

**Master IT Services ITQ  
CONTRACT**

**REQUEST FOR QUOTATIONS FOR**

**Microsoft Dynamics 365 for Operations Implementation**

**ISSUING OFFICE**

**Executive Offices, Office of the Budget – Office of Administrative Services on behalf of  
Pennsylvania Municipal Retirement System (PMRS)**

**RFQ NUMBER**

**6100043858**

**DATE OF ISSUANCE**

**2017**

**This is a restricted solicitation under the Master IT Services ITQ, Invitation to Qualify (ITQ), - Contract # 4400004480. Only those Offerors qualified in the following service category(s) under Contract #4400004480, prior to the bid opening date, may submit a quote in response to this RFQ.**

- **Consulting- IT General**
- **Commercial Off-The-Shelf (COTS) Software Services**
- **Modifiable Off-The-Shelf (MOTS) Software Services**

**For more information about the Master IT Services ITQ CONTRACT, please click on the following link. <http://www.dgs.internet.state.pa.us/ITQ/Default.aspx>**

**REQUEST FOR QUOTES FOR  
Microsoft Dynamics 365 for Operations Implementation**

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## CALENDAR OF EVENTS

The Commonwealth will make every effort to adhere to the following schedule:

Activity	Responsibility	Date
Deadline to submit Questions via email to mbelonus@pa.gov.	Offerors	10/18/2017 by 3:00 PM EST
Answers to Potential Offeror questions posted to eMarketplace at <a href="http://www.emarketplace.state.pa.us/Search.aspx">http://www.emarketplace.state.pa.us/Search.aspx</a> no later than this date.	Issuing Office	10/25/2017 4:00 PM EST
Please monitor website for all communications regarding the RFQ.	Offerors	Ongoing
Sealed quote must be received by the Issuing Office at <b>Melia Belonus   Chief, OAS Purchasing &amp; Payment Division</b> <b>555 Walnut Street Floor 7 Harrisburg Pa 17101-1941</b> <b>Ph: (717)-214-3740   Fax:(717)-214-3567</b>  <b>NOTE:</b> Proposals must be time and date stamped by the facility receiving the proposal. Proposals may only be hand-delivered between 10:00 AM EST and 12:00 PM EST. Call (717) 214-3530 for access to the secure floor.	Offerors	11/20/17 between 10:00 AM EST and 12:00 PM EST (See Note)

## PART I

### GENERAL INFORMATION

- I-1. Purpose.** This request for quotes (RFQ) provides to those interested in submitting quotes for the subject procurement (“Contractors”) sufficient information to enable them to prepare and submit quotes for the **PMRS’s** consideration on behalf of the Commonwealth of Pennsylvania (“Commonwealth”) to satisfy a need for **Microsoft Dynamics 365 for Operations Implementation** (“Project”). This RFQ contains instructions governing the requested quotes, including the requirements for the information and material to be included; a description of the service to be provided; requirements which Contractors must meet to be eligible for consideration; general evaluation criteria; and other requirements specific to this RFQ.
- I-2. Issuing Office.** The OAS Purchasing & Payment Division has issued this RFQ on behalf of the Pennsylvania Municipal Retirement System. The sole point of contact in the Commonwealth for this RFQ shall be Melia Belonus (the Issuing Officer for this RFQ) | Chief, OAS Purchasing & Payment Division | 555 Walnut Street Floor 7 | Harrisburg Pa 17101-1941 | mbelonus@pa.gov | Ph: (717)-214-3740 | Fax:(717)-214-3567. Please refer all inquiries to the Issuing Officer.
- I-3. Overview of Project.**  
PMRS is requesting proposals for software and implementation services for Microsoft Dynamics 365 for Operations financial management system. The system should have the ability to integrate the following functions: general ledger, procurement, accounts payable, accounts receivable, fixed assets, cash and investment management, budget, and financial reporting. It is anticipated that the software will lead to improvements in efficiency and effectiveness for PMRS and allow for the ability for expansion to meet future needs of PMRS. PMRS is seeking a vendor partner(s) that can design, build, and deploy Microsoft’s Dynamics software that, at a minimum, meets the requirements as designated in the statement of work.

The current pension administration system (CPAS) was originally customized to include general ledger accounting for approximately 1,000 municipalities and 14,000 members. PMRS is in the process of upgrading the pension administration system and will be removing the customization for general ledger accounting. The member records for approximately 14,000 members will continue to reside in the pension administration system and financial transactions will interface in aggregate by municipality with the financial management system. PMRS intends to shift all municipal (employer) accounting records to the financial management system prior to the go live date for the pension administration system upgrade. PMRS has approximately 10 users for financial management functions.

PMRS is anticipating a 2-Phased approach:

**Phase 1** – Begins no later than thirty (30) days after award of contract.

Will entail the Design, Build, and Deployment of:

- o General Ledger
- o Accounts Payable
- o Accounts Receivable
- o Cash Management

- o Financial Reporting

- Expected duration of phase 1 to be no longer than 12 months from the project start date.
- Accelerated timelines will be accepted and scored accordingly.
- Offerors are encouraged to provide solutions that minimize time to complete Phase 1, minimize reliance on PMRS staff and are still cost effective for PMRS.

**Phase 2** -Begins upon acceptance of completion of Phase 1 by PMRS; Phase 2 will entail the Design, Build, and Deployment of:

- o Procurement
- o Budget
- o Fixed Assets
- Expected duration of Phase 2 to be no longer than 12 months from the start of Phase 2.
- Accelerated timelines will be accepted and scored accordingly.
- Offerors are encouraged to provide solutions that minimize time to complete Phase 2, minimize reliance on PMRS staff and are still cost effective for PMRS.

**Enhancements.** At PMRS’ sole discretion, PMRS may request system enhancements not included in this statement of work or covered by the maintenance and support of the solution. PMRS will develop a statement of work (“SOW”) for any enhancement covered under this section. The Contractor shall provide pricing for the enhancement(s) based on the rates as included in Appendix H – Cost Matrix.

**Optional services.** At the PMRS’ sole discretion, PMRS may elect to procure the optional service(s) during the term of the contract.

#### **I-4.Objectives.**

##### **A. General.**

The project is tasked with meeting several of its key objectives. These include:

##### **A. Major Objectives.**

The following are the major objectives of the project:

- 1) Streamline PMRS’ core financial and treasury management processes through business process re-engineering in conjunction with the implementation of best practices included in the financial management system. This objective includes replacing existing systems to improve business operations through enhanced ERP functionality and new technologies.

- 2) Standardize interfaces between the PMRS, Commonwealth Agencies, and PMRS' business partners.
- 3) Eliminate administrative activities that do not add value, such as redundant keying, paper processing, and reconciliation of disparate systems.
- 4) Fulfill the business requirements of PMRS operating divisions utilizing industry standards and industry best practices for interaction with those Commonwealth Agencies, banks, and business partners that do business with PMRS.
- 5) Make PMRS processing information more readily available to agency heads, fiscal officers, comptrollers, and program managers.
- 6) Provide system users and business managers, with the necessary technology, tools, and training to enable them to extract the information they require to meet their daily business needs.
- 7) Make information more readily available, as appropriate, to municipalities.
- 8) Enable PMRS to more efficiently conduct business with its business partners through expansion of electronic interfaces.
- 9) Improve PMRS' ability to conduct business, and investment planning based on reliable, timely, financial data.
- 10) Enable PMRS to more efficiently extract and report data for financial reporting related to: Comprehensive Annual Financial Report, Generally Accepted Accounting Principles, Governmental Accounting Standards Board, Internal and External Audit request requirements.

**B. Functional Objectives:**

- 1) Reduce the time required to process transactions by reducing the number of touch points by 25% or more.
- 2) Reduce the cost and time required to process, copy, store, and retrieve paper documents by providing an alternative to the manual document processing, thereby reducing the number of paper documents required by 60% or more.
- 3) Reduce the average time required to reconcile 'items in transit' per day during bank to book reconciliation by at least 40%.
- 4) Re-engineer and automate the refund of failed payment process to reduce the time required to manually process paper refunds by 75%.
- 5) Bring external processing in-house where possible and practical.

**C. Technical Objectives:**

- 1) Improve application flexibility and configurability.
- 2) Improve information access capabilities.
- 3) Improve system and data security.
- 4) Reduce the burden of supporting obsolete programming languages.
- 5) Reduce the number of applications requiring support.
- 6) Improve application interoperability and data exchange.
- 7) Achieve self-sufficiency in operations and maintenance by the end of the project.

**B. Specific.**

PMRS is seeking to acquire the following:

1. Design services for a project that includes:
  - a. Review and analyze documented business requirements and fit-gap analysis.
  - b. Prepare functional design for configuration settings.
  - c. Prepare technical design documentation for customizations, integrations, interfaces and reports.
  - d. Plan processes around standard functionality, determine suitable options, and only as a last resort, assess the need for customizing a solution.
  - e. Document data conversion and migration approach.
  - f. Finalize testing and training plans.
  - g. Build process test scenarios.
  - h. Develop communications plan
  - i. Establish organization change management strategy
  - j. Prepare development environment
2. Build services for a project that includes:
  - a. Configure system based on approved functional designs
  - b. Develop customization code within Dynamics 365 for Operations based on technical designs
  - c. Build integrations and interfaces with other applications and custom reports based on technical designs
  - d. Leverage standard functionality, determine suitable options, and only as a last resort, develop customization code based on technical designs
  - e. Perform all application maintenance and support needed to ensure the application remains operational and meets the requirements of this statement
  - f. Perform release management services for its solution for all releases that shall include planning, scheduling and controlling releases through application stages and environments; to include but not be limited to, requirements management, design, development, testing and deployment of the software releases.



- g. Configure workflows, access security and segregation of duties to ensure proper application data security
- h. Establish user acceptance testing criteria during each phase and within the various modules
- i. Training of PMRS staff to build custom financial reports using Management Reporter from data captured in the chart of accounts with the associated financial dimensions of statistical accounts.
- j. Conduct SME training of all accounting staff and 5-6 personnel from other selected PMRS business units
- k. Test data conversion, data migration and assist with problem remediation if needed
- l. Prepare production environment

3. Deploy services for a project that includes:

- a. Conduct role based end user training for all PMRS Accounting personnel and 5-6 select personnel from other PMRS business units
- b. Obtain approval on user acceptance testing of application configuration, functionality, business process and customizations
- c. Complete deployment plan and system readiness review
- d. Migrate customization, integrations and configurations to production
- e. Run final data migration and obtain signoff
- f. Cutover to production environment
- g. Provide post go-live support
- h. Prepare for integration support with new CPAS version
- i. Provide electronic versions of all documentation, in a format acceptable to PMRS, and employ change control processes and version control to ensure documentation is kept current for the duration of the purchase order (PO) resulting from this RFQ

4. Phase 1 and Phase 2 each will contain support periods of one year of post implementation upon acceptance of each phase. At a minimum shall include thirty (30) days of on-site post implementation support. Types of support offered by vendors thereafter shall be scored accordingly. Offerors are encouraged to provide support solutions that minimize time and reliance on PMRS staff and are still cost effective for PMRS.

5. Defect remediation support during the entire project.

6. Knowledge transfer shall continue throughout the project to allow self-sufficiency in operation and maintenance of the financial management system and other implemented software.

7. PMRS staff will be productively utilized throughout the project, but the Offeror will be responsible for all deliverables.

8. Technical Microsoft Dynamics 365 environment support training for PMRS staff to include knowledge transfer for:

- operating the production environment
- environment replication for purposes of pre-production implementation of changes or upgrades
- upgrade practices and procedures
- backup practices and procedures

**I-5. Questions & Answers.** If a Contractor has any questions regarding this RFQ, the Contractor must submit the questions by email (**with the subject line “PMRS RFQ 6100043858 Question”**) to the Issuing Officer named in **Part I, Section I-2** of the RFQ. If the Contractor has questions, they must be submitted via email **no later than** the date indicated on the Calendar of Events. The Contractor shall not attempt to contact the Issuing Officer by any other means. The Issuing Officer shall post the answers to the questions to eMarketplace at <http://www.emarketplace.state.pa.us/Search.aspx> on an ongoing basis until the deadline stated on the Calendar of Events. A Contractor who submits a question *after* the deadline date for receipt of questions indicated on the Calendar of Events assumes the risk that its quote will not be responsive or competitive because the Commonwealth is not able to respond before the quote receipt date or in sufficient time for the Contractor to prepare a responsive or competitive quote. When submitted after the deadline date for receipt of questions indicated on the Calendar of Events, the Issuing Officer *may* respond to questions of an administrative nature by directing the questioning Contractor to specific provisions in the RFQ. To the extent that the Issuing Office decides to respond to a non-administrative question *after* the deadline date for receipt of questions indicated on the Calendar of Events, the answer will be provided to all Contractors through an addendum.

All questions and responses as posted on the eMarketplace are considered as an addendum to, and part of, this RFQ in accordance with RFQ, **Part I, Section I-7**. Each Contractor shall be responsible to monitor eMarketplace for new or revised RFQ information. The Issuing Office shall not be bound by any verbal information nor shall it be bound by any written information that is not either contained within the RFQ or formally issued as an addendum by the Issuing Office.

**I-6. Addenda to the RFQ.** If the Issuing Office deems it necessary to revise any part of this RFQ before the quote response date, the Issuing Office will post an addendum to eMarketplace at <http://www.emarketplace.state.pa.us/Search.aspx>. It is the Contractor’s responsibility to periodically check eMarketplace for any new information or addenda to the RFQ. Answers to the questions asked during the Questions & Answers period also will be posted to eMarketplace as addenda to the RFQ.

**I-7. Electronic Version of RFQ.** This RFQ is being made available by electronic means. The Contractor acknowledges and accepts full responsibility to ensure that no changes are made to the RFQ. In the event of a conflict between a version of the RFQ in the Contractor's possession and the Issuing Office's version of the RFQ, the Issuing Office's version shall govern.

**I-8. Response Date.** To be considered for selection, hard copies of quotes must arrive at the Issuing Office on or before the time and date specified in the RFQ Calendar of Events. The Issuing Office will **not** accept quotes via email or facsimile transmission. Contractors who send quotes by mail or other delivery service should allow sufficient delivery time to ensure timely receipt of their quotes. If, due to inclement weather, natural disaster, or any other cause, the Commonwealth office location to which quotes are to be returned is closed on the quote response date, the deadline for submission will be automatically extended until the next Commonwealth business day on which the office is open, unless the Issuing Office otherwise notifies Contractor. The hour

for submission of quotes shall remain the same. The Issuing Office will reject unopened, any late quotes.

**I-9. Incurring Costs.** The Issuing Office is not liable for any costs the Contractor incurs in preparation and submission of its quote, in participating in the RFQ process or in anticipation of receipt of the purchase order.

**I-10. Quote Requirements.**

**A. Quote Submission:** To be considered, Contractor should submit a complete response to this RFQ to the Issuing Office, using the format provided in **Section 1-11B**, providing **TEN (10) paper copies [one marked "ORIGINAL"] of the Technical Submittal and one (1) paper copy of the Cost Submittal and two (2) paper copies of the Small Diverse Business and Small Business (SDB/SB) Participation Submittal and related Letter(s) of Intent.**

In addition to the paper copies of the quote, Contractor shall submit one **complete and exact** copy of the entire quote (Technical, Cost and SDB/SB submittals, along with all requested documents) on CD-ROM or Flash drive in Microsoft Office or Microsoft Office-compatible format. The electronic copy must be a mirror image of the paper copy and any spreadsheets must be in Microsoft Excel. The Contractor may not lock or protect any cells or tabs. The CD or Flash drive should clearly identify the Contractor and include the name and version number of the virus scanning software that was used to scan the CD or Flash drive before it was submitted. The Contractor shall make no other distribution of its quote to any other Contractor or Commonwealth official or Commonwealth consultant. Each quote page should be numbered for ease of reference. An official authorized to bind the Contractor to its provisions must sign the quote. If the official signs the [Quote Cover Sheet \(Appendix A](#) to this RFQ) and the Quote Cover Sheet is attached to the Contractor's quote, the requirement will be met. For this RFQ, the quote must remain valid for **120** days or until a purchase order is fully executed. If the Issuing Office selects the Contractor's quote for award, the contents of the selected Contractor's quote will become, except to the extent the contents are changed through Best and Final Offers or negotiations, contractual obligations.

Each Contractor submitting a quote specifically waives any right to withdraw or modify it, except that the Contractor may withdraw its quote by written notice received at the Issuing Office's address for quote delivery prior to the exact hour and date specified for quote receipt. A Contractor or its authorized representative may withdraw its quote in person prior to the exact hour and date set for quote receipt, provided the withdrawing person provides appropriate identification and signs a receipt for the quote. A Contractor may modify its submitted quote prior to the exact hour and date set for quote receipt only by submitting a new sealed quote or sealed modification which complies with the RFQ requirements.

**B. Quote Format:** Contractors must submit their quotes in the format, including heading descriptions, outlined below. To be considered, the quote must respond to all quote requirements. Contractor should provide any other information thought to be relevant, but not applicable to the enumerated categories, as an appendix to the Quote. All cost data relating to this quote and all Small Diverse Business and Small Business cost data should be kept separate from and not included in the Technical Submittal. Contractor should not reiterate

technical information in the cost submittal. Each Quote shall consist of the following **three** separately sealed submittals:

1. Technical Submittal:
  - a. In response to **Part III**; and
  - b. Complete, sign and include [Appendix B - Domestic Workforce Utilization Certification](#);
2. Cost Submittal, in response to RFQ **Part IV**; and
3. Small Diverse Business and Small Business (SDB/SB) Participation Submittal, in response to RFQ **Part V**:
  - a. Complete and include [Appendix \[ D \] - SDB/SB Participation Submittal Form](#); and
  - b. Complete and include [Appendix \[ E \] - SDB/SB Letter of Intent](#). Contractor must provide a Letter of Intent for each SDB and SB listed on the SDB/SB Participation Submittal Form

The Issuing Office reserves the right to request additional information which, in the Issuing Office's opinion, is necessary to assure that the Contractor's competence, number of qualified employees, business organization, and financial resources are adequate to perform according to the RFQ.

The Issuing Office may make investigations as deemed necessary to determine the ability of the Contractor to perform the Project, and the Contractor shall furnish to the Issuing Office all requested information and data. The Issuing Office reserves the right to reject any quote if the evidence submitted by, or investigation of, such Contractor fails to satisfy the Issuing Office that such Contractor is properly qualified to carry out the obligations of the RFQ and to complete the Project as specified.

- I-11. Economy of Preparation.** Contractor should prepare quotes simply and economically, providing a straightforward, concise description of the Contractor's ability to meet the requirements of the RFQ.
- I-12. Alternate Quotes.** The Issuing Office has identified the basic approach to meeting its requirements, allowing Contractor to be creative and propose their best solution to meeting these requirements. The Issuing Office will not accept alternate quotes.
- I-13. Discussions for Clarification.** Contractor may be required to make an oral or written clarification of their quotes to the Issuing Office to ensure thorough mutual understanding and Contractor responsiveness to the solicitation requirements. The Issuing Office will initiate requests for clarification. Clarifications may occur at any stage of the evaluation and selection process prior to contract execution.

**I-14. Prime Contractor Responsibilities.** The selected Contractor will be responsible for all services offered in its quote whether it produces them itself or by subcontract. Further, the Issuing Office and Project Manager will consider the selected Contractor to be the sole point of contact with regard to all contractual matters and work order matters.

**I-15. Quote Contents.**

- A. Confidential Information. The Commonwealth is not requesting, and does not require, confidential proprietary information or trade secrets to be included as part of Contractor' submissions to evaluate quotes submitted in response to this RFQ. Accordingly, except as provided herein, Contractor should not label quote submissions as confidential or proprietary or trade secret protected. Any Contractor who determines that it must divulge such information as part of its quote must submit the signed written statement described in subsection c. below and must additionally provide a redacted version of its quote, which removes only the confidential proprietary information and trade secrets, for required public disclosure purposes.
- B. Commonwealth Use. All material submitted with the quote shall be considered the property of the Commonwealth of Pennsylvania and may be returned only at the Issuing Office's option. The Commonwealth has the right to use any or all ideas not protected by intellectual property rights that are presented in any quote regardless of whether the quote becomes part of a contract. Notwithstanding any Contractor copyright designations contained on quotes, the Commonwealth shall have the right to make copies and distribute quotes internally and to comply with public record or other disclosure requirements under the provisions of any Commonwealth or United States statute or regulation, or rule or order of any court of competent jurisdiction.
- C. Public Disclosure. After the award of a contract pursuant to this RFQ, all quote submissions are subject to disclosure in response to a request for public records made under the Pennsylvania Right-to-Know-Law, 65 P.S. § 67.101, et seq. If a quote submission contains confidential proprietary information or trade secrets, a signed written statement to this effect must be provided with the submission in accordance with 65 P.S. § 67.707(b) for the information to be considered exempt under 65 P.S. § 67.708(b)(11) from public records requests. Refer to [Appendix \[C\]](#) of the RFQ for a [Trade Secret Confidential Proprietary Information Notice Form](#) that may be utilized as the signed written statement, if applicable. If financial capability information is submitted in response to Part III of this RFQ such financial capability information is exempt from public records disclosure under 65 P.S. § 67.708(b)(26).

**I-16. Best and Final Offers.**

- A. While not required, the Issuing Office reserves the right to conduct discussions with Contractor for obtaining "best and final offers." To obtain best and final offers from Contractor, the Issuing Office may do one or more of the following, in any combination and order:
  - 1. Schedule oral presentations;
  - 2. Request revised quotes;

3. Conduct an online auction; and
  4. Enter into pre-selection negotiations.
- B.** The following Contractor will **not** be invited by the Issuing Office to submit a Best and Final Offer:
1. Those Contractor, which the Issuing Office has determined to be not responsible or whose quotes the Issuing Office has determined to be not responsive.
  2. Those Contractors, which the Issuing Office has determined in accordance with **Part II, Section II-5**, from the submitted and gathered financial and other information, do not possess the financial capability, experience or qualifications to assure good faith performance of the contract.
  3. Those contractors who's score for their technical submittal of the quote is less than 70% of the total amount of technical points allotted to the technical criterion.

The issuing office may further limit participation in the best and final offers process to those remaining responsible Contractor which the Issuing Office has, within its discretion, determined to be within the top competitive range of responsive quotes.

- C.** The Evaluation Criteria found in **Part II, Section II-4**, shall also be used to evaluate the Best and Final offers.
- D.** Price reductions offered through any online auction shall have no effect upon the Contractor's Technical Submittal.
- E.** Any reduction to commitments to Small Diverse Businesses and Small Businesses must be proportional to the reduction in the total price offered through any BAFO process or contract negotiations unless approved by BDISBO.
- I-17. News Releases.** Contractor shall not issue news releases, Internet postings, advertisements or any other public communications pertaining to this Project without prior written approval of the Issuing Office, and then only in coordination with the Issuing Office.
- I-18. Restriction of Contact.** From the issue date of this RFQ until the Issuing Office selects a quote as the best value, the Issuing Officer is the sole point of contact concerning this RFQ. Any violation of this condition may be cause for the Issuing Office to reject the offending Contractor's quote. If the Issuing Office later discovers that the Contractor has engaged in any violations of this condition, the Issuing Office may reject the offending Contractor's quote or rescind its purchase order. Contractors may not distribute any part of their quotes beyond the Issuing Office. A Contractor who shares information contained in its quote with other Commonwealth personnel and/or competing Contractor personnel may be disqualified.

- I-19. Term of Purchase Order.** The term of the purchase order will commence on the Effective Date and will end in 24 months. PMRS at its sole option, may renew the purchase order for up to an additional three (3) years. PMRS may exercise the renewal(s) in single or multiple year increments, at any time during the purchase order term. No work may begin or be reimbursed prior to the date of issuance of the purchase order or notice to proceed. The selected Contractor will be paid after submitting invoices, provided it is in accordance with the work plan and approved by the PMRS Project Manager. Final payment will not be made until all Project work has been successfully completed.
- I-20. Notification of Selection.** The Issuing Office will notify the selected Contractor in writing of its selection as the best value contractor after the Issuing Office has determined, taking into consideration all of the evaluation factors, the quote that is the most advantageous to the Issuing Office.
- I-21. Debriefing Conferences.** Upon notification of award, Contractor whose quotes were not selected will be given the opportunity to be debriefed. The Issuing Office will schedule the debriefing at a mutually agreeable time. The debriefing will not compare the Contractor with other Contractor, other than the position of the Contractor's quote in relation to all other Contractor quotes.
- I-22. Terms and Conditions.** The requirements and terms and conditions of **Master IT Services ITQ - 4400004480** shall govern all work conducted as a result of this RFQ.
- I-23. Use of Electronic Versions of this RFQ.** This RFQ is being made available by electronic means. If a Contractor electronically accepts the RFQ, the Contractor acknowledges and accepts full responsibility to insure that no changes are made to the RFQ. In the event of a conflict between a version of the RFQ in the Contractor's possession and the Issuing Office's version of the RFQ, the Issuing Office's version shall govern.
- I-24. Information Technology Policies.**

This RFQ is subject to the Information Technology Policies (ITPs) issued by the Office of Administration, Office for Information Technology (OA-OIT). ITPs may be found at <http://www.oa.pa.gov/Policies/Pages/itp.aspx>.

All quotes must be submitted on the basis that all ITPs are applicable to this procurement. It is the responsibility of the Contractor to read and be familiar with the ITPs. Notwithstanding the foregoing, if the Contractor believes that any ITP is not applicable to this procurement, it must list all such ITPs in its technical response, and explain why it believes the ITP is not applicable. The Issuing Office may, in its sole discretion, accept or reject any request that an ITP not be considered to be applicable to the procurement. The Contractor's failure to list an ITP will result in its waiving its right to do so later, unless the Issuing Office, in its sole discretion, determines that it would be in the best interest of the Commonwealth to waive the pertinent ITP.

## PART II

## CRITERIA FOR SELECTION

**II-1. Mandatory Responsiveness Requirements.** To be eligible for selection, a quote must:

- A. Be timely received from a Contractor (see **Part I, Section I-8**); and
- B. Be properly signed by the Contractor (see **Part I, Section I-10**).

**II-2. Technical Nonconforming Quotes.** The two (2) Mandatory Responsiveness Requirements set forth in **Section II-1** above (A-B) are the only RFQ requirements that the Commonwealth will consider to be *non-waivable*. The Issuing Office reserves the right, in its sole discretion, to (1) waive any other technical or immaterial nonconformities in a Contractor's quote, (2) allow the Contractor to cure the nonconformity, or (3) consider the nonconformity in the scoring of the Contractor's quote.

**II-3. Evaluation.** The Issuing Office has selected a committee of qualified personnel to review and evaluate timely submitted quotes. Independent of the committee, BDISBO will evaluate the Small Diverse Business and Small Business Participation Submittal and provide the Issuing Office with a rating for this component of each quote. The Issuing Office will notify in writing of its selection for negotiation the responsible Contractor whose quote is determined to be the most advantageous to the Commonwealth as determined by the Issuing Office after taking into consideration all of the evaluation factors.

**II-4. Evaluation Criteria.** The following criteria will be used in evaluating each quote:

**Technical:** The Issuing Office has established the weight for the Technical criterion for this RFQ as **50 %** of the total points. Evaluation will be based upon the following in order of importance:

- **Understanding the Problem**
- **Qualifications**
- **Soundness of Approach**
- **Available Facilities**
- **Implementation timeline**
- **Implementation Methodology**
- **Financial Stability of Vendor**
- **Client References**
- **Client References from other Dynamics 365 implementations etc.**

The final Technical scores are determined by giving the maximum number of technical points available to the quote with the highest raw technical score. The remaining quotes are rated by applying the Technical Scoring Formula set forth at the following webpage:

<http://www.dgs.pa.gov/Businesses/Materials%20and%20Services%20Procurement/Procurement-Resources/Pages/default.aspx>.

- **Cost:** The Issuing Office has established the weight for the Cost criterion for this RFQ as **30 %** of the total points. The cost criterion is rated by giving the quote with the lowest total cost the maximum number of Cost points available. The remaining quotes are rated by applying the



Cost Formula set forth at the following webpage:

<http://www.dgs.pa.gov/Businesses/Materials%20and%20Services%20Procurement/Procurement-Resources/Pages/default.aspx>.

- **Small Diverse Business and Small Business Participation:**

BDISBO has established the minimum evaluation weight for the Small Diverse Business and Small Business Participation criterion for this RFQ as 20% of the total points.

1. The Small Diverse and Small Business point allocation is based entirely on the percentage of the contract cost committed to Small Diverse Businesses and Small Businesses.
2. A total combined SDB/SB commitment less than one percent (1%) of the total contract cost is considered de minimis and will receive no Small Diverse Business or Small Business points.
3. Two thirds (2/3) of the total points are allocated to Small Diverse Business participation (SDB %).
4. One third (1/3) of the total points is allocated to Small Business participation (SB %).
5. Based on a maximum total of 200 available points for the Small Diverse Business and Small Business Participation Submittal, the scoring mechanism is as follows:

**Small Diverse Business and Small Business Raw Score =**

$$200 (SDB\% + (1/3 * SB \%))$$

6. Each Contractor's raw score will be pro-rated against the Highest Contractor's raw score by applying the formula set forth on the following webpage:  
[http://www.dgs.pa.gov/Businesses/Materials%20and%20Services%20Procurement/Procurement-Resources/Pages/RFQ\\_SCORING\\_FORMULA.aspx](http://www.dgs.pa.gov/Businesses/Materials%20and%20Services%20Procurement/Procurement-Resources/Pages/RFQ_SCORING_FORMULA.aspx).
7. The Contractor's prior performance in meeting its contractual obligations to Small Diverse Businesses and Small Businesses will be considered by BDISBO during the scoring process. To the extent the Contractor has failed to meet prior contractual commitments, BDISBO may recommend to the Issuing Office that the Contractor be determined non-responsible for the limited purpose of eligibility to receive Small Diverse Business and Small Business points.

- **Domestic Workforce Utilization:** Any points received for the Domestic Workforce Utilization criterion are bonus points in addition to the total points for this RFQ. The maximum amount of bonus points available for this criterion is 3% of the total points for this RFQ.

To the extent permitted by the laws and treaties of the United States, each quote will be scored for its commitment to use domestic workforce in the fulfillment of the contract. Maximum consideration will be given to those Contractor who will perform the contracted direct labor exclusively within the geographical boundaries of the United States or within the geographical boundaries of a country that is a party to the World Trade Organization Government Procurement Agreement. Those who propose to perform a portion of the direct labor outside of the United States and not within the geographical boundaries of a party to the World Trade Organization Government Procurement Agreement will receive a correspondingly smaller score for this criterion. See the following webpage for the Domestic Workforce Utilization Formula:

<http://www.dgs.pa.gov/Businesses/Materials%20and%20Services%20Procurement/Procurement-Resources/Pages/default.aspx>.

**II-5. Contractor Responsibility.** To be responsible, a Contractor must submit a responsive quote and possess the capability to fully perform the contract requirements in all respects and the integrity and reliability to assure good faith performance of the contract.

In order for a Contractor to be considered responsible for this RFQ and therefore eligible for selection for best and final offers or selection for contract negotiations:

- A. The total score for the technical submittal of the Contractor's quote must be greater than or equal to **75%** of the **available technical points**; and
- B. The Contractor's financial information must demonstrate that the Contractor possesses the financial capability to assure good faith performance of the contract. The Issuing Office will review the Contractor's previous three financial statements, any additional information received from the Contractor, and any other publicly-available financial information concerning the Contractor, and assess each Contractor's financial capacity based on calculating and analyzing various financial ratios, and comparison with industry standards and trends.

A Contractor which fails to demonstrate sufficient financial capability to assure good faith performance of the contract as specified herein may be considered by the Issuing Office, in its sole discretion, for Best and Final Offers or contract negotiation contingent upon such Contractor providing contract performance security for the first contract year cost proposed by the Contractor in a form acceptable to the Issuing Office. Based on the financial condition of the Contractor, the Issuing Office may require a certified or bank (cashier's) check, letter of credit, or a performance bond conditioned upon the faithful performance of the contract by the Contractor. The required performance security must be issued or executed by a bank or surety company authorized to do business in the Commonwealth. The cost of the required performance security will be the sole responsibility of the Contractor and cannot increase the Contractor's cost quote or the contract cost to the Commonwealth.

Further, the Issuing Office will award a contract only to a Contractor determined to be responsible in accordance with the most current version of Commonwealth Management Directive 215.9, Contractor Responsibility Program.

**II-6. Final Ranking and Award.**

- A.** After any best and final offer process conducted, the Issuing Office will combine the evaluation committee's final technical scores, BDISBO's final Small Diverse Business and Small Business Participation Submittal scores, the final cost scores, and (when applicable) the domestic workforce utilization scores, in accordance with the relative weights assigned to these areas as set forth in this Part.
- B.** The Issuing Office will rank responsible Contractors according to the total overall score assigned to each, in descending order.
- C.** The Issuing Office must select as the Best Value Contractor the Contractor with the highest overall score.
- D.** The Issuing Office has the discretion to reject all quotes or cancel the request for quotes, at any time prior to the time a purchase order is fully executed, when it is in the best interests of the Commonwealth. The reasons for the rejection or cancellation shall be made part of the contract file.

## PART III

### TECHNICAL SUBMITTAL

#### III-1. Objectives.

a. **General.**

Implement Dynamics 365 modules for integrated and streamlined financial accounting management processes. Establish automated integrations and interfaces between the PMRS, Commonwealth Agencies, and PMRS' business partners. To be considered, the proposal must respond to all requirements in this part of the RFQ and a PMRB-30 "Disclosures" form must accompany the proposal. Contractors should provide any other information thought to be relevant, but not applicable to the enumerated categories, as an appendix to the Proposal. All cost data relating to this proposal and all Disadvantaged Business cost data should be kept separate from and not included in the Technical Submittal. Each Proposal shall consist of the following four separately sealed submittals:

b. Technical Submittal

c. Cost Submittal

c. Disadvantaged Business Submittal

d. PMRB-30 "Disclosures" Form (<http://www.pMrs.state.pa.us/doc/forms/pMrb30.pdf>)

The Issuing Office reserves the right to request additional information which, in the Issuing Office's opinion, is necessary to assure that the Contractor's competence, number of qualified employees, business organization, and financial resources are adequate to perform according to the RFQ.

The Issuing Office may make investigations as deemed necessary to determine the ability of the Contractor to perform the Project, and the Contractor shall furnish to the Issuing Office all requested information and data. The Issuing Office reserves the right to reject any proposal if the evidence submitted by, or investigation of, such Contractor fails to satisfy the Issuing Office that such Contractor is properly qualified to carry out the obligations of the RFQ and to complete the Project as specified.

d. **Technical Objectives:**

- 1) Improve application flexibility and configurability.
- 2) Improve information access capabilities.
- 3) Improve system and data security.
- 4) Reduce the burden of supporting obsolete programming languages.
- 5) Reduce the number of applications requiring support.
- 6) Improve application interoperability and data exchange.
- 7) Achieve self-sufficiency in operations and maintenance by the end of the project.

III-2. Nature and Scope of the Project. Implementation of Dynamics 365 using system specification documents. See Section I-4.

III-3. Requirements. Project completion should be completed in order to support a 6 to 12 month Go-Live of the new system. See Appendix M.

### **Contractor Response**

#### **A. Functional requirements to be met by the proposal:**

##### **Phase 1**

General Ledger

[General Ledger](#)

[Payroll Summary from SAP](#)

[Employee Reimbursement from SAP](#)

Accounts Payable

[Accounts Payable](#)

[Advancement Account from SAP](#)

[Member Payment from Treasury](#)

[Member Payment Summary from CPAS](#)

[Operating Expense from SAP](#)

[P-Card Transactions from US Bank](#)

[Vendor \(AP\) Payment Request to Treasury](#)

[Vendor \(AP\) Payments from Treasury](#)

[Void Member Payment from CPAS](#)

Accounts Receivable

[Accounts Receivable](#)

[Adjustment Memorandum from SAP](#)

[Cash Receipts – Contributions and Refunds from Treasury](#)

[Employer Receipt Interface to CPAS](#)

Cash Management

[Cash and Bank Management](#)

Financial Reporting

[Reports](#)

Related Interfaces

[Fit Gap Analysis \(Including Interface Requirements\)](#)

##### **Phase 2**

[Procurement and Budget](#)

[Fixed Assets](#)

### **Contractor Response**

## **B. Emergency Preparedness.**

To support continuity of operations during an emergency, including a pandemic, the Commonwealth needs a strategy for maintaining operations for an extended period of time. One part of this strategy is to ensure that essential contracts that provide critical business services to the Commonwealth have planned for such an emergency and put contingencies in place to provide needed goods and services.

1. Describe how you anticipate such a crisis will impact your operations.
2. Describe your emergency response continuity of operations plan. Please attach a copy of your plan, or at a minimum, summarize how your plan addresses the following aspects of pandemic preparedness:
  - a. Employee training (describe your organization's training plan, and how frequently your plan will be shared with employees)
  - b. Identified essential business functions and key employees (within your organization) necessary to carry them out
  - c. Contingency plans for:
    - i. How your organization will handle staffing issues when a portion of key employees are incapacitated due to illness.
    - ii. How employees in your organization will carry out the essential functions if contagion control measures prevent them from coming to the primary workplace.
  - d. How your organization will communicate with staff and suppliers when primary communications systems are overloaded or otherwise fail, including key contacts, chain of communications (including suppliers), etc.
  - e. How and when your emergency plan will be tested, and if the plan will be tested by a third-party.

### **Contractor Response**

## **C. Disaster Recovery**

The selected Offeror must employ disaster recovery procedures to assist in preventing interruption to the project. The Offeror's disaster recovery must support full restoration of services within one (1) calendar days.

### **Contractor Response**

#### **D. Application Operation and Management**

The Offeror shall perform all application maintenance and support needed to ensure the application remains operational and meets the requirements of this statement.

The Offeror shall recommend and manage a process to track, monitor and resolve and report problems/issues and resolutions. This shall include a methodology to classify problems as to criticality and impact, including appropriate resolution procedures and escalation process for each classification of problem.

The Offeror shall perform release management services for its solution for all releases. Release management shall include planning, scheduling and controlling releases through application stages and environments; to include but not be limited to, requirements management, design, development, testing and deployment of the software releases.

#### **Contractor Response**

#### **E. Support**

Provide consultation and guidance to PMRS staff in best practices for establishing an application, including best practices for grouping users and system for ease of use.

Provide onsite training (or an equivalent amount of training conducted through a web-based training format) and documentation to PMRS staff in managing the application to include building custom financial reports using Management Reporter from data captured in the chart of accounts with the associated financial dimensions of statistical accounts, environment upgrade procedures, production replication for the purposes of building development or sandbox environments and backup best practices

Provide marketing, documentation, and training materials for use by PMRS staff to educate users in use of the application in commonly used digital formats.

The selected Offeror shall provide support for PMRS end users and system support agents Monday through Friday 7:00 A.M. to 8:00 P.M. Eastern Time (EDT or EST as applicable) and weekends as requested. Support shall include, but not be limited to, assistance and ongoing support regarding problems/issues, guidance in the operation of the solution, and identification and correction of possible data or system errors.

Provide technical support, including but not limited to the troubleshooting of system functionality and delivery issues, to maintain functionality of the application, including unlimited use of phone support during normal PMRS business hours. Support shall include, but not be limited to, assistance and ongoing support regarding problems/issues, guidance in the operation of the solution, and identification and correction of possible data or system errors. Offerors shall describe all types of solution support available (i.e. telephone, web chat, email). At a minimum email and phone support shall be provided.

The Offeror shall provide and manage a process to track, monitor and resolve reported problems/issues. Offeror shall describe its methodology to classify problems as to criticality and impact, including resolution procedures and escalation process for each classification of problems/issues.

Routine maintenance shall occur at a mutually agreed upon schedule.

System enhancements and upgrades shall occur at a mutually agreed upon time with at least two weeks' notice.

The Offeror shall provide the PMRS with immediate notice of emergency maintenance for events outside the Offeror's control.

***Contractor Response***

**III-4. Statement of the Project.** State in succinct terms your understanding of the project presented or the service required by this RFQ.

***Contractor Response***

**III-5. Qualifications.**

**A. Company Overview.**

***Contractor Response***

**B. Prior Experience.** Include experience in the implementation, support, and training of:

- Microsoft Dynamics ERP (i.e. Dynamics AX or Dynamics 365 Operations)
- Microsoft Dynamics ERP (i.e. Dynamics AX or Dynamics 365 Operations) for a public pension agency
- Microsoft Dynamics ERP (i.e. Dynamics AX or Dynamics 365 Operations) for a government agency
- Experience in providing financial services (including but not limited to implementation of other accounting software; software modifications, financial regulations such as governmental accounting regulations and legislative changes; other government accounting issues) to public pension organizations
- Microsoft Certified Partner status
- Experience shown should be work done by individuals who will be assigned to this project as well as that of your company. Studies or projects referred to must be identified and the name of the customer shown, including the name, address, and telephone number of the responsible official of the customer, company, or agency who may be contacted. Contractor shall describe any industry-recognized quality standard to which it is compliant (such as ITIL and ISO), as well as any industry certifications or awards received.



## **Contractor Response**

- C. **Project Staffing and Qualifications.** Include the number of executive and professional personnel, analysts, auditors, researchers, programmers, consultants, etc., who will be engaged in the work. Show where these personnel will be physically located during the time they are engaged in the Project. For key personnel please include project management, business analysts, and programmers/developers. Include the employee's name and, through a resume or similar document, the Project personnel's education and experience in the implementation, support, and training of Microsoft Dynamics 365 for Operations. Indicate the responsibilities each individual will have in this Project, how long each has been with your company and how long they have served in the role in which they will be assigned to this project.

The Offeror is responsible to provide and maintain sufficient numbers of qualified management, technical and functional staff to meet the needs of this project and provide the services outlined in the Offeror's response to this ITQ. The Offeror is also responsible for development of a detailed resource plan for Offeror staff, which defines the staffing and staff organization, identifies all team participants and their roles and responsibilities. The Offeror must identify key staff and will be required to commit these staff for the life of the project except for legitimate personal reasons, employment termination, acts of God or mutual agreement between PMRS and the Offeror. Any replacement of key staff should have skills and qualifications equal to or greater than the individual that departed. In any case, PMRS reserves the right to interview and agree or not agree on the replacement.

Expected Deliverables and Work Products:

1. Detailed Resource Plan

- D. **Subcontractors:** Provide a subcontracting plan for all subcontractors, including small diverse business and small business subcontractors, who will be assigned to the Project. The selected Contractor is prohibited from subcontracting or outsourcing any part of this Project without the express written approval from the Commonwealth. Upon award of the purchase order resulting from this RFQ, subcontractors included in the quote submission are deemed approved. For each position included in your subcontracting plan provide:

1. Name of subcontractor;
2. Address of subcontractor;
3. Number of years worked with the subcontractor;
4. Number of employees by job category to work on this project;
5. Description of services to be performed;
6. What percentage of time the staff will be dedicated to this project;

7. Geographical location of staff; and
8. Resumes (if appropriate and available).

The Contractor's subcontractor information shall include (through a resume or a similar document) the employees' names, education and experience in the services outlined in this RFQ. Information provided shall also indicate the responsibilities each individual will have in this Project and how long each has been with subcontractor's company.

### **Contractor Response**

#### **III-6. Training.**

To prepare for the implementation of the financial management system, Offeror must provide training for all financial processes, financial policies, and organization changes required for the implementation, accounting skills and knowledge, and some basic software navigation skills. All PMRS Accounting personnel (10-12) and select other personnel (5-6) from other PMRS business units using the new system will be required to attend all or some of the training. The training covered within the scope of this ITQ includes provision of training products as described below for all financial modules scheduled for implementation.

The Offeror will be required to provide curriculum and course design for each of the modules to be implemented. The contents of the training materials will be role-based to align with user responsibilities. The Offeror will also be responsible for developing audience-appropriate training materials for the delivery of training. All curriculum, course design, training support material, and instructors will be reviewed and approved by PMRS. The Offeror will be responsible for designing a formal process for reviewing and accepting all training materials. This design will be delivered as one of the first pieces of the training work stream.

In addition to the training deliverables described above, the Offeror will also be responsible for developing a training strategy, delivery system and materials to prepare for the Post-Implementation segment. These materials will accommodate ongoing training and refresher courses as needed.

To help ensure training meets PMRS goals, appropriate metrics will be defined to track training attendance, student feedback, and user confidence. These metrics will be defined as part of the Implementation Segment.

**PMRS Preferences:** A mixed set of training methods such that basic and prerequisite material should be delivered as self-paced customized User Productivity Kit instruction while complex financial processes and system transactions should be delivered via instructor-led training.

The formal classroom instructor-led training will cover the "how to" for all financial processes. This includes all modules for all divisions that will use financial management system.

Training material development will be managed by the Project Team under the direction of a training lead who is responsible to the Offeror's project manager. PMRS expects the Offeror to develop training materials. User Productivity Kit (UPK) is the training development package of choice; however, other packages will be considered if the Offeror can show that there is better support for the cost.

#### **Responsibility Matrix (Offeror Primary)**

	Vendor	PMRS
Development	<ul style="list-style-type: none"> <li>▪ Provide curriculum and course design for each of the modules to be implemented</li> <li>▪ Develop audience-appropriate training materials for delivery of training.</li> <li>▪ Design formal process for reviewing and accepting all training materials and for instructor certification.</li> <li>▪ Develop training strategy, delivery system and materials to prepare for post-implementation segment</li> <li>▪ Utilize development software to support training material development</li> </ul>	<ul style="list-style-type: none"> <li>▪ Support training material development</li> <li>▪ Provide review and feedback as required</li> <li>▪ Approve final training materials</li> </ul>
Execution	<ul style="list-style-type: none"> <li>▪ Conduct training sessions</li> <li>▪ Gather feedback adjusting course content as appropriate to provide effective learning</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide appropriate facilities</li> <li>▪ Schedule training sessions with appropriate staff</li> </ul>

DELIVERABLE 2: A finalized training plan and schedule to address the needs of the project

DELIVERABLE 3: Training documentations for designated users geared specifically toward the solution functions of each end-user. Include the materials such as workbooks, exercise and examples as well as handouts and aides.

DELIVERABLE 4: User training sessions

**Knowledge Transfer:** Knowledge transfer is a continuous process designed to enable PMRS to properly support the operation and continuous improvement of the financial processes and application without the support of external consultants. The Offeror will be responsible for development of a knowledge transfer plan for the project team. Through training, workshops and mentoring relationships, the Offeror will be responsible for educating the project team in the methodology and task plan to be used on the project as well as the skills and techniques needed for ongoing maintenance of the system.

#### Deliverable 5: Final Knowledge Transfer Plan

**PMRS Preferences:** PMRS believes that knowledge transfer should be in integral part of the overall project plan that incorporates classroom training, one-on-one coaching and directed work experience. The plan should identify the knowledge and skills team members need to acquire, the methods to be used to obtain these skills, and a mechanism for tracking progress.

#### Responsibility Matrix (Offeror Primary)

	Offeror	PMRS
Development	<ul style="list-style-type: none"> <li>▪ Develop the knowledge transfer plan</li> <li>▪ Make Offeror mentoring assignments</li> </ul>	<ul style="list-style-type: none"> <li>▪ Support plan development</li> <li>▪ Make PMRS staff assignments</li> <li>▪ Approve the plan</li> </ul>

<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Mentor PMRS staff</li> <li>▪ Monitor plan progress</li> <li>▪ Evaluate outcomes</li> <li>▪ Recommend corrective actions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monitor plan progress</li> <li>▪ Conduct performance appraisals of PMRS Staff</li> <li>▪ Provide educational opportunities</li> <li>▪ Provide appropriate work assignments</li> </ul>
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**Contractor Response**

**III-7. Financial Capability.** Describe your company’s financial stability and economic capability to perform the contract requirements. Provide your company’s financial statements (audited, if available) for the past three fiscal years. Financial statements must include the company’s Balance Sheet and Income Statement or Profit/Loss Statements. Also include a Dun & Bradstreet comprehensive report, if available. If your company is a publicly traded company, please provide a link to your financial records on your company website in lieu of providing hardcopies. The Commonwealth reserves the right to request additional information it deems necessary to evaluate a Contractor’s financial capability.

**Contractor Response**

**III-8. Work Plan.** Describe in narrative form your technical plan for accomplishing the work. Indicate the number of person hours allocated to each task. Include a Program Evaluation and Review Technique (PERT) or similar type display, time related, showing each event. If more than one approach is apparent, comment on why you chose this approach.

**Contractor Response**

**III-9. Reports and Project Control.** Project activities will be coordinated using SharePoint site provided by the PMRS. External contractor-provided resources can also be utilized if approved. Project managers will be identified by both PMRS and contractor. The contractor Project Manager will develop a project timeline for approval by PMRS. The contractor will be responsible for setting up weekly project meetings. These meetings can be a combination of on-site and/or conference calls as agreed upon by PMRS and contractor. Weekly progress reports will be provided by the contractor to the PMRS. Weekly progress reports will specifically track the progress of each of the business specification documents. The PMRS must approve the completion of all business specification documents. The contractor project manager will be responsible for developing, maintaining and presenting the following project management plans:

1. **Project Plan**  
 The project plan must describe the scope of work for the project and how the scope will be managed. The project plan shall act as a confirmation of project scope, phasing, implementation objectives, and be detailed enough to ensure the product is delivered on time, within projected estimates, and meets all requirements as specified in the RFP. The project plan must include, but is not limited to:

- Project Scope Statement
- Scope Management Process
- Major Milestones /Deliverables
- Work Breakdown Structure (WBS)
- Timeline

**A. Project Approach and Plan:** The Offeror will be responsible for development and maintenance of the project plan, project task plan and schedule, based on the approach, methodology and tools used successfully by the Offeror in previous engagements. The Offeror will be responsible for regular reporting of progress against the schedule, recommending corrective actions to be taken in the event of unanticipated changes to the plan or schedule, and regular updates to the plan and schedule to accommodate any changes.

1. Staff Management – PMRS will provide oversight for the entire project. The selected Offeror will provide overall project management for the tasks required to implement all components of the project and production support as contractually defined. PMRS will manage the staff activities as well as coordinate schedules and calendars for PMRS project team. The selected Offeror will provide administrative support for its staff and activities as well as coordinate schedules and calendars for the entire project team.

2. Use of a Project Repository – The selected Offeror will maintain a project repository in the SharePoint environment provided by PMRS. Copies of the electronic deliverables not contained in SharePoint must be stored on PMRS LAN. This repository will contain all document based work products, document based deliverables, issues descriptions and related analysis, memos, and other project documents. The selected Offeror will establish and use document creation, naming, and version control procedures.

3. Kick-Off Meeting – The selected Offeror and PMRS will conduct a kick-off meeting for the project. The initial kick-off meeting will occur within 10 business days after the Effective Date of the Contract or within an alternative time frame, approved by PMRS Project Director.

4. Status Meetings - Throughout the project, the selected Offeror’s Project Manager and key project staff will attend status meetings with PMRS Project Manager and other members of the Project. The weekly meetings will follow a pre-set agenda but must also allow the selected Offeror or PMRS the option to discuss other issues that concern either party. The PMRS Project Manager may require additional status meetings and associated status reports.

Biweekly Sponsor Meetings - Throughout the project, the selected Offeror’s Project Manager will attend biweekly sponsor meetings with the PMRS Project Manager and other members of the Project. The biweekly meetings will follow a pre-set agenda but must also allow the selected Offeror or PMRS the option to discuss other issues that concern either party. The PMRS Project Manager may require additional status reports.5. Ad-hoc and Monthly Executive Sponsor Committee Meetings – The selected Offeror’s Project Manager will prepare and present project information to the Executive Sponsor Committee including but not limited to project status updates, issues and risks,

key project related decisions, scope decisions and critical path dates. (Deliverable – Monthly Executive Sponsor Committee Presentations)

6. Status Reports – The selected Offeror will provide weekly electronic status reports on the project, which are due to the PMRS Project Manager at least 24 hours before each meeting unless the Parties agree to a different time frame during project planning.

Status reports must contain, at a minimum, descriptions of the following:

- a. Any issues encountered and their current disposition
- b. Whether deadlines were met
- c. Any issues that need to be addressed before proceeding to the next task
- d. Anticipated tasks to be completed in the next week
- e. Tasks timely completed, tasks not timely completed, and tasks where delays are expected
- f. Updated project schedule
- g. Status of open issues
- h. Change Control Status
- i. Risk Status
- j. Deliverables Status
- k. Knowledge Transfer Status
- l. Staffing Updates

The selected Offeror’s proposed format and level of detail for the status report will be subject to PMRS approval.

Expected Deliverables and Work Products:

- 1. Final Project Work Plan
- 2. Kick-Off Meeting
- 3. Project Status Reports
- 4. Workshop Summaries

**Responsibility Matrix (Shared)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Deve</b>	<ul style="list-style-type: none"> <li>▪ Develop the project schedule (MS Project)</li> <li>▪ Develop the plan narrative</li> <li>▪ Assign Offeror Staff</li> </ul>	<ul style="list-style-type: none"> <li>▪ Support plan development</li> <li>▪ Assign PMRS Staff</li> <li>▪ Approve the plan</li> </ul>

<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Evaluate and report on progress</li> <li>▪ Update the plan</li> <li>▪ Identify problems, issues and accomplishments</li> <li>▪ Recommend corrective actions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Manage execution of the plan</li> <li>▪ Assist in progress reporting</li> <li>▪ Approve updates, recommendations and corrective actions</li> </ul>
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**2. Requirements Management Plan**

The requirements management plan must describe the process and approach to manage and address requirements throughout the life of the project. The requirements management plan shall include:

- Requirements Management Process
- Roles and Responsibilities
- Requirements Traceability Matrix (RTM)

**3. Risk Management Plan**

The risk management plan must describe the approach used to manage risk throughout the life of the project, how contingency plans are implemented, and how project reserves are allocated to handle the risks. The plan will include the methods for identifying risks, tracking risks, documenting response strategies, and communicating risk information. The risk management plan shall include:

- Risk Management Process
- Roles and Responsibilities
- Rules/Procedures
- Risk Impact Analysis Approach
- Tools

**4. Issue Management Plan**

The issue management plan must describe the approach for capturing and managing issues throughout the life of the project to ensure the project is moving forward and avoids unnecessary delays. The issues management plan shall include:

- Issues Management Approach
- Roles and Responsibilities
- Tools

**5. Change Control Management Plan**

All changes to the solution must be approved by the Secretary, Assistant Secretary Designee and Chief Financial Officer of PMRS. The change control management plan must describe the approach to effectively manage changes throughout the life of a

project. The plan will include the process to track change requests from submittal to final disposition (submission, coordination, review, evaluation, categorization), the method used to communicate change requests and their status (approved, deferred, or rejected), the escalation process if changes cannot be resolved by the review team, and the process for project re-baselining. The change control management plan shall include:

- Change Management Process
- Roles and Responsibilities
- Rules/Procedures
- Change Impact Analysis Approach
- Tools

6. **Communications Management Plan**

The communication management plan must describe the communications process that will be used throughout the life of the project. The process must include the tools and techniques that will provide timely and appropriate generation, collection, distribution, storage, retrieval and disposition of project information. The communications management plan shall include:

- Communications Management Process
- Roles and Responsibilities
- Reporting Tools and Techniques
- Meeting Types and Frequency

7. **Quality Management Plan**

The quality management plan must describe the approach used to address Quality Assurance (QA) and Quality Control (QC) throughout the life of the project. The quality management plan should identify the quality processes and practices including the periodic reviews, audits and the testing strategy for key deliverables. The plan should also include the criteria by which quality is measured, the tolerances required of product and project deliverables, how compliance is measured, and the process for addressing those instances whenever quality measures are out of tolerance or compliance. The quality management plan will include:

- Quality Management Process
- Roles and Responsibilities
- Tools
- Quality Standards

The Offeror is responsible for participating with PMRS in ensuring the overall quality of the final product of this project. The Offeror is required to utilize PMRS' quality assurance process and recommend ways to improve this process on an on-going basis. The quality assurance plan is the foundation on which the project deliverables, particularly those addressing changes to aspects of the project or its elements, will be built to meet expectations and needs in accordance with specifications and standards. PMRS and Offeror will work through the quality assurance team to ensure quality control.



Quality assurance involves: a) ensuring that the achievement of quality objectives is not left to chance; b) ensuring project methodologies, standards, and controls are appropriate and reasonable for the project environment; c) reviewing the adequacy of and adherence to project standards and controls, issue tracking, risk management and change control procedures; d) ensuring quality control provides a basis for improving the project deliverables and knowledge transfer; e) ensuring that quality is monitored and defects identified, along with corrective actions; and f) ensuring that identified faults are rectified and that the chance of recurrence is minimized.

**Background:** PMRS’ Division of Information Technology has a process in place to address change control and quality assurance so that they meet industry standards and all involved parties are held accountable. PMRS’ Division of Information Technology approach to quality assurance involves a series of validation and verification steps in the system development lifecycle to ensure each step is logically related and traceable to business requirements.

This process relies on the use of technical and functional positions to review the work done in moving from request for a change to implementation of that change. In this process, the business requirements are laid out and approved before any technical activities are undertaken and requirement documents are matched against a pre-approved document outline and abstract. The technical activities take place following various reviews and approvals. At varying stages throughout the process checks are made to see that the design matches the documentation of the requirement, the development matches the design, and test results (user acceptance testing) match the initial request.

**PMRS Preferences:** PMRS proposes to establish a joint PMRS-Offerrer quality assurance team. This team would use PMRS’ Division of Information Technology’s quality control methodology and process.

**Responsibility Matrix (PMRS Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Design</b>	<ul style="list-style-type: none"> <li>▪ Supply qualified staff to support quality assurance</li> <li>▪ Propose solutions</li> <li>▪ Develop requirement and design documentation</li> <li>▪ Recommend process improvements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Manage quality assurance process</li> <li>▪ Approve requirements and designs</li> <li>▪ Support requirement development</li> <li>▪ Submit the customer service request (CSR)</li> <li>▪ Review code for adherence to standards.</li> <li>▪ Track CSR progress</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Develop solutions in accordance with design</li> <li>▪ Support quality assurance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Approve designs</li> <li>▪ Develop solutions</li> <li>▪ Manage development</li> <li>▪ Perform and document quality assurance</li> </ul>

Expected Work Products:

1. QA Recommendations

2. QA Process Documentation
3. Requirements Traceability Matrix

8. **Time Management Plan**

The time management plan must describe the process for controlling the proposed schedule and how the achievement of tasks and milestones will be identified and reported. The plan must also detail the process to identify, resolve, and report resolution of problems such as schedule slippage. The time management plan will include:

- Time Management Process
- Role and Responsibilities
- Tools and Techniques
- Work Plan

Where appropriate, a PERT or GANTT chart display should be used to show project, task, and time relationship.

9. **Service Management** - The Offeror shall provide service management throughout the Contract term. Service management shall include utilizing a strategic approach directed by policies and incorporated in processes and supporting procedures that are performed to plan, deliver, operate, control, and improve services offered to customers.

10. **Account Management** – The Offeror must provide a dedicated account manager who will be the main point of contact for all contract issues, and will be responsible for the coordination and the resolution of any issues. The Issuing Office will consider the account manager to be the sole point of contact with regard to Contractual and Purchase Order matters.

**A. Status Report.**

A **weekly** progress report covering activities, problems and recommendations. This report should be keyed to the work plan the Contractor developed in its quote, as amended or approved by the Issuing Office.

**Contractor Response**

**B. Problem Identification Report.**

An “as required” report, identifying problem areas. The report should describe the problem and its impact on the overall project and on each affected task. It should list possible courses of action with advantages and disadvantages of each, and include Contractor recommendations with supporting rationale.

**Contractor Response**

**C. Final Report**

At the conclusion of the project, the contractor will submit a final report to the PMRS for review and approval. The final report will specifically list all business specification requirements, and the timeline of project task completion.

**Contractor Response**

**D. SLA Report** - The Offeror shall provide a monthly report on statistical information to assess compliance with the required service levels as outlined in service level agreements. This report must be delivered within three (3) business days of month's end or available online for viewing.

**Contractor Response**

**E. Issue Management Report** - A monthly report which includes a summary on issues reported by the Commonwealth that month, open issues from previous reporting period, issue priority level, issue description, issue summary, and current status of issues. The Commonwealth may request additional detailed information or a corrective action plan for issues not resolved within the Problem Circumvention or Resolution Time SLA.

**III-10. Project Scope, Charter and Organization:** In conjunction with initial project planning activities, the selected Offeror will submit to PMRS a project scope and charter document inclusive of the project goals, governance, scope, project team, and project reporting and project management. The governance and project organization chart with accompanying narrative describing roles and responsibilities for each selected Offeror and PMRS team member, executive, or governance body should be included in the Scope and Charter Document. The organization chart and roles/responsibilities description will be subject to PMRS approval. The project organization chart will be updated as required during the project based on required staff changes.

**Expected Deliverables and Work Products:**

**1. Project Scope, Charter and Organization**

**III-12. Project Planning:** The selected Offeror will be responsible for the creation and maintenance of project plans and team level sub-plans throughout the project. Within the first four (4) weeks of beginning work, the selected Offeror will create the detailed Project Strategy, Work Plan and Resource Schedule consistent with time lines and plans submitted as a part of its ITQ Response. The project schedule should include key activities such as business requirements gathering, communications and change management, the technology plan, specification creation, development, testing, integration testing, user acceptance testing, end user training, dependencies, go-live, and any other work package required for the successful implementation of this project including 12 month post implementation support and additional yearly maintenance options. This document must be refined and approved in conjunction with the PMRS project manager, key stakeholders, and key project participants. This initial schedule document must contain the following:

- a. A consolidated view of the work to be performed and the timing of all major activities in the entire project.
- b. Work Breakdown Structure; Activity Definitions, Activity Sequence, Activity Resource Estimates, Activity Duration Estimates
- c. A narrative and graphical description of the overall implementation approach.
- d. Project activities, task assignments, due dates and resources for both the selected Offeror and PMRS employees in Microsoft Project or other project management tool.

In addition, the selected Offeror will routinely update the Microsoft Project Schedule to reflect changes in the nature and timing of project activities, all changes being subject to PMRS approval. The selected Offeror will work with PMRS management to add detail to the overall plan and adjust schedules and assignments so that a complete, detailed, and up-to-date plan is available for managing at all times.

Expected *Deliverables* and *Work Products*:

1. Project Schedule
2. Project Plan Updates

**Background:** PMRS has reviewed and documented current business operations. This provides a foundation for the ‘Fit-Gap’ process. PMRS has also compiled an inventory of all current interfaces and reports for rationalization within the new financial management system.

**PMRS Preferences:** An important element of this project will be the implementation of reengineered business processes utilizing a financial management system with supporting best practices. Fit-Gap, business process reengineering and workflow design activities will be executed by the selected Offeror. Key activities include:

- i. Analyzing existing business processes documentation to develop a process fit/gap analysis.
- I. Conducting process workshops to complete reengineered business processes for “gapped” processes.
- I. Conducting business process workshops to design workflow specifications.
- iv. Converting reengineered business process documentation into configured business processes and documented workflows for the financial management system.
- v. Ensuring that users are trained and capable of executing workflows.
- vi. The Offeror must address how PMRS will participate in this process, how many PMRS staff will be needed and for what timeframe, and if process modifications require changes to PMRS processes, how much time is recommended for the PMRS to consider these changes without delaying the project.

It will be expected that the selected Offeror will develop the design specifications during this business process reengineering and workflow design step in conjunction with the assigned SMEs from PMRS. It is also expected that the Offeror would fully utilize existing ‘As Is’ documentation and provide the approach to the ‘To Be’ methodology.

The process documents produced as a result of this activity will be used to develop or modify processes and operating procedures for PMRS. In addition, the Offeror will work with the PMRS to design organization and operating procedures to be used for the on-going operations and management of the system.

**III-13. Issues and Risk Management:** The selected Offeror will provide Issue and Risk Management to include key reports, mitigation process and the issue and risk escalation process. The tasks must include how issue and risks will be identified, quantified, strategies to respond to issues and risks to be used by the project team inclusive of monitoring and control. The Offeror is responsible for reviewing and recommending changes to PMRS’ issue and risk management processes and assisting the PMRS Project Manager in the management and maintenance of these processes.

Every large project that is undertaken has associated risks. A focus in every ERP implementation project is management of cost, schedule and performance risk. Project risks are uncertainties, liabilities or vulnerabilities that may cause a system implementation project to deviate from the defined plan. PMRS seeks a clear means to

compare planned versus actual status, including percentages, at a sufficiently detailed level to ensure PMRS can adequately monitor the progress of the project.

**Expected Deliverables and Work Products:**

1. Issue and Risk Management Recommendations
2. Issue and Risk Management Plan
3. Issue Log
4. Risk Register

**PMRS Preferences:** PMRS has studied ERP project lessons learned from various sources including resources available on the internet and through discussions with other ERP implementation teams. PMRS is aware of the following top risk management factors: 1) project leadership (sponsors and project management support and timely decision making); 2) control over scope creep; 3) creation of management plans to address risk and other items; 4) a stable technical infrastructure; 5) effective communication; 6) availability and sufficiency of resources; and 7) use of proven methodologies. These lessons learned studies also generically identified the top risks that implementation projects may face: 1) failure to redesign business processes; 2) insufficient internal expertise; 3) lack of business analysts with business and technology knowledge; 4) failure to mix internal and external resources properly; 5) lack of enterprise-wide data integration design; 6) insufficient training and reskilling; 7) failure to adhere to standardized, supported ERP software specifications; 8) lack of scope and cost control; 9) lack of measured performance goals; 10) inaccurate or insufficient data conversion; 11) schedule slippage; and 12) lack of dedicated resources.

PMRS believes that it is essential to proactively manage those issues and risks that face this implementation project so that it can be completed on schedule, within the project budget, and with high quality. Potential implementation Offerors should be prepared to identify how they would address various issues and risks that may threaten the cost, schedule or quality of the implementation effort. Risk management plans and processes need to identify, describe and classify the issues and risks, identify potential responses and lay out the action steps for the responses. In addition, the plans and processes should identify contingency steps that would be pursued if the initial response is unsuccessful.

**Responsibility Matrix (PMRS Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Review and recommending risk management processes</li> <li>▪ Assist in the implementation of any recommended changes</li> <li>▪ Train the project team in the issue and risk management procedures for these changes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Communicate issue and risk management procedures and status.</li> <li>▪ Develop issue and risk management processes</li> <li>▪ Approve issue and risk management plans and systems</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Assist PMRS Project Manager in the management and maintenance of these processes</li> <li>▪ Identify and document issues and risks</li> <li>▪ Participate in issue analysis and resolution</li> <li>▪ Participate in risk avoidance, mitigation, transfer or acceptance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Manage and maintain issue and risk management processes</li> <li>▪ Identify and document issues and risks</li> <li>▪ Participate in issue analysis and resolution</li> <li>▪ Participate in risk avoidance, mitigation, transfer or acceptance</li> </ul>

**III-14. Organizational Change Management:** PMRS has accepted the importance of Change Management as an integral part of Project Management and supported this concept through the placement of a dedicated Change Management Specialist assigned to the Project Team. The selected Offeror will create a Communication and Change Management Plan that is inclusive of all internal and external communications related to the organization and business process changes that will be implemented as a result of the project. The Change Management and Communications Plan must identify all stakeholder impacts and include key milestones based on the plan. The Plan should include at a minimum PMRS internal staff, Commonwealth Agencies, and PMRS’ business partners. Content creation for project communications is the responsibility of the selected Offeror. Content review is the responsibility of PMRS. Organization change recommended to support the business process changes is the responsibility of PMRS.

The Offeror will be responsible for documenting the changes in structure, processes, information, time lines, roles, and responsibilities needed for implementation and operation of the new system; for assisting PMRS in the readiness activities to engage this change; and for preparing the transition plan required to bring about these changes.

The Offeror will be responsible for facilitating the development of audience appropriate materials along with the Project Manager and Project Team Members in order to communicate these changes described above to PMRS financial users and stakeholders.

Expected Deliverables and Work Products:

1. Change Management Process Recommendations
2. Communications and Change Management Plan
3. Communication and Change Execution

**PMRS Preferences:** Just as important as the project methodology is the approach to Change Management. It’s anticipated that the selected Offeror will utilize PMRS’ change management documentation already gathered as a guide in the steps required for managing organizational change for this implementation.

**Responsibility Matrix (PMRS Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Documenting the changes in structure, processes, information, time lines, roles, and responsibilities needed for implementation and operation of new system</li> <li>▪ Preparing transition plan to bring about changes</li> <li>▪ Address change impacts by module</li> </ul>	<ul style="list-style-type: none"> <li>▪ Working with Offeror using the Organizational Change Management methodology</li> <li>▪ Undertaking readiness activities to engage in change</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Use existing Organizational Change Management methodology</li> <li>▪ Assisting PMRS in readiness activities to engage in change</li> <li>▪ Facilitating the development of audience-appropriate materials along with Project Manager and Project Team members</li> </ul>	<ul style="list-style-type: none"> <li>▪ Facilitating the development of audience-appropriate materials along with Offeror</li> </ul>

**III-15. Communications Plan:** The Offeror will be responsible for facilitating and reviewing audience-appropriate materials along with the Project Manager and Project Team Members for the delivery of messages identified in the Communications Plan. In addition to the Change Impacts acknowledged for each module within the contents of this ITQ, it is expected that other functional impacts will be identified during the implementation segment as a result of process and procedural changes. The Offeror will be responsible for developing the materials for all these impacts as they become a part of the evolving Communications Plan. The Offeror will be responsible for assisting PMRS in executing all message deliveries.

Expected Deliverables and Work Products:

1. Communication Plan Review Recommendations
2. Communication Plan Updates
3. Communications Materials

**Background:** PMRS realizes that communication, early and often, is key to successful implementation. Communications focus on building awareness of the business reasons for the change and move toward focusing on the “how” to change. Functional impacts (differences between an ‘as is’ and ‘to be’ PMRS) are identified and documented then communicated to end users. As part of this essential task, PMRS is developing the project Communications Plan. This plan represents a starting point only; as a living document in a dynamic environment, it will evolve.

The Communications Plan provides an organized framework for managing and coordinating the wide variety of communications that will directly or indirectly take place during the course of implementation. Such a framework will ensure that the Financials Reengineering Project Team provides relevant, accurate, consistent and timely information to the appropriate stakeholders. Throughout the project lifecycle, specific communication messages will be delivered to the appropriate audiences in order to build awareness of the project, gain understanding of the need for the project, help prepare for the project, and eventually become accustomed to the changes brought about by the project.

**Responsibility Matrix (PMRS Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Development of audience-appropriate materials along with Project Manager and Project Team members</li> <li>▪ Identifying functional impacts and developing materials covering these impacts</li> <li>▪ Recommending plan enhancements and improvements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Development of audience-appropriate materials along with Offeror</li> <li>▪ Producing the Financials Project Communications Plan</li> <li>▪ Identifying the timing and appropriate mode for the delivery of messages</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Updating communications plan</li> <li>▪ Assisting PMRS in executing all message deliveries</li> </ul>	<ul style="list-style-type: none"> <li>▪ Providing relevant, accurate, consistent and timely information to appropriate stakeholders</li> <li>▪ Executing all message deliveries</li> </ul>

DELIVERABLE 1: Project Management Plans reviewed and accepted by PMRS

**III-16. Database Administration:** The Offeror will be responsible for assisting in the initial system, database, backup, environment replication and security set up. During the project, the Offeror will be responsible for supporting PMRS staff and administration during the implementation project. This support will include analysis and recommendation for installation of all interim and final configurations of the financial management system and associated databases consistent with the project strategy and the implementation of an application security methodology that adheres to the current best business practices for information security. The implementation of maintenance packs, updates, fixes during the term of this contract will also be the responsibility of PMRS, supported by Offeror analysis, recommendation, input and mentoring.

Expected Work Products:

1. Installation, configuration, backup, environment replication and security recommendations
2. Analysis of Issues and Problems
3. Mentoring for System, Database and Security Administration

**Background:** It is anticipated that multiple environments of applications and databases for development, testing, training and production will be created to support the implementation of the financial management system.

**PMRS Preference:** It is PMRS’ intent to perform the system, database and security administration activities after suitable classroom and on-the-job training and knowledge transfer from the Offeror has been completed. PMRS will assign full time employees to undertake these responsibilities. PMRS will use its information technology solutions to oversee the installation of the hardware. The Offeror will assist in securing the certification of the installation within the first month of the project’s initiation.

**Responsibilities Matrix (PMRS Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Design</b>	<ul style="list-style-type: none"> <li>▪ Initial system, database, backup, environment replication and security set up and administration</li> <li>▪ Develop and implement configurations</li> <li>▪ Implement application security</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assign employees</li> <li>▪ Learn administration responsibilities and activities</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Implement service packs, updates and fixes</li> <li>▪ Support transition of responsibilities to PMRS</li> <li>▪ Analyzing problems</li> <li>▪ Recommending corrective actions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Manage administration</li> <li>▪ Maintain system, database and security</li> </ul>

**III-17. Technical Environment:** The Offeror will plan and design all technical environments needed on the project (including all development, quality, testing, training, sandbox and production environments and related network configuration). The design must describe the organization structure, security architecture and design to encompass all components making up the system solution/platform to achieve application security. It will be the Offeror’s responsibility to review the development software installation and make recommendations for enhancement or improvement based on the Offeror’s previous implementation experience. Six months prior to roll-out, it will be the Offeror’s responsibility to work with PMRS to design the configuration for the production environment. Throughout the project, it will be the Offeror’s responsibility to assist in the analysis and resolution of problems and issues related to the environments as they are identified.



Expected Work Products:

1. Development Environment Assessment Report
2. Technical Environment Design
3. Production environment recommendations
4. Documentation of issue analysis and resolutions
5. Installation of Software,
6. Installation Check List and Approval Document
7. Installed Module Checklist Results and Approval Document

**Responsibility Matrix (PMRS Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Review and evaluate the PMRS' configuration for development.</li> <li>▪ Recommend improvements and enhancements to this configuration</li> <li>▪ Work with PMRS to design the configuration for the production environment.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Document and communicate the existing PMRS technical environment affecting financial management system components.</li> <li>▪ Document and communicate the configuration of the development environment.</li> <li>▪ Participate in configuration planning sessions</li> <li>▪ Approve configuration plans</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Assist in establishment and maintenance of the development and production environments</li> <li>▪ Assist in analysis and resolution of any installation, configuration, interface, issues and problems.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Establish and maintain the development and configuration environments</li> </ul>

**Software Installation/Configuration:** The selected Offeror, with participation from PMRS staff, will install all required project software and assist PMRS in verifying that:

- all modules are present and installed;
- the system operates in a stable fashion both Online and in batch,
- the system can be accessed from PMRS' network or from any mobile application (as needed);
- and that the documentation is complete.

Documentation must include:

- Database configuration parameters, database object definitions, and other tailoring requirements to support the application
- Application and system software configuration parameters definitions, hardware requirements, installation procedures, and operations instructions
- Operations run book, backup and restore procedures, system monitoring and administration processes, and other operations functions

**Module Verification:** After completion of the initial software installation and configuration, the selected Offeror will verify, to PMRS, that all acquired modules are present and installed; that the system operates in a stable fashion both on-line and in batch mode; and that the system can be accessed from PMRS' network.

**III-18. System Configuration:** The Offeror is responsible for developing final documentation for configuration options, table set up, and special requirements for the financial management system and the modules within the scope of PMRS’ financial management system and PMRS implementation and detailing all environments and plans to control and move artifacts through these environments. The Configuration Management Plan should include hardware sizing and system software control, application software control, environment administration with regards to role based security access, backups, organizational responsibilities and change control. This documentation will identify any minor modifications (special requirements) to be made as part of the configuration process using Application Designer or other tools. The product of this activity will contribute to the final design of the new system.

Expected Work Products:

1. Configuration Documents
2. Configuration Management Plan
3. Workshop Summaries
4. Documentation of issue analysis and resolutions

**PMRS Preferences:** It is PMRS’ belief that the design documentation is essential in maintaining and managing a complex technical environment, especially one that will change in the future. By providing thorough and complete documentation, future upgrades and on-going maintenance will be made easier. It is PMRS’ desire to utilize the configuration document the Offeror will supply as a deliverable of this project. The configuration document will be used in conjunction with Setup Manager to document the setup and configuration settings necessary to implement the application. The major components of the document should include the setup task name, navigation, background about the setup, and configuration decisions made with respect to values and options and a reference to the setup task manager step.

**Responsibility Matrix (Offeror Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Review and evaluate PMRS’ configuration for development.</li> <li>▪ Recommend improvements and enhancements to this configuration</li> <li>▪ Document and communicate the configuration of the development environment</li> <li>▪ Work with the PMRS to design the configuration for the production environment.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Document and communicate the existing PMRS technical environment affecting financial management system</li> <li>▪ Participate in configuration planning sessions</li> <li>▪ Approve configuration plans</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Assist in establishment and maintenance of the development and production environments</li> <li>▪ Assist in analysis and resolution of configuration issues and problems.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Establish and maintain the development and configuration environments</li> </ul>

DELIVERABLE: Configuration of all platform environments Ready for Use (RFU).

**III-19. Design Specification (Modifications/Customizations):** The Offeror is responsible for finalizing requirements and developing the design specifications for all major modifications and customizations identified

by PMRS, along with design for any workflow modifications identified through the Financials configuration activity.

Expected Work Products:

1. Workshop Summaries
2. Requirement Specifications
3. Design Documentation
4. Documentation of issue analysis and resolutions

**PMRS Preferences:** It is PMRS’ preference that the major modifications and customizations to the core system applications be avoided regardless of the initial work effort. In addition, it is the PMRS’ preference that only those customizations and modifications that are business critical and either can’t be remedied through delivered functionality or through business process change within PMRS be considered.

However, PMRS recognizes that additional changes outside the scope presented in this ITQ may be identified during the course of the project. Any modifications or customizations that are approved should be subject to the change control, cost control, and quality assurance activities adopted for the project.

**Responsibility Matrix (Offeror Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Work with PMRS to document requirements for all modifications, customizations</li> <li>▪ Develop design documentation for solutions to satisfy the requirement</li> <li>▪ Develop work estimates for any new customizations or modifications approved by PMRS</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identify modifications and customizations and document the business necessity for any changes</li> <li>▪ Work with the Offeror to document change requirements</li> <li>▪ Review and validate design documents against the change requirements</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Assist in the creation of Issue papers required to justify customizations or modifications.</li> <li>▪ Develop the code to implement the approved customization or modification.</li> <li>▪ Identify ‘work around’ options for proposed customizations or modifications.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review Issue papers required to justify customizations or modifications to decision options available.</li> <li>▪ Approve requirement and design documentation</li> </ul>

**III-20. Data Conversion:** To reduce the conversion effort, PMRS intends to only convert data required to meet the financial processing and reporting needs of PMRS. PMRS intends to utilize existing technologies to accomplish conversions in an efficient manner and maintaining data quality.

The Offeror and PMRS will obtain data extracts from source systems for conversion analysis. Utilizing delivered technology, the Offeror will be responsible for data conversion. The Offeror will be responsible for data mapping, conversion, translation, and loading. The Offeror will assist PMRS with identifying problem areas within the legacy system data during data cleansing. The Offeror will perform data loading and assist PMRS with data validation and cleansing.

Expected Work Products:

1. Data Conversion Strategy
2. Data Mapping to Financial Management System

3. Data Transformation Documentation
4. Conversion Software and Related Source Code
5. Data Load Results
6. Documentation of issue analysis and resolutions

**Background:** PMRS’ Project Team is compiling a comprehensive list of data sources to be converted. While PMRS believes that its inventory of conversion data sets, as identified by the project team to date, represents the major data conversion requirements, additional analysis of PMRS’ application data will be required to identify other conversions that will be needed.

**PMRS Preference:** The strategy for managing legacy data during the transition period will be as follows:

- Populate the financial management system with cleansed master data from PMRS systems as required
- Extract, transfer, and load summary balances from PMRS financial systems and other systems where appropriate

**Responsibility Matrix (Offeror Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Provide staff members familiar with data conversion tools and with underlying data structures</li> <li>▪ Recommend conversion strategy and assist in dataset identification</li> <li>▪ Map conversion data to tables and columns</li> <li>▪ Identify and document data transformations</li> <li>▪ Finalize the conversion plan</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide staff members that are familiar with data elements and have an understanding of the data being converted</li> <li>▪ Assist in development of conversion strategy</li> <li>▪ Approve conversion strategy</li> <li>▪ Compile a comprehensive list of data sources to be converted (high level data conversion plan)</li> <li>▪ Identify final conversion data sets and fields</li> <li>▪ Approve the conversion plan</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Design, code and test load programs</li> <li>▪ Execute data load</li> <li>▪ Assist PMRS with identification of problem areas within the legacy system data during data scrubbing using automated and manual procedures</li> </ul>	<ul style="list-style-type: none"> <li>▪ Design, code and test extraction programs</li> <li>▪ Extract data from existing systems</li> <li>▪ Perform data validation</li> <li>▪ Identify problem areas within the legacy system and perform data scrubbing</li> <li>▪ Approve conversion products</li> </ul>

DELIVERABLE: Data Conversion and Validation Plan

DELIVERABLE: Final Conversion Test Results showing all Data has been successfully converted.

DELIVERABLE: Final Data Conversion into the Production Environment

**III-21. Interface Development:** Constructing interfaces will require cooperative efforts involving PMRS and Offeror staff. The Offeror will be responsible for the definition of the inbound and outbound file layouts subject to PMRS approval, to send and receive payment and financial data with external systems and the development of all interface programs for data entering or leaving the financial management system. PMRS or other organizations will be responsible for developing programs to send or receive data in their systems, in accordance with the Offeror developed specifications. It is expected that these interfaces be well documented to facilitate subsequent revisions based on changes to underlying systems. It is further expected that the interfaces will use Application Engine or Integration Broker and not write directly to the underlying tables or modify existing application code. The successful operation of all interfaces shall be the responsibility of the Offeror.

Expected Work Products:

1. Interface Requirements
2. Interface Design Documentation
3. Interface Software and Related Source Code, as applicable
4. Interface Test Results
5. Documentation of issue analysis and resolutions

**Background:** PMRS interfaces with systems from various State Agencies to support and complement the financial activities of the Commonwealth of Pennsylvania. These systems were created under the independent direction of the agency program areas for a specific segment of Commonwealth business activity. Examples include systems that use SAP and PeopleSoft ERP software.

**PMRS Preferences:** PMRS expects that some of these interfaces may be as simple as standard format data feeds accommodated by a delivered interface. Others may be complex interfaces to exchange information between the application and existing Agency systems. The solution shall support potential integration points and connections. PMRS interfaces with the Pennsylvania Treasury Department's (Treasury's) PeopleSoft system, CPAS pension administration system, BNY Mellon, and the Commonwealth of PA Comptroller Operation's SAP system is expected to adhere to the transaction interface requirements. A translation will be required for PMRS general ledger that uses a different chart of accounts than the PeopleSoft and SAP systems.

PMRS anticipates that a number of core interfaces including but not limited to the following will be required:

- Member Financial Transactions – An interface is required to record member financial transactions (contributions, interest, benefit payments, voids, refunds, etc.) processed in PMRS' CPAS pension administration system by employer in PMRS' accounting system. An interface is required to send member contribution receipt details back to PMRS' CPAS pension administration system from PMRS' accounting system. An interface is required to request member payments in Treasury's PeopleSoft system. Additional interfaces will be required to send warrants and payment details back to PMRS' accounting system.
- Revenue - An interface is required to record revenue in the Commonwealth of Comptroller Operations' SAP system to be interfaced with the PA Treasury Department's PeopleSoft system. Additional interfaces will be required to send warrant details back to PMRS' accounting system from the PA Treasury Department's PeopleSoft system.
- Payments – An interface is required to request payments in the PA Treasury Department's PeopleSoft system. Additional interfaces will be required to send warrants and payment details back to PMRS' accounting system.

- Employee payroll and travel expenses and state shared allocations for centralized services – An interface is required to send employee payroll and travel details back to PMRS’ accounting system from the PA Treasury Department’s PeopleSoft system. An interface is required to send state shared allocations for centralized services details back to PMRS’ accounting system from the PA Treasury Department’s PeopleSoft system.
- Journal Entry - It is expected that an interface will be utilized to provide a mechanism for various entries into the General Ledger module as necessary.
- Cash Management – It is expected that bank interfaces may need to be developed for cash and credit card accounts. Additional interfaces will be required to send warrant details back to PMRS’ accounting system from the PA Treasury Department’s PeopleSoft system to automate the bank reconciliation process.
- Investment – It is expected that bank interfaces may need to be developed for investment related detail from investment managers, the custodian, and the sub custodian bank.

Enterprise Content Management System (ECM) – It is expected that Dynamics will be able to generate various reports (GASB 68, 770, 771, etc.) and send the reports to an ECM repository. Dynamics should also have the ability to recall documents from the ECM (receipts, transaction documentation, etc.) for reference.

The solution shall provide capabilities to add additional interfaces to support future business needs.

**Responsibility Matrix (Shared)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Design</b>	<ul style="list-style-type: none"> <li>• Facilitate workshops or meetings with PMRS and State Agencies regarding interface requirements</li> <li>• Document interface requirements</li> <li>• Identify development approach for interfaces</li> <li>• Develop interface design documentation.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide an interface lead to support the Offeror</li> <li>• Schedule meetings, workshops and participants</li> <li>• Participate in workshops and meetings</li> <li>• Assist in the identification of Interface requirements</li> <li>• Approve interface designs</li> </ul>
<b>Build</b>	<ul style="list-style-type: none"> <li>• Provide skilled interface developers</li> <li>• Mentor PMRS Staff through Knowledge Transfer</li> <li>• Develop and test Interfaces in accordance with specifications</li> </ul>	<ul style="list-style-type: none"> <li>• Provide Staff for the Interface development Team</li> <li>• Develop and test interfaces in accordance with specifications</li> <li>• Approve final interfaces</li> </ul>

DELIVERABLE: Detailed Solution and Interface Design Document

**III-22. Reporting:** Reporting in PMRS is composed of numerous home grown databases and spreadsheets to record and manage information which is not recorded in the current financial system.

The Offeror is responsible for the identification and documentation of PMRS’ reporting requirements. PMRS expects the Offeror to provide documentation of the reporting requirements and develop an approach to satisfy those requirements. Furthermore, the Offeror will develop report specifications and provide experienced report developers to mentor and assist PMRS staff in the production of the system reports. PMRS will have lead responsibility for report development.

Expected Work Products:

1. Reporting Requirements Documentation
2. Workshop Summaries
3. Report Specification Documentation
4. Reporting Strategy
5. Reporting Software and Related Source Code

**Background:** An initial listing of current reports and report types has been assembled however a full review of the reporting needs must be conducted to design the most effective reporting strategy. PMRS will begin the review prior to implementation and complete it with the assistance of the successful Offeror.

**PMRS Preferences:** It is PMRS’ preference to move away from a batch-oriented reporting system toward a system where the majority of management information is retrieved through direct access to real-time transactions, Online reports, and stored queries. The ability to customize reports and create ad hoc reports on data element(s) to include building custom financial reports using Management Reporter from data captured in the chart of accounts with the associated financial dimensions of statistical accounts. Batch paper-centric reports will be the last choice for retrieving financial information. In addition, PMRS expects enhanced ad-hoc reporting capabilities to be available as a result of the implementation of the financial management system

To the extent possible, PMRS expects to access real time data (or data on a hour delay) in an environment that will not negatively impact response time for the production system. PMRS further expects to access that data in a variety of forms (ex: screen display, reports, graphs, dashboards, spreadsheets, WORD, user export files) and formats (ex.: PDF, XLSX, XML, XBRL, ASCI, DOCX). PMRS recognizes that may require the creation of a “reporting” instance of the database or a data warehouse and the implementation of reporting tools.

**Responsibility Matrix (PMRS Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Design</b>	<ul style="list-style-type: none"> <li>▪ Lead the reporting analysis effort</li> <li>▪ Facilitate analysis workshops</li> <li>▪ Document reporting requirements</li> <li>▪ Identify development approach to each reporting requirement</li> <li>▪ Develop report specifications</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide a reporting lead to support the Offeror</li> <li>▪ Schedule workshops and workshop participants</li> <li>▪ Participate in workshops</li> <li>▪ Articulate reporting requirements</li> <li>▪ Approve products</li> </ul>
<b>Build</b>	<ul style="list-style-type: none"> <li>▪ Provide skilled report developers</li> <li>▪ Mentor PMRS staff through knowledge transfer</li> <li>▪ Produce reports in accordance with specifications</li> <li>▪ Develop reports</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lead the development effort</li> <li>▪ Approve final reports</li> </ul>

DELIVERABLE: Ability to create reports using management reporter (Power BI)

DELIVERABLE: Run reports in batches either on demand or scheduled batches

DELIVERABLE: Enable the ability to download reports in bulk via secure connection

DELIVERABLE: Enable the ability to distribute reports via secure email to customer contacts either on demand or in batches

DELIVERABLE: Enable Push/Pull report population to other PMRS systems or web portals

**III-23. Security:** The Offeror is responsible for recommending a security plan that provides the security management process to be used for financials. PMRS desires the Offeror to provide security policies and

procedures compliant with the Federal Data Security (FIPS) guidelines. The Offeror is responsible for defining the roles and profiles for all users of the new system and the assisting with the development of policy and procedures for security maintenance in financials.

Expected Work Products:

1. Security Plan
2. Role and Profile Definition Document
3. Recommended Policy and Procedures
4. Workshop Summaries
5. Department-Level Security Recommendation

**Background:** PMRS will have a full-time Security Administrator assigned to this project.

**PMRS Preferences:** PMRS’ security preference is to provide ‘least privileged access’ by establishing the most granular level possible to each role. PMRS intends to allow pre-authorized non-PMRS agency representatives to access limited features of the system. These non-PMRS agency representatives must be restricted to a subset of the system data they’re authorized to access. The ability to deliver row-level security will go a long way in providing assurance that the right information is only available to the right people. PMRS understands that different alternatives to addressing the underlying requirements for granular security need to be explored. PMRS also understands that implementation of Department-level security is a relatively common modification.

PMRS desires a single sign-on configuration and therefore would like to consider a PMRS wide security standard for its applications. PMRS wishes to use of the delivered functionality to connect to Active Directory (PMRS security standard). Currently Microsoft Exchange On-line is used for PMRS mail services.

**Responsibility Matrix (PMRS Primary)**

	Offeror	PMRS
Development	<ul style="list-style-type: none"> <li>▪ Recommend a security plan</li> <li>▪ Recommend a roles and profiles for all users of the new system</li> <li>▪ Development of draft policy and procedures for security maintenance</li> <li>▪ Facilitate workshops and meetings to further analyze the Commonwealth department-level data sharing issues.</li> <li>▪ Develop recommendations to address department-level data sharing issues.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Approve the security plan</li> <li>▪ Completing preliminary list of possible roles related to each of the modules considered in scope for the duration of this project</li> <li>▪ Approval of role definitions and policy and procedures</li> <li>▪ Participate and support the analysis of department-level data sharing issues.</li> </ul>
Execution	<ul style="list-style-type: none"> <li>▪ Support implementation of the security plan, roles and profiles</li> <li>▪ Mentor PMRS security staff</li> </ul>	<ul style="list-style-type: none"> <li>▪ Implement security roles and profiles</li> <li>▪ Support implementation of row-level security</li> </ul>

**III\_24. System Build, Unit and Integration Testing:** The Offeror will be responsible for implementing the changes, execution and documentation of unit tests for all changes and certification that these changes are ready for integration test.



Expected Work Products:

1. Modifications to Configuration and Design Documentation
2. Software and Related Source Code, as applicable
3. Unit Test Results
4. Integration Certification
5. Documentation of development issue analysis and resolutions

**Background:** PMRS has an established process for change control and quality assurance that the Offeror will be required to use during the development process for all development activities – those related to configuration, customizations and modifications as well as for conversion, interfaces and reports.

**PMRS Preferences:** Although the Offeror will have primary responsibility for the implementation tasks, the work of implementation will be overseen by staff from PMRS’ Information Technology Solutions. PMRS will devote full time staff to this effort to supplement the Offeror staff, and mentoring of this staff will be extremely important during this segment of the project.

It is anticipated the Offeror will bring strong development and development management skills to the project, along with a well-proven series of metrics to track the success of the system build and unit testing process.

**Responsibility Matrix (Offeror Primary)**

	Offeror	PMRS
Design	<ul style="list-style-type: none"> <li>• Design final configuration for optimal performance on allocated hardware.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide PMRS Technical Standards and Management Plans</li> </ul>
Build	<ul style="list-style-type: none"> <li>• Provide skilled developers</li> <li>• Develop and unit test configuration, modifications and customizations in accordance with specifications</li> <li>• Document unit tests</li> <li>• Certify components for integration readiness</li> <li>• Mentor PMRS staff through knowledge transfer</li> </ul>	<ul style="list-style-type: none"> <li>• Provide staff for the development team</li> <li>• Develop and test interfaces in accordance with specifications</li> <li>• Approve unit test and certifications</li> </ul>

DELIVERABLE : Comprehensive Test Plan

DELIVERABLE : Test Scenarios and Scripts

DELIVERABLE : Successful System and UAT Test Results which includes the updated Traceability Matrix

**III-25. System Build, Unit and Integration Testing:** The Offeror will be responsible for implementing the changes, execution and documentation of unit tests for all changes and certification that these changes are ready for integration test.

Expected Work Products:

6. Modifications to Configuration and Design Documentation
7. Software and Related Source Code, as applicable
8. Unit Test Results
9. Integration Certification
10. Documentation of development issue analysis and resolutions

**Background:** PMRS has an established process for change control and quality assurance that the Offeror will be required to use during the development process for all development activities – those related to configuration, customizations and modifications as well as for conversion, interfaces and reports.

**PMRS Preferences:** Although the Offeror will have primary responsibility for the implementation tasks, the work of implementation will be overseen by staff from PMRS’ Information Technology. PMRS will devote full time staff to this effort to supplement the Offeror staff, and mentoring of this staff will be extremely important during this segment of the project.

It is anticipated the Offeror will bring strong development and development management skills to the project, along with a well-proven series of metrics to track the success of the system build and unit testing process.

**Responsibility Matrix (Offeror Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Design</b>	<ul style="list-style-type: none"> <li>• Design final configuration for optimal performance on allocated hardware.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide PMRS Technical Standards and Management Plans</li> </ul>
<b>Build</b>	<ul style="list-style-type: none"> <li>• Provide skilled developers</li> <li>• Develop and unit test configuration, modifications and customizations in accordance with specifications</li> <li>• Document unit tests</li> <li>• Certify components for integration readiness</li> <li>• Mentor PMRS staff through knowledge transfer</li> </ul>	<ul style="list-style-type: none"> <li>• Provide staff for the development team</li> <li>• Develop and test interfaces in accordance with specifications</li> <li>• Approve unit test and certifications</li> </ul>

DELIVERABLE : Comprehensive Test Plan

DELIVERABLE : Test Scenarios and Scripts

DELIVERABLE : Successful System and UAT Test Results which includes the updated Traceability Matrix

**III-26 Change Control (Scope & Schedule):** As important as the requirements contained within the ITQ is the on-going management of the scope of work throughout the implementation time line of the project. Defining an achievable scope and then controlling that scope is crucial to meeting deadlines and implementation dates. In order to realize the success of this project, a comprehensive change control program should be identified early in the project and followed rigorously throughout the duration of the implementation segment.

The Offeror will be responsible for working with PMRS to manage and limit changes to the scope of work during the project implementation segment. Through training and workshops, the Offeror will be responsible for educating the project team in the change control plan and tracking tools to be used to address management of scope on the project.

The Offeror and PMRS will establish a process to ensure that any customization requirements are clearly documented, analyzed and reviewed by appropriate management and that the appropriate level of user buy-in is achieved. This will ensure change orders are minimized throughout the project.

**Expected Work Products:**

1. Change analysis and recommendation
2. Change Log
3. Change Control Plan
4. Scope Management Plan
5. Cost Management Plan

**Background:** Part IV, Section IV-3 provides an overview of the modules and major functional requirements that are within the scope of work of PMRS' implementation effort. The information presented in this section is based on the work completed by the project team to date.

**PMRS Preferences:** Scope management ensures that the project meets stakeholder expectations and is delivered on time and within budget. During project implementation, changes may be necessary regarding what is to be delivered, who is responsible for delivery, budget, and/or schedule. The purpose of change control is not to eliminate changes; rather, the purpose is to ensure a fully informed evaluation of scope changes, resulting in the inclusion of only those changes that are consistent with the goals and the overall strategy of the project.

A process must be practiced allowing requests for changes to be analyzed by pre-defined criteria. In this process, a certain value must be established to determine the necessity of the change and to verify if a formal process is required. PMRS would ensure that only validated items are considered for the change control process.

The change control plan must contain measures to evaluate the importance and need of the request. The format of the review process should include prioritization, impact upon project schedule, resource assignment, financial costs, and the total cost of ownership including future maintenance and training. In addition, an approval process should be based on predefined metrics. Upon approval from both the Offeror and PMRS for each change item reviewed, an addendum should be made to the existing contract when appropriate.

**Responsibility Matrix (Shared)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Propose a change control plan and methodology that it has used on other similar projects</li> <li>▪ Describe how the Offeror and PMRS can manage the project to minimize or eliminate scope expansion and change orders</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review change control plan and methodology suggest minor modifications for this project.</li> </ul>

<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Train PMRS staff in change management process</li> <li>▪ Analyze and recommend alternatives for candidate changes</li> <li>▪ Track changes</li> <li>▪ Report outcomes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Analyze and recommend alternatives for candidate changes</li> <li>▪ Develop change log to track changes</li> <li>▪ Approve changes</li> </ul>
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**III-27. Testing:** The Offeror is responsible for developing the test plan, test scripts, and supporting documents, which identify the processes, tools, tasks and materials to be used for unit, integration acceptance, load, and security testing of the system. The Offeror is further responsible for documenting the successful execution of the test plan and any modifications that were required for successful execution. During and after end user training, PMRS will, with and support from the Offeror, conduct final user acceptance and system stress testing. Although user acceptance testing is a PMRS responsibility, the Offeror will be responsible for development of the acceptance test plan and for the development of the acceptance test scripts. PMRS will modify the acceptance test scripts as required.

The Offeror will perform unit, system, conversion and integration testing in addition to performance testing associated with each element prior to PMRS conducting user acceptance testing. The Offeror will provide written certification that adequate and sufficient testing has occurred prior to PMRS performing user acceptance testing. User testing documentation must include response time for all user actions at the server level. Batch testing documentation must include execution time for all jobs.

*Expected Deliverables and Work Products:*

1. Unit, System and Acceptance Test Plans
2. Test scenarios, scripts and test case data
3. Documentation of Successful Test Execution
4. User Acceptance Test Certification
5. Documentation of development issue analysis and resolutions

**PMRS Preferences:** It is anticipated the Offeror will be the principal in testing prior to the user acceptance testing activities and be supported by PMRS resources during this initial testing. PMRS will expect a detailed test plan to ensure a successful outcome to testing activities and that will provide the base for all subsequent testing tasks. PMRS will require that the testing activities and any associated training not be abbreviated in order to meet the project implementation schedules.

The test plan must include the scheduling assumptions for ‘trained’ PMRS resources that will be required in each segment of the testing. In addition, the systems and integration testing will include all of the discrete parts of the system as a whole and include the required integration with the recommended products, and any additional workflows, interfaces, conversions, and reports. The test plan will include a discussion of how the Offeror will use “real” examples in the test scripts (scenarios) to ensure that the needs of internal PMRS’ divisions, external offices, and business partners are met in the new system.

**Responsibility Matrix (Offeror Primary)**

Offeror	PMRS
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<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Develop the integration and acceptance test plan and t scripts</li> <li>▪ Train PMRS resources identified to perform acceptance testing</li> <li>▪ Certify that the Integration and acceptance test environments have been properly configured in accordance with the documentation Offeror has maintained</li> </ul>	<ul style="list-style-type: none"> <li>▪ Support the development of the test plans and scripts</li> <li>▪ Approve test plans and scenarios</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Execute integration test</li> <li>▪ Document successful test completion</li> <li>▪ Identify and resolve system issues identified through testing</li> <li>▪ Provide assistance in areas of coordination, issue resolution, error resolution and analysis</li> </ul>	<ul style="list-style-type: none"> <li>▪ Support the execution of the integration test</li> <li>▪ Conduct user acceptance testing and system stress testing</li> <li>▪ Provide notification of failure of test scripts and the details associated with each failure</li> <li>▪ Accept the system</li> </ul>

**III-28 System Cutover:** The Offeror is responsible for working with PMRS to develop the Cut-over plan, which documents the schedule, procedures and contingency plans for the deployment of the system, and for producing close-out documentation, documenting successful implementation and acceptance of the new system.

Expected Deliverables and Work Products:

1. Cut-over Plan
2. Closeout Documentation
3. Contingency Plan for Issues arising after Go-Live

**PMRS Preference:** PMRS is expecting the Offeror to be present and coordinate the parallel planning and the Go-Live process. The Offeror will be responsible for successful cut-over activities. It is expected that the Offeror’s approach will provide Cut-Over support that minimizes costs and maximizes availability.

**Responsibility Matrix (PMRS Primary)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Plan</b>	<ul style="list-style-type: none"> <li>▪ Recommend cut-over strategies</li> <li>▪ Develop cut-over plan</li> <li>▪ Develop contingency plan</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adopt cut-over strategy</li> <li>▪ Approve cut-over plan</li> <li>▪ Support cut-over plan development</li> </ul>
<b>Execute</b>	<ul style="list-style-type: none"> <li>▪ Support cut-over</li> </ul>	<ul style="list-style-type: none"> <li>▪ Manage and execute cut-over</li> <li>▪ Validate success</li> <li>▪ Make Go-Live decision</li> </ul>

**III-29. Implementation Support:** The Offeror is required to provide 90 days of on-site post implementation support for the system and one year of post implementation support for its core financial management processes. The support for the system will address post implementation fixes and technical support to the application. The functional support is required to assist with specific system activities and is not expected to require full-time on-site assistance.

Expected Deliverables and Work Products:

1. Technical and Functional Support

2. Post Go-Live Audit plan to verify data, system functionality, and system performance

**PMRS Preferences:** PMRS believes that through knowledge transfer, training, testing and other associated learning experiences gained through working with the Offeror to the implement the financial management system that it will be reasonably prepared to undertake ongoing operations. As a safeguard, however, PMRS feels that additional technical support may be required for break-fix situations and required upgrades that occur during the first months of system operations. In addition, functional support will be needed to assist with new processes and the knowledge transfer related to these processes.

**Responsibility Matrix (Offeror Primary)**

	Offeror	PMRS
Execution	<ul style="list-style-type: none"> <li>▪ Provide technical support through participation in PMRS’ operational system support organization</li> <li>▪ Provide functional support in accordance with the support agreement developed through this ITQ</li> </ul>	<ul style="list-style-type: none"> <li>▪ Manage the support organization</li> <li>▪ Manage system operations</li> <li>▪ Manage financial operations</li> </ul>

**III-30. Project Segments:** While the final work plan will be based on the submission from the successful Offeror, the material in this section is based on the assumption that the project will go through five major segments:

- The primary focus of the initiation segment will be the review and assessment of the products produced by the project team and the transitional milestone for this segment will be the approval of a final project plan that reflects the results of this assessment.
- The design segment will focus on completion of the module configuration documents and design documents for customizations, modifications, interfaces, conversion and reports. The transitional milestone for this segment will be the critical review and acceptance of all design materials.
- Implementation of the design documents will be the focus of the build segment, which will culminate in the user acceptance test and the acceptance of the system.
- The transition segment is concerned with the transition of the system from the development to the production environment and the cut-over of the system to PMRS users. The transition segment ends with documentation of successful Go-Live.

Overlapping build and transition is the training segment, ensuring that all users are adequately prepared to use the system on a daily basis and that the infrastructure is in place to support them. This end of this segment is marked by successful completion of all training.

**III-31. Collaboration and Productivity Tools:** The Offeror is responsible for providing the structure, tools and techniques to document and maintain the deliverables, work products and other artifacts of the implementation project. The Offeror is responsible for documenting the information management process to be used in this project and train all project team members in this process.

Expected Work Products:

1. Information Management Documentation
2. Information Management Training

**PMRS Preferences:** PMRS believes that an ERP implementation project will require the use of electronic tools to capture and relate the hundreds or thousands of items that will be produced during the effort. PMRS has

experience with SharePoint and Exchange. PMRS must have the license and right to continue to use any tools that are used to develop project documentation and full access to all project documents after project completion. All documentation for this project will be the property of PMRS and will be stored in a PMRS hosted system.

PMRS understands that many implementation Offerors have developed or licensed databases and automated tools designed to provide proven reference documents and templates to increase productivity; assistance in managing the project and tracking progress; means to communicate and collaborate effectively; and serve as a repository of project documentation. The Offeror may propose to employ such tools for this project or to use the existing tools.

**Responsibility Matrix (Shared)**

	<b>Offeror</b>	<b>PMRS</b>
<b>Development</b>	<ul style="list-style-type: none"> <li>▪ Recommend tools and their usage</li> <li>▪ Installation, setup and configuration of tools</li> <li>▪ Documentation of policies and procedures</li> <li>▪ Training of all project team staff in the tools and the methods and procedures for tool usage.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review and approval of tools, policies and procedures</li> <li>▪ Support the installation effort</li> <li>▪ Participate in training</li> </ul>
<b>Execution</b>	<ul style="list-style-type: none"> <li>▪ Oversee appropriate usage of the tools and adherence to policies and procedure</li> <li>▪ Use the tools in accordance with adopted policy and procedure</li> </ul>	<ul style="list-style-type: none"> <li>▪ Support management of the tools and their usage</li> <li>▪ Use the tools in accordance with adopted policy and procedure</li> </ul>

**III-32. Domestic Workforce Utilization.** Contractors must complete and sign the Domestic Workforce Certification attached to and made part of this RFQ as Appendix B. Contractors who seek consideration for the Domestic Workforce Utilization Certification criterion must complete, sign, and submit the Domestic Workforce Utilization Certification Form in the same sealed envelope with the Technical Submittal.

**III-33. Lobbying Certification and Disclosure of Lobbying Activities**

*[Include this provision if the Project involves the use of federal monies.]*

This Project will be funded, in whole or in part, with federal monies. Public Law 101-121, Section 319, prohibits federal funds from being expended by the recipient or by any lower tier sub-recipients of a federal contract, grant, loan, or a cooperative agreement to pay any person for influencing, or attempting to influence a federal agency or Congress in connection with the awarding of any federal contract, the making of any federal grant or loan, or entering into any cooperative agreement. All parties who submit quotes in response to this RFQ must sign the “Lobbying Certification Form,” (attached as [Appendix \[ G \]](#) and, if applicable, complete the “Disclosure of Lobbying Activities” form available at:

<http://www.whitehouse.gov/omb/assets/omb/grants/sfillin.pdf>.

## **PART IV**

### **COST SUBMITTAL**

**IV-1. Cost Submittal.** The information requested in this **Part IV** shall constitute the Cost Submittal. The Cost Submittal shall be placed in a separate sealed envelope within the sealed quote, separated from the technical submittal. The total proposed cost should be broken down into the components set forth in **Appendix [ H ]- PMRS - RFQ 6100042510 Cost Matrix.xls**. The percentage of commitment to Small Diverse Businesses and Small Businesses should not be stated in the Cost Submittal. Contractor should **not** include any assumptions in their cost submittals. If the Contractor includes assumptions in its cost submittal, the Issuing Office may reject the quote. Contractor should direct in writing to the Issuing Office pursuant to **Part I, Section I-6** of this RFQ any questions about whether a cost or other component is included or applies. All Contractors will then have the benefit of the Issuing Office's written answer so that all quotes are submitted on the same basis.

**The Issuing Office will reimburse the selected Contractor for work satisfactorily performed after execution of a purchase order, in accordance with contract requirements, and only after the Issuing Office has issued a notice to proceed.**



## PART V

### SMALL DIVERSE BUSINESS AND SMALL BUSINESS PARTICIPATION SUBMITTAL

**V-1. Small Diverse Business and Small Business General Information** The Issuing Office encourages participation by Small Diverse Businesses and Small Businesses as prime contractors, and encourages all prime contractors to make significant commitments to use Small Diverse Businesses and Small Businesses as subcontractors and suppliers.

A Small Business must meet each of the following requirements:

- The business must be a for-profit, United States business;
- The business must be independently owned;
- The business may not be dominant in its field of operation;
- The business may not employ more than 100 full-time or full-time equivalent employees;
- The business, by type, may not exceed the following three-year average gross sales:
  - Procurement Goods and Services: \$20 million
  - Construction: \$20 million
  - Building Design Services: \$7 million
  - Information Technology Goods and Services: \$25 million

For credit in the RFQ scoring process, a Small Business must complete the DGS/BDISBO self-certification process. Additional information on this process can be found at:

<http://www.dgs.pa.gov/Businesses/Small%20Business%20Contracting%20Program/Pages/default.aspx>.

A Small Diverse Business is a DGS-verified minority-owned small business, woman-owned small business, veteran-owned small business, service-disabled veteran-owned small business, LGBT-owned small business, Disability-owned small business, or other small businesses as approved by DGS, that are owned and controlled by a majority of persons, not limited to members of minority groups, who have been deprived of the opportunity to develop and maintain a competitive position in the economy because of social disadvantages.

For credit in the RFQ scoring process, a Small Diverse Business must complete the DGS verification process. Additional information on this process can be found at:

<http://www.dgs.pa.gov/Businesses/Minority,%20Women%20and%20Veteran%20Businesses/Pages/default.aspx>.

A Contractor that qualifies as a Small Diverse Business or a Small Business and submits a quote as a prime contractor is not prohibited from being included as a subcontractor in separate quotes submitted by other Contractor.

A Small Diverse Business or Small Business may be included as a subcontractor with as many prime contractors as it chooses in separate quotes.

The Department's directory of self-certified Small Businesses and DGS/BDISBO-verified Small Diverse Businesses can be accessed from:

<http://www.dgs.pa.gov/Businesses/Minority.%20Women%20and%20Veteran%20Businesses/Small-Diverse-Business-Verification/Pages/Finding-Small-Diverse-Businesses.aspx>.

Questions regarding the Small Diverse Business and Small Business Programs, including questions about the self-certification and verification processes can be directed to:

Department of General Services  
Bureau of Diversity, Inclusion and Small Business Opportunities (BDISBO)  
Room 601, North Office Building  
Harrisburg, PA 17125  
Phone: (717) 783-3119  
Fax: (717) 787-7052  
Email: [RA-BDISBOVerification@pa.gov](mailto:RA-BDISBOVerification@pa.gov)  
Website: [www.dgs.pa.gov](http://www.dgs.pa.gov)

- V-2. Small Diverse Business and Small Business (SDB/SB) Participation Submittal.** All Contractors are required to submit **two (2)** copies of the Small Diverse Business and Small Business Participation Submittal Form contained in [Appendix \[ E \]](#) and related Letter(s) of Intent [Appendix \[ F \]](#). The submittal must be sealed in its own envelope, separate from the remainder of the proposal, and must be provided on the Small Diverse Business and Small Business Participation Submittal form, with information as follows:
- A.** Contractors must indicate their status as a Small Diverse Business and as a Small Business through selection of the appropriate checkboxes.
  - B.** Contractors must include a numerical percentage which represents the total percentage of the total cost in the Cost Submittal that the Contractor commits to paying to Small Diverse Businesses and Small Businesses as subcontractors.
  - C.** Contractors must include a listing of and required information for each of the Small Diverse Businesses and/or Small Businesses with whom they will subcontract to achieve the participation percentages outlined on the Small Diverse Business and Small Business Participation Submittal.
  - D.** Contractors must include a Letter of Intent (attached as [Appendix \[ F \]](#) is a Letter of Intent template which may be used to satisfy these requirements) signed by both the Contractor and the Small Diverse Business or Small Business for each of the Small Diverse Businesses and Small Businesses identified in the Small Diverse Business and Small Business Participation Submittal form. At minimum, the Letter of Intent must include the following:
    - 1.** The fixed numerical percentage commitment and associated estimated dollar value of the commitment made to the Small Diverse Business or Small Business; and
    - 2.** A description of the services or supplies the Small Diverse Business or Small Business will provide; and

3. The timeframe during the initial contract term and any extensions, options and renewals when the Small Diverse Business or Small Business will perform or provide the services and/or supplies; and
  4. The name and telephone number of the Contractor's point of contact for Small Diverse Business and Small Business participation; and
  5. The name, address, and telephone number of the primary contact person for the Small Diverse Business or Small Business.
- E. Each Small Diverse Business and Small Business commitment which is credited by BDISBO along with the overall percentage of Small Diverse Business and Small Business commitments will become contractual obligations of the selected Contractor.

**NOTE: Contractors will not receive credit for any commitments for which information as above is not included in the Small Diverse Business and Small Business Participation Submittal. Contractors will not receive credit for stating that after the contract is awarded they will find a Small Diverse or Small Business.**

**NOTE: Equal employment opportunity and contract compliance statements referring to company equal employment opportunity policies or past contract compliance practices do not constitute proof of Small Diverse Business and/or Small Business Status or entitle an Contractor to receive credit for Small Diverse Business or Small Business participation.**

### **V-3. Contract Requirements—Small Diverse Business and Small Business Participation.**

All contracts containing Small Diverse Business and Small Business Participation must contain the following contract provisions to be maintained through the initial contract term and any subsequent options or renewals:

- A. Each Small Diverse Business and Small Business commitment which was credited by BDISBO and the total percentage of such Small Diverse Business and Small Business commitments made at the time of quote submittal, BAFO or contract negotiations, as applicable, become contractual obligations of the selected Contractor upon execution of its contract with the Commonwealth.
- B. All Small Diverse Business and Small Business subcontractors credited by BDISBO must perform at least 50% of the work subcontracted to them.
- C. The individual percentage commitments made to Small Diverse Businesses and Small Businesses cannot be altered without written approval from BDISBO.
- D. Small Diverse Business and Small Business commitments must be maintained in the event the contract is assigned to another prime contractor.
- E. The selected Contractor and each Small Diverse Business and Small Business for which a commitment was credited by BDISBO must submit a final, definitive subcontract agreement

signed by the selected Contractor and the Small Diverse Business and/or Small Business to BDISBO within 30 days of the final execution date of the Commonwealth contract. A Model Subcontract Agreement which may be used to satisfy this requirement is provided in **Appendix [F ] – Model Form of Small Diverse and Small Business Subcontract Agreement**. The subcontract must contain:

1. The specific work, supplies or services the Small Diverse Business and/or Small Business will perform; location for work performed; how the work, supplies or services relate to the project; and the specific timeframe during the initial term and any extensions, options and renewals of the prime contract when the work, supplies or services will be provided or performed.
  2. The fixed percentage commitment and associated estimated dollar value that each Small Diverse Business and/or Small Business will receive based on the final negotiated cost for the initial term of the prime contract.
  3. Payment terms indicating that the Small Diverse Business and/or Small Business will be paid for work satisfactorily completed within 14 days of the selected Contractor's receipt of payment from the Commonwealth for such work.
  4. Commercially reasonable terms for the applicable business/industry that are no less favorable than the terms of the selected Contractor's contract with the Commonwealth and that do not place disproportionate risk on the Small Diverse Business and/or Small Business relative to the nature and level of the Small Diverse Business' and/or Small Business' participation in the project.
- F.** If the selected Contractor and a Small Diverse Business or Small Business credited by BDISBO cannot agree upon a definitive subcontract within 30 days of the final execution date of the Commonwealth contract, the selected Contractor must notify BDISBO.
- G.** The Selected Contractor shall complete the Prime Contractor's Quarterly Utilization Report and submit it to the contracting officer of the Issuing Office and BDISBO within ten (10) business days at the end of each quarter of the contract term and any subsequent options or renewals. This information will be used to track and confirm the actual dollar amount paid to Small Diverse Business and Small Business subcontractors and suppliers and will serve as a record of fulfillment of the contractual commitment. If there was no activity during the quarter, the form must be completed by stating "No activity in this quarter." A late fee of \$100.00 per day may be assessed against the Selected Contractor if the Utilization Report is not submitted in accordance with the schedule above.
- H.** The Selected Contractor shall notify the Contracting Officer of the Issuing Office and BDISBO when circumstances arise that may negatively impact the selected Contractor's ability to comply with Small Diverse Business and/or Small Business commitments and to provide a corrective action plan. Disputes will be decided by the Issuing Office and DGS.
- I.** If the Selected Contractor fails to satisfy its Small Diverse Business and/or Small Business commitment(s), it may be subject to a range of sanctions BDISBO deems appropriate. Such

sanctions include, but are not limited to, one or more of the following: a determination that the selected Contractor is not responsible under the Contractor Responsibility Program; withholding of payments; suspension or termination of the contract together with consequential damages; revocation of the selected Contractor's Small Diverse Business status and/or Small Business status; and/or suspension or debarment from future contracting opportunities with the Commonwealth.

**APPENDIX [ A ]**

**Master IT Services ITQ Contract #4400004480 Consulting Services – IT General, Modifiable Off-The-Shelf (MOTS), and Commercial Off-The-Shelf (COTS) Software Services for the Commonwealth**

**QUOTE COVER SHEET**  
**COMMONWEALTH OF PENNSYLVANIA**  
**[OAS Purchasing & Payment Division]**  
**RFQ# 6100043858**

**Enclosed in three separately sealed submittals is the quote of the Contractor identified below for the above-referenced RFQ:**

<b>Contractor Information:</b>	
Contractor Name	
Contractor Mailing Address	
Contractor Website	
Contractor Contact Person	
Contact Person's Phone Number	
Contact Person's Facsimile Number	
Contact Person's E-Mail Address	
Contractor Federal ID Number	
Contractor SAP/SRM Vendor Number	
<b>Submittals Enclosed and Separately Sealed:</b>	
<input type="checkbox"/>	Technical Submittal <input type="checkbox"/> Domestic Workforce Utilization Certification
<input type="checkbox"/>	Small Diverse Business and Small Business Participation Submittal <input type="checkbox"/> Small Diverse Business and Small Business Participation Submittal Form <input type="checkbox"/> Small Diverse Business and Small Business Letter(s) of Intent
<input type="checkbox"/>	Cost Submittal
<b><i>Signature</i></b>	
Signature of an official authorized to bind the Contractor to the provisions contained in the Contractor's quote:	
Printed Name	
Title	

**APPENDIX [ B ]**  
**DOMESTIC WORKFORCE UTILIZATION CERTIFICATION**

To the extent permitted by the laws and treaties of the United States, each quote will be scored for its commitment to use the domestic workforce in the fulfillment of the contract. Maximum consideration will be given to those Contractor who will perform the contracted direct labor exclusively within the geographical boundaries of the United States or within the geographical boundaries of a country that is a party to the World Trade Organization Government Procurement Agreement. Those who propose to perform a portion of the direct labor outside of the United States and not within the geographical boundaries of a party to the World Trade Organization Government Procurement Agreement will receive a correspondingly smaller score for this criterion. In order to be eligible for any consideration for this criterion, Contractor must complete and sign the following certification. This certification will be included as a contractual obligation when the contract is executed. Failure to complete and sign this certification will result in no consideration being given to the Contractor for this criterion.

I, \_\_\_\_\_ [title] of \_\_\_\_\_ [name of Contractor] a \_\_\_\_\_ [place of incorporation] corporation or other legal entity, ("Contractor") located at \_\_\_\_\_ [address], having a Social Security or Federal Identification Number of \_\_\_\_\_, do hereby certify and represent to the Commonwealth of Pennsylvania ("Commonwealth") (Check **one** of the boxes below):

All of the direct labor performed within the scope of services under the contract will be performed exclusively within the geographical boundaries of the United States or one of the following countries that is a party to the World Trade Organization Government Procurement Agreement: Aruba, Austria, Belgium, Bulgaria, Canada, Chinese Taipei, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Liechtenstein, Lithuania, Luxemburg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom

OR

\_\_\_\_\_ percent ( \_\_\_\_%) [Contractor must specify the percentage] of the direct labor performed within the scope of services under the contract will be performed within the geographical boundaries of the United States or within the geographical boundaries of one of the countries listed above that is a party to the World Trade Organization Government Procurement Agreement. Please identify the direct labor performed under the contract that will be performed outside the United States and not within the geographical boundaries of a party to the World Trade Organization Government Procurement Agreement and identify the country where the direct labor will \_\_\_\_\_ be \_\_\_\_\_ performed:

\_\_\_\_\_  
\_\_\_\_\_  
[Use additional sheets if necessary]

The Department of General Services [or other purchasing agency] shall treat any misstatement as fraudulent concealment of the true facts punishable under Section 4904 of the *Pennsylvania Crimes Code*, Title 18, of Pa. Consolidated Statutes.

Attest or Witness:

\_\_\_\_\_  
Corporate or Legal Entity's Name

\_\_\_\_\_  
Signature/

\_\_\_\_\_  
Date Signature/Date

\_\_\_\_\_  
Printed Name/

\_\_\_\_\_  
Title Printed Name/Title



APPENDIX [ C ]

**Master Information Technology (IT) Services Invitation to Qualify (ITQ) Contract  
Trade Secret/Confidential Proprietary Information Notice**

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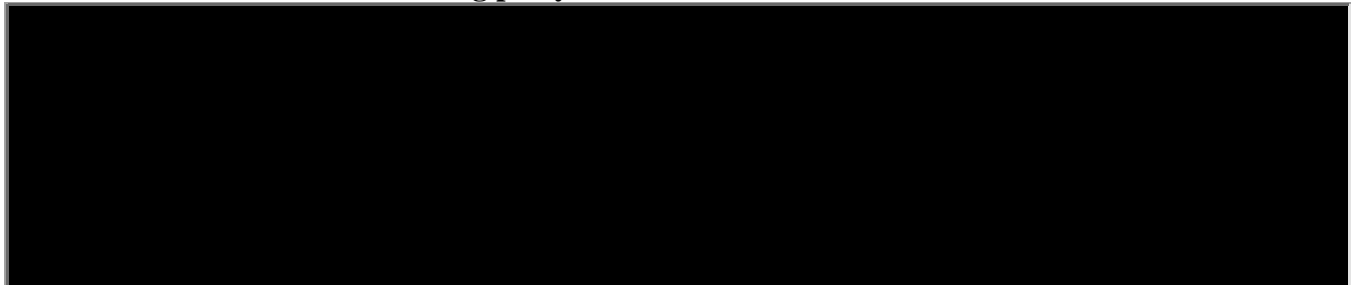
Instructions:

The Commonwealth may not assert on behalf of a third party an exception to the public release of materials that contain trade secrets or confidential proprietary information unless the materials are accompanied, at the time they are submitted, by this form or a document containing similar information.


It is the responsibility of the party submitting this form to ensure that all statements and assertions made below are legally defensible and accurate. The Commonwealth will not provide a submitting party any advice with regard to trade secret law.

**Name of submitting party:**

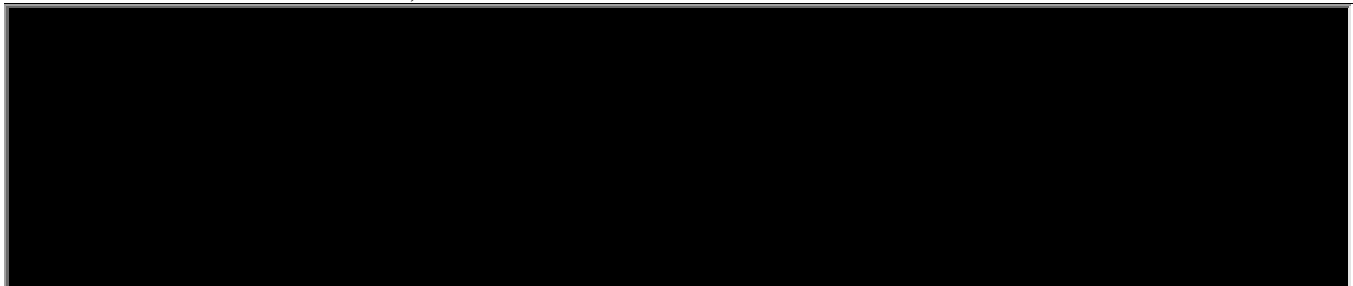
**Contact information for submitting party:**

A large black rectangular redaction box covering the contact information for the submitting party.

**Please provide a brief overview of the materials that you are submitting (e.g. bid, grant application, technical schematics):**

A large black rectangular redaction box covering the overview of the materials being submitted.

**Please provide a brief explanation of why the materials are being submitted to the Commonwealth (e.g. response to bid #12345, application for grant XYZ being offered by the Department of Health, documents required to be submitted under law ABC)**

A large black rectangular redaction box covering the explanation of why the materials are being submitted.



## Acknowledgment

The undersigned party hereby agrees that it has read and completed this form, and has marked the material being submitted in accordance with the instructions above. The undersigned party acknowledges that the Commonwealth is not liable for the use or disclosure of trade secret data or confidential proprietary information that has not been clearly marked as such, and which was not accompanied by a specific explanation included with this form.

The undersigned agrees to defend any action seeking release of the materials it believes to be trade secret or confidential, and indemnify and hold harmless the Commonwealth, its agents and employees, from any judgments awarded against the Commonwealth in favor of the party requesting the materials, and any and all costs connected with that defense. This indemnification survives so long as the Commonwealth has possession of the submitted material, and will apply to all costs unless and until the undersigned provides a written statement or similar notice to the Commonwealth stating that it no longer wishes to exempt the submitted material from public disclosure.

The undersigned acknowledges that the Commonwealth is required to keep all records for at least as long as specified in its published records retention schedule.

The undersigned acknowledges that the Commonwealth reserves the right to reject the undersigned's claim of trade secret/confidential proprietary information if the Commonwealth determines that the undersigned has not met the burden of establishing that the information constitutes a trade secret or is confidential. The undersigned also acknowledges that if only a certain part of the submitted material is found to constitute a trade secret or is confidential, the remainder of the submitted material will become public; only the protected information will be removed and remain nonpublic.

If being submitted electronically, the undersigned agrees that the mark below is a valid electronic signature.

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Signature

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Title

---

Date



**Listing SDB and SB Subcontractors**

The Contractor must list in the chart below the SDBs and SBs that will be used to meet the percentage commitments provided above. Include the SDB/SB firm name, SDB or SB designation, SDB/SB Primary Contact Information, a description of the service or supplies the SDB/SB will provide, fixed percent of total contract cost committed, estimated dollar value of each commitment, and an indication as to the Contractor’s intent to utilize the SDB/SB subcontractor for contract options or renewals. Include as many pages as necessary. **Contractor must also include a Letter of Intent as indicated in RFQ Part V, Section V-2 for each SDB/SB listed.**

SDB/SB Name	SDB or SB	Primary Contact Name & Email	Description of Services or Supplies to be provided	% of total Contract Cost Committed	Estimated \$ value of Commitment	Will SDB/SB be used for options/renewals? (yes/no)

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**APPENDIX [ E ]  
SMALL DIVERSE AND SMALL BUSINESS  
LETTER OF INTENT**

**[DATE]**

**[SDB/SB Contact Name  
Title  
SDB/SB Company Name  
Address  
City, State, Zip]**

Dear **[SDB/SB Contact Name]**:

This letter serves as confirmation of the intent of **[Contractor]** to utilize **[Small Diverse Business (SDB) or Small Business (SB)]** on RFQ **[RFQ number and Title]** issued by the **[Commonwealth agency name]**.

If **[Contractor]** is the successful vendor, **[SDB or SB]** shall provide **[identify the specific work, goods or services the SDB/SB will perform]** during the initial term of the prime contract and during any extensions, options or renewal periods of the prime contract exercised by the Commonwealth, as more specifically set forth below: **[identify the specific time periods during the initial contract term and any extensions, options and renewals when the component work, goods or services will be provided or performed.]**

These services represent **[identify fixed numerical percentage commitment]** of the total cost in the **[Contractor's]** cost submittal for the initial term of the contract. Dependent on final negotiated contract pricing and actual contract usage or volume, it is expected that **[SDB or SB]** will receive an estimated **[identify associated estimated dollar value that the fixed percentage commitment represents]** during the initial contract term.

**[SDB/SB]** represents that it meets the small or small diverse business requirements set forth in the RFQ and all required documentation has been provided to **[Contractor]** for its SDB/SB submission.

We look forward to the opportunity to serve the **[Commonwealth agency name]** on this project. If you have any questions concerning our small business or small diverse business commitment, please feel free to contact me at the number below.

Sincerely,

Acknowledged,

**Contractor  
Title  
Company**

**Name SDB or SB Name  
Title  
Company**

## APPENDIX [ F ]

### MODEL FORM OF SMALL DIVERSE AND SMALL BUSINESS SUBCONTRACTOR AGREEMENT

This Subcontractor Agreement ("Subcontract") is made effective as of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_, ("Contractor") and \_\_\_\_\_, a Small Diverse Business or Small Business ("Subcontractor") (collectively referred to as the "Parties").

#### RECITALS

Contractor has entered into a contract dated \_\_\_\_\_ (the "Prime Contract") with the Department of \_\_\_\_\_ the Commonwealth of Pennsylvania ("Commonwealth"). Under the Prime Contract, Contractor has agreed to provide certain supplies, services or construction ("Services") to the Commonwealth.

In connection with the Procurement leading to the Prime Contract, Contractor and Subcontractor entered into a letter agreement dated \_\_\_\_\_ ("Letter of Intent") whereby the Contractor committed a certain percentage of work ("Small Diverse Business or Small Business Commitment") under the Prime Contract to the Subcontractor.

As contemplated by the Letter of Intent and in accordance with the provisions of the Procurement and Prime Contract, the Parties have agreed to enter into this Subcontract to fulfill the Small Diverse Business or Small Business Commitment expressed in the Letter of Intent and as required by the Prime Contract.

#### DEFINITIONS

The following words and terms when used in this Subcontract shall have the following meanings:

*Bureau* – The Department's Bureau of Diversity, Inclusion and Small Business Opportunities.

*Contracting Officer* – The person authorized to administer and make written determinations for the Commonwealth with respect to the Prime Contract.

*Department* – The Department of General Services of the Commonwealth of Pennsylvania.

*Issuing Office* – The department, board, commission or other agency of the Commonwealth of Pennsylvania that issued the Procurement.

*Procurement* – The Invitation for Bids, Request for Quotes, Request for Quotes or other solicitation and all associated final procurement documentation issued by the Commonwealth to obtain quotes from firms for award of the Prime Contract.



*Small Business* – A business in the United States which is independently owned, not dominant in its field of operation, employs no more than 100 full-time or full-time equivalent employees, and earns less than \$7 million in gross annual revenues for building design, \$20 million in gross annual revenues for sales and services and \$25 million in gross annual revenues for those businesses in the information technology sales or service business.

*Small Diverse Business* – A Department-verified minority-owned small business, woman-owned small business, veteran-owned small business, service-disabled veteran-owned small business, LGBT-owned small business, or disability-owned small business.

## **AGREEMENT**

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, the Parties hereby agree as follows:

1. Subcontractor Representations. Subcontractor represents and warrants to Contractor as follows:

(a) Subcontractor is self-certified as a Small Business in accordance with the requirements and procedures established by the Bureau of Diversity, Inclusion and Small Business Opportunities; [Subcontractor is also verified as a Small Diverse Business by the Bureau of Diversity, Inclusion and Small Business Opportunities in accordance with the requirements and procedures established by the Bureau;]

(b) Subcontractor possesses the necessary knowledge, experience, expertise, capital, resources and personnel required to perform the Services it will provide under this Subcontract;

(c) Subcontractor (i) is duly organized, validly existing and in good standing under the laws of its state of incorporation or organization, (ii) has the power and authority to own its properties and to carry on business as now being conducted, and (iii) has the power to execute and deliver this Subcontract;

(d) The execution and performance by Subcontractor of the terms and provisions of this Subcontract have been duly authorized by all requisite action, and neither the execution nor the performance of this Subcontract by Subcontractor will violate any provision of law, any order of any court or other agency of government, the organizational documents of Subcontractor or any indenture, agreement or other instrument to which Subcontractor is a party, or by which Subcontractor is bound, or be in conflict with, result in a breach of, or constitute (with due notice or lapse of time or both) a default under, or except as may be provided by this Subcontract, result in the creation or imposition of any lien, charge or encumbrance of any nature whatsoever upon any of the property or assets of Subcontractor pursuant to, any such indenture agreement or instrument;

(e) Subcontractor has obtained all licenses, permits and approvals required to perform the Services it will provide under this Subcontract; and

(f) Subcontractor is not under suspension or debarment by the Commonwealth or any other governmental entity, instrumentality or authority.

2. Contractor Representations. Contractor represents and warrants to Subcontractor as follows:

(a) Contractor (i) is duly organized, validly existing and in good standing under the laws of its state of incorporation or organization, (ii) has the power and authority to own its properties and to carry on business as now being conducted, and (iii) has the power to execute and deliver this Subcontract;

(b) The execution and performance by Contractor of the terms and provisions of this Subcontract by Contractor have been duly authorized by all requisite action, and neither the execution nor the performance of this Subcontract will violate any provision of law, any order of any court or other agency of government, the organizational documents of Contractor or any indenture, agreement or other instrument to which Contractor is a party, or by which Contractor is bound, or be in conflict with, result in a breach of, or constitute (with due notice or lapse of time or both) a default under, or except as may be provided by this Subcontract, result in the creation or imposition of any lien, charge or encumbrance of any nature whatsoever upon any of the property or assets of Contractor pursuant to, any such indenture agreement or instrument;

(c) Contractor has obtained all licenses, permits and approvals required to perform the Services to be provided by Contractor under the Prime Contract; and

(d) Contractor is not under suspension or debarment by the Commonwealth or any other governmental entity, instrumentality or authority.

3. Relationship of the Parties. The provisions of this Subcontract are not intended to create, nor shall be deemed or construed to create, any joint venture, partnership or other relationship between Contractor and Subcontractor, other than that of independent entities contracting with each other solely for the purpose of carrying out the provisions of this Subcontract. Neither of the Parties to this Subcontract, nor any of their respective employees, agents, or other representatives, shall be construed to be the agent, employee or representative of the other party. Neither party shall have the authority to bind the other party, nor shall a party be responsible for the acts or omissions of the other party, unless otherwise stated in this Subcontract. Similarly, the Parties expressly acknowledge that neither the Contractor nor the Subcontractor is an agent, employee or representative of the Commonwealth and each party covenants not to represent itself accordingly.

4. Prime Contract Flow-Down.

(a) General. This agreement is a subcontract under the Prime Contract and all

provisions of the Prime Contract and any amendments thereto applicable to the Services being performed by the Subcontractor shall extend to and be binding upon the Parties as part of this Subcontract.

(b) Specific. The Parties agree to comply with the following provisions of the Prime Contract, which are incorporated herein by reference:

- (1) The Americans with Disabilities Act Provisions.
- (2) Nondiscrimination/Sexual Harassment Clause.
- (3) Contractor Integrity Provisions.
- (4) Contractor Responsibility Provisions.

(c) Termination. Should the Prime Contract be terminated pursuant to the terms and conditions provided in the Procurement, such termination shall have the same effect on this Subcontract. Payment for Services provided as of the date of termination must be made in accordance with the Section 13 of this Subcontract.

(d) Audit Provisions. The Commonwealth shall have the right, at reasonable times and at a site designated by the Commonwealth, to audit the books, documents, and records of the Parties to the extent that the books, documents, and records relate to the Parties' compliance with the provisions set forth in subsection (b) above or to the Small Diverse Business or Small Business Commitment effectuated through this Subcontract. The Parties shall preserve such books, documents, and records for a period of three years from the date of final payment hereunder. The Parties shall give full and free access to all such records to the Commonwealth and/or its authorized representatives.

5. Order of Precedence. The Letter of Intent, Procurement and Prime Contract are incorporated herein by reference into this Subcontract. In the event of any conflict or inconsistency among the individual components of this Subcontract, such conflict or inconsistency shall be resolved by observing the following order of precedence:

- (a) This Subcontract;
- (b) The Letter of Intent;
- (c) The Prime Contract; and
- (d) The Procurement.

6. Further Action. The Parties shall take such actions and complete, execute and deliver any and all documents or instruments necessary to carry out the terms and provisions of this Subcontract, to effectuate the purpose of this Subcontract, and to fulfill the obligations of each party hereunder.

7. Description of Services. Subcontractor will perform the following Services for the Contractor which Contractor is obligated to provide to the Commonwealth under the Prime Contract:

[DESCRIBE IN DETAIL THE SPECIFIC SUPPLIES, SERVICES OR CONSTRUCTION THE SUBCONTRACTOR WILL PROVIDE OR PERFORM]

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8. Small Diverse Business or Small Business Commitment. The above-referenced Services represent \_\_ % of the final negotiated total cost for the initial term of the Prime Contract. Any proposed change to the Small Diverse Business or Small Business Commitment must be submitted in writing to the Bureau which will make a recommendation to the Commonwealth Contracting Officer regarding a course of action.

9. Performance of Services. Subcontractor may not subcontract more than 50% of the work subcontracted to it hereunder without written permission from the Bureau. Subcontractor will perform the Services strictly in accordance with any applicable plans and specifications as contained in the Prime Contract and the reasonable deadlines set by Contractor in view of the requirements of the Prime Contract, and in a good workmanlike manner consistent with industry standards, meeting all applicable local, state and federal laws, regulations and policies.

10. Location of Services. Subcontractor will provide the Services at the following address(es):

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11. Timeframe for Performance of Services. The Services will be provided by Subcontractor during the initial term of the Prime Contract, and during any extensions, options or renewal periods of the Prime Contract exercised by the Commonwealth, as more specifically set forth below:

[IDENTIFY THE SPECIFIC TIME PERIODS DURING THE INITIAL CONTRACT TERM AND EXTENSIONS, OPTIONS AND RENEWALS WHEN THE SUBCONTRACTOR WILL PERFORM COMPONENT SERVICES]

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12. Pricing of Services. Subcontractor shall provide or perform the Services at the pricing specified in Exhibit \_\_ to this Subcontract. [ATTACH A BILL OF MATERIALS, RATE CARD OR OTHER APPROPRIATE COST SHEET COVERING THE SERVICES TO BE PROVIDED.]

13. Payment for Services. Contractor shall exert reasonable and diligent efforts to collect prompt payment from the Commonwealth. Contractor shall pay Subcontractor in

proportion to amounts received from the Commonwealth which are attributable to the Services performed by Subcontractor. Contractor shall pay Subcontractor within fourteen (14) days after the Contractor receives such payment from the Commonwealth, unless the parties expressly agree upon a different payment schedule or structure as set forth below:

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---

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14. Utilization Reports. Both the Contractor and Subcontractor shall complete Quarterly Utilization Reports (or similar type documents containing the same information) and submit them to the Contracting Officer and to the Bureau within ten (10) business days at the end of each quarter. This information will be used to determine the actual dollar amount paid to Subcontractor and will also serve as a record of fulfillment of Contractor's Small Diverse Business and Small Business Commitments. If there was no activity during the quarter, then the form must be completed by stating "No activity in this quarter." A late fee of \$100.00 per day may be assessed against the Contractor if its Utilization Report is not submitted in accordance with the schedule above.

15. Change Orders. If the Commonwealth issues any change order or other formal contract instrument either expanding or limiting the work to be performed under the Prime Contract, the Parties shall accept such Change Orders. Contractor agrees to provide Subcontractor with written notice of any such change orders that affect the Services to be provided by the Subcontractor hereunder as soon as practical after Contractor receives such notice. Any resulting increase or decrease in the Services, Small Diverse Business or Small Business Commitment provided for in Paragraphs 7 or 8 above must be in writing, mutually agreed to, and signed by both Parties and communicated to the Bureau. If the Parties are unable to reach an agreement regarding any adjustment to the Services, Small Diverse Business or Small Business Commitment necessitated by a Commonwealth Change Order, the Parties must submit the matter in writing to the Bureau which will make a recommendation to the Contracting Officer regarding a course of action.

16. Force Majeure. Neither party will incur any liability to the other if its performance of any obligation under this Subcontract is prevented or delayed by causes beyond its control and without the fault or negligence of either party. Causes beyond a party's control may include, but are not limited to, acts of God or war, changes in controlling law, regulations, orders or the requirements of any governmental entity, severe weather conditions, civil disorders, natural disasters, fire, epidemic and quarantines, general strikes throughout the trade, and freight embargoes. The existence of such causes beyond a party's control shall extend the period for performance to such extent as may be necessary to enable complete performance in the exercise of reasonable diligence after the causes have been removed.

17. Dispute Resolution.

(a) The Parties will attempt to resolve any dispute arising out of or relating to this Subcontract through friendly negotiations.

(1) The Parties expressly acknowledge and confer upon the Bureau and Contracting Officer the authority to adjudicate disputes that the Parties cannot resolve amicably concerning the Parties' compliance with their Small Diverse Business and Small Business Commitments as provided in the Prime Contract and this Subcontract.

(2) The Bureau may recommend to the Contracting Officer a range of sanctions it deems appropriate if the Bureau determines a party has failed to satisfy or perform its Small Diverse Business or Small Business commitment. Such sanctions include, but are not limited to, one or more of the following: a determination that the party is not responsible under the Contractor Responsibility Program; withholding of Prime Contract and/or Subcontract payments; suspension or termination of the Prime Contract and/or Subcontract together with consequential damages; revocation of the party's Small Business self-certification status and/or Small Diverse Business verification status; and/or suspension or debarment of one or both parties from future contracting opportunities with the Commonwealth.

(3) The Parties' acknowledge that their prior performance in meeting their Small Diverse Businesses and Small Businesses contractual obligations will be considered by the Bureau during future procurement scoring processes. To the extent a party has failed to meet prior contractual commitments, the Bureau may recommend to the Issuing Office that the party be determined non-responsible for the limited purpose of eligibility to receive SDB/SB points or consideration as a qualified Small Diverse Business or Small Business.

(b) Nothing herein shall be construed to prevent either party from seeking such relief as provided by law in a court or tribunal of competent jurisdiction.

18. Notices. Any written notice to any party under this Subcontract shall be deemed sufficient if delivered personally, or by facsimile, telecopy, electronic or digital transmission (provided such delivery is confirmed), or by a recognized overnight courier service (e.g., DHL, Federal Express, etc.) with confirmed receipt, or by certified or registered United States mail, postage prepaid, return receipt requested, and sent to the following:

If to Contractor:

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If to Subcontractor:

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19. Waiver. No waiver by either party of any breach of this Subcontract shall be deemed to waive any other breach. No acceptance of payment or performance after any breach shall be deemed a waiver of any breach. No failure or delay to exercise any right by a party upon another's default shall prevent that party from later exercising that right, nor shall such failure or delay operate as a waiver of any default.

20. Severability. If any provision of this Subcontract shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a court finds that any provision of this Subcontract is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision shall be deemed to be written, construed, and enforced as so limited.

21. Assignment. Neither party may assign or transfer this Subcontract without the prior written consent of the Commonwealth. If Contractor's Prime Contract with the Commonwealth is assigned to another contractor, the new contractor must maintain the Small Diverse Business and Small Business Commitment set forth in the Prime Contract as implemented through this Subcontract.

22. Applicable Law. This Subcontract shall be governed by the laws of the Commonwealth of Pennsylvania.

23. Entire Agreement. This Subcontract constitutes the entire agreement of the Parties regarding the subject of this Subcontract as of the date of execution. No other agreement or understandings, verbal or written, expressed or implied, are a part of this Subcontract unless specified herein.

24. Amendment. This Subcontract may be modified or amended only if made in writing and signed by both Parties. Any proposed change to the Contractor's Small Diverse Business or Small Business Commitment to Subcontractor must be submitted in writing to the Bureau which will make a recommendation to the Contracting Officer regarding a course of action.

25. Binding Effect. This Subcontract shall be binding upon, and inure to the benefit of, the Parties and their respective heirs, representatives, successors and assigns.

26. Counterparts. This Subcontract may be executed by the Parties in counterparts, each of which together shall be deemed an original but all of which together shall constitute one and the same instrument. A party's delivery of a duly executed signature page of this Subcontract in electronic format shall have the same force and effect as delivery of an original signature page.

#### **ADDITIONAL TERMS AND CONDITIONS**

[THE PARTIES MAY INCLUDE ADDITIONAL TERMS AND CONDITIONS APPROPRIATE FOR THE SERVICES TO BE PROVIDED SO LONG AS THEY ARE COMMERCIALY REASONABLE TERMS FOR THE APPLICABLE BUSINESS OR INDUSTRY, ARE NO LESS FAVORABLE THAN

THE TERMS OF THE PRIME CONTRACT, AND DO NOT PLACE DISPROPORTIONATE RISK ON THE SMALL DIVERSE BUSINESS OR SMALL BUSINESS RELATIVE TO THE NATURE AND LEVEL OF THE SMALL DIVERSE BUSINESS' OR SMALL BUSINESS' PARTICIPATION IN THE PROJECT. SUCH TERMS MAY INCLUDE:

- Background Checks
- Confidentiality/Disclosure of Information
- Data Security
- Insurance
- Invoicing Requirements
- Environmental Protection
- Intellectual Property Rights
- Record Retention/Audits
- Service Level Agreements (SLAs) (consistent with Prime Contract SLAs)
- Public Works Construction Requirements (including Bonding, E-Verify, Prevailing Wage, and Prompt Payment provisions)

**IN WITNESS WHEREOF**, the Parties hereto have caused this Subcontract to be executed by their duly authorized officers as set forth below.

Contractor

Subcontractor

*Insert Company Name*

*Insert Company Name*

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date



APPENDIX [ G ]

**Master Information Technology (IT) Services Invitation to Qualify (ITQ)  
Contract Lobbying Certification Form**

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**Certification for Contracts, Grants, Loans, and Cooperative Agreements**

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form- LLL, Disclosure of Lobbying Activities, in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed under *Section 1352, Title 31, U. S. Code*. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than **\$100,000** for such failure.

SIGNATURE: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

# FUNCTIONAL REQUIREMENTS

## Accounts Payable

### Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible
2. Treasury Department will process all payments (AP checks, member checks, payroll checks, and electronic funds transfers via Automated Clearing House (ACH) and wire on behalf of PMRS
3. There will be an integration between Treasury Department's Oracle PeopleSoft system and Dynamics AX for AP check processing

### Requirements Analysis

The following table includes requirements as presented in the corresponding Requirement Matrix.

Requirement ID	Requirement	Comments
AP-01	Needs ability to define own vendor number	Customers (setup as vendors for refunds) will be PERC#, employees will be personnel id (may also identify by vendor group). May also use DGS vendor number when appropriate.
AP-02	Needs the ability to cross reference a PMRS assigned vendor number with the state approved vendor number	
AP-03	Needs the ability to search for a vendor using the state approved vendor number	Can also match on Tax ID. All vendors have to have a tax id on the website.
AP-04	Needs the ability to record a vendor check name	
AP-05	Needs ability to track W9	
AP-06	Would like to attach the completed W9 form to the vendor record	
AP-07	Needs ability to maintain vendor main address	
AP-08	Needs ability to maintain vendor pay-to address	
AP-09	Needs the ability to maintain additional addresses and contact information as needed	
AP-10	Needs ability to maintain Employer Identification Number (EIN) for vendors	Each vendor has a unique EIN (i.e. different EIN = different vendor)
AP-11	Needs ability to maintain Social Security Numbers (SSN) for employees and contractors	
AP-12	Needs ability to produce 1099s for independent contractor vendors	
AP-13	Needs the ability to produce 1099s for lump sum payments to members	Would need to process non-batch lump sum payments in AX (refer to additional requirement for non-batch lump sum payments)
AP-14	Needs ability to link vendors and customers	Should be tied by the PERC#
AP-15	Needs ability to use approved vendors from the Department of General Services (DGS)	

Requirement ID	Requirement	Comments
AP-16	Needs ability to use vendors not on the approved vendor list	
AP-17	Needs ability to set up employees as vendors	
AP-18	Needs ability to make refunds to members	
AP-19	Needs ability to assign vendors to vendor groups	Initial thought of vendor groups would include: Trade Vendors, Employees, Consultants (requiring 1099), and Services Vendors
AP-20	Needs ability to inactivate vendors	
AP-21	Needs ability to track petty cash	
AP-22	Needs ability to make prepayments	Example: Support and maintenance agreement. May or may not be related to a PO. Hits pre-paid when payment is made
AP-23	Needs ability to see vendor aging	Aging – 30-60-90-Over 90
AP-24	Needs ability to close AP module periods / months. Closing should be a soft close	Closing is only done on annual basis today
AP-25	Does not need to consider sales and use tax	PMRS is tax exempt
AP-26	Needs ability to make vendor accrual entries	
AP-27	Needs ability to set up payment terms for vendors	
AP-28	Needs ability to process vendor invoice journals without associated POs	Examples include: Turnpike, Bottled Water, Parking, Utilities
AP-29	Needs the ability to process credit memos and reference PO if linked	
AP-30	Needs ability set vendor pay date so that checks are cut by the assigned pay date to realize vendor offered cash discounts	Pay date sent to Treasury and set to consider lag time for payment by Treasury.
AP-31	Needs ability to send information of what to pay to Treasury Department for payment processing	PMRS will not cut checks, but needs to be able to prepare files of what checks need to be processed by Treasury Department (Interface)
AP-32	Needs ability to include Trace ID on all invoices to be paid by Treasury	
AP-33	Needs ability to denote whether a separate check is required per invoice	
AP-34	Needs ability to select pay-to address	
AP-35	Needs the ability to receive a warning on duplicate vendor invoice numbers	
AP-36	Wants the ability to match invoices on alternate field (i.e. amount, value date or service date) for a warning or rejection	
AP-37	Needs ability to prepare Voucher transmittal – for multiple vouchers (invoice). A Voucher Transmittal (VT) is used for a paper trail to document internal approvals and provide supporting documentation; however, this document may not be necessary going forward since Treasury is now tracking every payment transaction at the invoice level and electronic approvals and hyperlinks to invoices can be sent via the interface file.	Send invoice number over to be used in the creation of the Trace ID. Trace ID will need to be created by PMRS and sent to Treasury.  Note: Voucher Transmittal (VT) is currently used for a paper trail to document internal approvals and provide supporting documentation; however, this document may not be necessary going forward since Treasury is now tracking every payment transaction at the invoice level and electronic approvals and hyperlinks to invoices can be sent via the interface file.
AP-38	Needs ability for vendors to send electronic invoices to central mailbox	Import into AX
AP-39	Needs ability to handle recurring invoices, such as leases	
AP-40	Needs ability to receive Warrant ID from Treasury to be used a check number to track payments	
AP-41	Needs ability to reconcile checks by Warrant ID	
AP-42	Needs the ability to identify the customer (i.e. PERC#) for vendors that are also customers when posting to general ledger so that generating a P&L by plan is possible	A financial dimension will be defined for the PERC#. Customer related AP transactions will need to be configured to assure that the PERC# for that

Requirement ID	Requirement	Comments
		customer is populated to the GL for these transactions.
AP-43	Needs the ability to receive alerts based on the status for procure to pay workflows	
AP-44	Wants the ability to automate an amortization type process against pre-pays to draw down the amount	Could be handled by Accrual Scheme in GL
AP-45	Needs the ability to record non-batch lump sum payments to members (processed outside of CPAS)	Currently entered into Access and file sent to Treasury. Consider if Access data can be put into AX instead and payment request sent to Treasury. Update to CPAS to record payment would still be manual
AP-46	Need ability for Treasury G/L Account Mapping and interface requirements for electronic approvals and hyperlink to actual invoice document for Treasury Fiscal Review.	
AP-47	Need ability to provide for PennWATCH Reporting for expenses by vendor and g/l account and eMarketplace and Treasury Reporting for contracts and purchase orders.	<a href="http://pennwatch.pa.gov/Pages/default.aspx">http://pennwatch.pa.gov/Pages/default.aspx</a> <a href="http://www.emarketplace.state.pa.us/">http://www.emarketplace.state.pa.us/</a> <a href="http://contracts.patreasury.gov/search.aspx">http://contracts.patreasury.gov/search.aspx</a>
AP-48	Provide the ability to setup vendor posting profiles at the All, Group or individual for when a vendor may belong to more than one vendor group (but only able to assign to one).	

## Requirement Details

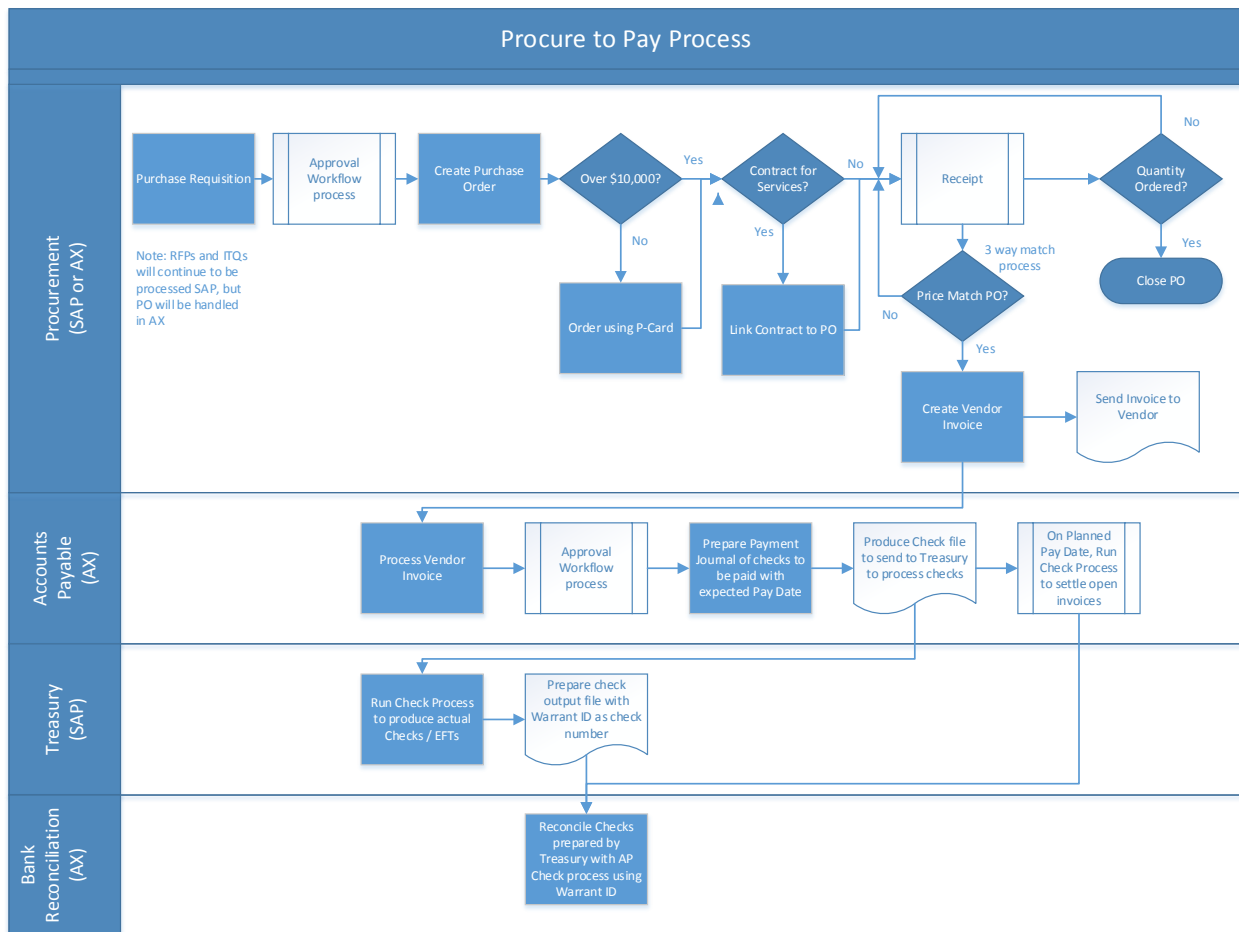
The following base data has been identified as required prior to working with the module on a day-to-day basis and the project team shall make certain set up decisions during the Design Phase.

### Procure to Pay Process Flow

Currently, accounts payable activities are processed in SAP, with all AP checks processed via the Treasury Department's Cash Management system in Oracle PeopleSoft.

The preferred plan for the future would be that all accounts payable processes would be handled in Dynamics AX except check processing which will continue to be handled out of the Treasury Department's Oracle PeopleSoft system.

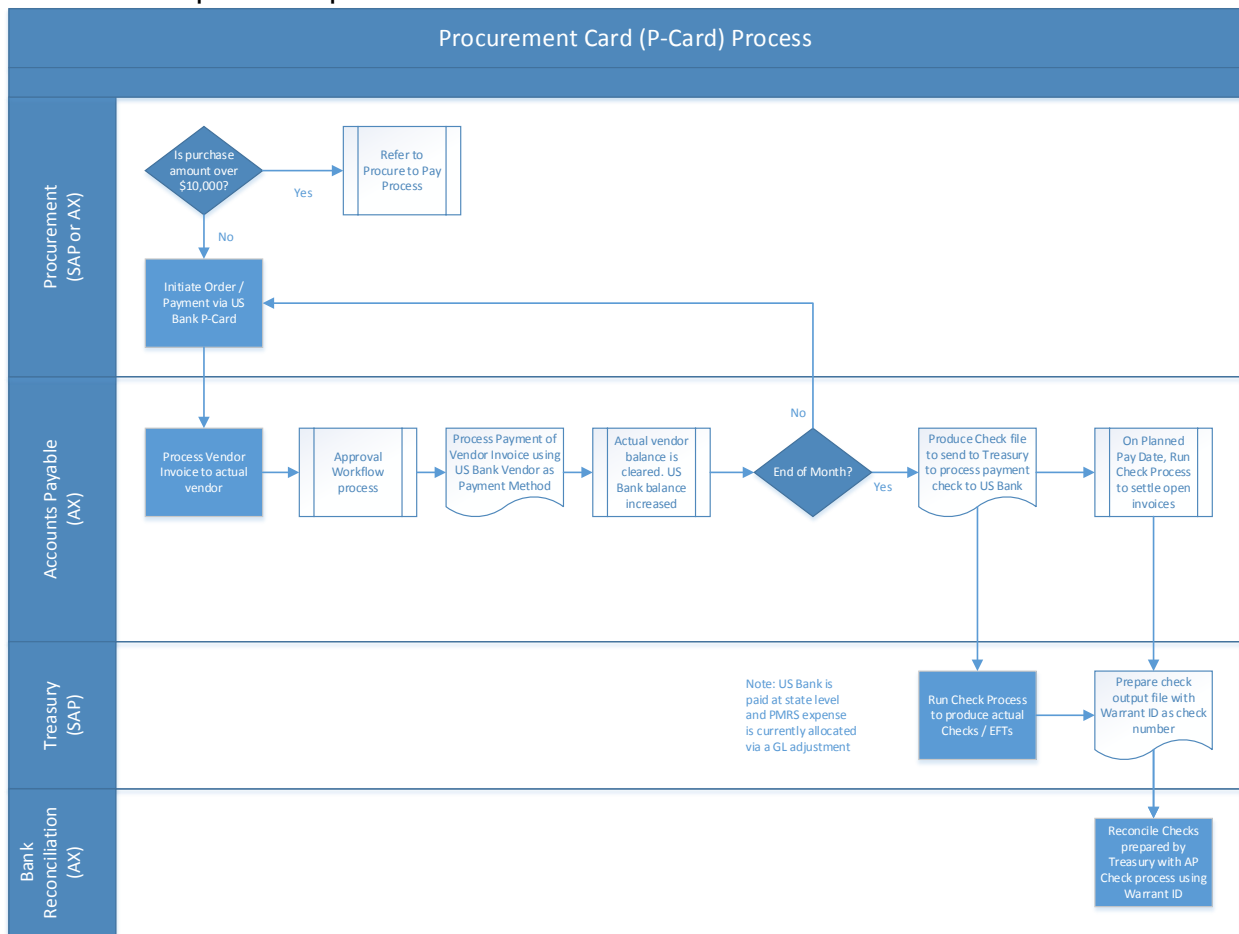
This process flow diagram depicts the Procure to Pay process for PMRS:



### Procurement Card (P-Card)

PMRS requires purchase orders for all vendor invoices.

Procurement Cards (P-Cards) issued from US Bank are used as the method of payment for purchases under \$10,000 even if they apply to specific contracts. Additional approvals via a purchase requisition/contract prior to payment are needed for these purchases. Currently there is not a way to track the purchase activity with the actual vendor as Treasury only tracks the payable to US Bank. PMRS would like to be able to track the expenses incurred to the actual vendor. Dynamics AX allows for a “credit card” to be used as the payment method and link it to the credit card vendor for final payment. The process flow below depicts this process:



### Vendor Setup

An approved vendor list for the Commonwealth of Pennsylvania is maintained by the Department of General Services (DGS). PMRS utilizes these vendors, but also uses some vendors that are not currently on this list, primarily for purchases under \$10,000 where a Procurement Card (P-Card) is used.

PMRS does not currently have access to the full list of approved vendors maintained by DGS, but would like to establish a way in which they could get this information, or look up this information, when setting up new vendors in Dynamics AX to avoid potential duplicates.

PMRS has indicated that they would like to set up vendors in a manner that is unique to their business activities, and utilize the capabilities of Dynamics AX for auto-numbering /

number sequences as much as possible. Currently, the vendor number is a five (5) digit code with a 3 digit suffix (payment instructions).

Where applicable, PMRS would like to tie the vendor and customer records together using the Public Employee Retirement Commission number (PERC #). As the vendor number will most likely not be the PERC #, a separate field will be required in the vendor master file to maintain this number and tie to the customer master.

This PERC# needs to be assigned to the PERC# financial dimension for AP documents for the associated vendor to facilitate complete P&L reporting by plan (PERC#)

For vendors, the following information is needed (at a minimum):

- Vendor Number
- Vendor Name
- Vendor Check Name
- W9 - Request for Taxpayer Identification Number and Certification, to get information from vendors they hire as independent contractors (would like to attach the completed form to the vendor record)
- 1099 Information – for an independent contractor paid \$600 or more over the course of a tax year
- Employer Identification Number (EIN) or Social Security Number (SSN)
- Main Address
- Pay To Address
- Additional addresses and contacts
- State Approved Vendor Number
- PERC# (vendor/customer link)

PMRS does have some independent contractors, so 1099 functionality is required. 1099s will also be produced from the Comprehensive Pension Administration System (CPAS) from Xerox, which PMRS utilizes for managing member pension contributions and “payroll” monthly and lump sum member payments. 1099s may also be produced for non-batch lump sums where the payment was not originated in CPAS. These 1099-R forms will continue to be produced from CPAS, so only 1099-MISC for independent contractor work and possible non-batch lump sums would need to be handled from Dynamics AX. Non-batch lump sum payments to members are currently processed outside of CPAS due to system deficiencies. In addition, the 1099 file is manually adjusted outside of CPAS for these payments in addition to other member payment adjustments for corrections/refunds for member payments processed in CPAS due to system deficiencies. These adjustments are made in an Access database and have not been entered in CPAS; therefore, the member records are not correct in CPAS and will need to be corrected prior to making historical member data available via an online portal. We would like all member payment activity to be tracked in CPAS and the 1099s to be produced from CPAS for all member payments going forward.

## Vendor Groups

In Dynamics AX, vendor groups are used to further define the type of vendor and associate related information (such as terms of payment and vendor tax groups) to the vendors within the same group. Vendor groups are also used for reporting purposes to be able to select specific vendors for further analysis. At a minimum, Dynamics AX requires that one (1) vendor group is setup and each vendor must be assigned to a vendor group. Vendor groups are a way to group vendors together for reporting and search, as well as defining similar accounting processes for the groups.

Through the initial discussions, PMRS has defined the following vendor groups as an initial list from which to start assigning vendors (see examples below)

- General Trade – Other
- Employees – Expense reimbursements
- Consultants (requiring 1099) – Professional Services
- Services (may also require 1099) – Other Services

## Methods of Payment

The Commonwealth of Pennsylvania Treasury Department processes all payments to vendors. PMRS provides information on what payments to make to vendors with the methods of payment of either check or electronic payment.

Also, for purchases under \$10,000, PMRS uses Procurement Cards (P-Cards) issued by US Bank. Separate US Bank cards are also used for Travel, Lodging and Airline travel.

The following methods of payment are required to be defined (at a minimum):

- Check
- ACH (electronic payment)
- P-Card (US Bank credit card)

Also, there may be the need to setup the following payment methods for employee travel reimbursement:

- Travel Card (US Bank credit card)
- Lodging Card (US Bank credit card)
- Airline Card (US Bank credit card)

## Terms of Payment

Due to the time it takes for Treasury to process payments, PMRS does not currently use vendor offered cash discounts by paying within a specific timeframe. In the future, PMRS would like to realize these cash discounts by setting up terms to define the specific pay date so that Treasury would pay by that date.

The terms of payment will need to be determined based on terms provided by respective vendors. PMRS will need to work with DGS to determine terms to be assigned to vendors, as well as review history with existing vendors to establish the required terms of payment.

At a minimum, the following terms of payment should be setup:

- On Receipt – Due upon receipt



- Net 30 – pay full amount in 30 days
- Net 45 – pay full amount in 45 days

### Cash Discounts

Due to the time it takes for Treasury to process payments, PMRS does not currently use vendor offered cash discounts by paying within a specific timeframe. In the future, PMRS would like to realize these cash discounts by setting up terms to define the specific pay date so that Treasury would pay by that date.

The cash discounts will need to be determined based on cash discounts offered by respective vendors. PMRS will need to work with DGS to determine terms and cash discounts to be assigned to vendors, as well as review history with existing vendors to establish any specific terms of payment so that cash discounts can be realized.

### Vendor Posting Profile

Vendor posting profiles enable you to assign general ledger accounts and document settings to all vendors, a group of vendors or a single vendor. These settings will be used when purchase orders, vendor invoices and cash payments are created.

Posting profiles can define the specific main accounts in the General Ledger to which AP transactions will be posted:

- Summary Account - the ledger AP liability account
- Arrival - the ledger account to which information about unapproved vendor invoices is posted.
- Offset Account - the ledger account that is used as the offset for transactions that are posted to arrival accounts. Therefore, the account contains vendor purchases that have not yet been approved.

Different vendor posting profiles can be used based on individual vendors, vendor groups or all vendors.

At a minimum, the above accounts need to be setup for all vendors

### Petty Cash

PMRS maintains a small amount of cash on-hand in the office (petty cash) for quick use / payment of certain internal activities. When funds are depleted, a request needs to be made to Treasury to replenish the petty cash fund.

Petty Cash is not currently tracked in the PMRS accounting system, but PMRS would like to track the funds and activity in Dynamics AX.

### Reason Codes

Reason codes are used to explain why specific adjustments are made. PMRS will need to determine the type of reason codes they would like to track for AP transactions.

## Non Purchase Order Invoices

Vendor invoices that do not require Purchase Orders include but are not limited to the following expenses

- Turnpike
- Bottled water
- Parking
- Travel
- Office Supplies

## Vendor Invoices

Purchase orders are required for all purchases. Purchases of less than \$10,000 will be made using Procurement Cards (P-Cards) as the payment method.

See PMRS - FRD Procurement and Sourcing for requirement and process details.

Vendors send invoices via mail and emails to a central email box. PMRS would like to be able to automate the vendor email invoices to feed into Dynamics AX. AX does not have this capability out of the box, but a customization could be built to read the PO number and vendor information from a vendor email to start the vendor invoice entry.

## Prepayments and Deferrals

PMRS has a need to process prepayments to vendors. However, all prepayments are currently realized at time of payment and amortized. Amortization could be handled via GL Accrual Schemes or General Journal entries.

## Invoice Accruals

PMRS does not currently accrue invoices as they really operate on a fiscal year basis with no accruals logged at month end. However, as processing is moved to more of a monthly cycle, there will be a need to accrue invoices in the future.

## Sales and Use Tax

PMRS is tax exempt and thus does not have a need to track sales and use tax.

## Centralized Payments

Payments are centralized for the Commonwealth of Pennsylvania in the Treasury Department, which uses Oracle PeopleSoft Cash Management system for payment processing. PMRS needs to interface Dynamics AX with the Treasury system for payment processing and receive payment details from Treasury for bank reconciliation purposes.

## Vendor Aging

PMRS would like to produce reports that show vendor aging with aging periods of 30 day, 60 day, 90 day, over 90 day basis.

## AP Closing

PMRS currently tracks activities on a fiscal year basis, not a periodic / monthly basis. PMRS would like to be able to establish monthly close process within Dynamics AX to better account for activities throughout the year.

Examples of month end activity includes:

- Accrual entries
- Reconcile sub ledgers
- Analytical review – financial statements, financial report monthly
- Vendor payments
- Budget to actual comparisons
- Aging Schedule
- Accounts payable and prepaid account reconciliations

## Reporting Requirements

Report #	Description	Comments
	AP Check file to provide to Treasury for payment processing	
	P-Card transactions with US Bank	
	Vendor aging report	
	Voucher Transmittal report	
	PennWATCH Reporting – Expenses	
	eMarketplace/Treasury Reporting – Contracts/POs	

## **Integrations**

### Vendor (AP) Payment Requests to Treasury

Dynamics AX needs to be able to send Treasury the documents for checks and electronic payments to be processed, including the Trace ID denoting the document that needs to be paid.

### Vendor (AP) Payments from Treasury

Treasury needs to be able to provide payment information to Dynamics AX, including the Trace ID and the Warrant Number (serving as the check number) for reconciliation purposes. Dynamics AX should generate Trace ID to send to Treasury. AX document number could be used as the Trace ID.

### SAP to Dynamics AX

There will be a need to integrate SAP and Dynamics AX for procurement and purchase order processing depending upon the detail that needs to be maintained in each system, and after a determination of which system will be the master source of procurement data.

### Department of General Services (DGS)

PMRS would like to have an integration or data share with the Department of General Services (DGS) to be able to see the approved list of vendors maintained by DGS. This most likely would not be a direct integration with Dynamics AX, but rather a data export / data extract that could be stored in a document repository, such as SharePoint, accessible by AP users.

## Customizations

The following customizations are identified to date. It is possible that other customizations are required after discussions during the Design Phase.

#	Description	Fit/Gap	Comments
	Vendor email invoice processing	Gap	This would require development; however other customers have this functionality
	Warrant Number	Gap	This would be a custom field added to Dynamics AX (or could replace check number field) to denote the number of the check / ACH for bank reconciliation purposes

## Data Conversion

The following elements of data conversions have been defined as needed.

- Vendors
- Vendor Contacts
- Vendor Addresses
- Vendor Open Invoices
- Vendor Contracts / Purchase Orders – Commitments and Available Balances

## Security Requirements

PMRS would like to ensure that there are proper segregation of duties, where access security could be utilized to segregate the following functions:

- Purchase Requisition Entry
- Purchase Requisition Approval
- Purchase Order Entry
- Purchase Order Approval
- Receiving
- Vendor Setup
- Vendor Invoice Processing
- Vendor Invoice Payment

## **Customer Deliverables**

The following elements must be fulfilled in order to demonstrate design functionality:

- Define vendor master account
- Define vendor numbering sequence
- Define vendor groups
- Define vendor contacts
- Define vendor addresses
- Define vendor bank accounts
- Define reason codes for vendor holds and for payment reversals
- Define vendor open invoices / balances
- Define vendor posting profile(s)
- Define AP aging periods
- Define invoice matching tolerances for 3-way match
- Define Payment Authorizations and Signature thresholds for checks

## Accounts Receivable

### Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible.
2. There will be an integration between Dynamics AX and the Department of Revenue's SAP system for transmittal of revenue recognition.
3. There will be an integration between Treasury Department's Oracle PeopleSoft system and Dynamics AX for AR cash receipts reconciliation.

### Requirements Analysis

The following table includes requirements as presented in the corresponding Requirement Matrix.

Requirement ID	Section Reference #	Requirement	Comments
AR-01	4.2	Provide the ability to identify customers using their PERC #	PERC # - Public Employee Retirement Commission number. Customer will be synonymous with Employer or Plan.
AR-02	4.2	Provide the ability to have multiple customer numbers for the same employer (customer).	An employer may have more than one plan administered through PMRS. Each plan has a separate and distinct PERC# and will therefore be a separate customer in AX.
AR-03	4.2	Provide the ability to search for a customer by customer name.	Pulls up associated PERC#.
AR-04	4.2	Provide the ability to record a customer's EIN.	Can be used to link/view customer association where same customer has multiple plans (PERC#s). However, customers still maintain separate billing and payment.
AR-05	4.2	Provide the ability to maintain customer legal address.	
AR-06	4.2	Provide the ability to maintain customer pay-to address.	
AR-07	4.2	Provide the ability to maintain additional customer addresses as needed.	
AR-08	4.2	Provide the ability to maintain multiple customer contacts, contact phone number and type of contact.	
AR-09	4.2	Provide the ability to maintain additional customer detail.	Phone number, fax number, e-mail address.

Requirement ID	Section Reference #	Requirement	Comments
AR-10	4.3	Provide the ability to attach the customer's contract.	See contract for plan association. Note: This could be done via AX attachments or could consider using a document management system like SharePoint
AR-11	4.4	Provide the ability to assign customers to customer groups	Group by type of municipalities: authorities, counties, etc. This is also denoted in a segment in the PERC#.
AR-12	4.5	Provide the ability to setup payment terms.	All invoices due by 12/31 of current calendar year.
AR-13	4.8	Provide the ability to define reason codes for receipts.	
AR-14		Provide the ability to record (define) the type of receipt and customer account for cash receipts (see PMRB 20 Form).	Will be used for GL coding. PMRB-20 provides information as to which reserve account it will be coded against.
AR-15	4.8	Provide the ability to define reason codes for write-offs.	
AR-16	4.10	Provide the ability to invoice a customer (employer) for yearly administrative expense.	Based on number or members in the plan.
AR-17	4.10	Provide the ability to invoice a customer for the administrative expense for a new member that is brought into the plan after the annual invoice has already been sent.	Note that this may not be for just new members but the removal of the administrative expense from the MMO invoice with invoicing throughout the year for new members and the overall administrative expense to be billed separately at year end.
AR-18	4.10	Provide the ability to invoice a customer (employer) for their Minimum Municipal Obligation (Liability) (MMO)	Input from MMO worksheet provided to employers.
AR-19	4.10	Provide the ability to code the MMO invoice to multiple receivables accounts as applicable.	For instance, current service charge, disability cost, administrative cost, amortization of actuarial surplus, etc.
AR-20	4.10	Provide the ability to invoice a customer for interest calculated.	Create an open receivable.
AR-21		Provide the ability to invoice a customer for member contributions.	CPAS interface
AR-22	4.11	Provide the ability to process customer receipts received by ACH or Check.	May want to consider lockbox processing in the future depending on PA Department of Revenue.
AR-23	4.11	Provide the ability to require reason codes for receipts.	
AR-24	4.11	Provide the ability to record a description for a receipt.	Description and reason code will be used to tie out to GL coding.



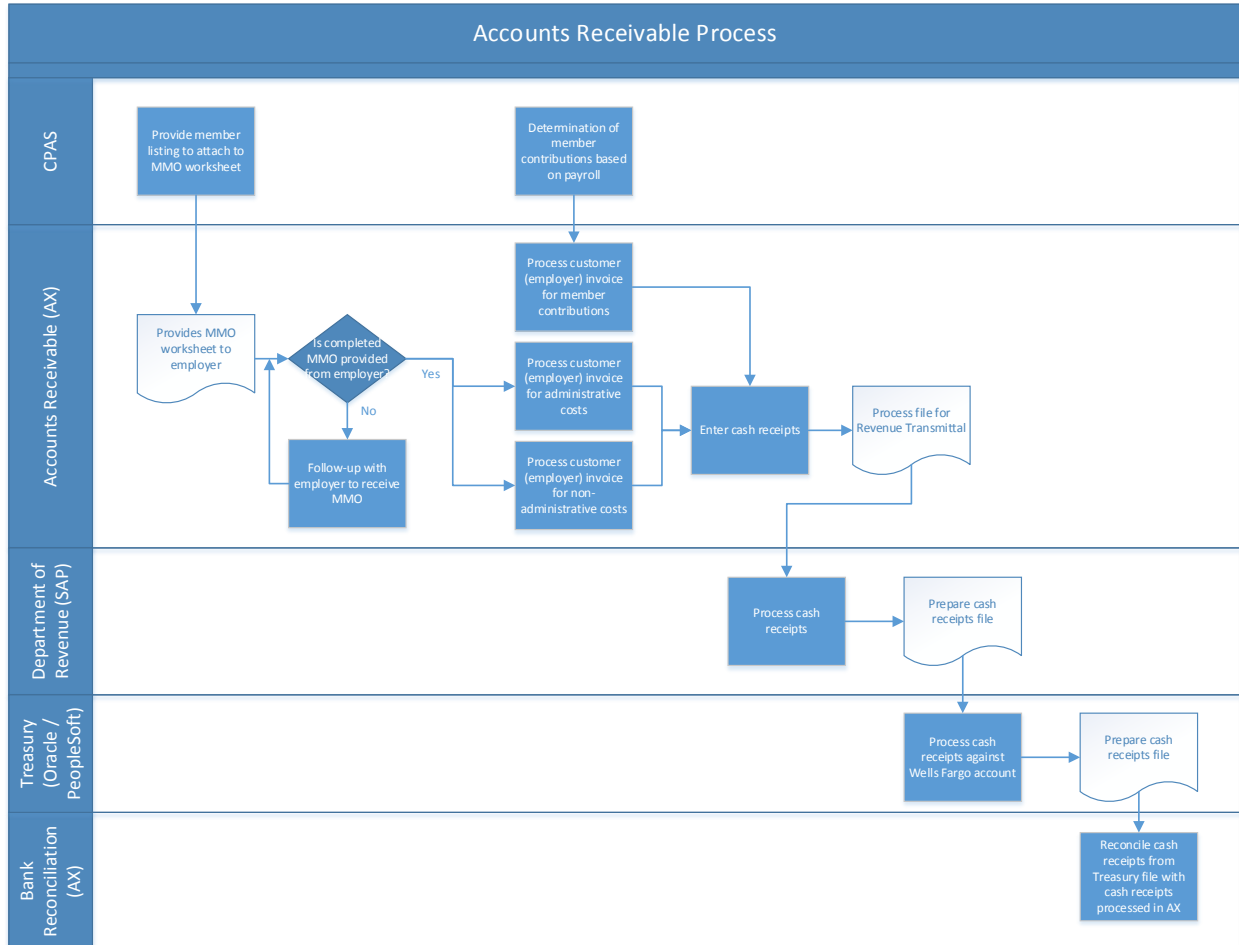
Requirement ID	Section Reference #	Requirement	Comments
AR-25	4.11	Provide the ability to apply customer receipts to outstanding customer invoice balances.	
AR-26	4.11	Provide the ability to code the customer receipt to multiple receivables accounts as applicable.	
AR-27	4.11	Provide the ability to have a workflow (or security) for the approval and posting of customer receipts.	May just be governed by security with a role for entry and a role to approve/post.
AR-28	4.11	Provide the ability to make an adjustment if a customer receipt does not clear.	Adjustment memorandum received (i.e. NSF check).
AR-29	4.12	Provide the ability to write off bad debt at the customer level.	Include PERC#.
AR-30	4.12	Provide the ability to require reason codes for processing write-offs.	
AR-31	4.13	Provide the ability to send a collection letter to a customer.	This would be handled in the AX Credit and Collections module
AR-32	4.13	Provide the ability to create standard collections templates for use in creating collections communications.	This would be handled in the AX Credit and Collections module
AR-33	4.13	May want the ability to log a collections case.	This would be handled in the AX Credit and Collections module
AR-34	4.13	May want the ability for collections agents to record notes / conversations, send emails, or setup various tasks and appointments.	This would be handled in the AX Credit and Collections module
AR-35	4.13	Provide the ability to send a statement to a customer on a timely basis (i.e. monthly).	Show what they owe, what they have paid and what is outstanding. Drill down on statement to see open invoice balances.
AR-36		Provide the ability to interface customer receipts information to SAP.	
AR-37		Provide the ability to include a Trace ID in the interface file to SAP.	To be used for matching.
AR-38		Provide the ability to perform bank reconciliation of customer receipts using an interface file from Treasury.	Reconcile using warrant id from Treasury. This would be handled in the AX Cash and Bank Management module
AR-39		Provide the ability to age receivables.	Current, 30-90, 90-180, 180-270, 270-360, over a year. Note that it is possible to create multiple aging definitions for reporting.
AR-40		Provide the ability to calculate interest awarded on deposits net of withdrawals.	See CPAS calculation for credited interest.
AR-41		Provide the ability to calculate interest on past due balances.	Generally yearly.
AR-42		Provide the ability to consider a payment lead time for calculating interest.	For instance, calculating interest through month end.
AR-43		Provide the ability to record the source customer (PERC#) at the general ledger level.	A financial dimension will be created for PERC#.
AR-44		Provide the ability to make payments to customers.	Refund requested by customer for overpayment;

Requirement ID	Section Reference #	Requirement	Comments
			duplicate payment, state aid, contributed before member was eligible. Processed in the same manner as other check requests.
AR-45		Provide the ability to track a plan (customer) balance.	
AR-46		Provide the ability to move funds from the customer (employer) and member accounts to a retiree account based on the present value calculation. Provide the ability to transfer funds between various customer accounts (member, municipal, retiree, disability, DROP, and undistributed).	G/L coding – transfers between various customer accounts (member, municipal, retiree, disability, DROP, and undistributed)
AR-47		Provide ability for an Employer Portal where the employer can view various invoices (annual bill, annual administrative fees, member contributions), make a payment, view payment history, and see outstanding balance due; complete MMO worksheet ; and access Year-End Financial Activity Reports, Annual Member Statements, IRS Form 1099-Rs, and other correspondence; anything that is not publicly available.	Current phase.
AR-48		Provide ability for a customer to pay on-line.	Current phase.
AR-49		Provide the ability to soft close a period after month end reconciliation on receivables and revenue	Reconciliation includes tie out of multiple receivables accounts (i.e. Current, Disability, Assessment and Member).Reconciliation will also be done on multiple revenue accounts (i.e. Employer Contributions*, Member Contributions*, Assessment Income, Disability and Drop Contributions, credited interest income, transfers from other plan administrators). *Primary revenue accounts to reconcile at month end.
AR-50		Provide the ability to invoice a member directly for member services.	
AR-51		Provide the ability to invoice the employer for multiple types of charges including but not limited to, adjustments, member services, loans, interest on loans, etc.	Receivable for interest on loans will come from CPAS
AR-52		Provide the ability to receive cash and not apply it to an invoice.	Business process for this requirement needs to be defined (i.e. create an open receivable for matching after the fact).
AR-53		Provide the ability to book cash receipts to an AR holding account until documentation is received for proper allocation.	

## Requirement Details

The following base data has been identified as required prior to working with the module on a day-to-day basis and the project team shall make certain set up decisions during the Design Phase.

## Process Flow



## Customer Setup

Employers that are wanting to start a plan with PMRS submit a plan document. Once that plan document has been reviewed and approved by the board, a contract is completed and the customer is assigned a unique number by the Public Employee Retirement Commission. This PERC# is the key identifier for a customer moving forward.

The PERC# structure is XX-XXX-X XX

The meaning of the segments is as follows:

1-2 – County

3-5 – Municipality #

6 – Type of Municipality

7 – Type of Plan

N – Non-uniform

P – Police

F - Fire

8 – Number of plans (may not have a digit for this) – may have N1 for Defined Benefit and N2 for Cash Balance – can be blank

Examples:

22-014-3 N1

22-014-3 N2

PMRS will utilize this assigned PERC# as the customer number and manually key it as the customer number in AX.

The PERC# is a key driving factor for all accounting dealing with a customer (i.e. also referred to as the employer or plan).

A financial dimension will be defined for the PERC# in order to associate all related transactions thus allowing financial reporting to be created at the plan level such as a plan balance and a P&L by plan.

## Customer Agreements

PMRS would like to attach the approved employer contract to the customer master record for quick access and reference.

## Customer Groups

In Dynamics AX, customer groups are used to further define the type of customer and associate related information (such as terms of payment) to the customers within the same group. Customer groups are also used for reporting purposes to be able to select specific customers for further analysis. At a minimum, Dynamics AX requires that one (1) customer group is setup and each customer must be assigned to a customer group.

Through the initial discussions, PMRS is considering creating customer groups based on the type of municipalities: authorities, counties, etc.

## Methods of Payment

Customers send payments (checks) or payment information (ACH/wire) directly to PMRS.

The following methods of payment are required to be defined (at a minimum):

- Check
- ACH/wire (electronic payment)

## Terms of Payment and Cash Discounts

PMRS primarily bills the customers annually for their plan. Additional invoices may be created for other reasons (new member, interest, member contributions/service purchases/loans) over the course of the year.

The payment due date for all invoices is 12/31 of the current calendar year. This may be a payment term of Net 365 or the manual override of the due date setting it to 12/31.

PMRS does not offer any cash discounts to customers. PMRS offers credited interest to customers.

## Customer Profile

Customer posting profiles enable you to assign general ledger accounts and document settings to all customers, a group of customers or a single customer. These settings will be used when customer transactions are created.

Posting profiles can define the specific main account in the General Ledger to which AR transactions will be posted:

- Summary Account - the default ledger AR asset account

Different customer posting profiles can be used based on individual customers, customer groups or all customers.

At a minimum, the summary account needs to be setup for all customers

The customer posting profile also defines the default for the collection letter sequence and interest code as well as the settings for whether these processes are valid for the customer (i.e. to charge or not charge interest).

## Reason Codes

Reason codes are used to explain why specific adjustments are made. PMRS has defined the following types of reason codes that will be needed, at a minimum, for AR transactions:

- Write-offs
- Customer receipts

## Sales Tax

PMRS is tax exempt and thus does not have a need to track sales tax.

## Customer Invoicing

PMRS will invoice the customers primarily on an annual basis for the MMO billing. This billing contains the employer's annual total cost based on detail from their MMO worksheet and additional information from the actuaries.

Invoices will need to contain the Liability and Credit detail as they do currently to create the MMO invoice. Additional text will need to be included on the invoice report (document) that is created to be sent to the customer. This will be detailed in the FRD for reports.

At a high level, the invoice document will have:

### Liabilities

- Plan's Normal Cost (break out as)

  - Current Service Charge

  - Disability Charge

- Administrative Cost

- Amortization of Unfunded Liability

Subtotal of Charges

### Credits

- Anticipated Member Contributions

- Amortization of Actuarial Surplus

Subtotal of Credits

Total Employer Cost

An additional type of invoice is created for administrative costs.

Ad hoc types of invoices may also be needed to bill customers for interest, where a custom interest calculation will be needed first.

Also, PMRS may bill a customer for a member fee if they register a new plan member after the annual invoice has already been created and sent out.

During invoicing, the customer posting profile can provide the main AR account. However, based on the actual billing (i.e. the annual bill), it may be necessary to distribute the amount of the invoice to multiple accounts.

CPAS interface – invoice for member contributions, service purchases, loans, etc.

## Cash Receipts

PMRS customers submit payments either via checks or ACH/wire. In each case, the customer submits a PMRB-20, Revenue Transmittal Form with the detail on the source and credits for the payment to PMRS.

This will allow the PMRS staff to enter the cash receipt and not only apply it to the invoice, but also to code the receipt the appropriate GL account or accounts (i.e. employer, employee or both).

PMRS will setup cash receipts to require a reason code (i.e. State Aid) and a description will also be needed.

This will help PMRS to tie this information between systems (AX, SAP, and Treasury).

Once processed in the accounting system , PMRS will submit to SAP (new interface) along with sending the checks, deposit transit slip, and paperwork to the PA Department of Revenue.

After processing into SAP, The Department of Revenue will send the receipt information to Treasury as it is in Treasury that the actual cash is updated (i.e. bank account).

Bank reconciliation of the cash receipts will occur based on an interface from Treasury to AX (new interface) detailing receipts that have cleared the bank.

Necessary considerations for this process will include the recording of the PERC# and a Trace ID/Warrant ID to tie the receipts between the systems.

Reconciliation of member A/R from CPAS to AX receipts (new interface).

### Credit Memos and Write Offs

Periodically PMRS will evaluate outstanding customer balances with the likelihood that they will be received. If the likelihood is low, a decision may be made and approved to write off the balance or a portion thereof.

This will require a specific write off account and PMRS will require a write off reason code.

### Collections

PMRS may want to implement a more definitive collections process. Nothing is in place at this time. This may be as simple as recording a collections case or sending collections letters.

Statements may also be sent to customers.

A more complex process may include recording notes, sending e-mails and setting up tasks for follow up.

### Customer Pre-payments

PMRS bills customers annually with the full amount of the invoice due at year end. There is no need for customer pre-payments.

### Customer Security Deposit

PMRS customers do not need to provide security deposits.

### Service Items

PMRS does not utilize or bill for service items.

### Commissions

PMRS does utilize commissions.

## Reporting Requirements

Report #	Description	Comments
	Invoice format for CB invoices	Administrative Costs
	Invoice format for DB invoices	Employer Liability – Credits – Total Employer Cost
	Invoice format for interest charges	
	Invoice format for new member charge	
	Customer aging report	
	Customer statement	
	Templates for collection letters	
	Invoice format for member A/R (CPAS Interface)	



## Integrations

### Revenue Transmittal to SAP

PMRS currently enters customer receipts information into SAP as well as sending a Deposit Transit Slip. A new interface may be created to send the receipt information to SAP via a file to process rather than manual entry if possible.

## Customizations

The following customizations are identified to date. It is possible that other customizations are required after discussions during the Design Phase.

#	Description	Fit/Gap	Comments
	Interest calculation	Gap	More detail is needed and will be defined during design as decisions are made for charging interest and awarding credited interest and excess interest.
	Trace ID	Gap	This would be a custom field added to Dynamics AX to denote receipts for invoice documents

## Data Conversion

The following elements of data conversions have been defined as needed.

- Customers
- Customer Contacts
- Customer Addresses
- Customer Open Invoices
- Customer Member Loan Balances

## **Security Requirements**

- Segregation of Duties
- Customer Setup
- Customer Invoice Processing
- Customer Receipts Entry
- Customer Receipts Approval
- Write-offs Processing Entry and Approval
- Collections Processing
- Transfer Processing Entry and Approval (Municipal for Member Contributions, Forfeitures, Other Municipal Account Transfers)

## **Customer Deliverables**

The following elements must be fulfilled in order to demonstrate design functionality:

- Define customer groups
- Define customer master account
- Define customer contacts
- Define customer addresses
- Define customer bank accounts
- Define reason codes for customer holds and for payment reversals
- Define customer open invoices/balances
- Define customer posting profile
- Define AR aging periods
- Define customer notes

## *Adjustment Memorandum from SAP*

### **Assumptions**

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

### **Requirements Analysis**

This interface will be an Inbound interface from the Department of Revenue (SAP) to Dynamics AX.

PMRS may receive adjustment memorandums from SAP for transactions such as an NSF check. These adjustments originate in the Department of Revenue and are recorded in SAP.

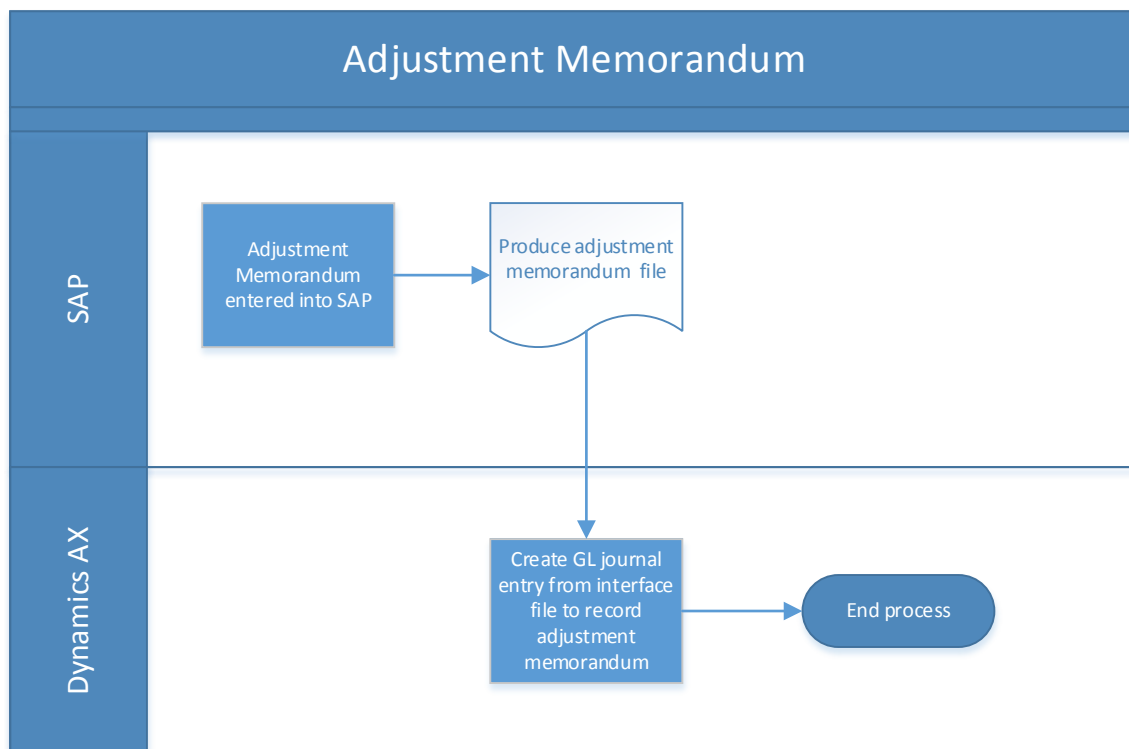
Certain types of adjustments must also be recorded in Dynamics AX for complete accounting.

This may be accomplished by creating a general journal entry in AX. The general journal entry will be at a detail level by adjustment. It will need to include customer (PERC#) information if it is affecting a customer account.

The general journal entry will record the adjustment at the appropriate account/financial dimension level.

## Requirement Details

### Process Flow



#### Source

The source of the data will be the Department of Revenue – SAP – Adjustment Memorandums

#### Destination

The destination for the data will be Dynamics AX – general journal entry.

## Key Data Elements

Element #	Data Element	Source Field (SAP)	Destination Field
1	GL Expense Account		
2	Amount		
3	Date		
4	Value Date		
5	Document #		

### Key Points:

Element 1: Mapping may be needed from the SAP account number to the AX account number. It will also be necessary to assign (or default) any financial dimensions as needed. Note that the division may or may not be needed. The customer (PERC#) may or may not be needed and it may be determined that a data element should be added for this.

### Data Conversion

The following elements of data conversions have been defined as needed.

- Current balances for adjustment memorandums at the appropriate GL account and financial dimension level.

### Security Requirements

Security will need to be assigned at the appropriate level for the users who are permitted to run the Adjustment Memorandum from SAP interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal. PMRS will need to determine if additional restrictions are needed for this journal type.

## Advancement Account from SAP

### Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

### Requirements Analysis

This interface will be an Inbound interface from the Department of Revenue (SAP) to Dynamics AX.

PMRS may provide advances to employees if appropriate. The advances originate in the Department of Revenue and are recorded in SAP.

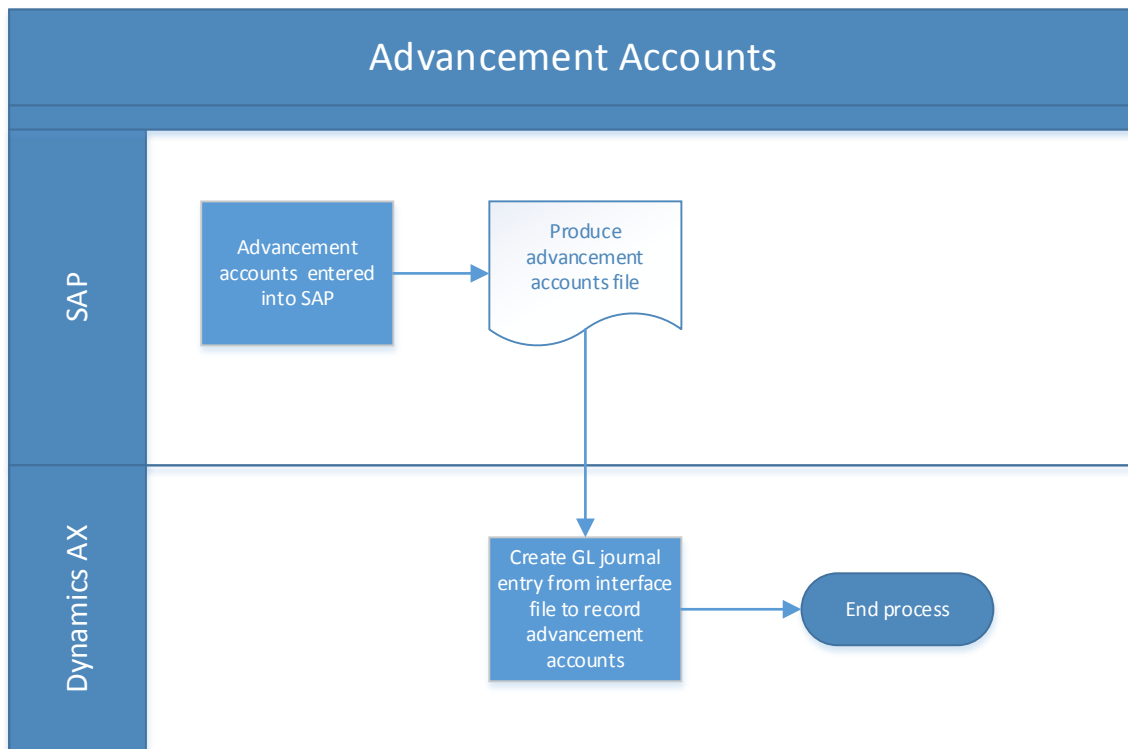
The receivable for the advance needs to be recorded in Dynamics AX.

This may be accomplished by creating a general journal entry in AX. The general journal entry will be at a detail level by advance. No employee information will be included.

The general journal entry will record the receivable at the appropriate account/financial dimension level.

### Requirement Details

Process Flow



Source

The source of the data will be the Department of Revenue – SAP – Advancement Amounts

Destination

The destination for the data will be Dynamics AX – general journal entry.

Key Data Elements

Element #	Data Element	Source Field (SAP)	Destination Field
1	GL Expense Account		
2	Division		
3	Amount		
4	Date		
5	Value Date		
6	Document #		

Key Points:

Element 1: Mapping may be needed from the SAP account number to the AX account number. It will also be necessary to assign (or default) any financial dimensions as needed.

Element 2: Mapping may be needed from the SAP division identifier to the AX division value for the financial dimension.

**Data Conversion**

The following elements of data conversions have been defined as needed.

- Current balances for advancement amounts at the appropriate GL account and financial dimension level.

**Security Requirements**

Security will need to be assigned at the appropriate level for the users who are permitted to run the Advancement Accounts from SAP interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal. PMRS will need to determine if additional restrictions are needed for this journal type.

## Cash and Bank Management

### Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

4. Standard Dynamics AX functionality will be used where possible
5. Treasury will be treated as a central bank for cash/pooled assets. Multiple bank accounts will need to be setup to handle the different pool accounts and cash accounts
6. Interfacing from Treasury's Oracle PeopleSoft system will be used to complete the check/bank reconciliation process.
7. Interfacing from BNY Mellon system will be used to complete the investment/bank reconciliation process. These investment accounts will need to be setup a separate bank accounts to properly track transactions and enable reconciliation.
8. Interfacing from US Bank/SAP system will be used to complete the PCard reconciliation process.

### Requirements Analysis

The following table includes requirements as presented in the corresponding Requirement Matrix.

Requirement ID	Section Reference #	Requirement	Comments
CB-01	4.1	Provide the ability to create multiple bank accounts.	
CB-02	4.1	Provide the ability to define a one to one relationship between a bank and a GL account.	
CB-03	4.4	Provide the ability to record miscellaneous bank transactions.	
CB-04	4.4	Provide the ability to mark a stopped payment.	Treasury will send a listing of stale dated checks. PMRS will request stop payment by Treasury and then determine if payment should be re-issued.
CB-05		Provide the ability to record payments made by Treasury.	Refer to FRD for Accounts Payable for details
CB-06		Provide the ability to record cash receipts processed by Treasury.	Refer to FRD for Accounts Receivable for details
CB-07	4.5	Provide the ability to automatically reconcile bank transactions performed by Treasury.	Payments as well as cash receipts
CB-08		Provide the ability to drill down to balances at the money manager level.	The GL account structure (main account and financial dimensions) needs to be defined to capture the data at this level of detail to allow drill down.
CB-09		Provide the ability to record the impacts of sweep processing between pooled accounts.	There are two pooled accounts 924 (BNY Mellon investment accounts) and 999 (Treasury operating account). It was decided that separate bank



Requirement ID	Section Reference #	Requirement	Comments
			accounts would be set up for each of the 14 BNY Mellon account managed by different account managers, and a Financial Reports (Management Reporter) report would be used to show activity details.
CB-10	5	Provide a way to recognize outstanding payments and receipts (cash in transit)	Cash in transit is defined as when PMRS sets a pay date in which payment should be made by Treasury, but the file from Treasury does not contain a warrant number for some transactions. This difference between what PMRS considers "paid" and what Treasury actually paid is accounting for in a "cash in transit" account
CB-11		Provide the ability to reconcile the totals of the Pool 999 and Pool 924 amounts separately. Further, under the Pool 924, the bank account would be at the manager level to allow reconciliation.	
CB-12		Provide the ability to have certain bank transactions, such as interest earned, created automatically during reconciliation.	This is possible with advanced bank reconciliation.

### Requirement Details

The following base data has been identified as required prior to working with the module on a day-to-day basis and the project team shall make certain set up decisions during the Design Phase.

#### Bank Accounts

1. PMRS will have multiple Bank Accounts:US Bank – P-Card Transactions
2. BNY Mellon – Investments

Investment Transactions include (source: BNY Mellon/Treasury):

- Cash/Asset transfers
- Daily activity for purchases and sales
- Investment income
- Investment fees
- Adjust to market (unrealized gains/losses)
- Realized gains/losses

3. Wells Fargo (Treasury) – Day to Day Transactions

Day to Day Transactions include:

- Receipts/ACH/Wire

- Disbursement Checks/ACH/Wire
  - Invested (uninvested) cash – transfers between investment pool accounts (Pool 98 and 99)
  - Fees
  - Bank Charges
  - Interest Income
  - Daily settlement (investment purchases/sales) from Treasury where Treasury confirms daily totals for purchases/sales and PMRS reconciles to BNY Mellon Reports/Manager Trade Statements
4. ACH Account for Employer Receipts – Sweep to Wells Fargo

Note: This is a new account that will only contain cash receipts from employers via Employer Payment Portal – PMRB20 (Revenue Transmittal Form) and Invoice, and have a daily sweep from ACH account to Treasury's main account (Wells Fargo)

### Bank Transaction Groups

Transaction groups will be utilized for querying and to assist in reconciliation. It may be advantageous for PMRS to assign transaction groups when interfacing bank transactions from the various sources (i.e. Treasury (Oracle PeopleSoft), BNY Mellon, SAP).

The final determination on this will be made during design of the interfaces.

### Bank Transaction Types

Transaction types are specific codes for each transaction in the module. Types are associated to Transactions Groups and automatically assigned during transaction entry.

The majority of the PMRS bank transactions will be integrated. It will be helpful for PMRS to have appropriate bank transaction types assigned if at all possible via the interfaces.

The final determination on this will be made during design of the interfaces.

### Bank Transactions

Bank transactions (i.e. transactions impacting Cash) will be done primarily outside of AX. Treasury's Cash Management system in Oracle PeopleSoft is the primary source for these transactions in the form of payments and receipts.

However, processing to support these transactions will initiate in AX with exception of member transactions initiated in CPAS. The pertinent detail will be sent to SAP and/or Treasury.

Cash receipts will be processed in AR and the receipt information will be sent to SAP. SAP will then send the necessary information to Treasury. Final reconciliation will occur when Treasury sends the cleared receipt detail back to AX. Refer to the

FRD for AR for the detail on this process. Also, refer to section 4.5 for Bank reconciliation.

Payments will follow the appropriate AP processes and the payment requests will be sent to Treasury for payment. Final reconciliation will occur when Treasury send the cleared payment detail back to AX. Refer to the FRD for AP for the detail on this process. Also, refer to section 4.5 for Bank reconciliation.

In addition to the cash receipts and payments, it may be necessary to record additional bank transactions directly if needed for corrections or exceptions. Journal entries with an account type of Bank or specific bank transaction, such as check reversal, can be used as needed.

### Bank Reconciliation

Daily cash reconciliation and monthly bank reconciliation will be performed when data is received back from Treasury, via an integration from Oracle PeopleSoft to Dynamics AX, that cash has been impacted. The file will be used to marked transactions as reconciled.

Additionally, PMRS will review the bank reconciliation to verify and reconcile any transactions that are not marked automatically through the import of the file from Treasury and BNY Mellon.

Since Treasury does not record a check number until a vendor payment has cleared the bank, the warrant number, will serve as the check number to match the transactions between AX and Treasury for reconciliation.

### Reporting Requirements

Report #	Description	Comments
	Outstanding bank transactions	Standard report - Unreconciled bank transactions
	Bank Reconciliation Report	
	Investment Reconciliation Report	

## **Integrations**

### Inbound Integrations

#### Member Payments from Treasury

This integration will record member payments that were paid by Treasury. The source file for this integration will come from Treasury's Oracle PeopleSoft Cash Management system. The file will be used to reconcile member payments.

Key data identified to date:

- Trace ID, Warrant #, Posted Date, Amount, Document #
- AX Destination – Electronic Bank Reconciliation

#### Vendor (AP) Payments from Treasury

This integration will record vendor payments that were paid by Treasury. The source file for this integration will come from Treasury. The file will be used to reconcile vendor (AP) payments.

Key data identified to date:

- Trace ID, Warrant #, Posted Date, Amount, Document #
- AX Destination – Electronic Bank Reconciliation

#### US Bank – PCard Transactions by Vendor

#### Cash Receipts – Contributions and Refunds from Treasury

This integration will record cash receipts from employers and employees from Treasury or SAP. The source file for this integration will come from Treasury or SAP.

Key data identified to date:

- SAP Account, Amount, Document #, PERC# (\*)
- AX Destination – Electronic Bank Reconciliation

(\*) – Treasury is currently not sending back PERC# which will be needed to record receipt at employer level, can leave blank if not related to employer/employee cash receipt for allocated accounts

## **Data Conversion**

The following elements of data conversions have been defined as needed.

- Bank account balances
- Outstanding bank transactions
- Investment account balances

## Cash Receipts – Contributions and Refunds from Treasury

### **Assumptions**

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

### **Requirements Analysis**

This interface will be an Inbound interface from Treasury to Dynamics AX.

The integration described in this document refers to the processes highlighted in the red box on the process flow. This includes:

- Reconcile cash receipts from Treasury file with cash receipts processed in AX

Prior to this integration (this process), the following processes have already occurred – refer to the process flow to view the complete flow.

- Employer has sent money to PMRS for:
  - Municipal Contribution
  - Member Contribution
  - Administrative Costs
  - Annual Bill (MMO)
  - New Member Fees
- The cash receipt is processed in Dynamics AX and applied to an invoice if appropriate or credited to the proper account (i.e. member contributions).
- The cash receipts are grouped as a deposit slip by SAP account (i.e. 100, 111, 312, etc.)
- The deposit slip is entered into SAP (manually) and a revenue transmittal form is sent with the supporting detail
- The deposit is processed in SAP and a file is sent to Treasury to record the receipt.

Following the above transactions, the final processes for the cash receipts, to close the loop, is the reconciliation of the cash receipts/deposit slip that were entered in SAP.

- This would include a file being created by Treasury, at the deposit slip level, for the cash receipts processed
- The final step would be processing a bank reconciliation in Dynamics AX using the file from Treasury
- For refunds from an employer or employee, PMRS would follow the above steps and process the refund in AX. It would then be included on the deposit

slip and complete the flow in the same manner. Any accounting at the PERC# level will be processed before the refund is grouped on a deposit slip

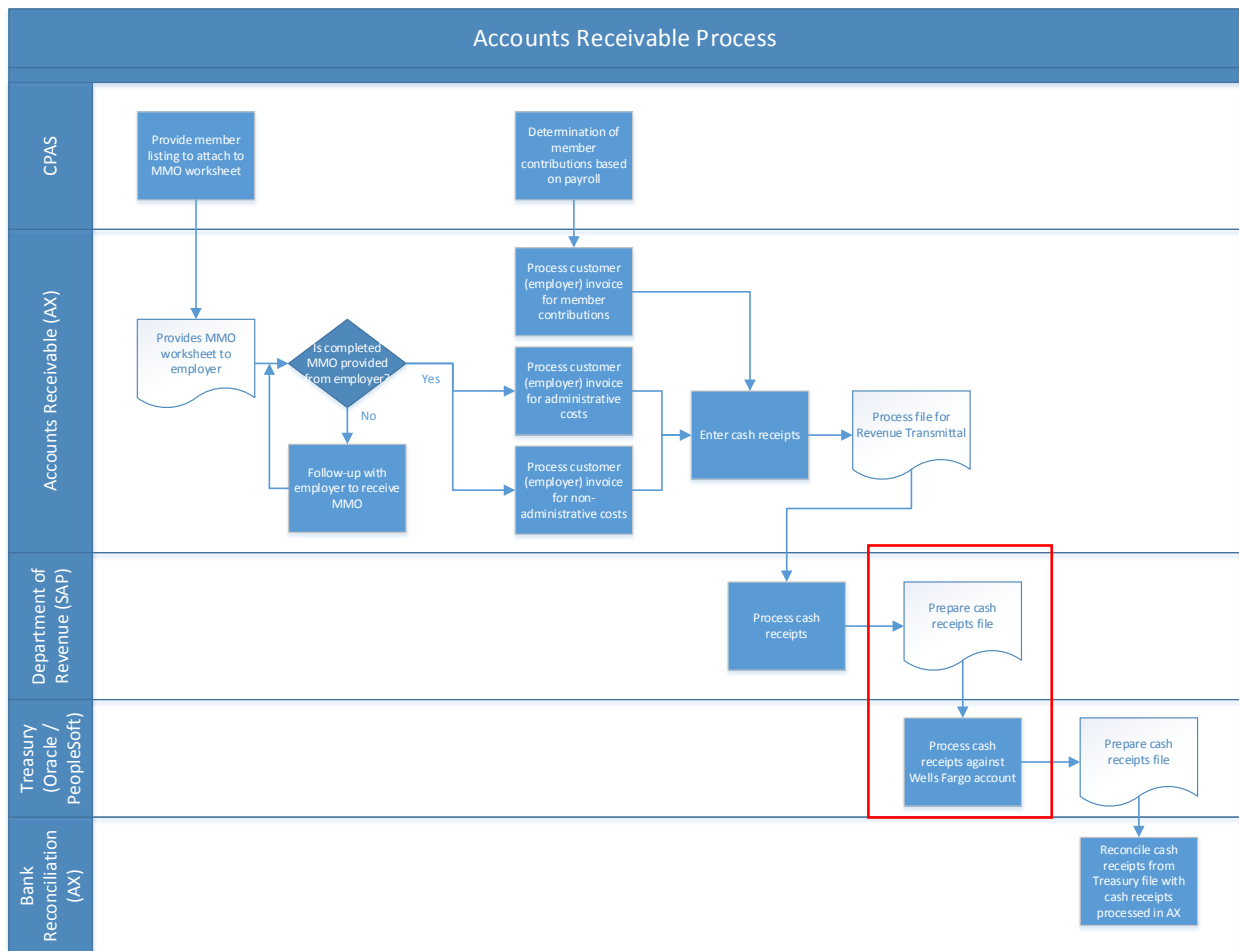
Given the available file formats for outbound files from Treasury, this file would most likely be the INT062 Outbound GL Posted Transactions format.

[The full INT062 Outbound GL Posted Transactions Guide Inbound can be referenced at here.](#)

Note that this integration will not create a general journal entry. It will only be reformatted and used for electronic bank reconciliation.

## Requirement Details

### Process Flow



**NOTE: The sections highlighted with the red squares are the processes being referenced in this document.**

#### Source

The source of the data will be Treasury – Cash Receipts Deposit

#### Destination

The destination will be Dynamics AX – Bank Reconciliation

## Key Data Elements

In the following table, (M) indicates a Mandatory Node and (O) for an Optional Node. The data elements shown are for the most part mandatory but some select optional fields have been included. Non-mandatory fields are noted in the Key Points.

#	Node Name	Element Name	Source Field (Treasury)	Destination Field	Fixed Value
1	GLOT01Response (M)	DocumentHeader			N/A
2	GLOT01Response (M)	GLPostedTransaction			N/A
3	DocumentHeader (M)	Control			N/A
4	Control (M)	Class	N/A	N/A	R
5	Control (M)	InterfacelIdentifier	N/A	N/A	GLOT01
6	Control (M)	SourceSystemCode	N/A	N/A	PAT
7	Control (M)	DocumentIdentifier			N/A
8	Control (M)	DocumentDateTime			N/A
9	Control (M)	ResponseCode			N/A
10	Control (M)	ControlCount			N/A
11	Control (M)	ControlAmount			N/A
12	Control (M)	RequestDocumentIdentifier			N/A
13	Control (M)	RequestDateTime			N/A
14	Control (M)	Message			N/A
15	Message(O)	Class	N/A	N/A	R
16	Message(O)	MessageNumber			N/A
17	Message(O)	MessageSet			N/A
18	Message(O)	Severity			N/A
19	Message(O)	Text			N/A
20	GLPostedTransaction (M)	PostedTransactionHeader			
21	PostedTransactionHeader (M)	Class	N/A	N/A	R
22	PostedTransactionHeader (M)	JournalId			N/A
23	PostedTransactionHeader (M)	JournalDate			N/A
24	PostedTransactionHeader (M)	SourceSystem			N/A
25	PostedTransactionHeader (M)	TracedId			N/A
26	PostedTransactionHeader (M)	BatchId			N/A
27	PostedTransactionHeader (M)	AccountingPeriod			N/A
28	PostedTransactionHeader (M)	AccountingYear			N/A
29	PostedTransactionHeader (M)	JournalSource			N/A
30	PostedTransactionHeader (M)	DocumentType			N/A
31	PostedTransactionHeader (M)	PostedTransactionDetail			N/A
32	PostedTransactionDetail (M)	Class	N/A	N/A	R
33	PostedTransactionDetail (M)	JournalLine			N/A
34	PostedTransactionDetail (M)	TransactionAmount			N/A
35	PostedTransactionDetail (M)	SymbolChangeIndicator			N/A
36	PostedTransactionDetail (M)	Fund			N/A
37	PostedTransactionDetail (M)	Department			N/A
38	PostedTransactionDetail (M)	Appropriation			N/A
39	PostedTransactionDetail (M)	FiscalYear			N/A
40	PostedTransactionDetail (M)	Account			N/A
41	PostedTransactionDetail (M)	BankCode			N/A



**Key Points:**

**Control Node**

Element 9: ResponseCode

Valid Values: 000E – For Error on run control values; 000S For Success on run control values

**PostedTransactionHeader Node**

Element 29: Journal Source

Valid Values:

TV – Transfer Vouchers

RT- Revenue Transmittal

RE – Refund of Expenditures

EA – Expenditure Adjustment

DM – Debit Memos

ONL – PAT - Online Journal Entry

CM – Cash Management Module

AR – Accounts Receivable

AP – Accounts Payable

INV – Deal Management

IP – Deal Management

**PostedTransactionDetail Node**

Element 35: SymbolChangeIndicator

Valid Values: Y – Chart of account changed; N – No changes

**Data Conversion**

The following elements of data conversions have been defined as needed.

- Current deposit slips that have not been reconciled

## Security Requirements

Security will need to be assigned at the appropriate level for the users who are permitted to run Bank Reconciliation for the Wells Fargo (Treasury) bank account. Users will need the appropriate security to access the integration file used for the electronic reconciliation.

### 1 Customer Deliverables

The following discussion points have been defined to be addressed in order to demonstrate design functionality:

Treasury files are in an XML format.

Example INT062 file:

```
<?xml version="1.0"?>
<GLOT01Response
xmlns="http://schemas.patresury.gov/interface/schema/GLOT01Response.v1">
  <DocumentHeader>
    <Control class="R">
      <InterfacelIdentifier>GLOT01</InterfacelIdentifier>
      <SourceSystemCode>PAT</SourceSystemCode>
      <DocumentIdentifier>GLOT01IES20130101101201</DocumentIdentifier>
      <DocumentDateTime>2013-01-01T16:12:56.000000</DocumentDateTime>
      <ResponseCode>000S</ResponseCode>
      <ControlCount>1</ControlCount>
      <ControlAmount>1500</ControlAmount>
      <RequestDocumentIdentifier>GLPOST01</RequestDocumentIdentifier>
      <RequestDateTime>2013-10-31T15:07:38.687500</RequestDateTime>
    </Control>
  </DocumentHeader>
  <GLPostedTransaction>
    <PostedTransactionHeader class="R">
      <JournalId>0000012345</JournalId>
      <JournalDate>2013-01-01</JournalDate>
      <SourceSystem>IES</SourceSystem>
      <Traceld>123456</Traceld>
      <BatchId>BATCH0001</BatchId>
      <AccountingPeriod>1</AccountingPeriod>
      <AccountingYear>2013</AccountingYear>
      <JournalSource>AR</JournalSource>
      <DocumentType>EA</DocumentType>
      <PostedTransactionDetail class="R">
        <JournalLine>1</JournalLine>
        <TransactionAmount>1500</TransactionAmount>
        <SymbolChangeIndicator>N</SymbolChangeIndicator>
        <Fund>001</Fund>
      </PostedTransactionDetail>
    </PostedTransactionHeader>
  </GLPostedTransaction>
</GLOT01Response>
```

```
<Department>011</Department>
<Appropriation>10748</Appropriation>
<FiscalYear>2013</FiscalYear>
<Account>1300000</Account>
</PostedTransactionDetail>
<PostedTransactionDetail class="R">
  <JournalLine>2</JournalLine>
  <TransactionAmount>-1500.00</TransactionAmount>
  <SymbolChangeIndicator>N</SymbolChangeIndicator>
  <Fund>002</Fund>
  <Department>099</Department>
  <Appropriation>10745</Appropriation>
  <FiscalYear>2013</FiscalYear>
  <Account>1500000</Account>
</PostedTransactionDetail>
</PostedTransactionHeader>
</GLPostedTransaction>
</GLOT01Response>
```

Standard industry formats accepted are:

- BAI2
- MT940
- ISO20022

# **Employee Reimbursement from SAP**

## **Assumptions**

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## **Requirements Analysis**

This interface will be an Inbound interface from the Department of Revenue (SAP) to Dynamics AX.

Employee reimbursements are entered into SAP. Payment for reimbursements are paid via payroll.

The expense for employee reimbursements needs to be recorded in Dynamics AX as well as the liability for payment.

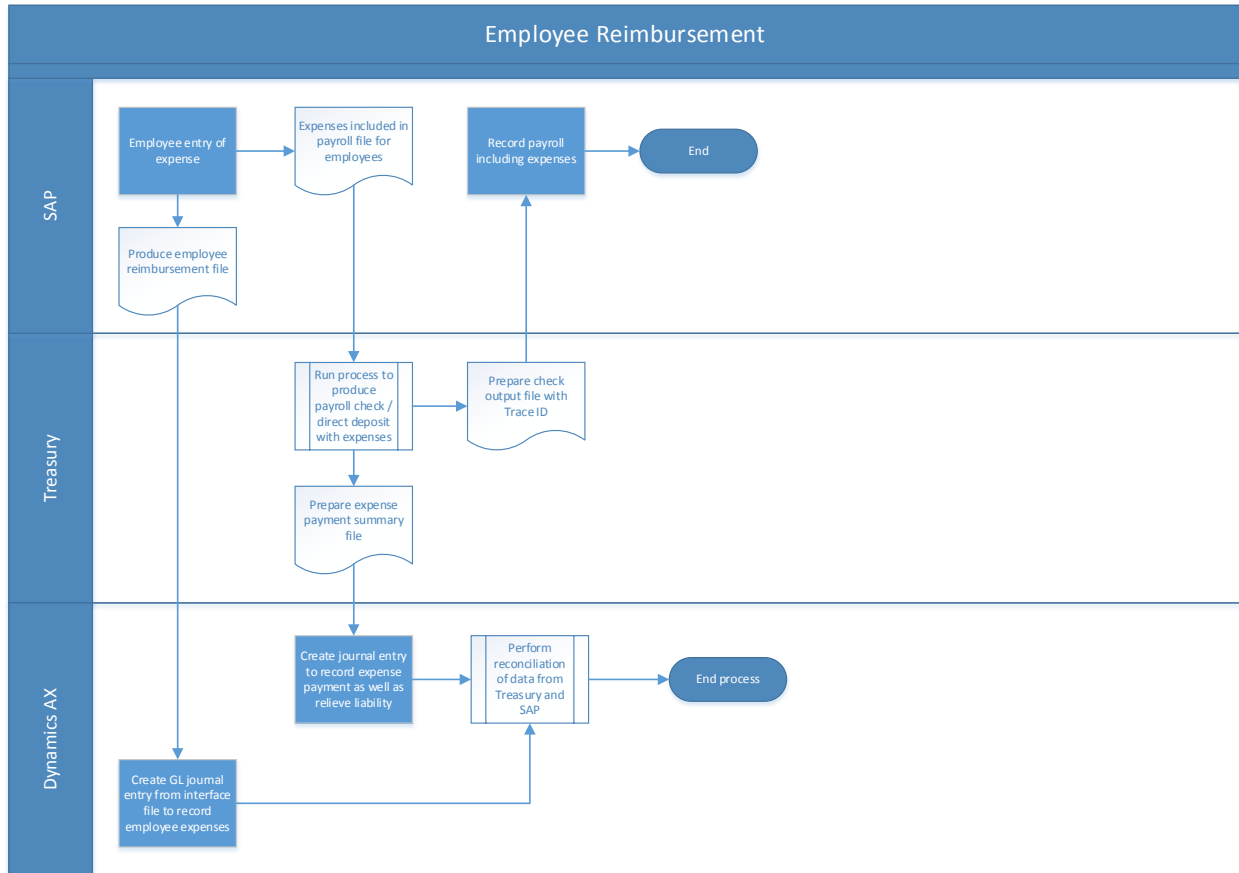
This may be accomplished by creating a general journal entry in AX. The general journal entry will be at a detail level by expense but will not contain any employee information.

The general journal entry will record the expense at the appropriate account/financial dimension level and create the offsetting liability.

Once Treasury completes the payroll payments, the payment information is sent back to SAP via an interface file to record the payment. This payment will relieve the liability created for the employee expenses to complete the cycle in AX. Refer to the PMRS – FRD Payroll Summary from SAP interface document.

## 2 Requirement Details

### Process Flow



#### Source

The source of the data will be the Department of Revenue – SAP – Employee Expense

#### Destination

The destination for the data will be Dynamics AX – general journal entry.

## Key Data Elements

Element #	Data Element	Source Field (SAP)	Destination Field
1	GL Expense Account		
2	Amount		
3	Pay Cycle		
4	Value Date		
5	Document #		

### Key Points:

Element 1: Mapping may be needed from the SAP account number to the AX account number. It will also be necessary to assign (or default) any financial dimensions as needed.

## Data Conversion

The following elements of data conversions have been defined as needed.

- Current balances for outstanding employee reimbursement expenses and liability at the appropriate GL account and financial dimension level.

## Security Requirements

Security will need to be assigned at the appropriate level for the users who are permitted to run the Employee Reimbursements from SAP interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal. PMRS will need to determine if additional restrictions are needed for this journal type.

# Employer Receipt Interface to CPAS

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Outbound interface from Dynamics AX to the Comprehensive Pension Administration System (CPAS).

Employers submit payments to PMRS on behalf of the employee which may be the employee contribution, the employer contribution or both. Payment is submitted with form PMRB-20 which includes sources of the payment and how the payment should be credited.

PART A: To be completed by municipality.		
1. MUNICIPAL PLAN NAME _____	2. MUNICIPAL CODE ____-____-____-____	3. CHECK AMOUNT \$ _____
4. SOURCE OF THIS PAYMENT		5. CREDIT THIS PAYMENT TO
\$ _____ Fund Money (Municipal, General, or Special)	\$ _____ Municipal Account	
\$ _____ State Aid - Act 205	\$ _____ Member Account	
\$ _____ Employee Deductions for <i>Month / Quarter / Pay Period</i>	\$ _____ Administrative Cost	
\$ _____ Other (Please Explain) _____ _____	_____ Annual Bill	
	_____ New Member(s) Fee for Name & SSN: (If more than three, attach list.)	
	_____	_____
	_____	_____
	_____	_____

Payment information will be entered into AX as a general journal entry (municipal and member) or a payment journal (administrative cost, annual bill and new member fees) and coded to appropriate account.

Note that for the member account, it might be desired to credit a Municipal for member account until the quarterly member breakout total entered into CPAS has been matched to the account from these payments recorded for member accounts.

The amount credited to Member Account must be sent over to the CPAS system. On a quarterly basis, the employer will send the breakout of the member account payment at the member level. The employer uses Form PMRB-21

Plan Name:  Municipal Code:

Name: (Last, First MI)	Social Security Number:	Second Quarter Compensation:	Member Cont Rate:	Contributions: (by Member)	Contributions: (Mun for Mem)	Service Purchase:	List Comments and/ or Breaks in Service:	Effective Date:

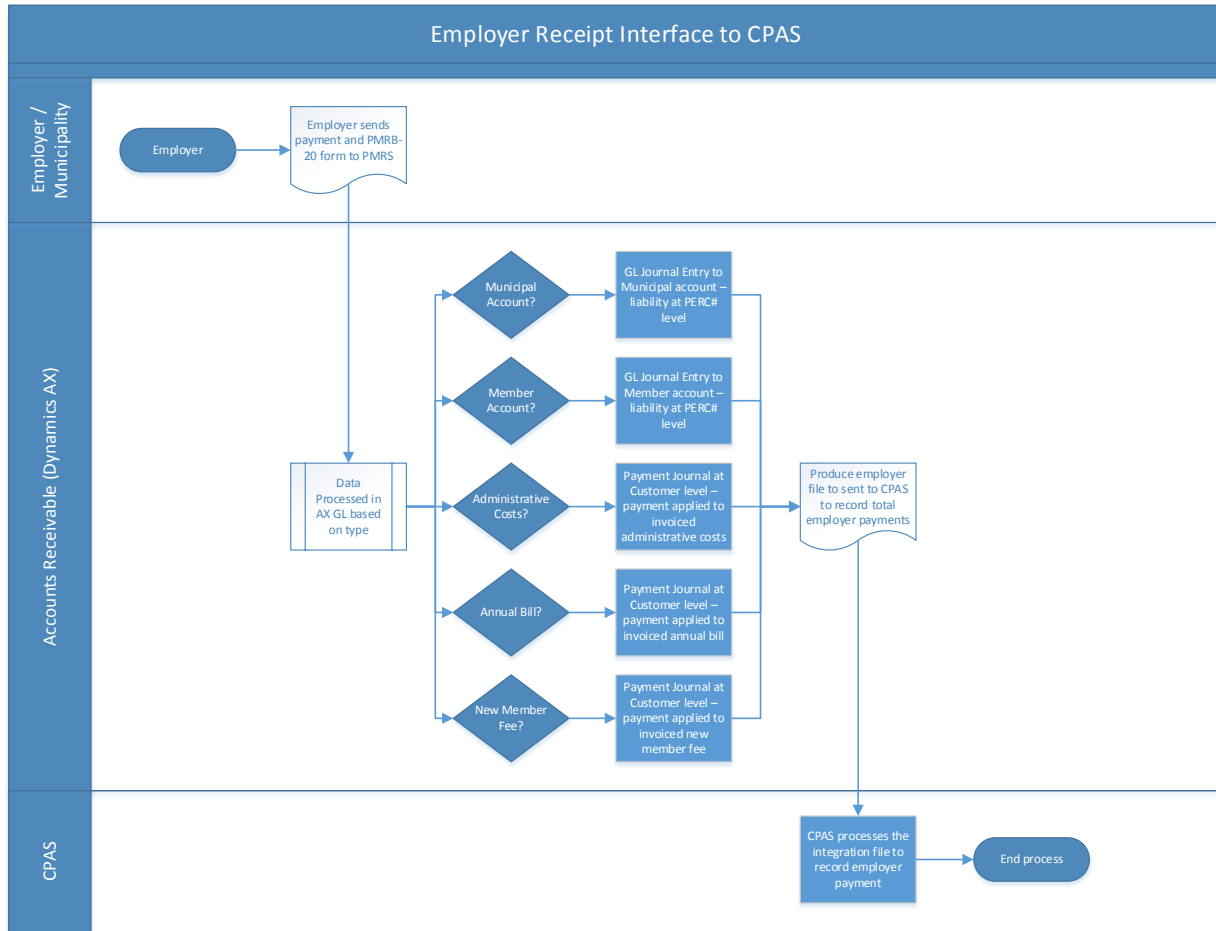
Use the following spaces to report information on unlisted members:


The detail breakout at the member level will not be represented in AX, only in CPAS. It will be entered directly into CPAS.  
 Note that if the payment has been credited to a municipal for member account upon receipt, once the member detail have been entered into CPAS and the total validated, a general journal entry would be performed in AX to move this amount from the municipal for member account to the member account.



## Requirement Details

### Process Flow



#### Source

The source of the data will be AX – Payment Journal Data  
It will be necessary to delineate the member account payment receipt in a manner such that selection can be performed on that specific payment journal type.

#### Destination

The destination will be the Comprehensive Pension Administration System (CPAS).

#### Key Data Elements

Element #	Data Element	Source Field	Destination Field (CPAS)
1	Pay Period End Date		
2	Member Total Paid Amount		
3	PERC# (Employer)		

## **Data Conversion**

The following elements of data conversions have been defined as needed.

- Current Balances for the accounts identified in the PMRB-20 at the appropriate financial dimension level (at a minimum the PERC # FD)
  - Municipal Account
  - Member Account
- Customer open invoices

## **Security Requirements**

Security will need to be assigned at the appropriate level for the users who are permitted to run the Employer Receipt for CPAS interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal. PMRS will need to determine if additional restrictions are needed for this journal type.

# Fixed Assets

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible
2. Fixed Assets will be purchased following the procurement process defined in the Procurement and Sourcing FRD

## Requirements Analysis

The following table includes requirements as presented in the corresponding Requirement Matrix.

Requirement ID	Requirement	Comments
FA-01	Needs ability to track purchased assets, such as furniture, computer equipment and software	
FA-02	Needs ability to track leased assets, such as vehicles and office equipment	
FA-03	Needs ability to track acquisition of fixed assets	
FA-04	Needs ability to track disposal of fixed assets	
FA-05	Needs ability to use Straight Line depreciation	
FA-06	Needs ability to assign asset tags to fixed asset items	
FA-07	Needs ability to assign a bar code to fixed asset items	
FA-08	Needs ability to use a bar code scanner to track fixed assets	
FA-09	Needs ability to assign location to fixed assets	Location: floor, room
FA-10	Needs ability to assign employee to certain fixed assets (i.e. computer)	PMRS would like track the employee, division, location, floor and room of where the fixed asset resides.
FA-11	Needs ability to track fixed assets by division / department	
FA-12	Needs ability to perform a physical inventory of fixed assets annually	
FA-13	Needs system (Dynamics AX) to calculate asset values	Net book value
FA-14	Needs ability to setup appropriate useful life of fixed assets	PMRS plans to follow the Commonwealth of Pennsylvania's fixed asset policy for useful lives as detailed in the PA CAFR
FA-15	Needs ability to track fixed asset attributes	<ul style="list-style-type: none"> <li>• Make</li> <li>• Model</li> <li>• Serial Number</li> <li>• Warranty</li> </ul>
FA-16	Need the ability to track an intangible asset separately if desired (i.e. software)	
FA-17	Need the ability to track the expiration date on an intangible asset	
FA-18	Need the ability to receive an alert for intangibles that are expiring	Define time frame to receive the alert

Requirement ID	Requirement	Comments
FA-19	Needs ability to purchase fixed assets following the overall procurement processes	<ul style="list-style-type: none"> <li>• Under \$10,000: use P-Card</li> <li>• Purchase order required</li> </ul>
FA-20	Would like to establish capital asset purchase thresholds	<ul style="list-style-type: none"> <li>• Useful life greater than a year</li> <li>• Tangible property (exception are intangibles – software)</li> </ul>
FA-21	Needs ability to apply / capitalize and expenses to some fixed assets	
FA-22	Needs ability to treat some computer equipment items as one fixed asset with multiple components	Example includes: Monitor, CPU, Keyboard, Mouse as one computer fixed asset
FA-23	Needs ability to group fixed assets	<ul style="list-style-type: none"> <li>• Office and IT Equipment</li> <li>• Vehicles</li> <li>• Furniture and Fixtures</li> <li>• Software</li> </ul>
FA-24	Needs ability to write up / write down value of asset	
FA-25	Needs ability to automate updates to an asset's replacement cost and insured value	For budgeting purposes
FA-26	Needs ability to maintain one set of depreciation books	
FA-27	Needs ability to explain asset changes via reason codes	
FA-28	Needs ability to show net proceeds (revenue) from sale of fixed assets	
FA-29	Needs ability to show expenses resulting from scrapping of fixed assets	

### Requirement Details

The following base data has been identified as required prior to working with the module on a day-to-day basis and the project team shall make certain set up decisions during the Design Phase.

#### Fixed Assets / Leased Assets

PMRS currently tracks their fixed asset items in Excel spreadsheets. Examples of these fixed assets include the following:

- Furniture and fixtures
- Computer (IT) equipment / office equipment
- Leased vehicles / office equipment

PMRS intends to “writeoff” all current fixed assets in June 2017, when they move to a new office building so the fixed asset balance will go to zero, and all new fixed assets will be maintained in the manner in which they want to be handled in Dynamics AX. One exception that is being considered is for computer equipment that has not yet fully depreciated in its 3 year life will be evaluated and may have its net book value adjusted and still be included in the fixed asset register going forward.

PMRS currently has two leased vehicles that are included in their fixed asset register.

PMRS does not plan to track the new building as a fixed asset, but rather will treat it as an investment item in their investment portfolio.

## Asset Tracking

PMRS currently tracks its fixed asset register in Excel. Asset tags are not currently used to track the physical asset, location and attributes.

With Dynamics AX, PMRS plans to initiate the use of asset tags with bar coding for ease of tracking the physical asset and location. PMRS would also like to do an annual inventory to reflect the actual location, physical attributes and state of the fixed assets.

At a minimum, PMRS would like to track their fixed assets by location (floor, room) and PMRS division that owns / uses the asset. For computer equipment, such as laptop computers, and office equipment and furniture. PMRS would also like to include the individual employee to whom the computer, office equipment and furniture is assigned in the fixed asset register.

## Fixed Asset Attributes

PMRS would like to track the attributes of its fixed assets, such as:

- Make
- Model
- Serial Number
- Warranty

## Depreciation Methods

PMRS uses straight line depreciation methods for all assets. The plan is for PMRS to continue to use straight line depreciation method, denoting the asset life based on the asset type PMRS plans to follow the Commonwealth of Pennsylvania's fixed asset policy for useful lives as detailed in the PA CAFR. During the Design Phase, a final decision will need to be made on the asset life and depreciation method that PMRS would like to use for computer equipment, furniture and fixtures, etc.

Types of Depreciation Books  
Depreciation books are used for reporting asset information for tax and other non-financial reporting.

PMRS only plans to maintain one depreciation set of books.

## Fixed Asset Purchasing Process / Methods

PMRS intends to follow the same purchasing processes for fixed assets as how these processes are defined in the Procurement and Sourcing functional requirements document (FRD).

To effectively use Dynamics AX for fixed asset management, purchase orders may need to be entered to allow the purchase data to flow to the fixed assets module, regardless of the purchasing thresholds.

The GL Account will be used as the trigger to denote a fixed asset. This trigger / indicator would denote a fixed asset entry and would create an entry in the Fixed Assets module as a starting point to add additional information about the fixed asset purchased.

## Fixed Asset Groups / Classification

PMRS plans to classify or group its assets by type of asset:

- Computer (IT) equipment / office equipment
- Furniture and fixtures
- Leased vehicles / office equipment

## Value Adjustments

PMRS may adjust the value of its fixed assets in the following manner:

- Write down value due to physical state of the asset (destroyed)
- Increase (“write up”) value based on add-on applied to the original asset.  
Depending on the asset and the add-on, the additional value may be expensed and not be added to the fixed asset, or the asset value may be increased

## Asset Transaction Types

PMRS intends to use the following asset transaction types:

- Acquisition of asset
- Scrapping of asset (disposal)
- Sale of asset

## Reason Codes

PMRS would like to add reason codes to explain why the value of an asset was adjusted.

## Disposal and Sale of Fixed Assets

PMRS sometimes disposes of damaged assets and writes off the asset expense. PMRS may sell fixed assets, where the sales proceeds need to be accounted for as revenue.

## Asset Transfers

Fixed assets may be transferred within PMRS divisions. PMRS would like track the employee, division, location, floor and room of where the fixed asset resides.

## Reporting Requirements

Report #	Description	Comments
	Fixed Asset Register	
	Depreciation Set of Books	
	Asset Tags	
	Bar Code	
	Fixed Asset Rollforward	
	Fixed Asset Additions	
	Fixed Asset Disposals	
	Depreciation Report	
	Inventory Report	
	Capital/Budget Report	

## Integrations

### Dynamics AX and Bar Code Reader

To effectively track the fixed assets, location and attributes, PMRS would like to assign asset tags with bar codes. Thus, there would need to be an integration between Dynamics AX and the bar code reader that PMRS would use.

## Data Conversion

The following elements of data conversions have been defined as needed.

- Fixed Assets
- Asset Values
- Asset Groups
- Asset Locations
- Purchase Date
- Useful Life

### **Security Requirements**

PMRS would like to ensure that there are proper segregation of duties, where access security could be utilized to segregate the following functions:

- Purchase Order Entry
- Purchase Order Approval
- Receiving
- Fixed Asset Management
- General journal entry of depreciation calculations
- Disposals/Write-Offs
- Value Adjustments

### **Customer Deliverables**

The following elements must be fulfilled in order to demonstrate design functionality:

- Define Fixed Assets
- Define Depreciation Methods
- Define Fixed Asset Groups
- Define Fixed Asset Locations
- Define Fixed Asset Values
- Decision on which bar code scanner PMRS will use



# General Ledger

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible
2. Dynamics AX will be considered the Accounting system of record for PMRS in order to produce financial reports and produce required statements. Note that input from additional sources will be needed but Dynamics AX will be the primary system for accounting.
3. Define Dynamics AX requirements for design and configuration of a system that will meet the following objectives:
  - a. Streamline PMRS' core financial and treasury management processes through business process re-engineering in conjunction with the implementation of best practices included in the financial management system. This objective includes replacing existing systems to improve business operations through enhanced ERP functionality and new technologies.
  - b. Standardize interfaces between the PMRS, Commonwealth Agencies, and PMRS' business partners.
  - c. Eliminate administrative activities that do not add value, such as redundant keying, paper processing, and reconciliation of disparate systems.
  - d. Fulfill the business requirements of PMRS operating divisions utilizing industry standards and industry best practices for interaction with those Commonwealth Agencies, banks, and business partners that do business with PMRS.
  - e. Make PMRS processing information more readily available to agency heads, fiscal officer, comptroller, and program managers.
  - f. Provide system users and business managers, with the necessary technology, tools, and training to enable them to extract the information they require to meet their daily business needs.
  - g. Make information more readily available, as appropriate, to municipalities.
  - h. Enable PMRS to more efficiently conduct business with its business partners through expansion of electronic interfaces.
  - i. Improve PMRS' ability to conduct business, and investment planning based on reliable, timely, financial data.
  - j. Enable PMRS to more efficiently extract and report data for financial reporting related to: Comprehensive Annual Financial Report, Generally Accepted Accounting Principles, Governmental Accounting Standards Board, Internal and External Audit request requirements.

## Requirements Analysis

The following table includes requirements as presented in the corresponding Requirement Matrix.

Requirement ID	Section Reference #	Requirement	Comments
		<b>Overview – Objectives</b>	
GE-01		Serve as the primary financial management tool for PMRS.	
GE-02		Reduce time spent manually compiling and reconciling financial data.	
GE-03		Ensure an appropriate level of internal control by providing a framework around general ledger entries as well as enhanced access control.	
GE-04		Provide accountability and structure to processes through security and workflows.	
GE-05		Provide a core financial system that can integrate to multiple external systems for complete financial accountability and reporting.	CPAS, Treasury, SAP, US Bank, BNY Mellon
GE-06		Provide enhanced reporting to obtain more data that is timely, complete and accessible.	Currently yearly, would like to move to monthly.
		<b>GL</b>	
GL-01	5.1	Create a single legal entity with a chart of accounts defined to support recording and reporting on the necessary level of detail.	
GL-02	5.2	Create a robust chart of accounts to support the level of detail needed for summary as well as detailed financial reporting.	
GL-03	5.3	Create multiple financial dimensions to support detailed collection of financial data that will permit drill down and reporting at a granular level.	Data collected at a detail level that is sufficient for reporting.
GL-04	5.3	Create a structure that will define which financial dimensions are mandatory based on the process and/or main account.	PERC# and reserve account (municipal, member, retiree, DROP, disability and undistributed) will be key to reporting for plans.
GL-05	5.3	Create defaults to the financial dimensions to diminish manual entry as well as minimize user error.	
GL-06	5.3	Create statistical accounts.	It will be critical to define and maintain all statistical accounts needed for reporting. Will be needed for reporting with respect to the CAFR at the very least
GL-07	5.3	Provide the ability to secure all changes to the chart of accounts and financial dimensions.	
GL-08	5.4	The account structure will be defined such that the order of the financial dimensions will represent the level to which they are utilized (i.e. all or extension).	
GL-09	5.11	Provide the ability for deferred revenue recognition.	This could be done via GL journal entries to deferred revenue accounts, or via

Requirement ID	Section Reference #	Requirement	Comments
			implementation of Project Accounting module
GL-10	5.11	Provide the ability to use journal entries for revenue deferral processing.	
GL-11	5.11	Provide the ability to define the timing of revenue deferrals.	
GL-12	5.12	Provide the ability to process repetitive journal entries on a periodic basis.	
GL-13	5.12	Provide the ability to create templates for journals that may be similar in nature but not specifically recurring. Journals may be created from the template on demand.	
GL-14	5.13	Provide the ability to differentiate journal entries by characteristics such as source and type.	Will be used for reporting.
GL-15	5.14	Provide the ability to require journal review and approval prior to posting.	
GL-16	5.14	Provide the ability to differentiate types of review and approval needed based on the type of journal.	
GL-17	5.14	Provide the ability to block users from posting their own journal entries.	Implement access control and audit.
GL-18	5.15	Provide the ability to impact sub ledger accounting from journal entry.	
GL-19	5.15	Provide the ability to use multiple ledgers (i.e. accrual or cash ledger).	Currently working on a cash basis. Move to accrual basis and possibly a mix of accrual and cash.
GL-20	5.15	Provide the ability to select to post to a single ledger or to multiple ledgers.	
GL-21	5.16	Provide the ability to enter regular journals entries for various transactions.	
GL-22	5.16	Provide the ability to post batches on demand or on a schedule.	
GL-23	5.16	Provide the ability to transfer batches from the sub ledgers to the General Ledger either real time or by batch.	
GL-24	5.17	Provide the ability to perform allocations.	Allocate overhead to divisions.
GL-25	5.18	Provide the ability to record encumbrances.	GL Parameters - Commitment Accounting
GL-26	5.19	Provide the ability to soft close a fiscal period.	
GL-27	5.19	Provide the ability to close the year-end profit or loss to retained earnings at a financial dimension level during year end close.	
GL-28	5.21	Provide the ability to run a trial balance report.	
GL-29	5.21	Provide the ability to run transaction reports.	
GL-30	5.21	Provide the ability to view transactions and drill down to the detail.	Drill down will be a key process. Data needs to be stored at a level of detail to facilitate drill down.
GL-31		Need the ability to handle budget reporting and financial reporting.	AX provides standard budget and financial reports. In addition,

Requirement ID	Section Reference #	Requirement	Comments
			Management Reporter can be used to develop specific reporting formats for budget and financial reporting.
GL-32		Needs ability to load summarized employee payroll data from SAP into GL to properly account for payroll expenses.	
GL-33		Would like ability to load detail employee payroll data from SAP into AX Payroll module to assist in budgeting processes.	This interface from SAP to the AX Payroll module with detailed employee data will need to be investigated to determine if data can be loaded but not processed.
GL-34		Provide the ability to create holding or overhead accounts/financial dimensions.	Overhead costs that do not have a breakout yet – create an undefined bucket until it can be allocated. Have PERC# assigned as all 9's until it can be assigned correctly.
BU-01	5.20	Provide the ability to create budgets.	Use for reporting and variances.
BU-02	5.20	Provide the ability to upload a budget from Excel.	
BU-03	5.20	Provide the ability to open an existing budget residing in AX in Excel.	
BU-04	5.20	Provide the ability to move budgeted funds from one account to another at the line item level.	
BU-05	5.20	Provide the ability to provide the State with a budget that is on a different fiscal calendar at a summarized level.	
BU-06	5.20	Provide the ability to check available budget on certain types of transactions.	Perform encumbrance accounting - Commitment Accounting, Budget Control
BU-07	5.20	Provide the ability to block transactions that would exceed the budget for that account/financial dimensions.	Perform encumbrance accounting - Commitment Accounting, Budget Control
BU-08	5.20	Provide the ability to include encumbered amounts in the calculation of available budget.	Perform encumbrance accounting - Commitment Accounting, Budget Control
BU-09	5.20	Provide the ability for a possible override on transactions that exceed the budget.	Perform encumbrance accounting - Commitment Accounting, Budget Control
BU-10		Provide the ability to enter some projected budget models into the system for the annual state budget book.	

## Requirement Details

The following base data has been identified as required prior to working with the module on a day-to-day basis and the project team shall make certain set up decisions during the Design Phase.

### 1.1 Organizational Hierarchy

Pennsylvania Municipal Retirement Servers (PMRS) will consist of a single legal entity.

### 1.2 Chart of Accounts

Currently, PMRS, has a very limited chart of accounts defined in their CPAS system. For instance, broad categories of expenses are accounted for under a single GL number. Further detail at not only the main account level but also at a lower level of detail within a main account (i.e. financial dimensions) is needed to support all levels of reporting.

PMRS will use their current chart of accounts as a reference only starting point. The demo companies in Dynamics AX will also be referenced by the CFO to build a new and complete chart of accounts. PMRS has not yet determined the length of their main account.

PMRS will need create a spreadsheet containing the new accounts to be imported to Dynamics AX. A mapping of the old account to a new account will be needed to migrate the GL beginning balances.

Each account in the new ERP will require a type designation; asset, liability, equity, revenue or expense.

### 1.3 Financial Dimensions

Key breakouts desired for reporting and analysis:

FUND	PERC#	RESERVE ACCOUNT	DIVISION	COST CENTER	Asset Class**	Manager**
General	Up to 8 digits – customer number	Member	Investment and Financial Management		Cash	
		Municipal	Operations		Timberland	
		Retiree	Membership Services		Emerging Markets	
		Disability	Municipal Services		Real Estate	
		Drop	IT		Fixed Income	
		Undistributed	Legal		International Developed	
			Executive		Small Cap	
					Large Cap	

The above GL account segments were proposed by PMRS for the new AX chart of accounts (shown above): Fund, PERC#, Reserve, Division, Cost Center, Asset Class and Manager.

\*\* Note: It needs to be determined as to whether Asset Class and Manager are needed as Financial Dimensions. If added as financial dimensions, the dimension needs to be coded on transactions. This level of data is needed for reporting but it may be determined that Asset Class could be setup and reported on as an account class and managers will likely be separate bank accounts which would allow reporting at the manager level.

Many of the detail, sub ledger reporting has been unavailable to PMRS in their present system. Some of the detail has been captured at the account level (i.e. having a different main account by reserve). However, that has been severely limited.

PMRS will use the sub ledger reporting within AX to analyze a number of these proposed GL segments.

P&L typical revenue breakouts: Account - Fund - PERC# - Reserve

P&L typical expense breakouts: Account - Fund - PERC# - Reserve - Division - Cost Center

BAL typical breakouts: Account - Fund - PERC# - Reserve - Asset Class - Manager

The ledger setup process will be used to setup valid combinations of financial dimensions for the main accounts.

Additionally, where possible, defaults will be set for the financial dimensions. For example, the PERC# will be assigned to the financial dimension on the customer master record and where applicable on the vendor master record.

Advanced rule settings and posting definitions will also be used.

PMRS will also use statistical accounts. Examples are complement, total filled positions, head count, square footage, etc. These accounts will be used for statistical reporting.

Changes to the chart of accounts will be controlled by security. Additionally, any changes to the main accounts will require approval via a workflow.

Changes to the financial dimensions will be controlled by security.

#### 1.4 Account Structure

The account structure will be setup to consider the fact that some financial dimensions will be used by the majority of accounts and others will be used more as extensions. The expected structure will be:

Account - Fund - PERC# - Reserve - Division - Cost Center - Asset Class - Manager

Cost center will be defined but may be reserved for future use.

The following uses are expected:

Fund - All

PERC# - All

Reserve - All

Division - Extension

Cost Center - Extension

Asset Class – Extension  
Manager - Extension

1.5 Fiscal Calendars

PMRS uses the calendar year as the fiscal year. They also use calendar months. However, it should be noted that the State of Pennsylvania (State) has a fiscal year ending June 30<sup>th</sup>. PMRS prepares the agency administrative/capital expense budget report by SAP g/l account on a calendar year for the State. PMRS also prepares 3-5 year projection report reflecting values through June 30<sup>th</sup> for the annual State Budget Book.

1.6 Exchange Rates

PMRS does not have the need for Exchange Rates. All transactions will be processed in US Dollars.

1.7 Intercompany Accounting

PMRS will have a single legal entity with no need for intercompany accounting.

1.8 Consolidations

PMRS will have a single legal entity with no need for consolidations.

1.9 Eliminations

PMRS will have a single legal entity with no need for eliminations.

1.10 Currency Revaluation

PMRS does not have the need for Currency revaluation. All transactions will be processed in US Dollars.

1.11 Revenue Recognition

PMRS recognizes deferred revenue for the following types of transactions:

Deferred inflows of resources related to pensions

Based on reports from the State Employee Retirement System (SERS)

Specific processes for revenue deferrals will be defined in the design stage.

Revenue deferral will be performed via journal entries. Templates may be defined to facilitate this processing. It is also desired to move from processing certain types of transactions only yearly to monthly. The templates will be setup to allow processing on demand.

## 1.12 Periodic Journals

Periodic journals are journals that occur periodically but on a recurring basis with little change to the journal itself. The periodic journal functionality in AX makes this process quicker by allowing the user to setup a journal that is retrieved periodically and posted with the appropriate accounting date.

PMRS may define periodic journals for certain types of recurring journals such as monthly accruals.

PMRS will most likely create journal templates for journal entries in that the accounts are the same but amounts and the period specified may differ.

## 1.13 Journal Names

Journal names are templates from which the user will select when creating a new journal entry. Journal names are required in AX. The journal name controls the voucher number format, whether or not approval will be needed, default offset accounts and account or account combination restrictions.

Journal names will be a key setup for PMRS. AX will be interfacing with multiple systems both inbound and outbound. Control over sources and types of data for flow and accounting will be critical. Also, numbering schemas need to be considered such that numbers that are passed for both inbound and outbound can be linked (i.e. trace id).

Considerations for journals names are (10 digits and description):

### Inbound Journals from Interfaces

Member payments inbound from CPAS – CPASMEMPAY

Member A/R inbound from CPAS – CPASMEMAR

Member interest inbound from CPAS – CPASMEMINT

Member transfers inbound from CPAS – CPASMEMTRF

Other member transactions inbound from CPAS

Treasury – Warranty Files – TRWAR

Rejected ACH Payments from Treasury

Payroll from SAP – SAPPAYROLL

Employee travel reimbursements from SAP – SAPEMPTRVREIM

Operating expenses for inter-agency billings for state shared services from SAP - SAPSTATESHAREDVCS

Advancement Account from SAP - SAPADVACC

Adjustment Memorandum from SAP – SAPADJMEM

PCard Transactions from US Bank

Investment Transactions from Treasury & BNY Mellon

### Outbound Interfaces from Journals

Cash Receipts to SAP – SAPRECPayment Requests to Treasury – PAYREQTRS

Note that these are examples of recommended types. A more granular level of journal names may be desired/advantageous.



Additional journal names will be required/desired for other processes such as General, Periodic Journals, EOM, etc.

#### 1.14 Journal Approvals

PMRS will utilize workflow for journal approvals. Different types of journals may require different types of approval.

For instance, due to the fact that account coding may need to be reviewed journals from Accounts Payable invoicing may have a workflow level to 'sign-off' on the accounting.

Journals that are interfaced will require a review and approval workflows before posting.

Adjustment journal entries will always require approval before posting.

Security access combined with workflow will be utilized to block users from posting their own journal entries.

#### 1.15 Journal Accounting

PMRS will be interfacing from several external systems (i.e. CPAS, SAP, Treasury, BNY Mellon, US Bank) to directly create journal entries in AX.

Some of these journal entries will be related to the Accounts Receivable and Accounts Payable sub ledgers. Other may impact the Bank account for reconciliation.

Therefore, PMRS will utilize the functionality in AX to create a journal, using the proper account, type of Ledger, Customer, Vendor or Bank based on the sub ledger (source code – AP, AR, payroll, etc.) where it is to be recorded.

PMRS would like to operate primarily on an accrual basis. However, the ability to post some transactions on a cash basis may also be necessary. To accommodate this, PMRS, would like to define 2 ledgers in AX with one being the accrual ledger and the other being the cash ledger.

Further, at posting time, PMRS would like to option to select which one of the ledgers to post or to post to both.

#### 1.16 Journal Processing

In addition to importing journal entries from external systems, PMRS will process manual journal entries which may include, but is not limited to, the following:

- Adjustment journals
- Accrual entries
- Receivables entries
- Market value adjustments
- Pre-paid value adjustments

Additionally, journal entries may be performed as a 2-step process to record all entries. For example, transferring an employer payment from Municipal for Member to Member may be a 2 step process once the funds are reconciled.

PMRS requires, as mentioned above, that posting of batches will be controlled by security and workflows. Once journals meet the requirements for posting, PMRS would like the ability to post them on-demand, daily, weekly, monthly or in scheduled batch processing.

Transferring of sub ledgers postings to the general ledger are needed to be performed real-time or in scheduled batch processing.

#### 1.17 Allocations

PMRS receives a yearly allocation of investment income (loss) and administrative expenses by participating plan (PERC#) for PMRS as a whole from the actuaries. PMRS will allocate this cost down to the PERC# level. This is currently performed on a yearly basis.

PMRS will define allocations of overhead costs for PMRS in AX using statistical accounts such as head count or square footage. The allocation will take actual values and allocate them to the division financial dimension. This processing will be monthly.

#### 1.18 Encumbrances

PMRS will use encumbrances to assist in budget management. When a contract/settlement agreement/purchase order is created, an account, with the appropriate financial dimensions, will be selected. At the time the contract/settlement agreement/purchase order is saved, the amount will show as an encumbrance against the account selected. Contract/settlement agreements bridge the gap between when one contract expires and the next one starts. PMRS will treat this as a contract.

The contract/settlement agreement/purchase order will be invoiced after receipt and once paid, will move the amount from encumbered to actuals.

Reporting will consider encumbered amounts against the budget as follows:

Available Budget = Budget – Encumbered amounts – Actual amounts

Any reporting of budget to actual will also need to include the encumbered amount.

#### 1.19 Period/Year End Close

PMRS will perform month-end/year end processes using the above functionality to perform adjustments, accruals, etc.

Financial reporting will also be used (see reporting).

PMRS will set the period status, of periods where no further entries are permitted, to On-Hold. This is a soft close in case that period must be re-opened,

PMRS would like the profit/loss recorded at year-end close to be recorded at a financial dimension level. The financial dimension to be used (Fund, Reserve, PERC#) is being determined as all profit and loss accounts must be able to have a value defined for that financial dimension in order to close properly.

## 1.20 Budgets

PMRS presently performs the GL financial budgets outside of their system using spreadsheets.

Budgeting is done on a calendar year.

Reporting to the State must align with the State's Budget format and be provided at a summary level by the Commonwealth's SAP g/l account. Budgets uploaded into AX could be reported against for any timeframe and summarization level in the Management Reporter tool. There will need to be a mapping of AX G/L accounts to SAP G/L accounts for the interfaces for revenue accounting and budget reporting, which will be discussed during the Design Phase of the AX implementation project. The current process, which starts in July/August timeframe is to gather the detail needed to prepare the budget is as follows:

- Start with previous year's actuals – note that this can be pulled from AX into an Excel worksheet as a starting point and to facilitate upload back to AX.

- Analyze and update for expenses by vendor, new initiatives, budgetary assumptions from the State, trends and proposals, etc.

- Budget is approved by the board which would remain outside of AX.

- Once approved, the budget would be uploaded to AX.

- Budget is approved in Sept and sent to the State in October.

- Future processes for budgeting will include more interaction with the division heads for their division budget.

- A limited set of accounts are used for budgeting including P&L accounts and capital expenditures primarily at the Division level.

- Future budgeting will include Revenue accounts.

- Currently 1 budget is created. AX will support multiple budgets and PMRS will split the Capital and Operational Budgets into 2 separate budgets.

- PMRS will also create some projected budget models for the annual State Budget Book.

PMRS may move budgeted funds from one account to another to align with changes in needs. Budget transfers in AX will permit moving funds at the line item budget level.

PMRS requires budget funds to be encumbered at the time that a contract/settlement agreement/purchase order is created. Encumbered funds need to be considered in the calculation of the available budget with the following calculation:

Available Budget = Account/Financial Dimension Budget – Encumbered amount for Account/ Financial Dimension – document requested amount.

The document requested amount will be from the following types of documents:

- Purchase Orders

- Contract/Settlement Agreements

Accounts Payable invoices (note that this may be from the accounts payable or journal entry module – i.e. account type = vendor)

When the available budget calculation for Account/Financial Dimension is less than the document requested amount, the user should receive an Infolog error and be blocked from further processing the transaction.

PMRS may require an override for these documents for the CFO to complete the transaction. In this case, for an over budget condition, the user would be able to save the transaction but not complete any additional processing.

A workflow would route the transaction for approval and completion.

PMRS requires that the document requested amount will be checked against budget on the following types of documents:

- Supplies/Purchase Requisitions

- Purchase Orders

- Contracts/Settlement Agreements

- Accounts Payable Invoices – Note that this may occur as a payables transaction or a journal entry to the account type of vendor.

## 1.21 General Ledger Module Reports and Inquiries

PMRS requires the ability to run reports from the General Ledger module directly in AX in addition to financial statement type reports in Management Reporter.

A number of reports and inquiries are directly available in AX including, but not limited to, Trial Balance, Voucher Transactions and Audit Trail. These reports are only examples of the out of the box GL reports within the AX General Ledger module. Additionally, there are about 20 out of the box Financial Reports accessible from General Ledger > Financial Reports option (commonly referred to as Management Reporter)

Reports and inquiries provide drill down to more detailed levels of reporting by financial dimensions and transactions as applicable.

## 2 Reporting Requirements

The following list includes financial reports that PMRS produces. They are currently generated manually and loaded into a report formatting type of software (Adobe InDesign – CAFR, Microsoft Excel/Word – Other Reports). The financial statements are currently produced yearly but PMRS would like to be able to produce all reports monthly if needed/desired. Reducing the manual processing and workload will assist them in the ability to produce the reports more frequently.

Management Reporter will be used as the primary tool to produce the reports by drawing data from AX including actuals, statistical values and budgets. Management Reporter can also draw data from Excel as an outside source.

These reports will be reviewed and addressed in the Reporting Functional Requirements document.

Report #	Description	Comments
1	CAFR Financial Section	Relating to CAFR
1a	Summary of Revenues	
1b	Summary of Expenses	
1c	Summary of Fiduciary Net Position	
1d	Summary of Changes in Fiduciary Net Position	
1e	Asset Distribution at Fair Market Value	
1f	Statement of Fiduciary Net Position	
1g	Statement of Changes in Fiduciary Net Position	
2	CAFR Financial Section Note Disclosures – Statistical Reporting	Relating to CAFR – would require statistical data for this to be stored/updated in AX
2a	Participating Local Government Employers	
2b	Individual Membership	
3	CAFR Financial Section Note Disclosures – Contributions Investment Allocation Investment Risk Reporting (Interest Rate Risk, Foreign Currency Risk)	Relating to CAFR
4	CAFR Financial Section - Supplemental Schedules	Relating to CAFR
4a	Schedule 1 – Investment Returns	
4b	Schedule 2 – Administrative Expenses	
4c	Schedule 3 – Investment Expenses	
4d	Schedule 4 – Payment to Consultants	
5	CAFR Investment Section	Related to CAFR
5a	Asset Allocation	

5b	Portfolio Distribution	
5c	Performance Summary	
5d	Summary of Investment Expenses	
5e	Ten Largest Common Stock Holdings	
5f	Portfolio Summary	
5g	Portfolio Quality	
5h	Summary of Commissions Paid to Brokers	
6	CAFR Actuarial Section	Related to CAFR
6a	Solvency Test	
6b	Funded Status of Actuarial Liabilities	
6c	Valuation of Defined Benefit Liabilities	
6d	Schedule of Retirees and Beneficiaries	
6e	Schedule of Total Membership	
6f	Funded Status of Actuarial Liabilities	
6g	Schedule of Active Member Valuation Data	
6i	Health Life Mortality Rates	
6j	Termination Rates Before Retirement	
6k	Disability Incidence Rates	
6l	Salary Scale	
6m	Retirement Rates	
	Retirement Rates	
7	Statistical	Relating to CAFR – the statistical reporting will be dependent on availability/tracking of data at the necessary level of detail and the tracking of any statistical values.
7a	Number of Members per Plan	
7b	Changes in Net Position	
7c	Revenues by Source	
7d	Expenses by Type	
7e	Results of Operations	
7f	Total Investments	

7g	Schedule of Benefit Deductions From Plan Net Assets by Type	
7h	Schedule of Refund Deductions From Plan Net Assets by Type	
7i	Total Membership	
7j	Active Members	
7k	Retired Members	
7l	Distribution of Active Members – Counts by Age/Service	
7m	Distribution of Active Members – Counts by Average Annual Salary/Service	
7n	Pensions in Payment Status	
7o	Pensions Awarded – 10 Years	
7p	Schedule of Total Membership – 10 Years	
7q	Schedule of Active Member Valuation Data	
7r	Schedule of Average New Monthly Benefit Payments from Defined Benefit Plans	
7s	Schedule of Participating Plans	
8	Schedule in Changes of Fiduciary Position	Financial statement for each plan - rolls up and ties out to CAFR
9	GASB 68 Reports and Actuary Financial Data by Participating Plan	Financial statement for each plan plus actuary information
10	770 – Year-end financial activity report by participating plan	Detail transactions (receipts, payments, and retirements). Note that timing will change to Quarterly then Monthly
11	Act 205 report by participating plan	Data from AX and Actuaries. Produced every 2 years (even years for counties and odd years for all other municipalities)
12	Employer Financial Statement and Liability Factors	
13	Budget Report for the State	Administrative expense and capital budget
14	Change in Position	
15	Projections	3-5 years on net assets
16	System wide revenue and expenses	
17	Budget Reports	Not sent to State. Division level – comparing Budget to Actual
18	Variance Reporting/Analytical Review Budget to Actual Current Year to Prior Year by % Current Year to Prior Year by \$ Year to Date	
19	Employee reports	Annual salaries and total complement – YTD paid
20	Monthly Flash Reports	Example – Workload reports - TBD

21	Board Reports	
21a	Financial Statements	Monthly, quarterly, annual
21b	Asset Allocation	Each investment by asset class - % of portfolio
21c	Investment manager transactions	Sales, acquisitions –information from BNY Mellon
21d	Quarterly Investment Compliance Review	Quarterly
21e	Proxy Voting Activities	Monthly
21f	Budget to Actual Report	Monthly, quarterly, annual
21g	Accounting Summary	Produced for board meeting every month – shows monthly and year-to-date activity



### 3 Integrations

The following integration are identified to date. It is possible that other integrations may be identified.

#### 3.1 Inbound Integrations

##### 3.1.1 Treasury Warrant File

###### Member Financial Transactions from CPAS

All member transactions resulting in a financial impact to the member account (A/R, A/P, Interest, Transfers, etc.)

###### Member A/R – Cash Receipts

Although most invoicing is at the employer level, it is possible to have invoicing at the member level rather than the employer level. For instance, the member may be invoiced directly for the purchase of member services. This integration will reconcile the cash receipt that will be entered into AX.

Key data identified to date:

Plan # (PERC#), Trace ID, Amount, Mkey, Check Date

AX Destination – General Ledger Journal – Account Type: Bank

###### Member Payment Summary from CPAS

This integration will record member payments that were sent to Treasury from CPAS. The source file for this integration will come from CPAS.

It may represent a monthly retirement payment or a lump sum payment.

Key data identified to date:

Plan # (PERC#), Trace ID, Amount, Mkey (member), Person ID, Check Date

AX Destination – General Ledger Journal – Account Type: Bank

###### Void Member Payment from CPAS

This integration will record voided member payments that were sent to Treasury from CPAS. The source file for this integration will come from CPAS.

It may represent a monthly retirement payment or a lump sum payment.

Key data identified to date:

Plan # (PERC#), Trace ID, Amount, Mkey, Check Date

AX Destination – General Ledger Journal – Account Type: Bank

###### Rejected ACH Member Payments

This integration will record rejected ACH member payments that were sent to Treasury from CPAS. The source file for this integration will come from CPAS.

It may represent a monthly retirement payment or a lump sum payment.

Key data identified to date:

Plan # (PERC#), Trace ID, Amount, Mkey, Check Date

AX Destination – General Ledger Journal – Account Type: Bank

###### Member Interest

This integration will record interest to be credited to member accounts processed through Treasury from CPAS. The source file for this integration will come from CPAS.

Key data identified to date:

Plan # (PERC#), Trace ID, Amount, Mkey, Check Date

AX Destination – General Ledger Journal – Account Type: Bank

## Member Transfers

Some member transfers may involve cash. For instance if a member transfers in from another plan. This integration will record that cash inflow or outflow.

Key data identified to date:

Plan # (PERC#), Trace ID, Amount, Mkey, Check Date

AX Destination – General Ledger Journal – Account Type: Dependent on transaction (Ledger, Customer, Vendor or Bank)

## Other Member Transactions

In general an integration is needed from Treasury for any transaction sent to Treasury from CPAS where there is an impact on cash. The source file for this integration will come from CPAS.

Key data identified to date:

Plan # (PERC#), Trace ID, Amount, Mkey, Check Date

AX Destination – General Ledger Journal – Account Type: Dependent on transaction (Ledger, Customer, Vendor or Bank)

### 3.1.2 Payroll Summary from SAP

This integration will record payroll from SAP. The source file for this integration will come from SAP.

Key data identified to date:

Account, Amount, Pay cycle, Value date, Document #, Description

AX Destination – General Ledger Journal – Account Type: Ledger

Summarized by pay cycle – no employee detail

Note: for budgeting purposes, PMRS would like to have payroll details, so there could be the potential for implementing the Payroll module for reporting purposes, but still having SAP handle actual payroll activities.

### 3.1.3 Employee Travel Reimbursement File from SAP

This integration will record employee travel reimbursement (via payroll) from SAP. The source file for this integration will come from SAP.

Key data identified to date:

Expense Account, Amount, Pay cycle, Value date, Document #, Employee #, Employee Name, Description

AX Destination – General Ledger Journal – Account Type: Ledger

#### 3.1.4 Operating Expenses from SAP (Inter-Agency Billings for State Shared Services)

This integration will record operating expenses from SAP. The source file for this integration will come from SAP.

Key data identified to date:

Non-payroll related account (including division), Amount, Date, Value date, Document #, Description

AX Destination – General Ledger Journal – Account Type: Ledger

Note: the key objective is to have better visibility of the expenses allocated to PMRS from SAP, so this integration is built to enable PMRS to have ability to review and approve expenses, and have more understanding of the allocated expenses prior to being charged.

#### 3.1.5 Advancement Account from SAP

This integration will record advances from SAP. The source file for this integration will come from SAP.

Key data identified to date:

Non-payroll related account (including division), Amount, Date, Value date, Document #, Description, Vendor #, Vendor Name

AX Destination – General Ledger Journal – Account Type: Ledger

Note: PMRS may discontinue using this account when they begin interfacing directly with Treasury

#### 3.1.6 Adjustment Memorandum from SAP

This integration will record adjustments needed in AX (i.e. NSF, etc.) from SAP. The source file for this integration will come from SAP.

Key data identified to date:

Account, PERC#, Amount, Date, Value date, Document #, Description

AX Destination – General Ledger Journal – Account Type: Ledger

#### 3.1.7 P-Card Transactions from US Bank

This integration will record adjustments record P-Card payments from the US Bank account. The source file for this integration will come from US Bank.

Key data identified to date:

Vendor, Transaction Type, Amount, Date, Account, Division

AX Destination – General Ledger Journal – Account Type: Vendor

Note: PMRS users have ability to update US Bank file data with actual account and division defining the expense and the associated division incurring the expense to properly account for the expenses prior to interfaced data being sent to Dynamics.

### 3.1.8 Other integrations

Pool transactions from Treasury

Investment transactions from BNY Mellon

This is currently open for further consideration and decision. This is regarding current process and level of detail going forward. Currently a daily settlement is done for purchases and sales for investments with data pulled from BNY Mellon (detail), Treasury (control totals) and Manager's reports (detail). Transactions are reconciled to confirm what the managers' report as buys and sells have hit the bank.

Will this continue to be done on the current schedule as:

Daily – Interest and Dividends; Realized Gains and Losses

Monthly – Unrealized Realized Gains and Losses; Market Adjustment

ACH Account receipt transactions from bank/online portal for employer payments

Note: PMRS would like to have subaccount coding (or financial dimension) details of Bank Account Sweeps directly to Treasury's Wells Fargo account on their behalf to properly record bank transactions for reconciliation purposes. There is potential that PMRS may set up an ACH account (not owned by Treasury) for customer payments via an online portal, which they would want to account for sweep activity in Dynamics.

## 3.2 Outbound Integrations

### 3.2.1 Employer Receipt Interface to CPAS

This integration will record receipt of employee and employer funds from the employer from AX. The transaction will be recorded in AX as a journal moving the funds from one account to another at the reserve financial dimension level or at the higher account level. The source file for this integration will come from AX.

Key data identified to date:

Pay period end date, Member Total Paid Amount, Municipal Total Paid Amount/Annual Billing Period, PERC#, Receipt Date

Destination – SAP or Treasury Receipt

### 3.2.2 Payment Request to Treasury

This integration will send a request for payment from AX. The transaction may be entered into AX as an Accounts Payable Invoice or a journal transaction to the account type of vendor. The source file for this integration will come from AX.

Key data identified to date:

This data must be presented in an XML file following the requirements in the INT055 Payment Request Interface Agency Guide Inbound. This will be specified in detail in the technical design document.

Destination – Treasury Payment Request

#### 4 **Data Conversion**

The following elements of data conversions have been defined as needed.

- Chart of Accounts - imported
- Beginning Balances – balance sheet accounts only if March go-live date
- Financial Dimensions - imported
- Account Categories
- Approved budget values for the go-live year
- Detail on open AR Documents (create document or general journal entry to customer account\*)
- Detail on open AP Documents (create document or general journal entry to vendor account\*)
- Detail on Open Encumbrance Documents
- Detail on Capital Assets
- Detail on Cash In transits
- Detail on Prepaid Assets
- Detail of Deferred Inflows/Outflows
- Detail on Reserve Accounts by PERC#

\*Likely to migrate as a general journal entry due to low volume

#### 5 **Security Requirements**

PMRS will evaluate using standard roles across the organization and users will be granted access as needed for job duties. Additional roles will be created as needed. Additional security will be incorporated using workflows and approval processes. Segregation of Duties and Internal Controls

## 6 **Customer Deliverables**

The following elements must be fulfilled in order to demonstrate design functionality:

- Define Chart of Accounts
- Define statistical accounts
- Define account categories
- Define dimension values
- Define journal names on corresponding voucher number sequences
- Define Account structures

# Member Payment from Treasury

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Inbound interface from the Treasury (Oracle) to Dynamics AX. The integration described in this document refers to the processes highlighted in the red box on the process flow. This includes:

- Prepare member payment summary file
- Create journal entry to record payment and relieve liability
- Perform reconciliation of data from Treasury and CPAS

Prior to this integration (these processes), the following processes have already occurred – refer to the process flow to view the complete flow.

The CPAS system holds the member details for the plans. Payment requests for members originate in CPAS and a payment request interface file is sent to Treasury. This may be for monthly payments or lump sums. The Member Payment Summary from CPAS integration will create general journal entries in AX.

These general journal entries will be at a summary level by plan, recording the total net amount paid to the members as well as the total for other types of payments associated with the member payments. This can include, but is not limited to, Federal taxes, BS/BC, IRS Levies and Domestic Relations payments.

This integration will record the payment and relieve the liability. Further, it is planned to use this file for bank reconciliation as well.

The Treasury will send a file with the member payment information. This information will include payments made to members as well as the associated payments such as Federal taxes, BS/BC, etc. A general journal entry may be created with an account type of bank. This general journal entry would relieve the liability and record the payment. It will be at a detail level. No member information will be included.

Once the payment has been recorded, the file may also be used for bank reconciliation to complete the processing.

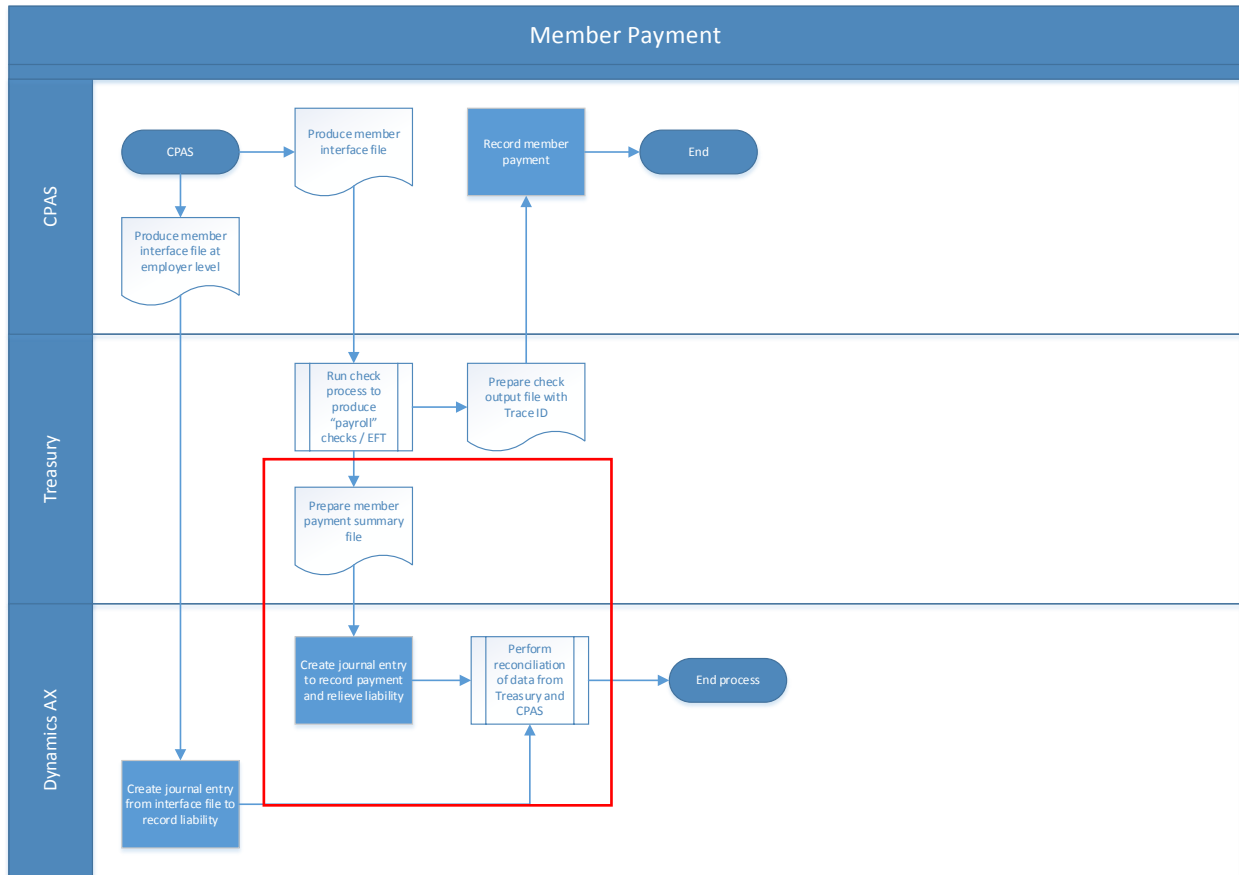
The file that Treasury sends back must be in a format specified in their interface guidelines and schemas. This interface follows the INT038 Outbound Reconciled Checks.

[The full INT038 Outbound Reconcile Checks Guide can be referenced here.](#)

## Requirement Details

Process Flow





**NOTE: The section highlighted with the red square are the processes being referenced in this document.**

#### Source

The source of the data will be the Treasury (Oracle) – member payments.

#### Destination

The destination for the data will be Dynamics AX – general journal entry and bank reconciliation.

#### Key Data Elements

In the following table, (M) indicates a Mandatory Node and (O) for an Optional Node. The data elements shown are for the most part mandatory but some select optional fields have been included. Non-mandatory fields are noted in the Key Points.

#	Node Name	Element Name	Source Field (Treasury)	Destination Field	Fixed Value
1	CMCR01Response (M)	DocumentHeader			N/A
2	CMCR01Response (M)	CheckReconciliationDetail			N/A
3	DocumentHeader (M)	Control			N/A
4	Control (M)	Class	N/A	N/A	R
5	Control (M)	InterfaceIdentifier	N/A	N/A	CMCR01
6	Control (M)	SourceSystemCode	N/A	N/A	PAT

#	Node Name	Element Name	Source Field (Treasury)	Destination Field	Fixed Value
7	Control (M)	DocumentIdentifier			N/A
8	Control (M)	DocumentDateTime			N/A
9	Control (M)	ResponseCode			N/A
10	Control (M)	ControlCount			N/A
11	Control (M)	ControlAmount			N/A
12	Control (M)	RequestDocumentIdentifier			N/A
13	Control (M)	RequestDateTime			N/A
14	Message(O)	Class	N/A	N/A	R
15	Message(O)	MessageNumber			N/A
16	Message(O)	MessageSet			N/A
17	Message(O)	Severity			N/A
18	Message(O)	Text			N/A
19	CheckReconciliationDetail (M)	ReconciledCheckInformation			
20	ReconciledCheckInformation (M)	Class	N/A	N/A	R
21	ReconciledCheckInformation (M)	BankAccountId			N/A
22	ReconciledCheckInformation (M)	WarrantNumber			N/A
23	ReconciledCheckInformation (M)	CheckNumber			N/A
24	ReconciledCheckInformation (M)	Payee			N/A
25	ReconciledCheckInformation (M)	PayDate			N/A
26	ReconciledCheckInformation (M)	ReconciledDate			N/A
27	ReconciledCheckInformation (M)	Amount			N/A
28	TraceNumber (M)	Class	N/A	N/A	R
29	TraceNumber (M)	SourceSystem			N/A
30	TraceNumber (M)	TraceId			N/A
31	TraceNumber (M)	DocumentType			N/A
32	TraceNumber (M)	BatchId			N/A

### **Key Points:**

#### **Control Node**

Element 9: ResponseCode

Valid Values: 000E – For Error on run control values; 000S For Success on run control values

#### **ReconciledCheckInformation Node:**

All elements are required. This is the key information for matching.

#### **TraceNumber Node**

Element 30: TraceID – this is mandatory and will also be key for matching.

## Data Conversion

The following elements of data conversions have been defined as needed.

- Current Balances for outstanding member payment liabilities at the appropriate GL account and financial dimension level (refer to Appendix for questions)

## Security Requirements

Security will need to be assigned at the appropriate level for the users who are permitted to run the Member Payment from Treasury interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal and performing bank reconciliation. PMRS will need to determine if additional restrictions are needed for this journal type.

## Customer Deliverables

The following discussion points have been defined to be addressed in order to demonstrate design functionality:

7.1 PMRS team

The member payments brought in from CPAS will be at a summary level.

Example of journal entry – in this example, P1 is the simplified PERC#

DR	CR
Member	Payable
Acct – Perc	Acct - Perc
Level	Level
<hr/>	
1000 –P1	1000 – P1

As we have it now, the payments from Treasury integration would be at the detail level. Note that member information is not passed – M1, M2, etc. here is just to denote payments to different members.

DR Payable Acct – Perc Level	CR Member Acct - Perc Level
250 – P1(M1)	250 – P1(M1)
125 – P1(M2)	125 – P1(M2)
350 – P1(M3)	350 – P1(M3)
275 – P1(M4)	275 – P1(M4)
1000 Total	1000 Total

This would relieve the 1000 total from the liability account. Reconciliation would be against the 4 checks written to the 4 individual members which would be the appropriate level to match to Treasury.

## 7.2 AX Technical team

Treasury files are in an XML format.

Example INT038 file:

```
<?xml version="1.0"?>
<CMCR01Response
xmlns="http://schemas.patresury.gov/interface/schema/CMCR01Response.v1">
  <DocumentHeader>
    <Control class="R">
      <InterfaceIdentifier>CMCR01</InterfaceIdentifier>
      <SourceSystemCode></SourceSystemCode>
      <DocumentIdentifier></DocumentIdentifier>
      <DocumentDateTime></DocumentDateTime>
      <ResponseCode></ResponseCode>
      <ControlCount></ControlCount>
      <ControlAmount></ControlAmount>
      <RequestDocumentIdentifier></RequestDocumentIdentifier>
      <RequestDateTime></RequestDateTime>
    <Message class="R">
      <MessageNumber></MessageNumber>
      <MessageSet></MessageSet>
      <Severity></Severity>
    </Message>
  </Control>
</DocumentHeader>
</CMCR01Response>
```

```
<Text></Text>
</Message>
</Control>
</DocumentHeader>
<CheckReconciliationDetail>
  <ReconciledCheckInformation class="R">
    <BankAccountId></BankAccountId>
    <WarrantNumber></WarrantNumber>
    <CheckNumber></CheckNumber>
    <Payee></Payee>
    <PayDate></PayDate>
    <ReconciledDate></ReconciledDate>
    <Amount></Amount>
    <TraceNumber class="R">
      <SourceSystem></SourceSystem>
      <TraceId></TraceId>
      <DocumentType></DocumentType>
      <BatchId></BatchId>
    </TraceNumber>
    <TraceNumber class="R">
      <SourceSystem></SourceSystem>
      <TraceId></TraceId>
      <DocumentType></DocumentType>
      <BatchId></BatchId>
    </TraceNumber>
    <TraceNumber class="R">
      <SourceSystem></SourceSystem>
      <TraceId></TraceId>
      <DocumentType></DocumentType>
      <BatchId></BatchId>
    </TraceNumber>
  </ReconciledCheckInformation>
</CheckReconciliationDetail>
<CheckReconciliationDetail>
  <ReconciledCheckInformation class="R">
    <BankAccountId></BankAccountId>
    <WarrantNumber></WarrantNumber>
    <CheckNumber></CheckNumber>
    <Payee></Payee>
    <PayDate></PayDate>
    <ReconciledDate></ReconciledDate>
    <Amount></Amount>
    <TraceNumber class="R">
      <SourceSystem></SourceSystem>
      <TraceId></TraceId>
      <DocumentType></DocumentType>
      <BatchId></BatchId>
    </TraceNumber>
    <TraceNumber class="R">
      <SourceSystem></SourceSystem>
      <TraceId></TraceId>
      <DocumentType></DocumentType>
      <BatchId></BatchId>
    </TraceNumber>
    <TraceNumber class="R">
      <SourceSystem></SourceSystem>
    </TraceNumber>
  </ReconciledCheckInformation>

```

```
<TraceId></TraceId>  
<DocumentType></DocumentType>  
<BatchId></BatchId>  
</TraceNumber>  
</ReconciledCheckInformation>  
</CheckReconciliationDetail>  
</CMCR01Response>
```

This integration will have 2 functions:

First – create general journals entries to records the payments. Format will need to be determined.

Second – bank reconciliation

Standard industry formats accepted are:

- BAI2
- MT940
- ISO20022

# Member Payment Summary from CPAS

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Inbound interface from the Comprehensive Pension Administration System (CPAS) to Dynamics AX.

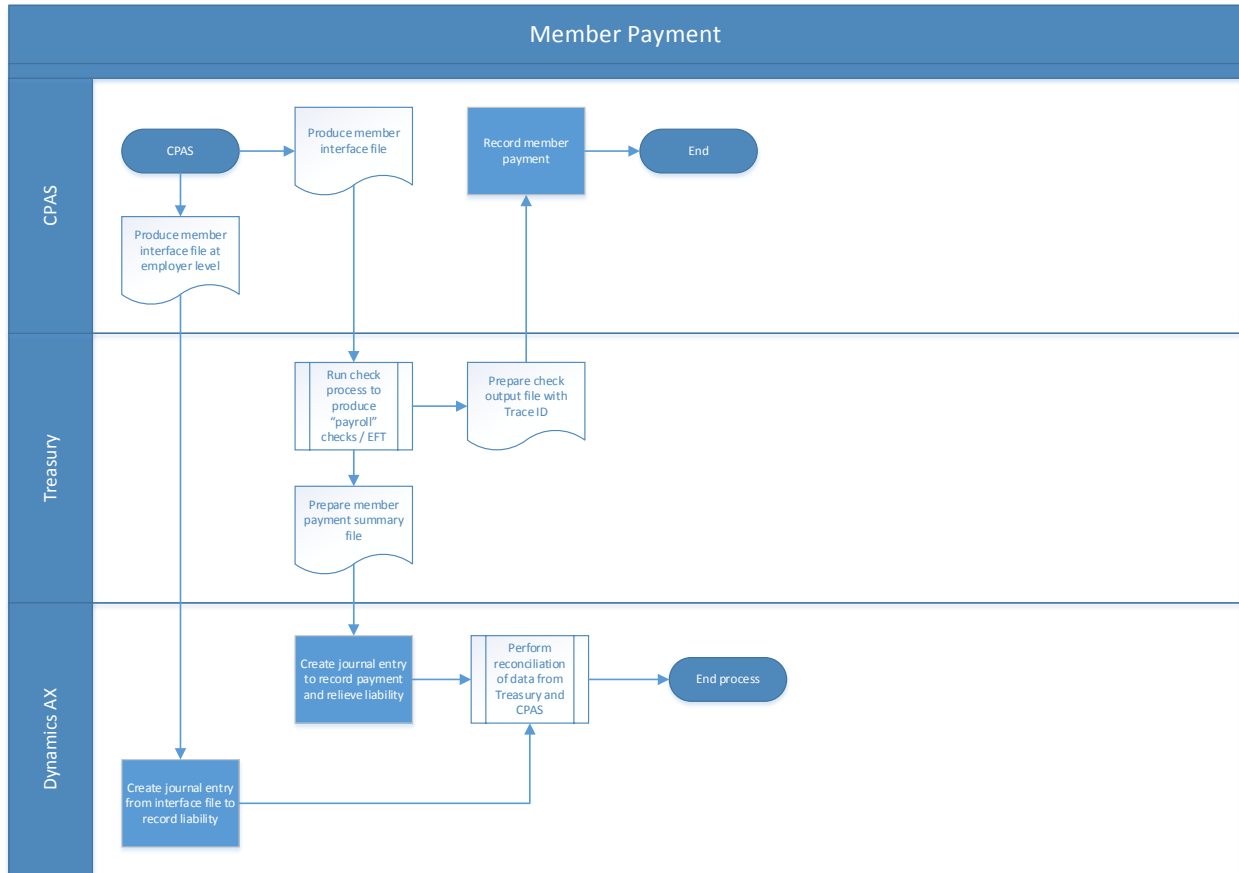
The CPAS system holds the member details for the plans. Payment requests for members originate in CPAS and a payment request interface file is sent to Treasury. This may be for monthly payments or lump sums.

The liability for the payments will need to be recorded in AX in a timely manner. This may be accomplished by creating a general journal entry in AX. The general journal entry will be at a summary level by plan, recording the total net amount paid to the members as well as the total for other types of payments associated with the member payments. This can include, but is not limited to, Federal taxes, BS/BC, IRS Levies and Domestic Relations payments.

Once Treasury makes the payment, the payment information is sent back to CPAS via an interface file. Summary payment information will also be needed in AX to relieve the liability to complete the cycle. This will be detailed in a separate interface document.

## Requirement Details

### Process Flow



#### Source

The source of the data will be the Comprehensive Pension Administration System (CPAS) – member payments.

#### Destination

The destination for the data will be Dynamics AX – general journal entry.

#### Key Data Elements

Element #	Data Element	Source Field (CPAS)	Destination Field
1	GL Account		
2	Financial Dimensions		
3	PERC# (Plan)		
4	Date		
5	Type		
6	Summary of Amount Paid by Type for Plan		
7	Trace ID		

#### Key Points:



Elements 1-3: If the GL account number cannot be sent from CPAS, the interface will need to be coded to prompt or otherwise determine the GL account and any financial dimensions needed. Note that the PERC# is a financial dimension and is a date element that will be required

Element 4: Date of liability not payment date

Element 5: Examples are: Net Amount to Member, Federal taxes, BS/BC, IRS Levies and Domestic Relations

Element 7: Needed to match for relieving the liability and close the loop

## **Data Conversion**

The following elements of data conversions have been defined as needed.

- Current Balances for outstanding member payment liabilities at the appropriate GL account and financial dimension level (at a minimum the PERC # FD)

## **Security Requirements**

Security will need to be assigned at the appropriate level for the users who are permitted to run the Member Payment Summary from CPAS interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal. PMRS will need to determine if additional restrictions are needed for this journal type.

# Operating Expense from SAP

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Inbound interface from the Department of Revenue (SAP) to Dynamics AX.

PMRS is burdened with their share of operating expense for the Commonwealth of Pennsylvania. These operating expenses originate in the Department of Revenue and are recorded in SAP.

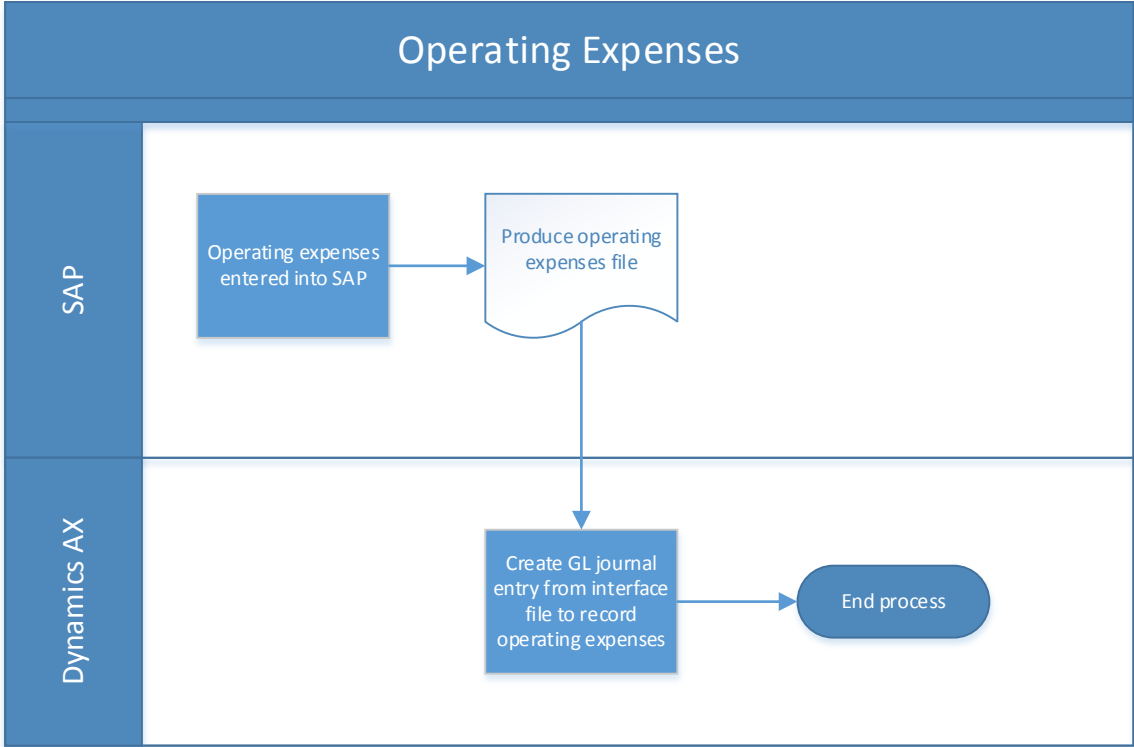
The expense for operating expenses needs to be recorded in Dynamics AX.

This may be accomplished by creating a general journal entry in AX. The general journal entry will be at a detail level by expense.

The general journal entry will record the expense at the appropriate account/financial dimension level.

**Requirement Details**

**Process Flow**



**Source**

The source of the data will be the Department of Revenue – SAP – Operating Expense

**Destination**

The destination for the data will be Dynamics AX – general journal entry.

## Key Data Elements

Element #	Data Element	Source Field (SAP)	Destination Field
1	GL Expense Account		
2	Division		
3	Amount		
4	Date		
5	Value Date		
6	Document #		

### Key Points:

Element 1: Mapping may be needed from the SAP account number to the AX account number. It will also be necessary to assign (or default) any financial dimensions as needed.

Element 2: Mapping may be needed from the SAP division identifier to the AX division value for the financial dimension.

### Data Conversion

The following elements of data conversions have been defined as needed.

- Current balances for operation expenses at the appropriate GL account and financial dimension level.

### Security Requirements

Security will need to be assigned at the appropriate level for the users who are permitted to run the Operating Expenses from SAP interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal. PMRS will need to determine if additional restrictions are needed for this journal type.

# Payroll Summary from SAP

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Inbound interface from the Department of Revenue (SAP) to Dynamics AX.

Payroll for PMRS is processed through the Department of Revenue through SAP. A payment request file is sent from SAP to Treasury to cut the checks and make direct deposits.

Accounting for payroll needs to be recorded in Dynamics AX. This will include payroll expenses as well as liabilities relating to payroll.

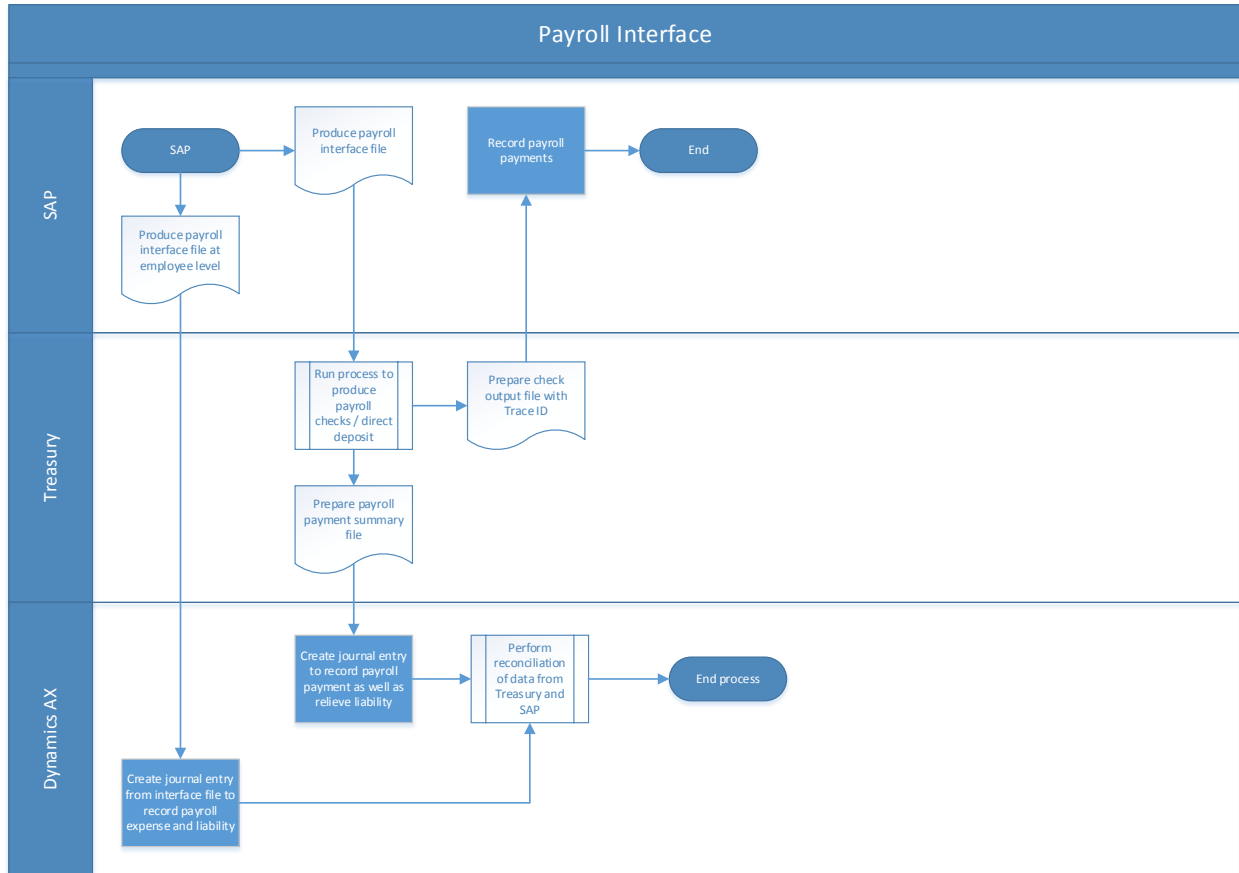
This may be accomplished by creating a general journal entry in AX. The general journal entry will be at a summary level by employee by pay cycle, recording the total net amount paid to employees based on the expense type such as salary, overtime and benefits expense for example. No employee identifiable information will be included.

There will also be liabilities to be recorded as a part of payroll such as taxes payable and withholding for employee deductions.

Once Treasury completes the payroll payments, the payment information is sent back to SAP via an interface file to record the payment. Summary payment information will also be needed in AX to record the payment as well as relieving any liabilities to complete the cycle. This will be detailed in a separate interface document.

# Requirement Details

## Process Flow



### Source

The source of the data will be the Department of Revenue – SAP – Payroll

### Destination

The destination for the data will be Dynamics AX – general journal entry.

### 4.3 Key Data Elements

Element #	Data Element	Source Field (SAP)	Destination Field
1	GL Account		
2	Amount		
3	Pay Cycle		
4	Value Date		
5	Document #		

#### Key Points:

Element 1: Mapping may be needed from the SAP account number to the AX account number. It will also be necessary to assign (or default) any financial dimensions as needed.

Element 5: Needed to match and close the loop

#### Data Conversion

The following elements of data conversions have been defined as needed.

- Current balances for outstanding payroll expenses at the appropriate GL account and financial dimension level.
- Current balances for any outstanding payroll liabilities at the appropriate GL account and financial dimension level.

#### Security Requirements

Security will need to be assigned at the appropriate level for the users who are permitted to run the Payroll Summary from SAP interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal. PMRS will need to determine if additional restrictions are needed for this journal type.

# P-Card Transactions from US Bank

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Inbound interface from the US Bank to Dynamics AX.

Under the Commonwealth of Pennsylvania regulations, PMRS may pay for purchases that are totaling less than \$10,000 using the PMRS P-Card.

PMRS will follow the procurement processes by P-Card for these types of purchases.

From an accounting standpoint, the initial invoice will be entered into AX. This may be accomplished by doing a direct AP invoice entry transaction or by following the purchase order process. The purchase order process would result in an open payables invoice linked to the purchase order and receipt (i.e. 3-way matching). Refer to the procurement requirements document for additional detail.

Following the creation of the invoice, in either manner, the payment for the purchase will be recorded in AX with a method of payment of P-Card. This payment will be applied to the invoice to clear the liability.

US Bank will ultimately bill PMRS for the P-Card Purchases at a summary level. PMRS will enter an invoice for this and submit to Treasury as per any other payment request.

PMRS would like to reconcile the P-Card transaction at the vendor level with US Bank as well. The Treasury does not have that level of detail.

Therefore, a requirement will be to perform bank reconciliation (i.e. US Bank as a bank account, showing detailed P-Card payments) at the vendor level which would be the purpose of this integration. This would be separate from recording and reconciling the invoice from US Bank with the payment on that invoice from Treasury.

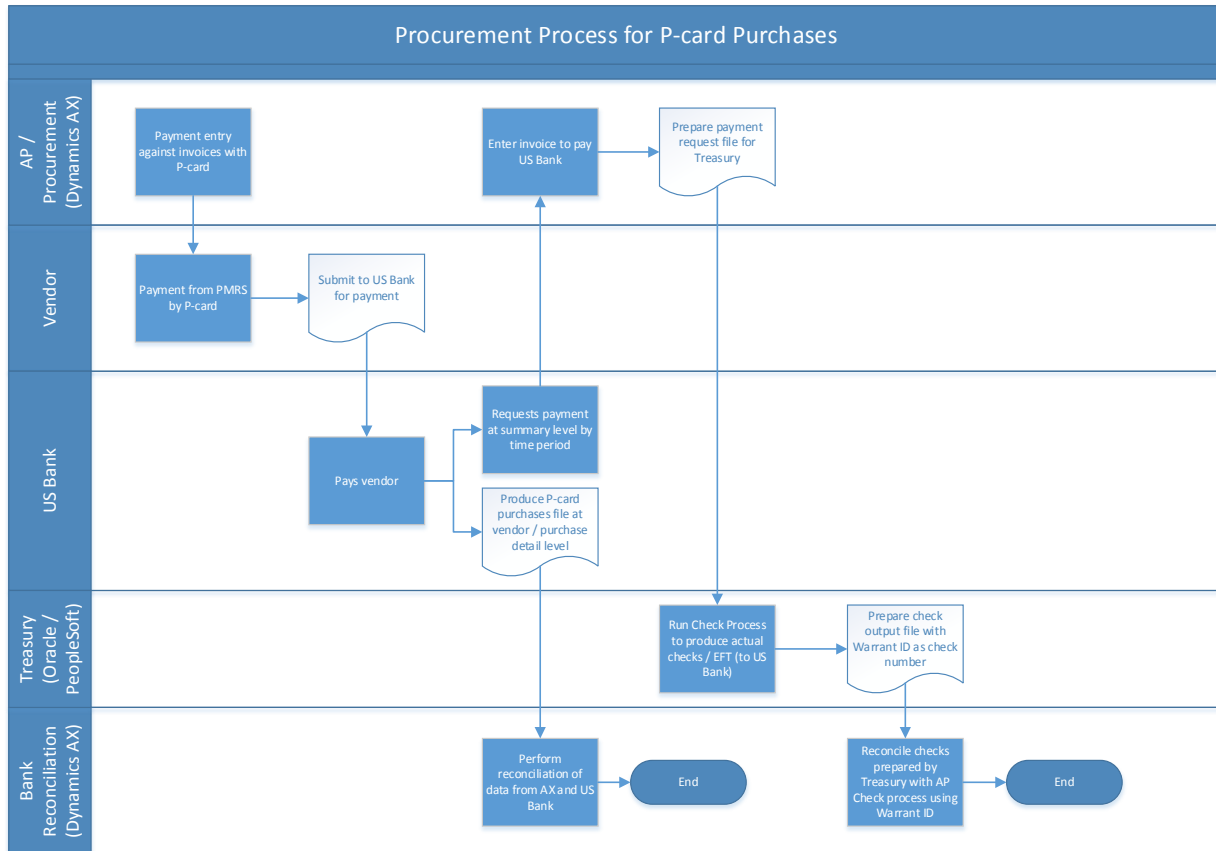
A payment file from US Bank will be used for this reconciliation to match the purchases recorded in AX to the vendor payments made by US Bank.

Note that there will be no impact at the general ledger level for these transactions as the expense was recorded for the invoice with payment recorded as well.



## Requirement Details

### Process Flow



#### Source

The source of the data will be US Bank – Vendor payments

#### Destination

The destination for the data will be Dynamics AX – bank reconciliation on US Bank defined as a bank account.

#### 4.4 Key Data Elements

Element #	Data Element	Source Field	Destination Field (CPAS)
1	Vendor		
2	Transaction Type		
3	Amount		
4	Date		

#### Key Points:

Element 1: Mapping may be needed from the US Bank vendor identifier to the AX Vendor ID.

## **Data Conversion**

The following elements of data conversions have been defined as needed.

- Current outstanding P-Card payments that have not yet been reconciled.
- Current outstanding invoices from US Bank that have not yet been paid.
- Current outstanding payments from Treasury to US Bank that have not been reconciled.

## **Security Requirements**

Security will need to be assigned at the appropriate level for the users who are permitted to run Bank Reconciliation for the Wells Fargo (Treasury) bank account. Users will need the appropriate security to access the integration file used for the electronic reconciliation.

# Procurement and Budget

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible
2. PMRS will need to make the decision or obtain approval as to whether all Procurement activities will be processed in Dynamics AX or SAP or from both systems
  - a. This decision would determine if additional interfaces are required between Dynamics AX and SAP
  - b. This decision would determine the extent of how Dynamics AX will be used for Procurement activities

## Requirements Analysis

The following table includes requirements as presented in the corresponding Requirement Matrix.

Requirement ID	Requirement	Comments
PR-01	Would like ability to enter purchase requisitions in AX and workflows for review and approval prior to entering into PO or purchase	AX has standard templates that can be used for purchase requisitions. We will also ensure that the workflow review and approval process is added
PR-02	Needs ability to process purchases using a Procurement Card (P-Card)	Purchases under \$10,000 are processed using P-Cards (payment method and not necessarily a procurement method) and should have a purchase requisition and/or Purchase Order (PO) for review and approval prior to purchase/payment. POs will be required for all purchases, and the only difference would be the method of payment: P-Card vs. Check processed by Treasury
PR-03	Needs ability to generate Purchase Orders (POs)	POs will be required for all purchases, and the only difference would be the method of payment: P-Card for purchases under \$10,000 vs. Check processed by Treasury.
PR-04	Needs ability to generate and track purchases against Blanket Purchase Orders (POs)	Contracts are setup as Blanket POs
PR-05	Needs ability to handle encumbrances / funds commitments (Contracts, Settlement Agreements, POs)	Commitment Accounting and Budget Control.
PR-06	Needs ability to set up approval routings	
PR-07	Would like workflow for procure to pay process	
PR-08	Needs ability to do 3-way matching of purchases	
PR-09	Needs ability to establish segregation of duties to separate purchasing from receiving and payment processing	
PR-10	Needs ability to set up thresholds for approval levels	
PR-11	Needs ability to manage workflows for service related contracts	Contract workflow for review and approval prior to encumbrance of funds

Requirement ID	Requirement	Comments
PR-12	Would like ability to be prompted when service related contracts are expiring or has expired	
PR-13	Would like ability to show life of contract commitment and PO if contract is linked to PO	
PR-14	Would like to set up own procurement policies	Currently required to follow State's procurement policies
PR-15	Would like to use cash discounts (i.e. payment terms)	PMRS does not use discounts today due to slow process of review of payment request by Comptroller Department prior to sending to Treasury for payment
PR-16	Would like to be able to take quantity discounts on purchases	Look at State Contracts as well as working with commodity specialists to get best price (i.e. threshold for quantities to order).
PR-17	Needs ability to apply miscellaneous charges to POs, such as shipping charges	
PR-18	Needs ability to apply freight charges to POs	
PR-19	Needs interface with US Bank for: <ul style="list-style-type: none"> <li>• PCards</li> <li>• Travel Cards (corporate card) expenses</li> <li>• Lodging Cards for group travel</li> <li>• Airline Cards for air travel</li> </ul>	AX has standard templates for travel and non-travel employee expense reimbursements via the Travel and Expense module within Project Accounting
PR-20	Needs ability to handle supply/purchase requisitions and purchase orders of office supplies	
PR-21	Needs ability to handle purchase orders of services by external and Commonwealth providers	Link PO to Contract to avoid duplicate encumbrance
PR-22	Needs ability to handle purchase orders of IT equipment	Commonwealth IT policies and standard terms and conditions must be attached to PO for IT equipment and services.
PR-23	Needs ability to handle purchase orders of fixed assets	Add workflow for asset lifecycle to ensure proper tagging and inventory for additions/disposals
PR-24	Needs ability to add notes or comments on purchase orders	
PR-25	Needs the ability to edit purchase orders after sending to the vendor	Changes are approved in writing with the vendor and the purchase order is updated per change order/updated fee schedule/contract amendment. Contract Amendments and Change Orders would enable extension of service period based on contract terms to existing PO#
PR-26	Needs the ability to manually enter the price on a purchase order. Quote/cost estimate should be received from vendor.	Price is generally negotiated or set based on that vendor's association with the state PO/contract. It is entered manually on the purchase order
PR-27	Need the ability to close a purchase order short with review and approval	A purchase order may be closed manually when short shipped and the remaining quantity will not be received
PR-28	Needs ability to attach State's Standard Terms and Conditions to PO	Setup a Terms and Conditions Template for attachment and update Template over time
PR-29	May need to synch PO in both AX and SAP	
PR-30	Needs ability to set up Procurement Categories to define type of purchase	
PR-31	May use "Punch-out" process in future	For example, office supply orders with Staples. Punchout functionality is the ability to link to a vendor's external catalog on their website to select items to include in the purchase requisition and feed the Shopping Cart back to AX for completion of the purchase requisition. This punchout functionality is not currently available in D365, but is on the roadmap to be

Requirement ID	Requirement	Comments
		available later this year (tentatively scheduled for late summer 2017).
PR-32	Provide ability to track inventory for office supplies	This would be handled in the Inventory module, but it would require managing inventory receipts and inventory adjustments based on usage / consumption of office supplies. Requirement was added; however, we need to determine if this capability may require more effort than what is needed. Could be a future phase, or internal process change.
PR-33	Need ability to follow required State reporting (Treasury Contract website, eMarketplace website for contracts/POs)	
PR-34	Needs ability to make PO Changes / Contract Amendments (option to extend service period based upon contract terms) and Change Orders	Changes are made using the same PO#, in most cases
PR-35	Provide the ability to enter a PO and reference the State's Contract.	Take advantage of the State's contract and pricing but encumber the amount under the PMRS budget.
PR-36	Provide the ability for vendor's to direct bill.	

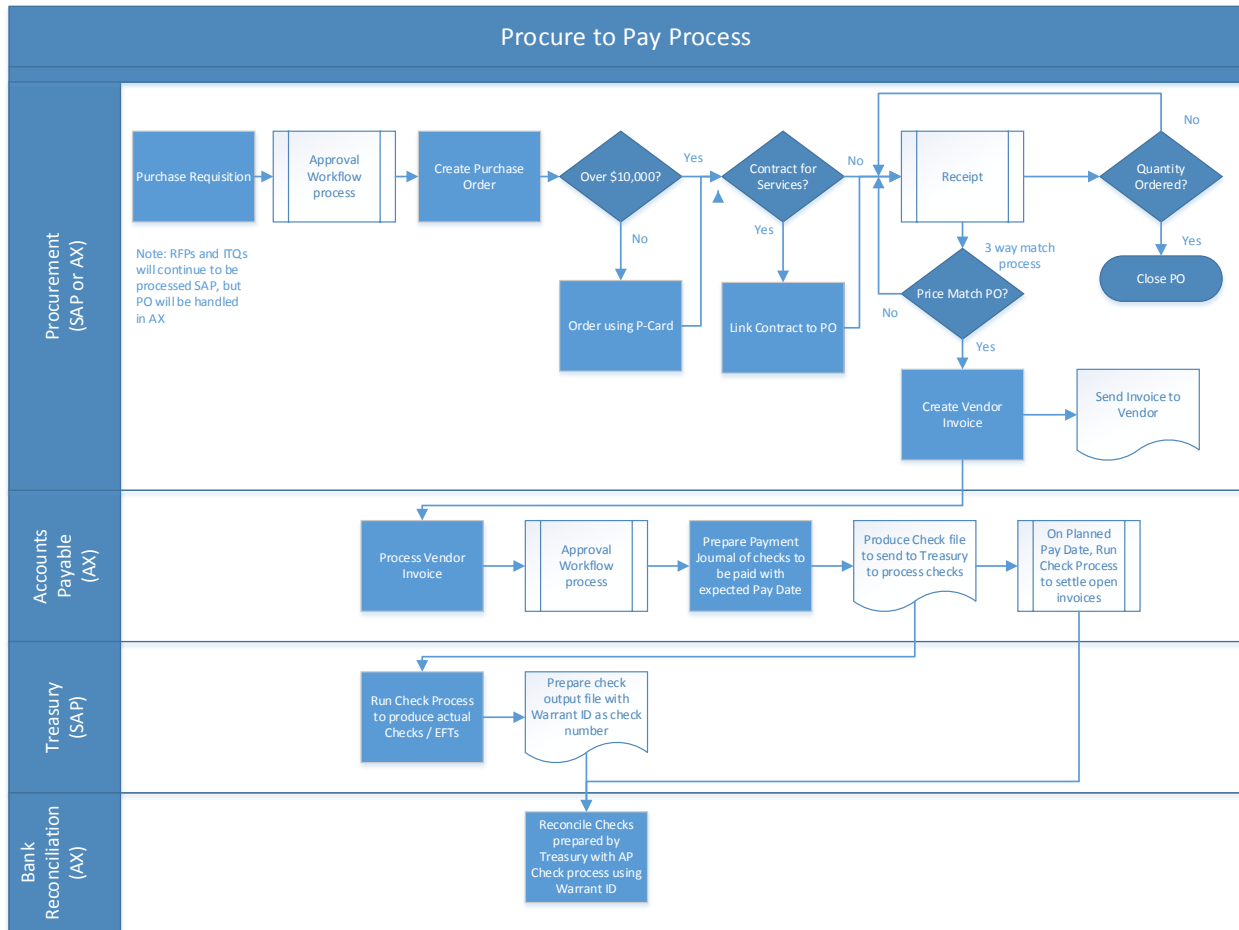
### Requirement Details

The following base data has been identified as required prior to working with the module on a day-to-day basis and the project team shall make certain set up decisions during the Design Phase.

#### Process Flow

Currently, all procurement and accounts payable activities are processed in SAP. The preferred plan for the future would be that all procurement and accounts payable processes, except check processing, would be handled in Dynamics AX. However, PMRS would need approval to move the procurement functions to Dynamics AX, or the purchasing information may have to be resident in both SAP and Dynamics AX.

This process flow diagram depicts the Procure to Pay Process for PMRS, noting that a decision would have to be made on where the procurement processes would reside. This could lead to an additional integration if procurement activities stay in SAP.



## Vendor Management

An approved vendor list for the Commonwealth of Pennsylvania is maintained by the Department of General Services (DGS). PMRS utilizes these vendors, but also uses some vendors that are not currently on this list, primarily for purchases under \$10,000 where a Procurement Card (P-Card) issued by US Bank is used as the payment method for these purchases.

PMRS does not currently have access to the full list of approved vendors maintained by DGS, but would like to establish a way in which they could get this information, or lookup this information, when setting up new vendors in Dynamics AX. Due to this limitation in access, PMRS is not able to realize volume discounts or other procurement benefits.

PMRS has indicated that they would like to set up vendors in a manner that is unique to their business activities, and utilize the capabilities of Dynamics AX for auto-numbering / number sequences as much as possible. Currently, the vendor number is a five (5) digit code.

Where applicable, PMRS would like to tie the vendor and customer records together using the Public Employee Retirement Commission number (PERC #). PERC # may be used as the vendor number, if applicable, but it is recommended to have a similar vendor number format for all vendors. We may consider a separate field in the vendor master file to maintain the PERC# number and tie to the customer master, as it is currently

considered to be part of the customer number and included as a financial dimension. Final decision on the vendor number format will be made during the Design Phase. For vendors, the following information is needed (at a minimum):

- Vendor Number
- Vendor Name
- W9 - Request for Taxpayer Identification Number and Certification, to get information from vendors they hire as independent contractors (would like to attach the completed form to the vendor record)
- 1099 Information – for an independent contractor paid \$600 or more over the course of a tax year
- Employer Identification Number (EIN) or Social Security Number (SSN)
- Main Address
- Pay To Address
- Additional addresses and contacts
- Banking Information (ACH payments)

PMRS does have some independent contractors, so 1099 functionality is required. 1099s will also be produced from the Comprehensive Pension Administration System (CPAS) from Xerox, which PMRS utilizes for managing member “payroll” monthly and lump sum payments. These 1099-R forms will continue to be produced from CPAS, so only 1099-MISC for independent contractor work would need to be handled from Dynamics AX. There will need to be a 1099-R reconciliation between CPAS and AX/Treasury. More detailed information about vendors will be included the FRD Accounts Payable document.

## Buyers

Currently, PMRS does not have a procurement department, per se, so there are no assigned buyers handling procurement activities, or a list of buyers to set up in Dynamics AX. This requirement will change in the future.

## Buyer Groups

Currently, there are no procurement buyers in PMRS, but there is a need to set up buyer groups in Dynamics AX for reporting purposes. These buyer groups will be defined during the Design Phase.

## Supplier Qualification

There are no specific processes for qualifying suppliers in PMRS as this process is an activity conducted by the Department of General Services (DGS) for the Commonwealth of Pennsylvania.

As noted in the Vendor Management section, DGS prepares an approved list of vendors that have been qualified to be used for purchases.

## Inventory Items (Stock / Non-Stock Items)

PMRS purchases non-stock items, such as office supplies, where an inventory master is not needed. PMRS does not maintain an inventory of stock items.

## Fixed Asset Items

PMRS purchases capitalized fixed assets, such as computer equipment. Details of these fixed assets will be included in the FRD Fixed Assets document.

## Service Items

PMRS purchases services from external and Commonwealth approved providers. Examples of these services include: IT Services, Actuarial Services, Audit Services, Consulting Services, etc.

## Units of Measure

Most items ordered on purchase orders will be denoted as the individual item (Each). However, some items are purchased in bulk (i.e. office supplies). Additional units of measure such as boxes, cartons, etc., would need to be setup to translate from these units of measure to the actual individual quantities.

## Purchase Price Agreements

PMRS does not maintain purchase price agreements with vendors, per se; however, at time of purchase or contract, the pricing is determined and included on all procurement documentation: requisitions, purchase orders, etc. The Commonwealth of Pennsylvania does have purchase price agreements established with some vendors, so a determination will need to be made during the Design Phase as to whether this information for PMRS vendors would be added to AX manually or via an interface.

## Recurring Invoices

PMRS would like the ability to establish recurring invoices for regular, on-going purchases; however, this is not currently utilized in their current systems.

## Purchase Requisitions

PMRS would like to utilize the purchase requisition functionality in Dynamics AX in the future.

The plan is that there would be an approval workflow of the purchase requisition before a purchase order is generated. Approval of the purchase requisitions would include (at a minimum) the following approvers:

- Division Head of group initiating the purchase requisition
- Comptroller



It is also recommended that Accounting be included in the workflow approval process to ensure that the main accounts and financial dimensions selected at the time of purchase requisition entry accurately reflect how the purchase should be accounted for on the General Ledger.

Approval roles may be setup with multiple users in the role to facilitate signing when a single approve may not be available.

## Purchase Orders

Purchase orders are currently processed in SAP and PMRS intends to use Dynamics AX for purchase ordering in the future. There may be a requirement that purchase orders would have to be maintained in both SAP and Dynamics AX for visibility to the purchases being made by the Commonwealth and PMRS, so this will be a decision that will need to be made.

Purchase orders are required for all purchases. For purchases under \$10,000, a Procurement Card (P-Card) issued by US Bank is used as the payment method. P-Card transactions are currently posted in SAP to US Bank with no association to the actual vendor. PMRS would like to interface with the US Bank to bring in the actual vendor detail going forward.

For larger purchases, a Request for Proposal (RFP), Invitation to Quote (ITQ) or service contracts are required, which will continue to be handled outside of Dynamics 365 for Operations. Approval of these types of contracts could take a long time, especially RFPs, which require a formal bid process to select the ultimate vendor / supplier of the service. Once an agreement / contract has been established, PMRS tracks the purchase expenditures against the contract using purchase orders.

An approval workflow is needed after the purchase order is entered before it is sent to the vendor / supplier. Approvers of purchase orders would be Comptroller and Agency Head, at a minimum. PMRS would like to set up purchase amount thresholds that determine when additional levels of approval may be required.

Once a purchase order has been initiated and sent to the vendor / supplier, there will need to be a "receiving" process to acknowledge that the item / service ordered was actually received / performed. Also, when a purchase order includes a quantity of more than one (i.e. multiple items ordered), there would need to be a validation of the quantity received to prevent paying for items / services not actually received.

PMRS requires a 3-way match of the purchase order, receiving document and the vendor invoice to validate that the order was correct, items on the order were received and that the invoice provided by the vendor reflects what was on the order and what was received. There also needs to be a matching of the price on the purchase order – vendor should not be changing price at invoice time.

After the receiving process and the 3-way match validation process, a vendor invoice will be provided by vendor for Accounts Payable department to process. This is where the segregation of duties between Purchasing / Operations and Accounting departments / division occurs.

The Procure to Pay workflow in **Requirements Details \ Process Flow** section of this document reflects the above process steps.

## Capital Expenditures

PMRS follows a similar purchasing process noted above for capital expenditures and fixed assets. Examples of fixed assets and expenditures that are capitalized and depreciated over time include:

- Computer / IT equipment / office equipment
- Furniture
- Automobile (leases)
- Software

Refer to the FRD Fixed Assets for more information about capital expenditures / fixed asset purchases.

## Invitation to Quote (ITQ)

The Invitation to Quote (ITQ) process that PMRS follows is very similar to a Request for Quote (RFQ) process, where a vendor is invited to provide a price / service quotation for a specific item / service. The ITQ process requires that the vendor / supplier is on the Commonwealth approved vendor list maintained by the Department of General Services (DGS).

Currently, the ITQ process is not handled in SAP

## Blanket Orders

PMRS utilizes blanket purchase orders to track purchase contracts. The blanket purchase order denotes the funds commitment to encumber funds for ITQs, RFPs and service contracts.

PMRS needs the ability to maintain blanket purchase orders to track the expenditures against the noted contracts, and would like to be alerted when encumbered funds are about to be fully used, and when a contract is expiring).

## Electronic Data Interchange (EDI)

PMRS does not currently utilize EDI for procurement processing, but would like to potentially have the capability to do so in the future.

The procurement punch-out process was discussed whereby Dynamics AX can connect to an external website to choose items to be purchased and then have the selected items in the checkout screen be brought back to Dynamics AX to complete the order process. Currently, PMRS places online orders for office supplies with Staples, and sees that this could be a function that they would like to automate in the future.

## Returns to Vendors (RTV)

Initial thought is that since inventory is not maintained, returns would be handled via credits in Accounts Payable, rather than through the purchasing return to vendor (RTV) process. The RTV process is part of the Inventory module within AX, whereby items are returned to the vendors denoting reason codes as to why items were returned, and

inventory adjustments are made to reduce the quantity of items on hand based on the return. Additional charges, such as shipping, may be applied to the RTV transaction.

**Reporting Requirements**

The following reporting requirements were identified:

Report #	Description	Comments
	Purchase Order	
	Open Commitments (Encumbrance, Payments, Available Balance) for POs, Contracts, Settlement Agreements	
	State required reporting – eMarketplace website, Treasury Contracts website)	
	Inventory – Office Supplies	
	Budget Reports	
	Encumbrance Report	
	Contracts Report	

**Integrations**

**Dynamics AX to SAP**

There is the potential for an interface between Dynamics AX and SAP for Purchase Orders. A final decision will need to be made as to whether these functions will reside in Dynamics AX, SAP or both, in the future state.

**P-Card Transactions from US Bank**

PMRS would like to have an interface between Dynamics AX and US Bank to bring in the actual vendor detail of Procurement Card (P-Card) usage.

This integration will record adjustments record P-Card payments from the US Bank account. The source file for this integration will come from US Bank.

Key data identified to date:

Vendor, Transaction Type, Amount, Date

AX Destination – General Ledger Journal – Account Type: Vendor

**Customizations**

The following customizations are identified to date. It is possible that other customizations are required after discussions during the Design Phase.

#	Description	Fit/Gap	Comments

--	--	--	--

### **Data Conversion**

The following elements of data conversions have been defined as needed.

- Vendors
- Vendor Contacts
- Vendor Addresses
- Open Vendor Invoices
- Open Purchase Orders
- Open Blanket Orders
- Open Funds Commitments

### **Security Requirements**

PMRS would like to ensure that there are proper segregation of duties, where access security could be utilized to segregate the following functions:

- Purchase Requisition Entry
- Purchase Requisition Approval
- Purchase Order Entry
- Purchase Order Approval
- Receiving
- Vendor Invoice Processing Entry
- Vendor Invoice Payment Approval
- Contract Approval

### **Customer Deliverables**

The following elements must be fulfilled in order to demonstrate design functionality:

- Define buyers (if needed)
- Define buyer groups (if needed)
- Define purchasing numbering sequence
- Define inventory items for non-stock / service items
- Define units of measure
- Define purchase approval processes
- Define purchase requisition processes
- Define purchase order formats

- Define contract approval processes

# Vendor (AP) Payment Request to Treasury

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Outbound interface from Dynamics AX to Treasury.

The integration described in this document refers to the processes highlighted in the red box on the process flow. This includes:

- Process check file to send to Treasury to process checks

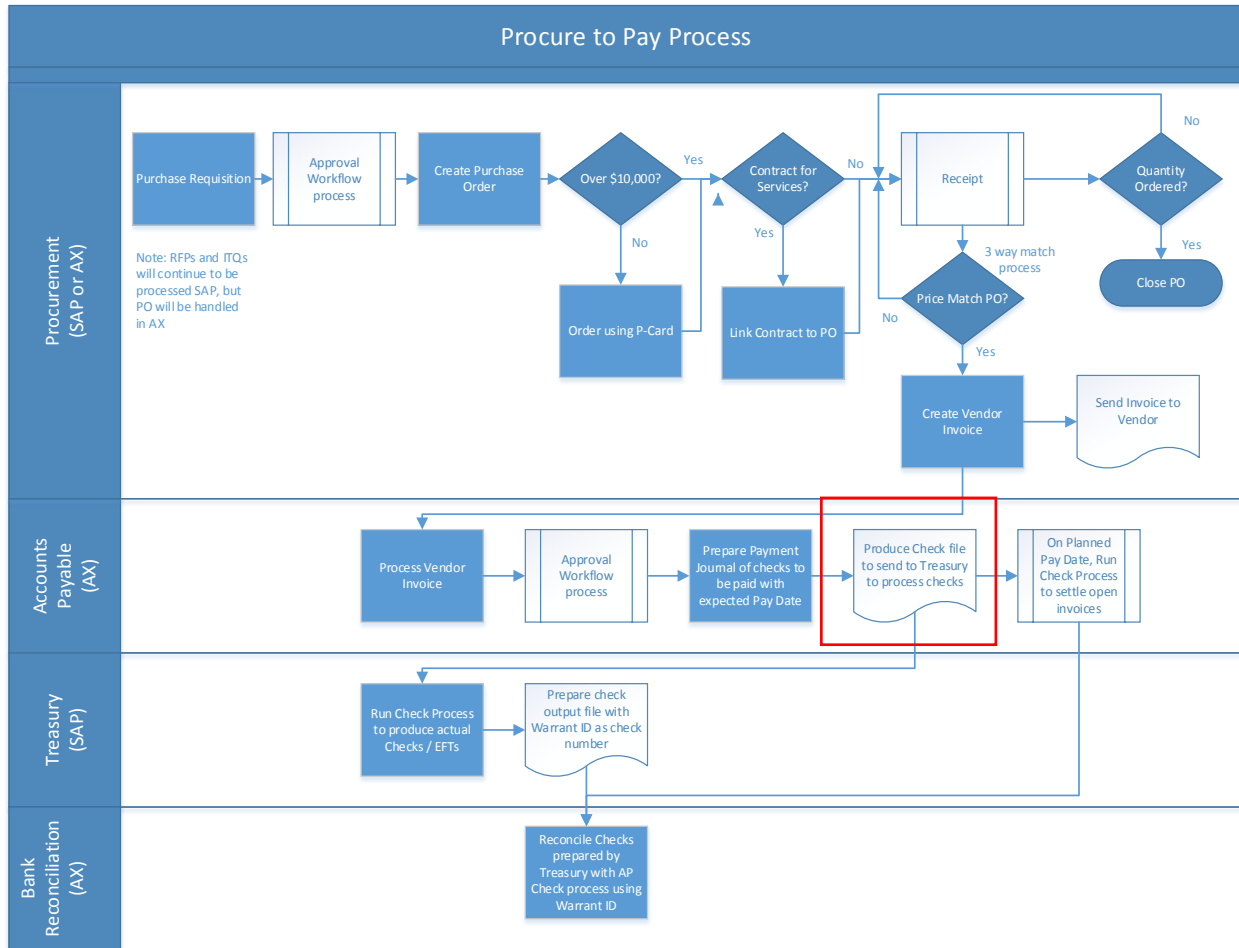
Prior to this integration (these processes), the following processes have already occurred – refer to the process flow to view the complete flow.

- The initial invoice will be entered into AX. This may be accomplished by doing a direct AP invoice entry transaction or by following the purchase order process. The purchase order process would result in an open payables invoice linked to the purchase order and receipt (i.e. 3-way matching). .
  - This will create the liability in the system offsetting to the appropriate expense or other type of account as needed.
- 
- Treasury cuts all checks for PMRS. Therefore, payment requests must be sent to Treasury with enough detail for processing and making the payment.
  - This information will be pulled from the AP vendor invoices and invoices created from purchase orders to provide the detail for payment. Payment may be by check or EFT.
  - The interface file must match a format defined by the Treasury as INT055.
  - This requires basic information such as the vendor information (vendor id, vendor name, address details, pay date and amount) as well as a Trace ID which is a required to be able to uniquely identify a payment transaction between the 2 systems.
  - The file structure also allows for optional information such as payment priority (i.e. rush payment), consolidation status, advice detail, etc.
  - This integration will be defined to run on demand by PMRS to allow selection of invoices to be included in order to extract and format this information that will then be sent to the Treasury with the appropriate timing for payment.

The full INT055 Payment Request Interface Agency Guide Inbound can be referenced in APPENDIX K – INT055 Payment Request Interface Agency Guide Inbound.docx.

## Requirement Details

### Process Flow



**NOTE: the section highlighted with the red square is the process being defined in this document.**

#### Source

The source of the data will be Dynamics AX – Vendor payments

#### Destination

The destination for the data will be Treasury – Vendor payments

#### Key Data Elements

In the following table, (M) indicates a Mandatory Node and (O) for an Optional Node. The data elements shown are for the most part mandatory but some select optional fields have been included. Non-mandatory fields are noted in the Key Points.

#	Node Name	Element Name	Source Field	Destination Field (Treasury)	Fixed Value
1	APPR01Request (M)	DocumentHeader			N/A
2	APPR01Request (M)	PaymentRequest			N/A
3	DocumentHeader (M)	Control			N/A
4	Control (M)	Class	N/A	N/A	R
5	Control (M)	InterfaceIdentifier	N/A	N/A	APPR01
6	Control (M)	SourceSystemCode			N/A
7	Control (M)	ControlCount			N/A
8	Control (M)	ControlAmount			N/A
9	PaymentRequest (M)	Header			N/A
10	Header (M)	Class	N/A	N/A	R
11	Header (M)	TraceId			N/A
12	Header (M)	PaymentClass			N/A
13	Header (M)	PriorityCode			N/A
14	Header (M)	RecipientId			N/A
15	Header (M)	DocumentType			N/A
16	Header (M)	GrossPaymentAmount			N/A
17	Payment (M)	Class	N/A	N/A	R
18	Payment (M)	PaymentNumber			1
19	Payment (M)	PaymentMethod			N/A
20	Payment (M)	SeparatePayment			N/A
21	Advice (O)	Class	N/A	N/A	R
22	Advice (O)	LineType			N/A
23	Advice (O)	LineTypeSequenceNumber			N/A
24	Advice (O)	Text			N/A
25	ACHAddenda (O)	Class	N/A	N/A	R
26	ACHAddenda (O)	SequenceNumber			N/A
27	ACHAddenda (O)	Text			N/A
28	Recipient (M)	Class	N/A	N/A	R
29	Recipient (M)	RecipientNumber	N/A	N/A	1
30	Recipient (M)	NameOne			N/A
31	Recipient (M)	StreetAddressOne			N/A
32	Recipient (M)	StreetAddressTwo			N/A
33	Recipient (M)	City			N/A
34	Recipient (M)	State			N/A
35	Recipient (M)	PostalCode			N/A
36	EFTBeneficiary (O)	Class	N/A	N/A	R
37	EFTBeneficiary (O)	BeneficiaryNumber			N/A
38	EFTBeneficiary (O)	TransactionHandling			N/A
39	EFTBeneficiary (O)	FormatCode			N/A
40	EFTBeneficiary (O)	DFIQualifier			N/A
41	EFTBeneficiary (O)	DFI			N/A
42	EFTBeneficiary (O)	BankAccountNumber			N/A
43	Item (M)	Class	N/A	N/A	R
44	Item (M)	ItemNumber			N/A
45	Item (M)	Description			N/A
46	Item (M)	ItemAmount			N/A



#	Node Name	Element Name	Source Field	Destination Field (Treasury)	Fixed Value
47	Item (M)	VendorID			N/A
48	SupportingDocument (O)	Class	N/A	N/A	R
49	SupportingDocument (O)	DocumentNumber			N/A
50	SupportingDocument (O)	Description			N/A
51	SupportingDocument (O)	Type			N/A
52	SupportingDocument (O)	Format			N/A
53	SupportingDocument (O)	URL			N/A
54	Funding (M)	Class	N/A	N/A	R
55	Funding (M)	FundingLineNumber			N/A
56	Funding (M)	Description			N/A
57	Funding (M)	Amount			N/A
58	Funding (M)	Fund			N/A
59	Funding (M)	Department			N/A
60	Funding (M)	Appropriation			N/A
61	Funding (M)	FiscalYear			N/A
62	Funding (M)	Account			N/A

### **Key Points:**

#### **Header Node:**

Element 11: TraceID - Key for PMRS and matching

Element 13: Priority Code - This is not a mandatory element but PMRS may want to designate is as such. Value List: 1 – Must be paid on the current or next business day; 2 – Must be paid within 5 business days; R – Regular (default). Expedited processing not required.

Element 14: Recipient ID - This is not a mandatory element but PMRS may want to designate is as such. Passing the Dynamics AX Vendor ID will assist with matching.

Element 15: Document Type – VT – Vendor payment; TE - Travel related expenditure; PE - Payroll related expenditure; AA - Advancement Account replenishment.

#### **Payment Node:**

Element 19: Payment Method - ACH - Automated Clearing House; CHK – Check; WIR - Wire Transfer

Element 20: Separate Payment - This is not a mandatory element but PMRS may want to designate is as such. Y – separate disbursement required, consolidation not permitted; N – separate disbursement not required, consolidation permitted (default)

#### **Advice Node:**

Element 22: Line Type - AG – Agency/Program; CH – Column Heading; DL – Detail Line; TL – Total Line; NL – Note Line

Element 23: Line Type Sequence Number – Ties in with Line Type

### **Recipient Node:**

Elements 31-35: Address information Fields - These are not mandatory elements but PMRS may want to designate is as such at least for check payments. Address is printed in the face of the check or on the remittance for ACH

### **EFT Beneficiary Node:**

Element 38: Transaction Handling - D - Payment Only; P – Prenotification – Use for ACH prenotes; X - Payment with Remittance Advice

Element 39: Format Code - CCD - Cash Concentration and Disbursement; CTX - Corporate Trade Exchange; PPD - Prearranged Payments and Deposit; WRT - Wire Transfer

Element 40: DFI Qualifier - 01 - Transit Routing Number; 02 - Swift ID/BIC

Element 41: DFI – Directly related to DFIQualifier

### **Item Node:**

Element 45: Description - This is not a mandatory element but PMRS may want to designate is as such to include a description for the payment.

Element 47: Vendor ID - This is not a mandatory element but PMRS may want to designate is as such. It is also possible to include this on the Payment Request node as Recipient ID. AN evaluation should be done on whether to include this detail and on what node.

### **Supporting Document Node:**

Element 50: Description - This is not a mandatory element but PMRS may want to designate is as such to include a description for the extra information.

Element 51: Type - PO - Purchase Order; CN – Contract; GR – Grant; IV – Invoice

Element 52: Format - XML – XML document; IMG - Scanned Image or link to agency-hosted document.

### File Naming Conventions

Each file name must be unique.

Name should be in XXXXXXSRC<FREEFORM>YYYYMMDDHHMMSSmmm.xml format

- XXXXXX – The first 6 characters represent the interface name i.e. APPR01
- SRC – The next 3 characters represent the source system code i.e. IES.
- <FREEFORM> - Free form text, sender can add any value they wish. Leave blank if not in use. Length of field can be from 0-10 alphanumeric characters.

- YYYYMMDD - The date of the transmission in YYYYMMDD format i.e. 20120101.
- HHMMSS - The time of day when the transmission occurred; it's a military time format i.e. 162412 for 4:24:12 PM.
- mmm - This is the milliseconds of the time when the transmission occurred. This is an optional field.
- .xml – This is the file extension.

#### Example File Names:

- APPR01IES20130101081235.xml – Minimum required in a file name.
- APPR01IES20130101081235123.xml – Includes millisecond.
- APPR01IESFFEX20130101081235123.xml – Includes freeform and milliseconds.

### Data Conversion

The following elements of data conversions have been defined as needed.

- Current outstanding invoices from Vendors (AP) that have not yet been paid.
- Current outstanding payments from Treasury to Vendors that have not been reconciled.

### Security Requirements

Security will need to be assigned at the appropriate level for the users who are permitted to run the Vendor (AP) Payment Request to Treasury integration.

### Sample Request Document

```
<?xml version="1.0"?>
<APPR01Request
xmlns="http://schemas.patreasury.gov/interface/schema/APPR01Request.v1">
  <DocumentHeader>
    <Control class="R">
      <InterfaceIdentifier>APPR01</InterfaceIdentifier>
      <SourceSystemCode>IES</SourceSystemCode>
      <DocumentIdentifier>123456789</DocumentIdentifier>
      <DocumentDateTime>2013-12-31T15:35:38.687500-
05:00</DocumentDateTime>
      <ControlCount>1</ControlCount>
      <ControlAmount>100.00</ControlAmount>
    </Control>
  </DocumentHeader>
  <!--1 or more repetitions-->
```

```
<PaymentRequest>
  <Header class="R">
    <TraceId></TraceId>
    <OriginalTraceId></OriginalTraceId>
    <PaymentClass></PaymentClass>
    <PriorityCode></PriorityCode>
    <RecipientType></RecipientType>
    <RecipientId></RecipientId>
    <RecipientLocation></RecipientLocation>
    <TaxpayerId></TaxpayerId>
    <PreConsolidationIndicator></PreConsolidationIndicator>
    <VendorInvoiceId></VendorInvoiceId>
    <VendorInvoiceDate></VendorInvoiceDate>
    <SourceSystemReference></SourceSystemReference>
    <DocumentType></DocumentType>
    <GrossPaymentAmount></GrossPaymentAmount>
    <GrossEarningsAmount></GrossEarningsAmount>
    <DueDate></DueDate>
    <PaymentTerms></PaymentTerms>
    <PaymentTermsBasisDate></PaymentTermsBasisDate>
    <DocumentFormat></DocumentFormat>
    <DocumentVerificationValue></DocumentVerificationValue>
    <DocumentURL></DocumentURL>
    <BatchType></BatchType>
    <BatchId></BatchId>
    <BatchSequenceNumber></BatchSequenceNumber>
    <ForceBatchProcessing></ForceBatchProcessing>
    <Payment class="R">
      <PaymentNumber></PaymentNumber>
      <PaymentType></PaymentType>
      <PaymentMethod></PaymentMethod>
      <SeparatePayment></SeparatePayment>
      <PaymentHandlingCode></PaymentHandlingCode>
      <PrintRemittance></PrintRemittance>
      <PaymentMessage></PaymentMessage>
      <PayrollDeliveryBusinessArea></PayrollDeliveryBusinessArea>
      <CheckMemoLine></CheckMemoLine>
      <!--0 to 10008 repetitions:-->
      <Advice class="R">
        <LineType> </LineType>
        <LineTypeSequenceNumber></LineTypeSequenceNumber>
        <Text> </Text>
      </Advice>
      <!--0 to 9999 repetitions:-->
      <ACHAddenda class="R">
        <SequenceNumber></SequenceNumber>
```

```
<Text> </Text>
</ACHAddenda>
</Payment>
<Recipient class="R">
  <RecipientNumber></RecipientNumber>
  <NameOne></NameOne>
  <NameTwo></NameTwo>
  <Country></Country>
  <StreetAddressOne></StreetAddressOne>
  <StreetAddressTwo></StreetAddressTwo>
  <City></City>
  <State></State>
  <PostalCode></PostalCode>
</Recipient>
<!--Optional:-->
<EFTBeneficiary class="R">
  <BeneficiaryNumber></BeneficiaryNumber>
  <TransactionHandling> </TransactionHandling>
  <FormatCode> </FormatCode>
  <WireType></WireType>
  <AgencyLocationCode></AgencyLocationCode>
  <DFIQualifier></DFIQualifier>
  <DFI></DFI>
  <BankAccountType></BankAccountType>
  <BankAccountNumber></BankAccountNumber>
  <IBAN></IBAN>
  <BankName></BankName>
  <Country></Country>
  <StreetAddressOne></StreetAddressOne>
  <StreetAddressTwo></StreetAddressTwo>
  <City></City>
  <State></State>
  <PostalCode></PostalCode>
  <PaymentDetailInformation></PaymentDetailInformation>
  <FurtherCreditToIndicator></FurtherCreditToIndicator>
  <BeneficiaryReference></BeneficiaryReference>
</EFTBeneficiary>
<!--1 to 99999 repetitions:-->
<Item class="R">
  <ItemNumber></ItemNumber>
  <Description></Description>
  <ItemAmount></ItemAmount>
  <ItemType> </ItemType>
  <ItemId></ItemId>
  <ItemLineNumber></ItemLineNumber>
  <ItemScheduleNumber></ItemScheduleNumber>
```

```
<ItemDate></ItemDate>
<ItemReference></ItemReference>
<VendorId></VendorId>
<VendorLocation></VendorLocation>
<VendorTaxpayerId></VendorTaxpayerId>
<SCDUNoncustodialParentName></SCDUNoncustodialParentName>
<SCDUNoncustodialParentSSN></SCDUNoncustodialParentSSN>
<SCDUEmploymentTerminated></SCDUEmploymentTerminated>
<SCDUMedicalSupportIndicator></SCDUMedicalSupportIndicator>
<SCDUFIPSCode></SCDUFIPSCode>
<Issuer></Issuer>

<AdvancementAccountBusinessArea></AdvancementAccountBusinessArea>
  <AdvancementAccountCode></AdvancementAccountCode>
  <PayeeNameOne></PayeeNameOne>
  <PayeeNameTwo></PayeeNameTwo>
  <AuditLookupType></AuditLookupType>
  <AuditLookupId></AuditLookupId>
  <AccountingReference></AccountingReference>
  <!--0 to 999 repetitions:-->
  <SupportingDocument class="R">
    <DocumentNumber></DocumentNumber>
    <Description></Description>
    <Type></Type>
    <Format></Format>
    <VerificationValue></VerificationValue>
    <URL></URL>
  </SupportingDocument>
  <!--1 to 99999 repetitions:-->
  <Funding class="R">
    <FundingLineNumber></FundingLineNumber>
    <Description></Description>
    <Amount></Amount>
    <Fund></Fund>
    <Department></Department>
    <Appropriation></Appropriation>
    <FiscalYear></FiscalYear>
    <Account></Account>
  </Funding>
</Item>
</Header>
</PaymentRequest>
</APPR01Request>
```

# Vendor (AP) Payments from Treasury

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Inbound interface from Treasury to Dynamics AX.

The integration described in this document refers to the processes highlighted in the red box on the process flow. This includes:

- Prepare member payment summary file
- Create journal entry to record payment and relieve liability
- Prepare check output file with warrant id as check number
- Reconcile checks prepared by Treasury with AP check process using Warrant ID

Prior to this integration (these processes), the following processes have already occurred – refer to the process flow to view the complete flow.

The initial invoice will be entered into AX. This may be accomplished by doing a direct AP invoice entry transaction or by following the purchase order process. The purchase order process would result in an open payables invoice linked to the purchase order and receipt (i.e. 3-way matching).

This will create the liability in the system offsetting to the appropriate expense or other type of account as needed.

Following the creation of the invoice, the payment request file will be sent to Treasury with the appropriate lead time for payment by the expected pay date.

On the planned pay date (sent to Treasury), a 'check' run will be processed in AX to settle the invoices sent for payment. This will relieve the liability and offset to the bank account.

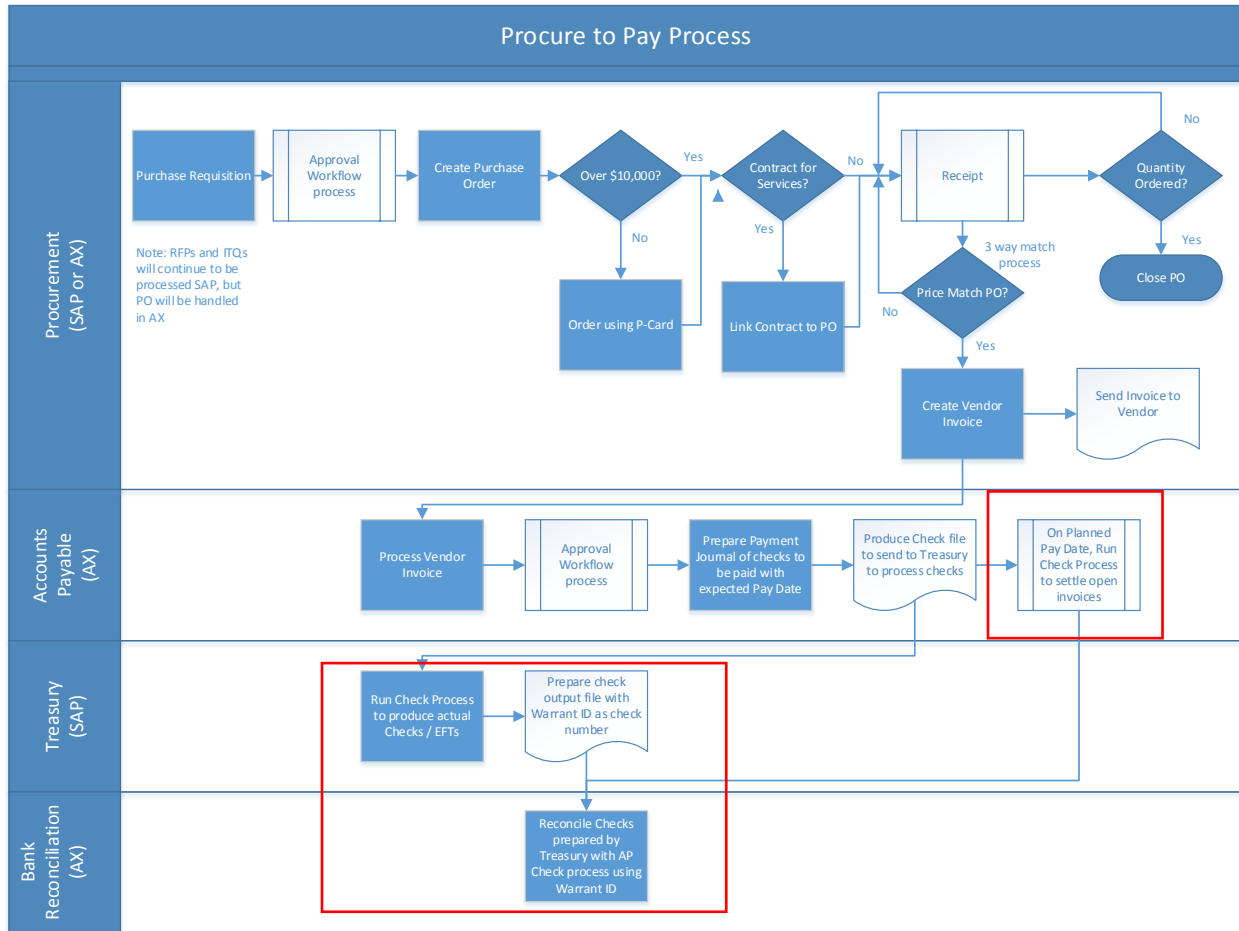
Once Treasury makes the payments and the payments have cleared the bank, a file will be created to send back to AX to be used for perform electronic bank reconciliation.

The file that Treasury sends back must be in a format specified in their interface guidelines and schemas. This interface follows the INT038 Outbound Reconciled Checks.

The full INT038 Outbound Reconcile Checks Guide can be found in APPENDIX J – INT038Outbound Reconciled Checks.docx

# Requirement Details

## Process Flow



**NOTE: The sections highlighted with the red squares are the processes being referenced in this document.**

### Source

The source of the data will be Treasury – Vendor payments

### Destination

The destination for the data will be Dynamics AX – bank reconciliation against Wells Fargo (Treasury)

### Key Data Elements

In the following table, (M) indicates a Mandatory Node and (O) for an Optional Node. The data elements shown are for the most part mandatory but some select optional fields have been included. Non-mandatory fields are noted in the Key Points.

#	Node Name	Element Name	Source Field (Treasury)	Destination Field	Fixed Value
1	CMCR01Response (M)	DocumentHeader			N/A
2	CMCR01Response (M)	CheckReconciliationDetail			N/A



#	Node Name	Element Name	Source Field (Treasury)	Destination Field	Fixed Value
3	DocumentHeader (M)	Control			N/A
4	Control (M)	Class	N/A	N/A	R
5	Control (M)	InterfaceIdentifier	N/A	N/A	CMCR01
6	Control (M)	SourceSystemCode	N/A	N/A	PAT
7	Control (M)	DocumentIdentifier			N/A
8	Control (M)	DocumentDateTime			N/A
9	Control (M)	ResponseCode			N/A
10	Control (M)	ControlCount			N/A
11	Control (M)	ControlAmount			N/A
12	Control (M)	RequestDocumentIdentifier			N/A
13	Control (M)	RequestDateTime			N/A
14	Message(O)	Class	N/A	N/A	R
15	Message(O)	MessageNumber			N/A
16	Message(O)	MessageSet			N/A
17	Message(O)	Severity			N/A
18	Message(O)	Text			N/A
19	CheckReconciliationDetail (M)	ReconciledCheckInformation			
20	ReconciledCheckInformation (M)	Class	N/A	N/A	R
21	ReconciledCheckInformation (M)	BankAccountld			N/A
22	ReconciledCheckInformation (M)	WarrantNumber			N/A
23	ReconciledCheckInformation (M)	CheckNumber			N/A
24	ReconciledCheckInformation (M)	Payee			N/A
25	ReconciledCheckInformation (M)	PayDate			N/A
26	ReconciledCheckInformation (M)	ReconciledDate			N/A
27	ReconciledCheckInformation (M)	Amount			N/A
28	TraceNumber (M)	Class	N/A	N/A	R
29	TraceNumber (M)	SourceSystem			N/A
30	TraceNumber (M)	TraceId			N/A
31	TraceNumber (M)	DocumentType			N/A
32	TraceNumber (M)	BatchId			N/A

**Key Points:**

**Control Node**

Element 9: ResponseCode

Valid Values: 000E – For Error on run control values; 000S For Success on run control values

**ReconciledCheckInformation Node:**

All elements are required. This is the key information for matching.

**TraceNumber Node**

Element 30: TraceID – this is mandatory and will also be key for matching.

## Data Conversion

The following elements of data conversions have been defined as needed.

- Current outstanding invoices from Vendors (AP) that have not yet been paid.
- Current outstanding payments from Treasury to Vendors that have not been reconciled.

## Security Requirements

Security will need to be assigned at the appropriate level for the users who are permitted to run Bank Reconciliation for the Wells Fargo (Treasury) bank account. Users will need the appropriate security to access the integration file used for the electronic reconciliation.

## Example INT038 file

```
<?xml version="1.0"?>
<CMCR01Response
xmlns="http://schemas.patresury.gov/interface/schema/CMCR01Response.v1">
  <DocumentHeader>
    <Control class="R">
      <InterfacelIdentifier>CMCR01</InterfacelIdentifier>
      <SourceSystemCode></SourceSystemCode>
      <DocumentIdentifier></DocumentIdentifier>
      <DocumentDateTime></DocumentDateTime>
      <ResponseCode></ResponseCode>
      <ControlCount></ControlCount>
      <ControlAmount></ControlAmount>
      <RequestDocumentIdentifier></RequestDocumentIdentifier>
      <RequestDateTime></RequestDateTime>
      <Message class="R">
        <MessageNumber></MessageNumber>
        <MessageSet></MessageSet>
        <Severity></Severity>
        <Text></Text>
      </Message>
    </Control>
  </DocumentHeader>
  <CheckReconciliationDetail>
    <ReconciledCheckInformation class="R">
      <BankAccountId></BankAccountId>
      <WarrantNumber></WarrantNumber>
      <CheckNumber></CheckNumber>
      <Payee></Payee>
      <PayDate></PayDate>
      <ReconciledDate></ReconciledDate>
      <Amount></Amount>
      <TraceNumber class="R">
```

```
<SourceSystem></SourceSystem>
<TraceId></TraceId>
<DocumentType></DocumentType>
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# Void Member Payment from CPAS

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Inbound interface from the Comprehensive Pension Administration System (CPAS) to Dynamics AX.

The CPAS system holds the member details for the plans. Payment requests for members originate in CPAS and a payment request interface file is sent to Treasury. This may be for monthly payments or lump sums.

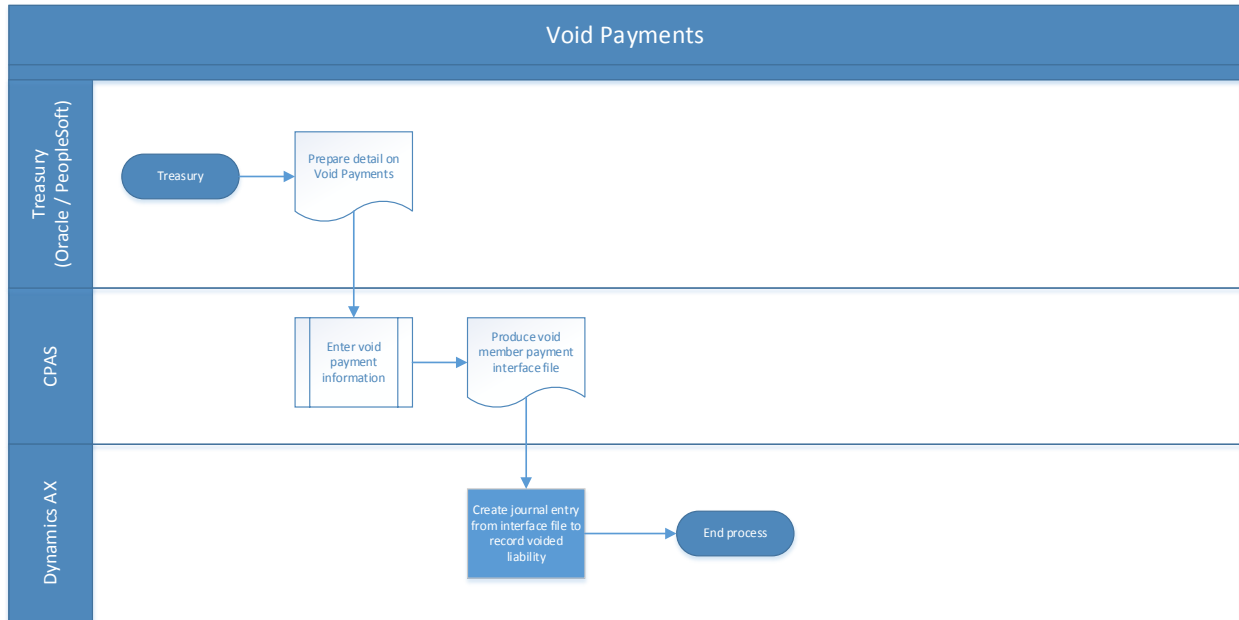
The liability for these payments will be recorded in AX at the time that the payment request is sent to Treasury. Refer to the PMRS - FRD Member Payment Summary from CPAS document.

For payments that do not clear the bank or are voided for any reason, Treasury provides the detail to CPAS. The void is recorded in the CPAS system.

The liability for the payment that was originally sent to AX will need to be offset with the void. This may be accomplished by creating a general journal entry in AX. The general journal entry will include the detail for the void including the net amount as well as Federal taxes, BS/BC, IRS Levies and Domestic Relations amounts as applicable. This will still be at the plan level and not the member level.

## Requirement Details

### Process Flow



#### Source

The source of the data will be the Comprehensive Pension Administration System (CPAS) – member payments.

#### Destination

The destination for the data will be Dynamics AX – general journal entry.

#### Key Data Elements

Element #	Data Element	Source Field (CPAS)	Destination Field
1	GL Account		
2	Financial Dimensions		
3	PERC# (Plan)		
4	Date		
5	Type		
6	Void Amount		
7	Trace ID		

#### Key Points:

Elements 1-3: If the GL account number cannot be sent from CPAS, the interface will need to be coded to prompt or otherwise determine the GL account and any financial dimensions needed. Note that the PERC# is a financial dimension and is a date element that will be required. This information will need to match the account number and financial dimensions used with the liability was first created

Element 4: Date of liability not payment date

Element 5: Examples are: Net Amount to Member, Federal taxes, BS/BC, IRS Levies and Domestic Relations

Element 7: Needed to match for relieving the liability and close the loop

## **Data Conversion**

The following elements of data conversions have been defined as needed.

- Current Balances for outstanding member payment liabilities at the appropriate GL account and financial dimension level (at a minimum the PERC # FD)

## **Security Requirements**

Security will need to be assigned at the appropriate level for the users who are permitted to run the Void Member Payment from CPAS interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal. PMRS will need to determine if additional restrictions are needed for this journal type.

# Void Member Payment from CPAS

## Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

1. Standard Dynamics AX functionality will be used where possible

## Requirements Analysis

This interface will be an Inbound interface from the Comprehensive Pension Administration System (CPAS) to Dynamics AX.

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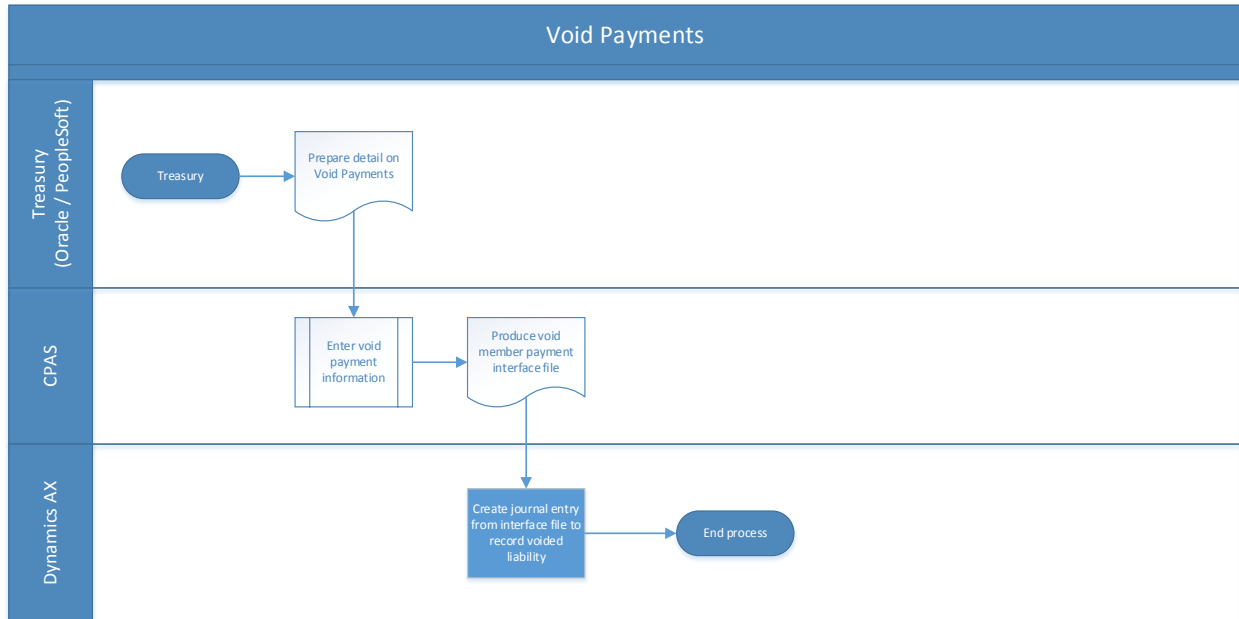
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The liability for the payment that was originally sent to AX will need to be offset with the void. This may be accomplished by creating a general journal entry in AX. The general journal entry will include the detail for the void including the net amount as well as Federal taxes, BS/BC, IRS Levies and Domestic Relations amounts as applicable. This will still be at the plan level and not the member level.

## Requirement Details

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The source of the data will be the Comprehensive Pension Administration System (CPAS) – member payments.

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### **Data Conversion**

The following elements of data conversions have been defined as needed.

- Current Balances for outstanding member payment liabilities at the appropriate GL account and financial dimension level (at a minimum the PERC # FD)

### **Security Requirements**

Security will need to be assigned at the appropriate level for the users who are permitted to run the Void Member Payment from CPAS interface. Once the data has been imported to Dynamics AX, the general workflow and/or user security will be in place for approval and posting of the journal. PMRS will need to determine if additional restrictions are needed for this journal type.

# Reports

## 7 Assumptions

The following elements must be fulfilled in order for the design detailed herein to provide expected results.

- The ability by authorized users to query and generate reports from the application as needed.
- The ability to export any data element(s) relating to users or system to Excel or text formats, including but not limited to .xsl or .xlsx file formats, Comma Separated Values file format, or delimited ASCII or Unicode text file formats.
- The ability to customize reports and create ad hoc reports on data element(s) to include building custom financial reports using Management Reporter from data captured in the chart of accounts with the associated financial dimensions of statistical accounts.
- Standard Dynamics AX functionality will be used where possible
- Financial reports will be generated outside of AX in Management Reporter.
- Power BI (Business Intelligence) reporting will be used to produce custom reports where possible.

## 8 Requirements Analysis

The following table includes requirements as presented in the corresponding Requirement Matrix.

Rpt #	Report Name	Description / Purpose
1	Summary of Revenues	This report is a part of the Comprehensive Annual Financial Report (CAFR). This report shows the Additions to Plan Net Assets as contribution, net investment income and miscellaneous income. It shows the current year with percent of total, the previous year and the \$ and \$ increase (decrease).
2	Summary of Expenses	This report is a part of the CAFR. This report shows the Deductions from Plan Net Assets as annuity benefits and terminations, transfers and administrative expenses. It shows the current year with percent of total, the previous year and the \$ and \$ increase (decrease).
3	Summary of Fiduciary Net Position	This report is a part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report. This report shows 3 years of comparison for the Assets and Liabilities. Assets include: Receivables; Investments; Capital Assets and Deferred outflows of resources related to pensions. Liabilities include: A total of all liabilities and Deferred inflows of resources related to pensions.
4	Summary of Changes in Fiduciary Net Position	This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report.

		<p>This report shows 3 years of comparison for analysis of additions and deductions to give a total fiduciary net position.</p> <p>Additions include: Contributions (net of refunds); Net investment income (loss) and Miscellaneous income.</p> <p>Deductions include: Annuity benefits and terminations; Transfers to other plan administrators; and Administrative expenses.</p>
5	Asset Distribution at Fair Market Value	<p>This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report.</p> <p>This report shows 3 years of comparison of the asset class distribution as well as percent by asset class.</p> <p>Asset classes include: Short term; Fixed income; Common preferred stock; International stock; and Real estate.</p>
6	Statement of Fiduciary Net Position	<p>This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report.</p> <p>This report shows 2 years of comparison for the Assets and Liabilities at a more detailed level to give the Net position restricted for pensions.</p> <p>Asset detail is shown under the following categories: Receivables; Investments (at fair value); and Deferred outflows of resources related to pensions.</p> <p>Liability detail is shown under the following categories: Accounts payable and accrued expenses; investment purchases payable; and Deferred inflows of resources related to pensions.</p>
7	Statement of Changes in Fiduciary Net Position	<p>This report is also part of the CAFR and will be produced from the detail captured in Dynamics AX for inclusion in the report.</p> <p>This report shows 2 years of comparison for the Additions and Deductions at a more detailed level to give the Net position restricted for pensions.</p> <p>Addition detail is shown under the following categories: Contributions net of refunds and Investment income, each of which also have multiple sub-categories.</p> <p>Deduction detail is shown as annuity benefits and terminations, transfers and administrative expenses.</p> <p>The detail is shown for 2 years. The last segment of the report shows the beginning balance, effect of the change in net accounting principle, beginning balance restated and ending balance.</p>
8	Participating Local Government Employers	<p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. Note that in order to produce this report, statistical accounts and statistical detail will need to be captured in Dynamics AX.</p> <p>This reports documents the type of local government employers participating with a break out between Defined Benefit Plans and Cash Balance Plans.</p> <p>The employer types included are: Counties; Cities; Boroughs; Townships of the first class; Townships of the second class; Authorities and other units; Police; and Firefighters.</p>
9	Individual Membership	<p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. Note that in order to produce this report, statistical accounts and statistical detail will need to be captured in Dynamics AX.</p> <p>This reports documents the type of local government employers participating with break outs between Defined Benefit Plans and Cash Balance Plans as well as detail for active members; retirees and beneficiaries; and inactive participants with rights to deferred pensions.</p> <p>Active members are defined for Defined Benefit Plans and Cash Balance Plans and categorized as Municipal, Police or Firefighters with a total of Active members.</p> <p>Retirees and beneficiaries are categorized only as retiree or beneficiary with the total of both.</p> <p>Inactive participants are categorized as Vested or Non-vested with a breakout under each for Defined Benefit Plan and Cash Balance Plan and totals for vested and non-vested.</p> <p>The report also provides a total of individual memberships.</p>

10	Contributions	This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. Note that in order to produce this report, statistical accounts and statistical detail will need to be captured in Dynamics AX. This report shows 2 years of comparison for the Municipality normal cost and Amortization of unfunded actuarial accrued liability.
11	Investment Allocation	This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. Note that in order to produce this report, statistical accounts and statistical detail will need to be captured in Dynamics AX. This report shows the percentages for each investment type including: Domestic Equities (large capitalized firms) Domestic Equities (small capitalized firms) International Equities (developed markets) International Equities (emerging markets) Fixed Income Real Estate Timberland
12	Investment Risk Reporting (Interest Rate Risk, Foreign Currency Risk)	This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. Note that in order to produce this report, statistical accounts and statistical detail will need to be captured in Dynamics AX. This report has 2 sections for the current year and the previous year. It shows the Currency, Equity, Short Term and Total
13	Schedule 1 – Investment Returns	This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. Note that in order to produce this report, statistical accounts and statistical detail will need to be captured in Dynamics AX. This report shows 2 years of comparison for the Annual money-weighted rate of return net of investment expense.
14	Supplemental Schedule 2 – Administrative Expenses	This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report. This report shows 2 years of comparison of Administrative expenses broken out into several categories. The categories contain further breakout of the detail under that category.  Categories include: Personnel services; Professional services; Communication; Other services and charges; and Depreciation.  Each category is shown as a sub-total and the total administrative expenses are calculated.
15	Supplemental Schedule 3 – Investment Expenses	This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report. This report shows 2 years of comparison of Investment expenses broken out by Investment management fees and Custodial fees as well as the total.
16	Supplemental Schedule 4 – Payment to Consultants	This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report. This report shows 2 years of comparison of consultant expenses broken out by Firm name and Nature of service as well as the total.
17	Number of Members per Plan	This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. Note that in order to produce this report, statistical accounts and statistical detail will need to be captured in Dynamics AX. This report shows the number of members in a plan for plans with over 100 members. The plan name, number of members and % are listed.
18	Changes in Net Position	This report is also part of the CAFR and may be produced from accounting detail captured in Dynamics AX for inclusion in the report. This report shows 10 years of comparison with several columns of revenues and deductions as a total for the year as well as a column showing the change in net position.  Additions column is Contributions; Investment income (loss) and Miscellaneous income;  Deduction columns are: Annuity benefits and terminations; and Administrative expense.

19	Revenues by Source	<p>This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report. This report shows 10 years of comparison of several columns of revenues as a total for the year as well as a column showing the total revenue (net of losses).</p> <p>Revenue columns are: Member contributions; Municipal contributions and transfers from other plan administrators; Municipal assessments; and Investment income (loss) and miscellaneous income.</p> <p>This report is also displayed in graphical form.</p>
20	Expenses by Type	<p>This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report. This report shows 10 years of comparison of several columns of expense types as a total for the year as well as a column showing the total expenses.</p> <p>Expense type columns are: Benefit expenses (annuity and termination); and administrative expenses.</p> <p>This report is also displayed in graphical forms.</p>
21	Results of Operations	<p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. This report is displayed in graphical form showing presenting bars in 2 colors, one for revenue and one for expense. A line shows the trending. The X axis is the amount in millions and the Y axis displays years. A legend for the representation is also presented.</p>
22	Total Investments	<p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. This report is displayed in graphical form showing presenting bars in multiple colors for each investment type. The X axis is the fair value amount in millions and the Y axis displays years. A legend for the representation is also presented.</p>
23	Schedule of Benefit Deductions From Plan Net Assets by Type	<p>This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report. This report shows 10 years of comparison of several columns of benefit deduction expense types as a total for the year as well as a column showing the total annuity.</p> <p>Expense type columns are: Normal; Early; Disability; Survivor; Death; Drop; and Transfer and other.</p>
24	Schedule of Refund Deductions From Plan Net Assets by Type	<p>This report is also part of the CAFR and will be produced from accounting detail captured in Dynamics AX for inclusion in the report. This report shows 10 years of comparison of several columns of refund deduction expense types as a total for the year as well as a column showing the total refunds.</p> <p>Expense type columns are: Terminations and Lump sum.</p>
	CAFR Statistical Section	
25		<p>Total Membership</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. This report is displayed in graphical form showing presenting bars in multiple colors for member type. The X axis is the amount and the Y axis displays years. A legend for the representation is also presented.</p>
26		<p>Active Members</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report. This report is displayed in graphical form showing presenting bars in multiple colors for active members. The X axis is the amount and the Y axis displays years. A legend for the representation is also presented.</p>
27		<p>Retired Members</p>

		<p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report is displayed in graphical form showing presenting bars in multiple colors for retired members. The X axis is the amount and the Y axis displays years. A legend for the representation is also presented.</p>
28		<p>Distribution of Active Members – Counts by Age/Service</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>It is a grid representing the counts by age and years of service. The X axis of the grid are ranges of ages (i.e. 20-24) and the Y axis is ranges for years of service (i.e. 1-2).</p> <p>Each cell as an intersection of the X and Y axis contains the count for members with that criteria.</p>
29		<p>Distribution of Active Members – Counts by Average Annual Salary/Service</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>It is a grid representing the salary by age and years of service. The X axis of the grid are ranges of ages (i.e. 20-24) and the Y axis is ranges for years of service (i.e. 1-2).</p> <p>Each cell as an intersection of the X and Y axis contains the salary totals for members with that criteria.</p>
30		<p>Pensions in Payment Status</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>It is a grid representing the count by an amount value and type of pension. The X axis of the grid are ranges of amounts (i.e. \$100-199) and the Y axis is the types of pension (i.e. normal, involuntary early, etc.)</p> <p>Each cell as an intersection of the X and Y axis contains the count for members with that criteria.</p>
31		<p>Pensions Awarded – 10 Years</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>It is a grid representing the count and the average monthly amount by type of pension based on a valuation date. The X axis of the grid is the valuation dates (i.e. 2015) and the Y axis is the types of pension (i.e. normal, involuntary early, etc.).</p> <p>Each cell as an intersection of the X and Y axis contains the count for members with that criteria as well as the average monthly amount for each pension type.</p>
32		<p>Schedule of Total Membership – 10 Years</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>It is a grid representing the count by pension status type based on a valuation date. The X axis of the grid is the valuation dates (i.e. 2015) and the Y axis is the pension status type (i.e. active, retiree, beneficiary, etc.).</p> <p>Each cell as an intersection of the X and Y axis contains the count for members with that criteria.</p>

33		<p>Schedule of Active Member Valuation Data</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>It shows by year, the count of active members along with statistics. It includes  Number of Active Members  Percentage Change in Membership  Number of Participating Employers  Percentage Increase in Number of Participating Employers  Total Annual Payroll  Percentage Increase in Payroll  Average Annual Salary  Percentage Increase in Average Annual Salary</p> <p>This is shown separately for Defined Benefit Plans and Cash Balance Plans.</p>
34		<p>Schedule of Average New Monthly Benefit Payments from Defined Benefit Plans</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>It is a grid representing the amounts for average monthly benefit, average final average salary and number of retired members by retirement effective date and years of credited service.</p>
35		<p>Schedule of Participating Plans</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This shows the list of names for each plan with various headings such as Townships of the First Class.</p>
	<p>CAFR Investment Section</p>	
36		<p>Asset Allocation</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This shows type, percent and amount for the different asset types. The total for equities is shown followed by fixed income, real estate and cash/equivalents and the overall total.</p>
37		<p>Portfolio Distribution</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report is displayed in graphical form showing presenting bars in multiple colors for the different portfolio types (i.e. Cash, Timberland, etc.). The X axis is the amount and the Y axis displays years. A legend for the representation is also presented.</p>
38		<p>Performance Summary</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This reports shows rows for portfolio types with further breakout by detail within types. It shows the 1, 3, 5 and 10 year performance as a percentage.</p>
39		<p>Summary of Investment Expenses</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p>

		<p>This report has 2 parts.</p> <p>The first section lists the sectors with the following detail:</p> <p>Target allocation  Target dollar  Current allocation  Current dollar allocation  Variance/dollar  Variance/percent</p> <p>The second section lists the Firm Name (with some additional breakout) with the total for the current and previous year with a total of each at the firm level.</p>
40		<p>Ten Largest Common Stock Holdings</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report lists the stock name with the number of shares, fair value and % of portfolio.</p>
41		<p>Portfolio Summary</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report list shows the type of investment (i.e. corporate bonds, common stock, etc.), cost value, fair value and % of total fair value.</p>
42		<p>Portfolio Quality</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report is a 2 year comparison of the AAA and AA ratings with the Fair Value, % of Total Fair Value and % of Total Carrying Value.</p>
43		<p>Summary of Commissions Paid to Brokers</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report lists the broker name and commissions paid.</p>
	CAFR Actuarial Section	
44		<p>Solvency Test</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report shows the Valuation date (Jan 1) for multiple years, along with the following:</p> <p>Active Member Contributions (1)  Retirees and Beneficiaries (2)  Active Member Employer Financed Contributions (3)  Actuarial Values of Reported Assets  Portion of Accrued Liabilities Covered by Reported Assets for (1), (2) and (3)</p>
45		<p>Funded Status of Actuarial Liabilities</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p>



		<p>This report shows the Valuation date (Jan 1) for multiple years, along with the following:</p> <ul style="list-style-type: none"> <li>Actuarial Value of Assets (A)</li> <li>Actuarial Liability (AL) Entry Age (B)</li> <li>Unfunded AL (Surplus) (B-A)</li> <li>Funded Ratio (A/B)</li> </ul>
46		<p>Valuation of Defined Benefit Liabilities</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report shows the Valuation date (Jan 1) for multiple years, along with the following:</p> <ul style="list-style-type: none"> <li>Complete Valuation</li> <li>Roll Forward</li> <li>Cash Balance Plans</li> </ul>
47		<p>Schedule of Retirees and Beneficiaries</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report shows the Valuation date (Jan 1) for multiple years, along with the following:</p> <ul style="list-style-type: none"> <li>Added to Roll</li> <li>Average Annual Annuities Added</li> <li>Deleted from Roll</li> <li>Average Annual Annuities Removed</li> <li>Number on Roll</li> <li>Annual Annuities</li> <li>Percentage Increase in Annuities</li> <li>Average Annual Annuities</li> <li>Percentage Increase in Average Annual Annuities</li> </ul>
48		<p>Schedule of Total Membership</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report shows the Valuation date (Jan 1) for multiple years, along with the following:</p> <ul style="list-style-type: none"> <li>Active Members Defined Benefits Plans</li> <li>Active Members Cash Balance Plans</li> <li>Retirees</li> <li>Beneficiaries</li> <li>Deferred Pension</li> <li>Inactive Members</li> <li>Total</li> </ul>
49		<p>Funded Status of Actuarial Liabilities</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report shows the Valuation date (Jan 1) for multiple years. It shows the count of the different types of employee payout liabilities.</p> <p>It also shows the active employees in defined benefits plans as the aggregate salary with the vested and non-vested employee counts.</p>

		Finally, it shows the participants in the cash balance plans with the aggregate salary with active and inactive members.
50		<p>Schedule of Active Member Valuation Data</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report has 2 sections for Defined Benefit Plans and Cash Balance Plans.</p> <p>It shows the Valuation date (Jan 1) for multiple years including the following:</p> <ul style="list-style-type: none"> <li>Number of Active Members</li> <li>Percentage Change in Membership</li> <li>Number of Participating Employers</li> <li>Percentage Change in the Number of Participating Employers</li> <li>Total Annual Payroll</li> <li>Percentage Increase (Decrease) in Payroll</li> <li>Average Annual Salary</li> <li>Average Annual Salary</li> <li>Percentage Increase (Decrease) in Average Annual Salary</li> </ul>
51		<p>Health Life Mortality Rates</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report gives a listing of ages along with the Actives (Males – RP2000+1) and (Females – RP2000+5) – Male and Female percentages by age.</p> <p>It also shows the Retirees (RP2000 Sex Distinct) – Male and Female percentages by age.</p>
52		<p>Termination Rates Before Retirement</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report shows ranges of service and the number of active members in the plan for Uniform and Municipal with percentage breakout for less than a year (&lt;25 and &gt;25) followed by the counts in the subsequent service ranges.</p>
53		<p>Disability Incidence Rates</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>The report has 2 sections for Municipal Rates and Uniform Rates with a listing of age and current valuation rate %.</p>
54		<p>Salary Scale</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>The report has a listing of age with the total rate % (including inflation).</p>
55		<p>Retirement Rates</p> <p>This report is also part of the CAFR and will be produced from detail captured in Dynamics AX for inclusion in the report.</p> <p>This report has 2 sections for Non-uniform Plan Retirement Assumptions and Retirement Rates for Uniformed Members.</p> <p>The Non-uniform Plan Retirement Assumptions displays age ranges and the current rate of normal retirement.</p>

		The Retirement Rates for Uniformed Members displays ages along with the retirement rates.
56	Schedule of Changes in Fiduciary Position	<p>This report is a columnar financial statement for each plan. The detail on this report rolls up and ties out to CAFR.</p> <p>It lists the Public Employee Retirement Commission # (PERC#) and participating municipality along with the corresponding financial detail.</p> <p>The report layout is Plan Fiduciary Net Position as of December 31/previous year + Additions – Deductions + Transfers = Plan Fiduciary Net Position as of December 31/current year</p> <p>Additions include: Employer contribution; Plan member contribution; PMRS Investment income credited to municipality; and Other net investment income (loss).</p> <p>Deductions include: Benefit payments; PMRS Administrative expense; and Additional administrative expense.</p> <p>The report also shows a grand total of all plans showing the Total, Reclassification and Adjusted Total.</p>
57	Government Accounting Standards Board Statement 68 (GASB 68)	<p>The GASB 68 statement contains several sub-report sections including: Summary of Results; Change in Net Pension Liability; Sensitivity of Net Pension Liability to Change in Discount Rate; Employees Covered by Benefits Terms; Schedule of Changes in Net Pension Liability; Schedule of Employer Contributions; Schedule of Collective Deferred Inflows and Outflows; and Calculation of Collective Pension Expense. The Appendices show: Appendix B – Reconciliation of Deferred Inflows and Outflows; Appendix C – Further Information Regarding Deferred Inflows and Outflows; Appendix D – Market Value of Assets Reconciliation.</p> <p>The Summary of Results section includes the Net Pension Liability with the Deferred Inflows and Outflows to calculate the Net Impact on Statement of Net Position. It also displays the Total Pension Expense as a \$ amount as well as a % of payroll.</p> <p>The Change in Net Pension Liability displays columns to calculate the Total Pension Liability – Plan Fiduciary Net Position = Net Pension Liability. The report shows that balance in each column at the end of the previous year. Changes for the year are displayed for categories such as (but not limited to), service costs, employer and member contributions and administrative expenses, each in the appropriate column. The report totals calculate the net change and the balance at the end of the current year.</p> <p>The Sensitivity of Net Pension Liability to Change in Discount Rate section displays a column based on a set discount rate as the base. A column to the left and to the right of the base shows the impact of a discount rate that is 1% decrease or 1% increase from than the base respectively. The categories included for the analysis include the Total Pension Liability and Plan Fiduciary Net Position calculating Net Pension Liability. The Plan Fiduciary Net Position as a Percentage of the Total Pension Liability is also displayed.</p> <p>The Employees Covered by Benefits Terms section contains the statistics for the inactive employees who are receiving and eligible but not yet receiving benefits as well as active employees and the total participant count.</p> <p>The Schedule of Changes in Net Pension Liability section displays values related to the Total Pension Liability and the Plan Fiduciary Net Position. The Total Pension Liability tracks values such as (but not limited to) service costs and benefits payments. It then displays the Net change in total pension liability along with Total pension liability – beginning and Total pension liability – ending. The Plan Fiduciary Net Position portion tracks values such as (but not limited to) contributions and administrative expenses to calculate the Net change in plan fiduciary net position. The Plan fiduciary net position – beginning and Plan fiduciary net position – ending are also displayed. The resulting calculation is the Net pension liability – ending.</p>

		<p>The Schedule of Employer Contributions section includes actuarial measurements over the last 10 measurement years if available. It is an accounting of the actuarial determined contribution along with the contributions related to that amount which determines the contribution deficiency or excess and the covered employee payroll. This is also displayed as the contributions as a percentage of the covered employee payroll.</p> <p>The Schedule of Collective Deferred Inflows and Outflows section displays the differences between expected and actual experience, changes in assumptions and the net difference between projected and actual earnings. It also shows how the amounts reported as inflows and outflows will be recognized as pension expense over the recognition period (individual 5 years and thereafter).</p> <p>The Calculation of Collective Pension Expense section has 2 subsections. The first calculates the Pension Expense including the change in net pension liability, changes in the deferred inflows/outflows and employer contributions. This is also shown as % of payroll. The second section contains pension expenses in more detail under the categories of operating expenses, financing expenses and changes.</p> <p>Appendix B – Reconciliation of Deferred Inflows and Outflows has 2 sections. The left is for Deferred (Inflows) and the right is for Deferred (Outflows).</p> <p>This includes adjustments due to investment earnings, deferred amounts for the year, recognition amounts and net changes. These values are further broken out as differences between expected and actual experience, changes in assumptions, net difference between projected and actual earnings on pension plan investments and the total.</p> <p>Appendix C – Further Information Regarding Deferred Inflows and Outflows has 3 sections for recognition of differences between expected and actual experience; recognition of changes in assumptions and recognition of net difference between projected and actual earnings on pension plan investments</p> <p>This includes from measurement year ending, remaining recognition period and remaining (inflows) and outflows. There is also additional recognition periods (multiple years).</p> <p>Appendix D – Market Value of Assets Reconciliation shows multiple breakouts of the types of valuations, including but not limited to, changes of benefits and assumptions, contributions, investment income sources, etc. It also shows breakouts by Member/Municipal Reserve, DROP Reserve, Retiree Liability, Retiree Reserve Allocation, Disability Reserve, MVA Allocation and Total.</p> <p>A combination of data from AX and actuarial input will be needed to complete all sections.</p>
58	770 – Year-end financial activity report	<p>This report is provided to employers giving them detail on the yearly activity for their municipal and member accounts. PMRS would ultimately like to be able to prepare this for them on a more real time basis (quarterly then monthly) and to enhance report to include activity for all reserve accounts (member, municipal, retiree, DROP, disability, and undistributed) included in their GASB 68 Report.</p> <p>The 770 statement contains several sub-report sections including: Summary of Municipal Reserve Account; Cash Receipts; Member Activity; Report Summary Totals; Accounts Payable Detail; Plan Member Status in PMRS; and Retiree Payments.</p> <p>The Summary of the Municipal Reserve Account section first displays the beginning amount, activity and ending amount followed by the withdrawal and deposit detail with a supporting comment. This section also provides a key to certain revenue codes.</p>

		<p>The Cash Receipts section details the date, revenue code (key provided) and amount by category which are Member, Current, Disability, Admin and Municipal.</p> <p>The Member Activity section provide details on the individual members in the plan based on several categories of contributions. It displays the Member Key (Mkey) and status along with the activity of beginning member account balance, contributions, transfers, interest withdrawals and ending member account balance in each category. Grand totals are displayed along with AP adjustments and the Adjusted totals.</p> <p>The Report Summary Totals sections display the excess int., contributions (member/municipal for member), withdrawals (deaths, forfeitures, retirements and terminations) along with the total.</p> <p>The Accounts Payable Detail section shows adjustments for the previous and current year with the Mkey, member name and amount with a total by year and grand total.</p> <p>The Plan Member Status in PMRS section shows the member name, Mkey and plan status as of the end of the year. It then shows a total count of members by status (i.e. active, vested, retired, DROP, etc.) as well as the total membership.</p> <p>The Retiree Payments section displays the Mkey, payee and yearly gross amount along with the grand total number of retirees and payment amount.</p> <p>Values for this report will be determined from the accounting detail captured in Dynamics AX. A combination of data from AX and CPAS may be needed to complete all sections.</p>
59	Act 205	<p>The Act 205 report is the Act 205 Actuarial Valuation Report. Its type is further defined by the plan such as non-uniformed or police pension plan with or without defined benefits. The sections in the report differ depending on whether the pension plan is with or without defined benefits.</p>
59a	Act 205 – Pension Plan Without Defined Benefits	<p>There are several sections to the Act 205 report including:</p> <p>Section I – Identification of Municipality.</p> <p>Section II – Identification of Pension Plan and Specification of Valuation Date</p> <p>Section III – Specification Instructions</p> <p>Section IV – General Data</p> <p>Note that sections I - IV are most likely manual as it is not accounting data related.</p> <p>Section V – Financial Data</p> <p>A - Summary of Financial Data – this includes detail such as market value, income and expenses.</p> <p>B – Specification of Contribution Rates – this section will likely also be manual</p> <p>Section VI – Summary of Demographic Data – this includes detail of the payroll, members total and member receiving benefits (broken out by type) shown as number and \$ amount</p> <p>Section VII – Certification of the Report by the Chief Administrative Officer of the Municipality – signature section.</p> <p>Schedule A – Demographic Data As Of Date</p> <p>Part I – Distribution of Active Members by Age and Service</p>

		<p>This section is a matrix with the x-axis showing groupings by age and the y-axis showing groupings by years of service. The intersection of the axis shows the number as well as the payroll amount. The total members and total annual payroll are also displayed.</p> <p>Schedule B – Financial Data As Of Date</p> <p>Section I – Schedule of Net Assets Available or Benefits as of the Valuation Date</p> <p>Part A of this section shows assets including cash, receivables, investments, etc.</p> <p>Part B shows the liabilities including accounts payable and retiree liabilities</p> <p>Part C calculates the Net Assets</p> <p>Part D shows the Balance in Forfeited Non-Vested Employer Contribution Account</p> <p>Section II - Statement of Revenues, Expenses and Change in Fund Assets for the Year Ended on the Valuation Date</p> <p>Part A – Net Assets at Beginning of the Year (Market Value)</p> <p>Part B – Revenues including contributions, interest income, transfers, etc.</p> <p>Part C – Expenses including benefit payments, insurance, administrative expenses, etc.</p> <p>Part D – Net change in market value of assets</p> <p>Part E - Net Assets at End of the Year (Market Value)</p>
59b	Act 205 – Pension Plan With Defined Benefits	<p>There are several sections to the Act 205 report including:</p> <p>Section I – Identification of Municipality</p> <p>Section II – Identification of Pension Plan and Specification of Valuation Date</p> <p>Section III – Specification Instructions</p> <p>Section IV – General Data</p> <p>Note that sections I - IV are most likely manual as it is not accounting data related.</p> <p>Section V – Financial Data</p> <p>A - Summary of Financial Data – this includes detail such as market value, income and expenses.</p> <p>B – Specification of Contribution Rates – this section will likely also be manual</p> <p>Section VI – Actuarial Data – this includes actuarial detail for the plan including actuarial present values, actuarial value of assets, normal costs, average administrative costs, annual covered payroll etc.</p> <p>There are several pages of actuarial data (which will not be held in AX) as well as an actuarial certification page.</p> <p>Section VII – Certification of the Report by the Chief Administrative Officer of the Municipality – signature section.</p> <p>Schedule A – Demographic Data As Of Date</p>

Part I – Demographic Data for Individual Retired Members

Part II - Demographic Data for Individual Members Terminated with Vesting

The above 2 sections provide member detail of current age, monthly pension payable, retirement age, type (on retired only), years of service and gender in a grid.

Part III – Active Member Data

This grid shows age, years of service, total annual payroll and gender.

For these grids, a spreadsheet may be attached if there are more members than can be listed in the space available.

Schedule B – Financial Data As Of Date

Section I – Schedule of Net Assets Available or Benefits as of the Valuation Date

Part A of this section shows assets including cash, receivables, investments, etc.

Part B shows the liabilities including accounts payable and retiree liabilities

Part C calculates the Net Assets

Part D shows the Balance in Forfeited Non-Vested Employer Contribution Account

This is similar to the Schedule B for plans without the defined benefits but it shows 2 columns for As of the Above Valuation Date and As of the Previous Year.

Section II - Statement of Revenues, Expenses and Change in Fund Assets for the Year Ended on the Valuation Date

Part A – Net Assets at Beginning of the Year (Market Value)

Part B – Revenues including contributions, interest income, transfers, etc.

Part C – Expenses including benefit payments, insurance, administrative expenses, etc.

Part D - Net Assets at End of the Year (Market Value)

This is similar to the Schedule B for plans without the defined benefits but it shows 2 columns for As of the Above Valuation Date and As of the Previous Year.

Section III - Presentation of the Determination of the Minimum Municipal Obligation (MMO) for the Plan Year Beginning in YYYY.

This includes development of the MMO (i.e. payroll, costs, amortization, expenses, member contributions, adjustments for total MMO, etc.). Delinquent MMO and interest is also displayed along with any amortization contribution reduction to give the recalculated MMO for year ended as of valuation date.

Section V – Documentation of Compliance with Act 205 Funding Standard Requirements

This section includes the Prior Year's Deficiency (may be multiple years), interest rate, monthly interest rate, amount due on payment date, minimum municipal obligation, total minimum municipal obligation, amount deposited and funding deficiency.

Section VI – Certification of Compliance with Act 205 Funding Standard Requirements (signatures section)

Schedule C – Actuarial Data as of Date

		<p>Section I – Presentation of Actuarial Present Value of Future Benefits as of the Valuation Date</p> <p>Part A - Actuarial Present Values for Active Members – benefits by type such as retirement, disability, survivor, etc.</p> <p>Part B - Actuarial Present Values for Active for Non-Active Members and Benefit Recipients – benefits by type such as deferred vested benefits, retirement benefits, etc.</p> <p>Part C – Total Actuarial Present Value of Future Benefits (without adjustments)</p> <p>Part D – Total Adjustments for Ancillary Benefits Valued through Approximation Techniques</p> <p>Part E - Total Actuarial Present Value of Future Benefits</p> <p>Section II – Unfunded Actuarial Accrued Liability and Amortization Contributions as of Valuation Date</p> <p>Part A – Initial Unfunded Actuarial Accrued Liability – grid showing amount of initial liability, date established, target date, original amortization period, remaining balance and level dollar amortization contribution.</p> <p>Part B – Changes in Unfunded Actuarial Accrued Liability since last actuarial valuation report prepared and submitted under Act 205 – grid showing source, amount of liability, date established, target date, amortization period and amortization contribution.</p> <p>Part C – Aggregation of Changes in Unfunded Actuarial Accrued Liability since initially established in YYYY – grid showing description, remaining balance of aggregated liability, date of aggregation, aggregated amortization period and aggregated amortization contribution</p> <p>The remaining sections are text only with the exception of a listing of the Development of Expected Unfunded Actuarial Accrued Liability (UAAL) (Exhibit IV) which includes the UAAL as of date, previous year (YYYY) amortization payment, current year (YYYY) amortization payment, interest to end of current year (12/31/YY) and expected UAAL as of beginning of next year (1/1/YY).</p>
60	Projections	<p>PMRS will create 3-5 year projections.</p> <p>This is a current report for PMRS.</p> <p>This report shows a Statement of Cash Receipts and Disbursements. This is shown for several years as appropriate.</p> <p>The report details a Cash Balance Beginning, Receipts, Disbursements and Cash Balance Ending.</p> <p>Receipts include:</p> <ul style="list-style-type: none"> <li>Contributions</li> <li>Interest</li> <li>Premium / Discount on Sale of Securities</li> <li>Net Investment Adjustment</li> <li>Other</li> </ul> <p>This nets to Total Funds Available</p> <p>Disbursements include:</p> <ul style="list-style-type: none"> <li>Municipal Retirement Board</li> </ul> <p>This is used to calculate the Cash Ending Balance</p>
61	System wide revenue and expenses	<p>PMRS will create system wide revenue and expense reports.</p> <p>These are current reports for PMRS.</p> <p>A sample layout for this report is needed.</p>



62	Budget Reports	<p>PMRS will create budget reports for internal use (i.e. separate from the budget that is sent to the state).</p> <p>This budget report would be defined at the division level.</p> <p>This is a current report for PMRS.</p> <p>Multiple budget reports are available as Standard reports.</p>
63	Analytical Review/Variance Reporting	<p>PMRS would like the ability to do variance reporting. Examples of variance reporting needed would include:</p> <p>Budget to Actual  Current Year to Prior Year by %  Current Year to Prior Year by \$  Year To Date</p> <p>These are not current reports for PMRS and therefore the data, calculations and format will need to be defined.</p>
64	Employee reports	<p>PMRS would like the ability to produce employee reports. Examples of employee reporting needed would include:</p> <p>Annual salaries  Total complement  YTD paid</p> <p>These are not current reports for PMRS and therefore the data, calculations and format will need to be defined.</p>
65	Monthly Flash Reports	<p>PMRS would like the ability to produce monthly flash reports as a point in time view. Examples of monthly flash reporting needed would include:</p> <p>Productivity &amp; Performance by Division  Key Financial and Operational Metrics  Workloads  Volumes  Ratios – Number of transactions processed per employee, etc.</p> <p>These are not current reports for PMRS and therefore the data, calculations and format will need to be defined.</p>
66	Daily & Monthly Bank Reconciliations	<p>AX has standard bank reconciliation reporting for unreconciled bank transactions, printed statements and bank statements.</p>
67	Outstanding bank transactions	<p>PMRS would like to have the ability to run a report to see any un-reconciled bank transactions.</p> <p>The standard AX report for unreconciled bank transactions can be used.</p> <p>Any changes needed to the standard Unreconciled bank transactions will be detailed in the design phase.</p>
68	Vendor aging report	<p>An aging period definition of 30 days, 60 days, 90 days, over 90 days can be setup to be used with the standard AX vendor aging report to analyze outstanding vendor invoices.</p> <p>Any changes needed to the standard aging report will be detailed in the design phase.</p>
69	Invoice format for CB invoices	<p>PMRS will enter customer invoices to charge their customers for administrative costs. A format for this document that is materially the same as their current invoice will be needed.</p> <p>A customization to the standard AX invoice format will be needed.</p>
70	Invoice format for DB invoices	<p>PMRS will enter customer invoices to charge their customers for their minimum municipal obligation (MMO). A format for this document that is materially the same as their current invoice will be needed.</p>

		A customization to the standard AX invoice format will be needed.
71	Invoice format for interest charges	PMRS will enter customer invoices to charge their customers for interest. A format needs to be defined for this document.  A customization to the standard AX invoice format will be needed.
72	Invoice format for new member charge	PMRS will enter customer invoices to charge their customers for new member charges when a member joins after the MMO billing has been sent out. A format needs to be defined for this document.  A customization to the standard AX invoice format will be needed.
73	Customer aging report	An aging period definition of Current, 30-90 days, 90-180 days, 180-270 days, 270-360 days, and over a year can be setup to be used with the standard AX customer aging report to analyze outstanding customer invoices. Note that it is possible to create multiple aging period definitions if needed. The aging period definition is selected at the time of report generation. Any changes needed to the standard aging report will be detailed in the design phase.
74	Customer statement	Currently PMRS does not send out customer statements. However, a customer statement report is needed such that it can be run at any time to show, for a customer, at an invoice level, the amount billed, amounts paid and the balance on their account.  The standard AX customer account statement can be used to print customer statements.  Any changes needed to the customer account statement will be detailed in the design phase.
75	Templates for collection letters	This would be handled in the AX Credit and Collections module
76	Purchase Order	PMRS will want to send a copy of a purchase order to their vendor via e-mail. A format is needed for the purchase order document.  The standard AX purchase order can used to send purchase orders to vendors.  Note that a determination may be made to add a link to the State's terms and conditions rather than attaching.  Any changes needed to the purchase order document will be detailed in the design phase.
77	12-31-YY Accounts Receivable	This report is in a spreadsheet format having 4 tabs for selected Accounts Receivable information including:  <b>Account 111</b> – This tab contains columns for PERC#, Plan Name, Debits, Credits and Balance  <b>Accounts 112, 113, 114</b> – This tab contains columns for Erkey, Ername, Current(111), Disability(112), Admin(113) and Total  <b>YYYY 799 Report</b> – YYYY is the Year ending for the report – This tab includes columns for Calcid, Cdate, Rdate, ID, Edate, JournalType, EntryType, Apptype, Accounttype, Amount, Clnt, Erkey, Calcid, Processid, ReferenceNo, Remarkid, Amend_who, Amend_When, Memo, Forfeiture, PMRS_TR, Treasury_TR, SSN  <b>YYYY-1 799 Report</b> – YYYY for previous year – this tab includes the same columns as the current year.
78	12-31-YY Cash Reconciliation	This report is in a spreadsheet format having 13 tabs. It starts with December for the previous year and has a tab for each month in the year of the report. Each tab (month) has the same format.  There are several sections (row format)

			<p>Treasury Balance – shows only a total column</p> <p>TRs &amp; REs Deposits in Transit – with a list of applicable documents</p> <p>Outstanding VTs – with a list of applicable documents</p> <p>Total (TRs, REs and VTs)</p> <p>The above sections (TRs, REs and VTs) have columns for</p> <p>CPAS Balance – no columns</p> <p>Account 100 per Trial Balance – shows only a total column</p> <p>Account 102 per Trial Balance – shows only a total column</p> <p>Total Cash Balance (Accounts 100 and 102) – shows only a total column</p>
79	12-31-YY Interest	Credited	<p>This report is in a spreadsheet format having a single tab. It is showing interest credited to 2 accounts:</p> <p>Disability Reserve Account</p> <p>Retired Members Reserve Account</p> <p>By account, it shows the beginning balance, the interest percent applied and the result.</p> <p>It also shows the ending balance, the interest percent applied and the result.</p> <p>After these 2 sections, there is another section for the 2 accounts.</p> <p>For the Disability account, it shows:</p> <p>Beginning balance 1/1/YY Add: Contributions Plus: Disability Transfers Total</p> <p>For the Retiree account, it shows:</p> <p>Bal Before Closing Entries Plus: Retiree Transfers Less: Retiree Payments Total</p>

80	YYYY Budget by Month	<p>This report is in a spreadsheet format having 3 tabs with Budget information including:</p> <p><b>Monthly Information Summary</b></p> <p>There are several sections on this tab</p> <p>The first sections show expenses at a summary level</p> <p>First</p> <p>Operating Expenses = Personnel and Non-Personnel categories</p> <p>Personnel expense show the amounts as well as the total complement and total filled</p> <p>Next</p> <p>The non-personnel expense includes:</p> <ul style="list-style-type: none"> <li>Office expenses</li> <li>Client communications and travel</li> <li>Employee professional development</li> <li>Professional Services</li> <li>Information Technology</li> <li>State Shared Services Allocations</li> </ul> <p>Total Operating Expenses</p> <p>Fixed Asset Purchases is also shown with several types of purchases and a total.</p> <p>There is an overall total for operating expenses plus fixed asset purchases.</p> <p>The columns include the following:</p> <p>YYYY total budget in that category</p> <ul style="list-style-type: none"> <li>Monthly actuals</li> <li>Quarterly totals</li> <li>Total YTD</li> <li>% of Budget</li> </ul> <p><b>Monthly Information Detail</b></p> <p>This tab contains the same categories (i.e. operating, office, client communications, etc.). However, each category has a more detailed breakout of expenses. There is also a greater level of detail under the fixed assets section. The column layout is the same as well.</p> <p><b>GL Listing</b></p> <p>The GL Listing tab is a list of GL accounts with some additional cross-reference information. Note that this also includes some external data (source?)</p> <p>The columns are:</p> <ul style="list-style-type: none"> <li>GL Long Text</li> <li>GL</li> <li>Cmmt Item</li> <li>GL Long Text</li> </ul>
81	Accounting Summary	<p>This report is in a spreadsheet format having a tab for each month to be included as a rolling report.</p>

		<p>Each month has the same layout:</p> <p>Columns:</p> <p>Month Year-to-Date Year-to-Date One Year Ago</p> <p>Rows:</p> <p>Revenue (Cash Basis)</p> <ol style="list-style-type: none"> <li>1. Contributions</li> <li>2. Net Investment Related Income</li> <li>3. Value as Cost of Investments Sold</li> </ol> <p>Expenses (Cash Basis)</p> <ol style="list-style-type: none"> <li>1. Retirement &amp; Disability</li> <li>2a. Refunds to Members</li> <li>2b. Refunds Due to Withdrawn Plans</li> <li>3. Investments Purchased, Accrued Interest Purchased</li> <li>4. Investment Management Expenses</li> <li>5. Administrative Expenses</li> </ol> <p><b>This spreadsheet has links to an external source. Further definition will be needed to define the relationship to this data.</b></p>
82	12-31-YY Financial Statements	<p>This report is in a spreadsheet format having 20 tabs with Financial statement information at multiple levels spanning the year of the report and 2 previous years. The tabs included for each of the years differs.</p> <p><b>YYYY Adjusting Entries</b></p> <p>This tab lists the detail of adjusting journal entries. The columns include:</p> <p>Adj Entry – year or sequential number J/E – journal entry number Description GL# - GL account number Debit Credit Reversing – Yes or No</p> <p><b>YYYY Plan Withdrawals</b></p> <p>This tab lists plan withdrawals for the year by municipality and account. A single municipality may have multiple rows for multiple accounts. The columns include:</p> <p>Municipality PERC # Acct # Reason Amount</p> <p>There is a total row for each municipality and a grand total.</p> <p><b>YYYY Closing Entries</b></p> <p>This tab is similar to the adjusting entries. It lists the detail of closing journal entries with the key being the gain and loss summary account. The columns include:</p>

Sequential number  
Journal entry number  
Description  
GL# - GL account number  
Debit  
Credit  
Gain and Loss Summary amount as positive or negative ()

**YYYY GASB Database**

This tab contains a significant number of columns without any real identifier. This data will come from Dynamics AX and CPAS. However, more information can be determined during the design phase. The columns include:

Erkey  
Ename  
Type – DB or DC  
Link  
Blank Column  
Acct\_Rec  
B1..B22  
BFOOT1  
B23  
B24

**YYYY TB**

This tab shows 2 versions of the Trial Balance. One with the adjusting entries and one with the closing entries. They are shown side by side. The adjusting entries version has several extra columns with additional data but it is unclear as to the origin or the date represented. This will need to be defined in the design phase.

The columns include:

**TB After Adjusting Entries**

Account – Description  
Account  
Debits  
Unnamed column  
Credits  
Unnamed column  
Unnamed column

**TB After Closing Entries**

Description  
Account  
Debit  
Credit

**YYYY Post Closing TB**

This tab is the post-closing trial balance for the reporting and the previous year. The columns are the 'standard' trial balance columns:

Category  
Report Year Total  
Previous Year Total

Categories/sub-categories include:

Assets  
Total Assets  
Total Receivables  
Fixed Assets – net of depreciation  
Deferred outflows  
Total Assets

Liabilities and Reserves  
Total Liabilities  
Deferred inflows  
Total Reserves  
Total Liabilities and Reserves

Undistributed Earnings as a percentage of total assets

**YYYY Plan Additions**

This tab lists plan additions for the year by municipality and account. A single municipality may have multiple rows for multiple accounts. The columns include:

Date  
PERC #  
Name  
Amount  
GL Account  
Account (Member or Municipal)

There is a total row by member and municipal and a grand total.

**YYYY Statements**

This tab displays multiple reporting sections representing multiple perspectives on financial data.

The left side is the

Statement of Fiduciary Net Position

This has columns for:

Category  
Current Year Total  
Previous Year Total  
\$ Change  
% Change

For some categories, there are 2 additional columns, which may be hidden, that show the previous year's total and reclassification where the previous year column is then the restated value.

The top section is similar to a trial balance format with:

Assets  
Deferred outflows of resources  
Liabilities  
Deferred inflows of resources

Resulting in the Net position restricted for pensions

The lower left section is the Statement of Changes in Fiduciary Net Position which shows the additions and deductions to give the net increase or decrease resulting in the Net position restricted for pensions.

This is followed by:

Balance, beginning of year  
Effect of change in accounting principle  
Balance, beginning, as restated  
Balance, end of year

The upper right side section is the Management Discussion and Analysis - Summary of Fiduciary Net Position.

This follows the same format as the Statement of Fiduciary Net Position but in less detail by category. This is comparing 3 years with Change in \$ and Change in %.

There is also a Summary of Changes in Fiduciary Net Position.

The final section on this tab is **the** Asset Distribution at Fair Market Value. This lists categories of assets for 3 years with the % of the total shown as well.

#### **AnnuityPayrollYYYY-2Recon**

This tab shows payroll information in several sections and formats for withdrawals, refunds, drop and retirement.

The summary shows 2 years by category with the increase/decrease amount as well as %.

Foot notes are included.

Detail is also shown and differs with respect to each account. The format and inclusions would need to be defined further during the design phase.

Several other sections are showing selected data from payroll. The format and inclusions would need to be defined further during the design phase.

#### **YYYY -2 TB after adjust**

This tab is similar to the YYYY Statement tab. This tab shows 2 versions of the Trial Balance. One with the adjusting entries and one with the closing entries. They are shown side by side.

The format is slightly different but it is likely only one format is needed.

#### **YYYY -1 Statements**

This tab has several sections of Statement of Plan Net Position referencing multiple years.

The first shows selected categories of Assets and Liabilities with the resulting Net Assets Held In Trust For Pension Benefits.

The next view of Statement of Plan Net Position showing additions, investments, deductions and net increase with the resulting Net Assets Held In Trust For Pension Benefits. Beginning and Ending balances for the year are included.

The next view is an analysis of plan assets with select assets and liabilities with the resulting Total Net Plan Position.



The final section is the Summary of Changes in Plan Net Position for 2 years, and the change between the years, showing the Additions, Deductions resulting in the Net Assets Held In Trust For Pension Benefits.

**YYYY-1 TB after adj**

This tab is similar to the YYYY Statement tab. This tab shows 2 versions of the Trial Balance. One with the adjusting entries and one with the closing entries. They are shown side by side.

The format is slightly different but it is likely only one format is needed.

**AnnuityPayrollYYYY-1**

This tab shows payroll information in the same manner as the AnnuityPayrollYYYY-2Recon tab.

The format and inclusions would need to be defined further during the design phase.

**2014 GASB 68 Adj**

This tab shows Adjustments to Financial Data due to Transfers into and out of Individual Plans.

The top section is showing:

Employer Code  
Employer  
Benefit Payment Adjustment  
Employer Contribution Adjustment  
Member Contribution Adjustment  
Transfer Adjustment.

The bottom section is Other Adjustments along with the Adjusted Total, CAFR Difference and Variance. This section will to be defined further during the design phase.

**CB Other Misc Adjustments**

This tab shows the Cash Balance Other Miscellaneous Adjustments. This includes the employer code, employer and benefit payment adjustment.

A total is also calculated/displayed.

**YYYY-1 GASB 68 reclassification**

This tab is a CAFR reconciliation. For the categories of members + municipal, disability, drop, retired members and undistributed earnings. Those amounts are the CAFR. The CPAS by Plan is displayed and the variance between the CAFR and CPAS by Plan.

Categories for the columns are:

Beg Balance YYYY  
Member Contributions  
Employer Contributions  
Credited Interest  
Assessments  
Annuity Benefits  
Transfers

YYYY-1 DROP Reserve Adjustment Posted in YYYY  
Net Investment Income  
Administrative Expenses  
YYYY Ending Balance  
Variance

**UndistEarnings**

This tab displays detail of undistributed earnings including:

Beginning Balance YYYY (i.e. ending balance from previous year)  
Effect of change in accounting principle  
Prior Year Adjustment  
Transfers throughout YYYY  
Calculates - Balance Before YYYY Closing Entries

The closing entries include additions:

Municipal Assessments – Admin  
Interest and Dividends Income  
Realized Gains on Investments  
Miscellaneous Revenue  
Unrealized Losses on Investments

Deductions of:

Admin Expenses / Manager Fees  
5.5% Interest Credited to Reserve Accounts (shown by reserve account level)

Along with the Current Year Adjustment and Prior Period Adjustment, the Undistributed Earnings are calculated.

Another section on the lower portion displays the Undistributed Earnings Balances As Of:

For the year end 12/31/YY for multiple prior years.

**DisabActivity**

This tab shows activity in the disability reserve account for the YYYY.

Beginning Balance

Termination/Retirement amounts listed for each applicable member including the Mkey, the amount and the ERKEY (PERC#)

This is sub-totaled.

Additions are made for transfer and contributions as well as interest resulting in the Ending Balance of the Disability reserve account

**Drop Activity**

This tab shows activity in the drop reserve account for the YYYY.

Beginning Balance

Add- 12/31/YY TB Members  
Transfers  
Interest  
Sub-total

		<p>Less - 12/31/YY Trial Balance</p> <p>Withdrawal amounts listed for each applicable member including the Mkey and the amount</p> <p>Ending Balance</p> <p><b>Reserve Transfers</b></p> <p>This tab is a listing of reserve transfers listed at several account levels. The listing includes:</p> <p>Date ID 211 Amount (member reserve account) 212 Amount (municipal reserve account) 213 Amount (disability reserve account) 219 Amount (retiree reserve account) 290 Amount (undistributed earnings account) CType PERC Memo</p> <p>There are no totals.</p> <p><b>This spreadsheet has links to an external source. Further definition will be needed to define the relationship to this data.</b></p>
83	12-31-YY Fixed Assets & Accrued Expenses	<p>This report is in a spreadsheet format having 13 tabs with Fixed Asset and Accrued Expenses information including:</p> <p><b>12-31-YY Fixed Assets</b></p> <p>There are several sections on this tab</p> <p><b>12-31-YY Accrued Expenses</b></p> <p>This tab shows accrued expenses in several categories.</p> <p>The top section shows the current and previous year with a calculation of the variance by amount and %.</p> <p>The categories are:</p> <p>Investment Management Fees Administrative Expenses Net Pension Liability OPEB Liability Compensated Absences Total</p> <p>The bottom section shows more detail on the administrative expenses including:</p> <p>Administrative Expense Total Administrative Expense per Daily Tabs Reversal of Prior Year Accruals Fixed Asset Additions Current Year Accruals Total Administrative Expenses</p> <p><b>12-31-YY Investment Fees</b></p>

This tab shows investment management expenses. It displays detail by quarter at a manager level as well as FYE adjustment and total fees for the year.

An additional column is displayed for accrued investment fees.

There are sub-totals by asset class between the categories on manager types resulting in a Total Manager Fees.

Additional fees of BNY Mellon Custody Fee and BNY Mellon Out of Pocket Expenses are added to calculate the Total Investment Fees.

A section of this tab also shows the amount and total by the categories of Domestic, International, Fixed Income and Real Estate.

#### **12-31-YY NPL & OPEB**

This tab as links to external e-mail messages. Further research is needed on this in the design phase.

#### **12-31-YY Compensated Absences**

This tab shows detail for compensated absences for the year. It shows the employee and hourly rate with the hours and liability for the following categories:

Annual  
Personal  
Sick (also shows max rate)

The total liability, sick days and sick max hours are shown for each employee.

Totals are also calculated across all employees in each category.

The lower section of the tab shows the accrued liability for Annual, Sick and Personal with the total.

Note that this tab also has a link to an external source as well as a section on sick policy. This will need to reviewed and defined during the design phase.

#### **Compensated Absences**

This tab is showing the compensated absences and the difference in the amount paid out year over year. The sample report was showing 12 years.

The columns displayed are date (12/31/YY), amount and difference (from the previous year).

Note that this tab also displays the journal entry for the accrual as well as a section on sick policy. This will need to reviewed and defined during the design phase.

#### **YYYY Administrative Expenses**

This tab shows the administrative expenses as a breakout by category. The category breakout (further broken down for detail) is:

Personnel Costs  
Professional Costs  
Communication Costs  
Other Services and Charges

These are the total administrative Costs

Total Fixed Assets costs are displayed next resulting in the Total operating and capital budget.

The columns displayed include:

Current Year Budget  
Current Year Actual  
\$ Change  
% Change

Previous Year Budget  
Previous Year Actual  
\$ Change  
% Change

Current Year Actual  
Previous Year Actual  
\$ Change  
% Change

**AP after 3-31-YY+1**

This tab shows **the** Outstanding YYYY Administrative Expenses after 3/31/YYYY+1 (i.e. outstanding payables from the previous year still outstanding after the first quarter of the next year). The following information is included:

GL#  
Description  
Vendor#  
Amount  
Notes

The total amount is also shown.

**12-31-YY Accrued Payroll**

This tab displays detail of personnel costs paid out with respect to several time periods. The report displays:

- (2) Paid in January
- (3) Payroll \*Pd in January
- (4) Paid in February
- (5) Paid after February\*
- (1) Less YYYY items paid in YYYY-1
- (6) Total Accrual = (Sum 2-5) – (1)

Another section is showing a more detailed breakout by cost category as well as showing some payroll date breakout.

It is unclear as to what dates should be included on this report. For example, are months added over the course of the year such that a complete year is displayed by the end of the year to result in the accrual amount for year end?

This will need to be reviewed and defined during the design phase.

**YYYY Budget**

This tab is showing a breakout of the budget categories at various levels to create the total budget. With respect to a structure, it is displaying:

Operating Expenses

Personnel Expenses  
Total Personnel Expenses  
Total Complement  
Total Filled

Non-Personnel Expenses  
Total Office Expenses  
Total Client Communications and Travel  
Total Employee Professional Development  
Total Professional Services  
Total Information Technology  
Total State Shared Services Allocations  
Total Non-Personnel Expenses  
Total Operating Expenses

Fixed Assets Purchases

IT Hardware  
Total IT Hardware

Other Assets  
Total Other Assets Purchases  
Total Fixed Assets

Total Operating and Fixed Asset Expenses

There are a number of columns on this tab, some of which are hidden. The columns prior to Categories (GL Code 1..GL Code 7 and Category Description) should be reviewed and defined further during the design phase.

The main columns are:

Category  
YYYY Budget  
Total (YTD) as of 12/31/YY  
% of Budget  
Q1 (for YYYY+1)  
Total (YTD) as of 3/31/YY+1  
% of Budget

Between Category and YYYY Budget, the monthly columns and Q1..Q4 columns are hidden. These should also be reviewed.

Likewise, the Jan, Feb and Mar columns for the next year are hidden.

#### **YYYY-1 Budget**

This tab shows the line item budget for the previous year.

The flow of this tab is top to bottom by month rather than on a columnar basis per month.

The first representation is for the previous year's expenses paid in this year followed by the single monthly sections.

The sections have the same format of columns:

Account Number  
Category  
Expenditure  
YYYY-1 or Month Name Expenditures  
Year to Date Expenditures  
Amount Budgeted

		<p>% Paid of Amount Budgeted</p> <p>The categories and totals are:</p> <p>Personnel  Subtotal Personnel  Operational Expenses  Subtotal Operational Costs  Fixed Assets  Subtotal Fixed Assets</p> <p><b>OfficeRent</b></p> <p>This tab shows the rent for 1 office building for several years.</p> <p>The first section has the rent for the PMRS Lease with Penn State and shows:</p> <p>Dates of Lease  Beginning and End Dates  Sq. Ft  Cost per Sq. Ft.  Annual Cost  Monthly Cost  Comment (i.e. Current Lease or Option to Extend)</p> <p>This will need to be reviewed and defined during the design phase.</p> <p><b>250 – Accounts Payable</b></p> <p>This tab shows that 794 - Report of Details for 250 for Year YYYY</p> <p>The columns include:</p> <p>Date  ID  Account  Debits  Credits  Memo</p> <p>Details of an adjusting journal entry are also shown in the sample report. This will need to reviewed and defined during the design phase.</p>
84	12-31-YY Investments	<p>This report is in a spreadsheet format having 24 tabs with Investments information including:</p> <p><b>TB before Adj Entry</b></p> <p>This tab is an account listing for a trial balance which includes:</p> <p>Account (description)  Debits  Credits</p> <p>A total is also shown.</p> <p><b>Adjusting Entries</b></p> <p>This tab lists the detail of adjusting journal entries. The columns include:</p> <p>Adj Entry – year or sequential number  J/E – journal entry number  Description  GL# - GL account number</p>

Debit  
Credit  
Reverse – Yes or No

**TB After Invest Adj**

This tab is an account listing for a trial balance which includes:

Account (description)  
Debits  
Credits

A total is also shown.

**CostMarket Work papers**

This tab contains information on investments with respect to Cost and Market. Categories and break-outs of investments (i.e. Domestic Equities/Polen and Real Estate/Forest) are listed with the Cost and Market values. The GL account number is also listed.

Another section of this tab is showing the General Ledger Interim Reconciliation Prior To Posting Adjusting Entries for several account types (i.e. Cash, Int'l Equities).

This shows:  
Account  
Description  
Trial Balance Before Adjusting Entries  
Trade Date Purchases (DR)  
Trade Date Sales & Late Day Dividends (CR)  
Reclassify Non-base Currencies (CR#103)  
J/E For Cost  
J/E For Market Unrealized  
Real Estate Manager Cash (DR#103)  
Adjusted Balances  
Final Market Spreadsheet  
Difference

Total are also shown. Further definitions for this report will be needed in the design phase.

**Investment Reconciliation**

This tab displays investment reconciliation to BNY Mellon and Dahab detail by types of investments.

The investments are listed as the name, an identifier and type. For example:

BMO Asset Management  
CPU FEQ0132  
Small Cap

The columns represent the Statement of Net Assets Available for Benefits with columns representing:

Investments:  
Cost  
Cost of Foreign Currency  
Unrealized Appreciation-Invest  
Unrealized Appreciation-Currency  
Unrealized on Foreign Currency  
Total



Receivables:  
Securities Sold  
Interest  
Dividends  
FFX Contracts  
Total

Foreign Currency Fluctuations:  
Receivable For Securities Sold  
Dividend Receivable  
FFX Contract Receivable  
Total

Cash  
Total Assets

Payables:  
Securities Purchased  
FFX Contracts  
Foreign Taxes – Dividend  
Total

Foreign Currency Fluctuations:  
Payable for Securities Purchased  
Foreign Taxes Payable – Dividend  
FFX Contracts Payable  
Total

Total Liabilities  
Net Assets

Investment Distribution (Market Value):  
Cash Equivalents  
Equity  
Real Estate  
Total

Dahab - Investment Distribution:  
Cash Equivalents  
Large Cap Equity  
Small Cap  
Int'l Equity  
Emerging Markets  
Fixed Income  
Real Estate  
Total

A lower section on this tab is showing selected asset types with associated values.

Further definition of this report would be needed during the design phase and particularly with respect to how much of this level of data will be recorded in AX.

### **Book and Market Summary**

This tab is the BNY Mellon - Book and Market Summary

It includes:

Source Account Number  
Source Account Name

Book Value  
Market Value  
Accrued Income  
Total Net Assets  
Unrealized Gain/Loss  
Total Net Assets%

Another section on this tab is showing the BNY Mellon Total Net Assets with deductions and additions for the resulting 12/31/YY Total Net Assets

### **Cash #100 In Transit**

This tab shows by day for December, cash account activities as:

- \*Contributions
- \*Sale of Investments
- \*Gain (Loss) on Sales
- \*Investment Income
- \*Misc. Income
- \*STIF Interest – Pool 924
- \*STIF Interest – Pool 999
- \*Purchase Investments
- \*Benefit Payments
- \*Admin Expense
- \*Mgr Fees – Pool 924
- \*Mgr Fees – Pool 999
- \*Transfer to (from) 999 from 924
- \*Transfer from (to) 999 from 924

Non-Invest STIF = Contributions + Misc. Income + STIF Interest – Pool 999 + Benefit Payments + Admin Expense + Mgr Fees – Pool 999 + Transfer to (from) 999 from 924

Invest STIF = Sale of Investments + Gain (Loss) on Sales + Investment Income + STIF Interest – Pool 924 + Purchase Investments + Purchase Investments + Transfer from (to) 999 from 924

Ending Cash = Ending cash from previous line + Sum of \* items

Ending STIF = Ending STIF from previous line - Non-Invest STIF - Invest STIF

Uninvested Cash  
Pool 924  
Pool 999

Total = Uninvested Cash + Pool 924 + Pool 999

Calculation = Ending STIF - Total

Totals are also shown for each column.

After this monthly listing are Intransits listed with the Account and amounts in the appropriate columns.

There is also a section showing columns of Pool 924 + Pool 999 = Total STIF.

The categories are:

Beginning Balance  
Current Month Purchases  
Current Month Sales  
Total

Pool Participant Balances Report  
Variance

These 2 sections need to be reviewed and defined further during the design phase.

**J5\_6Pending Transactions**

This tab appears to be details of a journal entry that is a consistently definable entry

This needs to be reviewed and defined further during the design phase.

**JE8\_MgrForeign Currency**

This tab appears to be details of a journal entry that is a consistently definable entry.

This needs to be reviewed and defined further during the design phase.

**CostMarketJE9\_10**

This tab appears to be details of a journal entry that is a consistently definable entry.

This needs to be reviewed and defined further during the design phase.

**Effective Exposure Summary**

This tab displays the BNY Mellon Effective Exposure Summary as of December 31, YYYY

The columns are:

- \*Currency Name
- \*GL Account
- \*Market Exposure
- \*Equity
- \*Short Term
- \*Payables
- \*Receivables

Total = Sum of \* items

These are also totaled for each column.

After the foreign currencies, there is a row for US Dollar for the same categories.

Further, Market Exposure and Equity + Total are shown for:

Real Estate  
TIAA-CREF  
FOREST  
PRIA

A grand total is then displayed.

Another section is showing:

Category  
Market Value  
Market Equity  
As of Date

A grand total is displayed first in this table followed by the foreign currencies and US Dollar.

**JE11\_RealEstate Mgr Fee**

This tab shows the Real Estate Manager Fees Deducted From Reinvested Income - Year Ended December 31, YYYY.

This is shown for Prudential with columns:

PRISA I	
PRISA	II
Short-Term	
Total	

This is shown by quarter and the total

The next sections is TIAA-CREF which has a total for each quarter, a total for FYE Adjustment with an overall total.

A total of both accounts is shown.

The details of the journal entry made at year end for the activity for the entire year.

DR - Investments - Management Expense  
CR - Interest – PRISA  
CR - Interest - TIAA-CREF

**JE12\_Accrued Mgr Fee**

This tab shows the Accrued Investment Management Expenses for the Year Ending December 31, YYYY.

The columns are:

Manager  
Amount  
Year-Quarter(s)

The amounts are totaled.

The bottom section shows the journal entry for the total – posting a DR to Investments - Management Expense and a CR to Accrued Expenses to record investment management payable at 12/31//YY.

**JE13\_Income Receivable**

This tab appears to be details of a journal entry that is a consistently definable entry.

This needs to be reviewed and defined further during the design phase.

**YYYY Manager Fees**

This tab shows investment management expenses. It displays detail by quarter at a manager level as well as FYE adjustment and total fees for the year.

An additional column is displayed which will need defined as the sample data calculation is inconsistent.

There are sub-totals between the categories on manager types resulting in a Total Manager Fees.

Additional fees of BNY Mellon Custody Fee and BNY Mellon Out of Pocket Expenses are added to calculate the Total Investment Fees.

A section of this tab also shows the amount and total by the categories of Domestic, International, Fixed Income and Real Estate.

**YYYYvsYYYY-1 Mgr Fee**

This tab shows investment management expenses. It displays detail for the current and previous year at a manager level along with the \$ Change, % Change and Variance Explanations.

There are sub-totals between the categories on manager types resulting in a Total Manager Fees.

Additional fees of BNY Mellon Custodian Fee and BNY Mellon Out of Pocket Expenses are shown, which are sub-totaled then added to an overall total.

A section at the bottom of this tab also shows Market Values in a similar layout for category, current year, previous year and changes.

This section also includes Cash (unallocated)

**Mgr Fund changes YYYY-1 & YYYY**

This tab show details of amounts for the Manager Fund.

The columns are:

Date  
Amount  
Description  
YYYY Allocations

**DECYYYY**

This tab is the same format as item 52 - Asset Allocation YYYY

**Asset Allocation Dec YYYY**

This tab is the same format as the left side of item 52 - Asset Allocation YYYY

**Detailed Cash Statement – Prior**

This tab lists the **BNY** Mellon - Detailed Cash Statement (Prior Day Late) – December 31, YYYY.

The columns included are:

Reporting Account  
Reporting Account Name  
Affiliate  
Source Account  
Source Account Name  
Payable / Receivable Category  
Transaction Category  
Cusip  
Transaction Description 1  
CMS Number  
Shares  
Trade Date

Contract Settle Date  
Report Date  
Principal Amount  
Interest Amount  
Local Amount  
Site  
Currency Name  
Currency Code  
Create Date

**Broker Commissions Paid**

This tab lists the BNY Mellon – Broker Commissions Paid for Year Ending December 31, YYYY.

The columns included are:

Category  
Broker Name  
Base Commission  
%  
Calendar Commission  
%  
Fiscal Commission  
%

**SecLend Done**

This tab is showing Gross/Net Securities Lending Income - Year Ended December 31, YYYY.

There is one section per month top to bottom.

Each month shows rows for:

Mellon  
Less Penalty for leaving program  
Treasury – Interest  
SSgA

With columns for:

Gross  
Expenses  
Net

**Top Holdings**

This tab lists the BNY Mellon – Top 10 Holdings for Active Managers – December 31, YYYY

The columns included are:

Category  
ISIN  
Security  
Description 1  
Share par  
Market Value  
Percent  
Date

ID

		<p><b>Pending Foreign Exchange Contra</b></p> <p>This tab lists the BNY Mellon – Pending Foreign Exchange Contracts – December 31, YYYY</p> <p>The columns included are:</p> <p>Reporting Account Number  Source Account Number  Source Account Name  Transaction Number  Trade Date  Settle Date  Payable Description  Receivable Description</p> <p>FX Contract Rate  Exchange Rate  Payable Units  Receivable Units  Payable Base Cost  Receivable Base Cost  Payable Base Market Value  Receivable Base Market Value  Payable Unrealized Gain/Loss  Receivable Unrealized Gain/Loss  As-Of Date  Report Run Date  FX Payable Ccy Code  FX Receivable Ccy Code</p>
85	YYYY GASB 68 Financial Data by Plan	<p>This report is in a spreadsheet format having 11 tabs with CAFR information including:</p> <p><b>YYYY CAFR</b></p> <p>This tab displays the Statement of Fiduciary Net Position as well as the Statement of Changes in Fiduciary Net Position.</p> <p>Statement of Fiduciary Net Position</p> <p>This has columns for the Category, Current Year Total, Previous Year Total, \$ Change and % Change</p> <p>The top section is similar to a trial balance format with:</p> <p>Assets  Deferred outflows of resources  Liabilities  Deferred inflows of resources</p> <p>Resulting in the Net position restricted for pensions</p> <p>The lower left section is the Statement of Changes in Fiduciary Net Position which shows the additions and deductions to give the net increase or decrease resulting in the Net position restricted for pensions.</p> <p><b>YYYY CAFR Reserve Rollforward</b></p> <p>This tab is a showing CAFR detail for a number of categories:</p> <p>Members</p>

Municipal  
Disability  
DROP  
Retired members  
Undistributed earnings

Totals are calculated for each column as well as showing the CPAS amount where applicable and the Variance

Categories for the columns are:

Beg Balance YYYY-1  
Effect of change in accounting principle  
Reserve Adjustment  
Beg Balance YYYY-1, as restated  
Employer Contributions  
Member Contributions  
Transfers from Other Plan Administrators  
Credited Interest  
Assessments  
Annuity Benefits and Terminations  
Transfers to Other Plan Administrators  
Transfers  
Net Investment Income (Loss)  
Miscellaneous Revenue  
Administrative Expenses  
12/31/YY Ending Balance  
Variance

**YYYY CAFR Reconciliation**

This tab is a CAFR reconciliation. For categories of members, municipal, disability, drop, retired members and undistributed earnings. Those amounts are the Total CAFR. The CPAS by Plan is displayed and the variance between the CAFR and CPAS by Plan.

Categories for the columns are:

Beg Balance YYYY-1  
Effect of change in accounting principle  
Reserve Adjustment  
Beg Balance YYYY-1, as restated  
Employer Contributions  
Member Contributions  
Transfers from Other Plan Administrators  
Credited Interest  
Assessments  
Annuity Benefits and Terminations  
Transfers to Other Plan Administrators  
Transfers  
Net Investment Income (Loss)  
Miscellaneous Revenue  
Administrative Expenses  
12/31/YY Ending Balance  
Variance

**YYYY Memb & Mun Reserve by Plan**

This tab is providing detail on the member and municipal reserves. The detail listed includes:

ERKEY (PERC#)



ERName  
 Type  
 Member Beginning Balance  
 Municipal Beginning Balance  
 Beginning Balance = Member + Municipal  
 Employer Contributions  
 Municipal for Member Contributions  
 Member Contributions  
 Member Transfers from Other Plan Administrators  
 Municipal Transfers from Other Plan Administrators  
 Transfers from Other Plan Administrators = (Member + Municipal Transfers)  
 Member Credited Interest  
 Municipal Credited Interest  
 Credited Interest = (Member + Municipal Interest)  
 Member Terminations  
 Member Transfers to Other Plan Administrators  
 Municipal Transfers to Other Plan Administrators  
 Transfers to Other Plan Administrators = (Member + Municipal Transfers)  
 Forfeitures  
 Member Reserve Transfers  
 Municipal Reserve Transfers  
 Transfers = (Member + Municipal Transfers)  
 CAFR Municipal Ending Balance  
 CAFR Member Ending Balance  
 CAFR Ending Balance = ( Beginning Balance + Employer Contributions + Member  
 Contributions + Transfers from Other Plan Administrators + Credited Interest +  
 Member Terminations + Transfers to Other Plan Administrators + Transfers)

**YYYY Member Account**

This tab is providing detail on the member accounts. The detail listed includes:

ERKEY (PERC#)  
 ERName  
 Type  
 Member Beginning Balance  
 \*Employer Contributions (Municipal for Member)  
 \*Member Contributions  
 \*Member Transfers from Other Plan Administrators  
 \*Member Credited Interest  
 \*Member Terminations  
 \*Member Transfers to Other Plan Administrators  
 \*Forfeitures  
 Net Changes = Sum of \* items  
 Ending Balance Calculated = Member Beginning Balance + Net Changes  
 Ending Balance (definition of calculation needed)  
 Check = Ending Balance Calculated – Ending Balance

**YYYY Municipal Account**

This tab is providing detail on the Municipal accounts. The detail listed includes:

ERKEY (PERC#)  
 ERName  
 Type  
 Municipal Beginning Balance  
 \*Employer Contributions  
 \* Municipal Transfers from Other Plan Administrators  
 \* Municipal Credited Interest  
 \* Municipal Terminations  
 \* Municipal Transfers to Other Plan Administrators  
 \*Forfeitures

Net Changes = Sum of \* items  
Ending Balance Calculated = Municipal Beginning Balance + Net Changes  
Ending Balance (definition of calculation needed)  
Check = Ending Balance Calculated – Ending Balance

**YYYY Retiree Activity by Plan**

This tab is providing detail on the Retiree activity. The detail listed includes:

ERKEY (PERC#)  
ERName  
Type  
Beginning Balance  
1099 Database  
Refunds/Reissued Payments not included on 1099 File  
Ret Refunds/Reissued Payments not included on 1099 File and incorrectly posted to member account  
Member Reserve Terminations  
DROP Annuity Benefits  
Annuity Benefits = 1099 Database + Refunds/Reissued Payments not included on 1099 File – (Member Reserve Terminations + DROP Annuity Benefits)  
Transfers to Other Plan Administrators  
Transfers  
Credited Interest  
Ending Balance (definition of calculation needed)

**YYYY Disability Activity by Plan**

This tab is providing detail on the Disability activity. The detail listed includes:

ERKEY (PERC#)  
ERName  
Type  
Beginning Balance  
Employer Contributions  
Transfers  
Credited Interest  
Ending Balance (definition of calculation needed)  
MMO  
Surplus Transfers  
Total Employer Contributions = (MMO + Surplus Transfers)  
Other Transfers (Transfers + Surplus Transfers)

**YYYY DROP Activity by Plan**

This tab is providing detail on the Disability activity. The detail listed includes:

ERKEY (PERC#)  
ERName  
Type  
\*Beginning Balance  
\*Interest  
\*Annuity Benefits  
\*Transfers  
Ending Balance (definition of calculation needed)  
Calculation column = (Sum of \* items) – Ending Balance

**YYYY Undist Activity by Plan**

This tab is providing detail on the Undistributed activity. The detail listed includes:

		<p>ERKEY (PERC#)  ERName  Type  *Beginning Balance  Effect of change in accounting principle  Beginning Balance, Restated  Transfers  YYYY-2 AP for Terminations Paid in YYYY-1  YYYY-1 AP for Terminations Paid in YYYY  Revised GASB 25 Ending Balance  Assessments  Credited Interest  Net Investment Income  Miscellaneous Revenue  Administrative Expenses  Ending Balance (definition of calculation needed)  *GASB Database  *Surplus Transfer to Undistributed Earnings  *Municipal Transfer to Undistributed Earnings  12/31/YY-1 Accounts Receivable  12/31/YY Accounts Receivable  Total = (Sum of * items)-(Sum Accounts Receivable)  Variance = Assessments - Total</p> <p><b>YYYY Retiree&amp;DisabilityRegInt</b></p> <p>This shows the interest credited to 2 accounts:</p> <p>Disability Reserve Account</p> <p>Retired Members Reserve Account</p> <p>By account, it shows the beginning balance, the interest percent applied and the result.</p> <p>It also shows the ending balance, the interest percent applied and the result.</p> <p>After these 2 sections, there is another section for the 2 accounts.</p> <p>For the Disability account, it shows:</p> <p>Beginning balance 1/1/YY  Add: Contributions  Plus: Disability Transfers  Total</p> <p>For the Retiree account, it shows:</p> <p>Bal Before Closing Entries  Plus: Retiree Transfers  Less: Retiree Payments  Total</p>
86	YYYY Budget Final	<p>This report is in a spreadsheet format having 10 tabs with the current fiscal year budget information including:</p> <p><b>YYYY &amp; YYYY-1 BudgetvsActual_CAFR</b></p> <p>This tab shows the administrative expenses as a breakout by category. The category breakout (further broken down for detail) is:</p> <p>Personnel Costs  Professional Costs</p>

Communication Costs  
Other Services and Charges  
Depreciation

These are the total administrative Costs

Total Fixed Assets costs are displayed next resulting in the Total operating and capital budget.

The columns displayed include:

Current Year Budget  
Current Year Actual  
\$ Change  
% Change

Previous Year Budget  
Previous Year Actual  
\$ Change  
% Change

Current Year Actual  
Previous Year Actual  
\$ Change  
% Change

#### **Budget - Legislature Format**

This format includes columns for:

SAP GL Account  
SAP GL Account Description  
Budget Amount

The categories (each with a subtotal) are:

Personnel  
Operating  
Fixed Assets

The 3 subtotals are summed for the grand total.

#### **Budget - Board Format**

This tab has the following categories for the board format.

First

Operating Expenses = Personnel and Non-Personnel categories

Personnel expense show the amounts as well and the total complement and total filled

Next

The non-personnel expense includes:

Office expenses  
Client communications and travel

Employee professional development  
Professional Services  
Information Technology  
State Shared Services Allocations

Total Operating Expenses

Capital Expenses include the Fixed Assets

There is an overall total for Total Operating Expenses and Capital Expenses.

The columns include the following:

Categories  
Category Description  
GL Code 1  
GL Code 2  
GL Code 3  
Executive  
Operations  
Membership Services  
Municipal Services  
Technology Services  
Legal  
Investment & Financial Management  
YYYY Proposed Budget  
YYYY-1 Budget  
\$ Change  
% Change

Also listed are the:

Major Initiatives (One-Time Costs):  
CPAS (Upgrade, Document Imaging)  
Accounting Software Implementation Services  
New Office Relocation (Moving, Furniture, IT Expenses)

These items and a Total Excluding Major Initiatives are included only in the following columns:

YYYY Proposed Budget  
YYYY-1 Budget  
\$ Change  
% Change

**Executive**

The tab has the same categories as the board format above with each category broken out at a higher level of detail. The budget amounts are those pertaining only to the Executive division.

For example, Benefits is broken out by the type of benefit as opposed to a single line.

The columns are:

Categories  
Category Description  
GL Code 1  
GL Code 2  
GL Code 3  
YYYY Proposed Budget

		<p>YYYY Proposed Budget Explanation          YYYY-1 Budget          \$ Change          Variance Explanation</p> <p><b>Operations</b></p> <p>This tab is the same format as the Executive tab but showing the budget amounts pertaining only to the Operations division.</p> <p><b>Membership Services</b></p> <p>This tab is the same format as the Executive tab but showing the budget amounts pertaining only to the Membership Services division.</p> <p><b>Municipal Services</b></p> <p>This tab is the same format as the Executive tab but showing the budget amounts pertaining only to the Municipal Services division.</p> <p><b>Legal</b></p> <p>This tab is the same format as the Executive tab but showing the budget amounts pertaining only to the Legal division.</p> <p><b>Technology Services</b></p> <p>This tab is the same format as the Executive tab but showing the budget amounts pertaining only to the Technology Services division.</p> <p><b>Investment &amp; Financial Mgmt</b></p> <p>This tab is the same format as the Executive tab but showing the budget amounts pertaining only to the Investment &amp; Financial Mgmt division.</p> <p><b>This spreadsheet has links to an external source. Further definition will be needed to define the relationship to this data.</b></p>
87	YYYYMMDD Payroll	<p>This SAP report provides detail on a specific payroll. This includes:</p> <p>Itm          PK          Account Payee          Account short text          Amount          BusA          Earnd Fnds          Itm          Value date          Fund          BP          Cost Ctr Order          WBS elem.          Text          Assign.          PBk          BnkT          Bline Date          Dy 1          Net due dt</p> <p>Further definition of this report is needed during the design phase.</p>

88	Asset Allocation YYYY	<p>This report has 1 tab per month. Some months also have a revised tab. All tabs have the same format.</p> <p>The left side of the tab show Cash at Treasury – Manager Cash</p> <p>For each manager category (i.e. BMO, Brandywine, etc.), the following information is included:</p> <p>Cash Amount  % of Total Cash  % of Total Assets  % of Portfolio  Total Manager Cash (note – no total for % of Total Assets)</p> <p>The next line shows the unallocated (except % of Total Assets)</p> <p>Resulting in the Total Cash at Treasury (Cash and % of Portfolio)</p> <p>The next section is Fixed Income:</p> <p>Cost  Market  % of Asset Class  % of Portfolio  Total Fixed</p> <p>The next section is Equity</p> <p>This is broken out by type of equity such as Large Cap Domestic Equity, Small Cap Domestic Equity, International Broad Market Equity, etc. with totals for each type.</p> <p>Each equity shows:</p> <p>Cost  Market  % of Asset Class  % of Portfolio</p> <p>Resulting in Total Equity</p> <p>The last section on this side of the tab displays the same categories for Real Estate broken out by several real estate types</p> <p>The final line is the Total Portfolio in this section</p> <p>The right side of this tab shows the Total % of Portfolio by Manager. This includes</p> <p>Manager  Type (Equity, Real Estate and Fixed)</p> <p>This also includes Unallocated Cash for a total of 100%</p> <p>The final section shows</p> <p>Change in Total Portfolio From Previous Month</p> <p>Up/Down % (Based on Cost)  Up/Down % (Based on Market Value)</p> <p>Change in Total Portfolio From Previous Year</p> <p>Up/Down % (Based on Cost)</p>
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		Up/Down % (Based on Market Value)
89	Nov YYYY Audited Statements	<p>The document is a series of statement sets for a fund type. The funds are:</p> <p>Examples:</p> <p>CPUFCA010002 – Cash Management  CPUFEQ011302 – Federated Investors  CPUFEQ012202 - Brandywine</p> <p>It is unlikely that the level of detail needed for this representation will be captured in AX. This will need to be reviewed and defined further in the design phase.</p> <p><b>Statement Of Net Assets Available For Benefits</b></p> <p>It may be possible to produce this section from AX if the appropriate level of detail is captured. However, it may be suitable to produce this portion along with the remaining sections.</p> <p>The remaining sections are at an investment detail level that is likely to be captured in AX.</p> <p><b>Investment Summary</b>  <b>Investment Detail</b>  <b>Purchases Pending Settlement</b>  <b>Pending Foreign Exchange Contracts</b>  <b>Sales Pending Settlement</b>  <b>Interest Receivable</b>  <b>Interest Payable</b>  <b>Interest Reclaim Receivable</b>  <b>Dividends Receivable</b>  <b>Dividends Payable</b>  <b>Dividends Reclaim Receivable</b>  <b>Statement of Change in Net Assets Available for Benefit</b>  <b>Transaction Report</b>  <b>Foreign Exchange Contract Transactions</b>  <b>Interest Earned</b>  <b>Dividends Earned</b>  <b>Cash and Base Cost Reconciliation – settled</b>  <b>General Ledger Journal Entries</b>  <b>Statement of Net Assets Available for Benefits</b>  <b>Net Assets – Currency Exposure</b>  <b>Net Assets – Summary By Currency</b>  <b>Investment Classification Summary</b>  <b>Currency Balances</b>  <b>Investment Detail By Currency</b>  <b>Purchases Pending Settlement</b>  <b>Sales Pending Settlement</b>  <b>Pending Foreign Exchange Contracts</b>  <b>Interest Receivable</b>  <b>Interest Payable</b>  <b>Dividends Receivable</b>  <b>Dividends Payable</b>  <b>Multicurrency Transaction Report</b>  <b>Foreign Exchange Contract Transactions</b>  <b>Interest Earned</b>  <b>Dividends Earned</b>  <b>Cash and Base Cost Reconciliation – Traded</b>  <b>General Ledger Journal Entries</b>  <b>Local Detail Currency Statement</b></p>
90	Nov YYYY Treasury Warrants and Posted	<p>This report is a spreadsheet that is setup to allow filtering and queries.</p> <p>There are 2 rows of detail for each item. The first row has the following columns:</p>



	Transactions – SAP Report	<p>Doc Number Item Posting Date Date Sent to Treas Pay Date Journal Date Document Type (abbreviation) Document Type (description) G/L Account (code) G/L Account (description) Vendor (number) Vendor (name) Item Text Amount</p> <p>The second is a cell for Result</p> <p>Due to its format and content, further definition of this report will be needed during the design phase.</p>
91	PMRS Org Chart	<p>This report is a graphic depiction of the PMRS Organization Chart. It is currently displayed via Power Point.</p> <p>The highest level depiction is the PMR Management Structure.</p> <p>The next slide shows the structure for Information Technology Services.</p> <p>The next slide shows the structure for Investment and Financial Management.</p> <p>The next slide shows the structure for Municipal Services.</p> <p>The next slide shows the structure for Operations.</p> <p>The next slide shows the structure for Membership Services.</p>
92	Quarterly Investment Compliance Review	<p>This report provides detailed information on portfolios, managers, verification, results, etc.</p> <p>It is unlikely that the majority of this information would be captured in AX. However, it may be possible to extract some supporting detail, such as commissions paid, from AX.</p> <p>Further definition will be needed during the design phase.</p>
93	YYYY 1099 Reconciliation – CPAS to Treasury	<p>This report is in a spreadsheet format having 10 tabs with 1099 information. It is primarily at the member level which will not be captured at this level in AX.</p> <p><b>1099 Database Revised 1-17-17</b></p> <p>Member Level</p> <p><b>1099 Reconciliation</b></p> <p>Member Level</p> <p><b>Payroll EFT</b></p> <p>Member Level</p> <p><b>Payroll EFT Refunds</b></p> <p>Member Level</p> <p><b>Lump Sum Batch</b></p>

		<p>Member Level</p> <p><b>Lump Sum Non-Batch</b></p> <p>Member Level</p> <p><b>IRS Payments</b></p> <p>This tab is not at the member level. However, this level of data is to be at a level that will be captured in AX. Further review and definition will be needed during the design phase.</p> <p><b>Reissued Payments</b></p> <p>Member Level</p> <p><b>Lump Sum Refunds</b></p> <p>Member Level</p>
	Board Reports	
94	Performance Summary	This report shows the Total Portfolio and further breakout the assets/funds making up that portfolio. Examples are Shadow Index, Emerald, Mercator, etc. The report shows the QTD, YTD, Market Value and Percent.
95	Asset Allocation	<p>This report has several sections.</p> <p>The first shows the Cash at Treasury with more detail such as Brandywine, Emerald, Eagle, etc. It shows the Value, % of Total Cash, % of Total Assets and % of Portfolio.</p> <p>The next section shows the Fixed Income with Cost, Market, and % of Asset Class and % of Portfolio.</p> <p>The next section shows the Equity broken out by domestic and international with further detailed breakouts. It shows the Cost, Market, % of Asset Class and % of Portfolio.</p> <p>The next section details Real Estate by type such as Forest and PRISA. It also shows Cost, Market, % of Asset Class and % of Portfolio.</p> <p>The portfolio total shows cost and market with the total percent at 100%.</p> <p>The next section is a Total % of Portfolio by Manager with a breakout of manager and type such as BMO (Equity) and TIAA (Real Estate).</p> <p>The final detail shows Change in Total Portfolio from previous month up or down for cost and market. The same information is shown for change from previous year.</p>
96	Proxy Voting Activities	<p>This report shows voting detail. It breaks out the categories such as Antitakeover Related, Capitalization, etc.</p> <p>It shows the count for Meetings, Proposals and Management With or Against.</p>
97	Accounting Summary	<p>This report shows a monthly, YTD and YTD for previous year summary on a cash basis for the following categories:</p> <p>Revenue</p> <p>Contributions</p> <p>Net Investment Related</p>

		<p>Value at Cost of Investments Sold</p> <p>Expenses</p> <p>Retirement and Disability Allowance</p> <p>Refunds to Members</p> <p>Refunds Due to Withdrawn Plans</p> <p>Investments Purchased, Accrued Interest Purchased</p> <p>Investment Management Expenses</p> <p>Administrative Expenses</p> <p>The report shows each month separately.</p>
98	YYYY Tabs	<p>This report is in a spreadsheet format having multiple tabs.</p> <p>There is a tab for each month in the year that includes:</p> <p>Contributions</p> <p>Sale of Investments</p> <p>Gain (Loss) on Sales</p> <p>Investment Income</p> <p>Misc. Income</p> <p>STIF Interest – 924 Pool</p> <p>STIF Interest – 999 Pool</p> <p>Purchase Investments</p> <p>Benefit Payments</p> <p>Admin Expense</p> <p>Mgr Fees – 924 Pool</p> <p>Mgr Fees – 999 Pool</p> <p>Transfer to (from) 999 from 924</p> <p>Transfer from (to) 999 to 924</p> <p>Non-invest STIF</p> <p>Invest <span style="float: right;">STIF</span></p> <p>Ending Cash</p> <p>Ending STIF</p> <p>Uninvested Cash</p> <p>Pool 924</p> <p>Pool 999</p> <p>Total</p> <p>The lower section of these tabs show the beginning balance, current month purchases, current month sales and total for Pool 924 and Pool 999 added to get the Total STIF.</p> <p>Another tab on the report shows the current activity with 2 sections for each month.</p> <p>The first section is benefit payments showing a total column that is the summation of Refunds (411 and 412) and Retirements (419).</p> <p>The next section is Administrative Expenses showing a total column that is the summation of previous year, current year and next year.</p> <p>The final tab shows several sections. The first section contains the same columns as the monthly tabs through Mgr Fees showing the total for each month. After a row showing the total for the year, the board report total is listed along with a variance.</p>

		<p>A separate sections shows some additional totals for the year along with the board report total and variance. This is shown for Refunds to Members, Retirements and Refunds due to Withdrawn Plans.</p>
99	Cash Balances	<p>This report is in a spreadsheet format having multiple tabs.</p> <p>This report shows a tab for each month. It includes previous years. It should the days of the month as a number in the first column and then shows the balance of the accounts for each appropriate day.</p> <p>The accounts are:</p> <p>POLEN  FEDERATED  BRANDYWINE  SMITH, GRAHAM  LSV (SMALL CAP)  EMERALD  BMO  LSV (LARGE CAP)  EAGLE  HGK  JOHNSTON  JARISLOWSKY  CASH MGMT</p> <p>The total by account is shown along with the average for the month.</p>
100	Transaction Reports for Board	<p>This report is in a spreadsheet format having multiple tabs.</p> <p>Each tab is representing 2 months (i.e. 01JUN16-31JUL16).</p> <p>Each tab shows Equities broken out as Domestic Large Cap, Domestic Small Cap and International Developed Markets (with further detail).</p> <p>For each breakout, the following is shown as a count:</p> <p>Securities Held  Securities Added  Securities Removed</p> <p>For each breakout, the following is shown as a valuation:</p> <p>Base Gain/Loss of Transactions</p> <p>Transactions of Note may also be included</p> <p>PMRS Initiated transactions are listed afterwards with the amount and description.</p>
101	Voucher Transmittal report	<p>This report shows supporting detail for transmittal of payments to Treasury for member payments.</p> <p>The top section shows some header information and the total transmitted. It also includes a breakout for the totals to members/beneficiaries/rollovers as well as FTW.</p> <p>This is followed by pages detailing the payments that comprise the total. This includes the payout from member account (person id), recipient, gross amount, FTW, etc.</p>
102	PennWATCH Reporting – Expenses	<p>This report contains details on payments (expenses). It is uploaded to the PennWATCH Website.</p> <p>It includes at a summary level:</p> <p>Payee Name</p>

		<p>City, State Fund Source Amount Paid</p> <p>At a detail level (drill down), it includes:</p> <p>Agency Name Appropriation Expenditure Category &gt; Subcategory Approp Year Fund Source Payment Date Expenditure Amount</p>
103	eMarketplace/Treasury Reporting – Contracts/POs	<p>This report displays contract and/or purchase order information on the Treasury's eMarketplace website.</p> <p>This includes:</p> <p>Solicitation Number Types Solicitation Title Description Agency County Amended Date Solicitation Start Date Solicitation Due Date Bid Opening Date Status Contact Person</p>
104	Fixed Asset Register	AX provides a standard fixed asset listing report.
105	Depreciation Set of Books	AX provides a standard fixed assets book compare report.
106	Asset Tags	A definition of this report(s) or sample report is needed.
107	Bar Code	This will be dependent on the bar coding solution chosen.
108	Fixed Asset Additions	AX provides a standard fixed asset listing report.
109	Fixed Asset Disposals	AX provides a standard fixed asset listing report.
110	Depreciation Report	AX provides a standard fixed assets transaction report which can be filtered for depreciation type transactions.
111	Inventory Report	AX provides several standard inventory reports including On-hand inventory, On-hand list and Count History.
112	Open Commitments (Encumbrance, Payments, Available Balance) for POs, Contracts, Settlement Agreements	<p>This report shows the open commitments (i.e. transactions that have not cleared).</p> <p>The listing includes:</p> <p>Ref. Document Number Vendor G/L Account Original Amount Total Amount Activity Amount Available Balance</p>
113	Encumbrance Report	A definition of this report(s) or sample report is needed.
114	Contracts Report	<p>This report shows the status of PMRS contracts. It has 2 sections.</p> <p>The first section is a listing of the contracts including:</p> <p>Name Description</p>

		<p>Date Received Status</p> <p>The second section gives a listing of contracts expiring in the next 12 months.</p> <p>This includes:</p> <p>Contractor Name of Contract Expiration Date</p>
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## 9 Reporting Requirements

The following base data has been identified as required prior to working with the module on a day-to-day basis and the project team shall make certain set up decisions during the Design Phase.

### 9.1 Financial Reports

Where possible, financial reports will be created using Management Reporter. Management Reporter is designed to use data captured in the Dynamics AX financial dimensions including statistical accounts. It is also possible to include data from spreadsheets in Management Reporter to combine with the Dynamics AX data.

Report #	Report Name	Description	Comments
60/9.86	Projections	PMRS will create 3-5 year projections.  PMRS would run this report on an on demand basis.  This is a current report for PMRS.	This report may be created in Management Reporter or Power BI.
61	System wide revenue and expenses	PMRS will create system wide revenue and expense reports.  PMRS would run these reports on an on demand basis.  These are not current reports for PMRS and therefore the data, calculations and format will need to be defined.	This report may be created in Management Reporter.
62	Budget Reports	PMRS will create budgets report for internal use (i.e. separate from the budget that is sent to the state).  PMRS would run this report monthly and on an on demand basis.  This is a current report for PMRS.	This report may be created in Management Reporter.
63	Analytical Review/Variance Reporting	PMRS would like the ability to do variance reporting.  PMRS would run these reports on an on demand basis.  These are current reports for PMRS.	This report may be created in Management Reporter.
77/9.63	12-31-YY Accounts Receivable	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
78/9.64	12-31-YY Cash Reconciliation	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.

79/9.65	12-31-YY Credited Interest	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
80/9.66	YYYY Budget by Month	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
81/9.67	Accounting Summary	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
82/9.68	12-31-YY Financial Statements	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
83/9.69	12-31-YY Fixed Assets & Accrued Expenses	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
84/9.70	12-31-YY Investments	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
85/9.71	YYYY GASB 68 Financial Data by Plan	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
86/9.72	YYYY Budget Final	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
87/9.73	YYYYMMDD Payroll	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.	This report may be created in Management Reporter or Power BI.



		This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	
88/9.74	Asset Allocation YYYY	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
89	Nov YYYY Audited Statements	PMRS is currently producing this set of reports.  It is unlikely that the level of detail needed for this report set will be available in Dynamics AX.	
90/9.75	Nov YYYY Treasury Warrants and Posted Transactions	PMRS is currently producing this set of reports and would like to create it from data captured primarily in Dynamics AX.  This will be dependent on the level of the detail captured in Dynamics AX. Some external data may be needed.	This report may be created in Management Reporter or Power BI.
92/9.77	Quarterly Investment Compliance Review	PMRS is currently producing this set of reports.  It is unlikely that the level of detail needed for this report set will be available in Dynamics AX.	
93/9.78	YYYY 1099 Reconciliation	PMRS is currently producing this set of reports.  This report set is at the member level. Member level data will not be captured in Dynamics AX. This report should be created from CPAS.	
94/9.82	Board Reports – Performance Summary	This report shows the summary information for the performance of the assets/funds for the QTD and YTD along with valuation.	
95/9.83	Board Reports – Asset Allocation	This report gives the detail of the asset allocation broken out by types such as Cash at Treasury, Fixed Income, Equity and Real Estate. Multiple views are shown.	
96/9.84	Board Reports – Proxy Voting Activities	This report gives proxy voting detail of topics and counts.	
97/9.85	Board Reports – Accounting Summary	This report shows a monthly and YTD (with YTD previous year) view of Revenue and Expenses for specific categories.	
98/9.79	YYYY Tabs	This report provides details monthly on contributions, investments, transfers, etc.	This report may be created in Management Reporter or Power BI.
99/9.80	Cash Balances	This report shows cash balances for specific investment accounts.	
100/9.81	Transaction Reports for Board	This report shows information on securities held, added, removed and the valuation.	
112/9.90	Open Commitments (Encumbrance, Payments, Available Balance) for POs, Contracts, Settlement Agreements	This report shows the open commitments (i.e. transactions that have not cleared).	
113	Encumbrance Report	A definition of this report(s) or sample report is needed.	

## 9.2 Customer Facing Reports

Note that for the customer facing reports of the CAFR, GASB 68, 770 – Year End Activity and Act 205, there will be input from multiple systems including Dynamics AX, CPAS, Actuarial input, Manual input etc. as not all is financial data that will be captured in Dynamics AX. Further definition of the source of data will be detailed in the design phase.

Report #/Appendix Ref	Report Name	Description	Comment
1/9.1	Summary of Revenues	This report is a part of the annual Comprehensive Annual Financial Report (CAFR) which is the definitive financial reports for funds	This report may be created in Management Reporter or Power BI.
2/9.2	Summary of Expenses	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
3/9.3	Summary of Fiduciary Net Position	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
4/9.4	Summary of Changes in Fiduciary Net Position	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
5/9.5	Asset Distribution at Fair Market Value	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
6/9.6	Statement of Fiduciary Net Position	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
7/9.7	Statement of Changes in Fiduciary Net Position	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
8/9.8	Participating Local Government Employers	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
9/9.9	Individual Membership	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
10/9.10	Contributions	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.

11/9.11	Investment Allocation	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
12/9.12	Investment Risk Reporting\Foreign Currency Risk	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
13/19.3	Supplemental Schedule 1 – Investment Returns	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
14/9.14	Supplemental Schedule 2 – Administrative Expenses	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
15/9.15	Supplemental Schedule 3 – Investment Expenses	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
16/9.16	Supplemental Schedule 4 – Payment to Consultants	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
17/9.17	Number of Members per Plan	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
18/9.18	Changes in Net Position	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
19/9.19	Revenues by Source	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
20/9.20	Expenses by Type	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
21/9.21	Results of Operations	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
22/9.22	Total Investments	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.

23/9.23	Schedule of Benefit Deductions From Plan Net Assets by Type	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
24/9.24	Schedule of Refund Deductions From Plan Net Assets by Type	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
	CAFR Statistical Section		
25/9.25		Total Membership	
26/9.26		Active Members	
27/9.27		Retired Members	
28/9.28		Distribution of Active Members – Counts by Age/Service	
29/9.29		Distribution of Active Members – Counts by Average Annual Salary/Service	
30/9.30		Pensions in Payment Status	
31/9.31		Pensions Awarded – 10 Years	
32/9.32		Schedule of Total Membership – 10 Years	
33/9.33		Schedule of Active Member Valuation Data	
34/9.34		Schedule of Average New Monthly Benefit Payments from Defined Benefit Plans	
35/9.35		Schedule of Participating Plans	
	CAFR Investment Section		
36/9.36		Asset Allocation	
37.9.37		Portfolio Distribution	
38/9.38		Performance Summary	
39/9.39		Summary of Investment Expenses	
40/9.40		Ten Largest Common Stock Holdings	
41/9.41		Portfolio Summary	
42/9.42		Portfolio Quality	
43/9.43		Summary of Commissions Paid to Brokers	
	CAFR Actuarial Section		
44/9.44		Solvency Test	
45/9.45		Funded Status of Actuarial Liabilities	
46/9.46		Valuation of Defined Benefit Liabilities	
47/9.47		Schedule of Retirees and Beneficiaries	
48/9.48		Schedule of Total Membership	
49/9.49		Funded Status of Actuarial Liabilities	

50/9.50		Schedule of Active Member Valuation Data	
51/9.51		Health Life Mortality Rates	
52/9.52		Termination Rates Before Retirement	
53/9.53		Disability Incidence Rates	
54/9.54		Salary Scale	
55/9.55		Retirement Rates	
56/9.56	Schedule of Changes in Fiduciary Position	This report is a part of the CAFR	This report may be created in Management Reporter or Power BI.
57/9.57	Government Accounting Standards Board Statement 68 (GASB 68)	The GASB 68 statement is produced yearly for each plan.	This report may be created in Management Reporter or Power BI.
58/9.58	770 – Year end activity report	This report is provider to employers giving them detail on multiple aspects of the yearly activity for their plan. PMRS would ultimately like to be able to prepare this for them on a more real time basis (quarterly then monthly).	This report may be created in Management Reporter or Power BI.
59	Act 205	<p>The Act 205 report is the Act 205 Actuarial Valuation Report. Its type is further defined by the plan such as non-uniformed or police pension plan with or without defined benefits. The sections in the report differ depending on whether the pension plan is with or without defined benefits.</p> <p>The Act 205 report is produced every 2 years. The Act 205 for the Counties are produced on the even years. The Act 205 for all other plans are produced on the odd years.</p>	
59a/9.59a	Act 205 – Without Defined Benefits Pension Plan	Act 205 report for Pension Plans Without Defined Benefits	This report may be created in Management Reporter or Power BI.
59b/9.59b	Act 205 – With Defined Benefits Pension Plan	Act 205 report for Pension Plans Without Defined Benefits	This report may be created in Management Reporter or Power BI.

### 9.3 Operational Reports

Report #/Appendix Ref #	Report Name	Description	Comment
64	Employee reports	<p>PMRS would like the ability to produce employee reports.</p> <p>PMRS would run these reports on an on demand basis.</p> <p>These are not current reports for PMRS and therefore the data, calculations and format will need to be defined.</p>	This report may be created in Power BI.
65	Monthly Flash Reports	<p>PMRS would like the ability to produce monthly flash reports as a point in time view.</p> <p>PMRS would run these reports Monthly.</p> <p>These are not current reports for PMRS and therefore the data, calculations and format will need to be defined.</p>	This report may be created in Power BI.
66	Daily & Monthly Bank Reconciliation		
67	Outstanding bank transactions	<p>PMRS would like to have the ability to run a report to see any un-reconciled bank transactions.</p> <p>The standard AX report for unreconciled bank transactions can be used.</p> <p>PMRS would run this report on an on demand basis.</p>	This is a standard AX report.
68	Vendor aging report	<p>An aging period definition of 30 days, 60 days, 90 days, over 90 days can be setup to be used with the standard AX vendor aging report to analyze outstanding vendor invoices.</p> <p>PMRS would run this report on an on demand basis.</p>	This is a standard AX report.
69/9.60	Invoice format for CB invoices	<p>PMRS will enter customer invoices to charge their customers for administrative costs. A format for this document that is materially the same as their current invoice will be needed.</p> <p>PMRS would create this document on an on demand basis.</p>	This is a standard AX report. Customization will be needed.
70/9.61	Invoice format for DB invoices	<p>PMRS will enter customer invoices to charge their minimum municipal obligation (MMO). A format for this document that is materially the same as their current invoice will be needed.</p> <p>PMRS would create this document on an on demand basis.</p>	This is a standard AX report. Customization will be needed
71	Invoice format for interest charges	<p>PMRS will enter customer invoices to charge their customers for interest. A format needs to be defined for this document.</p> <p>PMRS would create this document on an on demand basis.</p>	This is a standard AX report. Customization will be needed
72	Invoice format for new member charge	<p>PMRS will enter customer invoices to charge their customers for new member charges when a</p>	This is a standard AX

		<p>member joins after the MMO billing has been sent out. A format needs to be defined for this document.</p> <p>PMRS would create this document on an on demand basis.</p>	<p>report. Customization will be needed</p>
73	Customer aging report	<p>An aging period definition of Current, 30-90 days, 90-120 days, 120-180 days, 180-270 days, 270-360 days and over a year can be setup to be used with the standard AX customer aging report to analyze outstanding customer invoices.</p> <p>PMRS would run this report on an on demand basis.</p>	<p>This is a standard AX report.</p>
74	Customer statement	<p>Currently PMRS does not send out customer statements. However, a customer statement report is required such that it can be run at any time to show a customer at an invoice level, the amount billed, amounts paid and the balance on their account.</p> <p>PMRS would run this report on an on demand basis.</p>	<p>This is a standard AX report.</p>
76/9.62	Purchase Order	<p>PMRS may want to send a copy of a purchase order to their vendor either as hard copy or via e-mail.</p> <p>PMRS would create this document on an on demand basis.</p>	
91/9.76	PMRS Org Chart	<p>PMRS currently produces an Organization Chart.</p>	<p>This is a standard AX report.</p>
101/9.87	Voucher Transmittal report	<p>This report shows the total and details of payroll payouts to members/beneficiaries/rollover.</p>	
102/9.88	PennWATCH Reporting – Expenses	<p>This report contains information that is uploaded to the PennWATCH website for expenditures.</p>	
103/9.89	eMarketplace/Treasury Reporting – Contracts/POs	<p>This report displays solicitation details on the eMarketplace website.</p>	
104	Fixed Asset Register	<p>AX provides a standard fixed asset listing report.</p>	<p>This is a standard AX report.</p>
105	Depreciation Set of Books	<p>AX provides a standard fixed assets book compare report.</p>	<p>This is a standard AX report.</p>
106	Asset Tags	<p>A definition of this report(s) or sample report is needed.</p>	
107	Bar Code	<p>This will be dependent on the bar coding solution chosen.</p>	
108	Fixed Asset Additions	<p>AX provides a standard fixed asset listing report.</p>	<p>This is a standard AX report.</p>
109	Fixed Asset Disposals	<p>AX provides a standard fixed asset listing report.</p>	<p>This is a standard AX report.</p>
110	Depreciation Report	<p>AX provides a standard fixed assets transaction report which can be filtered for depreciation type transactions.</p>	<p>This is a standard AX report.</p>
111	Inventory Report	<p>AX provides several standard inventory reports including On-hand inventory, On-hand list and Count History.</p>	<p>This is a standard AX report.</p>

114/9.91	Contracts Report	This report provides a listing of contracts at a summary level as well as those expiring in the next 12 months.	
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## 10 Customizations

The following customizations are identified to date. Further definition of the level of customization that may be needed for reporting will be detailed after discussions during the Design Phase.

#	Description	Fit/Gap	Comments
1	The Standard AR invoice will need to be customized. PMRS will need at least 3 invoice formats where 2 of those formats need to materially match the invoices format being used currently.		PMRS will produce 4 types on customer invoices: 1) Administrative charges invoice 2) MMO annual invoice 3) Interest charges 4) New member fee/re-enrollments 5) Member contributions

## 11 **Data Conversion**

The following elements of data conversions have been defined as needed.

- Ledger balances for 1 year
- Budget values for 1 year
- Customer open invoices
- Vendor open invoices
- Open encumbrances
- Reserve account by type and PERC#
- Open prepaids
- Fixed Assets
- Deferred inflows/outflows

## 12 **Security Requirements**

PMRS will evaluate using standard roles across the organization and users will be granted access as needed for job duties. Additional roles will be created as needed. This model will be followed for reporting as well.

Segregation of duties and internal controls

### 13 **Customer Deliverables**

The following elements must be fulfilled in order to demonstrate design functionality:

- Samples of current relied upon operations reports
- Define purpose for report
- Define owner of report
- Define audience of report
- Define data elements required for report
- Define when and how often run
- Define how report is distributed

## 14 Appendix – Report Samples

A sample of the full Comprehensive Annual Financial Report (CAFR) which includes the reports shown below has been provided as an attachment (2015CAFR.pdf)

### 14.1 Summary of Revenues

REVENUES					
ADDITIONS TO PLAN NET ASSETS	2015 AMOUNTS	PERCENT OF TOTAL	2014 AMOUNTS	\$ INCREASE (DECREASE)	PERCENT INCREASE (DECREASE)
Contributions, net of refunds	\$ 68,740,888	107.7	\$ 89,762,417	(\$ 21,021,529)	(23.4)
Net investment income (loss)	(5,197,261)	(8.1)	100,443,382	(105,640,643)	(105.2)
Miscellaneous income	253,740	0.4	10,176	243,564	2,393.5
<b>Total</b>	<b>\$ 63,797,367</b>	<b>100.0</b>	<b>\$ 190,215,975</b>	<b>(\$ 126,418,608)</b>	<b>(66.5)</b>

### 14.2 Summary of Expenses

EXPENSES					
DEDUCTIONS FROM PLAN NET ASSETS	2015 AMOUNTS	PERCENT OF TOTAL	2014 AMOUNTS	\$ INCREASE (DECREASE)	PERCENT INCREASE (DECREASE)
Annuity benefits and terminations	\$ 89,855,588	78.0	\$ 84,025,435	(\$ 5,830,153)	6.9
Transfers to other plan administrators	20,448,089	17.7	3,411,316	17,036,773	499.4
Administrative expenses	4,984,399	4.3	4,411,462	571,937	13.0
<b>Total</b>	<b>\$ 115,287,076</b>	<b>100.0</b>	<b>\$ 91,848,213</b>	<b>\$ 23,438,863</b>	<b>25.5</b>

### 14.3 Summary of Fiduciary Net Position

#### SUMMARY OF FIDUCIARY NET POSITION

as of December 31, 2015, 2014, and 2013  
(amounts in thousands)

ANALYSIS OF FIDUCIARY POSITION	2015	2014	2013
<b>Assets</b>			
Receivables	\$ 16,845	\$ 4,648	\$ 4,494
Investments	1,997,183	2,049,464	1,951,675
Capital assets	121	134	145
<b>Total assets</b>	<b>\$ 2,014,149</b>	<b>\$ 2,054,246</b>	<b>\$ 1,956,314</b>
Deferred outflows of resources related to pensions	453	-	-
<b>Liabilities</b>			
Deferred inflows of resources related to pensions	2	-	-
<b>Total fiduciary net position</b>	<b>\$ 1,994,491</b>	<b>\$ 2,049,615</b>	<b>\$ 1,951,247</b>

### 14.4 Summary of Changes in Fiduciary Net Position

#### SUMMARY OF CHANGES IN FIDUCIARY NET POSITION

as of December 31, 2015, 2014, and 2013  
(amounts in thousands)

ANALYSIS OF FIDUCIARY POSITION	2015	2014	2013
<b>Additions</b>			
Contributions, net of refunds <sup>(1)</sup>	\$ 68,741	\$ 89,763	\$ 61,092
Net investment income (loss)	(5,197)	100,443	309,729
Miscellaneous income	253	10	469
<b>Total additions</b>	<b>\$ 63,797</b>	<b>\$ 190,216</b>	<b>\$ 371,290</b>
<b>Deductions</b>			
Annuity benefits and terminations <sup>(2)</sup>	89,856	84,025	78,245
Transfers to other plan administrators <sup>(3)</sup>	20,448	3,411	-
Administrative expenses	4,983	4,412	3,724
<b>Total deductions</b>	<b>\$ 115,287</b>	<b>\$ 91,848</b>	<b>\$ 81,969</b>
<b>Total fiduciary net position</b>	<b>(\$ 51,490)</b>	<b>\$ 98,368</b>	<b>\$ 289,321</b>

### 14.5 Asset Distribution at Fair Market Value

### ASSET DISTRIBUTION AT FAIR MARKET VALUE

as of December 31, 2015, 2014, and 2013  
(amounts in thousands)

Asset class	2015	PERCENT	2014	PERCENT	2013	PERCENT
Short term <sup>(4)</sup>	\$ 37,390	1.9	\$ 58,712	2.9	\$ 54,535	2.8
Fixed income	33,327	16.5	301,574	14.7	271,645	13.9
Common preferred stock	816,383	40.9	873,000	42.6	892,301	45.7
International stock	455,212	22.8	487,819	23.8	438,838	22.5
Real estate	357,871	17.9	328,359	16.0	294,355	15.1
<b>Total</b>	<b>\$ 1,997,183</b>	<b>100.0</b>	<b>\$ 2,049,464</b>	<b>100.0</b>	<b>\$ 1,951,674</b>	<b>100.0</b>

## 14.6 Statement of Fiduciary Net Position

### STATEMENT OF FIDUCIARY NET POSITION

as of December 31, 2015 and 2014

ASSETS	2015	2014
<b>Receivables</b>		
Plan members	\$ 2,125,173	\$ 1,832,661
Municipal employers	1,741,796	240,903
Accrued investment income	1,119,459	1,310,518
Investment sales receivable	11,858,823	1,264,099
<b>Total receivables</b>	<b>16,845,251</b>	<b>4,648,181</b>
<b>Investments, at fair value</b>		
Short-term and other investments	37,389,514	58,712,288
U.S. government fixed income pooled funds	226,339,921	206,849,517
Corporate bond pooled funds	103,986,876	94,724,352
Equity index funds, common and preferred stocks	816,383,502	872,999,594
Real estate	357,870,568	328,359,467
International equities	455,212,477	487,818,617
<b>Total investments</b>	<b>1,997,182,858</b>	<b>2,049,463,835</b>
Capital assets (net of accumulated depreciation of \$133,257 and \$133,344 at 2015 and 2014, respectively)	120,799	134,402
<b>Total assets</b>	<b>2,014,148,908</b>	<b>2,054,246,418</b>
Deferred outflows of resources related to pensions	453,473	-
<b>Liabilities</b>		
Accounts payable and accrued expenses	7,857,322	2,749,092
Investment purchases payable	12,252,123	1,882,194
<b>Total liabilities</b>	<b>20,109,445</b>	<b>4,631,286</b>
Deferred inflows of resources related to pensions	1,680	-
<b>Net position restricted for pensions</b>	<b>\$ 1,994,491,256</b>	<b>\$ 2,049,615,132</b>

The accompanying notes are an integral part of the financial statements.

## 14.7 Statement of Changes in Fiduciary Net Position

<b>STATEMENT OF CHANGES IN FIDUCIARY NET POSITION</b>		
as of December 31, 2015 and 2014		
<b>ADDITIONS</b>	<b>2015</b>	<b>2014</b>
<b>Contributions, net of refunds</b>		
Municipal employers	\$ 47,504,803	\$ 67,249,330
Plan members	19,605,687	18,441,437
Transfers from other plan administrators	1,424,284	3,908,410
Assessments	206,114	163,240
<b>Total contributions, net of refunds</b>	<b>68,740,888</b>	<b>89,762,417</b>
<b>Investment income</b>		
From investing activities:		
Net appreciation (depreciation) in fair value of investments	(27,307,292)	73,174,459
Short-term and other investments	103,688	104,102
Common and preferred stocks	11,973,079	9,739,317
Real estate	14,466,205	20,528,588
International equities	4,669,589	4,760,130
<b>Total investment income</b>	<b>3,905,269</b>	<b>108,306,596</b>
Less investment expenses	(9,102,530)	(7,863,214)
<b>Total net investment income (loss)</b>	<b>(5,197,261)</b>	<b>100,443,382</b>
Other miscellaneous	253,740	10,176
<b>Total additions</b>	<b>63,797,367</b>	<b>190,215,975</b>
<b>Deductions</b>		
Annuity benefits and terminations	89,855,588	84,025,435
Transfers to other plan administrators	20,448,089	3,411,316
Administrative expenses	4,983,399	4,411,462
<b>Total deductions</b>	<b>115,287,076</b>	<b>91,848,213</b>
<b>Net increase (decrease)</b>	<b>(51,489,709)</b>	<b>98,367,762</b>
<b>Net position restricted for pensions</b>		
Balance, beginning of year	2,049,615,132	1,951,247,370
Effect of change in accounting principle	(3,634,167)	-
Balance, beginning, as restated	2,045,980,965	-
<b>Balance, end of year</b>	<b>\$ 1,994,491,256</b>	<b>\$ 2,049,615,132</b>

The accompanying notes are an integral part of the financial statements.



## 14.8 Participating Local Government Employers

### **PARTICIPATING LOCAL GOVERNMENT EMPLOYERS**

	<b>DEFINED BENEFITS</b>	<b>CASH BALANCE</b>
Counties	4	0
Cities	18	0
Boroughs	146	52
Townships of the first class	18	3
Townships of the second class	165	141
Authorities and other units	170	75
Police	191	14
Firefighters	9	1
<b>Total*</b>	<b>721</b>	<b>286</b>

\* Total includes plans with no active members.

## 14.9 Individual Membership

### INDIVIDUAL MEMBERSHIP

<b>ACTIVE MEMBERS</b>	
Defined benefit plans	
Municipal	6,702
Police	752
Firefighters	126
<b>Total</b>	<b>7,580</b>
Cash balance plans	
Municipal	1,200
Police	13
Firefighters	1
<b>Total</b>	<b>1,214</b>
<b>Total active members</b>	<b>8,794</b>
<b>RETIREES AND BENEFICIARIES</b>	
Retirees	4,566
Beneficiaries	542
<b>Total retirees and beneficiaries</b>	<b>5,108</b>
<b>INACTIVE PARTICIPANTS WITH RIGHTS TO DEFERRED PENSION (VESTED)</b>	
Defined benefit	779
Cash balance	248
<b>Total vested</b>	<b>1,027</b>
Defined benefit	8
Cash balance	0
<b>Total non-vested</b>	<b>8</b>
<b>Total individual memberships</b>	<b>14,937</b>

## 14.10 Contributions

	2015	2014
Municipality normal cost	\$47,504,803	\$39,838,781
Amortization of unfunded actuarial accrued liability	(4,965,969)	(3,627,673)
<b>Total<sup>(1)</sup></b>	<b>\$42,538,834</b>	<b>\$36,211,108</b>

#### 14.11 Investment Allocation

Domestic Equities (large capitalized firms)	25 percent
Domestic Equities (small capitalized firms)	15 percent
International Equities (developed markets)	15 percent
International Equities (emerging markets)	10 percent
Fixed income	15 percent
Real estate	12.5 percent
Timberland	7.5 percent

## 14.12 Foreign Currency Risk

### 2015 FOREIGN CURRENCY RISK

CURRENCY	EQUITY	SHORT-TERM	TOTAL
European Euro	\$76,667,441	\$ -	\$76,667,441
Japanese Yen	42,201,404	-	42,201,404
British Pound Sterling	34,531,699	-	34,531,699
Swiss Franc	16,256,244	(26)	16,256,218
Hong Kong Dollar	14,109,955	-	14,109,955
Norwegian Krone	3,762,934	-	3,762,934
Swedish Krona	3,425,252	-	3,425,252
South Korean Won	2,473,852	-	2,473,852
Australian Dollar	1,886,688	-	1,886,688
Thailand Baht	1,320,119	-	1,320,119

### 2014 FOREIGN CURRENCY RISK

CURRENCY	EQUITY	SHORT-TERM	TOTAL
European Euro	\$59,462,977	(\$37,681)	\$59,425,296
Japanese Yen	46,133,758	59	46,133,817
British Pound Sterling	35,334,367	-	35,334,367
Swiss Franc	18,391,321	21	18,391,342
Hong Kong Dollar	8,469,310	-	8,469,310
Norwegian Krone	5,727,442	-	5,727,442
Swedish Krona	5,468,868	-	5,468,868
South Korean Won	2,432,082	-	2,432,082
Thailand Baht	2,426,492	-	2,426,492
Singapore Dollar	1,008,523	-	1,008,523
Australian Dollar	797,279	-	797,279
Israeli Shekel	606,740	-	606,740

14.13 Supplemental Schedule 1 – Investment Returns

**SCHEDULE 1**

Schedule of Investment Returns  
Annual money-weighted rate of return,  
net of investment expense

YEAR ENDED DECEMBER 31	ANNUAL RATE
2015	-0.27%
2014	5.20%

Note: Money-weighted results for the required 10-year timeframe will be added as available.

## 14.14 Supplemental Schedule 2 – Administrative Expenses

### Supplementary Schedules and Information

#### SCHEDULE 2 – ADMINISTRATIVE EXPENSES

Comparative Two-Year Schedule  
Years Ended December 31, 2015 and 2014

	2015	2014
<b>PERSONNEL SERVICES</b>		
Salaries and wages	\$ 1,766,570	\$ 1,720,154
Social security contributions	121,944	128,069
Retirement contributions	34,641 <sup>(1)</sup>	282,345
Insurance contributions	1,219,299	647,145
Other employee benefits	6,900	6,765
<b>Total personnel services</b>	<b>3,149,354</b>	<b>2,784,478</b>
<b>PROFESSIONAL SERVICES</b>		
Actuarial	590,331	422,726
Legal	367,271	264,208
Investment consultants	187,000	175,000
IT consultants	-	144,451
Audit	162,600	108,500
Miscellaneous professional	72,797	80,837
Proxy voting services	16,100	16,100
Data processing	21,466	14,084
<b>Total professional costs</b>	<b>1,417,565</b>	<b>1,225,906</b>
<b>COMMUNICATION</b>		
Postage	53,634	61,752
Telephone	43,574	38,930
Travel and conferences	27,892	35,748
Printing	9,764	13,852
Advertising	7,620	7,380
<b>Total communication</b>	<b>142,484</b>	<b>157,662</b>
<b>OTHER SERVICES AND CHARGES</b>		
Office space rental	104,992	112,435
Contracted EDP services	72,160	51,266
Equipment leasing	29,603	18,054
Supplies	24,374	17,354
Maintenance	2,238	5,904
Dues and subscriptions	7,507	3,538
Bonding and insurance	1,744	1,293
<b>Total other services and charges</b>	<b>242,618</b>	<b>209,844</b>
<b>DEPRECIATION</b>		
	31,378	33,572
<b>Total administrative expenses</b>	<b>\$ 4,983,399</b>	<b>\$ 4,411,462</b>

## 14.15 Supplemental Schedule 3 – Investment Expenses

### SCHEDULE 3 – INVESTMENT EXPENSES

Comparative Two-Year Schedule  
Years Ended December 31, 2015 and 2014

	2015	2014
Investment management fees	\$ 9,012,672	\$ 7,789,141
Custodial fees	89,858	74,073
<b>Total investment expenses</b>	<b>\$ 9,102,530</b>	<b>\$ 7,863,214</b>

#### 14.16 Supplemental Schedule 4 – Payment to Consultants

### SCHEDULE 4 – PAYMENT TO CONSULTANTS

Comparative Two-Year Schedule  
Years Ended December 31, 2015 and 2014

FIRM NAME	NATURE OF SERVICE	2015	2014
Cheiron	Actuary	\$ 590,331	\$ 422,726
CliftonLarsonAllen, LLP	Auditor	162,600	108,500
Dahab Associates, Inc.	Investment consultant	187,000	175,000
Akanksha	IT consultants	-	127,150
ISS	Proxy voting services	16,100	16,100
<b>Total</b>		<b>\$ 956,031</b>	<b>\$ 849,476</b>

## 14.17 Number of Members per Plan

### NUMBER OF MEMBERS PER PLAN

(Plans with more or 100 members )

PLAN	MEMBERS	%
Allentown City	857	5.52
Adams County	785	5.06
Bethlehem City	651	4.20
Harrisburg City – Plan B	408	2.63
Jefferson County	279	1.80
Harrisburg City Fire – Plan B	209	1.35
Easton City	196	1.26
Monroeville Municipality	180	1.16
Lehigh County Authority	179	1.15
Bucks County Water & Sewer Authority	162	1.04
Tredyffrin Township	126	0.81
Upper Moreland Township	115	0.74
Hermitage City	107	0.69
Capital Region Water	105	0.68



## 14.18 Changes in Net Position

### CHANGES IN NET POSITION

Last 10 Years

YEAR	CONTRIBUTIONS	INVESTMENT INCOME (LOSS) AND MISCELLANEOUS INCOME	ANNUITY BENEFITS AND TERMINATIONS	ADMINISTRATIVE EXPENSES	CHANGE IN NET POSITION
2015	\$ 68,740,888	(\$ 4,943,521)	\$ 110,303,677	\$ 4,983,399	(\$ 51,489,709)
2014	89,762,417	100,453,558	87,436,751	4,411,462	98,367,762
2013	61,092,399	310,197,575	78,245,253	3,723,590	289,321,131
2012	59,253,955	187,755,253	71,827,710	3,424,363	171,257,135
2011	61,265,501	(29,086,613)	81,155,883	3,142,004	(52,118,999)
2010	61,930,391	180,338,425	63,383,838	3,183,253	175,701,725
2009	54,933,975	210,272,809	66,048,632	3,203,478	195,954,674
2008	49,693,605	(387,077,602)	53,771,225	2,986,656	(394,141,878)
2007	46,833,548	114,838,806	49,905,064	2,862,482	108,904,808
2006	37,749,106	161,140,029	62,491,362	2,920,868	133,476,905

## 14.19 Revenues by Source

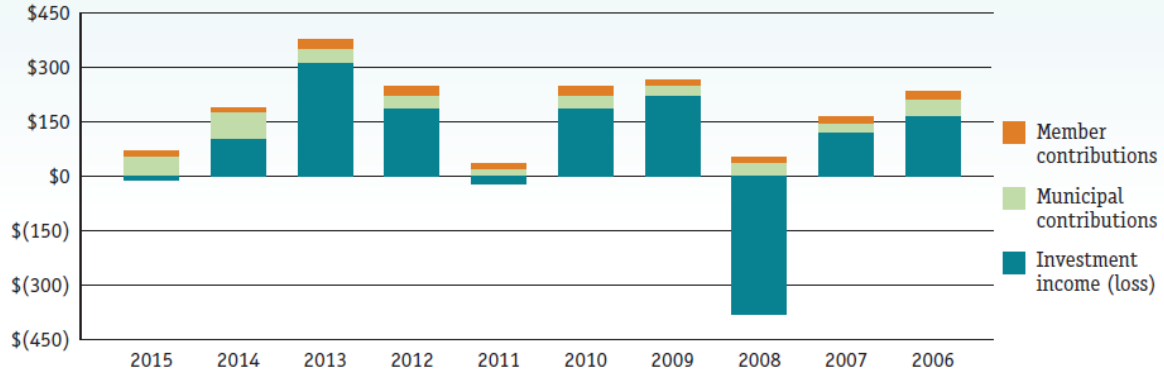
### REVENUES BY SOURCE

Last 10 Years

YEAR	MEMBER CONTRIBUTIONS	MUNICIPAL CONTRIBUTIONS AND TRANSFERS FROM OTHER PLAN ADMINISTRATORS <sup>(1)</sup>	MUNICIPAL ASSESSMENTS <sup>(2)</sup>	INVESTMENT INCOME (LOSS) AND MISCELLANEOUS INCOME	TOTAL REVENUE, NET OF LOSSES
2015	\$ 19,605,687	\$ 48,929,087	\$ 206,114	(\$ 4,943,521)	\$ 63,797,367
2014	18,441,437	71,157,740 <sup>(3)</sup>	163,240	100,453,558	190,215,975
2013	22,416,432	38,493,407	182,560	310,197,575	371,289,974
2012	20,981,612	37,974,023	298,320	187,755,253	247,009,208
2011	20,732,344	40,231,586	301,571	(29,086,613)	32,178,888
2010	20,684,591	40,949,360	296,440	180,338,425	242,268,816
2009	19,331,869	35,309,446	292,660	210,272,809	265,206,784
2008	17,870,426	31,532,859	290,320	(387,077,602)	(337,383,997)
2007	17,491,672	29,059,248	282,628	114,838,806	161,672,354
2006	16,316,197	21,148,089	284,820	161,140,029	198,889,135

### REVENUES BY SOURCE

(Amounts in Millions)



## 14.20 Expenses by Type

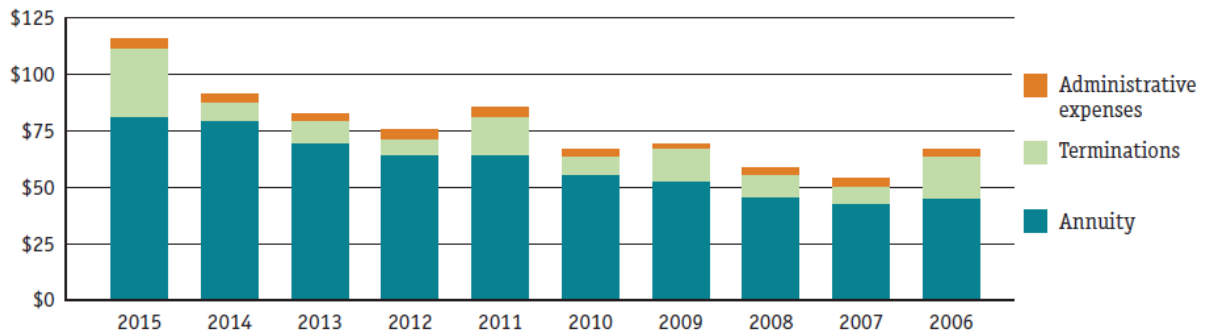
### EXPENSES BY TYPE

Last 10 Years

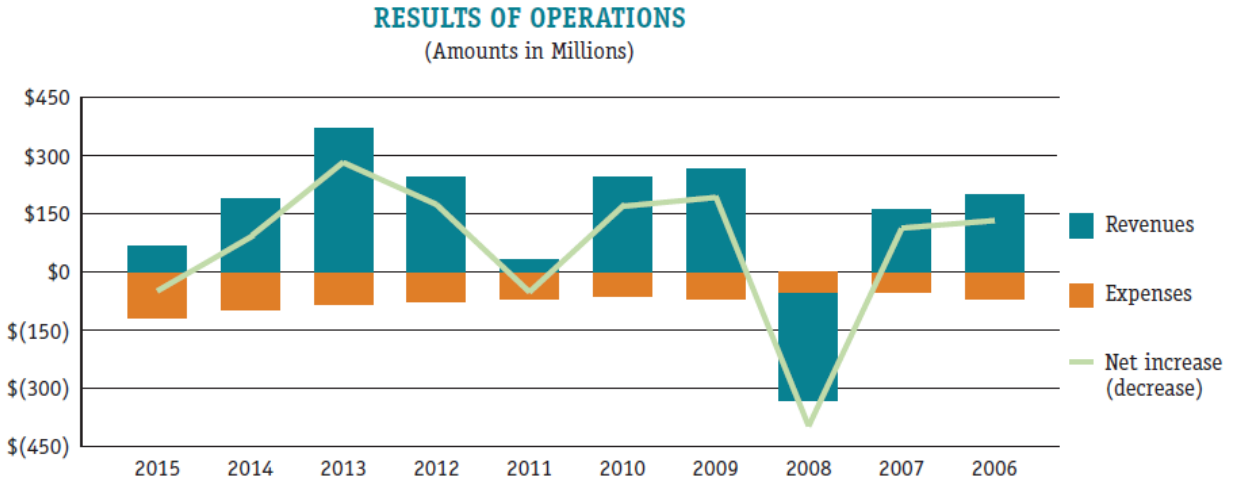
YEAR	BENEFIT EXPENSES		ADMINISTRATIVE EXPENSES	TOTAL EXPENSES
	ANNUITY	TERMINATION		
2015	\$ 81,299,398	\$ 29,004,279	\$ 4,983,399	\$ 115,287,076
2014	78,046,330	9,390,421	4,411,462	91,848,213
2013	68,901,058	9,344,195	3,723,590	81,968,843
2012	63,390,100	8,437,610	3,424,363	75,252,073
2011	63,105,165	18,050,718	3,142,004	84,297,887
2010	54,771,528	8,612,310	3,183,373	66,567,211
2009	52,267,003	13,781,629	3,203,478	69,252,110
2008	46,173,544	7,597,681	2,986,656	56,757,881
2007	42,898,882	7,006,182	2,862,482	52,767,546
2006	44,136,795	18,354,567	2,920,868	65,412,230

### EXPENSES BY TYPE

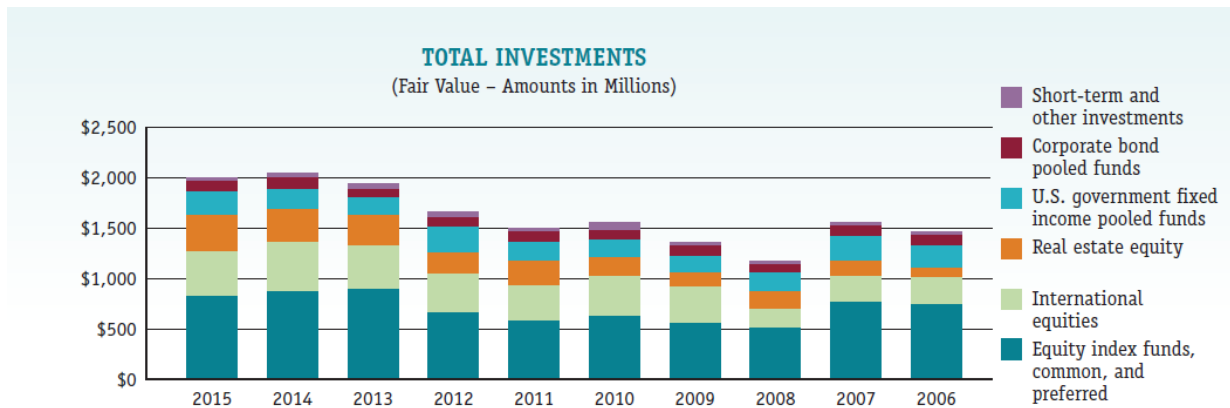
(Amounts in Millions)



## 14.21 Results of Operations



## 14.22 Total Investments



## 14.23 Schedule of Benefit Deductions From Plan Net Assets by Type

### SCHEDULE OF BENEFIT DEDUCTIONS FROM PLAN NET ASSETS BY TYPE

Last Nine Years<sup>(1)</sup>

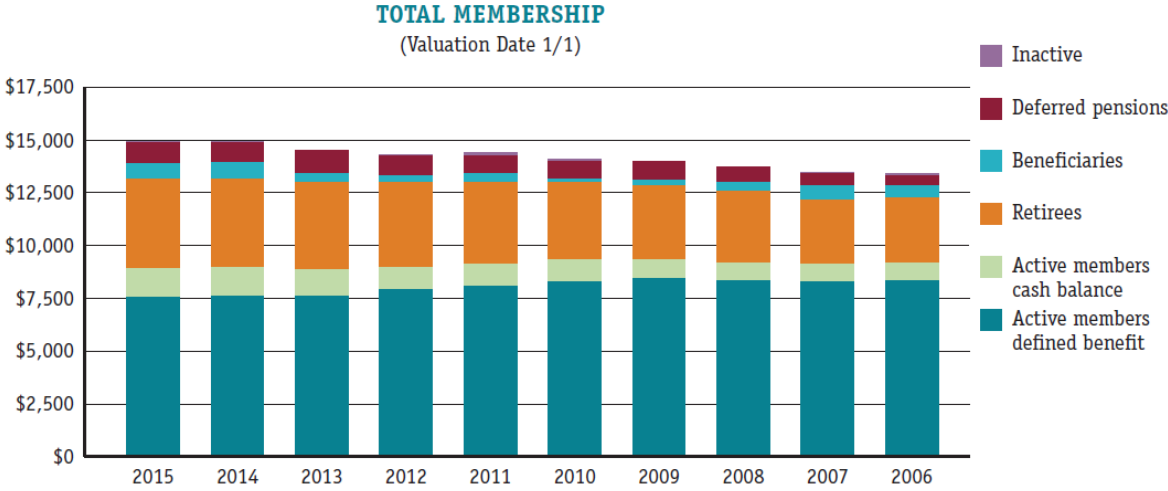
YEAR	EXPENSES BY TYPE							TOTAL ANNUITY
	NORMAL	EARLY	DISABILITY	SURVIVOR	DEATH	DROP <sup>(2)</sup>	TRANSFER AND OTHER	
2015	\$ 64,508,631	\$ 8,698,618	\$ 1,036,807	\$ 3,900,315	\$ 2,614,938	\$ 460,751	\$ 79,338	\$ 81,299,398
2014	58,291,738	8,769,947	1,362,544	5,569,629	3,234,667	146,215	671,590	78,046,330
2013	52,063,381	8,156,170	1,722,313	5,243,882	1,637,485	68,795	9,032	68,901,058
2012	47,951,194	7,545,724	1,347,255	4,848,070	1,678,836	0	19,021	63,390,100
2011	44,166,997	6,161,604	1,257,354	4,497,860	2,241,312	0	4,780,038	63,105,165
2010	38,721,068	4,263,362	1,392,815	4,376,019	2,653,312	0	3,364,952	54,771,528
2009	36,648,826	3,780,903	2,462,766	4,284,030	3,523,786	0	1,566,692	52,267,003
2008	34,911,175	4,549,688	1,351,900	3,897,639	1,397,947	0	65,195	46,173,544
2007	31,560,200	4,397,101	1,318,921	3,975,518	1,085,900	0	561,242	42,898,882

14.24 Schedule of Refund Deductions From Plan Net Assets by Type

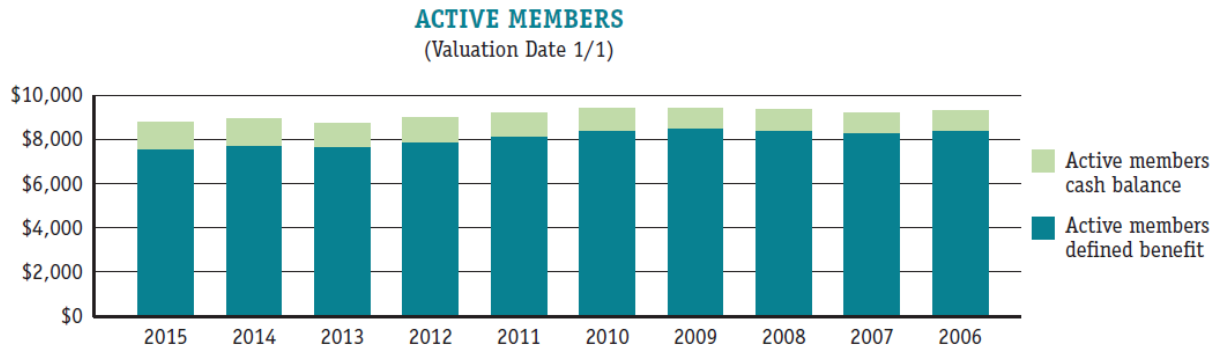
**SCHEDULE OF REFUND DEDUCTIONS FROM PLAN NET ASSETS BY TYPE**  
 Last Nine Years<sup>(1)</sup>

YEAR	EXPENSES BY TYPE		
	TERMINATIONS	LUMP SUM	TOTAL REFUNDS
2015	\$ 2,838,347	\$ 26,165,932	\$ 29,004,279
2014	4,788,017	4,602,404	9,390,421
2013	2,449,964	6,894,231	9,344,195
2012	3,908,772	4,528,838	8,437,610
2011	12,421,382	5,629,336	18,050,719
2010	5,657,499	2,954,811	8,612,310
2009	11,189,048	2,592,581	13,781,629
2008	6,675,755	921,926	7,597,681
2007	4,262,309	2,743,873	7,006,182

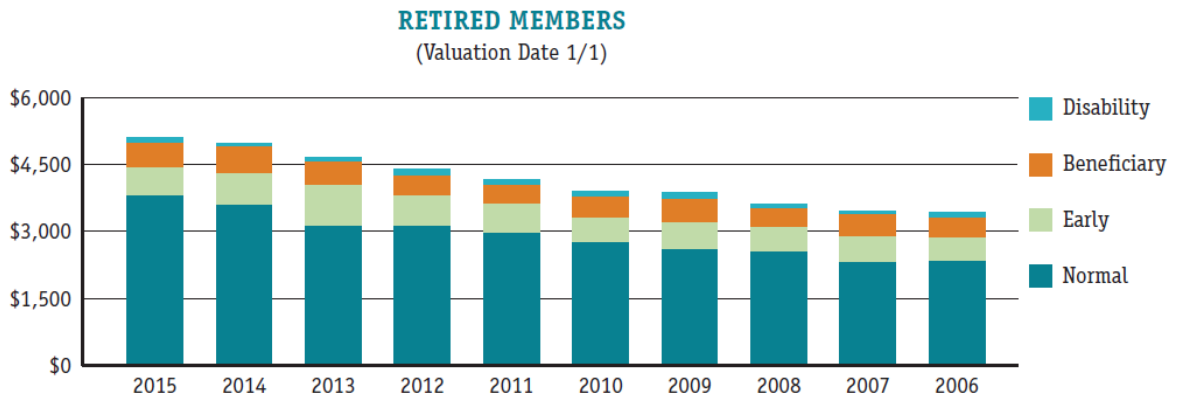
14.25 Total Membership



## 14.26 Active Members



## 14.27 Retired Members



## 14.28 Distribution of Active Members – Counts by Age/Service

### DISTRIBUTION OF ACTIVE MEMBERS

Counts by Age/Service as of January 1, 2015

AGE	COUNTS BY AGE/SERVICE										TOTAL
	1 YEAR OR LESS	1 TO 2	2 TO 3	3 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 & UP	
Under 20	9	0	0	0	0	0	0	0	0	0	9
20 – 24	93	52	21	12	4	0	0	0	0	0	182
25 – 29	129	91	80	88	100	2	0	0	0	0	490
30 – 34	103	83	59	89	232	75	4	0	0	0	645
35 – 39	76	48	52	75	227	222	46	1	0	0	747
40 – 44	63	54	59	94	237	233	154	71	11	0	976
45 – 49	76	78	59	99	236	275	226	143	88	3	1,283
50 – 54	78	73	52	78	256	252	218	194	180	117	1,498
55 – 59	65	67	35	89	228	267	231	184	164	236	1,566
60 – 64	30	44	20	55	133	145	138	113	118	206	1,002
65 & up	10	8	12	12	62	69	66	60	46	51	396
Total	732	598	449	691	1,715	1,540	1,083	766	607	613	8,794



## 14.29 Distribution of Active Members – Counts by Average Annual Salary/Service

### DISTRIBUTION OF ACTIVE MEMBERS

Average Annual Salary by Age/Service as of January 1, 2015

COUNTS BY AGE/SERVICE											
AGE	1 YEAR OR LESS	1 TO 2	2 TO 3	3 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 & UP	TOTAL
Under 20	\$ 18,725	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,725
20 – 24	21,914	38,371	43,303	43,980	50,981	-	-	-	-	-	31,178
25 – 29	24,313	40,049	44,224	43,967	45,547	60,131	-	-	-	-	38,496
30 – 34	26,544	41,133	43,666	49,075	53,013	56,394	61,268	-	-	-	46,303
35 – 39	22,692	47,769	44,182	47,708	51,413	60,003	62,093	34,195	-	-	50,569
40 – 44	22,243	41,001	45,214	46,495	50,768	57,965	60,476	64,144	69,543	-	52,203
45 – 49	24,016	42,757	43,140	43,682	48,648	53,019	56,428	56,496	62,378	52,509	50,996
50 – 54	26,882	43,300	47,629	42,591	47,641	49,767	50,837	59,563	61,269	59,470	51,018
55 – 59	24,783	49,317	45,119	42,079	44,545	49,812	51,377	52,926	56,766	58,132	50,020
60 – 64	25,771	45,865	38,503	44,488	47,876	47,329	48,951	53,092	55,548	59,446	50,692
65 & up	29,195	31,810	32,292	44,005	39,831	41,377	41,885	43,169	53,997	57,053	\$44,279
Total	\$ 24,490	\$ 42,878	\$ 43,981	\$ 44,978	\$ 48,648	\$ 52,802	\$ 53,220	\$ 56,669	\$ 58,700	\$ 58,712	\$ 49,103

### 14.30 Pensions in Payment Status

#### PENSIONS IN PAYMENT STATUS ON JANUARY 1, 2015

By Type and Monthly Amount

MONTHLY AMOUNT	TOTAL	TYPE OF PENSION				
		NORMAL	INVOLUNTARY EARLY	VOLUNTARY EARLY	SERVICE DISABILITY	NON-SERVICE DISABILITY
Total	5,108	4,218	267	509	34	80
Under \$100	251	216	25	8	1	1
\$100 - \$199	307	249	41	16	1	0
200 - 299	294	230	38	25	1	0
300 - 399	303	246	27	29	0	1
400 - 499	284	229	24	29	2	0
500 - 599	302	245	16	32	1	8
600 - 699	244	199	13	26	2	4
700 - 799	254	191	17	40	0	6
800 - 899	230	175	10	29	1	15
900 - 999	208	157	9	27	4	11
1,000 - 1,199	411	323	17	54	4	13
1,200 - 1,399	317	249	7	51	4	6
1,400 - 1,599	282	234	4	32	6	6
1,600 - 1,799	202	173	6	22	0	1
1,800 - 1,999	203	173	5	22	1	2
2,000 - 2,199	163	147	2	17	1	1
2,200 - 2,399	147	130	3	13	1	0
2,400 - 2,599	116	106	0	8	1	1
2,600 - 2,799	91	79	2	7	1	2
2,800 - 2,999	80	76	0	2	1	1
3,000 - 3,499	174	163	1	9	1	0
3,500 - 3,999	115	106	0	8	0	1
4,000 and over	125	122	0	3	0	0

### 14.31 Pensions Awarded – 10 Years

<b>PENSIONS AWARDED EACH OF THE LAST 10 YEARS</b>										
By Type and Amount										
VALUATION DATE 1/1	TOTAL		NORMAL		VOLUNTARY EARLY		INVOLUNTARY EARLY		DISABILITY	
	COUNT	AMA <sup>(1)</sup>	COUNT	AMA	COUNT	AMA	COUNT	AMA	COUNT <sup>(2)</sup>	AMA
2015	392	1,492	341	1,524	29	1,575	14	825	8(2)	1,022
2014	431	1,706	364	1,800	34	1,280	17	905	16(2)	1,319
2013	390	1,370	341	1,421	22	1,614	20	520	7(2)	709
2012	438	1,367	352	1,496	40	1,180	37	459	9(3)	888
2011	396	1,552	341	1,632	37	1,250	13	364	5(0)	1,407
2010	296	1,336	249	1,412	26	1,300	17	339	4(0)	1,067
2009	271	1,157	223	1,150	36	1,259	7	843	5(3)	1,162
2008	236	1,065	227	1,056	0	0	6	1,259	3(0)	1,350
2007	252	1,069	192	1,082	32	1,196	19	572	9(2)	1,373
2006	264	1,270	217	1,290	11	639	23	1,257	13(4)	1,493

### 14.32 Schedule of Total Membership – 10 Years

<b>SCHEDULE OF TOTAL MEMBERSHIP – 10-YEAR TREND</b>							
VALUATION DATE 1/1	ACTIVE MEMBERS DEFINED BENEFIT PLANS	ACTIVE MEMBERS CASH BALANCE PLANS	RETIREEES	BENEFICIARIES	DEFERRED PENSIONS <sup>(3)</sup>	INACTIVE MEMBERS <sup>(4)</sup>	TOTAL
2015	7,580	1,214	4,566	542	1,027	8	14,937
2014	7,676	1,185	4,423	520	1,044	14	14,862
2013	7,599	1,131	4,160	520	1,098	51	14,559
2012	7,836	1,158	3,899	495	952	21	14,361
2011	8,091	1,119	3,707	477	945	42	14,381
2010	8,357	994	3,449	460	834	23	14,117
2009	8,411	978	3,289	461	847	0	13,986
2008	8,383	950	3,173	425	744	7	13,682
2007	8,314	918	2,965	494	723	33	13,447
2006	8,374	896	2,941	436	675	66	13,388

### 14.33 Schedule of Active Member Valuation Data

DEFINED BENEFIT PLANS								
VALUATION DATE 1/1	NUMBER OF ACTIVE MEMBERS	PERCENTAGE CHANGE IN MEMBERSHIP	NUMBER OF PARTICIPATING EMPLOYERS	PERCENTAGE INCREASE IN NUMBER OF PARTICIPATING EMPLOYERS	TOTAL ANNUAL PAYROLL	PERCENTAGE INCREASE IN PAYROLL	AVERAGE ANNUAL SALARY	PERCENTAGE INCREASE IN AVERAGE ANNUAL SALARY
2015	7,580	(1.3)	721	0.7	\$384,270,155	(1.3)	\$50,695	(0.1)
2014	7,676	1.0	716	0.3	389,410,214	3.5	50,731	2.5
2013	7,599	(3.0)	714	0.7	376,296,674	2.6	49,519	5.8
2012	7,836	(3.2)	709	0.3	366,882,467	(4.4)	46,820	1.3
2011	8,091	(3.2)	707	1.4	383,802,844	1.6	47,436	4.9
2010	8,357	(0.6)	697	0.1	377,960,930	1.5	45,227	2.2
2009	8,411	0.3	696	0.6	372,370,037	2.0	44,272	1.7
2008	8,383	0.8	692	1.3	364,865,000	1.7	43,524	0.9
2007	8,314	(0.7)	683	0.0	358,691,000	7.6	43,143	8.4
2006	8,374	0.4	683	0.9	333,300,000	4.5	39,807	4.1

CASH BALANCE PLANS								
VALUATION DATE 1/1	NUMBER OF ACTIVE MEMBERS	PERCENTAGE CHANGE IN MEMBERSHIP	NUMBER OF PARTICIPATING EMPLOYERS	PERCENTAGE INCREASE IN NUMBER OF PARTICIPATING EMPLOYERS	TOTAL ANNUAL PAYROLL	PERCENTAGE INCREASE IN PAYROLL	AVERAGE ANNUAL SALARY	PERCENTAGE INCREASE IN AVERAGE ANNUAL SALARY
2015	1,214	2.4	286	6.7	\$47,537,851	5.2	\$39,158	2.8
2014	1,185	4.8	268	6.8	45,193,710	1.6	38,138	(3.1)
2013	1,131	(2.3)	251	4.6	44,490,671	8.1	39,337	10.7
2012	1,158	3.5	240	4.8	41,143,383	(1.3)	35,530	(4.6)
2011	1,119	12.6	229	13.4	41,683,065	18.8	37,250	5.5
2010	944	1.6	203	(0.5)	35,104,086	6.9	35,316	5.3
2009	978	3.0	204	11.0	32,811,919	5.5	33,550	2.5
2008	950	3.5	183	3.4	31,107,000	10.3	32,744	6.5
2007	918	2.5	177	2.9	28,213,000	1.0	30,734	(1.6)
2006	896	3.3	172	1.8	27,970,000	4.3	31,218	1.4

## 14.34 Schedule of Average New Monthly Benefit Payments from Defined Benefit Plans

<b>SCHEDULE OF AVERAGE NEW MONTHLY BENEFIT PAYMENTS FROM DEFINED BENEFIT PLANS<sup>(1)</sup></b>							
10 Years Ended January 1, 2015							
RETIREMENT EFFECTIVE DATES	YEARS CREDITED SERVICE						
	< 5	5-10	10-15	15-20	20-25	25-30	30+
<b>Period 1/1/14 to 1/1/2015</b>							
Average monthly benefit	\$189	\$593	\$831	\$1,304	\$1,775	\$2,236	\$3,754
Average final average salary	\$53,205	\$45,627	\$37,345	\$43,942	\$50,630	\$50,369	\$64,658
Number of retired members	16	34	34	51	36	52	54
<b>Period 1/1/13 to 1/1/2014</b>							
Average monthly benefit	\$172	\$438	\$786	\$1,226	\$2,042	\$2,115	\$3,318
Average final average salary	\$46,376	\$41,308	\$39,652	\$43,743	\$51,190	\$50,465	\$57,022
Number of retired members	11	35	56	41	41	43	65
<b>Period 1/1/12 to 1/1/2013</b>							
Average monthly benefit	\$419	\$388	\$702	\$1,196	\$1,460	\$2,093	\$3,079
Average final average salary	\$48,636	\$35,733	\$36,715	\$42,421	\$44,420	\$46,997	\$53,016
Number of retired members	13	37	61	39	44	36	76
<b>Period 1/1/11 to 1/1/12</b>							
Average monthly benefit	\$256	\$410	\$673	\$1,059	\$1,476	\$2,083	\$3,203
Average final average salary	\$48,402	\$36,620	\$42,759	\$40,426	\$44,336	\$49,368	\$55,249
Number of retired members	12	31	42	50	54	30	61
<b>Period 1/1/10 to 1/1/11</b>							
Average monthly benefit	\$244	\$544	\$813	\$1,209	\$1,588	\$2,394	\$3,336
Average final average salary	\$50,215	\$39,201	\$39,197	\$43,014	\$43,653	\$54,686	\$58,242
Number of retired members	7	31	53	44	70	40	97
<b>Period 1/1/09 to 1/1/10</b>							
Average monthly benefit	\$151	\$392	\$729	\$1,294	\$1,653	\$2,247	\$3,020
Average final average salary	\$30,418	\$36,819	\$36,047	\$42,001	\$47,445	\$48,018	\$53,737
Number of retired members	17	30	26	39	47	40	65
<b>Period 1/1/08 to 1/1/09</b>							
Average monthly benefit	\$237	\$431	\$455	\$1,004	\$1,051	\$1,999	\$2,118
Average final average salary	\$29,979	\$35,106	\$32,921	\$45,862	\$35,792	\$50,659	\$50,249
Number of retired members	17	32	42	55	25	38	58
<b>Period 1/1/07 to 1/1/08</b>							
Average monthly benefit	\$179	\$374	\$685	\$999	\$1,338	\$1,739	\$2,530
Average final average salary	\$34,031	\$32,597	\$35,004	\$35,358	\$35,290	\$45,102	\$51,424
Number of retired members	11	34	45	43	33	32	38
<b>Period 1/1/06 to 1/1/07</b>							
Average monthly benefit	\$376	\$458	\$707	\$928	\$1,331	\$1,864	\$2,443
Average final average salary	\$38,487	\$38,257	\$31,807	\$43,304	\$40,141	\$45,548	\$50,429
Number of retired members	11	27	35	45	39	36	30
<b>Period 1/1/05 to 1/1/06</b>							
Average monthly benefit	\$686	\$386	\$661	\$1,052	\$1,330	\$1,912	\$2,292
Average final average salary	\$38,368	\$27,580	\$33,166	\$37,380	\$37,914	\$46,427	\$45,614
Number of retired members	11	27	37	44	36	44	60

## 14.35 Schedule of Participating Plans

### SCHEDULE OF PARTICIPATING PLANS<sup>(1)(2)</sup>

as of January 1, 2015

#### COUNTIES

Adams County  
Forest County  
Jefferson County  
Sullivan County

#### CITIES

Allentown City  
Bethlehem City  
Clairton City  
Connellsville City  
Easton City  
Farrell City  
Greensburg City  
Harrisburg City  
Hermitage City  
Jeannette City  
Latrobe City  
Lebanon City  
Lower Burrell City  
Nanticoke City  
New Kensington City

Bridgeville Borough  
Bridgewater Borough  
Brockway Borough  
Brookville Borough  
California Borough  
Cambridge Springs Borough  
Camp Hill Borough  
Carnegie Borough  
Carroll Valley Borough  
Carrolltown Borough  
Centerville Borough  
Central City Borough  
Charleroi Borough  
Claysville Borough  
Cleona Borough  
Clymer Borough  
Coaldale Borough  
Cochranton Borough  
Cokeburg Borough  
Collegeville Borough  
Collingdale Borough  
Conneautville Borough

Franklin Borough  
Franklintown Borough  
Freeburg Borough  
Freedom Borough  
Freeland Borough  
Freeport Borough  
Greenville Borough  
Hollidaysburg Borough  
Homer City Borough  
Honey Brook Borough  
Hughestown Borough  
Hummelstown Borough  
Huntingdon Borough  
Hyndman Borough  
Jim Thorpe Borough  
Johnsonburg Borough  
Kenhorst Borough  
Kennett Square Borough  
Kittanning Borough  
Knox Borough  
Kulpmont Borough  
Kutztown Borough

Mount Jewett Borough  
Mount Pleasant Borough  
Mount Union Borough  
Mt. Gretna Borough  
Nanty Glo Borough  
Narberth Borough  
Nesquehoning Borough  
New Eagle Borough  
New Florence Borough  
New Stanton Borough  
Newport Borough  
Newtown Borough  
Norristown Borough  
North East Borough  
North Wales Borough  
Northumberland Borough  
Orwigsburg Borough  
Palmerton Borough  
Palmyra Borough  
Pen Argyl Borough  
Pennsburg Borough  
Perkasie Borough

## 14.36 Asset Allocation

### ASSET ALLOCATION

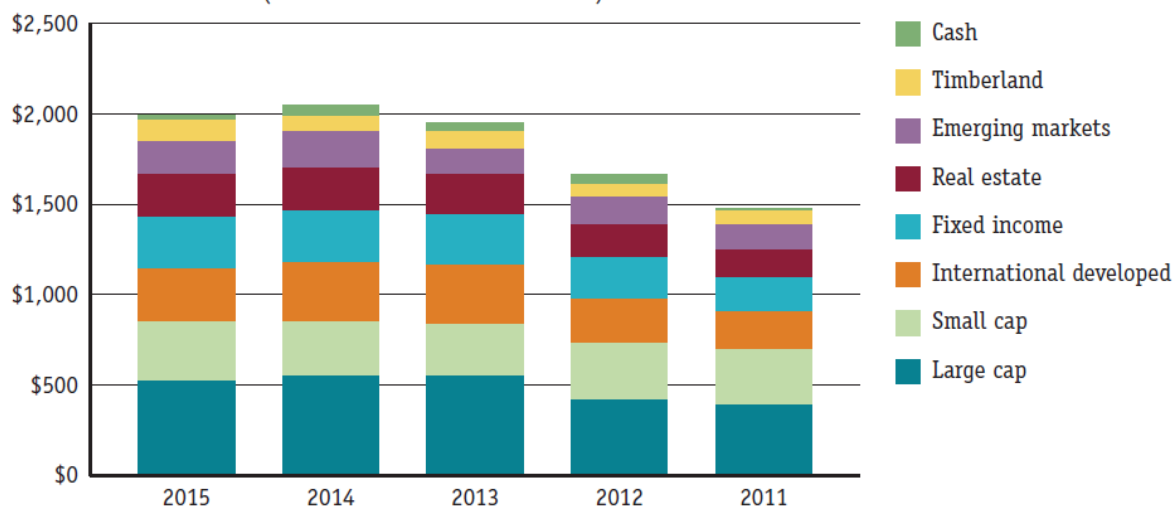
(as of December 31, 2015)

TYPE	PERCENT	AMOUNT
Large cap equities	26.1	\$ 520,582,661
Small cap equities	14.8	296,458,850
International developed markets	14.1	280,938,692
International emerging markets	8.8	174,723,714
<b>Total equities</b>	<b>63.8</b>	<b>\$ 1,272,703,917</b>
Fixed income	16.5	330,326,796
Real estate	18.0	359,232,883
Cash and equivalents <sup>(1)</sup>	1.7	34,308,906
<b>Total portfolio</b>	<b>100.0</b>	<b>\$ 1,996,572,502</b>

## 14.37 Portfolio Distribution

### PORTFOLIO DISTRIBUTION — FIVE-YEAR TREND

(Fair Value – Amounts in Millions)



## 14.38 Performance Summary

PERFORMANCE SUMMARY				
	1 YEAR (PERCENT)	3 YEAR (PERCENT)	5 YEAR (PERCENT)	10 YEAR (PERCENT)
Total Portfolio	0.1	8.1	7.1	5.7
Public Fund Rank <sup>(2)</sup>	(43)	(35)	(45)	(56)
Shadow Index <sup>(3)</sup>	0.3	8.0	7.1	5.9
Large Cap Equity	1.8	15.9	13.3	7.4
Large Cap Rank <sup>(4)</sup>	(41)	(36)	(31)	(64)
S&P 500	1.4	15.1	12.6	7.3
Small Cap Equities	-5.2	12.3	9.7	6.7
Small Cap Rank <sup>(4)</sup>	(75)	(62)	(67)	(81)
Russell 2000	-4.4	11.7	9.2	6.8
International Equity	0.3	6.1	4.5	4.5
International Equity Rank <sup>(5)</sup>	(45)	(43)	(50)	(57)
MSCI EAFE	-0.4	5.5	4.0	3.5
Emerging Markets Equity	-15.1	-7.2	-5.0	-
Emerging Markets Rank <sup>(6)</sup>	(70)	(82)	(84)	-
MSCI Emerging Markets	-14.6	-6.4	-4.5	3.9
Real Estate	11.2	11.0	10.1	5.6
NCREIF	13.3	12.0	12.2	7.8
Fixed Income	0.6	1.5	3.3	4.5
Core Fixed Income Rank <sup>(7)</sup>	(70)	(78)	(87)	(84)
Barclays Aggregate	0.6	1.4	3.3	4.5

## 14.39 Summary of Investment Expenses

SUMMARY OF INVESTMENT EXPENSES						
December 31, 2015						
SECTOR	TARGET ALLOCATION	TARGET DOLLAR	CURRENT ALLOCATION	CURRENT DOLLAR ALLOCATION	VARIANCE/DOLLAR	VARIANCE/PERCENT
Large cap	25	\$ 499,143,126	26.1	\$ 520,582,661	\$ 21,439,535	1.07
Small cap	15	299,485,875	14.8	296,458,850	(3,027,025)	-0.15
International developed	15	299,485,875	14.1	280,938,692	(18,547,183)	-0.93
Emerging markets	10	199,657,250	8.8	174,723,714	(24,933,536)	-1.25
Fixed income	15	299,485,875	16.5	330,326,796	30,840,921	1.54
Real estate	12.5	249,571,563	12.4	248,171,383	(1,400,180)	-0.07
Timber	7.5	149,742,938	5.6	111,061,500	(38,681,438)	-1.94
Cash	0.0	-	1.7	34,308,906	34,308,906	1.72
<b>TOTAL</b>	<b>100</b>	<b>\$ 1,996,572,502</b>	<b>100</b>	<b>\$ 1,996,572,502</b>		



## SUMMARY OF INVESTMENT EXPENSES

Comparative Two-Year Schedule  
Years ended December 31, 2015 and 2014

FIRM NAME	2015	2014
<b>Large Cap Domestic Managers</b>		
Polen Capital Management	\$ 769,266	\$ 676,568
LSV Asset management	587,637	569,416
DePrince, Race & Zollo	383,925	461,839
Federated Investors <sup>(1)</sup>	364,781	-
	2,105,609	1,707,823
<b>Small Cap Domestic Managers</b>		
Brandywine Global Investment	722,351	740,456
BMO Global Asset Management	634,761	569,573
Emerald Advisers	472,433	405,995
	1,829,545	1,716,024
<b>Passive Manager</b>		
State Street Global Advisors	343,901	374,275
	343,901	374,275
<b>International Managers</b>		
HGK Asset Management	621,742	642,914
Johnston Asset Management	510,761	503,521
Jarislowsky, Fraser Limited <sup>(2)</sup>	328,610	100,960
WHV Investment Management <sup>(3)</sup>	-	150,301
	1,461,113	1,397,696
<b>Real Estate Managers</b>		
TIAA-CREF Global Real Estate	1,494,400	1,145,397
Forest Investment Associates	1,003,959	755,774
Prudential Real Estate Investors	774,145	692,152
	3,272,504	2,593,323
<b>Total Investment Management Fees</b>	<b>\$ 9,012,672</b>	<b>\$ 7,789,141</b>
Custodial Fees – BNY Mellon	89,858	74,073
<b>Total Investment Expenses</b>	<b>\$ 9,102,530</b>	<b>\$ 7,863,214</b>

## 14.40 Ten Largest Common Stock Holdings

### TEN LARGEST COMMON STOCK HOLDINGS

As of December 31, 2015 (Fair Value)

STOCK	SHARES	FAIR VALUE	% OF PORTFOLIO
Visa Inc.	178,472	\$ 13,840,504	0.69
Starbucks Corp.	205,302	12,324,279	0.62
Nike, Inc.	197,180	12,323,750	0.62
Alphabet Inc., Class C	14,830	11,254,190	0.56
Oracle Corp.	267,752	9,780,981	0.49
Priceline Group Inc.	7,591	9,678,145	0.48
TJX COS Inc.	135,328	9,596,108	0.48
Alphabet Inc., Class A	11,975	9,316,670	0.47
Abbott Laboratories	203,800	9,152,658	0.46
Regeneron Pharmaceuticals Inc.	16,403	8,904,697	0.45

A complete list of portfolio holdings can be obtained from the system.

## 14.41 Portfolio Summary

### PORTFOLIO SUMMARY

As of December 31, 2015

TYPE OF INVESTMENT	COST VALUE	FAIR VALUE	% OF TOTAL FAIR VALUE
Corporate and government bonds			
U.S. Government bonds	\$ 192,248,317	\$ 226,339,921	11
Corporate bonds	88,324,241	103,986,876	5
<b>Total</b>	<b>280,572,558</b>	<b>330,326,797</b>	<b>16</b>
Common stock			
Domestic	717,579,218	816,383,502	41
International	413,804,360	455,212,477	23
<b>Total</b>	<b>1,131,383,578</b>	<b>1,271,595,979</b>	<b>64</b>
Other investments			
Real estate	298,059,159	357,870,568	18
Cash equivalents	37,389,514	37,389,514	2
<b>Total</b>	<b>335,448,673</b>	<b>395,260,082</b>	<b>20</b>
<b>Grand total</b>	<b>\$ 1,747,404,809</b>	<b>\$ 1,997,182,858</b>	<b>100</b>

## 14.42 Portfolio Quality

### PORTFOLIO QUALITY

Two-Year Comparative Analysis  
As of December 31, 2015 and 2014

BOND RATING	FAIR VALUE	% OF TOTAL FAIR VALUE	% OF TOTAL CARRYING VALUE
December 31, 2015			
AAA	\$ 226,339,921	69	69
AA	103,986,876	31	31
<b>Total bonds</b>	<b>\$ 330,326,797</b>	<b>100</b>	<b>100</b>
December 31, 2014			
AAA	\$ 206,849,517	69	69
AA	94,724,352	31	31
<b>Total bonds</b>	<b>\$ 301,573,869</b>	<b>100</b>	<b>100</b>

## 14.43 Summary of Commissions Paid to Brokers

### SUMMARY OF COMMISSIONS PAID TO BROKERS

Year Ended December 31, 2015

BROKER NAME	COMMISSIONS PAID	BROKER NAME	COMMISSIONS PAID
Albert Fried & Company LLC, New York	\$ 210	Exane Inc., Jersey City	\$ 4
Ancora Securities Inc., Jersey City	4,805	Exane, Paris	546
Avondale Partners LLC, Nashville	2,216	Fidentis Equities SvSa., Madrid	4,230
Baird, Robert W. & Co. Inc., Milwaukee	2,634	First Analysis Secs. Corp., Chicago	65
Banque Paribas, Frankfurt	70	Fox River Execution Tech., LLC, Jersey City	767
Banque Paribas, Paris	574	Friedman Billing and Ramsey	141
Barclays Capital Inc./LE, New Jersey	359	Goldman Sachs & Co., NY	7,971
Barclays Capital LE, Jersey City	7,455	Goldman Sachs Execution & Clearing, NY	935
Batucha Securities & Inv LTD, Tel-Aviv	833	Goldman Sachs Intl., London	15,570
BB&T Securities, LLC, Richmond	2,700	Gordon Haskett Cap. Corp., NJ	1,963
Bernstein, Sanford C. & Co., New York	3,619	Greentree Brokerage Services, Jersey City	7,618
Bloomberg Tradebook LLC, New York	44,882	Guggenheim Capital Mkt. LLC, Jersey City	248
BMO Capital Markets Corp, New York	192	Guggenheim Liquidity Svcs., New York	201

## 14.44 Solvency Test

### SOLVENCY TEST

Aggregate Accrued Liabilities for

VALUATION DATE JANUARY 1,	ACTIVE MEMBER CONTRIBUTIONS (1) <sup>(1)</sup>	RETIREES & BENEFICIARIES (2)	ACTIVE MEMBER EMPLOYER FINANCED CONTRIBUTIONS (3)	ACTUARIAL VALUE OF REPORTED ASSETS	PORTION OF ACCRUED LIABILITIES COVERED BY REPORTED ASSETS		
					(1)	(2)	(3)
2015	\$ 427,736,008	\$ 938,380,470	\$ 701,148,372	\$ 2,081,439,591	100%	100%	102%
2014	416,472,872	881,502,593	707,246,642	1,972,273,674	100%	100%	95%
2013	418,163,830	812,688,102	672,720,129	1,886,703,664	100%	100%	97%
2012	407,199,633	639,260,852	680,756,784	1,792,809,433	100%	100%	110%
2011	395,048,320	655,645,661	623,210,164	1,713,751,974	100%	100%	106%
2010	348,126,106	589,362,501	622,868,929	1,620,150,779	100%	100%	110%

<sup>(1)</sup> This includes the sum of the active member employee contribution balances, the member separate annuity account balances, the municipal for member separate annuity account balances, and the excess interest allocations.

## 14.45 Funded Status of Actuarial Liabilities

### FUNDED STATUS OF ACTUARIAL LIABILITIES

VALUATION DATE JANUARY 1,	ACTUARIAL VALUE OF ASSETS (A) <sup>(1)</sup>	ACTUARIAL LIABILITY (AL) ENTRY AGE (B)	UNFUNDED AL (SURPLUS) (B-A)	FUNDED RATIO (A/B)
2015	\$ 2,081,439,591	\$ 2,067,264,850	(\$ 14,174,741)	100.7%
2014	1,972,273,674	2,005,222,107	32,948,433	98.4%
2013	1,886,703,664	1,903,572,061	16,868,397	99.1%
2012	1,792,809,433	1,727,217,269	(65,592,164)	103.8%
2011	1,713,751,974	1,673,904,145	(39,847,829)	102.4%
2010	1,620,150,779	1,560,357,536	(59,793,243)	103.8%

<sup>(1)</sup> The Actuarial Value Assets (AVA) were determined based upon the methodology outlined in PMRS Policy Statement. The 1/1/2015 AVA was based upon the reserves published by PMRS in the 2014 CAFR.

#### 14.46 Valuation of Defined Benefit Liabilities

VALUATION OF DEFINED BENEFIT LIABILITIES			
VALUATION DATE	COMPLETE VALUATION	ROLL FORWARD	CASH BALANCE PLANS
January 1, 2015	717	4	286
January 1, 2014	4	712	268
January 1, 2013	710	4	251
January 1, 2012	4	705	240
January 1, 2011	702	5	229
January 1, 2010	5	691	202
January 1, 2009	691	5	203
January 1, 2008	4	688	183

#### 14.47 Schedule of Retirees and Beneficiaries

##### SCHEDULE OF RETIREES AND BENEFICIARIES

Added to and Removed from Rolls in Last Six Years

VALUATION DATE JANUARY 1,	ADDED TO ROLL	AVERAGE ANNUAL ANNUITIES ADDED <sup>(1)</sup>	DELETED FROM ROLL	AVERAGE ANNUAL ANNUITIES REMOVED <sup>(1)</sup>	NUMBER ON ROLL	ANNUAL ANNUITIES	PERCENTAGE INCREASE IN ANNUITIES	AVERAGE ANNUAL ANNUITIES	PERCENTAGE INCREASE IN AVERAGE ANNUAL ANNUITIES
2015	392	\$ 17,908	227	\$ 10,494	5,108	\$ 75,936,364	6.6	\$ 14,866	3.1
2014	431	20,472	168	16,043	4,943	71,257,797	9.5	14,416	3.7
2013	391	16,440	105	8,288	4,680	65,046,544	9.5	13,899	2.8
2012	438	16,404	228	14,252	4,394	59,411,245	7.5	13,521	2.4
2011	396	18,624	121	8,981	4,184	55,257,189	13.0	13,207	5.6
2010	296	16,030	137	9,458	3,909	48,897,954	7.7	12,509	3.3

## 14.48 Schedule of Total Membership

### SCHEDULE OF TOTAL MEMBERSHIP Six-Year Trend

VALUATION DATE JANUARY 1,	ACTIVE MEMBERS DEFINED BENEFIT PLANS	ACTIVE MEMBERS CASH BALANCE PLANS	RETIREES	BENEFICIARIES	DEFERRED PENSIONS	INACTIVE MEMBERS <sup>(1)</sup>	TOTAL
2015	7,580	1,214	4,566	542	1,027	8	14,937
2014	7,676	1,185	4,423	520	1,044	14	14,862
2013	7,599	1,131	4,160	520	1,098	51	14,559
2012	7,836	1,158	3,899	495	952	21	14,361
2011	8,091	1,119	3,707	477	945	42	14,381
2010	8,357	994	3,449	460	834	23	14,117

## 14.49 Funded Status of Actuarial Liabilities

### SCHEDULE OF TOTAL MEMBERSHIP FUNDED STATUS OF ACTUARIAL LIABILITIES Schedule of Total Membership Over Last Six Years

	AS OF JANUARY 1 <sup>(1)</sup>					
	2015	2014	2013	2012	2011	2010
a. Retirees currently receiving benefits	4,566	4,423	4,160	3,899	3,707	3,449
b. Beneficiaries currently receiving benefits	542	520	520	495	477	460
c. Terminated vested employees entitled to future benefits from defined benefit plans	779	753	800	723	711	647
d. Terminated non-vested employees entitled to contribution refunds from defined benefit plans	8	14	51	21	42	23
e. Active employees in defined benefit plans	7,580	7,676	7,599	7,836	8,091	8,357
i. Aggregate salary <sup>(2)</sup>	\$384,270,155	\$389,410,214	\$376,296,674	\$366,882,467	\$383,802,844	\$377,960,930
ii. Vested <sup>(3)</sup>	4,726	4,881	4,885	4,964	4,992	5,025
iii. Non-vested	2,854	2,795	2,715	2,872	3,099	3,333
f. Participants in cash balance-only plans	1,462	1,476	1,429	1,387	1,353	1,181
i. Aggregate salary <sup>(2)</sup>	\$47,537,851	\$45,193,710	\$44,490,671	\$41,143,383	\$41,683,065	\$35,104,086
ii. Active	1,214	1,185	1,131	1,158	1,119	994
iii. Inactive	248	291	298	229	234	187

## 14.50 Schedule of Active Member Valuation Data

### SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Last Six Years

DEFINED BENEFIT PLANS								
VALUATION DATE 1/1	NUMBER OF ACTIVE MEMBERS	PERCENTAGE CHANGE IN MEMBERSHIP	NUMBER OF PARTICIPATING EMPLOYERS	PERCENTAGE INCREASE IN NUMBER OF PARTICIPATING EMPLOYERS	TOTAL ANNUAL PAYROLL	PERCENTAGE INCREASE (DECREASE) IN PAYROLL	AVERAGE ANNUAL SALARY	PERCENTAGE INCREASE (DECREASE) IN AVERAGE ANNUAL SALARY
2015	7,580	(1.3)	721	0.7	\$ 384,270,155	(1.3)	\$ 50,695	(0.1)
2014	7,676	1.0	716	0.3	389,410,214	3.5	50,731	2.5
2013	7,599	(3.0)	714	0.7	376,296,674	2.6	49,519	5.8
2012	7,836	(3.2)	709	0.3	366,882,467	(4.4)	46,820	(1.3)
2011	8,091	(3.2)	707	1.4	383,802,844	1.5	47,436	4.9
2010	8,357	(0.6)	697	0.1	377,960,930	1.5	45,227	2.2

CASH BALANCE PLANS								
VALUATION DATE 1/1	NUMBER OF ACTIVE MEMBERS	PERCENTAGE CHANGE IN MEMBERSHIP	NUMBER OF PARTICIPATING EMPLOYERS	PERCENTAGE INCREASE IN NUMBER OF PARTICIPATING EMPLOYERS	TOTAL ANNUAL PAYROLL	PERCENTAGE INCREASE (DECREASE) IN PAYROLL	AVERAGE ANNUAL SALARY	PERCENTAGE INCREASE (DECREASE) IN AVERAGE ANNUAL SALARY
2015	1,214	2.4	286	6.7	\$ 47,537,851	5.2	\$ 39,158	2.7
2014	1,185	4.8	268	6.8	45,193,710	1.6	38,138	(3.1)
2013	1,131	(2.3)	251	4.6	44,490,671	8.1	39,337	10.7
2012	1,158	3.5	240	4.8	41,143,383	(1.3)	35,530	(4.6)
2011	1,119	12.6	229	13.4	41,683,065	18.7	37,250	5.5
2010	994	1.6	203	(.5)	35,104,086	6.9	35,316	5.3

14.51 Health Life Mortality Rates

<b>HEALTHY LIFE MORTALITY RATES</b>				
<b>AGE</b>	<b>ACTIVES (MALES RP2000+1) FEMALES RP2000+5)</b>		<b>RETIREEES (RP2000 SEX DISTINCT)</b>	
	<b>MALE</b>	<b>FEMALE</b>	<b>MALE</b>	<b>FEMALE</b>
50	0.20%	0.11%	0.21%	0.17%
55	0.32	0.17	0.36	0.27
60	0.59	0.27	0.67	0.51
65	1.13	0.51	1.27	0.97
70	1.98	0.97	2.22	1.67
75	3.39	1.67	3.78	2.81
80	5.79	2.81	6.43	4.59
85	9.98	4.59	11.08	7.74



14.52 Termination Rates Before Retirement

YEARS OF SERVICE	CURRENT VALUATION RATE <sup>(1)</sup>			
	NUMBER OF ACTIVE MEMBERS IN PLAN			
	UNIFORMED		MUNICIPAL	
	<25	>25	<25	>25
LESS THAN 1	14%	13%	20%	20%
1 BUT LESS THAN 2	14	10	20	20
2 BUT LESS THAN 3	12	7	12	15
3 BUT LESS THAN 4	10	7	10	12
4 BUT LESS THAN 5	6	6	8	7
5 BUT LESS THAN 6	4	5	6	7
6 BUT LESS THAN 7	3	4	4	6
7 BUT LESS THAN 8	2	3	3	5
8 BUT LESS THAN 9	2	3	3	5
9 BUT LESS THAN 10	1	3	2.5	5
10 OR MORE	1	3	2.5	3

#### 14.53 Disability Incidence Rates

<b>MUNICIPAL RATES</b>		<b>UNIFORMED RATES</b>	
<b>AGE</b>	<b>CURRENT VALUATION RATE (%)</b>	<b>AGE</b>	<b>CURRENT VALUATION RATE (%)</b>
25	0.034	25	0.051
35	0.059	35	0.088
45	0.144	45	0.216
55	0.404	55	0.605
65	0.928	65	1.393

#### 14.54 Salary Scale

<b>SAMPLE SALARY RATES</b>	
<b>AGE</b>	<b>TOTAL RATE (%)<sup>(2)</sup> (INCLUDING INFLATION)</b>
25	8.3
30	6.4
35	5.6
40	5.0
45	4.2
50	4.1
55	3.9
60	3.7
65	3.0

## 14.55 Retirement Rates

### NON-UNIFORM PLAN RETIREMENT ASSUMPTIONS

AGE	CURRENT RATE OF NORMAL RETIREMENT
under 46	5
46-54	15
55-59	10
60-61	10
62	30
63-64	20
65	35
66-74	15
75	100

**RETIREMENT RATES  
FOR UNIFORMED  
MEMBERS**

<b>AGE</b>	<b>RATES<sup>(3)</sup></b>
<49	0%
50	20
51	10
52	10
53	10
54	10
55	20
56	25
57	25
58	30
59	30
60	40
61	50
62	50
63	60
64	70
65	80
66+	100

14.56 Schedule of Changes in Fiduciary Position

A sample of the full Schedule of Changes in Fiduciary Position has been provided as an attachment (ChangesInFuduciary.pdf)

**Schedule of Changes in Fiduciary Net Position (by Participating Municipality)**  
 For the Year Ended December 31, 2014

PERC #	Participating Municipality	Plan Fiduciary Net Position December 31, 2013	Additions				Deductions				Transfers	Plan Fiduciary Net Position December 31, 2014	Allocation Adjustment for Other Net Investment Income (Loss) <sup>(6)</sup>	Adjusted Plan Fiduciary Net Position December 31, 2014
			Employer Contributions	Plan Member Contributions	PMRS Investment Income Credited to Municipality	Other Net Investment Income (Loss)	Benefit Payments	PMRS Administrative Expense	Additional Administrative Expense					
17-540-6 N	York County Planning Commission	8,919,119	94,000	76,426	489,207	(67,521)	(345,060)	(1,400)	(18,761)	-	9,140,010	-	9,140,010	
01-096-1 N	York Springs Borough	457,212	40	2,558	24,515	2,404	(32,201)	(80)	(560)	-	452,548	-	452,548	
65-192-1 N	Youngwood Borough Police	1,380,032	20,724	16,558	77,054	(1,231)	(28,789)	(340)	(2,955)	-	1,461,051	-	1,461,051	
65-192-1 P	Youngwood Borough Police	25,179	20	-	1,348	95	(1,828)	(20)	(52)	-	24,742	-	24,742	
49-108-5 N	Zerbe Township	237,987	3,636	6,021	12,933	5,521	(15,877)	(100)	(496)	-	249,625	-	249,625	
	<b>Total</b>	<b>1,951,247,370</b>	<b>67,897,211</b>	<b>18,441,437</b>	<b>106,972,256</b>	<b>(6,446,686)</b>	<b>(84,502,406)</b>	<b>(309,080)</b>	<b>(4,102,422)</b>	<b>491,877</b>	<b>2,049,689,557</b>	<b>(74,425)</b>	<b>2,049,615,132</b>	
	Reclassifications		(481,641)		2,413	476,971	145,840	(145,800)	5,217	-	-	-	-	
	<b>Adjusted Total</b>	<b>1,951,247,370</b>	<b>67,415,570</b>	<b>18,441,437</b>	<b>106,972,256</b>	<b>(6,444,273)</b>	<b>(84,025,435)</b>	<b>(163,240)</b>	<b>(4,248,222)</b>	<b>497,094</b>	<b>2,049,689,557</b>	<b>(74,425)</b>	<b>2,049,615,132</b>	

Note: Column may not foot due to rounding.

14.57 Government Accounting Standards Board Statement 68 (GASB 68)

A sample of the full GASB 68 has been provided as an attachment (GASB68.pdf).

	<b>Summary of Results</b>	
	<b>Measurement Date</b>	
	<b>12/31/2015</b>	<b>12/31/2014</b>
Net Pension Liability	\$ 6,102,514	\$ 1,927,446
Deferred Inflows	1,455,508	0
Deferred Outflows	<u>(4,381,012)</u>	<u>(159,590)</u>
Net Impact on Statement of Net Position	\$ 3,177,010	\$ 1,767,856
Total Pension Expense (\$ Amount)	\$ 2,721,995	\$ 2,131,129
Total Pension Expense (% of Payroll)	13.27%	10.22%

<b>Change in Net Pension Liability</b>					
	<b>Increase (Decrease)</b>				
	<b>Total Pension Liability</b>		<b>Plan Fiduciary Net Position</b>		<b>Net Pension Liability</b>
	<b>(a)</b>		<b>(b)</b>		<b>(a) - (b)</b>
<b>Balances at 12/31/2014</b>	<b>\$ 71,475,893</b>	<b>\$</b>	<b>69,548,447</b>	<b>\$</b>	<b>1,927,446</b>
<b>Changes for the year:</b>					
Service cost	2,973,800				2,973,800
Interest	4,007,991				4,007,991
Changes of benefits					
Changes of assumptions*	1,220,568				1,220,568
Differences between expected and actual experience	(1,698,093)				(1,698,093)
Contributions - employer			1,311,561		(1,311,561)
Contributions - PMRS assessment			1,280		(1,280)
Contributions - employee			1,317,545		(1,317,545)
PMRS investment income			3,896,675		(3,896,675)
Market value investment income**			(4,018,899)		4,018,899
Transfers					
Benefit payments	(3,108,608)		(3,108,608)		
PMRS administrative expense			(16,520)		16,520
Additional administrative expense			(162,444)		162,444
<b>Net changes</b>	<b>3,395,658</b>		<b>(779,410)</b>		<b>4,175,068</b>
<b>Balances at 12/31/2015</b>	<b>\$ 74,871,551</b>	<b>\$</b>	<b>68,769,037</b>	<b>\$</b>	<b>6,102,514</b>

**Sensitivity of Net Pension Liability to Changes in Discount Rate**

	<b>1% Decrease 4.50%</b>	<b>Discount Rate 5.50%</b>	<b>1% Increase 6.50%</b>
Total Pension Liability	\$ 82,227,060	\$ 74,871,551	\$ 68,707,467
Plan Fiduciary Net Position	<u>68,769,037</u>	<u>68,769,037</u>	<u>68,769,037</u>
Net Pension Liability	<u>\$ 13,458,023</u>	<u>\$ 6,102,514</u>	<u>\$ (61,570)</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	83.6%	91.8%	100.1%

**Employees Covered by Benefit Terms**

Inactive employees or beneficiaries currently receiving benefits	238
Inactive employees entitled to but not yet receiving benefits	77
Active employees	<u>437</u>
Total Participant Count	<u>752</u>



**Schedule of Changes in Net Pension Liability**

	Measurement Year Ending	
	12/31/2015	12/31/2014
<b><u>Total Pension Liability</u></b>		
Service cost (beginning of year)	\$ 2,973,800	\$ 3,017,176
Interest (includes interest on service cost)	4,007,991	3,801,632
Changes of benefit terms		
Differences between expected and actual experience	(1,698,093)	
Changes of assumptions	1,220,568	
Transfers		
Benefit payments, including refunds of employee contributions	(3,108,608)	(2,937,209)
<b>Net change in total pension liability</b>	<b>\$ 3,395,658</b>	<b>\$ 3,881,599</b>
<b>Total pension liability - beginning</b>	<b>71,475,893</b>	<b>67,594,294</b>
<b>Total pension liability - ending</b>	<b>\$ 74,871,551</b>	<b>\$ 71,475,893</b>
<b><u>Plan fiduciary net position</u></b>		
Contributions - employer	\$ 1,311,561	\$ 1,363,234
Contributions - PMRS assessment	1,280	
Contributions - employee	1,317,545	1,218,090
PMRS investment income	3,896,675	3,665,978
Market value investment income	(4,018,899)	(199,488)
Transfers		
Benefit payments, including refunds of employee contributions	(3,108,608)	(2,937,209)
PMRS administrative expense	(16,520)	(15,900)
Additional administrative expense	(162,444)	(140,591)
<b>Net change in plan fiduciary net position</b>	<b>\$ (779,410)</b>	<b>\$ 2,954,114</b>
<b>Plan fiduciary net position - beginning</b>	<b>69,548,447</b>	<b>66,594,333</b>
<b>Plan fiduciary net position - ending</b>	<b>\$ 68,769,037</b>	<b>\$ 69,548,447</b>
<b>Net pension liability - ending</b>	<b>\$ 6,102,514</b>	<b>\$ 1,927,446</b>
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	<b>91.85%</b>	<b>97.30%</b>
<b>Covered employee payroll</b>	<b>\$ 20,512,956</b>	<b>\$ 20,844,661</b>
<b>Net pension liability as a percentage of covered employee payroll</b>	<b>29.75%</b>	<b>9.25%</b>

**Schedule of Employer Contributions**  
Last 10 Measurement Years (if available)

	2015	2014
Actuarially Determined Contribution	\$ 1,311,774	\$ 1,345,330
Contributions in Relation to the Actuarially Determined Contribution*	<u>1,312,841</u>	<u>1,363,234</u>
Contribution Deficiency/(Excess)	<u>\$ (1,067)</u>	<u>\$ (17,904)</u>
Participant Payroll**	\$ 20,512,956	\$ 20,844,661
 Contributions as a Percentage of Participant Payroll	 6.40%	 6.54%

**Schedule of Collective Deferred Inflows and Outflows**

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 0	\$ 1,455,508
Changes in assumptions	1,046,201	0
Net difference between projected and actual earnings on pension plan investments	<u>3,334,811</u>	<u>0</u>
<b>Total</b>	<u><u>\$ 4,381,012</u></u>	<u><u>\$ 1,455,508</u></u>

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:

**Year ended December 31:**

2016	775,460
2017	775,460
2018	775,458
2019	735,561
2020	(68,218)
Thereafter \$	(68,217)

The recognition period for experience and assumptions change gains/losses is 7.00 years.

**Calculation of Collective Pension Expense**

	Measurement Year Ending	
	12/31/2015	12/31/2014
Change in Net Pension Liability	\$ 4,175,068	\$ 927,485
Change in Deferred Outflows	(4,221,422)	(159,590)
Change in Deferred Inflows	1,455,508	0
Employer Contributions	<u>1,312,841</u>	<u>1,363,234</u>
<b>Pension Expense</b>	<b>\$ 2,721,995</b>	<b>\$ 2,131,129</b>
<b>Pension Expense as % of Payroll</b>	<b>13.27%</b>	<b>10.22%</b>
<b>Operating Expenses</b>		
Service cost	\$ 2,973,800	\$ 3,017,176
Employee contributions	(1,317,545)	(1,218,090)
PMRS administrative expense	16,520	15,900
Additional administrative expense	<u>162,444</u>	<u>140,591</u>
Total	\$ 1,835,219	\$ 1,955,577
<b>Financing Expenses</b>		
Interest cost	\$ 4,007,991	\$ 3,801,632
Expected return on assets	<u>(3,896,675)</u>	<u>(3,665,978)</u>
Total	\$ 111,316	\$ 135,654
<b>Changes</b>		
Benefit changes	\$ 0	\$ 0
Recognition of assumption changes	174,367	0
Recognition of liability gains and losses	(242,585)	0
Recognition of investment gains and losses	<u>843,678</u>	<u>39,898</u>
Total	\$ 775,460	\$ 39,898
<b>Pension Expense</b>	<b>\$ 2,721,995</b>	<b>\$ 2,131,129</b>

APPENDIX B

RECONCILIATION OF DEFERRED INFLOWS AND OUTFLOWS

	Deferred (Inflows)				Deferred Outflows			
	Differences between expected and actual experience	Changes in assumptions	Net difference between projected and actual earnings on pension plan investments	Total	Differences between expected and actual experience	Changes in assumptions	Net difference between projected and actual earnings on pension plan investments	Total
12/31/2014	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 159,590	\$ 159,590
Adjustments due to investment earnings*	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2015 deferred amounts	(1,698,093)	0	0	(1,698,093)	0	1,220,568	4,018,899	5,239,467
Recognition amounts	242,585	0	0	242,585	0	(174,367)	(843,678)	(1,018,045)
Net changes	<u>\$ (1,455,508)</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ (1,455,508)</u>	<u>\$ 0</u>	<u>\$ 1,046,201</u>	<u>\$ 3,175,221</u>	<u>\$ 4,221,422</u>
12/31/2015	<u>\$ (1,455,508)</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ (1,455,508)</u>	<u>\$ 0</u>	<u>\$ 1,046,201</u>	<u>\$ 3,334,811</u>	<u>\$ 4,381,012</u>

APPENDIX C

FURTHER INFORMATION REGARDING DEFERRED INFLOWS AND OUTFLOWS

Detailed Schedule of Collective Inflows and Outflows of Resources									
Recognition of differences between expected and actual experience									
From Measurement Year Ending	Remaining Recognition Period	Remaining (Inflows) and Outflows	Recognition Year						
			2015	2016	2017	2018	2019	2020	Thereafter
2015	7	\$ (1,698,093)	\$ (242,585)	\$ (242,585)	\$ (242,585)	\$ (242,585)	\$ (242,585)	\$ (242,585)	\$ (242,583)
2014	6	0	0	0	0	0	0	0	0
Total		\$ (1,698,093)	\$ (242,585)	\$ (242,585)	\$ (242,585)	\$ (242,585)	\$ (242,585)	\$ (242,585)	\$ (242,583)
Recognition of changes in assumptions									
From Measurement Year Ending	Remaining Recognition Period	Remaining (Inflows) and Outflows	Recognition Year						
			2015	2016	2017	2018	2019	2020	Thereafter
2015	7	\$ 1,220,568	\$ 174,367	\$ 174,367	\$ 174,367	\$ 174,367	\$ 174,367	\$ 174,367	\$ 174,366
2014	6	0	0	0	0	0	0	0	0
Total		\$ 1,220,568	\$ 174,367	\$ 174,367	\$ 174,367	\$ 174,367	\$ 174,367	\$ 174,367	\$ 174,366
Recognition of net difference between projected and actual earnings on pension plan investments									
From Measurement Year Ending	Remaining Recognition Period	Remaining (Inflows) and Outflows	Recognition Year						
			2015	2016	2017	2018	2019	2020	Thereafter
2015	5	\$ 4,018,899	\$ 803,780	\$ 803,780	\$ 803,780	\$ 803,780	\$ 803,779	\$ 0	\$ 0
2014	4	\$ 159,590	\$ 39,898	\$ 39,898	\$ 39,898	\$ 39,896	\$ 0	\$ 0	\$ 0
Total		\$ 4,178,489	\$ 843,678	\$ 843,678	\$ 843,678	\$ 843,676	\$ 803,779	\$ 0	\$ 0
<b>Grand Total</b>		<b>\$ 3,700,964</b>	<b>\$ 775,460</b>	<b>\$ 775,460</b>	<b>\$ 775,460</b>	<b>\$ 775,458</b>	<b>\$ 735,561</b>	<b>\$ (68,218)</b>	<b>\$ (68,217)</b>

APPENDIX D

MARKET VALUE OF ASSETS RECONCILIATION

	Member/ Municipal Reserve	DROP Reserve	Retiree Liability	Retiree Reserve Allocation	Disability Reserve	MVA Allocation	Total
Reported 12/31/2014 GASB 68 MVA	\$ 47,628,208	\$ 0	\$ 23,410,578	\$ (489,428)	\$ 2,119	\$ (1,003,031)	\$ 69,548,447
Adjustment for updated census data	0	0	0	0	0	0	0
Adjusted 12/31/2014 GASB 68 MVA	\$ 47,628,208	\$ 0	\$ 23,410,578	\$ (489,428)	\$ 2,119	\$ (1,003,031)	\$ 69,548,447
Changes of benefits	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Changes of assumptions	0	0	0	0	0	0	0
Transfers	(2,115,214)	0	2,097,439	0	1,958	15,817	0
Contributions - employer	1,311,561	0	0	0	0	0	1,311,561
Contributions - PMRS assessment	0	0	0	0	0	1,280	1,280
Contributions - employee	1,317,545	0	0	0	0	0	1,317,545
PMRS investment income	2,638,670	0	1,284,754	(26,919)	170	0	3,896,675
Market value investment income	0	0	0	0	0	(4,077,528)	(4,077,528)
Benefit payments	(908,343)	0	(2,200,266)	0	0	0	(3,108,608)
PMRS administrative expense	0	0	0	0	0	(16,520)	(16,520)
Additional administrative expense	0	0	0	0	0	(162,444)	(162,444)
Net changes	\$ 2,244,219	\$ 0	\$ 1,181,928	\$ (26,919)	\$ 2,128	\$ (4,239,395)	\$ (838,039)
Preliminary 12/31/2015 GASB 68 MVA	\$ 49,872,427	\$ 0	\$ 24,592,506	\$ (516,346)	\$ 4,247	\$ (5,242,425)	\$ 68,710,408
Differences between expected and actual experience*	0	0	372,604	(229,218)	(1,264)	(83,494)	58,629
Final 12/31/2015 GASB 68 MVA	\$ 49,872,427	\$ 0	\$ 24,965,110	\$ (745,564)	\$ 2,983	\$ (5,325,919)	\$ 68,769,037

14.58 770 – Year End Financial Activity Report

A sample of the full 770 – Year End Activity report has been provided as an attachment (770YearEndActivity.pdf)

**Summary of Municipal Reserve Account For 2015**



Total at Dec. 31, 2014	Activity	Totals at Dec. 31, 2015
\$27,712,593.36	\$1,623,475.92	\$29,336,069.29

Date	Amount	Transaction	Comments *
01/01/2015	-1,958.00	Withdraw	Act Surplus Used for Annual Billing
01/01/2015	-15,340.00	Withdraw	Act Surplus Used for Annual Billing
01/07/2015	-86,414.76	Withdraw	Retirement for MKEY: 1040246-Kettman
01/23/2015	-85.42	Withdraw	20151
01/28/2015	655,887.00	Deposit	2015B
02/07/2015	-63,613.34	Withdraw	Retirement for MKEY: 1038433-Frock
04/17/2015	-127.15	Withdraw	20151
05/30/2015	-15,970.35	Withdraw	Retirement for MKEY: 1078829-Schem
07/15/2015	655,887.00	Deposit	2015B
07/21/2015	-211,499.58	Withdraw	Retirement for MKEY: 1044757-Fissel
07/21/2015	-2,863.50	Withdraw	Retirement for MKEY: 1080305-Baldwin
08/01/2015	-28,014.58	Withdraw	Retirement for MKEY: 1053971-Riley
08/25/2015	-30,091.15	Withdraw	Retirement for MKEY: 1071917-Snyder
10/05/2015	-90,829.88	Withdraw	Retirement for MKEY: 1055872-Benzel
10/17/2015	-258,991.98	Withdraw	Retirement for MKEY: 1041779-Heintzelman
11/06/2015	-178,262.57	Withdraw	Retirement for MKEY: 1038441-Funt
11/07/2015	-281,676.53	Withdraw	Retirement for MKEY: 1046958-Adair
12/31/2015	1,551,611.81		2015 Credited Interest
12/31/2015	5,828.90	Deposit	Holding Acct Int

**1,623,475.92 Total Municipal Activity**

\* Key to Certain Revenue Codes:

- 2015B - Annual Bill or MMO
- 2015I - Interest Paid by Municipality
- 2015M - Miscellaneous
- 2015F - Assets From Previous Plan
- 2015(1,2,3,4) - Member Cont. in Quarter
- 20155 - State Aid
- 20155(B) - State Aid Used to pay Annual Bill

## Cash Receipts for 2015



Date	Revenue Code *	Member (111/311)	Current (112)	Disability (113)	Admin (114)	Municipal (312)
11/17/2014	2015	0.00	0.00	0.00	20.00	0.00
01/12/2015	20151	48,808.90	0.00	0.00	0.00	0.00
01/28/2015	2015B	47,610.20	655,887.00	0.00	0.00	0.00
02/10/2015	20151	48,107.91	0.00	0.00	0.00	0.00
02/25/2015	20151	46,584.71	0.00	0.00	0.00	0.00
03/12/2015	20151	49,691.34	0.00	0.00	0.00	0.00
03/23/2015	2015	0.00	0.00	0.00	100.00	0.00
03/24/2015	20151	48,717.61	0.00	0.00	0.00	0.00
04/06/2015	20151	47,415.06	0.00	0.00	0.00	0.00
04/22/2015	2015	48,518.05	0.00	0.00	40.00	0.00
05/04/2015	2015	48,413.31	0.00	0.00	100.00	0.00
06/02/2015	20152	97,042.49	0.00	0.00	0.00	0.00
06/15/2015	20152	50,274.02	0.00	0.00	0.00	0.00
07/01/2015	2015	48,822.72	0.00	0.00	40.00	0.00
07/15/2015	2015	48,523.15	655,887.00	0.00	40.00	0.00
07/27/2015	2015	50,607.50	0.00	0.00	160.00	0.00
08/10/2015	20153	48,057.93	0.00	0.00	0.00	0.00
08/24/2015	20153	48,135.18	0.00	0.00	0.00	0.00
08/25/2015	2015	0.00	0.00	0.00	60.00	0.00
09/09/2015	20153	48,796.50	0.00	0.00	0.00	0.00
09/22/2015	2015	48,051.04	0.00	0.00	40.00	0.00
10/05/2015	20153	49,041.58	0.00	0.00	0.00	0.00
10/21/2015	2015	48,051.04	0.00	0.00	100.00	0.00
11/02/2015	20154	49,450.10	0.00	0.00	0.00	0.00
11/16/2015	2015	0.00	0.00	0.00	100.00	0.00
11/24/2015	2015 Bill Stop P	0.00	0.00	0.00	100.00	0.00
11/30/2015	20154	98,048.65	0.00	0.00	0.00	0.00
12/14/2015	20154	49,724.36	0.00	0.00	0.00	0.00
12/15/2015	2015	0.00	0.00	0.00	200.00	0.00
12/30/2015	20154	47,637.65	0.00	0.00	0.00	0.00
01/11/2016	20154	51,962.11	0.00	0.00	0.00	0.00
01/27/2016	2015	0.00	0.00	0.00	180.00	0.00
02/09/2016	20154	1,011.22	0.00	0.00	0.00	0.00
03/21/2016	20153	373.01	0.00	0.00	0.00	0.00

## Member Activity 2015



	Beginning	Contributions	Transfers	Interest	Withdrawals	Ending
<b>Retiree</b>						
\$	107,224.93	0.00	0.00	5,004.86	-112,229.79	0.00
	19,846.21	0.00	0.00	926.35	-20,772.56	0.00
14H	161,126.60	3,132.28	0.00	7,572.04	-171,830.92	0.00
	38,537.59	5,220.30	0.00	1,884.21	-45,642.10	0.00
	<b>326,735.33</b>	<b>8,352.58</b>	<b>0.00</b>	<b>15,387.46</b>	<b>-350,475.37</b>	<b>0.00</b>
<b>Active</b>						
\$	10,459.29	0.00	0.00	575.26	0.00	11,034.55
14H	92,792.30	3,628.00	0.00	5,177.13	0.00	101,597.43
	<b>103,251.59</b>	<b>3,628.00</b>	<b>0.00</b>	<b>5,752.39</b>	<b>0.00</b>	<b>112,631.98</b>
\$	0.00	0.00	0.00	0.00	0.00	0.00
14H	0.00	0.00	0.00	0.00	0.00	0.00
<b>Active</b>						
\$	2,109.52	0.00	0.00	116.02	0.00	2,225.54
14H	37,117.20	1,967.71	0.00	2,081.49	0.00	41,166.40
	<b>39,226.72</b>	<b>1,967.71</b>	<b>0.00</b>	<b>2,197.51</b>	<b>0.00</b>	<b>43,391.94</b>
<b>Terminated</b>						
14H	4,331.40	1,465.53	0.00	117.45	-5,914.38	0.00
	<b>4,331.40</b>	<b>1,465.53</b>	<b>0.00</b>	<b>117.45</b>	<b>-5,914.38</b>	<b>0.00</b>
<b>Active</b>						
14H	0.00	1,558.92	0.00	19.51	0.00	1,578.43
	<b>0.00</b>	<b>1,558.92</b>	<b>0.00</b>	<b>19.51</b>	<b>0.00</b>	<b>1,578.43</b>



	Active						
	H	4,957.97	0.00	0.00	272.69	0.00	5,230.66
		<b>4,957.97</b>	<b>0.00</b>	<b>0.00</b>	<b>272.69</b>	<b>0.00</b>	<b>5,230.66</b>
	Active						
H	11,398.85	2,902.61	0.00	685.72	0.00	14,987.18	
	<b>11,398.85</b>	<b>2,902.61</b>	<b>0.00</b>	<b>685.72</b>	<b>0.00</b>	<b>14,987.18</b>	
<b>Plan's Grand Total:</b>	<b>19,821,614.88</b>	<b>1,317,544.77</b>	<b>-477.27</b>	<b>1,081,675.83</b>	<b>-1,788,507.71</b>	<b>20,431,850.51</b>	
<b>AP Adjustments:</b>	<b>93,287.50</b>				<b>11,219.51</b>	<b>104,507.01</b>	
<b>Adjusted Totals:</b>	<b>19,914,902.38</b>	<b>1,317,544.77</b>	<b>-477.27</b>	<b>1,081,675.83</b>	<b>-1,777,288.20</b>	<b>0,536,357.52</b>	

As of Date: 06/15/2016

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Prepared by PMRS

## Report Summary Totals:

Excess Int:	0.00	Deaths	0.00
Contributions:	1,317,544.77	Forfeitures	0.00
Member:	1,317,544.77	Retirements	-1,453,030.05
Municipal for Member:	0.00	Terminations	-335,477.66
		<u>Totals</u>	<u>-1,788,507.71</u>

# Accounts Payable Detail

01-000-1 N

MKEY	Member Name	Amount
2014 Adjustments:		20,480.51
		50,551.55
		36.23
		3,600.25
		6,544.73
		2,722.14
		5,240.38
		2,761.12
		1,350.59
		<b>Total :</b>
2015 Adjustments:		35,404.23
		10.46
		43,960.33
		13,535.77
		9,271.97
		2,324.25
	<b>Total :</b>	<b>104,507.01</b>
	<b>Grand Total :</b>	<b>197,794.51</b>

## Plan Member Status in PMRS



Member Name	MKEY	Plan Status as of 12/31/2015
		Retired
		Retired
		Active
		Retired
		Active
		Terminated
		Active
		Active
		Retired
		Active
		Active
		Vested
		Active
		Retired
		Deceased
		Active
		Active
		Active
		Vested
		Active
		Active
		Active
		Retired
		Active
		Active
		Active
		Retired
		Retired
		Retired
		Retired
		Vested
		Active
		Retired



Active  
Active  
Retired



Active Members:	466	Retired Members:	236
Vested Members:	78	Retired (Survivors):	5
		Retired (Disabled):	0
		DROP :	0
<b>Total Membership (Active/Vested/Retired)</b>	<b>785</b>		

## Retiree Payments in 2015



MKEY	Payee	Yearly Gross Amount
		\$3,250.92
		\$4,349.54
		\$11,192.88
		\$11,036.76
		\$11,749.92
		\$32.91
		\$4,769.76
		\$16,943.52
		\$2,262.48
		\$5,786.64
		\$175.80
		\$910.80
		\$2,032.00
		\$4,841.76
		\$7,070.28
		\$909.96
		\$11,281.56
		\$14,148.24
		\$5,163.48
		\$25,097.52
		\$24,321.12
		\$15,825.96
		\$15,842.64
		\$27,523.56
		\$7,033.68
		\$1,852.79
		\$11,051.76
		\$5,147.88
		\$40,908.60
		\$37,558.92
		\$14,160.48
		\$3,608.28
		\$355.80

MKEY	Payee	Yearly Gross Amount
		\$2,964.32
		\$3,186.48
		\$2,367.84
		\$17,949.72
		\$5,594.28
		\$5,517.36
		\$7,432.80
		\$6,370.20
		\$13,489.32
		\$5,774.40
		\$1,027.20
		\$2,719.92
<b>Number of Retirees: 245</b>		<b>\$2,203,526.18</b>

Please direct questions to Member Service Division.

14.59 (a) Act 205 – Without Defined Benefits Pension Plan

A. Summary of Financial Data		
1. MARKET VALUE OF ASSETS, <i>excluding the cash surrender values of individual insurance and annuity contracts</i> , on the above valuation date	\$ 75,311	(26)
2. CASH SURRENDER VALUE of individual insurance and annuity contracts on the above valuation date or nearest anniversary date	\$ 0	(27)
3. TOTAL FUND ASSETS (1 + 2) on the above valuation date (Must equal Schedule B, item 21, page 7 and item 22, page 8)	\$ 75,311	(28)
4. INVESTMENT INCOME, <i>excluding individual insurance and annuity contract dividends</i> , for the year ended on the above valuation date	\$ 3,926	(29)
5. REALIZED CAPITAL GAINS/LOSSES for the year ended on the above valuation date	\$ 0	(30)
6. DIVIDENDS ON INSURANCE/ANNUITY CONTRACTS for the year ended on the above valuation date	\$ 0	(31)
7. MEMBER CONTRIBUTIONS to plan for the year ended on the above valuation date (Include employee contributions treated as employer contributions pursuant to Section 414(h) of the Internal Revenue Code.)	\$ 0	(32)
8. MUNICIPAL CONTRIBUTIONS to plan for the year ended on the above valuation date (8a+8b)	\$ 0	(33)
a. State Aid Portion \$ 0		
b. Local Portion \$ 0		
9. TRANSFERS MADE IN LIEU OF MUNICIPAL CONTRIBUTIONS for the year ended on the above valuation date (Enter the total amount of any unallocated monies in forfeiture or other accounts that was allocated to the individual participant accounts and reduced the municipality's contribution requirement.)	\$ 0	(34)
10. ANNUAL INSURANCE OR ANNUITY PREMIUM PAYMENTS, <i>excluding single premium annuity purchases</i> , for the year ended on the above valuation date	\$ 0	(35)
11. ADMINISTRATIVE EXPENSES paid from the assets of the pension plan for the year ended on the above valuation date	\$ 0	(36)

A. Summary of Demographic Data		
1. Number of active members as of above valuation date	0	(13)
2. Total annual payroll of active members as of above valuation date	\$ 0	(14)
3. Number of members terminated with vested or deferred benefit as of above valuation date	3	(15)
4. As of the above valuation date, number of persons receiving:		
a. Retirement benefits	0	(16)
b. Disability benefits	0	(17)
c. Surviving spouse benefits	0	(18)
d. Surviving child benefits	0	(19)
e. Total (a+b+c+d)	0	(20)
5. As of the above valuation date, total annual benefits payable as:		
a. Retirement benefits	\$ 0	(21)
b. Disability benefits	\$ 0	(22)
c. Surviving spouse benefits	\$ 0	(23)
d. Surviving child benefits	\$ 0	(24)
e. Total (a+b+c+d)	\$ 0	(25)





**Section I - Statement of Net Assets Available for Benefits as of the Valuation Date**

	Item No.
<b>A. Assets:</b>	
1. Cash .....	\$ 0 (1)
2. Accrued Interest and Dividends Receivable .....	\$ 0 (2)
3. Other Receivables (Specify)	
.....	\$ 0 (3)
.....	\$ 0 (4)
.....	\$ 0 (5)
4. Investments at Market Value (Specify)	
.....	\$ 0 (6)
.....	\$ 0 (7)
.....	\$ 0 (8)
.....	\$ (9)
.....	\$ (10)
5. Insurance/Annuity Cash Surrender Value (Individual Policies) .....	\$ 0 (11)
6. Other Assets (Specify)	
Member Assets .....	\$ 75,311 (12)
Municipal Assets .....	\$ 0 (13)
Retiree Assets .....	\$ 0 (14)
<b>Total Assets</b> .....	<b>\$ 75,311 (15)</b>
<b>B. Current Liabilities:</b>	
1. Accounts Payable and Accrued Administrative Expenses .....	\$ 0 (16)
2. Other Current Liabilities (Specify)	
Retiree Liabilities .....	\$ 0 (17)
.....	\$ 0 (18)
.....	\$ 0 (19)
<b>Total Current Liabilities</b> .....	<b>\$ 0 (20)</b>
<b>C. Net Assets Available for Benefits (Market Value) as of valuation date</b> .....	<b>\$ 75,311 (21)</b>
<b>D. Balance in Forfeited Non-Vested Employer Contribution Account</b> .....	<b>\$ 0 (22)</b>

**Section II - Statement of Revenues, Expenses and Change in Fund Assets for the Year Ended on the Valuation Date**

**Note:** This schedule reflects the financial activity for the year preceding the valuation date and establishes the asset value on the valuation date.

	Item No.	
A. Net Assets at Beginning of Year (Market Value) 1/1/2014 <sup>2</sup> .....	71,384	(1)
B. Revenues:		
Member Contributions .....	\$ 0	(2)
Total Municipal Contributions .....	\$ 0	(3)
a. State Aid Portions \$ 0    b. Local Portion \$ 0		
Transfers of Any Unallocated Monies in Lieu of Municipal Contributions .....	\$ 0	(4)
Interest Earnings .....	\$ 3,926	(5)
Dividend Income .....	\$ 0	(6)
Realized Capital Gains .....	\$ 0	(7)
Other Revenues or Credits (Specify)		
Miscellaneous Revenue .....	\$ 0	(8)
Forfeiture .....	\$ 0	(9)
Total Revenues .....	\$ 3,926	(10)
C. Expenses:		
Total Benefit Payments (Lump Sum) .....	\$ 0	(11)
Total Benefit Payments (Monthly) .....	\$ 0	(12)
Annuity Purchases (Lump Sum) .....	\$ 0	(13)
Insurance Premiums .....	\$ 0	(14)
Refund of Member Contributions .....	\$ 0	(15)
Administrative Expenses .....	\$ 0	(16)
Realized Capital Losses .....	\$ 0	(17)
Other Expenses or Debits (Specify)		
Miscellaneous Expense .....	\$ 0	(18)
Transfer Expense .....	\$ 0	(19)
Total Expenses .....	\$ 0	(20)
D. Net Change in Market Value of Assets (Unrealized Capital Gains or Losses) .....	\$ 0	(21)
E. Net Assets at End of Year (Market Value) 12/31/2014 <sup>3</sup> .....	\$ 75,311	(22)

14.59 (b) Act 205 – With Defined Benefits Pension Plan

A. Summary of Financial Data		Item No.
1	MARKET VALUE OF ASSETS, <i>excluding the cash surrender values of individual insurance and annuity contracts, on the above valuation date</i> .....	\$ 356,619 (26)
2	CASH SURRENDER VALUE of individual insurance and annuity contracts on the above valuation date or nearest anniversary date.....	\$ 0 (27)
3	TOTAL FUND ASSETS (1 + 2) on the above valuation date.....	\$ 356,619 (28)
4	TOTAL EARNINGS, including investment income, realized capital gains/losses, unrealized capital gains/losses, and dividends on insurance/annuity contracts for the year ended on the above valuation date.....	\$ 17,080 (29)
5	MEMBER CONTRIBUTIONS to plan for the year ended on the above valuation date (include employee contributions treated as employer contributions pursuant to Section 414(h) of the Internal Revenue Code.).....	\$ 6,995 (30)
6	MUNICIPAL CONTRIBUTIONS to plan for the year ended on valuation date (6a + 6b).....	\$ 32,937 (31)
	a. State Aid Portion \$ <u>4,177</u> b. Local Portion \$ <u>28,760</u>	
7	ACTUAL MUNICIPAL DEPOSIT for the year ended on the valuation date (6 + 7a + 7b).....	\$ 32,937 (32)
	a. Contributions Receivable at beginning of year \$ <u>0</u> b. Contributions Receivable at End of year \$ <u>0</u> 1	
8	TOTAL MONTHLY BENEFIT PAYMENTS for the year ended on the above valuation date.....	\$ 0 (33)
9	ANNUAL INSURANCE OR ANNUITY PREMIUM PAYMENTS, <i>excluding single premium annuity purchases</i> , for the year ended on the above valuation date.....	\$ 260 (34)
10	ADMINISTRATIVE EXPENSES paid from the assets of the pension plan for the year ended on the above valuation date.....	\$ 120 (35)
11	MINIMUM MUNICIPAL OBLIGATION to the pension plan for the year ended on the valuation date (Enter amount reported in Item 12 or Item 14 on page 12, whichever is applicable.).....	\$ 32,937 (36)

**A. Summary of Actuarial Data**

**INSTRUCTIONS:** Print or type the data requested, rounded to the nearest dollar, in the space provided. Enter zero or negative values, if applicable. Do not leave blanks or refer to exhibits.

		Item No
1. ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS as of valuation date .....	\$ 659,060	140
2. ACTUARIAL PRESENT VALUE OF FUTURE NORMAL COST as of valuation date .....	\$ 203,628	141
3. ACTUARIAL ACCRUED LIABILITY as of valuation date.....	\$ 455,432	142
4. ACTUARIAL VALUE OF ASSETS, including aggregate insurance/annuity cash surrender value, as of valuation date .....	\$ 356,619	143
5. UNFUNDED ACTUARIAL ACCRUED LIABILITY as of valuation date (+ or -).....	\$ 98,813	144
6. NORMAL COST (employer & employee), excluding administrative expenses, payable as of valuation date for the plan year beginning on valuation date:		
a. As a dollar amount .....	\$ 26,367	145
b. As a percentage of total annual payroll .....	14.49	%146
7. AVERAGE ADMINISTRATIVE EXPENSES payable from the assets of the pension plan in the prior plan year and the plan year beginning on valuation date <sup>1</sup> .....	\$ 120	147
8. ANNUAL COVERED PAYROLL of active members as of valuation date .....	\$ 181,989	148
9. AMORTIZATION CONTRIBUTIONS		
a. For amortization of initial unfunded actuarial accrued liability established 1/1/85. <sup>2</sup>		
1) Amortization period remaining (years) .....	8	149
2) Amortization contribution calculated as a level dollar amount for the plan year beginning on valuation date .....	\$ 2,862	150
3) Amortization contribution calculated as a level percentage of payroll for the plan year beginning on valuation date <sup>3</sup> .....	\$ N/A	151
b. For amortization of all increases or decreases in unfunded actuarial accrued liability occurring after 1/1/85 or the initial UAL's establishment. <sup>2</sup>		
1) Aggregated amortization period (years) .....	8	152
2) Aggregated amortization contribution calculated as a level dollar amount for the plan year beginning on valuation date .....	\$ 12,966	153
c. Modified Total Amortization Requirement <sup>4</sup> .....	\$ 0	154
d. Total Amortization Requirement (Item 50 + Item 53 or Item 51 + Item 53 or Item 54, whichever is applicable).....	\$ 15,828	155
10. ACTUAL OR ESTIMATED MEMBER CONTRIBUTIONS to the pension plan for the year beginning on the valuation date.....	\$ 7,280	156

INSTRUCTIONS: Print or type the requested information in the space provided. For totals, enter zero if applicable. Refer to attachments or exhibits only to explain or support data entered on the schedule. If you need additional space, make a photocopy of this page and insert behind this page.

Check here if there are no retired members.

Check here if there are no members terminated with vesting.

PART I - DEMOGRAPHIC DATA FOR INDIVIDUAL RETIRED MEMBERS						
Member	Current Age	Monthly Pension Payable	Retirement Age	Type *	Years of Service	Gender (M/F)
1						
2						
3						
4						
5						
6						
7						
8						
9						

PART II - DEMOGRAPHIC DATA FOR INDIVIDUAL MEMBERS TERMINATED WITH VESTING					
Member	Current Age	Monthly Pension Payable	Retirement Age	Years of Service	Gender (M/F)
1					
2					
3					
4					
5					
6					
7					
8					
9					

Part III - Active Member Data <sup>1</sup>  Check here if there are no active members.

Member	Age	Years of Service	Total Annual Payroll	Gender (M/F)
1	64	21	56,223	F
2	42	14	59,055	M
3	56	8	59,600	M
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

Member	Age	Years of Service	Total Annual Payroll	Gender (M/F)
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				

**Section I - Statement of Net Assets Available for Benefits**

	As of the Above Valuation Date	As of the Previous Year (2014)	
<b>A. Assets:</b>			
1. Cash.....	\$ 0	\$ 0	(1)
2. Accrued Interest and Dividends Receivable.....	\$ 0	\$ 0	(2)
3. Receivables (Specify)			
Employee Contributions.....	\$ 0	\$ 0	(3)
Employer Contributions.....	\$ 0	\$ 0	(4)
State Aid.....	\$ 0	\$ 0	(5)
Other.....	\$ 0	\$ 0	(6)
_____	\$ 0	\$ 0	(7)
4. Investments at Market Value: (Specify)			
Money Markets and Other Cash Investments.....	\$ 0	\$ 0	(8)
Mutual Funds.....	\$ 0	\$ 0	(9)
Stocks and Other Equities.....	\$ 0	\$ 0	(10)
Bonds and Other Fixed Income.....	\$ 0	\$ 0	(11)
5. Other Assets (Specify)			
<b>PMRS Retiree Reserve</b> Insurance Contract/Group Annuity.....	\$ 0	\$ 0	(12)
Other <b>PMRS Municipal Reserve</b> .....	\$ 299,639	\$ 252,731	(13)
<b>PMRS Member Reserve</b> _____	\$ 56,981	\$ 47,256	(14)
_____	\$ 0	\$ 0	(15)
6. Insurance/Annuity Cash Surrender Value (Individual Policies)...			
Total Fund Assets.....	\$ 356,619	\$ 299,987	(16)
<b>B. Current Liabilities:</b>			
1. Accounts Payable and Accrued Administrative Expenses.....	\$ 0	\$ 0	(17)
2. Other Current Liabilities			
Benefits Payable <b>PMRS Retiree Reserve</b> .....	\$ 0	\$ 0	(18)
Other.....	\$	\$	(19)
_____	\$ 0	\$ 0	(20)
_____	\$ 0	\$ 0	(21)
Total Current Liabilities.....	\$	\$	(22)
<b>C. Net Assets Available for Benefits (Market Value) as of valuation date:</b>	\$ 356,619	\$ 299,987	(22)

**Section II - Statement of Revenues, Expenses and Change in Fund Assets.**

	As of the Above Valuation Date	As of the Previous Year (2014)	Line #
A - Net Assets at Beginning of Year (Market Value).....	\$ 299,987	\$ 246,446	(1)
B. Gross Revenues (reduced by any fees, costs, or expenses):			
Member Contributions .....	\$ 6,995	\$ 7,301	(2)
Total Municipal Contributions			
a. State Aid Portion .....	\$ 4,177	\$ 9,065	(3)
b. Local Portion .....	\$ 28,760	\$ 23,417	(4)
Interest Earnings/Dividend Income.....	\$ 17,080	\$ 14,133	(5)
Realized/Unrealized Capital Gains/Losses .....	\$ 0	\$ 0	(6)
Other Revenues or Credits (Specify)			
Miscellaneous Revenue .....	\$ 0	\$ 0	(7)
Forfeiture .....	\$ 0	\$ 0	(8)
Transfer Revenue .....	\$ 0	\$ 0	(9)
Total Revenues.....	\$ 57,012	\$ 53,916	(10)
C. Expenses			
Total Benefit Payments (Lump Sum).....	\$ 0	\$ 0	(11)
Total Benefit Payments (Monthly) .....	\$ 0	\$ 0	(12)
Annuity Purchases (Lump Sum).....	\$ 0	\$ 0	(13)
Insurance Premiums .....	\$ 260	\$ 254	(14)
Refund of Member Contributions .....	\$ 0	\$ 0	(15)
Lump-Sum Drop Account Payments.....	\$ 0	\$ 0	(16)
Actuarial Costs .....	\$ 0	\$ 0	(17)
Investment Costs .....	\$ 0	\$ 0	(18)
All Other Expenses or Debits (Specify)			
PMRS Administrative Fee .....	\$ 120	\$ 120	(19)
Misc/Transfer Expense .....	\$ 0	\$ 0	(20)
Total Expenses.....	\$ 380	\$ 374	(21)
C. Net Assets at End of Year (Market Value) .....	\$ 356,619	\$ 299,987	(22)

**Section III - Presentation of the Determination of the Minimum Municipal Obligation (MMO) for the Year Ended on Valuation Date.**

INSTRUCTIONS: Enter data reflecting the minimum municipal obligation developed in the fall of 2013 for the plan year beginning in 2014.  
[Section 302(C) of Act 205 of 1984.]

	1 / 1 / 2011	Item No.
	Mo. / Da. / Yr.	
<b>A. IDENTIFICATION OF THE ACTUARIAL VALUATION REPORT (AVR)</b> used to determine funding requirement. [Enter valuation date - 2013 or earlier year.]		(1)
<b>B. DEVELOPMENT OF MINIMUM MUNICIPAL OBLIGATION</b> under Section 302(c) of Act 205 of 1984. [If the asset value exceeded the present value of future benefits in the actuarial valuation report identified in Part A, check the box, skip Item 2 through Item 10, and complete Item 11 and Item 12, if applicable.] <input type="checkbox"/>		
1. TOTAL ANNUAL PAYROLL projected for year ended on valuation date.....	\$ 173,574	(2)
2. TOTAL NORMAL COST, expressed as a percentage of total annual payroll, derived from actuarial valuation report identified in item 1.....	14.22 %	(3)
3. TOTAL PROJECTED NORMAL COST for year ended on valuation date (Item 2 x Item 3).....	\$ 24,682	(4)
4. TOTAL AMORTIZATION REQUIREMENT for year ended on valuation date <sup>1</sup> .....	\$ 15,078	(5)
5. TOTAL ADMINISTRATIVE EXPENSES projected for year ended on valuation date.....	\$ 120	(6)
6. TOTAL FINANCIAL REQUIREMENTS (Item 4 + Item 5 + Item 6).....	\$ 39,880	(7)
7. MEMBER CONTRIBUTIONS projected for year ended on valuation date.....	\$ 6,943	(8)
8. FUNDING ADJUSTMENT determined pursuant to Section 302(c)(2) of Act 205 of 1984 for year ended on valuation date <sup>2</sup> .....	\$ 0	(9)
9. MINIMUM MUNICIPAL OBLIGATION (MMO) for year ended on valuation date (Item 7 - Item 8 - Item 9).....	\$ 32,937	(10)
10. DELINQUENT MMO PLUS INTEREST from plan year beginning in 2013.....	\$ 0	(11)
11. TOTAL MMO for year ended on valuation date (Item 10 + Item 11).....	\$ 32,937	(12)
<b>C. AMORTIZATION CONTRIBUTION REDUCTION</b> (Complete if Amortization Contribution Reduction was elected pursuant to Section 607(H)(1) of Act 205.)		
1. REDUCTION OF AMORTIZATION CONTRIBUTION (Maximum is 25% of Item 5.).....	\$ 0	(13)
2. RE CALCULATED MMO for year ended on valuation date (Item 12 - Item 13).....	\$ 0	(14)



**Section V - Documentation of Compliance with Act 205 Funding Standard Requirements**

- INSTRUCTIONS: 1. Complete the information below if a funding deficiency has been partially or fully rectified, and provide the following:
- a. Documentation showing the development of the pension plan's municipal funding requirements (Minimum Municipal Obligation (MMO)) pursuant to Section 302 and, if applicable, Section 607(H.1) of Act 205 for the years reported.
  - b. Signature in Section VI below by the approved actuary and the municipality's chief administrative officer certifying, subject to the penalties of 18 Pa. C. S. §1904 relating to unsworn falsification to authorities, that the accompanying documentation is accurate and that the funding requirements prescribed by Section 302, and if applicable Section 607(H.1), of Act 205 are satisfied.
2. Documentation showing the actual municipal contributions to the pension plan for the years reported, including copies of specific supporting documents such as the development of the MMO, bank statements, evidence of deposit, and cancelled checks should be maintained by the municipality for audit and other purposes.

	2014	2015	Line It.
A) Prior Year's Deficiency <sup>1</sup> for each year indicated .....	\$ _____	\$ _____	11
B) Interest Rate .....	_____ %	_____ %	12
C) Monthly Interest Rate [B + 12] .....	_____ %	_____ %	13
D) Amount Due on Payment Date $(A \times (1 + C)^{\text{months in a yr}})$ .....	\$ _____	\$ _____	14
E) Minimum Municipal Obligation .....	\$ _____	\$ _____	15
F) Total Minimum Municipal Obligation [D + E] .....	\$ _____	\$ _____	16
G) Amount Deposited <sup>2</sup> .....	\$ _____	\$ _____	17
H) Funding Deficiency .....	\$ _____	\$ _____	18

INSTRUCTIONS: Complete all items using the entry age normal actuarial cost method. Enter zero, if applicable, and round to the nearest dollar. Refer to attachments or exhibits only to explain or support data entered on the schedule.

**Section I - Presentation of Actuarial Present Value of Future Benefits as of the Valuation Date**

**A. Actuarial Present Values for Active Members**

(Enter values for ancillary benefits only if valued using RAN.)

1 Retirement Benefits.....	\$ <u>576,650</u>	(1)
2 Disability Benefits.....	\$ <u>11,199</u>	(2)
3 Survivor Benefits.....	\$ <u>25,570</u>	(3)
4 Liability for the Refund of Member Contributions.....	\$ <u>475</u>	(4)
5 Vested Withdrawal Benefits.....	\$ <u>45,166</u>	(5)
6 Other (Specify) .....	\$ <u>0</u>	(6)
Subtotal for Active Members.....	\$ <u>659,060</u>	(7)

**B. Actuarial Present Values for Non-Active Members and Benefit Recipients**

1 Deferred Vested Benefits.....	\$ <u>0</u>	(8)
2 Retirement Benefits.....	\$ <u>0</u>	(9)
3 Disability Benefits.....	\$ <u>0</u>	(10)
4 Survivor Benefits.....	\$ <u>0</u>	(11)
5 Total Monies Accumulated in DRCP Participant Accounts.....	\$ <u>0</u>	(12)
6 Other (Specify) .....	\$ <u>0</u>	(13)
Subtotal for Non Active Members and Benefit Recipients.....	\$ <u>0</u>	(14)

C. Total Actuarial Present Value of Future Benefits (Without adjustments).....\$ 659,060 (15)

D. Total Adjustments for Ancillary Benefits Valued through Approximation Techniques <sup>1</sup>.....\$ 0 (16)

E. Total Actuarial Present Value of Future Benefits (Item 15 + Item 16).....\$ 659,060 (17)

**Section II - Unfunded Actuarial Accrued Liability and Amortization Contributions as of Valuation Date**

Part A - Initial Unfunded Actuarial Accrued Liability

Amount of Initial Liability	Date Established	Target Date	Original Amortization Period	Remaining Balance	Level Dollar Amortization Contribution <sup>1</sup>
\$ 28,744	01/01/2009	12/31/2022	14	\$ 19,125	\$ 2,862 (1)

Part B - Changes in Unfunded Actuarial Accrued Liability since the last actuarial valuation report prepared and submitted under Act 295. <sup>2</sup>

Source	Amount of Liability	Date Established	Target Date	Amortization Period	Amortization Contribution
Benefit Plan Modification	0			0	0
Actuarial Assumption Modification	0			0	0
Actuarial Losses (+) or Gains (-)	-28,233 <sup>3</sup>	01/01/2015	12/31/2022	8	-4,225
Post Retirement Adjustments	0			0	0
Total	\$ -28,233	XXXXX	XXXXX	XXXXX	\$ -4,225 (2)

Part C - Aggregation of Changes in Unfunded Actuarial Accrued Liability since initially established in 1985

Description	Remaining Balance of Aggregated Liability	Date of Aggregation	Aggregated Target Date	Aggregated Amortization Period	Aggregated Amortization Contribution
Aggregation of all prior changes (exclude changes in Section B)	\$ 107,920	01/01/2013	12/31/2022	8	\$ 17,191 (1)
Aggregation of all changes (include changes in Section B)	\$ 79,687	Current Valuation Date	12/31/2022	8	\$ 12,966 (1)

**E. Development of Expected Unfunded Actuarial Accrued Liability (UAAL) (Exhibit IV)**

1. UAAL as of 1/1/2013	153,205
2. 2013 Amortization Payment	20,053
3. 2014 Amortization Payment	20,053
4. Interest to 12/31/2014	13,947
5. Expected UAAL as of 1/1/2015 -	127,046



9.60 Invoice format for administrative cost invoices (CB)

**Pennsylvania Municipal  
Retirement System**

**Pension Plan Invoice for Calendar Year 2016**

Please be advised that the administrative fee for the above referenced plan is now due. Should the municipality decide to pay the obligation from municipal assets, a check in the amount shown below along with a Transmittal of Revenue form (PMRB-20) should be mailed to the following address:

Pennsylvania Municipal Retirement System  
P.O. Box 1165  
Harrisburg, PA 17108-1165

In the event the plan has a credit or the municipality anticipates meeting the obligation in the fall when Act 205 State Aid monies are received, please indicate that intent on the bottom of this form and return it or fax it to our office. The fax number is (717)783-8363.

The employer's contributions to the plan members' accounts should be remitted with the Quarterly Report of Contributions (PMRB-21). Questions about this invoice, the funding of the plan, or the handling of any payments can be addressed to the PMRS Accounting staff at (800) 622-7968 or by e-mailing the staff at ra-staff@pa.gov.

**BILL SUMMARY:**

Administrative Cost:

\$140

- Check Enclosed - Make all checks payable to: "Pennsylvania Municipal Retirement System"
- Please deduct obligation from existing credit on deposit at PMRS
- We anticipate paying this 2016 obligation with state aid in the fall of the year

Retain a copy of this invoice for the municipality's files and future audit documentation.

9.61 Invoice format for MMO invoices (DB)

**Pennsylvania Municipal Retirement System**

Pension Plan Invoice for Calendar Year 2016



**BILL SUMMARY:**

Liability:

Plan's Normal Cost:		(A)	\$	2,868,111
Current Service Charge:	2,866,074			
Disability Charge:	2,037			
Administrative Cost:		(B)		15,500
Amortization of Unfunded Liability:		(C)		<u>0</u>
Subtotal of Charges (A + B + C) = (D):		(D)		2,883,611

Credits:

Anticipated Member Contributions:		(E)		1,222,206
Amortization of Actuarial Surplus:		(F)		<u>732</u>
Subtotal of Credits (E + F) = (G):		(G)		<u>1,222,938</u>
<b>Total Employer Cost (D - G) = H:</b>		(H)	\$	<b>1,660,673</b>

Item (H) is the pension plan's Minimum Municipal Obligation or "MMO." It is based upon the plan's anticipated payroll for 2015, the normal cost, amortization charge or surplus credit as determined in the January 1, 2014 Actuarial Valuation Report, and an administrative charge of \$20 per plan member as of August 1, 2015.

If the plan anticipates receiving Act 205 State Aid monies for municipal pension plans, the municipality may want to consider delaying payment until the state aid is received in the fall of 2016. The plan obligation identified above is due on December 31, 2016. Delinquent interest will only be assessed against the outstanding receivables as of January 1, 2017 but will bear interest charges from January 1, 2016.

If the "Total Employer Cost" is "0," no additional action is needed at this time by the plan's governing body. Questions about this obligation, the funding of the plan, or the handling of the payment can be addressed to the PMRS Accounting staff at (800) 622-7968 or by e-mailing the staff at [ra-staff@pa.gov](mailto:ra-staff@pa.gov).

Please make all checks payable to: "Pennsylvania Municipal Retirement System"

Return this copy of the invoice with a completed Revenue Transmittal Form (PMRB-20) and payment to:

Pennsylvania Municipal Retirement System  
P.O. Box 1165  
Harrisburg, PA 17108-1165

Retain a copy of the invoice for the municipality's files and future audit documentation.

9.62 Purchase Order



**FULLY EXECUTED - CHANGE 4**  
Pur  
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PO I

Your SAP Vend

Please Deliver To:  
PMRB  
1010 N 7th Street Suite 301 Eastgate  
Harrisburg PA 17108-1165 US

Supplier Name/Address:

Please Bill To:  
For the preferred Email Invoice option, visit  
[www.budget.pa.gov](http://www.budget.pa.gov)  
Click Programs and select E-Invoicing.

Sup  
Sup

Or mail paper invoice to:  
Commonwealth of Pennsylvania - PO Invoice  
PO Box 69180, Harrisburg, PA 17106

**Purchasing Agent**

Na  
Ph  
Fax

Purchase Order Description:  
PMR

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Du  
co  
In

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
------	-----------------------	-----	-----	---------------	-----------	------------	-------

1							
2							

**Information:**

**Total Amount:**  
SEE LAST PAGE FOR TOTAL OF ALL ITEMS  
Currency: USD

Supplier's Signature \_\_\_\_\_  
Printed Name \_\_\_\_\_

Title \_\_\_\_\_  
Date \_\_\_\_\_



FULLY EXECUTED - CHANGE 4

Purch Order:  
Original PO C:  
PO Is:

Supplier Name:  
C#:

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
Item 3	Actu Area Reti Ben						
Item 4	Actu Area Reti Ben Benchmarking studies.						
Item 6	Actu Area Reti Ben Benchmarking Studies.						
Information:					Total Amount: SEE LAST PAGE FOR TOTAL OF ALL ITEMS Currency: USD		





**FULLY EXECUTED - CHANGE 4**

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Information:

Total Amount:

Currency: USD

### 14.63 12-31-YY Accounts Receivable

	A	B	C	D	E
1	<b>Report of 111 Holding Account by Plan As Of 12/31/2015</b>				
2					
3	<b>PERC</b>	<b>Plan Name</b>	<b>DEBITS</b>	<b>CREDITS</b>	<b>BALANCE</b>
4	01-		\$ 10,871,726.68	\$ (10,719,970.41)	\$ 151,756.27
5	01-		\$ 1,555,157.39	\$ (1,653,607.46)	\$ (98,450.07)
6	36-		\$ 109,697.73	\$ (107,075.61)	\$ 2,622.12
7	02-		\$ 261,084.71	\$ (257,033.49)	\$ 4,051.22
8	39-		\$ 17,616,470.88	\$ (17,156,971.65)	\$ 459,499.23
9	04-		\$ 187,297.10	\$ (181,556.10)	\$ 5,741.00
10	28-		\$ 104,057.50	\$ (100,732.50)	\$ 3,325.00
11	03-		\$ 59,688.52	\$ (57,992.74)	\$ 1,695.78
12	03-		\$ 13,859.34	\$ (13,463.34)	\$ 396.00
13	15-		\$ 69,309.11	\$ (69,001.68)	\$ 307.43

### Accounts 112\_113\_114 Tab

1	<b>Accounts Receivable - Accounts 111, 112, 113</b>					
2	<b>December 31, 2015</b>					
3						
4	<b>ERKEY</b>	<b>ERNAME</b>	<b>CURRENT (111)</b>	<b>DISABILITY (112)</b>	<b>ADMIN (113)</b>	<b>TOTAL</b>
5	48-		763,550.00	0.00	0.00	763,550.00
6	48-		392,076.00	9,923.00	3,660.00	405,659.00
7	62-		0.00	0.00	140.00	140.00
8	65-		92,469.00	191.00	340.00	93,000.00
9	41-		16,042.06	0.00	0.00	16,042.06
10	41-		23,713.00	0.00	0.00	23,713.00
11	41-		34,682.00	0.00	0.00	34,682.00
12	47-		16,608.00	66.00	40.00	16,714.00
13	09-		192,591.00	0.00	0.00	192,591.00
14	50-		6,229.00	0.00	0.00	6,229.00
15	04-		27,088.34	0.00	0.00	27,088.34

# 2015 799 Report Tab

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Journal Entries for CalcDate Year 2015 with Run Date After 12/31/2015														
2	CALCID	CDATE	RDATE	ID	EDATE	JOURNALTYPE	ENTRYTYPE	APPTYPE	ACCOUNTTYPE	AMOUNT	CLNT	ERKEY	CALCID	PROCESSID	REFERENCENO
3	1374799	11/24/2015	02/02/2016	1590501	11/24/2015	A1	DR	CC	444	20.00	9901	01	000	1374799	
4															01
5															07
6															08
7															09
8															06
9															09
10															02
11															04
12															07
13															08
14															04
15															02
16															05
17															08
18															04
19															08
20															04
21															03
22															08
23															02
24															04

Continued

	REMARKID	AMEND_WHO	AMEND_WHEN	MEMO	FORFEITURE	PMRS_TR	TREASURY_TR	SSN
3	23				32	N		
4	23				33	N		
5	23				34	N		
5	23				35	N		
7	23				36	N		
3	23				30	N		
3	23				38	N		
0	23				39	N		
1	23				37	N		
2	23				4633	N		
3	23				50	N		
4	23				38	N		
5	23				21	N		
6	23				54	N		
7	23				88	N		
8	23				57	N		
9	24				11	N		

14.64 12-31-YY Cash Reconciliation

1	<b>Monthly Cash Reconciliation</b>						
2	<b>October 31, 2015</b>						
3							
4	<b>Treasury Balance</b>			<b>TOTAL</b>	\$ 71,114,522.06	\$ -	
5							
6	<b>TRs &amp; REs Deposits in Transit</b>						
7	<b>Doc No.</b>	<b>Doc. Date</b>	<b>CPAS Date</b>	<b>Treasury Date</b>			
8	95453450	10/30/2015	10/30/2015	11/3/2015	\$ 618,150.43		
9	95453568	10/30/2015	10/30/2015	11/3/2015	\$ 1,179,691.40		
10				<b>TOTAL</b>	\$ 1,797,841.83		
11	<b>Outstanding VTs</b>						
12	<b>Doc No.</b>	<b>Doc. Date</b>	<b>CPAS Date</b>	<b>Treasury Date</b>			
13							
14							
15				<b>TOTAL</b>	\$ -		
16	<b>CPAS Balance</b>						
17	Account 100 per Trial Balance				\$ 1,797,841.83	\$ 0.00	
18	Account 102 per Trial Balance				\$ 71,114,522.06	\$ -	
19	<b>Total Cash Balance</b>			<b>TOTAL</b>	\$ 72,912,363.89		
20					\$ -		
21							

14.65 12-31-YY Credited Interest

	A	B	C	D	E	F
1	<b>INTEREST CREDITED TO RESERVE ACCOUNTS</b>					
2	<b>YEAR ENDED DECEMBER 31, 2015</b>					
3	<b>5.5% Calculated by taking 2.75% of Beginning Balance and 2.75% of Ending Balance</b>					
4						
5						
6	<b>INTEREST ON DISABILITY RESERVE ACCOUNT - 213</b>					
7						
8	Beginning Balance 1/1/15	213		489,966.77		
9				0.0275		
10					13,474.09	
11						
12	Ending Balance 12/31/15	<b>*see below</b>		812,830.71		
13				0.0275		
14	<b>CLOSING ENTRY</b>				22,352.84	
15	<b>Acct #443 - AJ-17</b>					35,826.93
16						
17						
18	<b>INTEREST ON RETIRED MEMBERS RESERVE ACCOUNT - 219</b>					
19						
20	Beginning Balance 1/1/15			833,748,582.11		
21				0.0275		
22					22,928,086.01	
23						
24	Ending Balance 12/31/15	<b>** see below:</b>		831,900,811.38		
25				0.0275		
26	<b>CLOSING ENTRY</b>				22,877,272.31	
27	<b>Acct #449 - AJ-17</b>					45,805,358.32
28						
29						
30						
31						
32	<b>G/L #213</b>					
33	Beginning Balance 1/1/15	213		489,966.77		
34	Add: Contributions	313		317,437.00		
35	Plus: Disability Transfers	213		5,366.94		
36		*		812,830.71		
37						
38	<b>G/L #219</b>					
39	Bal Before Closing Entries	219		833,748,582.11		
40	Plus: Retiree Transfers	219		86,810,081.72		
41	Less: Retire Payments	419		(88,657,852.45)		
42		**		831,900,811.38		
43						
44						

14.66 YYYY Budget-By Month  
Monthly Information Summary Tab

	I	J	K	L	M	N	U	P	Q	R	Y	Z	AA	AB	AC	AD
						2016	January	February	March	Q1	Q2	Q3	October	November	Total (YTD)	Budget
1					Categories											
2																
3					<b>Operating Expenses</b>											
4					<b>Personnel Expenses</b>											
12					Salary and Wages	\$0										3%
21					Benefits	\$1										8%
22					<b>Total Personnel Expenses</b>	\$1										2%
23					<b>Total Complement</b>											
24					<b>Total Filled</b>											
25																
26					<b>Non-Personnel Expenses</b>											
38					Facilities											5%
42					Equipment											4%
51					Supplies and Publications											5%
52					<b>Total Office Expenses</b>											6%
53					<b>Client Communications and Travel</b>											
63					Communications/Outreach											5%
72					Travel											0%
73					<b>Total Client Communications and Travel</b>											5%
80					<b>Employee Professional Development</b>											8%
37					<b>Professional Services</b>	\$										0%
113					<b>Information Technology</b>	\$1										3%
122					<b>State Shared Services Allocation</b>											1%
123					<b>Total Non-Personnel Expenses</b>	\$										5%
124																
125					<b>Total Operating Expenses</b>	\$1										2%
126																
127																
128					<b>Fixed Assets Purchases</b>											
129					<b>Fixed Assets</b>											
137					IT Hardware Purchases											0%
142					Other Asset Purchases											3%
143					<b>Total Fixed Assets</b>											8%
144																
145					<b>Total Operating and Fixed Assets</b>	\$1										2%
146																
147							\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
148																

Monthly Information Summary

Monthly Information Detail

GL Listing

## Monthly Information Detail Tab

	J	K	L	M	N	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG
1	Categories			2016 Budget	Q1	April	May	June	Q2	July	August	September	Q3	October	November	December	Q4	Total (YTD)	% of Budget		
2	Operating Expenses																				
3	Personnel Expenses																				
4	Salary and Wages																				
5	Regular																			0%	
6	Overtime																			1%	
7	General Pay Increase - Cash Payments																			8%	
8	Out of Class																			9%	
9	Temporary/Part Time																			5%	
10	Leave Payouts																			5%	
11	Salary and Wages																			3%	
12	Benefits																				
13	Social Security/Medicare																			5%	
14	Health Care																			4%	
15	Retirement																			1%	
16	Retiree Health																			4%	
17	Life Insurance																			1%	
18	Worker's Comp Insurance																			7%	
19	Unemployment Compensation Payment																			0%	
20	Benefits																			6%	
21	Total Personnel Expenses																			2%	
22	Total Complement																				
23	Total Filled																				

## SAP GL Listing Tab

	A	B	C	D	E	F
1	GL long text	GL	Cmnt item	GL long text		
2	Cash with Treasurer	1000000	1000000	Cash with Treasurer	#REF!	
3	Cash Replenished to Adv Acct from Treasury	1000001	1000000	Cash Replenished to Adv Acct from Treasury	#REF!	
4	Cash - Payroll Bank Clearing	1000002	1000000	Cash - Payroll Bank Clearing	#REF!	
5	Cash with Fiscal Agent	1001000	1000000	Cash with Fiscal Agent	#REF!	
6	Cash with Fiscal Agent - PV BONYM	1001001	1000000	Cash with Fiscal Agent - PV BONYM	#REF!	
7	Cash with Fiscal Agent Clearing - PV BONYM	1001002	1000000	Cash with Fiscal Agent Clearing - PV BONYM	#REF!	
8	Cash with Fiscal Agent - CFA TD Bank	1001003	1000000	Cash with Fiscal Agent - CFA TD Bank	#REF!	
9	Cash with Fiscal Agent Clearing - CFA TD Bank	1001004	1000000	Cash with Fiscal Agent Clearing - CFA TD Bank	#REF!	
10	Cash with Fiscal Agent - PIDA US Bank	1001005	1000000	Cash with Fiscal Agent - PIDA US Bank	#REF!	
11	Cash with Fiscal Agent Clearing - PIDA US Bank	1001006	1000000	Cash with Fiscal Agent Clearing - PIDA US Bank	#REF!	
12	Cash with Fiscal Agent - PV Wells Fargo	1001007	1000000	Cash with Fiscal Agent - PV Wells Fargo	#REF!	
13	Cash with Fiscal Agent Clearing - PV Wells Fargo	1001008	1000000	Cash with Fiscal Agent Clearing - PV Wells Fargo	#REF!	
14	Cash with Fiscal Agent - CFA Wells Fargo	1001009	1000000	Cash with Fiscal Agent - CFA Wells Fargo	#REF!	
15	Cash with Fiscal Agent Clearing - CFA Wells Fargo	1001010	1000000	Cash with Fiscal Agent Clearing - CFA Wells Fargo	#REF!	
16	Cash with Fiscal Agent - PIDA Wells Fargo	1001011	1000000	Cash with Fiscal Agent - PIDA Wells Fargo	#REF!	
17	Cash with Fiscal Agent Clearing - PIDA Wells Fargo	1001012	1000000	Cash with Fiscal Agent Clearing - PIDA Wells Fargo	#REF!	
18	Cash - Change Fund	1002000	1000000	Cash - Change Fund	#REF!	
19	Cash in Transit	1003000	1000000	Cash in Transit	#REF!	
20	Cash in Transit Health Registrar	1003001	1000000	Cash in Transit Health Registrar	#REF!	
21	Cash in Transit - Payroll Advances	1003005	1000000	Cash in Transit - Payroll Advances	#REF!	
22	Public Utility Lockbox Cash	1030017	1000000	Public Utility Lockbox Cash	#REF!	
23	Banking Lockbox Cash	1030075	1000000	Banking Lockbox Cash	#REF!	
24	Insurance Lockbox Cash	1030079	1000000	Insurance Lockbox Cash	#REF!	

## 14.67 Accounting Summary

	A	B	C	D	E	F	G
1	<b>ACCOUNTING SUMMARY - PMRS</b>						
2	<b>JANUARY 2016</b>						
3							
4							Year-to-Date
5							One Year Ago
6	Revenue (Cash Basis)		Month		Year-to-Date		
7							
8	1. Contributions	\$6,					7.72
9							
10	2. Net Investment Related						
11	Income (Dividends,						
12	Realized Gains, Losses,						
13	Interest)	(1,					51.16
14							
15	3. Value at Cost of						
16	Investments Sold	47,					0.65
17							
18	Expenses (Cash Basis)						
19							
20	1. Retirement & Disability						
21	Allowance	6,					2.36
22							
23	2a. Refunds to Members						5.50
24							
25	2b. Refunds Due to						
26	Withdrawn Plans						7.87
27							
28	3. Investments Purchased,						
29	Accrued Interest						
30	Purchased	41					7.54
31							
32	4. Investment Management						
33	Expenses						1.33
34							
35	5. Administrative Expenses						1.52
36							
37							
38							
39							
40	Prepared by: SDG 2/22/16						
41							
42							
43							

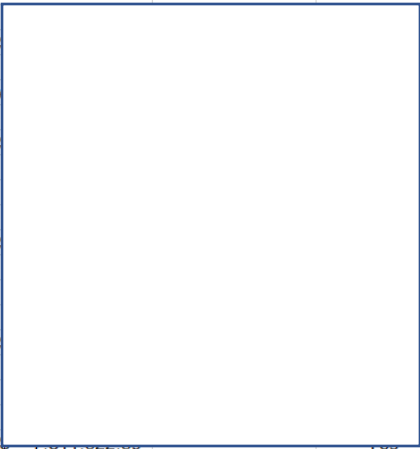
14.68 Financial Statements

YYYY Adjusting Entries Tab



**ADJUSTING ENTRIES  
DECEMBER 31, 2015**

Adj Entry	J/E		G/L #	Debit	Credit	Reverse
2015						
1	131	Accumulated Depreciation	195			
		Furniture & Fixtures	190			
		To credit the above account with fixed assets purchased in 2007 and hav				
2	132	Depreciation Expense	495			
		Accumulated Depreciation	195			
		To record 2015 depreciation for equipment, furniture, and software.				
3		Furniture & Fixtures	190			
		Administrative Expense	435			
		To reclassify 2015 equipment, furniture, and software purchases.				
4	133	Administrative Expense	435			
		Accrued Expenses	250			
		To record accrued compensated absences as of 12/31/15.				
5	134	Equity Securities	151			



YYYY Plan Withdrawals Tab

	A	B	C	D	E	F
1	<b>PLAN WITHDRAWALS IN 2015</b>					
2						
3						
4	<b>Municipality</b>	<b>PERC</b>	<b>Acct #</b>	<b>Reason</b>	<b>Amount</b>	
5	P		411	Withdrew	\$	
5	P		412	Withdrew	\$	
7	P		419	Withdrew	\$	
3					\$	
9						
0	B		412	Withdrew	\$	
1						
2	B		411	Withdrew	\$	
3	B		412	Withdrew	\$	
4	B		419	Withdrew	\$	
5					\$	
6						
7				Total	\$	
8						
9						
0						

### YYYY Closing Entries Tab

CLOSING ENTRIES FOR YEAR 2015				Debit	Credit
1	148	Contributions - Member	311		
		Contributions - Municipal Current	312		
		Contributions - Municipal Disability	313		
		Municipal Assessments - (Admin)	314		
		DROP Members Contributions	317		
		Member's Account	211		
		Municipal Account	212		
		Disability Reserve Account	213		
		DROP Members Reserve	217		
		Gain and Loss Summary	290		
		To close contribution accounts into reserve accounts.			
2	149	Member's Account	211		
		Municipal Account	212		
		DROP Members' Account	217		
		Withdrawals - Members	411		
		Refunds - Municipal Current	412		
		Refund DROP Members	417		
		To close refund accounts into			

### YYYY GASB Database Tab

ERKEY	ENAME	TYPE	LINK	ACCT_REC	B2	B3	B4	B5 - Member
01		DB	1	0	1312954	0		77
36		DC	1	0	0	0		0
65		DB	1	0	0	0	23722	87
02		DB	1	0	26130	0		19
39		DB	1	0	1040979.97	0	1189466	86
04		DB	1	0	27347	0		52
28		DB	1	0	0	0	49106	50
03		DC	1	0	80	0		0
03		DC	1	0	20	0		0
03		DC	1	0	140	0		7.6
54		DB	1	0	8487.5	0	2151	41
40		DB	1	0	0	0		0
15		DB	1	0	18313	0		22
15		DC	1	0	40	0		06
20		DC	1	0	80	0		0
15		DC	1	0	100	0		45
65		DB	1	0	0	0	5	0
65		DB	1	0	0	0		0
06		DB	1	0	79314	0		21
18		DB	1	0	0	0		78

YYYY TB Tab

PA MUNICIPAL RETIREMENT SYSTEM				
TRIAL BALANCE				
DECEMBER 31, 2015				
(AFTER ADJUSTING ENTRIES)				
	Account	Debits	Credits	
100 -- Cash	100	4,561,877.74	0.00	5,07,888,510.66
102 -- Short-Term Investments	102			
103 -- Short-Term Investments - Managers	103			
111 -- Accounts Receivable - Members	111			.58
112 -- Accounts Receivable - Current	112			.40
113 -- Accounts Receivable - Disability	113			
114 -- Accounts Receivable - Administrative	114			
116 -- Accounts Receivable - Investments	116			.63
140 -- Short-Term Interest Receivable	140			.20
141 -- Dividend Receivable	141			
151 -- Equity Securities	151			.17
152 -- State Street Index Fund (Equities)	152			
152 -- State Street Index Fund (U.S. Government Fixed Income)	152			
152 -- State Street Index Fund (Corporate Bond Fixed Income)	152			
152 -- State Street Index Fund (International)	152			
154FIA -- Forest Investment Assoc	154			.90
154P -- PRISA	154P	93,447,223.19	0.00	9

Continued

	A	B	C	D	E
<b>PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM</b>					
<b>POST CLOSING TRIAL BALANCE</b>					
<b>DECEMBER 31, 2015 and 2014</b>					
		<b>2015</b>		<b>2014</b>	
<b>ASSETS:</b>					
Investments:					
Cash and Short Term Investments					
Equities - Domestic					
State Street Index Fund					
FIA Real Estate					
PRISA Real Estate					
TIAA-CREF (Times Square - 2007)					
Equities - International					
<b>Total Assets</b>		<b>1,94</b>			
Receivables:					
Member					
Municipal Current					
Disability					
Administrative Fees					
Investment Settlements					
Investment Income					
<b>Total Receivables</b>					
<b>Fixed Assets - Net of Depreciation</b>					
<b>Deferred outflow</b>					
<b>TOTAL ASSETS</b>		<b>2.0</b>			
<b>LIABILITIES AND RESERVES:</b>					
Liabilities:					
Investment Settlements					
Accrued Expenses					
Collateral Held Under Securities Leases					
<b>Total Liabilities</b>					
<b>Deferred inflow</b>					
Reserves:					
Member's					
Municipal					
Disability					
DROP Members					
Retired Member's					
Undistributed Earnings					
<b>Total Reserves</b>		<b>1,94</b>			
<b>TOTAL LIABILITIES AND RESERVES</b>		<b>2.0</b>			
Undistributed Earnings as a percentage of					

## YYYY Plan Additions Tab

TRANSFERRED-IN ASSETS IN 2015						
DATE	PERC	NAME	AMOUNT		ACCOUNT	
8/28/2015	07				311	Member
8/24/2015	07				311	Member
6/22/2015	48				311	Member
6/4/2015	28				312	Municipal
5/8/2015	38				312	Municipal
5/8/2015	38				312	Municipal
5/7/2015	16				312	Municipal
7/20/2015	67				312	Municipal
<b>TRANSFERRED-IN ASSETS IN 2013</b>						

## YYYY Statements Tab

		Pennsylvania Municipal Retirement System	
		Statement of Fiduciary Net Position	
		As of December 31, 2015 and 2014	
Assets			
<b>Receivables</b>			
Plan members			
Municipal employers			
Accrued investment income			
Investment sales receivable			
<b>Total receivables</b>			
<b>Investments, at fair value</b>			
Short-term and other investments			
U. S. Government fixed income pooled funds			
Corporate bond pooled funds			
Equity index funds, common and preferred			
Real estate equity			
International equities			
<b>Total investments</b>			
<b>Additions</b>			
Contributions, net of refunds			
Municipal employers			
Plan members			
Transfers from other plan administrators			
Assessments			
<b>Total contributions, net of refunds</b>			
Investment Income			
From investing activities:			
Net appreciation (depreciation) in fair value			
Short-term and other investments			
Common and preferred stocks			
Real estate equity			
International equities			
<b>Total investment income</b>			
Less investment expenses			
<b>Total net investment income (loss)</b>			

	2015	2014	2013	\$ Change	% Change
<b>Pennsylvania Municipal Retirement System</b>					
<b>Management Discussion and Analysis</b>					
<b>Summary of Fiduciary Net Position</b>					
<b>As of December 31, 2015, 2014, and 2013</b>					
<b>Assets</b>					
Receivables	\$				%
Investments					%
Capital assets					%
<b>Total assets</b>					%
<b>Deferred outflows</b>					
<b>Liabilities</b>					%
<b>Deferred inflows</b>					%
<b>Total fiduciary net position</b>	\$				%
Additions:					
Contributions, net of refunds	\$				%
Net investment income (loss)					%
Miscellaneous					%
<b>Total additions</b>					%
Deductions:					
Annuity benefits and terminations					%
Transfers to other plan administrators					%
Administrative expenses					%
<b>Total deductions</b>					%
<b>Total changes in fiduciary net position</b>	\$				%

<b>Asset Distribution at Fair Market Value</b>							
<b>as of December 31, 2015, 2014, and 2013</b>							
<b>Asset Class</b>	<b>2015</b>	<b>%</b>	<b>2014</b>	<b>%</b>	<b>2013</b>	<b>%</b>	<b>%</b>
Short term	\$ 27,220	1.2%	\$ 27,710	0.9%	\$ 44,525	0.8%	
Fixed income							
Common preferred stock							
International stock							
Real estate equity							
<b>Total</b>							





# UndistEarnings Tab

	A	B	C	D
1	<b>Undistributed Earnings</b>			
2	<b>For The Year Ending December 31, 2015</b>			
3				
4				
5	Beq			
6	Effe			
7	Pric			
8	Tran			
9	Bal			
10				
11	Add			
12	Add			
13	Add		21	
14	Add			
15	Les			
16	Add			
17	Les			
18				
19				
20				
21				
22				
23	Cur			
24	Pric			
25	Und		71	
26				
27	Use		71	
28				
29	Und			
30				
31	12		7	
32	12			
33	12			
34	12			
35	12			
36	12			
37	12			
38	12			
39	12			
40	12			
41	12			
42	12			
43	12			
44	12			
45	12			
46	12			
47	12,000,000	100,000,000.00		
48				
49				

DisabActivity Tab

PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM			
DISABILITY RESERVE ACCOUNT			
ACTIVITY FOR THE YEAR ENDING DECEMBER 31, 2015			
Beginning Balance 12/31/14		213	489,966.77
Less -			
Disabil			
) Disabil			
L Disabil			
2 Disabil			
3			
4			
5 Add: T			
5 Add: C			
7			
3			
) Add: 5			
3			
4 Ending			

DROP Activity Tab

PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM			
DROP MEMBER RESERVE ACCOUNT			
ACTIVITY FOR THE YEAR ENDING DECEMBER 31, 2015			
Beginn			7
Add- 1			
Trans			7
) Intere			7
L			
2 Less -			
3 DROP			
4 DROP			
5 DROP			
5 Total V			7
7			
3 Closing			7
)			
)			
L			





# 12-31-YY Accrued Expenses Tab

	A	B	C	D	E
1	<b>Accrued Expenses</b>				
2					
3					
4					
5	Investment M				%
6	Administrativ				%
7	Net Pension				%
8	OPEB Liabil				%
9	Compensate				%
0					
1					
2					
3					
4	Administrativ				
5	Total Admin				
6	Reversal of				
7	Fixed Asse				
8	Current Ye				
9	Total Admini				
0					
1					

# 12-31-YY Investment Fees Tab

	A	B	C	D	E	F	G	H	I	J	K	
1		<b>2015 INVESTMENT MANAGEMENT EXPENSES</b>										
2							paid 2015				.85	
3							paid 2015				.87	
4											.66	
5											.56	
6											.34	
7	<b>Manager</b>	<b>First Quarter</b>	<b>Second Quarter</b>	<b>Third Quarter</b>	<b>Fourth Quarter</b>	<b>Y/E Adjustmen</b>	<b>Total Fees 2015</b>					
8	BMO	15										
9	Brandywine	16										
10	DePrince	10										
11	Emerald Advisers	11										
12	Federated											
13	Forest Investment	30										
14	HGK	7										
15	Jarislowsky, Fraser	8										
16	Johnston	12										
17	LSV	14										
18	Polen	13										
19	State Street - S & P 500											
20	State Street - Russell 1000 Growth NL											
21	State Street - Bond Index Non-Lending	2										
22	State Street - Emerging Markets	4										
23	State Street - Russell 2000 Non-Lending											
24	State Street - MSCI World Ex-U.S.A. NL											
25		<b>1,665</b>									<b>00</b>	
26	R/E: Prudential PRISA	5										
27	R/E: Prudential PRISA II	12										
28	R/E: TIAA-CREF	34										
29		<b>549</b>										
30	<b>Total Manager Fees</b>	<b>2,215</b>										
31	BNY Mellon Custody Fee	2										
32	BNY Mellon Out of Pocket Expenses											
33		<b>22</b>									<b>76</b>	
34	<b>Total Investment Fees</b>	<b>2,238</b>									<b>76</b>	
35											<b>46</b>	
36											<b>0.30</b>	
37	*Forest's first quarter fees included placement fee for purchase of Bucktails Management Unit.											
38	*DePrince reduced their fee from 40 bps to 32 bps as of 7/01/15.											
39	*Polen reduced their fee from 50 bps to 40 bps as of 10/01/15.											

# 12-31-YY Compensated Absences Tab

COMPENSATED ABSENCES																										
AS OF DECEMBER 31, 2015																										
Employee Name	Hourly Rate	Annual		Personal		Sick			Total	Sick	Sick															
		Hours	Liability	Hours	Liability	Hours	Max Rate	Liability	Liability	Days	Max Hours															
	\$ 18.8																									
	\$ 22.0																									
	\$ 16.0																									
Total Accrued Liability:																										
Annual																										
Personal																										
Sick																										
	195,054.33																									
Source: OA HR		will provide the data for this spreadsheet																								
Sick Policy		<table border="1"> <tr> <td>DAYS AVAIL</td> <td></td> </tr> <tr> <td>AT RETIREM</td> <td></td> </tr> <tr> <td>0-100</td> <td></td> </tr> <tr> <td>101-200</td> <td></td> </tr> <tr> <td>201-300</td> <td></td> </tr> <tr> <td>over 300 in lo</td> <td></td> </tr> <tr> <td>of employem</td> <td></td> </tr> </table>											DAYS AVAIL		AT RETIREM		0-100		101-200		201-300		over 300 in lo		of employem	
DAYS AVAIL																										
AT RETIREM																										
0-100																										
101-200																										
201-300																										
over 300 in lo																										
of employem																										



### Compensated Absences Tab

	A	B	C	D	E	F	G	H	I	J	K	L
1	COMPENSATED ABSENCES											
2	Date	Amount	Difference									
3	12/31/2004	251,000.00			IF# 4	Administrative Expenses	425	105,054.00			Yes	
4	12/31/2005	265								54.93		
5	12/31/2006	258										
6	12/31/2007	282										
7	12/31/2008	310										
8	12/31/2009	271										
9	12/31/2010	256										
10	12/31/2011	246										
11	12/31/2012	241										
12	12/31/2013	216										
13	12/31/2014	188								014		
14	12/31/2015	195										
15												
16												
17												
18	Spreads											
19	M:Acco											
20	Give To											
21	He will e											
22	Hourly F											
23	Spreads											
24	Check w											
25	Sick Lia											
26	Sick Pol											
27	DAYS A											
28	AT RET											
29												
30	0-100											
31	101-200											
32	201-300											
33	over 300											
34	of empl											
35												
36												

### YYYY Administrative Expenses Tab

	B	C	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	X	Y
1	Personnel Municipal Retirement System																					
2	Administrative Expenses																					
3	Year ended December 31, 2015 and 2014																					
4																						
5																						
6																						
7	PERSONNEL																					9999
17	Salaried and																					2,789
18	Social secur																					6,779
20	Retirement																					7,779
21	Insurance and																					18,410
22	Other employe																					1,532
23	Total person																					31,999
24																						
25	PROFESSION																					
26	Accountant																					0,632
27	Legal																					9,910
28	Insurance Co																					0,362
29	IT Consultant																					0,000
30	Audit																					0,362
31	Microfilmer																					0,000
32	Printing																					0,000
33	Travel																					0,000
34	Total profes																					11,912
35																						
36	COMMUNIC																					
37	Postage																					3,332
38	Telephone																					1,999
39	Travel and Co																					1,999
40	Fuel																					0,330
41	Advertising																					3,252
42	Total commu																					11,912
43																						
44	OTHER SERV																					
45	Office equip																					6,632
46	Contract ser																					0,700
47	Equipment																					0,972
48	Supplies																					0,000
49	Printing																					2,900
50	Travel and Co																					0,000
51	Total other																					11,204
52																						
53	DEPRECIATION																					
54	Total deprec																					6,542
55																						
56																						
57																						
58																						
59																						
60																						
61																						
62																						
63																						

AP after 3-31-YY





YYYY-1 Budget Tab

PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM						
2014 LINE ITEM BUDGET						
2014 LINE ITEMS PAID IN 2013						
		2013	YEAR-TO-DATE	AMOUNT	% PAID	
		EXPENDITURES	EXPENDITURES	BUDGETED	OF AMOUNT	BUDGETED
6100000	PERSONNEL					
6111000	Salaries					0.00
6114000	General					0.00
6121000	Wages					0.00
6142000	State S					0.00
6143000	State S					0.00
6145000	State S					0.00
6146000	State W					0.00
6147000	State S					0.00
6148000	State S					0.00
6149000	State S					0.00
6162010	Annual					0.00
6162020	Sick Le					0.00
6321010	Out Ser					0.00
6321020	In-Servic					0.00
6321030	Confere					0.00
	Subtotal					0.00

# OfficeRent Tab

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Pennsylvania Municipal Retirement System</b>												
2	<b>Rent of Office Building</b>												
3	<b>Budget Line Item 6351220</b>												
4													
5													
6					<b>Cost Per</b>	<b>Annual</b>	<b>Monthly</b>						
7	<b>Dates of Lease</b>	<b>Sq. Ft.</b>	<b>Sq. Ft.</b>		<b>Rent</b>	<b>Rent</b>							
8													
9													
10	12/1/20												
11													
12	12/1/20												
13	12/1/20												
14	12/1/20												
15	12/1/20												
16													
17	<b>PMRS</b>												
18	<b>Oper</b>												
19													
20													
21													
22													
23													
24													
25													
26													
27	<b>Da</b>												
28													
29	12/1/20												
30													
31	12/1/20												index.
32													
33													
34													
35													
36	<b>PMRS</b>												
37	<b>Shan</b>												
38													
39													
40													
41													
42													
43													
44													

# 250 Tab

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	794 - Report of Details for 250 for Year 2015												
2	DATE												
3	01/01/20												4
4	01/12/20												
5	12/07/20												
6	10/26/20												
7	12/31/20												
8													
9	5/16/20												
10													
11	AJ-16												
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													

14.70 12-31-YY Investments

TB before Adj Entry Tab

**PA MUNICIPAL RETIREMENT SYSTEM**  
**CPAS TRIAL BALANCE - BEFORE ADJUSTING ENTRIES**  
**December 31, 2015**

Account	Debits	Credits
100 -- Cash	1,591,877.71	0.00
102 -- Short-Term Investments		
103 -- Short-Term Investments - Managers		
111 -- Accounts Receivable - Members		
112 -- Accounts Receivable - Current		
113 -- Accounts Receivable - Disability		
114 -- Accounts Receivable - Administrative		
116 -- Accounts Receivable - Investments		
140 -- Short-Term Interest Receivable		
464JMB -- Loss on Sale of Investments - JMB		
465 -- Loss on Sale of Investment - Gov't Bonds		
466 -- Loss on Sale of Investments - Mortgages		
467 -- Loss on Sale of Investments - Int'l Equities		
495 -- Depreciation Expense		
499 -- Gain and Loss Summary		
Date Printed: May 12, 2016	Page -1 of 1	

### Adjusting Entries Tab

ADJUSTING ENTRIES DECEMBER 31, 2015							
Adj Entry	J/E		G/L #	Debit	Credit	Reverse	
1	131	Accumulated Depreciation	195	\$		No	
		Furniture & Fixtures	190				
		To credit the above account with fixed assets purchased				preciated.	
2	132	Depreciation Expense	495	\$			No
		Accumulated Depreciation	195				
		To record 2015 depreciation for equipment, furniture, and					
3		Furniture & Fixtures	190	\$		No	
		Administrative Expense	435				
		To reclassify 2015 equipment, furniture, and software pu					
4	133	Administrative Expense	435	\$		Yes	
		Accrued Expenses	250				
		To record accrued compensated absences as of 12/31/					

### TB After Invest Adj Tab

PA MUNICIPAL RETIREMENT SYSTEM CPAS TRIAL BALANCE - AFTER INVESTMENT ADJUSTING ENTRIES December 31, 2015		
Account	Debits	Credits
100 -- Cash		0.00
102 -- Short-Term Investments		0.00
103 -- Short-Term Investments - Managers		0.00
111 -- Accounts Receivable - Members		0.00
112 -- Accounts Receivable - Current		0.00
113 -- Accounts Receivable - Disability		0.00
114 -- Accounts Receivable - Administrative		0.00
116 -- Accounts Receivable - Investments		0.00
464FIA -- Loss on Sale of Investment - FIA		0.00
464JMB -- Loss on Sale of Investments - JMB		0.00
465 -- Loss on Sale of Investment - Gov't Bonds		0.00
466 -- Loss on Sale of Investments - Mortgages		0.00
467 -- Loss on Sale of Investments - Int'l Equities		0.00
495 -- Depreciation Expense		0.00
499 -- Gain and Loss Summary	0.00	
44539693356		
Date Printed: June 06, 2016	Page 1 of 1	

### CostMarket Work papers Tab

INVESTMENTS DECEMBER 31, 2019										General Ledger Income Reconciliation Prior To Posting Adjusting Entries										
	Over	Market	IDL																	
<b>DOMESTIC EQUITIES:</b>																				
Brandywine																				
DePrince																				
Emerald																				
Federated																				
HGK																				
Jarislowsky																				
Johnston																				
LSV																				
Polen Cap																				
Cash Mgmt																				
Total Alloc																				
Unallocated																				
3 Late Day A																				
4 In transit D																				
5 Forest - C																				
7 Int'l Manag																				
<b>TOTAL SH</b>																				
<b>TOTAL F</b>																				
Cash Held																				
Int'l Manag																				
In transit D																				
Late Day A																				
PMRS Ass																				
<b>TOTAL LONG TERM</b>	1,710,009,239.88	1,393,732,343.33																		

SHORT-TERM:																				
BMO																				
Brandywine																				
DePrince																				
Emerald																				
Federated																				
HGK																				
Jarislowsky																				
Johnston																				
LSV																				
Polen Cap																				
Cash Mgmt																				
Total Alloc																				
Unallocated																				
3 Late Day A																				
4 In transit D																				
5 Forest - C																				
7 Int'l Manag																				
<b>TOTAL SH</b>																				
<b>TOTAL F</b>																				
Cash Held																				
Int'l Manag																				
In transit D																				
Late Day A																				
PMRS Ass																				
<b>TOTAL LONG TERM</b>																				

**SOURCE OF INFORMATION**  
 Asset Allocation for December 31st  
 SSgA - Statements - Fixed Income - Sector Weights  
 1 \* Credit & Govt  
 2 \*\* ABS, Cash, CMBS & MBS  
 3 Mellon Report for Late Day Activity Dividends for Dec 31st.  
 4 In transit deposits - December Daily Tabs  
 5 Forest - 4th quarter report - Cash  
 6 TIAA-CREF - 4th quarter report - Cash  
 7 Int'l Managers Foreign Currencies - J-8



# Investment Reconciliation Tab

Investment Reconciliation December 31, 2015									
Statement of Net Assets Available for Benefits									
Investments						Receivables			
Cost	Cost of Foreign Currency	Unrealized Appreciation-Invest	Unrealized Appreciation- Currency	Unrealized on Foreign Currency	Total	Securities Sold	Interest	Dividends	
NY Mellon Statements									8.50
EYD Asset Management									0.41
Brandywine Global Inv.Mg									1.00
DePrince Race and Zollo									4.55
EQ-Emerald Advisors									8.50
Federated Investors									4.76
HGX Asset Management									3.87
Jantrowitz, Fraser									3.62
Johnson Asset Management									0.60
LSV Asset Management									4.13
Polen Capital Manager									8.64
VHF Investment Manager									
Green Cash - Audited Financial									
IAA-CREF Audited Financial									
TIAA-CREF Asset Manag									
* January Statement reflect									0.22

Foreign Currency Fluctuations				Payables					
Receivable For Securities Sold	Dividend Receivable	FFX Contract Receivable	Total	Cash	Total Assets	Securities Purchased	FFX Contracts	Foreign Taxes - Dividend	Total
1	\$								00
5	\$								58
5	\$								24
1	\$								26
1	\$								50
2	\$								10
3	\$								22
3	\$	2.2							50
1	\$								
3	\$								
4	\$								
5	\$	2.2							48







JE8\_MgrForeign Currency Tab

	A	B	C	D	E
1	<b>Manager Cash Balances</b>				
2	<b>December 31, 2015</b>				
3					
4	<b>International Managers</b>				
5	<b>Non-Base Currency:</b>	Cost	Market	Difference	
6					
7	<b>HGK</b>				
9	SWISS FRANC	(26.45)	(26.08)		
10	SOUTH KOREAN WON	0.01	0.00		
11	<b>Total HGK</b>	(26.44)	(26.08)	(0.36)	
12					
13	<b>Jarislowsky, Frazier</b>				
14	AUSTRALIAN DOLLAR	0.50	0.51		
15	<b>Total Jarislowsky</b>	0.50	0.51	(0.01)	
16					
25	<b>Total Non-Base Currency</b>	(25.94)	(25.57)	(0.37)	
26		-		0.00	
27					
28	<b>Adjusting Entry #8</b>	Debit	Credit		
29	Short Term Investments - Managers		25.94	103	
30	International Equities	25.94		157	
31	To reclassify non-base currency for				
32	international equity managers at				
33	12/31/15. Amounts were originally				
34	recorded as international equities.				
35					
36	<b>From Mellon Reports for each international manager and</b>				
37	<b>Mellon's "Effective Exposure Summary by Currency" Report</b>				



b	Category	Market Value	Market Exposure	As of Date
7				
8	<b>GRAND TOTAL</b>			8
9	AUSTRALIAN DOL			4
6	EURO CURRENCY			9
9	HONG KONG DOL			0
8	JAPANESE YEN			0
18	NORWEGIAN KRO			6
17	POUND STERLING			3
72	SOUTH KOREAN V			6
14	SWEDISH KRONA			9
17	SWISS FRANC			6
14	THAILAND BAHT			4
17	U.S. DOLLAR			1
20				
21				
22				















# Broker Commissions Paid Tab

	A	B	C	D	E	F	G	H	
1									
2	Year Ended December 31, 2015								
3									
4	Category	Broker Name	Base Commission	%	Calendar Commission	%	Fiscal Commission	%	
5	Grand								
6								02	
7								66	
8								26	
9								31	
10								01	
11								07	
12								04	
13								38	
14								10	
15								32	
16								42	
17								27	
18								02	
19								04	

SecLend Done Tab

	A	B	C	D	E	F	G
0	<b>Gross/Net Securities Lending Income:</b>						
1	<b>Year Ended December 31, 2009</b>						
2							
3							
4		<b>Gross</b>		<b>Expenses</b>		<b>Net</b>	
5							
6	M			-		-	
7	Le						
8	I						
9	Tr			-		-	
0							
1	S	24		-		442,929.24	
2							
3		<u>24</u>		<u>-</u>		<u>442,929.24</u>	
4							
7	<b>Gross/Net Securities Lending Income:</b>						
3	<b>Year Ended December 31, 2008</b>						
3							
0							
1		<b>Gross</b>		<b>Expenses</b>		<b>Net</b>	
2							
3	M						
4	Le						
5	I						
6	Tr						
7							
8	S						
9							
0		<u>2,007,012.00</u>		<u>1,710,111.01</u>		<u>1,710,000.00</u>	

Top Holdings Tab

BNY Mellon							
TOP 10 HOLDINGS OF ACTIVE MANAGERS							
December 31, 2015							
Category	ISIN	Security ID	Description 1	Shares par	Market Value	Percent	Date
	92						015
	85						015
	65						015
	02						015
	68						015
	74						015
	87						015
	02						015
	00						015
	75						015

Pending Foreign Exchange Contra Tab

Receivable Units	Payable Base Cost	Receivable Base Cost	Payable Base Market Value	Receivable Base Market Value	Payable Unrealized Gain/Loss	Receivable Unrealized Gain/Loss	As-Of Date	Report Run Date	FX Payable Ccy Code	Fx Receivable Ccy Code
										SD
										PY
										SD
										PY
										SD
										PY

14.71 YYYY GASB 68 Financial Data by Plan

YYYY CAFR Tab



**Pennsylvania Municipal Retirement System**

**Statement of Fiduciary Net Position**

**As of December 31, 2015 and 2014**

	2015	2014	\$ Change	% Change
<b>Assets</b>				
<b>Receivables</b>				
Plan members	\$ 2,125,173	\$ 1,832,661	\$ 292,512	15.96%
Municipal employers	1,741,796	240,903	1,500,893	623.03%
Accrued investment income	1,119,459	1,310,518	(191,059)	-14.58%
Investment sales receivable	11,858,823	1,264,099	10,594,724	838.12%
<b>Total receivables</b>	<b>16,845,251</b>	<b>4,648,181</b>	<b>12,197,070</b>	<b>262.41%</b>
<b>Investments, at fair value</b>				
Short-term and other investments	37,389,514	58,712,288	(21,322,774)	-36.32%
U. S. Government fixed income pooled funds	226,339,921	206,849,517	19,490,404	9.42%
Corporate bond pooled funds	103,986,876	94,724,352	9,262,524	9.78%
Equity index funds, common and preferred stocks	816,383,502	872,999,594	(56,616,092)	-6.49%
Real estate equity	357,870,568	328,359,467	29,511,101	8.99%
International equities	455,212,477	487,818,617	(32,606,140)	-6.68%
<b>Total investments</b>	<b>1,997,182,858</b>	<b>2,049,463,835</b>	<b>(52,280,977)</b>	<b>-2.55%</b>

2	<b>Total additions</b>	<b>63,797,367</b>	<b>190,215,975</b>	<b>(126,418,608)</b>	<b>-66.46%</b>
3					
4	<b>Deductions</b>				
5	Annuity benefits and terminations	89,855,588	84,025,435	5,830,153	6.94%
6	Transfers to other plan administrators	20,448,089	3,411,316	17,036,773	499.42%
7	Administrative expenses	4,983,399	4,411,462	571,937	12.96%
8	<b>Total deductions</b>	<b>115,287,076</b>	<b>91,848,213</b>	<b>23,438,863</b>	<b>25.52%</b>
9					
0	<b>Net increase</b>	<b>(51,489,709)</b>	<b>98,367,762</b>	<b>(149,857,471)</b>	<b>-152.34%</b>
1	<b>Net position restricted for pensions</b>				
2	Balance, beginning of year	2,049,615,132	1,951,247,370	98,367,762	5.04%
3	Effect of change in accounting principle	(3,634,167)	-	(3,634,167)	100.00%
4	Balance, beginning, as restated	2,045,980,965	-	2,045,980,965	100.00%
5	Balance, end of year	<b>\$ 1,994,491,256</b>	<b>\$ 2,049,615,132</b>	<b>\$ (55,123,876)</b>	<b>-2.69%</b>

6

7

8

9 These financial statements should be read only in connection with the

0 accompanying notes to financial statements.

1

### YYYY CAFR Reserve Rollforward Tab

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
	12/31/14 Beginning Balance	Effect of change in accounting principle	Reserve Adjustment	12/31/14 Beginning Balance, as restated	Employer Contributions	Member Contributions	Transfers from Other Plan Administrator	Credited Interest	Assessments	Annuity Benefits and Terminations	Transfers to other plan administrator	Transfers	Net Investment Income (Loss)	Miscellaneous Revenue	Administrative Expenses	12/31/15 Ending Balance	Variance
Members	\$ 427,736,000	\$ 1,527,802	\$ 487,207	\$ 429,263,910	\$ 19,605,687	\$ 66,580	\$ 1,357,704	\$ 22,623,823	\$ 43,463,094	\$ (8,556,190)	\$ (5,347,689)	\$ (20,763,316)	\$ 156,289,593	\$ 293,740	\$ (4,983,399)	\$ 436,896,705	\$ -
Municipal	\$ 814,734,267	\$ -	\$ 487,207	\$ 815,221,474	\$ 47,187,306	\$ -	\$ 1,357,704	\$ 43,463,094	\$ -	\$ -	\$ (7,281,194)	\$ (65,422,540)	\$ -	\$ -	\$ -	\$ 834,525,844	\$ -
Disability	\$ 483,967	\$ -	\$ -	\$ 483,967	\$ 317,497	\$ -	\$ -	\$ 35,827	\$ -	\$ -	\$ -	\$ 5,367	\$ -	\$ -	\$ -	\$ 489,334	\$ -
DROP	\$ 628,345	\$ -	\$ -	\$ 628,345	\$ -	\$ -	\$ -	\$ 1,470	\$ -	\$ (460,755)	\$ -	\$ 644,330	\$ -	\$ -	\$ -	\$ 813,384	\$ -
Retired Members	\$ 833,748,582	\$ -	\$ -	\$ 833,748,582	\$ -	\$ -	\$ -	\$ 45,805,358	\$ -	\$ (80,836,647)	\$ (7,815,206)	\$ 86,810,083	\$ -	\$ -	\$ -	\$ 877,706,170	\$ -
Undistributed E arns	\$ (27,722,037)	\$ (3,634,167)	\$ (2,015,009)	\$ (33,371,213)	\$ -	\$ -	\$ -	\$ (11,323,572)	\$ 206,114	\$ -	\$ -	\$ (126,740)	\$ (5,197,261)	\$ 253,740	\$ (4,983,399)	\$ (56,283,519)	\$ -
CAFR	\$ 2,045,980,965	\$ 47,504,803	\$ 19,605,687	\$ 2,045,980,965	\$ 47,504,803	\$ 19,605,687	\$ 1,424,284	\$ -	\$ 206,114	\$ (83,955,589)	\$ (20,446,089)	\$ -	\$ (5,197,261)	\$ 253,740	\$ (4,983,399)	\$ 1,984,491,256	\$ -
CAFR Variance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

### YYYY CAFR Reconciliation Tab

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	12/31/14 Beginning Balance	Effect of change in accounting principle	Reserve Adjustment	12/31/14 Beginning Balance, as restated	Employer Contributions	Member Contributions	Transfers from Other Plan Administrator	Credited Interest	Assessments	Annuity Benefits and Terminations	Transfers to other plan administrator	Transfers	Net Investment Income	Miscellaneous Revenue	Administrative Expenses	12/31/15 Ending Balance	Variance	
Members	\$ 427,736,000	\$ -	\$ 1,527,802	\$ 429,263,910	\$ 19,605,687	\$ 66,580	\$ 1,357,704	\$ 22,623,823	\$ 43,463,094	\$ (8,556,190)	\$ (5,347,689)	\$ (20,763,316)	\$ 156,289,593	\$ 293,740	\$ (4,983,399)	\$ 436,896,705	\$ -	
CAFR	\$ 427,736,000	\$ -	\$ 1,527,802	\$ 429,263,910	\$ 19,605,687	\$ 66,580	\$ 1,357,704	\$ 22,623,823	\$ 43,463,094	\$ (8,556,190)	\$ (5,347,689)	\$ (20,763,316)	\$ 156,289,593	\$ 293,740	\$ (4,983,399)	\$ 436,896,705	\$ -	
CPAS by Plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Variance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Municipal	\$ 814,734,267	\$ -	\$ 487,207	\$ 815,221,474	\$ 47,187,306	\$ -	\$ 1,357,704	\$ 43,463,094	\$ -	\$ -	\$ (7,281,194)	\$ (65,422,540)	\$ -	\$ -	\$ -	\$ 834,525,844	\$ -	
CAFR	\$ 814,734,267	\$ -	\$ 487,207	\$ 815,221,474	\$ 47,187,306	\$ -	\$ 1,357,704	\$ 43,463,094	\$ -	\$ -	\$ (7,281,194)	\$ (65,422,540)	\$ -	\$ -	\$ -	\$ 834,525,844	\$ -	
CPAS by Plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Variance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Disability	\$ 483,967	\$ -	\$ -	\$ 483,967	\$ 317,497	\$ -	\$ -	\$ 35,827	\$ -	\$ -	\$ -	\$ 5,367	\$ -	\$ -	\$ -	\$ 489,334	\$ -	
CAFR	\$ 483,967	\$ -	\$ -	\$ 483,967	\$ 317,497	\$ -	\$ -	\$ 35,827	\$ -	\$ -	\$ -	\$ 5,367	\$ -	\$ -	\$ -	\$ 489,334	\$ -	
CPAS by Plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Variance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
DROP	\$ 628,345	\$ -	\$ -	\$ 628,345	\$ -	\$ -	\$ -	\$ 1,470	\$ -	\$ (460,755)	\$ -	\$ 644,330	\$ -	\$ -	\$ -	\$ 813,384	\$ -	
CAFR	\$ 628,345	\$ -	\$ -	\$ 628,345	\$ -	\$ -	\$ -	\$ 1,470	\$ -	\$ (460,755)	\$ -	\$ 644,330	\$ -	\$ -	\$ -	\$ 813,384	\$ -	
CPAS by Plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Variance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Retired Members	\$ 833,748,582	\$ -	\$ -	\$ 833,748,582	\$ -	\$ -	\$ -	\$ 45,805,358	\$ -	\$ (80,836,647)	\$ (7,815,206)	\$ 86,810,083	\$ -	\$ -	\$ -	\$ 877,706,170	\$ -	
CAFR	\$ 833,748,582	\$ -	\$ -	\$ 833,748,582	\$ -	\$ -	\$ -	\$ 45,805,358	\$ -	\$ (80,836,647)	\$ (7,815,206)	\$ 86,810,083	\$ -	\$ -	\$ -	\$ 877,706,170	\$ -	
CPAS by Plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Variance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Undistributed E arns	\$ (27,722,037)	\$ (3,634,167)	\$ (2,015,009)	\$ (33,371,213)	\$ -	\$ -	\$ -	\$ (11,323,572)	\$ 206,114	\$ -	\$ -	\$ (126,740)	\$ (5,197,261)	\$ 253,740	\$ (4,983,399)	\$ (56,283,519)	\$ -	
CAFR	\$ (27,722,037)	\$ (3,634,167)	\$ (2,015,009)	\$ (33,371,213)	\$ -	\$ -	\$ -	\$ (11,323,572)	\$ 206,114	\$ -	\$ -	\$ (126,740)	\$ (5,197,261)	\$ 253,740	\$ (4,983,399)	\$ (56,283,519)	\$ -	
CPAS by Plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Variance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total CAFR	\$ 2,045,980,965	\$ 47,504,803	\$ 19,605,687	\$ 2,045,980,965	\$ 47,504,803	\$ 19,605,687	\$ 1,424,284	\$ -	\$ 206,114	\$ (83,955,589)	\$ (20,446,089)	\$ -	\$ (5,197,261)	\$ 253,740	\$ (4,983,399)	\$ 1,984,491,256	\$ -	
Total CPAS by Plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Variance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

### YYYY Memb & Mun Reserve by Plan Tab

ERKEY	ENAME	TYP	Member Beginning Balance	Municipal Beginning Balance	Employer Contributions	Municipal for Member Contribution
67						
67						
67						
67						
67						
67						
67						
99						
9						
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
0						
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4						
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6						
7						
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1						
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3						
4						
5						
6						
7						
8						
9						
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
0						
1						
2						
3						



### YYYY Disability Activity by Plan Tab

ERKEY	ENAME	TYPE	Beginning Balance	Employer Contributions	Transfers	Credited Interest	Ending Balance
17 67							
18 67							
19 67							
00 67							
01 67							
02 67							
03 67							
04 67							
05 67							
06 67							
07 67							
08 67							
09 67							
10							64
11							.00
12							36)
13							
14							
15							
16							

### YYYY DROP Activity by Plan Tab

ERKEY	ENAME	TYPE	Balance	Interest	Annuity Benefits	Transfers	Ending Balance
98 67							\$ -
99 67							\$ -
000 67							\$ -
001 67							\$ -
002 67							\$ -
003 67							\$ -
004 67							\$ -
005 67							\$ -
006 67							\$ -
007 67							\$ -
008 67							\$ -
009 67							\$ -
010							\$ -
011							
012							
013							
014							
015							

### YYYY Undist Activity by Plan Tab

ERKEY	ENAME	TYPE	Assessments	Credited Interest	Net Investment Income	Miscellaneous Revenue	Administrative Expenses
0 67							
1 67							
2 67							
3 67							
4 67							
5 67							
6 67							
7 67							
8 67							
9 67							
0 99							
1							
2							99.00)
3							99.00)
4							-
5							
6							
7							

### YYYY Retiree&DisabilityRegInt Tab

	A	B	C	D	E	F	G
1	<b>INTEREST CREDITED TO RESERVE ACCOUNTS</b>						
2	<b>YEAR ENDED DECEMBER 31, 2015</b>						
3	<b>5.5% Calculated by taking 2.75% of Beginning Balance and 2.75% of Ending Balance</b>						
4							
5							
6	<b>INTEREST ON DISABILITY RESERVE ACCOUNT - 213</b>						
7							
8	Beginning Balance 1/1/15	213		483,966.77			
9				0.0275			
10					13,474.03		
11							
12	Ending Balance 12/31/15	*see below		812,830.71			
13				0.0275			
14	<b>CLOSING ENTRY</b>				22,352.84		
15	<b>Acct #443 - AJ-17</b>					35,826.33	
16							
17							
18	<b>INTEREST ON RETIRED MEMBERS RESERVE ACCOUNT - 219</b>						
19							
20	Beginning Balance 1/1/15			833,748,582.11			
21				0.0275			
22					22,928,086.01		
23							
24	Ending Balance 12/31/15	** see below:		831,900,811.38			
25				0.0275			
26	<b>CLOSING ENTRY</b>				22,877,272.31		
27	<b>Acct #443 - AJ-17</b>					45,805,358.32	
28							
29							
30							
31							
32	<b>G/L #213</b>						
33	Beginning Balance 1/1/15	213		483,966.77			
34	Add: Contributions	313		317,437.00			
35	Plus: Disability Transfers	213		5,366.34			
36		*		812,830.71			
37							
38	<b>G/L #219</b>						
39	Bal Before Closing Entry	219		833,748,582.11			
40	Plus: Retiree Transfers	219		86,810,081.72			
41	Less: Retire Payments	419		(88,657,852.45)			
42		**		831,900,811.38			
43							
44							



Budget - Board Format Tab

				2017 Proposed Budget			
				2017 Proposed Budget	2016 Budget	\$ Change	% Change
3	Categories						
41	Facilities						%
45	Equipment						%
53	Supplies and Publications						%
56	Insurance						%
57	Total Office Expenses						%
58	Client Communications and Travel						%
38	Communications/Outreach						%
78	Travel						%
79	Total Client Communications and Travel						%
36	Employee Professional Development						%
03	Professional Services						%
21	Information Technology						%
22	Recurring Operating Expenses						%
23	Major Initiatives (One-Time Costs)						%

Executive Tab

				Proposed Budget - Executive Division			
				2017 Proposed Budget	2017 Proposed Budget Exple		
3	Categories	Category Description					
4	Total Office Expenses			\$ -			
57	Client Communications and Travel						
58	Communications/Outreach						
59		Discretionary Printing	For discretionary printing as				
60		Postage	For discretionary printing				
61		PMRS Sponsored Meeting Expenses	For PMRS sponsored meetings and				
62		Presentation Materials (excluding external)	For presentation materials				
63		Advertising	For advertising costs				
64		Conference/Exhibit Registration	For conference and exhibit registration				

# Operations Tab

2017 Proposed Budget - Operations Division									
Categories	Category Description	GL Code 1	GL Code 2	GL Code 3	2017 Proposed Budget	2017 Proposed Budget Explanation			
<b>Office Expenses</b>									
Facilities									
Leasing	Rental					Leasing for n			
Maintenance/Repairs	Includ					ate Lease;			
Parking Leasing	For re								
Utilities	space								
Phone/Land line	Contr								
Phone/Mobile	Basic								
Internet	variab								
IT Shared Services	As sta								
Security	Ident								
	Misce								
	For of								

# Membership Services Tab

2017 Proposed Budget - Membership Services Division									
Categories	Category Description	GL Code 1	GL Code 2	GL Code 3	2017 Proposed Budget	2017 Proposed Budget Explanation			
<b>Professional Services</b>									
Legal									
Act									
Inv									
Aud									
Me									
Pro									
Dive									
Dea									



## Municipal Services Tab

2017 Proposed Budget - Municipal Services Division									
2017 Proposed Budget	2017 Proposed Budget Explanation								
Categories	Category Description								
41	Equipment								
42	Leasing	For							
43	Maintenance/Repairs	For							
44	Equipment	agreed							
45	Supplies								
46	General Materials	For							
47	Printing	For							
48	Postage	For							
49	Publications	to							
50	Subscriptions	For							
		Information							

## Legal Tab

2017 Proposed Budget - Legal Division									
2017 Proposed Budget	2017 Proposed Budget Explanation								
Categories	Category Description								
GL Code 1	GL Code 2	GL Code 3							
71	Auto Rental	As stated	6351322	6351320					
72	Gasoline Purchases and Tolls	As stated	6380210						
73	Auto Repairs/Maintenance/Supplies	For PMRS owned vehicles	6344700	6380710					
74	Common Carrier (Rail/Air/Taxi)	As stated	6311040						
75	Lodging	As stated	6311010						
76	Food/Travel Meals	For "subsistence" reimbursement	6311020						
77	<b>Travel</b>								\$ -
78	<b>Total Client Communications and Travel</b>								\$ -
79	Employee Professional Development								
30	State Sponsored Training/Classes	As stated	6321020						
31	3rd Party Sponsored Training/Classes	As stated but excluding conference registration fees	6321010						
32	Conference Registration Fees	For professional/educational related fees	6321030						
33	Certification Renewal Fees	For fees by an accreditation/certification organization to begin or maintain an approved designation	6391050.1						

## Technology Services Tab

2017 Proposed Budget - Technology Services Division									
2017 Proposed Budget	2017 Proposed Budget Explanation								
Categories	Category Description								
GL Code 1	GL Code 2	GL Code 3							
82	Conference Registration Fees	For professional/educational related fees	632						
83	Certification Renewal Fees	For fees by an accreditation/certification organization to begin or maintain an approved designation	63910						
84	Professional Membership Fees		639						
85	<b>Total Employee Professional Development</b>								
86	Professional Services								
87	Legal								
88	OCC	As stated	634						
89	Non-OCC	As stated	63421						
90	Actuarial								
91	Fixed	For fixed costs (including any designated multiyear adjustments)	634311						
92	Variable	Per contract costs related to per output deliverables	634311.01						
93	Investment Consulting	Per contract amounts	634311.04						

## Investment & Financial Mgmt Tab

2	A	B	C	D	E	F	G	L	M	
1									<b>Budget -Investment &amp; Financial Management Division</b>	
2										
3						<b>Categories</b>	<b>Category Description</b>	<b>2017 Proposed Budget</b>	<b>2017 Proposed Budget Explanation</b>	
4										
44						<b>Equipment</b>		\$ -		
45						Supplies				
46						General Materials	For all everyday office materials			
47						Printing	For 3rd party printing costs that would be considered as required for normal business			
48						Postage	For all routine mailings generally considered necessary to conduct our business			
49						Publications				
50						Subscriptions	For all printed or electronic costs for access to ongoing information			
51						Purchases	For all printed or electronic costs for access to one-time or static information			
52						<b>Supplies and Publications</b>		\$ -		
53						Insurance				

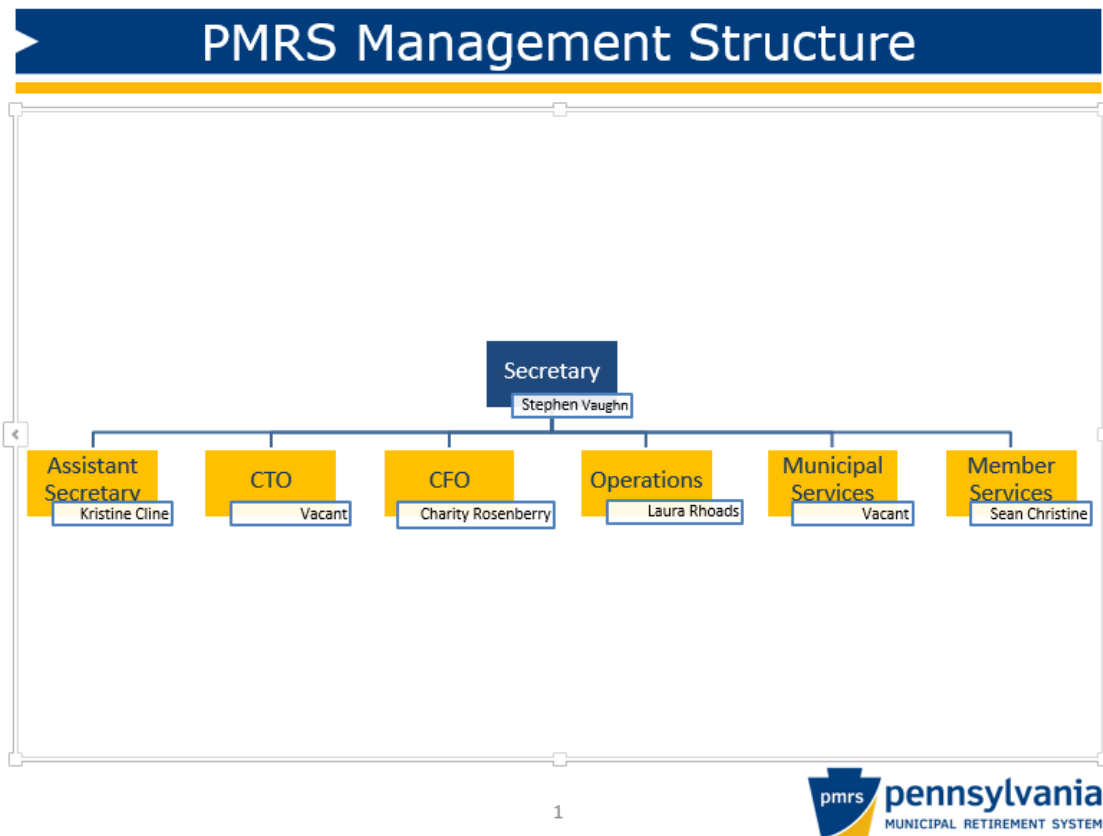


# 14.74 Asset Allocation YYYY

PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM ASSET ALLOCATION December 31, 2015				PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM ASSET ALLOCATION December 31, 2015			
CASH AT TREASURY		% OF	% OF	% OF	TOTAL % OF PORTFOLIO BY MANAGER:		
Manager Cash		TOTAL CASH	TOTAL ASSETS	PORTFOLIO			
BM							%
Bra							%
Dv							%
Em							%
Fed							%
HC							%
Jar							%
Joh							%
LS							%
Po							%
Tot							%
Unal							%
TOTA							%
FIXED							%
Stat							%



14.76 PMRS Org Chart



# 14.77 Quarterly Investment Compliance Review

## PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM QUARTERLY INVESTMENT COMPLIANCE REVIEW Third Quarter 2016

Requirements / Restrictions from PMRS Investment Guidelines	Office / Person Responsible for Monitoring Compliance	Results of Verification	Action Taken / To Be Taken
COMMON STOCK			
Total allocation 25% large international investments be consistent	<div style="border: 1px solid black; width: 100%; height: 100%;"></div>		Documented justifications in \$ staff.
Maximum of the cap			
Maximum of the m			
The cum funds) sh of 5% m			
If more th holdings shall just industry			
Active equity managers shall report quarterly the average <small>commission price per share traded and any soft dollar credits granted</small>	Investment Accountant	All active equity managers submitted <small>report</small>	None required.

“Note 3” Commission Costs and/or Soft Dollar Information by Manager

Manager	Total Shares Traded	Total Commissions Paid This Quarter	Average Comm. Price Per Share This Quarter	Soft-Dollar Credit	Year-To- Date Total Shares Traded	Year-To- Date Commissions	YTD Average Comm. Price Per Share	YTD Soft- Dollar Credit
BM								0
Bra								8
Em								0
Eag								0
Fed								8
LSV								0
Pol								0
Tot								6
Equ								5
								8
HG								3
Jari								0
Joh								5
Tot								8
Equities								8

# 14.78 YYYY 1099 Reconciliation

1099 Database Revised 1-17-YY Tab





### Payroll EFT Tab

	A	B	C	D	E	F	G	H	I	J
	PAYEE	MKEY	Cheque Date	Payment Method	Gross Amount	Taxes	Deductions	Net Amount	TraceID	
2	He									68 \$ -
3	He									61 \$ -
4	He									55 \$ -
5	He									44 \$ -
6	He									29 \$ -
7	He									11 \$ -
8	He									05 \$ -
9	He									01 \$ -
0	He									98 \$ -
1	He									96 \$ -
2	He									94 \$ -
3	He									86 \$ -
4	Jos									67 \$ -
5	Jos									61 \$ -
6	Jos									55 \$ -
7	Jos									43 \$ -
8	Jos									30 \$ -
9	Jos									13 \$ -
0	Jos									07 \$ -
1	Jos									04 \$ -

### Payroll EFT Refunds Tab

	A	B	C	D	E	F	G	H	I	J	K
	PAYEE	MKEY	Cheque Date	Payment Method	Gross Amount	Taxes	Deductions	Net Amount	TraceID	ROEs	ROE#
2	Ch										0579A
3	Ch										0577F
4	Ch										
5	Ch										
6	Ch										0582E
7	Ch										0555D
8	Ro										
9	De										
0	De										
1	Sat										0583A
2	Ma										
3	Fre										0567C
4	Th										d to Treas
5	Ho										0567G
6	Rat										0583B
7	Ha										0564A
8	Jar										0577A
9	Jef										0577H
0	Jea										0551A
1	De										0586C
2	Ch										0563C

### Lump Sum Batch Tab

	A	B	C	D	E	F	G	H	I	J	K	L	M	N		
	Records for the Lumpsum Batch	TREVT #	TraceID	Payee	PROCESS	Cheque Date	Paymnt Methc	CheckID	MKEY	Person	Payment Type	LumpSum	Gross Amou	Taxes	Deductio	Net
1	571															
2	571															
3	571															
4	571															
5	571															
6	571															
7	571															
8	571															
9	571															
0	571															
1	571															
2	571															
3	571															
4	571															
5	571															
6	571															

### Lump Sum Non-Batch Tab

VTNo	RecordNumber	RecordType	RequestDate	PaymentDate	FBO	PayeeName	SSN_EIN	MKEY	PERC	Gross	Tax	Net
57110231	1	Ld										3.57
57110231	2	Ld										35.12
57110253	1	Ld										3.23
57110253	2	Ld										3.25
57110253	3	Ld										0.00
57110253	4	Ld										3.30
57110271	1	Ld										1.98
57110280	1	Ld										8.82
57110368	7	Ld										9.09
57110368	8	Ld										0.68
57110368	4	Ld										6.99
57110368	5	Ld										5.26
57110368	6	Ld										3.11
57110368	1	Ld										0.94
57110368	2	Ld										2.72
57110368	3	Ld										5.18
67110005	1	Ld										0.85
67110030	2	Ld										7.37
67110030	3	Ld										7.91
67110030	1	Ld										4.52
67110067	6	Ld										7.37
67110067	7	Ld										0.83
67110096	2	Ld										7.70
67110096	1	Ld										3.62

### IRS Payments Tab

BU	Source System	Voucher ID	Voucher Amount	Trace Id	Batch Id	FR Status	Budget Status	Close Status	Entry Status	Payment Class	Post Status	Date Recvd by Treasury	Requested Due Date	Assigned Due Date
PMER														016
PMER														016
PMER														016
PMER														016
PMER														016
PMER														016
PMER														016
PMER														016

### Reissued Payments Tab

Clearing Doc Number	Vendor	Location	Postal Code	P.O. Box
1501133519	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501134335	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501134338	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501134821	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501134822	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501134824	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501135280	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501135434	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501137235	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501139411	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501137231	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501140410	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501142939	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501143043	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501143565	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501145233	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501145631	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#
1501146842	599501	ONE TIME VEND MAN ENT NON 1099 ELIG	#	#

### Lump Sum Refunds Tab



# 14.79 YYYY Tabs

## Monthly Tab

DAILY TABS REPORT																						
JANUARY 2016																						
Contributions	Salv of hour/masr	Gln(Loss) On Sale	hour/masr Income	Misc Income	STIF Inscrpt- Paal 924	STIF Inscrpt- Paal 999	Purchase hour/masr	Benefit Paymnt	Admin Expense	Mgr Fee- Paal 924	Mgr Fee- Paal 999	Transfer to (from) 999 from 924	Transfer from (to) 924 to 999	Non-Inscrpt STIF	Inscrpt STIF	Endng Crsh	Endng STIF	Uninscrpt Crsh	Paal 924	Paal 924	TOTAL	
4			4.4																			
5			2.4																			
6			78,142.51																			
7			1,997,043.26																			
8																						
11																						
12			321,095.46																			
13																						
14																						
15			35,147.57																			
19																						
20			45,228.43																			
21			1,045,295.91																			
22			472,419.29																			
28																						
24																						
27																						
22			1,244,495.59																			
29																						
																					Variance	(0.00)

## Current Activity Tab

	Benefit Payments		ADMINISTRATIVE EXPENSES		
	January 2016		January 2016		
	Refunds (411, 412)	Retirements (419)	2015 Budget	2016 Budget	2017 Budget
4	\$				
6	\$				
7	\$				
	\$				
	\$				
11	\$				
12	\$				
13	\$				
15	\$				
	\$				
20	\$				
21	\$				
	\$				
	\$				
	\$				
	\$				
	\$				
27	\$				
29	\$				





## 14.82 Board Reports – Performance Summary

PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM

JANUARY 31ST, 2017

### PRELIMINARY PERFORMANCE SUMMARY

Name	QTD	YTD	Market Value	Pct
Total Portfolio	1.8	1.8	\$2,188,861,530	100.0
<i>Shadow Index</i>	<i>1.5</i>	<i>1.5</i>		
State Street Global Advisors	2.0	2.0	\$732,068,590	33.4
<i>Shadow Index</i>	<i>2.0</i>	<i>2.0</i>		
Federated Kaufmann Large Cap Growth	3.6	3.6	\$77,135,358	3.5
Polen Capital Management Large Cap Growth	2.2	2.2	\$180,368,380	8.2
<i>Russell 1000 Growth</i>	<i>3.4</i>	<i>3.4</i>		
Eagle Capital Management Equity	3.1	3.1	\$119,181,583	5.4
LSV U.S. Large Cap Value	0.9	0.9	\$154,632,985	7.1
<i>Russell 1000 Value</i>	<i>0.7</i>	<i>0.7</i>		
BMO Fundamental Small-Cap Growth	----	----	\$44,720	0.0
Emerald	1.6	1.6	\$98,504,688	4.5
<i>Russell 2000 Growth</i>	<i>1.6</i>	<i>1.6</i>		
Brandywine Institutional Small Cap Value Equity	----	----	\$1	0.0
LSV US Small Cap Value Equity	-1.1	-1.1	\$68,387,850	3.1
Smith, Graham & Company Small Cap Value	0.3	0.3	\$68,291,663	3.1
<i>Russell 2000 Value</i>	<i>-0.7</i>	<i>-0.7</i>		
GlobeFlex Capital	----	----	\$2,627	0.0
HGK Trinity Street International Equity	5.7	5.7	\$96,878,219	4.4
Johnston Asset Management International Equity	5.4	5.4	\$82,786,176	3.8
Mercator	----	----	\$17,465	0.0
WHV Investment Management	----	----	\$2,889	0.0
<i>S&amp;P BMI Developed Ex US Index</i>	<i>3.3</i>	<i>3.3</i>		
Jarislowsky Fraser International Equity	2.9	2.9	\$63,861,982	2.9
<i>MSCI EAFE</i>	<i>2.9</i>	<i>2.9</i>		
Prudential PRISA	----	----	\$33,763,500	1.5
Prudential PRISA II	----	----	\$68,135,447	3.1
TIAA CREF	0.3	0.3	\$188,699,254	8.6
<i>NCREIF NFL-ODCE Index</i>	<i>----</i>	<i>----</i>		
Forest Investment Associates	----	----	\$134,183,960	6.1
<i>NCREIF Timber Index</i>	<i>----</i>	<i>----</i>		
BNY Cash	----	----	\$3,722,299	0.2
Treasury Pool STIP	----	----	\$18,191,894	0.8

## 14.83 Board Reports – Asset Allocation

**PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM  
ASSET ALLOCATION  
October 31, 2016**

<u>CASH AT TREASURY</u>		<u>% OF TOTAL CASH</u>	<u>% OF TOTAL ASSETS</u>	<u>% OF PORTFOLIO</u>
Manager Cash				
BMO	\$ 3,141,616.84	1.86%	4.75%	0.15%
Brandywine	\$ 109,202,912.42	64.67%	93.84%	5.22%
Eagle	\$ 4,720,746.62	2.80%	4.35%	0.23%
Emerald	\$ 3,650,579.34	2.16%	4.23%	0.17%
Federated	\$ 7,135,741.52	4.23%	9.99%	0.34%
Forest	\$ 1,362,322.52	0.81%	1.02%	0.07%
HGK	\$ 4,693,047.99	2.78%	5.15%	0.22%
Jarislowsky	\$ 2,042,929.09	1.21%	3.30%	0.10%
Johnston	\$ 5,520,744.19	3.27%	6.90%	0.26%
LSV	\$ 924,202.96	0.55%	0.65%	0.04%
Polen	\$ 5,305,807.06	3.14%	3.05%	0.25%
<b>Total Manager Cash</b>	<b>\$ 147,700,650.55</b>	<b>87.47%</b>		<b>7.06%</b>
Unallocated	\$ 21,160,424.43	12.53%		1.01%
<b>TOTAL CASH AT TREASURY</b>	<b>\$ 168,861,074.98</b>	<b>100.00%</b>		<b>8.08%</b>
	<u>COST</u>	<u>MARKET</u>	<u>% OF ASSET CLASS</u>	
<u>FIXED INCOME</u>				
State Street	\$ 232,482,633.64	\$ 287,411,878.57	100.00%	13.75%
<b>TOTAL FIXED</b>	<b>\$ 232,482,633.64</b>	<b>\$ 287,411,878.57</b>		<b>13.75%</b>



EQUITY				
Large Cap Domestic Equity				
Eagle	\$ 87,168,630.64	\$ 103,717,275.80	19.58%	4.96%
Federated	\$ 60,864,960.21	\$ 64,316,758.85	12.14%	3.08%
LSV	\$ 121,684,408.96	\$ 140,516,419.43	26.53%	6.72%
Polen	\$ 110,368,503.86	\$ 168,723,223.17	31.85%	8.07%
State Street S&P 500	\$ 45,104,594.71	\$ 52,390,317.74	9.89%	2.51%
<b>Total Large Cap</b>	<b>\$ 425,191,098.38</b>	<b>\$ 529,663,994.99</b>		<b>25.33%</b>
Small Cap Domestic Equity				
BMO	\$ 60,555,884.55	\$ 62,936,488.48	32.50%	3.01%
Brandywine	\$ 7,052,090.04	\$ 7,170,203.00	3.70%	0.34%
Emerald	\$ 75,496,714.88	\$ 82,627,384.93	42.66%	3.95%
State Street Russell 2000	\$ 25,335,021.81	\$ 40,940,472.32	21.14%	1.96%
<b>Total Small Cap</b>	<b>\$ 168,439,711.28</b>	<b>\$ 193,674,548.73</b>		<b>9.26%</b>
International Broad Market Equity				
HGK	\$ 82,607,611.44	\$ 86,491,786.06	30.46%	4.14%
Jarislowsky	\$ 64,139,694.13	\$ 59,842,130.70	21.07%	2.86%
Johnston	\$ 63,526,317.07	\$ 74,527,566.84	26.25%	3.56%
State Street MSCI World Ex-USA	\$ 61,126,346.75	\$ 63,090,336.34	22.22%	3.02%
<b>Total International Broad Market</b>	<b>\$ 271,399,969.39</b>	<b>\$ 283,951,819.94</b>		<b>13.58%</b>
International Emerging Markets Equity				
State Street Emerging Markets	\$ 140,265,638.72	\$ 203,942,151.83	100.00%	9.75%
<b>Total International Emerging Markets</b>	<b>\$ 140,265,638.72</b>	<b>\$ 203,942,151.83</b>		<b>9.75%</b>
<b>TOTAL EQUITY</b>	<b>\$ 1,005,296,417.77</b>	<b>\$ 1,211,232,515.49</b>		<b>57.93%</b>

REAL ESTATE				
Forest	\$ 91,528,146.27	\$ 132,650,778.29	31.34%	6.34%
PRISA	\$ 27,176,738.19	\$ 33,037,655.49	7.80%	1.58%
PRISA II	\$ 55,767,336.45	\$ 66,493,450.68	15.71%	3.18%
TIAA	\$ 169,189,600.00	\$ 189,869,600.00	44.85%	9.08%
TIAA - 1721 N. Front St.	\$ 1,263,000.00	\$ 1,268,000.00	0.30%	0.06%
<b>TOTAL REAL ESTATE</b>	<b>\$ 344,924,820.91</b>	<b>\$ 423,319,484.46</b>		<b>20.25%</b>
<b>TOTAL PORTFOLIO</b>	<b>\$ 1,751,564,947.30</b>	<b>\$ 2,090,824,953.50</b>		<b>100.00%</b>

**PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM  
ASSET ALLOCATION  
October 31, 2016**

TOTAL % OF PORTFOLIO BY MANAGER:

	(Equity)	3.16%
	(Equity)	5.57%
	(Equity)	5.19%
	(Equity)	4.13%
	(Equity)	3.42%
	(Real Estate)	6.41%
	(Equity)	4.36%
	(Equity)	2.96%
	(Equity)	3.83%
	(Equity)	6.76%
	(Equity)	8.32%
	(Real Estate - PRISA & PRISA II)	4.76%
	(Fixed, Equity)	30.98%
	(Real Estate)	9.14%
		1.01%
		<u>100.00%</u>

CHANGE IN TOTAL PORTFOLIO FROM PREVIOUS MONTH:

UP:   
(Based on )  
DOWN:   
(Based on )

CHANGE IN TOTAL PORTFOLIO SINCE 12/31/15:

UP:   
(Based on )  
UP:   
(Based on )

## 14.84 Proxy Voting Activities

### Proxy Voting Activities 10/01 - 11/30/16

	<u>Management</u>			
	<u>Meetings</u>	<u>Proposals</u>	<u>With</u>	<u>Against</u>
<i>Antitakover Related</i>				
<i>Capitalization</i>				
<i>Directors Related</i>				
<i>Non-Salary Compensation</i>				
<i>Reorganizations &amp; Mergers</i>				
<i>Routine Business</i>				
<i>Shareholder Proposals - Directors Related</i>				
<i>Shareholder Proposals - Other/Miscellaneous</i>				
<i>Totals</i>				

14.85 Accounting Summary

**ACCOUNTING SUMMARY - PMRS**  
**October 2016**

	Month	Year-to-Date	Year-to-Date One Year Ago
<b>Revenue (Cash Basis)</b>			
1. Contributions	\$		
2. Net Investment Related Income (Dividends, Realized Gains, Losses, Interest)			
3. Value at Cost of Investments Sold			
<b>Expenses (Cash Basis)</b>			
1. Retirement & Disability Allowance			
2a. Refunds to Members			
2b. Refunds Due to Withdrawn Plans			
3. Investments Purchased, Accrued Interest Purchased			
4. Investment Management Expenses			
5. Administrative Expenses			

14.86 Projections

## Statement of Cash Receipts and Disbursements

(Dollar Amounts in Thousands)

	2015-16 <u>Actual</u>	2016-17 <u>Estimated</u>	2017-18 <u>Estimated</u>	
<b>Cash Balance, Beginning</b> .....	<b>\$</b>			
<b>Receipts:</b>				
Contributions.....	\$			
Interest.....				
Premium / Discount on Sale of Securities.....				
Net Investment Adjustment.....				
Other.....				
<b>Total Receipts</b> .....				
<b>Total Funds Available</b> .....	<b>\$</b>			
<b>Disbursements:</b>				
Municipal Retirement Board.....	\$			
<b>Total Disbursements</b> .....				
<b>Cash Balance, Ending</b> .....	<b>\$</b>			

# 14.87 Voucher Transmittal

COMMONWEALTH OF PENNSYLVANIA  
STD-125 REV. 1-80

DATE 03/06/2017

## VOUCHER TRANSMITTAL

PAGE 1 OF 1

EFT FILE PROVIDED

V.T. NO. 67110264

**TO THE DEPARTMENT OF TREASURY:**

I have reviewed and approved for payment the items listed herein with attached invoices. Please audit these items and upon your approval issue your checks in payment thereof. Payment is authorized by the following appropriations and acts:

AGENCY: PENNSYLVANIA MUNICIPAL RETIREMENT BOARD  
FUND: PENNSYLVANIA MUNICIPAL RETIREMENT FUND  
APPROP: PENNSYLVANIA MUNICIPAL RETIREMENT BOARD  
YR-ACT: 1974 15 078 071 501 5

AMOUNT PAYABLE

PER ATTACHEE

SAP CODING -  
SAP FUND:  
COST CENTER:  
G/L ACCOUNT:

WARRANT  
NO.

1. TREASURY 2. COMPTROLLER 3. TREASURY 4. OTHER

**PMRS SUPPORTING DOCUMENTATION FOR LUMP SUM VOUCHERS**

Details for Lump Sum Voucher : 67110264

Payout From Account of: ----- Check: 1    Receptient: M ----- To Member: 0.00	
Payout From Account of: ----- Check: 2    Receptient: M ----- To Member: 0.00	
Payout From Account of: ----- Check: 3    Receptient: M ----- To Member: 0.00	
Payout From Account of: ----- Check: 4    Receptient: M ----- To Member: 0.00	
Payout From Account of: ----- Check: 5    Receptient: M ----- To Member: 0.00	



## 14.88 PennWATCH Reporting – Expenses

Home | About PennWATCH | Contact Us | Glossary | Disclaimers | PA Agencies | FAQ

### Payments

This report provides information on payments made by state agencies. To begin, use the search fields to generate a report. You do not have to enter criteria into every field. The "Payee Name" field also accepts partial entries.

Next, use the drop down menus in the report to narrow the results further, if necessary. The "Payee Details" links in the report provide additional information about each payment.

Fiscal Year:

Payee Name:

Payee City:  Payee State:

Payee Zip Code:

Payment Range:  Agency:

Select the printer icon to save your results

#### Payments from PA Municipal Retirement Board for Fiscal Year 2016-17

Fiscal Year to Date Through Feb 2017

Payee Name	City, State	Fund Source	Amount Paid	<a href="#">Payment Details</a>
ALLEGHENY TOWNSHIP	LEECHBURG, PA	State	\$26,068	<a href="#">Payment Details</a>
BARBARA MORDAN	ENOLA, PA	State	\$920	<a href="#">Payment Details</a>
BERKS AREA REGIONAL TRANS AUTH	READING, PA	State	\$79,314	<a href="#">Payment Details</a>
BMO ASSET MANAGEMENT CORP	MILWAUKEE, WI	State	\$361,648	<a href="#">Payment Details</a>
BRANDYWINE GLOBAL INVESTMENT	PHILADELPHIA, PA	State	\$3	<a href="#">Payment Details</a>
CDW LLC	VERNON HILLS, IL	State	\$636	<a href="#">Payment Details</a>
CENEG CORPORATION DBA	WILLIAMSBURG, PA	State	\$294	<a href="#">Payment Details</a>
CHERON INC	MCLEAN, VA	State	\$926,831	<a href="#">Payment Details</a>
CLIFTONLARSONALLEN LLP	HARRISBURG, PA	State	\$127,690	<a href="#">Payment Details</a>
CPAS SYSTEMS INC	TORONTO, ON	State	\$350,491	<a href="#">Payment Details</a>
DAHAS ASSOCIATES INC	BAY SHORE, NY	State	\$142,500	<a href="#">Payment Details</a>

Payment Details - Internet Explorer

Select the printer icon to save your results

#### Payments For Fiscal Year 2016-17

Fiscal Year to Date Through Feb 2017

### ALLEGHENY TOWNSHIP

136 COMMUNITY BLDG RD  
LEECHBURG, PA 15666  
US

Agency Name	Appropriation	Expenditure Category -> Sub Category	Approp Year	Fund Source	Payment Date	Expenditure Amount
PA Municipal Retirement Board	RETIREMENT OF MUNICIPAL EMPLOYEES	Grants -> Grants & Payments to Individuals	0000	State	12/10/16	\$26,068
Total for PA Municipal Retirement Board						\$26,068
Grand Total						\$26,068

1/1

[Payee Details](#)



## 14.89 eMarketplace/Treasury Reporting – Contract/POs

List of Current Solicitations											
Solicitation #	Types	Solicitation Title	Description	Agency	County	Amended Date	Solicitation Start Date	Solicitation Due Date	Bid Opening Date	Status	Contact Person
<a href="#">PMRS RFP 2015-2</a>	RFP	Financial Auditing Services	Pmrs Is In Need Of Financial Audit ...	Municipal Retirement System	Dauphin	11/25/2015	10/30/2015	12/2/2015 4:00:00 PM	12/7/2015 9:00:00 AM	Closed	Charity Rosenberry
<a href="#">PMRS RFP 2015-1</a>	RFP	Proxy Research And Voting Services	To Provide Proxy Voting Services T ...	Municipal Retirement System	Dauphin	9/29/2015	9/1/2015	10/9/2015 4:00:00 PM	10/14/2015 10:00:00 AM	Closed	Wanita Campbell
<a href="#">PMRS 2014-1</a>	RFP	Investment Consulting	Pmrs Is Contracting For Investment ...	Municipal Retirement System	Dauphin	10/3/2014	10/3/2014	11/21/2014 3:00:00 PM	11/26/2014 10:00:00 AM	Closed	Wanita Campbell
<a href="#">PMRS-2011-1</a>	ITQ	Oracle Database Upgrade	Oracle Data Upgrade And Integratio ...	Municipal Retirement System	Statewide	7/12/2011	7/11/2011	7/20/2011 12:00:00 AM	7/20/2011 12:00:00 PM	Closed	Michael Mortimer

### 14.90 Open Commitments (Encumbrance, Payments, Available Balance) for POs, Contracts, Settlement Agreements

Ref	Document Number	Vendor	Gl. Account	Original Amt	Total Amt	Activity Amt	Available Balance
0							
1	605463181						65
2	605463881						63
3	605464011						64
4	605464182						60
5	605464222						70
6	605464243						60
7	605464393						68
8	605464401						60
9	605464421						60
0	605464771						62
1	605464781						62
2	4000012533						62
3	4000013918						62
4	4000015418						60
5	4000019869						60
6	4000020423						62
7	4000020506						60
8	4000020535						60
		Not assigned	Legal services fees	6042.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00

14.91 Contracts Report

**PENNSYLVANIA MUNICIPAL RETIREMENT BOARD  
 CONTRACT STATUS REPORT  
 March 7, 2017**

NAME: Berv  
 DESCRIPTION: Deat  
 DATE RECD: 7/5/1  
 STATUS: Awa

NAME: Offi  
 DESCRIPTION: MOU  
 DATE RECD: 7/11  
 STATUS: Awa

NAME: HGK  
 DESCRIPTION: Adv  
 DATE RECD: 11/1  
 STATUS: Com

NAME: John  
 DESCRIPTION: Adv  
 DATE RECD: 11/1  
 STATUS: Com



**CONTRACTS EXPIRING WITHIN THE NEXT 12 MONTHS**

CONTRACTOR	NAME OF CONTRACT	EXPIRATION DATE
Duan		6/30/17
Penn		
Func		
Brar		
Man		

**Fit Definition** Can be handled using OOB functionality and OOB Configuration tools

**Gap Definition** Can be handled using a custom solutions

**Note:** Data migration and integration activity is neither Fit or Gap but a functional activity

**# Fits:** 184

**# Gaps:** 37

**% Fit:** 83.26%

ID	Functional Area	Requirement	Comments	Fit (or) Gap	Gap description
GE-01	Overall Objectives	Serve as the primary financial management tool for PMRS.		N/A	
GE-02	Overall Objectives	Reduce time spent manually compiling and reconciling financial data.		N/A	
GE-03	Overall Objectives	Ensure an appropriate level of internal control by providing a framework around general ledger entries as well as enhanced access control.		N/A	
GE-04	Overall Objectives	Provide accountability and structure to processes through security and workflows.		N/A	
GE-05	Overall Objectives	Provide a core financial system that can integrate to multiple external systems for complete financial accountability and reporting.	CPAS, Treasury, SAP, US Bank, BNY Mellon	N/A	
GE-06	Overall Objectives	Provide enhanced reporting to obtain more data that is timely, complete and accessible.	Currently yearly, would like to move to monthly.	N/A	
GL-01	General Ledger	Create a single legal entity with a chart of accounts defined to support recording and reporting on the necessary level of detail.		Fit	
GL-02	General Ledger	Create a robust chart of accounts to support the level of detail needed for		Fit	

		summary as well as detailed financial reporting.			
GL-03	General Ledger	Create multiple financial dimensions to support detailed collection of financial data that will permit drill down and reporting at a granular level.	Data collected at a detail level that is sufficient for reporting.	Fit	
GL-04	General Ledger	Create a structure that will define which financial dimensions are mandatory based on the process and/or main account.	PERC# and reserve account (municipal, member, retiree, DROP, disability and undistributed) will be key to reporting for plans.	Fit	
GL-05	General Ledger	Create defaults to the financial dimensions to diminish manual entry as well as minimize user error.		Fit	
GL-06	General Ledger	Create statistical accounts.	It will be critical to define and maintain all statistical accounts needed for reporting. Will be needed for reporting with respect to the CAFR at the very least	Fit	
GL-07	General Ledger	Provide the ability to secure all changes to the chart of accounts and financial dimensions.		Fit	
GL-08	General Ledger	The account structure will be defined such that the order of the financial dimensions will represent the level to which they are utilized (i.e. all or extension).		Fit	
GL-09	General Ledger	Provide the ability for deferred revenue recognition.	This could be done via GL journal entries to deferred revenue accounts, or via implementation of Project Accounting module	Fit	
GL-10	General Ledger	Provide the ability to use journal entries for revenue deferral processing.		Fit	
GL-11	General Ledger	Provide the ability to define the timing of revenue deferrals.		Fit	
GL-12	General Ledger	Provide the ability to process repetitive journal entries on a periodic basis.		Fit	

GL-13	General Ledger	Provide the ability to create templates for journals that may be similar in nature but not specifically recurring. Journals may be created from the template on demand.		Fit	
GL-14	General Ledger	Provide the ability to differentiate journal entries by characteristics such as source and type.	Will be used for reporting.	Fit	
GL-15	General Ledger	Provide the ability to require journal review and approval prior to posting.		Fit	
GL-16	General Ledger	Provide the ability to differentiate types of review and approval needed based on the type of journal		Fit	
GL-17	General Ledger	Provide the ability to block users from posting their own journal entries.	Implement access control and audit.	Fit	
GL-18	General Ledger	Provide the ability to impact sub ledger accounting from journal entry.		Fit	
GL-19	General Ledger	Provide the ability to use multiple ledgers (i.e. accrual or cash ledger).	Currently working on a cash basis. Move to accrual basis and possibly a mix of accrual and cash.	Gap	It is recommended to work in an accrual basis and use financial reporting to reflect cash basis reporting, if needed
GL-20	General Ledger	Provide the ability to select to post to a single ledger or to multiple ledgers.		Gap	It is recommended to work in an accrual basis and use financial reporting to reflect cash basis reporting, if needed
GL-21	General Ledger	Provide the ability to enter regular journals entries for various transactions.		Fit	
GL-22	General Ledger	Provide the ability to post batches on demand or on a schedule.		Fit	
GL-23	General Ledger	Provide the ability to transfer batches from the sub ledgers to the General Ledger either real time or by batch.		Fit	
GL-24	General Ledger	Provide the ability to perform allocations.	Allocate overhead to divisions.	Fit	



GL-25	General Ledger	Provide the ability to record encumbrances.	GL Parameters - Commitment Accounting	Fit	
GL-26	General Ledger	Provide the ability to soft close a fiscal period.		Fit	
GL-27	General Ledger	Provide the ability to close the year-end profit or loss to retained earnings at a financial dimension level during year end close.		Fit	
GL-28	General Ledger	Provide the ability to run a trial balance report.		Fit	
GL-29	General Ledger	Provide the ability to run transaction reports.		Fit	
GL-30	General Ledger	Provide the ability to view transactions and drill down to the detail.	Drill down will be a key process. Data needs to be stored at a level of detail to facilitate drill down.	Fit	
GL-31	General Ledger	Need ability to handle budget reporting and financial reporting	AX provides standard budget and financial reports. In addition, Management Reporter can be used to develop specific reporting formats for budget and financial reporting.	Fit	
GL-32	General Ledger	Needs ability to load summarized employee payroll data from SAP into GL to properly account for payroll expenses		Gap	Interface
GL-33	General Ledger	Would like ability to load detail employee payroll data from SAP into AX Payroll module to assist in budgeting processes	This interface from SAP to AX Payroll module with detailed employee data will need to be investigated to determine if data can be loaded but not processed	Gap	Interface
GL-34	General Ledger	Provide the ability to create holding or overhead accounts/financial dimensions.	Overhead costs that do not have a breakout yet – create an undefined bucket until it can be allocated. Have PERC# assigned as all 9's until it can be assigned correctly	Fit	
BU-01	Budgeting	Provide the ability to create budgets.	Use for reporting and variances.	Fit	
BU-02	Budgeting	Provide the ability to upload a budget from Excel.		Fit	
BU-03	Budgeting	Provide the ability to open an existing budget residing in AX in Excel.		Fit	
BU-04	Budgeting	Provide the ability to move budgeted funds from one account to another at the line item level.		Fit	

BU-05	Budgeting	Provide the ability to provide the State with a budget that is on a different fiscal calendar at a summarized level.	Perform encumbrance accounting - Commitment Accounting, Budget Control	Fit	
BU-06	Budgeting	Provide the ability to check available budget on certain types of transactions.	Perform encumbrance accounting - Commitment Accounting, Budget Control	Fit	
BU-07	Budgeting	Provide the ability to block transactions that would exceed the budget for that account/financial dimensions.	Perform encumbrance accounting - Commitment Accounting, Budget Control	Fit	
BU-08	Budgeting	Provide the ability to include encumbered amounts in the calculation of available budget.	Perform encumbrance accounting - Commitment Accounting, Budget Control	Fit	
BU-09	Budgeting	Provide the ability for a possible override on transactions that exceed the budget.	Perform encumbrance accounting - Commitment Accounting, Budget Control	Fit	
BU-10	Budgeting	Provide the ability to enter some projected budget models into the system for the annual state budget book.		Fit	
CB-01	Cash and Bank Management	Provide the ability to create multiple bank accounts.		Fit	
CB-02	Cash and Bank Management	Provide the ability to define a one to one relationship between a bank and a GL account.		Fit	
CB-03	Cash and Bank Management	Provide the ability to record miscellaneous bank transactions.		Fit	
CB-04	Cash and Bank Management	Provide the ability to mark a stopped payment.	Treasury will send listing of stale dated checks. PMRS will request stop payment by Treasury and then determine if payment should be re-issued.	Fit	
CB-05	Cash and Bank Management	Provide the ability to record payments made by Treasury.	Refer to FRD for Accounts Payable for details	Fit	
CB-06	Cash and Bank Management	Provide the ability to record cash receipts processed by Treasury.	Refer to FRD for Accounts Receivable for details	Fit	
CB-07	Cash and Bank Management	Provide the ability to automatically reconcile bank transactions performed by Treasury.	Payments as well as cash receipts	Fit	

CB-08	Cash and Bank Management	Provide the ability to drill down to balances at the money manager level.	See comment below	Fit	
CB-09	Cash and Bank Management	Provide the ability to record the impacts of sweep processing between pooled accounts.	There are two pooled accounts 924 (BNY Mellon investment accounts) and 999 (Treasury operating account). It was decided that separate bank accounts would be set up for each of the 14 BNY Mellon account managed by different account managers, and a Financial Reports (Management Reporter) report would be used to show activity details.	Fit	
CB-10	Cash and Bank Management	Provide a way to recognize outstanding payments.	Cash in transit is defined as when PMRS sets a pay date in which payment should be made by Treasury, but the file from Treasury does not contain a warrant number for some transactions. This difference between what PMRS considers "paid" and what Treasury actually paid is accounting for in a "cash in transit" account	Gap	
CB-11	Cash and Bank Management	Provide the ability to reconcile the totals of the Pool 999 and Pool 924 amounts separately. Further, under the Pool 924, the bank account would be at the manager level to allow reconciliation.		Fit	
CB-12	Cash and Bank Management	Provide the ability to have certain bank transactions, such as interest earned, created automatically during reconciliation.	This is possible with advanced bank reconciliation.	Fit	
PR-01	Procurement and Sourcing	Would like ability to enter purchase requisitions in AX and workflows for review and approval prior to entering into PO or purchase	AX has standard templates that can be used for purchase requisitions. We will also ensure that the workflow review and approval process is added	Fit	
PR-02	Procurement and Sourcing	Needs ability to process purchases using a Procurement Card (P-Card)	Purchases under \$10,000 are processed using P-Cards (payment method and not necessarily a procurement method) and should have a purchase requisition and/or Purchase Order (PO) for review and approval prior to purchase/payment. POs will be required for all purchases, and the only	Fit	

			difference would be the method of payment: P-Card vs. Check processed by Treasury		
PR-03	Procurement and Sourcing	Needs ability to generate Purchase Orders (POs)	POs will be required for all purchases, and the only difference would be the method of payment: P-Card for purchases under \$10,000 vs. Check processed by Treasury.	Fit	
PR-04	Procurement and Sourcing	Needs ability to generate and track purchases against Blanket Purchase Orders (POs)	Contracts are setup as Blanket POs	Fit	
PR-05	Procurement and Sourcing	Needs ability to handle encumbrances / funds commitments (Contracts, Settlement Agreements , POs)	Commitment Accounting and Budget Control.	Fit	
PR-06	Procurement and Sourcing	Needs ability to set up approval routings		Fit	
PR-07	Procurement and Sourcing	Would like workflow for procure to pay process		Fit	
PR-08	Procurement and Sourcing	Needs ability to do 3-way matching of purchases		Fit	
PR-09	Procurement and Sourcing	Needs ability to establish segregation of duties to separate purchasing from receiving and payment processing		Fit	
PR-10	Procurement and Sourcing	Needs ability to set up thresholds for approval levels		Fit	
PR-11	Procurement and Sourcing	Needs ability to manage workflows for service related contracts	Contract workflow for review and approval prior to encumbrance of funds	Fit	
PR-12	Procurement and Sourcing	Would like ability to be prompted when service related contracts are expiring or has expired		Fit	
PR-13	Procurement and Sourcing	Would like ability to show life of contract commitment and PO if contract is linked to PO		Gap	
PR-14	Procurement and Sourcing	Would like to set up own procurement policies	Currently required to follow State's procurement policies	Fit	

PR-15	Procurement and Sourcing	Would like to use cash discounts (i.e. payment terms)	PMRS does not use discounts today due to slow process of review of payment request by Comptroller Department prior to sending to Treasury for payment	Fit	
PR-16	Procurement and Sourcing	Would like to be able to take quantity discounts on purchases	Look at State Contracts as well as working with commodity specialists to get best price (i.e. threshold for quantities to order).	Fit	
PR-17	Procurement and Sourcing	Needs ability to apply miscellaneous charges to POs, such as shipping charges		Fit	
PR-18	Procurement and Sourcing	Needs ability to apply freight charges to POs		Fit	
PR-19	Procurement and Sourcing	Needs interface with US Bank for: <ul style="list-style-type: none"> <li>· P-Cards</li> <li>· Travel Cards (corporate card) expenses</li> <li>· Lodging Cards for group travel</li> <li>· Airline Cards for air travel</li> </ul>	AX has standard templates for travel and non-travel employee expense reimbursements via the Travel and Expense module within Project Accounting	Gap	Would need interface
PR-20	Procurement and Sourcing	Needs ability to handle supply/purchase requisitions and purchase orders of office supplies		Fit	
PR-21	Procurement and Sourcing	Needs ability to handle purchase orders of services by external and Commonwealth providers	Link PO to Contract to avoid duplicate encumbrance	Fit	
PR-22	Procurement and Sourcing	Needs ability to handle purchase orders of IT equipment	Commonwealth IT policies and standard terms and conditions must be attached to PO for IT equipment and services.	Fit	
PR-23	Procurement and Sourcing	Needs ability to handle purchase orders of fixed assets	Add workflow for asset lifecycle to ensure proper tagging and inventory for additions/disposals	Fit	
PR-24	Procurement and Sourcing	Needs ability to add notes or comments on purchase orders		Fit	
PR-25	Procurement and Sourcing	Needs the ability to edit purchase orders after sending to the vendor	Changes are approved in writing with the vendor and the purchase order is updated per change order/updated fee schedule/contract amendment. Contract Amendments and Change Orders would enable extension of service period based on contract terms to existing PO#	Fit	

PR-26	Procurement and Sourcing	Needs the ability to manually enter the price on a purchase order. Quote/cost estimate should be received from vendor.	Price is generally negotiated or set based on that vendor's association with the state PO/contract. It is entered manually on the purchase order	Fit	
PR-27	Procurement and Sourcing	Need the ability to close a purchase order short with review and approval	A purchase order may be closed manually when short shipped and the remaining quantity will not be received	Fit	
PR-28	Procurement and Sourcing	Needs ability to attach State's Standard Terms and Conditions to PO	Setup a Terms and Conditions Template for attachment and update Template over time	Gap	
PR-29	Procurement and Sourcing	May need to synch PO in both AX and SAP		Gap	Interface
PR-30	Procurement and Sourcing	Needs ability to set up Procurement Categories to define type of purchase		Fit	
PR-31	Procurement and Sourcing	May use "Punch-out" process in future	For example, office supply orders with Staples. Punchout functionality is the ability to link to a vendor's external catalog on their website to select items to include in the purchase requisition and feed the Shopping Cart back to AX for completion of the purchase requisition. This punchout functionality is not currently available in D365, but is on the roadmap to be available later this year (tentatively scheduled for late summer 2017).	Gap	Punchout functionality is the ability to link to a vendor's external catalog on their website to select items to include in the purchase requisition and feed the Shopping Cart back to AX for completion of the purchase requisition. This punchout functionality is not currently available in D365, but is on the roadmap to be available later this year (tentatively scheduled for late summer 2017).
PR-32	Procurement and Sourcing	Provide ability to track inventory for office supplies	This would be handled in the Inventory module, but it would require managing inventory receipts and inventory adjustments based on usage / consumption of office supplies. Requirement was added; however, we need to determine if this capability may require more effort than what	Fit	

			is needed. Could be a future phase, or internal process change.		
PR-33	Procurement and Sourcing	Need ability to follow required State reporting (Treasury Contract website, eMarketplace website for contracts/POs		Gap	Interface
PR-34	Procurement and Sourcing	Needs ability to make PO Changes / Contract Amendments (option to extend service period based upon contract terms) and Change Orders	Changes are made using the same PO#, in most cases	Fit	
PR-35	Procurement and Sourcing	Provide the ability to enter a PO and reference the State's Contract.	Take advantage of the State's contract and pricing but encumber the amount under the PMRS budget.	Gap	
PR-36	Procurement and Sourcing	Provide the ability for vendor's to direct bill.		Fit	
AP-01	Accounts Payable	Needs ability to define own vendor number	Customers (setup as vendors for refunds) will be PERC#, employees will be personnel id (may also identify by vendor group). May also use DGS vendor number when appropriate.	Fit	
AP-02	Accounts Payable	Needs the ability to cross reference a PMRS assigned vendor number with the state approved vendor number		Gap	Customization Needed
AP-03	Accounts Payable	Needs the ability to search for a vendor using the state approved vendor number	Can also match on Tax ID. All vendors have to have a tax id on the website.	Gap	Customization Needed
AP-04	Accounts Payable	Needs the ability to record a vendor check name		Fit	
AP-05	Accounts Payable	Needs ability to track W9		Fit	
AP-06	Accounts Payable	Would like to attach the completed W9 form to the vendor record		Fit	
AP-07	Accounts Payable	Needs ability to maintain vendor main address		Fit	

AP-08	Accounts Payable	Needs ability to maintain vendor pay-to address		Fit	
AP-09	Accounts Payable	Needs the ability to maintain additional addresses and contact information as needed		Fit	
AP-10	Accounts Payable	Needs ability to maintain Employer Identification Number (EIN) for vendors	Each vendor has a unique EIN (i.e. different EIN = different vendor)	Fit	
AP-11	Accounts Payable	Needs ability to maintain Social Security Numbers (SSN) for employees and contractors		Fit	
AP-12	Accounts Payable	Needs ability to produce 1099s for independent contractor vendors		Fit	
AP-13	Accounts Payable	Needs the ability to produce 1099s for lump sum payments to members	Would need to process non-batch lump sum payments in AX (refer to additional requirement for non-batch lump sum payments)	Fit	
AP-14	Accounts Payable	Needs ability to link vendors and customers	Should be tied by the PERC#	Fit	
AP-15	Accounts Payable	Needs ability to use approved vendors from the Department of General Services (DGS)		Fit	
AP-16	Accounts Payable	Needs ability to use vendors not on the approved vendor list		Fit	
AP-17	Accounts Payable	Needs ability to set up employees as vendors		Fit	
AP-18	Accounts Payable	Needs ability to make refunds to members		Fit	
AP-19	Accounts Payable	Needs ability to assign vendors to vendor groups	Initial thought of vendor groups would include: Trade Vendors, Employees, Consultants (requiring 1099), and Services Vendors	Fit	
AP-20	Accounts Payable	Needs ability to inactivate vendors		Fit	
AP-21	Accounts Payable	Needs ability to track petty cash		Fit	
AP-22	Accounts Payable	Needs ability to make prepayments	Example: Support and maintenance agreement. May or may not be related to a PO. Hits pre-paid when payment is made	Fit	



AP-23	Accounts Payable	Needs ability to see vendor aging	Aging – 30-60-90-Over 90	Fit	
AP-24	Accounts Payable	Needs ability to close AP module periods / months. Closing should be a soft close	Closing is only done on annual basis today	Fit	
AP-25	Accounts Payable	Does not need to consider sales and use tax	PMRS is tax exempt	N/A	
AP-26	Accounts Payable	Needs ability to make vendor accrual entries		Fit	
AP-27	Accounts Payable	Needs ability to set up payment terms for vendors		Fit	
AP-28	Accounts Payable	Needs ability to process vendor invoice journals without associated POs	Examples include: Turnpike, Bottled Water, Parking, Utilities	Fit	
AP-29	Accounts Payable	Needs the ability to process credit memos and reference PO if linked		Fit	
AP-30	Accounts Payable	Needs ability set vendor pay date so that checks are cut by the assigned pay date to realize vendor offered cash discounts	Pay date sent to Treasury and set to consider lag time for payment by Treasury.	Fit	
AP-31	Accounts Payable	Needs ability to send information of what to pay to Treasury Department for payment processing	PMRS will not cut checks, but needs to be able to prepare files of what checks need to be processed by Treasury Department (Interface)	Gap	Interface
AP-32	Accounts Payable	Needs ability to include Trace ID on all invoices to be paid by Treasury		Gap	Customization Needed
AP-33	Accounts Payable	Needs ability to denote whether a separate check is required per invoice		Fit	
AP-34	Accounts Payable	Needs ability to select pay-to address		Fit	
AP-35	Accounts Payable	Needs the ability to receive a warning on duplicate vendor invoice numbers		Fit	
AP-36	Accounts Payable	Wants the ability to match invoices on alternate field (i.e. amount, value date or service date) for a warning or rejection		Gap	Customization Needed

AP-37	Accounts Payable	Needs ability to prepare Voucher transmittal – for multiple vouchers (invoice)	Send invoice number over to be used in the creation of the Trace ID. Trace ID will need to be created by PMRS and sent to Treasury.  Note: Voucher Transmittal (VT) is currently used for a paper trail to document internal approvals and provide supporting documentation; however, this document may not be necessary going forward since Treasury is now tracking every payment transaction at the invoice level and electronic approvals and hyperlinks to invoices can be sent via the interface file.	Gap	Interface
AP-38	Accounts Payable	Needs ability for vendors to send electronic invoices to central mailbox	Import into AX	Gap	Customization Needed
AP-39	Accounts Payable	Needs ability to handle recurring invoices, such as leases		Fit	
AP-40	Accounts Payable	Needs ability to receive Warrant ID from Treasury to be used a check number to track payments		Gap	Customization Needed
AP-41	Accounts Payable	Needs ability to reconcile checks by Warrant ID		Gap	Customization Needed
AP-42	Accounts Payable	Needs the ability to identify the customer (i.e. PERC#) for vendors that are also customers when posting to general ledger so that generating a P&L by plan is possible	A financial dimension will be defined for the PERC#. Customer related AP transactions will need to be configured to assure that the PERC# for that customer is populated to the GL for these transactions.	Fit	
AP-43	Accounts Payable	Needs the ability to receive alerts based on the status for procure to pay workflows		Gap	Future functionality in D365, could use workflow email notifications now
AP-44	Accounts Payable	Wants the ability to automate an amortization type process against pre-pays to draw down the amount	Could be handled by Accrual Scheme in GL	Gap	Possible customization needed
AP-45	Accounts Payable	Needs the ability to record non-batch lump sum payments to members (processed outside of CPAS)	Currently entered into Access and file sent to Treasury. Consider if Access data can be put into AX instead and payment request sent to Treasury. Update to CPAS to record payment would still be manual	Gap	Interface

AP-46	Accounts Payable	Need ability for Treasury G/L Account Mapping and interface requirements for electronic approvals and hyperlink to actual invoice document for Treasury Fiscal Review.		Gap	Interface
AP-47	Accounts Payable	Need ability to provide for PennWATCH Reporting for expenses by vendor and g/l account and eMarketplace and Treasury Reporting for contracts and purchase orders.	<a href="http://pennwatch.pa.gov/Pages/default.aspx">http://pennwatch.pa.gov/Pages/default.aspx</a> <a href="http://www.emarketplace.state.pa.us/">http://www.emarketplace.state.pa.us/</a> <a href="http://contracts.patreasury.gov/search.aspx">http://contracts.patreasury.gov/search.aspx</a>	Gap	Interface
AP-48	Accounts Payable	Provide the ability to setup vendor posting profiles at the All, Group or individual for when a vendor may belong to more than one vendor group (but only able to assign to one).		Fit	
FA-01	Fixed Assets	Needs ability to track purchased assets, such as furniture, computer equipment and software		Fit	
FA-02	Fixed Assets	Needs ability to track leased assets, such as vehicles and office equipment		Fit	
FA-03	Fixed Assets	Needs ability to track acquisition of fixed assets		Fit	
FA-04	Fixed Assets	Needs ability to track disposal of fixed assets		Fit	
FA-05	Fixed Assets	Needs ability to use Straight Line depreciation		Fit	
FA-06	Fixed Assets	Needs ability to assign asset tags to fixed asset items		Fit	
FA-07	Fixed Assets	Needs ability to assign a bar code to fixed asset items		Fit	
FA-08	Fixed Assets	Needs ability to use a bar code scanner to track fixed assets		Gap	
FA-09	Fixed Assets	Needs ability to assign location to fixed assets	Location: floor, room	Fit	
FA-10	Fixed Assets	Needs ability to assign employee to certain fixed assets (i.e. computer)	PMRS would like track the employee, division, location, floor and room of where the fixed asset resides.	Gap	Possible customization needed
FA-11	Fixed Assets	Needs ability to track fixed assets by division / department		Fit	

FA-12	Fixed Assets	Needs ability to perform a physical inventory of fixed assets annually		Fit	
FA-13	Fixed Assets	Needs system (Dynamics AX) to calculate asset values	Net book value	Fit	
FA-14	Fixed Assets	Needs ability to setup appropriate useful life of fixed assets	PMRS intends to follow Commonwealth's fixed asset policy for useful lives as detailed in PA CAFR.	Fit	
FA-15	Fixed Assets	Needs ability to track fixed asset attributes	- Make - Model - Serial Number - Warranty	Fit	
FA-16	Fixed Assets	Need the ability to track an intangible asset separately if desired (i.e. software)		Fit	
FA-17	Fixed Assets	Need the ability to track the expiration date on an intangible asset		Fit	
FA-18	Fixed Assets	Need the ability to receive an alert for intangibles that are expiring	Define time frame to receive the alert	Gap	Future functionality in D365, could use workflow email notifications now
FA-19	Fixed Assets	Needs ability to purchase fixed assets following the overall procurement processes	- Under \$10,000: use P-Card - Purchase order required	Fit	
FA-20	Fixed Assets	Would like to establish capital asset purchase thresholds	- Useful life greater than a year - Tangible property (exception are intangibles – software)	Fit	
FA-21	Fixed Assets	Needs ability to apply / capitalize fees and expenses to some fixed assets		Fit	
FA-22	Fixed Assets	Needs ability to treat some computer equipment items as one fixed asset with multiple components	Example includes: Monitor, CPU, Keyboard, Mouse as one computer fixed asset	Fit	
FA-23	Fixed Assets	Needs ability to group fixed assets	- Office and IT Equipment - Vehicles - Furniture and Fixtures - Software	Fit	
FA-24	Fixed Assets	Needs ability to write up / write down value of asset		Fit	

FA-25	Fixed Assets	Needs ability to automate updates to an asset's replacement cost and insured value	For budgeting purposes	Fit	
FA-26	Fixed Assets	Needs ability to maintain one set of depreciation books		Fit	
FA-27	Fixed Assets	Needs ability to explain asset changes via reason codes		Fit	
FA-28	Fixed Assets	Needs ability to show net proceeds (revenue) from sale of some fixed assets		Fit	
FA-29	Fixed Assets	Needs ability to show expenses resulting from scrapping of fixed assets		Fit	
AR-01	Accounts Receivable	Provide the ability to identify customers using their PERC #	PERC # - Public Employee Retirement Commission number. Customer will be synonymous with Employer or Plan.	Fit	
AR-02	Accounts Receivable	Provide the ability to have multiple customer numbers for the same employer (customer).	An employer may have more than one plan administered through PMRS. Each plan has a separate and distinct PERC# and will therefore be a separate customer in AX.	Fit	
AR-03	Accounts Receivable	Provide the ability to search for a customer by customer name.	Pulls up associated PERC#.	Fit	
AR-04	Accounts Receivable	Provide the ability to record a customer's EIN.	Can be used to link/view customer association where same customer has multiple plans (PERC#s). However, customers still maintain separate billing and payment.	Fit	
AR-05	Accounts Receivable	Provide the ability to maintain customer legal address.		Fit	
AR-06	Accounts Receivable	Provide the ability to maintain customer pay-to address.		Fit	
AR-07	Accounts Receivable	Provide the ability to maintain additional customer addresses as needed.		Fit	
AR-08	Accounts Receivable	Provide the ability to maintain multiple customer contacts, contact phone number and type of contact.		Fit	
AR-09	Accounts Receivable	Provide the ability to maintain additional customer detail.	Phone number, fax number, e-mail address.	Fit	

AR-10	Accounts Receivable	Provide the ability to attach the customer's contract.	See contract for plan association. Note: This could be done via AX attachments or could consider using a document management system like SharePoint	Fit	
AR-11	Accounts Receivable	Provide the ability to assign customers to customer groups	Group by type of municipalities: authorities, counties, etc. This is also denoted in a segment in the PERC#.	Fit	
AR-12	Accounts Receivable	Provide the ability to setup payment terms.	All invoices due by 12/31 of current calendar year.	Fit	
AR-13	Accounts Receivable	Provide the ability to define reason codes for receipts.		Fit	
AR-14	Accounts Receivable	Provide the ability to record (define) the type of receipt and customer account for cash receipts (see PMRB 20 Form).	Will be used for GL coding. PMRB-20 provides information as to which reserve account it will be coded against.	Fit	
AR-15	Accounts Receivable	Provide the ability to define reason codes for write-offs.		Fit	
AR-16	Accounts Receivable	Provide the ability to invoice a customer (employer) for yearly administrative expense.	Based on number or members in the plan.	Fit	
AR-17	Accounts Receivable	Provide the ability to invoice a customer for the administrative expense for a new member that is brought into the plan after the annual invoice has already been sent.	Note that this may not be for just new members but the removal of the administrative expense from the MMO invoice with invoicing throughout the year for new members and the overall administrative expense to be billed separately at year end.	Fit	
AR-18	Accounts Receivable	Provide the ability to invoice a customer (employer) for their Minimum Municipal Obligation (liability) (MMO)	Input from MMO worksheet provided to employers	Fit	
AR-19	Accounts Receivable	Provide the ability to code the MMO invoice to multiple receivables accounts as applicable.	For instance, current service charge, disability cost, administrative cost, amortization of actuarial surplus, etc.	Fit	May be a template
AR-20	Accounts Receivable	Provide the ability to invoice a customer for interest calculated.	Create an open receivable.	Fit	
AR-21	Accounts Receivable	Provide the ability to invoice a customer (employer) for member contributions.	CPAS interface	Gap	Interface

AR-22	Accounts Receivable	Provide the ability to process customer receipts received by ACH or Check.	May want to consider lockbox processing in the future depending on PA Department of Revenue.	Fit	
AR-23	Accounts Receivable	Provide the ability to require reason codes for receipts.		Fit	
AR-24	Accounts Receivable	Provide the ability to record a description for a receipt.	Description and reason code will be used to tie out to GL coding.	Fit	
AR-25	Accounts Receivable	Provide the ability to apply customer receipts to outstanding customer invoice balances.		Fit	
AR-26	Accounts Receivable	Provide the ability to code the customer receipt to multiple receivables accounts as applicable.		Fit	
AR-27	Accounts Receivable	Provide the ability to have a workflow (or security) for the approval and posting of customer receipts.	May just be governed by security with a role for entry and a role to approve/post.	Fit	
AR-28	Accounts Receivable	Provide the ability to make an adjustment if a customer receipt does not clear.	Adjustment memorandum received (i.e. NSF check).	Fit	
AR-29	Accounts Receivable	Provide the ability to write off bad debt at the customer level.	Include PERC#.	Fit	
AR-30	Accounts Receivable	Provide the ability to require reason codes for processing write-offs.		Fit	
AR-31	Accounts Receivable	Provide the ability to send a collection letter to a customer.	This would be handled in the AX Credit and Collections module	Fit	
AR-32	Accounts Receivable	Provide the ability to create standard collections templates for use in creating collections communications.	This would be handled in the AX Credit and Collections module	Fit	
AR-33	Accounts Receivable	May want the ability to log a collections case.	This would be handled in the AX Credit and Collections module	Fit	
AR-34	Accounts Receivable	May want the ability for collections agents to record notes / conversations, send emails, or setup various tasks and appointments.	This would be handled in the AX Credit and Collections module	Fit	
AR-35	Accounts Receivable	Provide the ability to send a statement to a customer on a timely basis (i.e. monthly).	Show what they owe, what they have paid and what is outstanding. Drill down on statement to see open invoice balances.	Fit	
AR-36	Accounts Receivable	Provide the ability to interface customer receipts information to SAP.		Gap	Would be an interface

AR-37	Accounts Receivable	Provide the ability to include a Trace ID in the interface file to SAP.	To be used for matching.	Gap	Custom field would need to be added
AR-38	Accounts Receivable	Provide the ability to perform bank reconciliation of customer receipts using an interface file from Treasury.	Reconcile using warrant id from Treasury. This would be handled in the AX Cash and Bank Management module	Gap	Interface
AR-39	Accounts Receivable	Provide the ability to age receivables.	Current, 30-90, 90-180, 180-270, 270-360, over a year. Note that it is possible to create multiple aging definitions for reporting.	Fit	
AR-40	Accounts Receivable	Provide the ability to calculate interest awarded on deposits net of withdrawals.	See CPAS calculation for credited interest.	Gap	Probably would have to be calculated in Excel or other tool to be loaded into AX, or customization
AR-41	Accounts Receivable	Provide the ability to calculate interest on past due balances.	Generally yearly.	Fit	
AR-42	Accounts Receivable	Provide the ability to consider a payment lead time for calculating interest.	For instance, calculating interest through month end.	Fit	Finance Charge?
AR-43	Accounts Receivable	Provide the ability to record the source customer (PERC#) at the general ledger level.	A financial dimension will be created for PERC#.	Fit	
AR-44	Accounts Receivable	Provide the ability to make payments to customers.	Refund requested by customer for overpayment; duplicate payment, state aid, contributed before member was eligible. Processed in the same manner as other check requests.	Fit	
AR-45	Accounts Receivable	Provide the ability to track a plan (customer) balance.		Fit	
AR-46	Accounts Receivable	Provide the ability to move funds from the customer (employer) and member accounts to a retiree account based on the present value calculation. Provide the ability to transfer funds between various customer accounts (member, municipal, retiree, disability, DROP, and undistributed).	G/L coding – transfers between various customer accounts (member, municipal, retiree, disability, DROP, and undistributed)	Gap	Will have to investigate



AR-47	Accounts Receivable	Provide ability for an Employer Portal where the employer can view various invoices (annual bill, annual administrative fees, member contributions), make a payment, view payment history, and see outstanding balance due; see complete MMO; and access Year-End Financial Activity Reports, Annual Member Statements, IRS Form 1099-Rs, and other correspondence; anything that is not publicly available.	Current phase	Gap	Most likely a custom portal that can read / update data from AX and CPAS
AR-48	Accounts Receivable	Provide ability for a customer to pay on-line.	Current phase	Gap	Will need to investigate
AR-49	Accounts Receivable	Provide the ability to soft close a period after month end reconciliation on receivables and revenue.	Reconciliation includes tie out of multiple receivables accounts (i.e. Current, Disability, Assessment and Member).Reconciliation will also be done on multiple revenue accounts (i.e. Employer Contributions*, Member Contributions*, Assessment Income, Disability and Drop Contributions, credited interest income, transfers from other plan administrators). *Primary revenue accounts to reconcile at month end	Fit	
AR-50	Accounts Receivable	Provide the ability to invoice a member directly for member services.		Fit	
AR-51	Accounts Receivable	Provide the ability to invoice the employer for multiple types of charges including but not limited to, adjustments, member services, loans, interest on loans, etc.	Receivable for interest on loans will come from CPAS	Fit	
AR-52	Accounts Receivable	Provide the ability to receive cash and not apply it to an invoice.	Business process for this requirement needs to be defined (i.e. create an open receivable for matching after the fact).	Fit	
AR-53	Accounts Receivable	Provide the ability to book cash receipts to an AR holding account until documentation is received for proper allocation.		Fit	



**OUTBOUND GL POSTED TRANSACTIONS INTERFACE  
GLOT01  
INT 062**

**USER GUIDE  
TREASURY ERP PROJECT**

**PENNSYLVANIA TREASURY  
RM G-22 FINANCE BUILDING  
HARRISBURG, PA 17120-0018**

09/18/2013

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## Document Information and Revision History

Version	Date	Revision Notes
1.0	1/15/2013	Initial Version
1.1	1/23/2013	Updated guide to add DocumentType element and moved Traceld to header level
1.2	2/6/2013	Added Appendix C which includes additional source system codes.
1.3	02/13/2013	Correction made: PostedTransactionDetail should be listed under PostedTransactionHeader not GLPostedTransaction. The Min Occur value for PostedTransactionDetail was updated from 0 to 2.
2.0	03/27/2013	Modified chartfield names in request/response message and included new chartfield – 'FiscalYear'. Modified root element name. Added new elements - BatchId at the header level and BankCode at the line level. Modified FiscalYear element name at the header level to AccountingYear.
2.1	05/16/2013	Clarified definition of 'appropriation'
2.2	06/27/2013	Clarified definition of 'Account'
2.3	06/27/2013	Clarified definition of 'FiscalYear'
3.0	08/08/2013	Added SourceSystem to the PostedTransactionHeader node of the Response message.
3.1	08/21/2013	Removed Appendix A and B from Outbound User Guides. Please refer to the Inbound User Guides for valid values.
3.2	08/21/2013	Appendix C – New source system 'COS' Commission On Sentencing
4.0	09/18/2013	AsOfDate – No longer AsOfDate – 1 logic
4.1	09/18/2013	Journal Source – New sources of 'IP' and 'INV'

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## Interface Overview

This interface is used for sending posted transactions from the Department of Treasury PeopleSoft General Ledger. The Department of Treasury intends to facilitate agencies' ability to keep their systems reconciled with Treasury. As part of this effort, an outbound interface XML file or message will be provided to agencies with detailed posted transactions on a daily basis. The transactional data will come from the General Ledger journal entries that have been posted.

If the agencies intend to make use of webservices to receive this information the request message schema is used for making the web service call. For XML file based transmission this request is not required and a scheduled job will move the files to the correct source system.

## Interface Guidance

### Interfacing using Files

**File naming conventions:** Each file name needs to be unique.

Name should be in XXXXXXSRC<FREEFORM>YYYYMMDDHHMMSSmmm.xml format

- XXXXXX – The first 6 characters represent the interface name i.e. GLOT01
- SRC – The next 3 characters represent the source system code i.e. IES.
- <FREEFORM> - Free form text, sender can add any value they wish. Leave blank if not in use. Length of field can be from 0-10 alphanumeric characters.
- YYYYMMDD - The date of the transmission in YYYYMMDD format i.e. 20120101.
- HHMMSS - The time of day when the transmission occurred; it's a military time format i.e. 162412 for 4:24:12 PM.
- mmm - This is the milliseconds of the time when the transmission occurred. This is an optional field.
- .xml – This is the file extension.

### Example File Names:

- GLOT01IES20130101081235.xml – Minimum required in a file name.
- GLOT01IES20130101081235123.xml – Includes millisecond.
- GLOT01IESFFEX20130101081235123.xml – Includes freeform and milliseconds.

### Interface using Web Services

**Webservice format:** SOAP XML

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**Webservice limitations:** Additional documentation will be provided concerning the maximum number of chartfield values that can be included on a web service message.

**Test WSDL:**

Treasury will provide this to agencies that need to develop against a test instance of this interface.

**Production WSDL:**

T.B.D.

**Schema Locations**

**Request:**

Schema xsd can be found in the collaboration SharePoint portal.

**Response:**

Schema xsd can be found in the collaboration SharePoint portal.

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## Request Message

The GL Posted Transaction Request Message is used to transmit requests for posted transactions from Treasury. It is formatted as an XML document and may be submitted via web service.

All GL Posted Transaction Request documents consist of a single document header containing control information and a posted transaction parameter data module consisting of the data elements necessary to target all revenue related transactions for the specified system and business area that have been posted.

## Sample Request Message

```
<?xml version="1.0"?>
<GLOT01Request xmlns="http://schemas.patreasury.gov/interface/schema/GLOT01Request.v1">
  <DocumentHeader>
    <Control class="R">
      <InterfaceIdentifier>GLOT01</InterfaceIdentifier>
      <SourceSystemCode>IES</SourceSystemCode>
      <DocumentIdentifier>GLPOST01</DocumentIdentifier>
      <DocumentDateTime>2013-10-31T15:07:38.687500</DocumentDateTime>
    </Control>
  </DocumentHeader>
  <PostedTransactionRequest>
    <PostedTransactionParameter class="R">
      <ProcessSourceSystem>IES</ProcessSourceSystem>
      <Department>023</Department>
      <AsOfDate>2012-12-01</AsOfDate>
    </PostedTransactionParameter>
  </PostedTransactionRequest>
</GLOT01Request>
```

---



Request Detail Node Information

<b>Node Name</b>	<b>GLOT01Request</b>		<b>Parent Node</b>	<b>NA</b>	
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>This is the root node of the XML file / message.</b>				
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
DocumentHeader	Element			Y	This is PA Treasury's standard request header that must be present once on every outbound interface document.
PostedTransactionRequest	Element			Y	Request parameters for GL Posted transactions interface.

<b>Node Name</b>	<b>DocumentHeader</b>		<b>Parent Node</b>	<b>GLOT01Request</b>	
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>This is PA Treasury's standard request header that must be present once on every outbound interface document. This contains interface identifier and requesting source system.</b>				
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
Control	Element			Y	The Control element holds interface identifier and requesting source system for the request.

<b>Node Name</b>	<b>Control</b>		<b>Parent Node</b>	<b>DocumentHeader</b>	
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>Contains identifying information related to the source system that is sending the inbound request.</b>				
<b>Attribute Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
class	String	1	Uppercase	Y	Value must always be "R"
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description. Add valid values like translates</b>
InterfaceIdentifier	string	6	Uppercase	Y	Used to identify the interface. Should always be GLOT01 for this message.

---

Element Name	Data Type	Size	Format	Required	Description. Add valid values like translates
SourceSystemCode	string	3	Uppercase	Y	Should contain 3-character abbreviation of the requesting Source System. Values will be provided by Treasury. See <i>Appendix C</i> for currently defined Source System codes.
DocumentIdentifier	String	36	Mixed	N	Unique identifier on the requesting source system to identify this request message. This is an optional field and can be left blank if not applicable.
DocumentDateTime	String	26		N	Optional field to populate the date and time the request was sent. Format: YYYY-MM-DDTHH:MM:SS.999999-0000. If left blank, the value will default to Treasury's system date and time.

Node Name	PostedTransactionRequest		Parent Node	GLOT01Request	
Min Occur	1	Max Occurs	1		
Description	XML Wrapper for GL posted transaction request parameters.				
Element Name	Data Type	Size	Format	Required	Description
PostedTransactionParameter	Element			Y	Contains the parameters used to specify the target source system for which posted transactions should be returned.

Node Name	PostedTransactionParameter		Parent Node	PostedTransactionRequest	
Min Occur	1	Max Occurs	1		
Description	Contains the parameters used to specify the target source system for which posted transactions should be returned.				
Attribute Name	Data Type	Size	Format	Required	Description
class	String	1	Uppercase	Y	Value must always be "R"

Element Name	Data Type	Size	Format	Required	Description. Add valid values like translates
ProcessSourceSystem	String	3	Uppercase	Y	Source system for which the outbound file needs to be generated. Values will be provided by Treasury. See <i>Appendix C</i> for currently defined Source System codes.

Element Name	Data Type	Size	Format	Required	Description. Add valid values like translates
					To generate the posted transactions for all source systems accessible to the requesting source system, set this value to '%'.
Department	String	3	Uppercase	Y	A Commonwealth agency or department. Populate with department id (3 character length with business area and leading 0s) for which the response will be generated. To generate the response for all departments, set this value to '%'.
AsOfDate	Date	10	YYYY-MM-DD	Y	Date for which file has to be run. Ideally this should be the current date. The data would then have journal entries with posted date of (AsOfDate).

### Response Message

The outbound message is an XML document containing information on the posted GL transactions for the source system and business area specified in the initiating message. The outbound message is returned as a synchronous response when the interface is accessed via its web service integration point and as a file, email message, or both when accessed via its file integration point.

### Sample Response Message

```
<?xml version="1.0"?>
<GLOT01Response xmlns="http://schemas.patreasury.gov/interface/schema/GLOT01Response.v1">
  <DocumentHeader>
    <Control class="R">
      <InterfaceIdentifier>GLOT01</InterfaceIdentifier>
      <SourceSystemCode>PAT</SourceSystemCode>
      <DocumentIdentifier>GLOT01IES20130101101201</DocumentIdentifier>
      <DocumentDateTime>2013-01-01T16:12:56.000000</DocumentDateTime>
      <ResponseCode>000S</ResponseCode>
      <ControlCount>1</ControlCount>
      <ControlAmount>1500</ControlAmount>
      <RequestDocumentIdentifier>GLPOST01</RequestDocumentIdentifier>
      <RequestDateTime>2013-10-31T15:07:38.687500</RequestDateTime>
    </Control>
  </DocumentHeader>
  <GLPostedTransaction>
    <PostedTransactionHeader class="R">
      <JournalId>0000012345</JournalId>
      <JournalDate>2013-01-01</JournalDate>
      <SourceSystem>IES</SourceSystem>
    </PostedTransactionHeader>
  </GLPostedTransaction>
</GLOT01Response>
```

```
<TraceId>123456</TraceId>
<BatchId>BATCH0001</BatchId>
<AccountingPeriod>1</AccountingPeriod>
<AccountingYear>2013</AccountingYear>
<JournalSource>AR</JournalSource>
<DocumentType>EA</DocumentType>
<PostedTransactionDetail class="R">
  <JournalLine>1</JournalLine>
  <TransactionAmount>1500</TransactionAmount>
  <SymbolChangeIndicator>N</SymbolChangeIndicator>
  <Fund>001</Fund>
  <Department>011</Department>
  <Appropriation>10748</Appropriation>
  <FiscalYear>2013</FiscalYear>
  <Account>1300000</Account>
</PostedTransactionDetail>
<PostedTransactionDetail class="R">
  <JournalLine>2</JournalLine>
  <TransactionAmount>-1500.00</TransactionAmount>
  <SymbolChangeIndicator>N</SymbolChangeIndicator>
  <Fund>002</Fund>
  <Department>099</Department>
  <Appropriation>10745</Appropriation>
  <FiscalYear>2013</FiscalYear>
  <Account>1500000</Account>
</PostedTransactionDetail>
</PostedTransactionHeader>
</GLPostedTransaction>
</GLOT01Response>
```

---

Response Detail Node Information

<b>Node Name</b>	<b>GLOT01Response</b>			<b>Parent Node</b>	<b>NA</b>
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>This is the root node of the XML response message.</b>				
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
DocumentHeader	Element			Y	Document header information that contains control information related to the document. This will be present once on every outbound response.
GLPostedTransaction	Element			N	GL Posted transactions group data.

<b>Node Name</b>	<b>DocumentHeader</b>			<b>Parent Node</b>	<b>GLOT01Response</b>
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>Treasury's standard response header to inbound requests. Contains control information related to the response.</b>				
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
Control	Element			Y	Document header information containing control totals.

<b>Node Name</b>	<b>Control</b>			<b>Parent Node</b>	<b>DocumentHeader</b>
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>Provides control information for the document including the system transmitting the document, control counts and amounts for outbound response.</b>				
<b>Attribute Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
class	String	1	Uppercase	Y	Value will always be "R"
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description. Add valid values like translates</b>
InterfaceIdentifier	String	6	Uppercase	Y	Used to identify the interface, the value will always be "GLOT01".

---

Element Name	Data Type	Size	Format	Required	Description. Add valid values like translates
SourceSystemCode	String	30	Uppercase	Y	Source System Code is the three-character abbreviation of the transmitting organization and will always be 'PAT'.
DocumentIdentifier	String	36	Mixed	Y	Unique identifier related to this response message. Format will be GLOT01XXXYYYYMMDDHHMMSS. ProcessSourceSystem determine what goes into XXX
DocumentDateTime	String	26		Y	Will be populated with the date and time response was sent. Format: YYYY-MM-DDTHH:MM:SS.999999-0000.
ResponseCode	String	4	Uppercase	Y	Will be populated with the response code based on the request message. Valid Values are: 1) 000E – For Error on run control values 2) 000S – For Success on run control values. If there was an error in run control values, the error reason will be populated in the Message node of DocumentHeader.
ControlCount	Integer	10		N	Total number of GLPostedTransaction elements.
ControlAmount	Decimal	28	23.3	N	Sum of all positive TransactionAmount values.
RequestDocumentIdentifier	String	36	Mixed	N	If the inbound request had a DocumentIdentifier provided on the DocumentHeader node, that value will be populated here. If not then the field will be blank.
RequestDateTime	String	26		N	If the inbound request had a DocumentDateTime provided on the DocumentHeader node, that value will be populated here. If not then the field will be blank.
Message	Element			N	Standard header message response containing information related to request message processing. Will occur only if there were any invalid values on the process parameters.

Node Name	Message		Parent Node	Control	
Min Occur	0	Max Occurs	Unbounded		
Description	Standard header message response containing information related to request message processing. Will occur only if there were any invalid values on the process parameters.				
Attribute Name	Data Type	Size	Format	Required	Description
class	String	1	Uppercase	Y	Value will always be "R"

Element Name	Data Type	Size	Format	Required	Description. Add valid values like translates
MessageNumber	Integer	5		N	This is a PA Treasury generated error message sub-set number.
MessageSet	Integer	5		N	This is a PA Treasury generated error message set number.
Severity	String	1	Uppercase	N	Severity of message. Values are: <b>E</b> – Error: the issue identified in the request will prevent the file from being processed. <b>M</b> – Message: the message is informational only. <b>W</b> – Warning: the issue with the request element will not prevent the file from being processed.
Text	String	254	Mixed	N	Text description of the message.

Node Name	GLPostedTransaction		Parent Node	GLOT01Response	
Min Occur	0	Max Occurs	Unbounded		
Description	The GL Posted transactions group data contains header and detail information for the posted transactions				
Element Name	Data Type	Size	Format	Required	Description
PostedTransactionHeader	Element			Y	Header information related to GL posted transactions.

Node Name	PostedTransactionHeader		Parent Node	GLPostedTransaction	
Min Occur	1		Max Occurs	1	
Description	Header information related to GL posted transactions.				
Attribute Name	Data Type	Size	Format	Required	Description
class	String	1	Uppercase	Y	Value must always be “R”

Element Name	Data Type	Size	Format	Required	Description. Add valid values like translates
JournalId	String	10	Uppercase	Y	Unique Header ID from PA Treasury GL system that identifies the transaction.
JournalDate	Date	10	YYYY-MM-DD	Y	Date on which Journal was posted in PeopleSoft. When run on a daily basis this field would contain prior date.
SourceSystem	String	3	Uppercase	N	The source system that submitted the Journal Transaction to Treasury.
TraceId	String	36	Mixed	N	Unique identifier to identify the Journal ID in the source system. This value is same as – TraceId provided on the Inbound GL transactions interface.
BatchId	String	14	Mixed	N	BatchId will allow GL transactions to be linked to payment request transactions.
AccountingPeriod	Integer	3		Y	Accounting period to which the transactions were posted in the Treasury General Ledger.
AccountingYear	Integer	4		Y	Accounting year to which the transactions were posted in the Treasury General Ledger.
JournalSource	String	3	Uppercase	Y	Identifies the application or Source system that generated the Journal entry. Valid values are TV - Transfer Vouchers RT - Revenue Transmittal RE - Refund of Expenditures EA - Expenditure Adjustment DM - Debit Memos AM - Adjustment Memo's ONL - PAT - Online Journal Entry CM - Cash Management Module AR - Accounts Receivable AP - Accounts Payable INV – Deal Management IP – Deal Management
DocumentType	String	2	Uppercase	N	The document type identifies the business transaction to be posted. Refer to Appendix A and Appendix B for listing of values.
PostedTransactionDetail	Element			N	Line and Chart of Accounts information related to GL posted transactions.



Node Name	PostedTransactionDetail		Parent Node	PostedTransactionHeader	
Min Occur	2	Max Occurs	Unbounded		
Description	Line and Chart of Accounts detail information related to GL posted transactions.				
Attribute Name	Data Type	Size	Format	Required	Description
class	String	1	Uppercase	Y	Value will always be "R"
Element Name	Data Type	Size	Format	Required	Description. Add valid values like translates
JournalLine	Integer	9		Y	Unique Line number for every Journal_ID.
TransactionAmount	Decimal	28	23.3	Y	Amount on the line transaction.
SymbolChangeIndicator	String	1	Uppercase	Y	Indicates if the chart of accounts symbol was changed for a previously sent transaction. Valid values are Y – Chart of account changed N – No changes
Fund	String	3	Uppercase	Y	Represents a grouping of funds established in Funds Management, to enable accounting and reporting to be done by activity or objective in accordance with laws, special regulations, restrictions, or limitations. Example: 001
Department	String	3	Uppercase	N	A Commonwealth agency or department
Appropriation	String	7	Uppercase	N	Represents the lowest level source of funding required for budgeting and monitoring. The appropriation values sent to Treasury should be the first 5 characters of the SAPFund. Positions 6-7 of the SAP Fund, which represents the Fiscal Year, should be recorded in the Fiscal Year element. Positions 8-10 are not used by Treasury. The field length of the appropriation is 7 to support future growth if deemed necessary.
FiscalYear	String	4	Uppercase	N	Fiscal year to which the transaction belongs. For ledgers 40,50, and 60, this field should be 0000.
Account	String	7	Uppercase	Y	Classifies the nature of a transaction. This represents the SAP Commitment Item. For Non-SAP Agencies, map your GL Account to the SAP Commitment Item.
BankCode	String	4	Uppercase	N	Represents bank code associated with the revenue transactions.

Please refer to INT054 Inbound GL Journal Entry User Guide for a list of valid values.

**Appendix C: Source System Codes**

<b>Source System Code</b>	<b>Source System Description</b>
ADG	Auditor General
AGA	Auditor General Allocation Payments
ATP	Automobile Theft Prevention Authority
BDD	Labor and Industry BDD Travel Reimbursements
BFR	Liquid Fuels
COS	Commission On Sentencing
EDU	Education
GPF	Treasury Financials
GPP	Treasury Payroll
HIP	HIPP (DPW)
ICF	Intergovernmental Cooperative Authority (financials)
ICP	Intergovernmental Cooperative Authority (payroll)
IES	Integrated Enterprise Systems (formerly the SAP source system)
IFP	Insurance Fraud Prevention Authority
LCB	Liquor Control Board
LDF	LDPC Financials
LDP	LDPC Payroll
LIH	LIHEAP (DPW)
PHE	Pennsylvania Higher Education Agency
PME	PMERS Annuitants
PRO	PROMISe (DPW)
PSE	PSERS Annuitants
REV	Revenue
SER	SERS Annuitants
SWI	SWIF

TAP	Tuition Account Program
TSC	Thaddeus Steven College of Technology
UCD	Unemployment Compensation
UCP	Unclaimed Property
UJS	AOPC/UJS
WCP	Workers Compensation

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**CHECK RECONCILIATION INTERFACE  
CMCR01  
INT 038**

**USER GUIDE  
TREASURY ERP PROJECT**

**PENNSYLVANIA TREASURY  
RM G-22 FINANCE BUILDING  
HARRISBURG, PA 17120-0018**

08/21/2013

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## Document Information and Revision History

Version	Date	Revision Notes
1.0	1/18/2013	Initial Version
2.0	3/27/2013	Changed root element and XML namespace names to comply with standard.
3.0	08/08/2013	Added SourceSystem to the RunControlParameters node of the Request message.  Added SourceSystem, DocumentType, and BatchId to the TraceNumber node of the Response message.  Changed the length of the Payee element from 10 to 25 in the ReconciledCheckInformation node of the Response message.

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## Interface Overview

The outbound Check Reconciliation interface transmits detailed check reconciliation data from Treasury to the respective agencies. Reconciled checks can be matched up to the originating payment request because this file will include the original traceid(s) from the payment request interface. The data is contained in XML format and can be transmitted as a file using a secure file transfer method or via SOAP formatted web services.

Interface Guidance:

### Interfacing using Files

**File naming conventions:** Each file name needs to be unique.

Name should be in XXXXXXSRC<FREEFORM>YYYYMMDDHHMMSSmmm.xml format.

- XXXXXX – The first 6 characters represent the interface name i.e. CMCR01
- SRC - The next 3 Characters represent the source system code , IES, etc...
- YYYYMMDD - The date of the transmission in YYYYMMDD format i.e. 20120101.
- HHMMSS - The time of day when the transmission occurred: it's a military time format i.e. 162412 for 4:24:12 PM.
- mmm – This is the milliseconds of the time when the transmission occurred. This is an optional field.
- .xml – This is the file extension.

### Example File Names:

- CMCR01IES20130101081235.xml – Minimum required in a file name.
  - CMCR01IES20130101081235123.xml – Includes millisecond.
  - CMCR01IESFFEX20130101081235123.xml – Includes freeform and milliseconds.
-



## **Interfacing using Web Services**

**Web service format:** SOAP XML

**Web service limitations:** Additional documentation will be provided concerning the maximum number of Chartfield values that can be included on a web service message.

### **Test WSDL:**

Treasury will provide this to agencies that need to develop against a test instance of this interface.

### **Production WSDL:**

T.B.D.

### **Schema Locations:**

#### **Request:**

Schema xsd can be found in the collaboration SharePoint portal.

#### **Response:**

Schema xsd can be found in the collaboration SharePoint portal.

---

## Request Message

The request message is used by agencies to request detailed check reconciliation data from Treasury. It is formatted as an XML document and is only needed for agencies receiving data via webservices. Agencies receiving this data as a file will receive it via a scheduled secure file transfer. All request documents consist of a single document header containing control information and a single check reconciliation parameters node containing the run control parameters used to specify the date range of the requested check reconciliation data.

### Sample Request Message:

```
<?xml version="1.0"?>
<CMCR01Request
xmlns="http://schemas.pat treasury.gov/interface/schema/CMCR01Request.v1">
  <DocumentHeader>
    <Control class="R">
      <InterfaceIdentifier>CMCR01</InterfaceIdentifier>
      <SourceSystemCode>IES</SourceSystemCode>
    </Control>
  </DocumentHeader>
  <CheckReconciliationParameters>
    <RunControlParameters class="R">
      <SourceSystem>IES</SourceSystem>
      <FromDate>2013-03-01</FromDate>
      <ToDate>2013-03-01</ToDate>
    </RunControlParameters>
  </CheckReconciliationParameters>
</CMCR01Request>
```

---

Request Detail Node Information:

<b>Node Name</b>	<b>CMCR01Request</b>		<b>Parent Node</b>	<b>NA</b>	
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>This is the root node of the xml file.</b>				
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
DocumentHeader	Element			Y	This is our standard request header that must be present on every interface document.
CheckReconciliationParameters	Element			Y	Check Reconciliation File request parameters

<b>Node Name</b>	<b>DocumentHeader</b>		<b>Parent Node</b>	<b>CMCR01Request</b>	
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>This is our standard inbound request header that must be present once on every inbound interface document.</b>				
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
Control	Element			Y	The Control element holds control data for the document.

<b>Node Name</b>	<b>Control</b>		<b>Parent Node</b>	<b>DocumentHeader</b>	
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>Provides control information for the document including the transmitting system code, unique identifier, and the date and time of the transmission.</b>				
<b>Attribute Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
class	String	1	Uppercase	Y	Value must always be "R"
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
InterfaceIdentifier	String	6		Y	Value must always be CMCR01
SourceSystemCode	String	30		Y	Three-character abbreviation of the transmitting system. The interface will only process requests if the source system code checks for the source system that is transmitting the request.
DocumentIdentifier	String	36		N	Unique identifier used to respond with information about the request that was processed.
DocumentDateTime	DateTime			N	Date and time when the request was transmitted. If not populated, the field will default to the date and time when the request was loaded by Treasury.



## Response Message

The response XML message provides the reconciled checks for a date range. Every response message also contains a DocumentHeader element which contains control total information. This message can be received as a web service response to the Request message in this document or as a scheduled secure file transfer

### Sample Response Message:

```
<?xml version="1.0"?>
<CMCR01Response
xmlns="http://schemas.patreaury.gov/interface/schema/CMCR01Response.v1">
  <DocumentHeader>
    <Control class="R">
      <InterfaceIdentifier>CMCR01</InterfaceIdentifier>
      <SourceSystemCode></SourceSystemCode>
      <DocumentIdentifier></DocumentIdentifier>
      <DocumentDateTime></DocumentDateTime>
      <ResponseCode></ResponseCode>
      <ControlCount></ControlCount>
      <ControlAmount></ControlAmount>
      <RequestDocumentIdentifier></RequestDocumentIdentifier>
      <RequestDateTime></RequestDateTime>
      <Message class="R">
        <MessageNumber></MessageNumber>
        <MessageSet></MessageSet>
        <Severity></Severity>
        <Text></Text>
      </Message>
    </Control>
  </DocumentHeader>
  <CheckReconciliationDetail>
    <ReconciledCheckInformation class="R">
      <BankAccountId></BankAccountId>
      <WarrantNumber></WarrantNumber>
      <CheckNumber></CheckNumber>
      <Payee></Payee>
      <PayDate></PayDate>
      <ReconciledDate></ReconciledDate>
      <Amount></Amount>
      <TraceNumber class="R">
        <SourceSystem></SourceSystem>
        <TraceId></TraceId>
        <DocumentType></DocumentType>
        <BatchId></BatchId>
      </TraceNumber>
      <TraceNumber class="R">
        <SourceSystem></SourceSystem>
        <TraceId></TraceId>
        <DocumentType></DocumentType>
        <BatchId></BatchId>
      </TraceNumber>
      <TraceNumber class="R">
        <SourceSystem></SourceSystem>
        <TraceId></TraceId>
        <DocumentType></DocumentType>
        <BatchId></BatchId>
      </TraceNumber>
    </ReconciledCheckInformation>
  </CheckReconciliationDetail>
</CMCR01Response>
```

---

```
</CheckReconciliationDetail>
<CheckReconciliationDetail>
  <ReconciledCheckInformation class="R">
    <BankAccountId></BankAccountId>
    <WarrantNumber></WarrantNumber>
    <CheckNumber></CheckNumber>
    <Payee></Payee>
    <PayDate></PayDate>
    <ReconciledDate></ReconciledDate>
    <Amount></Amount>
    <TraceNumber class="R">
      <SourceSystem></SourceSystem>
      <TraceId></TraceId>
      <DocumentType></DocumentType>
      <BatchId></BatchId>
    </TraceNumber>
    <TraceNumber class="R">
      <SourceSystem></SourceSystem>
      <TraceId></TraceId>
      <DocumentType></DocumentType>
      <BatchId></BatchId>
    </TraceNumber>
    <TraceNumber class="R">
      <SourceSystem></SourceSystem>
      <TraceId></TraceId>
      <DocumentType></DocumentType>
      <BatchId></BatchId>
    </TraceNumber>
  </ReconciledCheckInformation>
</CheckReconciliationDetail>
</CMCR01Response>
```

---

Response Detail Node information:

<b>Node Name</b>	<b>CMCR01Response</b>			<b>Parent Node</b>	<b>NA</b>
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>		<b>1</b>	
<b>Description</b>	<b>Main Node of XML file.</b>				
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
DocumentHeader	Element			Y	Standard response header for outbound interfaces.
CheckReconciliationDetail	Element			N	Check Reconciliation details.

<b>Node Name</b>	<b>DocumentHeader</b>			<b>Parent Node</b>	<b>CMCR01Response</b>
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>		<b>1</b>	
<b>Description</b>	<b>Standard header response for outbound interfaces</b>				
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
Control	Element			Y	Includes control information and error message processing of the data.

<b>Node Name</b>	<b>Control</b>			<b>Parent Node</b>	<b>DocumentHeader</b>
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>		<b>1</b>	
<b>Description</b>	<b>Standard control response for outbound interfaces. Contains counts, amounts, and responses.</b>				
<b>Attribute Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
class	String	1	Uppercase	Y	Value will always be "R"
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description. Add valid values like</b>
InterfaceIdentifier	String	6	Uppercase	Y	Used to identify the interface. Always default for Check Reconciliation request message.
SourceSystemCode	String	30	Uppercase	Y	Three-character abbreviation of the transmitting system. Usually be PAT, for PA Treasury
DocumentIdentifier	String	36	Mixed	Y	Identifier to uniquely identify this check reconciliation request
DocumentDateTime	DateTime	26		Y	Populated with the date and time the Check Reconciliation (response message) was sent Format: YYYY-MM-DD HH:MM:SS.999999

Element Name	Data Type	Size	Format	Required	Description. Add valid values like
ResponseCode	String	4	Uppercase	Y	Will be populated with the response code b message. Valid Values are: 3) 000E – For Error while generating 4) 000S – For Success file creation  If there was error the error reason will be popu node of the document header.
ControlCount	Integer	10		N	Will be populated with total number of recor Check Reconciliation message
ControlAmount	Decimal	28	23.3	N	Will be populated with total disbursement an Reconciliation file.
RequestDocumentIdentifier	String	36	Mixed	N	If the inbound request message had a Document on the DocumentHeader node, that value will U not then the field will be blank.
RequestDateTime	DateTime	26		N	If the inbound request message had a Document on the DocumentHeader node, that value will U not then the field will be blank.

Node Name	Message		Parent Node		Control
Min Occur	0	Max Occurs	Unbounded		
Description	Standard response message for outbound interfaces will include error, warning, and informat related to processing the request. This node will only be present if one or more errors were				
Attribute Name	Data Type	Size	Format	Required	Description
class	String	1	Uppercase	Y	Value will always be “R”
Element Name	Data Type	Size	Format	Required	Description. Add valid values like
MessageNumber	Integer	5		N	This is a PA Treasury generated error message
MessageSet	Integerr	5		N	This is a PA Treasury generated error message
Severity	String	1	Uppercase	N	The following valid values indicate message se  <b>E</b> – Error: The issue identified in the referenc prevent the entire message from being process <b>M</b> – Message: The message is informational c <b>W</b> – Warning: The issue with the referenced c prevent the request from being processed.
Text	String	254	Mixed	N	Text description of the message



<b>Node Name</b>	<b>CheckReconciliationDetail</b>		<b>Parent Node</b>		<b>CMCR01Response</b>
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>Unbounded</b>		
<b>Description</b>	<b>Check Reconciliation Details</b>				
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
ReconciledCheckInformation	Element			Y	Reconciled check information populated details

<b>Node Name</b>	<b>ReconciledCheckInformation</b>		<b>Parent Node</b>		<b>CheckReconciliationDetail</b>
<b>Min Occur</b>	<b>1</b>	<b>Max Occurs</b>	<b>1</b>		
<b>Description</b>	<b>Check Reconciliation Information</b>				
<b>Attribute Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
class	String	1	Uppercase	Y	Value must always be "R"
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
BankAccountId	String	4	Uppercase	Y	Contains the PA Treasury identifier for the bank the payment is drawn.
WarrantNumber	String	10	Uppercase	Y	Ten alphanumeric character Warrant Number.
CheckNumber	String	20	Uppercase	Y	Twenty alphanumeric character Check Number.
Payee	String	25	Uppercase	Y	Twenty-five alphanumeric character Payee Name
PayDate	Date	10	YYYY-MM-DD	Y	Date when the check was issued..
ReconciledDate	Date	10	YYYY-MM-DD	Y	Date the check was reconciled.
Amount	Decimal	28	23.3	Y	Monetary amount of the check.

<b>Node Name</b>	<b>TraceNumber</b>		<b>Parent Node</b>		<b>ReconciledCheckInformation</b>
<b>Min Occur</b>	<b>0</b>	<b>Max Occurs</b>	<b>Unbounded</b>		
<b>Description</b>	<b>Provides the trace number sent for payment requests that was make up the check. This repeating element because payment consolidation can lead to multiple Tracelds for a single</b>				
<b>Attribute Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description</b>
class	String	1	Uppercase	Y	Value will always be "R"
<b>Element Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Format</b>	<b>Required</b>	<b>Description. Add valid values like</b>
SourceSystem	String	3	Uppercase	Y	The source system that submitted the Payment
TraceId	String	36	Mixed	Y	Contains the unique agency identifier inform provided on the Payment Request file by the s ID is a alphanumeric character field of length

DocumentType	String	2	Uppercase	N	The document type assigned to the Payment R system that submitted it to Treasury.
BatchId	String	14	Uppercase	N	The Agency Batch ID assigned to the Paym source system that submitted it to Treasury. W is blank.