

NATIONWIDE FINANCIAL SERVICES, INC. NATIONWIDE RETIREMENT SOLUTIONS, INC. PUBLIC SECTOR RETIREMENT PLAN ADMINISTRATION

Report on Management's Description of its System and the Suitability of the Design and Operating Effectiveness of Controls

For the period January 1, 2017 to December 31, 2017

NATIONWIDE FINANCIAL SERVICES, INC. NATIONWIDE RETIREMENT SOLUTIONS, INC. PUBLIC SECTOR RETIREMENT PLAN ADMINISTRATION

TABLE OF CONTENTS

I.	Independent Service Auditors' Report	1
II.	Management's Assertion	5
III.	. Management's Description of its Retirement Plan Administration System	8
	Overview of Operations	9
	Relevant Aspects of the Control Environment, Risk Assessment, and Monitoring	9
	Transaction Processing	11
	Retirement Plan Administration – New Plan Setup	11
	Retirement Plan Administration – Fund Release	11
	Retirement Plan Administration – Plan Maintenance	11
	Retirement Plan Administration – Participant Enrollments	12
	Retirement Plan Administration – Participant Account Maintenance	12
	Retirement Plan Contributions/Receipts	13
	Retirement Plan Withdrawals	
	Retirement Plan Disbursements	16
	Retirement Plan Exchanges/Investment Election Changes	17
	Investment Transactions	18
	Unit Valuation	19
	User Entity Reporting	21
	Computerized Information Systems	22
	Program and System Software Change Control	
	Logical Access	24
	Physical Access	
	Retail Service Center Data Transmissions	
	System Backups	26
	TierPoint Data Center Management	27
	Complementary User Entity Controls	28
IV	Control Objectives, Controls, and Tests of Operating Effectiveness	30

I. INDEPENDENT SERVICE AUDITO	ORS' REPORT



KPMG LLP One Cleveland Center Suite 2600 1375 East Ninth Street Cleveland, OH 44114-1796

Independent Service Auditor's Report

Board of Directors of Nationwide Financial Services, Inc.:

Scope

We have examined Nationwide Financial Services, Inc.'s (NFS) description of its system entitled "Nationwide Financial Services, Inc.'s Description of its public sector retirement plan administration system" for processing user entities' transactions throughout the period January 1, 2017 to December 31, 2017 (the description) and the suitability of the design and operating effectiveness of the controls included in the description to achieve the related control objectives stated in the description, based on the criteria identified in "Nationwide Financial Services, Inc.'s Assertion" (the assertion). The controls and control objectives included in the description are those that management of NFS believes are likely to be relevant to user entities' internal control over financial reporting, and the description does not include those aspects of the public sector retirement plan administration system that are not likely to be relevant to user entities' internal control over financial reporting.

NFS uses a subservice organization, TierPoint Data Center (TPDC) for hosting the TMS (Public) system. The description includes only the control objectives and related controls of NFS and excludes the control objectives and related controls of the subservice organization. The description also indicates that certain control objectives specified by NFS can be achieved only if complementary subservice organization controls assumed in the design of NFS's controls are suitably designed and operating effectively, along with the related controls at NFS. Our examination did not extend to controls of the subservice organization, and we have not evaluated the suitability of the design or operating effectiveness of such complementary subservice organization controls.

The description indicates that certain control objectives specified in the description can be achieved only if complementary user entity controls assumed in the design of NFS's controls are suitably designed and operating effectively, along with related controls at NFS. Our examination did not extend to such complementary user entity controls, and we have not evaluated the suitability of the design or operating effectiveness of such complementary user entity controls.

Service Organization's Responsibilities

In Section II, NFS has provided an assertion about the fairness of the presentation of the description and suitability of the design and operating effectiveness of the controls to achieve the related control objectives stated in the description. NFS is responsible for preparing the description and its assertion, including the completeness, accuracy, and method of presentation of the description and assertion, providing the services covered by the description, specifying the control objectives and stating them in the description, identifying the risks that threaten the achievement of the control objectives, selecting the criteria stated in the assertion, and designing, implementing, and documenting controls that are suitably designed and operating effectively to achieve the related control objectives stated in the description.

Service Auditor's Responsibilities

Our responsibility is to express an opinion on the fairness of the presentation of the description and on the suitability of the design and operating effectiveness of the controls to achieve the related control objectives stated in the description, based on our examination.



Our examination was conducted in accordance with attestation standards established by the American Institute of CPAs. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether, in all material respects, based on the criteria in management's assertion, the description is fairly presented and the controls were suitably designed and operating effectively to achieve the related control objectives stated in the description throughout the period January 1, 2017 to December 31, 2017. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

An examination of a description of a service organization's system and the suitability of the design and operating effectiveness of controls involves:

- performing procedures to obtain evidence about the fairness of the presentation of the description and the suitability of
 the design and operating effectiveness of the controls to achieve the related control objectives stated in the description,
 based on the criteria in management's assertion,
- assessing the risks that the description is not fairly presented and that the controls were not suitably designed or operating effectively to achieve the related control objectives stated in the description,
- testing the operating effectiveness of those controls that management considers necessary to provide reasonable assurance that the related control objectives stated in the description were achieved,
- evaluating the overall presentation of the description, suitability of the control objectives stated in the description, and suitability of the criteria specified by the service organization in its assertion.

Inherent Limitations

The description is prepared to meet the common needs of a broad range of user entities and their auditors who audit and report on user entities' financial statements and may not, therefore, include every aspect of the system that each individual user entity may consider important in its own particular environment. Because of their nature, controls at a service organization may not prevent, or detect and correct, all misstatements in processing or reporting transactions. Also, the projection to the future of any evaluation of the fairness of the presentation of the description, or conclusions about the suitability of the design or operating effectiveness of the controls to achieve the related control objectives stated in the description is subject to the risk that controls at a service organization may become ineffective.

Description of Tests of Controls

The specific controls tested and the nature, timing, and results of those tests are listed in Section IV.

Opinion

In our opinion, in all material respects, based on the criteria described in NFS's assertion:

- the description fairly presents the public sector retirement plan administration system that was designed and implemented throughout the period January 1, 2017 to December 31, 2017;
- the controls related to the control objectives stated in the description were suitably designed to provide reasonable assurance that the control objectives would be achieved if the controls operated effectively throughout the period January 1, 2017 to December 31, 2017, and the subservice organization and user entities applied the complementary controls assumed in the design of NFS's controls throughout the period January 1, 2017 to December 31, 2017; and
- the controls operated effectively to provide reasonable assurance that the control objectives stated in the description were achieved throughout the period January 1, 2017 to December 31, 2017 if complementary subservice organization and user entity controls, assumed in the design of NFS's controls, operated effectively throughout the period January 1, 2017 to December 31, 2017.

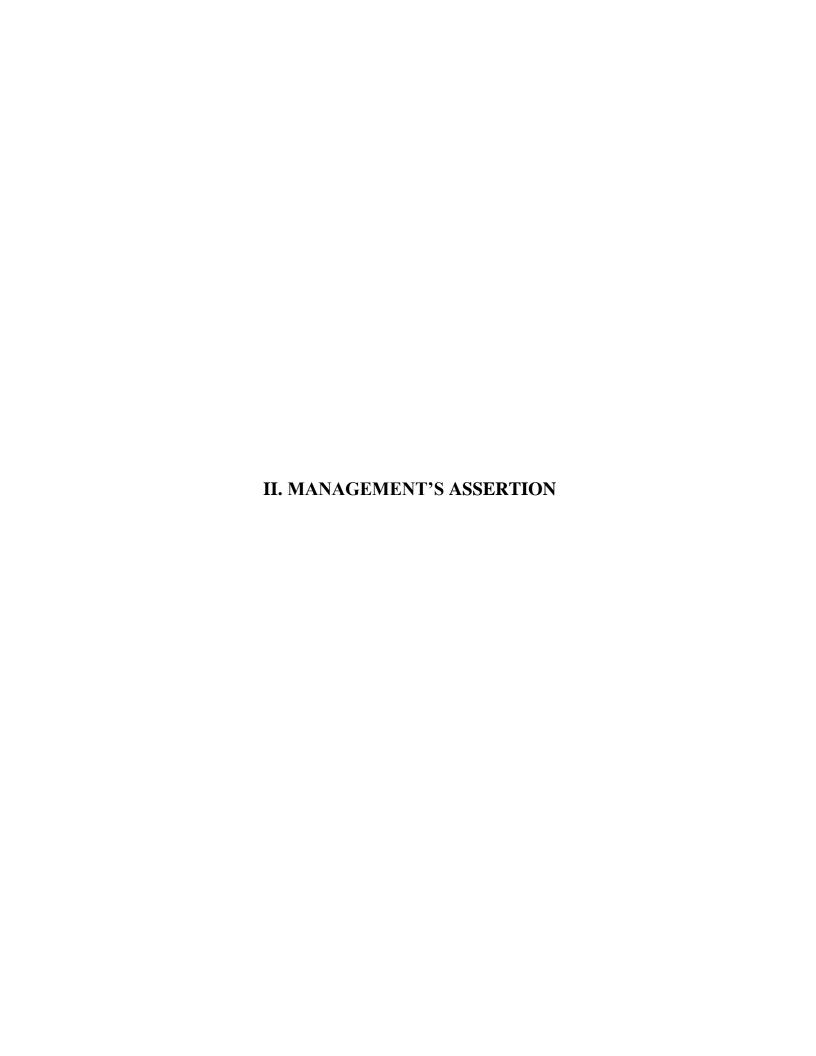


Restricted Use

This report, including the description of tests of controls and results thereof in Section IV, is intended solely for the information and use of management of NFS, user entities of NFS's public sector retirement plan administration system during some or all of the period January 1, 2017 to December 31, 2017, and their auditors who audit and report on such user entities' financial statements or internal control over financial reporting and have a sufficient understanding to consider it, along with other information, including information about controls implemented by user entities themselves, when assessing the risks of material misstatement of user entities' financial statements. This report is not intended to be and should not be used by anyone other than these specified parties.



April 16, 2018 Cleveland, Ohio





Nationwide Financial Services, Inc. Assertion

We have prepared the description of Nationwide Financial Services, Inc.'s (NFS) public sector retirement plan administration system entitled, "Nationwide Financial Services, Inc.'s Description of Its Public Sector Retirement Plan Administration System," for processing user entities' transactions throughout the period January 1, 2017 to December 31, 2017 (description) for user entities of the system during some or all of the period January 1, 2017 to December 31, 2017, and their auditors who audit and report on such user entities' financial statements or internal control over financial reporting and have a sufficient understanding to consider it, along with other information, including information about controls implemented by subservice organizations and user entities of the system themselves, when assessing the risks of material misstatement of user entities' financial statements.

NFS uses TierPoint Data Center (TPDC), a subservice organization, for hosting of the TMS (Public) system. The description includes only the control objectives and related controls of NFS and excludes the control objectives and related controls of the subservice organization. The description also indicates that certain control objectives specified in the description can be achieved only if complementary subservice organization controls assumed in the design of our controls are suitably designed and operating effectively along with the related controls at NFS. The description does not extend to controls of the subservice organization.

The description indicates that certain control objectives specified in the description can be achieved only if complementary user entity controls assumed in the design of NFS's controls are suitably designed and operating effectively, along with related controls at NFS. The description does not extend to controls of the user entities.

We confirm, to the best of our knowledge and belief, that:

- a) The description fairly presents the public sector retirement plan administration system made available to user entities of the system during some or all of the period January 1, 2017 to December 31, 2017 for processing their transactions as it relates to controls that are likely to be relevant to user entities' internal control over financial reporting. The criteria we used in making this assertion were that the description
 - presents how the system made available to user entities of the system was designed and implemented to process relevant user entity transactions, including, if applicable,
 - (1) the types of services provided, including, as appropriate, the classes of transactions processed;
 - (2) the procedures, within both automated and manual systems, by which those services are provided, including, as appropriate, procedures by which transactions are initiated, authorized, recorded, processed, corrected as necessary, and transferred to the reports and other information prepared for user entities of the system;
 - (3) the information used in the performance of the procedures, including, if applicable, related accounting records, whether electronic or manual, and supporting information involved in initiating, authorizing, recording, processing, and reporting transactions; this includes the correction of incorrect information and how information is transferred to the reports and other information prepared for user entities;
 - (4) how the system captures and addresses significant events and conditions other than transactions;
 - (5) the process used to prepare reports and other information for user entities;
 - (6) services performed by a subservice organization, if any, including whether the carve-out method or the inclusive method has been used in relation to them;



- (7) the specified control objectives and controls designed to achieve those objectives, including, as applicable, complementary user entity controls and complementary subservice organization controls assumed in the design of the service organization's controls;
- (8) other aspects of our control environment, risk assessment process, information and communications (including the related business processes), control activities and monitoring activities that are relevant to the services provided.
- ii. includes relevant details of changes to NFS's system during the period covered by the description.
- iii. does not omit or distort information relevant to NFS's system, while acknowledging that the description is prepared to meet the common needs of a broad range of user entities of the system and their auditors, and may not, therefore, include every aspect of the public sector retirement plan administration system that each individual user entity of the system and its auditor may consider important in its own particular environment.
- b) The controls related to the control objectives stated in the description were suitably designed and operating effectively throughout the period January 1, 2017 to December 31, 2017 to achieve those control objectives if subservice organizations and user entities applied the complementary controls assumed in the design of NFS's controls throughout the period January 1, 2017 to December 31, 2017. The criteria we used in making this assertion were that:
 - the risks that threaten the achievement of the control objectives stated in the description have been identified by management of NFS;
 - ii. the controls identified in the description would, if operating effectively, provide reasonable assurance that those risks would not prevent the control objectives stated in the description from being achieved; and
 - iii. the controls were consistently applied as designed, including whether manual controls were applied by individuals who have the appropriate competence and authority.

KG-0150	Michael A Di Sand
Kevin G. O'Brien	Michael A. Richardson
VP and CFO, Nationwide Retirement Plans	Sr. Vice President, Chief Information Officer Nationwide Financial
4/14/18	4116/18
Date	Date

III. MANAGEMENT'S DESCRIPTION OF ITS PUBLIC SECT RETIREMENT PLAN ADMINISTRATION SYSTEM	OR

NATIONWIDE FINANCIAL SERVICES, INC. NATIONWIDE RETIREMENT SOLUTIONS, INC. PUBLIC SECTOR RETIREMENT PLAN ADMINISTRATION

Overview of Operations

Nationwide Financial Services, Inc. (NFS), an affiliate of Nationwide Mutual Insurance Company, provides a broad array of financial services including Retirement Plans, Annuities, Life Insurance, Mutual funds and Banking. Certain retirement plan operations of NFS are provided by Nationwide Retirement Solutions, Inc. (NRS) Retirement Plan Administration Operations. NRS is an indirect wholly owned subsidiary of NFS.

NRS offers a range of investment products and services to meet the retirement and savings needs of state and local government entities and their employees. The majority of plan participants contribute to employer-sponsored plans (including Internal Revenue Code Section 401, 403, and 457 plans), which allow the accumulation of retirement assets through pretax employee contributions. Contracts with plans are separated into two different levels of service based upon whether NRS handles the participant accounting. These levels of service are Full Service (plan and participant level records are maintained) and Unallocated Service (only plan level records are maintained). Professional money management is available to Full Service contract plan participants through Nationwide ProAccount, a managed account service offered by Nationwide Investment Advisors, LLC, (NIA), and a subsidiary of NFS. NIA utilizes the services of RIA Services, Inc., a subsidiary of NFS, to interface with the operations of NRS. This report has been prepared to provide information on NRS', RIA Services, and ProAccounts controls, which may be relevant to internal control of both types of User Entities as well as both levels of service entered into by the plans.

Relevant Aspects of the Control Environment, Risk Assessment, and Monitoring

As this description is intended to focus on features that are likely to be relevant to internal control over financial reporting of NRS's User Entities, it does not encompass all aspects of the services provided or procedures followed by NRS for User Entity accounts.

Organization

There are 16 members currently serving as directors of the Nationwide Mutual Insurance Company board, including its Chief Executive Officer.

The Audit Committee consists of 5 external board members who monitor internal and external examinations of NRS and ensure that suitable internal control is maintained.

NRS's activities are conducted in accordance with established policy and procedural guides, which are periodically updated. The responsibilities of NRS are allocated among personnel to segregate the following functions: input of transactions, processing of transactions, recording of transactions, custody of assets and reconcilement activities.

Management Control

A formal management information and reporting system exists to provide monitoring of key control and performance measurements by management.

Adherence to controls is monitored through periodic management reporting of exceptions and production and transaction volume. Results of NRS's operations are communicated to various levels of management and culminate in a monthly report.

Personnel Policies and Procedures

NRS has formal hiring procedures that are designed to help ensure that new employees are qualified for their job responsibilities. New employees must be jointly approved by the Human Resources department and the manager of the department requiring the position. Hiring policies include meeting minimum education and experience requirements, and completion of reference, background and credit investigation checks.

Training of personnel is accomplished through supervised on-the-job training, external seminars, and in-house courses. Certain positions require completion of specific training. It is the immediate supervisor's responsibility to help ensure that employees have completed such training. Department managers are also responsible for encouraging training and development to continue to qualify personnel for their functional responsibilities.

Formal performance reviews are conducted on a semi-annual basis. On a monthly basis, immediate supervisors meet with their employees to review performance goals and provide feedback.

Internal Audits

NRS's activities are subject to review by the Office of Internal Audits (Internal Audits). Internal Audits has been established as an independent, objective appraiser of the Nationwide Group of companies' activities, acting in the interest of Nationwide and its policyholders. Internal Audits reports directly to the CEO and the Nationwide Audit Committee. Internal Audits' scope, responsibilities, and reporting relationships are outlined in a charter that is reviewed annually by the Audit Committee.

During the performance of audit engagements, Internal Audits reviews the reliability and integrity of operational and financial controls; ascertains the extent of compliance with established policies, plans, procedures, laws and regulations to which Nationwide is subject; verifies the accuracy and propriety of transactions processed; and ascertains the reliability of management information developed within the organization. The audits also cover automated system application controls, and review to help ensure that internal control is adequate to account for and safeguard assets, deter fraud, detect errors, and promote the efficient and effective use of Nationwide resources.

Internal Audits prepares an annual audit plan, which is reviewed and approved by executive management and the Audit Committee. The plan is developed using a formal risk management methodology and provides for an audit approach covering business issues deemed significant by Internal Audits. Activities for the year typically include operational and financial audits, special projects, and system development reviews. Formal reports of audit findings are provided to management after each audit and significant audit findings are summarized and reported to the Audit Committee. Finally, audit findings are tracked to help ensure that action is taken on reported audit findings, and there is an escalation process for issues that are not resolved timely.

Other Considerations

NRS's control activities are documented in a combination of manuals, which are updated on an "as-needed" basis.

A Conflict of Interest policy exists and a Conflict of Interest statement is required to be completed by managers and other key employees, except those whose duties are clerical in nature.

NRS is subject to regulation and supervision by the state insurance departments (Insurance Departments) in the states in which it operates. As such, NRS is required to file periodic reports with and is subject to periodic examination by regulatory authorities.

Transaction Processing

Retirement Plan Administration - New Plan Setup

New plan documents are received by an analyst, who then completes a pre-production checklist to verify that documents have been signed and have been received in good order. The analyst passes the new document to the Plan Support Analyst to be entered on the system.

After the new plan has been established, the pre-production and associated plan documents are passed to a Quality Control (QC) Partner for verification and sign-off. If the QC Partner finds an error it is noted on the checklist, the plan setup documents are passed back to the Plan Support Analyst for correction. Once the error is corrected, the Plan Support Analyst returns the documents to the QC Partner for verification that the correction has been made.

Once the new plan is set up on the system, notification is sent to the Plan Support Analyst. The Plan Support Analyst completes the contract issuance process, and then forwards the checklist and pertinent documents to management for review. Management reviews the documents, signs the Setup checklist, and forwards the documents to Imaging Services.

Retirement Plan Administration - Fund Release

Pre-scheduled fund releases to the DCdirect platform (consisting of the inclusion of an existing fund for an entity, the mapping of participant assets to that fund, and the restriction and/or closure of the old fund that the new fund is replacing) are aggregated by Nationwide Retirement Solutions as part of project exchanges and are documented on fund sheets by a corresponding Relationship Consultant. As part of a scheduled fund release, Relationship Consultants are to follow the intake process which includes adding the Intake Form and supporting documents into Nationwide's Work Request Tool by the Client Services Support Analyst are aggregated by the Plan Implementation and Administration (PI&A) and Fund Administration and manually entered into a required Project Scope Definition document for any of the following: fund additions, fund restrictions and/or closures, price conversions, and future date fund mapping. The Project Scope Document is a document which is used to communicate the fund release activity to the various teams in a concise manner with approvals from each team involved in the release within the Work Request Tool. The Work Request Tool allows for activity central location to maintain the scope document and updates.

Funds are added to DCdirect as part of a scheduled fund release by a PI&A. To help ensure fund entry into DCdirect is complete and accurate, a secondary Support Analyst performs a quality control review of the fund data entry on DCdirect. Both the Support Analyst completing the DCdirect fund data entry and the secondary Support Analyst providing a QC good order review authorize the fund addition sheet via annotating the good order scope document.

NRS participants impacted by a mass fund release appear on a corresponding system report the day after the release takes place. The report systematically displays all monetary exchange ins/outs of DCdirect funds included on the fund release and provides NRS Client Support management the ability to perform validation testing insuring all monetary amounts (whether debits or credits) were completely and accurately migrated from one fund to another as listed on the DCdirect Fund Release Project Scope Definition Document.

Retirement Plan Administration – Plan Maintenance

Occasionally, changes are made to the general information of a plan. Significant changes include, but are not limited to, contract charges, plan name, interest rates and interest rate guarantee periods. Upon initiation of a change by a plan or NRS, the plan sponsor works with NRS agents to make the changes. Endorsements are also filed in the corresponding state with state regulatory agencies, if required. Depending on the type of change, the change will be included in a contract amendment, which is reviewed and signed, by either an authorized plan representative or a NRS Representative. The PI&A team will enter the necessary changes in the Imaging Services. Once processed the QC process will be followed.

Once the changes have been made, notification is sent to the responsible area. The responsible area reviews the changes.

Retirement Plan Administration – Participant Enrollments

Participants typically enroll using a Participation Agreement (PA) which can be remitted via employer, plan representative, or mail fax, email to Imaging Services or to the plan administration home office for manual account setup.

Manual Enrollments

New business applications are received by Imaging Services, where they are date and time stamped and imaged. They are then forwarded to the New Business Team for processing. The New Business Processor reviews the new business application to ensure it is in good order (name, address, date of birth, etc.). If the new business application is not in good order, the New Business Processor will key an Incomplete Enrollment and then forwards the business application to the appropriate department Not In Good Order (NIGO) Team which will try to collect the missing information. If the (NIGO) Team Processor is not able to obtain the necessary information, will then reach out by phone call and letter that the transaction will be closed.

Once the new business application is determined to be in good order, the New Business Processor enters the relevant information in the RPLink website (DCdirect system). At the completion of entry, the system is configured to list error and warning messages, which can then be addressed by the New Business Processor before submission. The enrollment is immediately processed and the account is established on the system. Samples of the applications are forwarded to the Quality Assurance (QA) Processor, who reviews the New Business Processor's work and verifies that data entries are correct. Nightly, the DCdirect system applies any purchases received prior to the input of the form and generates the application confirmation letters to the participant and plan sponsor. Each day, the issue resolution team is required to individually review the DCdirect Daily Error Report for errors originated from their processor ID. Errors are displayed on-line and on Report 1061 Daily Error Report.

Retirement Plan Administration – Participant Account Maintenance

Typical changes to participant accounts include changes related to a participant's name, beneficiary designation, deferral increase/decreases, personal information, Social Security number and investment election. Changes pertaining to investment elections and exchanges are discussed in the Retirement Plan Exchanges/Investment Elections section of this document.

Requests for maintenance can be received either through the Retail Service Center (RSC), telephone, or hard copy from the plan or participant. Typically, most maintenance requests are received via telephone. All requests initiated by a telephone call to a Customer Service Representative require the participant verify their name, Social Security number, address, and date of birth to help ensure the request is being received from an authorized source. Customer Service Representative interactions are recorded. The request is then entered into the system. At the completion of entry, the system is configured to list error and warning messages to be immediately addressed before submission. The nonfinancial transactions are effective immediately and are viewable online. If received via the RSC, the participant will be required to enter their user name and password for access to their account. Any change requested will be processed when the RSC interfaces with DCdirect.

Hard copy or manually processed items are processed by a New Business Processor, who also determines if the items are in good order and properly authorized. Items requiring QC are forwarded to the QA Processor via the NRS Workflow and Imaging system who then validates the entry paperwork. The NRS Imaging and Workflow system is an automated infrastructure tool for documenting and directing the progression of processing tasks.

On a quarterly basis, participant account statements are generated that indicate the changes made to the participant's account. See User Entity Reporting for a description of the User Entity Reporting Process. Investment election change requests are handled in the same manner as Exchanges (see the section of this document entitled Retirement Plan Exchanges/Election Changes). For participant maintenance transactions, the system generates an error report for any improperly processed maintenance transactions. Error reports are reviewed by the New Business Processor.

Retirement Plan Contributions/Receipts

Each business day, money associated with retirement plan contributions is received by NRS in one of three forms:

- Checks
- Wires
- Automated Clearing House (ACH)

Checks are remitted either via the Direct Deposit Account (lockbox) with the bank or via U.S. Mail/Overnight Mail.

Receipt of Checks via Lockbox

Certain plans remit retirement plan contributions and payroll documents to a designated lockbox. The bank deposits the checks into the bank account. The bank then remits one copy of the checks, check detail (Advice of Credit and Batch Detail Listing) and the payroll documents via courier to the Payroll Team. A processor reviews the payroll documents sent by the bank with each deposit and verifies that deposits listed on the Advice of Credit and Batch Detail Listing are received and accurate.

The processor then enters checks received on DCdirect via the Payroll Entry and Balancing System.

Receipt of Checks via the U.S. Mail/Overnight Mail

Certain plans remit retirement plan contributions to NRS via U.S. Mail or Overnight Express Mail. Imaging Services receives and opens mail and places a "For Deposit Only" stamp on the back of each check. A log of checks received is prepared by Mail Services. The log and checks are then remitted by Mail Services to a Check Processor in the Retail Service Center. After receiving the checks, the Check Processor restrictively endorses and photocopies checks for that day's deposits. The Check Processor then prepares a deposit ticket and forwards the deposit ticket, checks and log to a QC Processor for review. After approval from the QC Processor, the deposit tickets and checks are returned to the Check Processor who is responsible for remitting them to Treasury Services via courier twice daily.

Receipt via Wire/ACH

A Payroll Processor is responsible for printing the Incoming Wire Report three times a day (10:00 a.m., 2:00 p.m., and 4:00 p.m.) from the bank's website. The Payroll Processor then enters the wire and ACH receipts onto the system. To ascertain accuracy of the information entered onto the system, a second Payroll Processor performs a QC review. Finally, Payroll Processors sign-off on the ACH/Wire Log and forward to Reconciliation the next business day.

All Contribution Receipts

Each business day, the detail supporting retirement plan contributions is remitted to NRS in hardcopy format via a lockbox, U.S. Mail, or Overnight Mail. Imaging Services receives and opens all mail. Hardcopy detail is remitted from the bank or Mail Services, or Imaging Services depending on who initially received the detail, to the Retail Service Center Payroll Team for processing. Alternatively, the plans can fax retirement plan contribution information to the Document Solutions team.

Once the deposit receipt information and corresponding retirement plan contribution detail is received by the Retail Service Center Payroll Team, a Payroll Processor reconciles the receipt information with the retirement plan contribution detail. If the retirement plan contribution detail entered into DCdirect does not balance to the receipt information, DCdirect will place the information in an unbalanced status until the discrepancy is resolved. Information that is "in balance" according to DCdirect is assigned an effective date. DCdirect updates the participant accounts using the information from the nightly batch processing. A Financial Transaction Register (FTR) report is generated by DCdirect after the nightly flow. The FTR report shows that the total dollars received on DCdirect were processed in the system. These balancing procedures are performed by the Financial Service Representatives in the reconciliation area to ensure that deferrals are processed or placed in a suspense account.

Financial Operations personnel perform cash reconciliation on both a daily and monthly basis. Monthly reconciliations are reviewed by management within 25 business days of month end, and signed off as evidence of approval.

Daily, the Team Manager or Team Lead will review the regional unbalanced screen to identify unprocessed deferral contributions. This screen is used to monitor the timeliness of processing contributions against internal time standards (same day for contributions). Any unprocessed batches are assigned to a Processor to review, investigate, and resolve the unprocessed payrolls. Calls made to the entity in an effort to resolve the unprocessed payrolls are documented by the designated Processor. The Team Manager or Team Lead later reviews unbalanced screen to verify with the Processors that the unbalanced payroll batches are being researched by a Processor. Also, the Processor will note any calls to the plan sponsor to resolve problems on the batch header. The Reconciliation Processor validates that wires were entered on DCdirect and uses the Checks Received Report to identify any outstanding issues. The Reconciliation Processor then enters dollar amounts from the outstanding issues on the reconciliation as an open item.

Payroll deferrals that do not have an exact match on the DCdirect system are sent to the "Suspense Account" for various reasons, such as the entered Social Security number/plan sponsor number combination does not exist on the system, the account is at a closed or restricted status, or the life insurance premium exceeds the total deferral amount. Suspense reconciliations are performed on a daily basis and are distributed to Team Managers.

Each of the Suspense Account items must be researched and identified, and the final resolution must be made by the sixth day. Individual suspense tickets are delivered to the processing teams by the Internal Control Unit each day, and the 1176 Purchase Suspense Aged Open Items Report shows unresolved suspense items for regions to date. This report is reviewed daily by the processing teams to identify and clear suspense items. Open items older than 30 calendar days are distributed to NRS management on a weekly basis via email to ensure timely clearing.

A payroll analyst pulls a random sample of payroll participants processed in the previous week to quality check (qc) for good order.

Retirement Plan Withdrawals

Participants can withdraw funds from their accounts using one of the following options:

- 1. Annuitization/Systematic withdrawal
 - a. Purchased Annuity
 - b. Fixed Payment Systematic Distribution
 - c. Fixed Period Systematic Distribution
 - d. Required Minimum Distribution
 - e. Manual Pull Systematic Withdrawals
- 2. Immediate Payment
 - a. Single Payment Entire Balance
 - b. Single Payment Partial
- 3. Unforeseeable Emergency (Financial Hardship) Withdrawals (Paper Request)
- 4. Outgoing funds to another carrier plan
 - a. Rollover
 - b. Transfer
 - c. Purchase Service Credit
 - d. Plan to Plan Transfer

- 5. In-Service Withdrawal (not actively deferring, but not terminated)
- 6. In-Service Rollover (used to withdraw from a Rollover Pre-Tax money source at any time)
- 7. Beneficiary Withdrawal due to death of participant

Upon receiving a request from a participant to withdraw funds, a Customer Service Representative mails the participant a package containing payout election forms (except special cases which mail their own forms). The participant completes the appropriate form based on which withdrawal option they are choosing and mails or faxes the completed form to NRS, the participant may also complete the appropriate form online. A completed and signed form is required for withdrawals. Imaging Services will receive and scan the payout election forms, which are then forwarded to the distribution teams. Upon receipt of the payout election forms, a Disbursement Team Processor reviews the forms to determine the withdrawal option selected. All distribution requests are sent to the Balancing Team to be quality checked.

Annuitization

The Income Products Service Center (IPSC) is responsible for maintaining the account information and making future payments for participants electing a purchased annuity option for payout (annuitization). Purchased Payments is a lump-sum distribution from the plan moving the assets from the Income Products Payout Service Center (IPPSC), with the future distributions made from the Repetitive Payment System 6 (RPS 6). For purchased annuities, the payout election forms are received by the NRS processing units who screen the applications for good order requirements and then forward them to an IPPSC Processor. The IPPSC Processor establishes the customer account and then enters the annuitization information contained on the payout election forms on RPS 6. The setup in RPS 6 and the rate calculation is reviewed by another member of IPPSC for accuracy. This review is evidenced by the reviewer signing the approval slip attached to the supporting documentation. Once the customer account has been established on RPS 6, the IPPSC Processor sends an e-mail to NRS Disbursement Team Processor requesting the account to be surrendered from the system. The NRS Disbursement Team Processor processes a surrender/transfer on the system with the funds being sent to IPPSC via wire. The NRS Distribution QC Processor reviews the annuitization surrender for accuracy. The following day, a Balancing Processor will obtain a report, which lists processed distributions and confirms the wire, which will move the money from the NRS bank account to the IPPSC bank account. Additionally, the Balancing Processor will inform the IPPSC Processor, via e-mail notification, that the surrender is completed. Participants with a minimum balance of \$5,000 have the option to choose a Purchased Annuity. The paperwork is mailed from the NRS fulfillment area when participants request a distribution packet. Once the completed paperwork is received by the NRS processing unit, it is screened for good order requirements. The NRS Disbursement Team Processor processes a surrender/transfer on the system. The NRS Distribution QC Processor reviews the annuitization surrender for accuracy. The following day, a Balancing Processor obtains the #1210 Daily Distribution Reconciliation Report, which lists processed distributions. When the first payment is generated from RPS 6 through PMTS, the IPPSC Processor receives a First Time Payment Report from RPS 6. This report is matched to the original supporting detail for the new setup and is verified for accuracy by a member of the IPSC team. The manager approving the checks on PMTS reviews the firsttime payment report for evidence of review by another member of IPPSC and a copy of the supporting detail. The manager will approve the checks on PMTS upon the completion of his/her review. After the initial payment, reoccurring payments will be processed automatically. Once approved, the checks will be printed and mailed by Document Services. Once the first benefit payment commences, the benefit election cannot be changed.

A RPS 6 report identifying the expected checks from RPS 6, along with a PMTS report that identifies the checks that were processed is produced weekly. These reports are reviewed as part of the balancing by the IPPSC team. Payments are balanced daily, monthly, quarterly, and annually depending on the term elected by the participant. If the person elected payment via ACH, verification is performed to help ensure the payment is issued accurately and timely. For check payments that exceed \$10,000, the option and dollar amount is reviewed by the IPPSC team.

IPPSC receives the Daily Error Report, #1261, which identifies surrenders that did not process on the system/RPS 6, indicating where RPS 6 attempted to produce a check and PMTS did not produce the check. RPS 6 also produces an Action Required Report that identifies pending account setups and account changes, as well as an Activity Report, which identifies everything processed on RPS 6 the previous business day. The IPPSC Support Services team reviews the Action Required Report and investigates any unusual items. The Activity Report is utilized primarily for research purposes.

A participant can elect a systematic withdrawal to remain in the plan. In these cases, the withdrawal request is processed by a NRS Disbursement Team Processor and the periodic payment schedule would be established in the system following a good order screening. Once the periodic payment schedule is established, periodic withdrawals will automatically be made and a

check will be sent to the participant based on the term elected or when the distribution was processed.

Unforeseeable Emergency Withdrawals (Paper Requests)

Participants may apply to receive funds for an unforeseeable emergency/financial hardship via paper application.

Paper applications are reviewed for good order requirements (name, address, Tax ID or account number, date of birth, etc) and then reviewed under the IRS Unforeseeable Emergency plan specific guidelines as interpreted by Nationwide. The processing unit also determines if supporting documentation was presented to support the withdrawal request. One of three outcomes are derived from this review.

- 1. The application is approved and processed through DCdirect, with special attention paid to the participant's taxation request and mailing instructions (U.S. Mail or ACH).
- 2. The application is pended for 60 days and a letter is sent requesting additional documentation to support the request.
- 3. The application is denied and is pended for 30 days in the case that additional information is received.

Overview of the Distribution Process

Payout requests are initiated through a paper application and with evidence of termination of employment. Once the payout terms are established the participant can call at any time and request additional amounts from their established payout terms assuming the amount is up to \$10,000 but not more than 95% of the account value. The participant can also call to change periodic payment amounts and processing dates.

For over the phone requests the customer service representative verifies the participant's name, SSN, DOB, and address. Once they have verified the account for security they will then verify the initial distribution request was done via paper and that termination of employment is on file, and that the plan is eligible for this payment request. If the participant is eligible the customer service representative completes the request form with all of the necessary information and submits it through Imaging for review in the processing department.

For other payout requests, the processor determines that the participant's name, address, and Social Security number agrees to information included on the system. The processor also reviews the date of birth to help ensure the request meets minimum distribution requirements governed by the Internal Revenue Code. The processor checks the participants' tax elections. Finally, the processor checks to see if the waiver of notice box has been initialed on the request form. This means that the transaction will be entered on the system with a future effective date. The processor accesses the system and enters the payee and distribution information for immediate payments, outgoing funds to another carrier, in-service withdrawals, and financial hardships. Once the transaction is entered the Balancing Processor will QC the transaction and generates the system report. The Balancing Processor reconciles withdrawal requests as reported on the systems. The Balancing Processor's name is automatically entered onto each withdrawal request on PMTS after review. If a discrepancy or error is noted, the Balancing Processor will forward the request using Imaging, back to the original processor to correct the transaction. Once the correction is made, the request will be reviewed by the manager (in the case of a manual check) or the balancer again if the error was created on the system. Once the transactions have been balanced, the balanced report is passed to the Manager for approval. Requests are approved online and evidenced by the manager's name being automatically entered onto each withdrawal request after review on PMTS. Payout election forms are then remitted to "closed" in the NRS Imaging and Workflow System. Items that are processed on the system, but not on PMTS appear on reconciliation reports. Items in error during the interface between the system and PMTS are identified on the 511D PMTS Report and referred to Distribution or Loan/UE Teams for resolution.

Retirement Plan Disbursements

Withdrawal payments (disbursements) can be issued in one of four formats:

- 1. Manual check
- 2. Operations check
- 3. ACH (An ACH is also used to transfer funds to the IPPSC account when an annuity is purchased)

4. Wire

Payment via Manual Check

Manual checks are used in certain situations (e.g., payments to those with a foreign address, and instances where corrective processing must be performed). For manual checks, the withdrawal information is entered on PMTS. A manual check request is prepared and imaged by the Disbursement Team Processor. The manual check request, along with the withdrawal request detail from the system, is given to the manager for review and approval. The manual check request and detail is then forwarded to Treasury Services. The Treasury Services Processor accesses PMTS and validates the payee and amount is correct and that the account balance is sufficient to cover the request. The check is then prepared and logged according to the method of delivery that will be used (regular mail, overnight, or pick-up by a NRS Processor). The checks will be mailed directly from Treasury Services or the mailroom to the designated recipient. A second processor will perform a QC review of the request and the check before the check is mailed. After a batch of manual checks has been printed, a Treasury Services Disbursement Accountant compares the PMTS system report, which lists the checks requested with the check log, which shows checks printed. Any discrepancies between the number of checks requested and the number of checks printed is followed up by the Treasury Services Disbursement Accountant.

Payment via Operations Check

Operations checks are those checks electronically approved in PMTS and automatically sent through the system to be printed in the Document Services print shop for mailing unless special mailing instructions are involved. A file is transmitted from PMTS to the Document Services print queue. The checks marked for ADMIN on the PMTS system are delivered back to the NRS Distribution Processing Teams to satisfy the special instructions.

Infrequently, a check is destroyed in the printing process and NRS Disbursement Team is notified to reissue and stop pay the destroyed check.

For both manual and operations checks, there is an electronic signature in the system. Once a check request has been approved in the system, the system allows the electronic signature to be printed on the checks.

Payment via ACH or Wire

For manual ACH or Wire requests, a Treasury Services Accountant reviews for proper authorization and approves the request electronically. PMTS will then create and send a transmission file to the bank.

All Disbursements

Cash reconciliations are performed on a daily and monthly basis both by the Reconciliation Team and Treasury Services personnel. Monthly reconciliations are reviewed by management within 25 business days after month end, and initialed as evidence of approval.

Retirement Plan Exchanges/Investment Election Changes

From time to time, participants and plans may wish to exchange funds or change the manner in which future contributions are allocated to investment options. Participants can exchange funds or change their allocation mixes via the methods listed below. Plan Sponsors can also elect to add or delete funds offered within the plan through the fund mapping process which is separate from the methods listed below. Each business day, NRS receives exchanges/investment election changes from User Entities in one of three formats:

- 1. Telephone
- 2. Retail Service Center (RSC)
- 3. U.S. Mail or Facsimile

Via Telephone

The telephone exchange and investment election change request process enables participants to call NRS's Customer Service Center on a recorded line and transfer money from one investment fund to another (in the case of an exchange) or change the

manner in which certain future participant contributions will be allocated (in the case of investment election changes).

Participants can prompt out to the Interactive Voice Response (IVR) to a Customer Service Representative to perform these transactions.

If utilizing the IVR system, the participant is prompted to enter his/her Account Number and personal identification number (PIN) before the participant can access any account information or perform any transactions.

Transactions are entered into the system and confirmed with the participant. A QC review is completed on all exchanges greater than or equal to \$100,000. Additionally, participants receive a confirmation of the exchange and/or investment election change by mail.

Via RSC

The RSC allows access to DCdirect from the Internet. The RSC allows participants to access current fund balance information, make changes to future investment allocations, and allows the movement of participant funds between investment options. The RSC feeds the system on a daily basis. Participants receive a confirmation of the exchange and/or investment election change made via the web through the mail.

The RSC transactions and data in the system are protected with a combination of routers, servers, a network firewall, and transaction encryption methods. Unique participant information is required to gain access to the RSC and to establish an Internet account and password to that account. Once the account is established, a personal password is required to gain access.

RSC transactions use 256-bit encryption for transactions between the participant, the website, and the firewall for web browsers that support 256-bit encryption. After 15 minutes of inactivity with any browser, the session is terminated.

Via U.S. Mail or Facsimile

Hardcopy requests via U.S. Mail or facsimile are received by Imaging Services and are imaged and forwarded onto the Retail Service Center. A financial analyst will then process the requested exchange via the system. The accountholder receives a confirmation of the exchange and/or investment election change by mail.

A QC review is completed on a sampling of exchanges. If an error is identified, it is entered into the Service Tracking Database for monitoring and resolution. Once added into the database, an error is to be resolved within five business days. Items may be pended for longer than five days provided research has been completed and documentation provided for the pended item. Team Leads and Managers monitor the Service Tracking Database on a daily basis to determine the status of each pending inquiry/item. Any exchange items needing retroactive investment processing must have management approval.

Investment Transactions

NRS provides full-service contract level of service, where NRS maintains participant records. Therefore, investment transactions are kept at the participant and plan levels.

Investment transactions that are the direct result of contribution, withdrawal and exchange transactions are entered onto the system upon receipt of notification from the account holder for participant level (full-service) contracts.

Variable Investment Options

Each day, typically before 4:00 a.m., the system sends daily trade information to the Buy/Sell Trading System (BUYS). The interface feed received from the system by BUYS is balanced to the administrative feed received by the general ledger system. By 4:00 a.m., BUYS notifies each Financial Operations staff member of the status of the National Securities Clearing Corporation (NSCC) flow. The BUYS system is programmed to identify trades that can be processed through NSCC. NSCC allows trades to be initiated and settled in a timelier and cost-efficient manner (on a net basis) than manual fax order forms sent directly to the fund houses. By 6:15 a.m., BUYS creates and sends a batch file to the NSCC of the daily trades. BUYS automatically sends an e-mail notification to Financial Operations indicating that each line of business' NSCC trades were sent successfully. This alerts the staff if manual fax order forms need to be initiated for missed NSCC processing by an individual line of business. By no later than 9:30 a.m., the Financial Operations staff faxes the manual order forms to the fund houses that do not use NSCC. Around 10:00 a.m., manual wires are posted to PMTS, and the Disbursement Wire Totals Report and Manual Payment Summary Approval Sheet, after being signed by an authorized Financial Operations

approver, are sent to Treasury Services for final approval and initiation of wires. The NSCC notifies BUYS of the trades rejected as soon as they occur. This allows NRS to research and resolve any rejected trades in a timely manner. Confirmed or accepted trade notifications are received throughout the day from the NSCC. The final NSCC settlement information is received around 12:00 p.m., and an e-mail notification is sent to Financial Operations. After 12:00 p.m., the NSCC settlement information is balanced to the Cash Requirement Report, and settlement notification spreadsheet is completed and emailed to the bank and Treasury Services.

Manual wire requests are automatically set up on PMTS by an interface between PMTS and BUYS. A member of the Financial Operations team verifies that the BUYS Disbursement Report agrees to each pending wire on PMTS. If a wire does not exist that should be on PMTS, the team member enters the wire into PMTS. If a wire exists that should not, the team member removes or deletes the request from PMTS. An authorized approver must approve each wire request established in PMTS. A Manual Payment Summary Approval Sheet is printed from PMTS and signed by the authorized approver. The Manual Payment Summary Approval Sheet and the Disbursement Wire Summary are reviewed by Treasury Services for proper authorization. Once the authorization has been noted, Treasury Services approves the wires on PMTS and the wires are released to the bank for processing.

On a periodic basis (no less frequently than monthly), investment transactions with mutual fund houses are reconciled to mutual fund account statements by a Senior Accountant in Portfolio Accounting that is independent of the Accountant placing the trades.

Fixed Investment Options

Each evening the system updates the general ledger system for the fixed investments purchased and sold that day. A Senior Accountant performs monthly ledger reconciliations of fixed investments to the financial transaction information on the system, which includes deposits and withdrawals. In addition, a quarterly reconciliation is performed to ensure that the interface between the system and the general ledger system is working correctly. This reconciliation involves an Accounting Supervisor verifying the fixed investment balances per the general ledger system to reports of fixed investment balances per the record-keeping systems. A Senior Actuarial Assistant ensures that the fixed investment balances per this report agree to what was entered onto the Company's general ledger system.

Quarterly, valuation summaries are uploaded by NRS Systems Department to a website and then downloaded by the Actuarial Department. Either an Actuarial Analyst or a Senior Actuarial Assistant reconciles the system valuation summaries to data obtained from the original source table data files. On a quarterly basis, a Senior Actuary approves fixed investment data to be uploaded to the general ledger system by the Finance Department.

Unit Valuation

Both variable and fixed investment options are valued based upon unit values multiplied by the number of units held (i.e., an underlying investment option's unit value multiplied by the number of units held by the participant equals the value of the investment option). The change in unit value is calculated for each underlying mutual fund in a variable annuity contract and for each fixed investment option. These calculations are performed daily by the VALU system for variable investment options and the record-keeping systems for fixed investment options. For variable investment options, an Associate in the Unit Value Accounting Department, independent of the Associate who entered the information into VALU, reviews a system-generated report of the data entry information for accuracy and evidences review by initialing the system-generated report. For fixed investment options, an Actuarial Assistant in the NRS Actuarial Department reviews interest earned monthly for reasonableness compared to the contract rate.

Both variable and fixed investment option unit calculations are equal to the previous day's unit value multiplied by a Net Investment Factor (NIF).

Variable Investment Options

The NIF for the variable investment option is calculated using the following formula:

 $NIF = [(NAVt + Div + Cap Gains)/NAVt-1] - (\Delta dys * Daily Admin Charge)$

where

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NAVt = The mutual fund's net asset value (NAV) at the end of today.

NAVt-1 = The mutual fund's NAV at the end of yesterday.

Div = Dividends. Accumulated income distributed by the mutual fund at the end of today.

Cap Gains = Capital Gains. Distribution of net capital gains by the mutual fund at the end of today.

 $\Delta dys =$ The number of days since the last unit value calculation.

Daily Admin Charge = The daily administrative charge assessed by the contract.

Each evening, the Unit Value Accounting Department electronically receives the current day's dividend rate, capital gain rate, NAV per share and change in NAV per share by one of three ways. They receive them via email, through the NSCC or by FTP file from the fund house or agent. There are also some prices that may have to be entered manually.

Once prices received by the VALU system the system performs a series of control checks for accuracy. If any price fails the control checks it will suspend, (does not process) until the Accountant researches the issue and validates the price received or makes any necessary corrections. As each price (including NAVs/Divs/CG) are processed and any suspended items are cleared, the VALU system calculates the current unit value using the above formula. VALU then interfaces with DCdirect and updates DCdirect with current unit values.

For prices entered manually an Associate in the Unit Value Accounting Department, independent of the Associate who entered the information onto VALU, reviews a system generated report of the data entry information for accuracy; this is evidenced by the Associate initialing the generated report. Once the information is input onto VALU, VALU calculates the current unit value using the above formula. VALU then interfaces with DCdirect and updates DCdirect with current unit values.

Dividend and Capital Gain rate information is received by the Unit Value area and entered into the VALU system. This information is then posted to VIDS along with the NAV information. VIDS than calculates the number of shares to be reinvested into the account. This is then reconciled by comparing outstanding share balance post Dividend or Capital Gain share reinvestment between VIDS and what the fund house reports as their shares outstanding. All sporadic Dividends and Capital Gain are reconciled to the penny and the shares to the thousandths decimal place. For daily interest funds, by the fifth workday of each month, the Portfolio Accounting Area (PA) requests a VIDS5212 report (Monthly Detailed Daily Dividend (Per Fund House Range)). This report illustrates the daily dividend amounts that the VIDS system has calculated for the General Ledger period. The PA will retrieve the Dividend information from the fund houses via NSCC electronic data, calling, monthly account statements, or DST Vision access. These amounts are written on the VIDS5212 report. Any variances over the acceptable amount, \$500, are researched by the PA. The Accountant will verify that the daily Dividend rates and Record/Reinvest dates that the VALU system supplied agree to the fund house information. The Accountant is independent of the Associate that entered the information onto VALU and of the Associate that placed the trades with the fund house.

Once Dividend is reconciled, the PA will input the information into the VIDS system for monthly processing. The reconciliation is placed in a file evidencing the review.

Fixed Investment Options

The NIF for fixed investment option is calculated using the following formula:

 $NIF = (1 + Interest)^{1/N}$

where

Interest = The annual interest rate credited on the guaranteed return insurance contract which includes the guaranteed interest rate earned less any contract charges assessed

N = Number of days in the year

The system has fixed investment options for contracts underwritten by NRS as well as other insurance carriers. For NRS contracts, interest rates on the fixed investment options are determined and reviewed quarterly by a NRS Actuary. For these Nationwide Retirement Solutions, Inc.

Management's Description of its System

insurance contracts that have their interest rate determined by a NRS Actuary, interest rates are reviewed and approved by a Senior Actuarial Officer.

On the first business day of each quarter, the interest rate calculation for fixed investment options is electronically downloaded by a Senior Actuarial Analyst who reconciles the system valuation summaries to the data obtained from the original source data files. The data runs through the nightly flow and the system uses the unit value process to update the system with the current unit values.

For fixed investment options that may have interest rates change throughout the quarter, the Company Actuary will create a memo which orders a change in interest rate for that particular fixed investment option. This memo (which lists the fund #, daily factor, and the new interest rate) is then delivered to the Internal Control Team Manager, who reviews the memo for reasonableness. The memo is then given to an Accounting Clerk, who manually enters the change into the system. The data then runs through the nightly flow where the system updates the interest rate credited information maintained on the system. The following business day, the Internal Control Team Manager will compare the system with the memo to ensure the change was made. Any discrepancies are investigated and followed up by the Internal Control Team Manager.

User Entity Reporting

Statements

Participant and plan statements are generated from the record-keeping systems beginning on the first day following the calendar quarters. Prior to generating statements, files of statement data are received from outside providers and reviewed by the Statement Unit Team for good order. These files are reconciled against the system files and reports are generated to balance the data and to report unbalanced accounts.

The Statement Unit Team performs an audit ensuring financial transactions fields on the statement and funds available to the entity are properly being reported. These fields include beginning and ending balances, deferrals and incoming transfers, withdrawals and surrenders, exchanges, charges and gain/loss on investments. In addition, nonfinancial data is verified including phone numbers and address. Also, fund performance is verified. Both participant and plan statements are included in the audit. Once verified, statements are released to be printed and to insert into statement envelopes. Systematic and manual controls are in place to ensure insertion quality and counts. An additional audit is performed on the statements loaded to the web prior to the release of the on-line statements for participant and plan viewing.

The control activities consist of the following:

An audit is performed by the Statement Team prior to the releasing of statements to be printed or loading to the web. The audit consists of verifying fund balances by calculating the unit values and verifying that the beginning balance agrees with the previous period's ending balance. They also ensure that financial transactions are included in the audit. The address and phone numbers, etc., are checked. An audit checklist is prepared and initialed by the processor and by a Unit Manager to ensure completeness of the audit. A OCR and Filebase/MRDR code is printed on each statement page to ensure page counts are accurate and the statement matches the mailing address.

Once the statements are inserted into envelopes, the NSC Quality Control Team performs a "Mailroom Audit." This consists of pulling statements at random, opening them up to ensure that statements are properly included, the correct postage is metered, the correct envelope is used and the address presentation meets postal requirements.

Investment/insurance product provider data not accounted for by NRS is remitted electronically to the system. The information is received via teleprocessing, from the outside provider. The teleprocess file is received directly by the IT area. Once the data is identified as in good order, the reconciliation program runs and produces balanced and unbalanced reports, based on a comparison of the systems records to the carrier's records.

Tax Reporting

Taxpayer information is entered onto the record-keeping systems by processors from the participant's tax form or, in the case where no tax form is received, the tax information is defaulted by the system based on the withdrawal request. Payment information is then electronically fed to PMTS. PMTS electronically feeds Taxport YTD taxable transactions monthly in order for the Internal Revenue Service (IRS) Tax Forms W-2, 1042S, Puerto Rican 480.6, and 1099 to be prepared. The 1099 print files are forwarded to the Printing and Document Services area; forms are created, printed, and the participant copy is mailed by Printing and Document Services before the IRS deadline. Convey prints and mails forms W-2 and 480.6 before the IRS

deadline.

Monthly, the Finance Tax Reporting Unit generates rejection reports from Taxport for unusual withdrawal information electronically fed to it by PMTS. These rejection reports are forwarded monthly to the Internal Control Area to determine the nature of each unusual item. True discrepancies are forwarded to tax maintainers to be corrected. The Tax Coordinator reviews corrections made on discrepancy items and checks to make sure they are resolved within time standards prior to the release of the tax information. The Tax Reporting Analyst reviews the following month's rejection report to ensure discrepancies were properly cleared. After the Tax Reporting Analyst reviews the report, it is submitted to the NRS Disbursement Manager. Since the exception reports are cumulative (i.e., error conditions remain on the report until corrected and/or cleared), the NRS Disbursement Team can review the report at year-end to determine if the necessary changes have been made in order to release the year-end tax information.

Computerized Information Systems

Nationwide Retirement Plans uses a number of different computerized information systems in order to process User Entity transactions. Most of these systems have been developed internally.

DCdirect - DCdirect is a Java-based application allowing both online real-time and batch processing. DCdirect uses a batch flow to apply the majority of financial transactions. Nonfinancial and financial transactions, for which the price of the investment options is known, are processed real-time. Investment options include fixed and variable options provided by various financial institutions. Daily interfaces provide pricing information for the variable products while fixed pricing is calculated daily based on certain predetermined rate factors. DCdirect uses a combination of different online inquiry transactions to aid in customer's inquiries. Online update transactions are also available for plan level activity. DCdirect has the ability to house a large number of accounts and process large volumes of transactions while still meeting daily service level agreements. DCdirect interfaces with different systems to facilitate User Entity record keeping and provides daily reports, which support transaction activity.

TaxPort – Accumulates withholding amounts in order to prepare tax Forms W-2, 1042S, Puerto Rican 480.6 and 1099.

Retail Commission System (RCS) – This system is used by NRS Administration to track incoming participant deferrals to have commissions paid.

Interactive Voice Response (IVR) – IVR provides participants, via their touch-tone phone, the ability to review their account balance and current investment allocation information. It also gives them the ability to change their future investment allocation and process exchanges.

Retail Service Center (RSC) – RSC provides participants and plan sponsors with a variety of plan and individual participant level information, including balances and current investment allocations. The RSC allows input of participant enrollments, participant demographic changes and participant exchange and investment allocation change transactions.

BUYS – BUYS is an intermediary between Public Sector Retirement Plans and the National Securities Clearing House. It is used for the execution of mutual fund trades on behalf of the Public Sector Retirement Plans.

VALU – The VALU System receives NAVs from the various Fund Houses doing business with NRS. For Public Sector Retirement Plans, VALU generates net unit values (unit values with the asset management charges deducted) and interfaces these with DCdirect.

PMTS – The Payments System is used for the processing of disbursements. These can be checks, ACHs, or Wires.

Tax Calculator – The DCdirect accesses the Tax Calculator when processing a taxable withdrawal transaction. This system receives basic withdrawal data from DCdirect and returns the federal and state and withholding amounts. PMTS also accesses the Tax Calculator.

VIDS – Receives trading transactions from BUYS for buy/sell activities at the shareholder account level. This is the Portfolio area that reconciles shareholder account activity between the Mutual Fund Houses, G/L, and the Administration systems.

RIA Managed Accounts Transaction Management System (Public) –TMS (Public) is an Oracle Reports and PL/SQL based application that provides omnibus level modeling and trade capability of portfolios of mutual funds, a fee calculating engine,

Nationwide Retirement Solutions, Inc.

Management's Description of its System

and reporting. The application allows both online real-time and batch processing. TMS (public) is used by Nationwide Investment Advisor ProAccount for managing 457 plans participant investments.

Program and System Software Change Control

Nationwide Retirement Plans has documented change and emergency change management standards that describe the process for requesting and executing changes to the production environments.

For operational changes, a request is initiated by the Business Analyst (BA), an application member, or a business customer by entering information into the Work Request Tool (WRT). A project manager is assigned and the work is prioritized and scheduled by collaboration of the Project Manager (PM), Application Owner, Break-Fix (BF)/Walk-Up (WU) Lead, BA and Customer Manager. For TMS (Public), a request is initiated by the business consultant on behalf of an end user, operations team member, or a business customer by sending an email to the application. The work is prioritized and scheduled by collaboration of the RIA Services President and RIA Services Vice-President and Application owner.

Once work is approved, a Service Now Request for Change (RFC) is completed by the Release Manager. The RFC is submitted as soon as work begins on the change and an implementation date is finalized. The RFC captures information regarding the change: summary of change, description of change; contact information; implementation window; impacts to customers during implementation, after install, and postponement of change; installation strategy; back-out strategy; verification strategy; and classification of the change (e.g., minor, significant, major) as well as lines of business impacted. Each RFC is then assigned a developer. For TMS (Public), once work is approved, the work begins on the change and an implementation date is tentatively targeted. The functional Specification document captures use cases for the change: summary of change, the work is then assigned to a developer or developers.

The software design is prepared by the development team through iteration story cards. Coding and unit testing is performed once the design document has been approved. Version control packages are used to facilitate the development, testing, and implementation process. If developers are making changes to production code, they must create one or more branches in the version control software. Production code is checked out into these branches and the developers make their changes to the code. Once created, the branches are promoted into the testing environment by the developers for unit, system and acceptance testing. Version control packages installed into Production must be installed in the testing environment first. Branches must also be approved by the developer before installation into Production. The BA is responsible for conducting and recording acceptance testing. If there are no discrepancies between the expected test results and the actual test results, the developer sends an e-mail to the BA group, describing the changes made and asking for their approval to implement. The BA replies to indicate approval.

In the event that a change needs to be inserted into the monthly project release, after the release scope or code freeze has passed, a ServiceNow request needs to be completed online by the developer interested in making the change. The developer completes the form with information regarding the application area, environment, change type, application name, approver, description of the change, effective date and time, server name, RFC number, and comments/instructions. When selecting the approver, the system automatically provides the developer's manager and that manager's manager as choices. The developer also has the option of selecting another approver.

Once the request is completed and submitted, the selected approver is notified of the request via e-mail. The approver is responsible for reviewing the request and approving or rejecting the request. The developer is notified of the status of the request (i.e., approval, assignment, completion, etc.) via e-mail during the entire process.

Once the request is approved, the developer making the change completes an Implementation Specification form. This document outlines the modules that have changed as well as procedures to install and verify any version control package changes. The following people must review and approve/sign the form before the change is migrated into the production environment:

- Document Author for changes
- Document Reviewer for changes
- Business Manager for changes that affect business users only
- BF/WU Lead for operational changes only
- PM for project changes only

• System Steward – for changes

The changes are migrated to production by a designated individual or team which does not have development responsibilities. The specific teams are application or platform specific. Once the changes are installed, the RFC status is updated to closed. For operational changes, the WRT is also closed.

For TMS (Public), the following people must review the implementation plan document before the change is migrated into the production environment:

- Document Author for changes
- Document Reviewer for changes

Once the changes are installed, post-implementation validation is performed.

Logical Access

Nationwide Retirement Plans has established Information Security policies that include standards to be followed for management of logical access including authentication and password requirements; procedures for granting, removing and reviewing access; and procedures for managing privileged access and generic IDs.

The applications and underlying operating systems are configured to require a valid user-ID and password to gain access. Password parameters are configured to enforce password complexity standards as documented in the information security policy. This includes a minimum length of 8 characters, expiration every 56 days, with the exception of TMS (Public) which expires every 60 days, lock out after 5 invalid attempts, and meeting 3 of 4 complexity requirements (upper case, lower case, numeric, special character).

User access to the applications requires formal management approval and users must complete an access request form in order for access to be granted or modified. Once the form has been completed and approved, the user forwards the form to the appropriate security administration team who reviews the request to ensure that required information has been completed and that management authorization has been obtained. The security administrator then grants the user the access requested. He/she then notifies the user as well as the approver via e-mail that the user's access has been set up and contacts the user directly with their password.

It is the responsibility of business unit management to notify the application security administrators of employees leaving or transferring positions. Additionally, when an employee is marked as terminated in the Human Resource application, their internal network (NWIE) ID is automatically disabled, revoking network access. On a quarterly basis (except TMS (Public) which is reviewed on a bi-annual basis), NRS management reviews user access privileges on each of the applications and privileged access on the operating systems to help ensure access remains appropriate. User IDs found to have inappropriate access are removed.

Generic IDs are registered and assigned a formal ID guardian. This ID guardian is responsible for maintaining a description of the purpose and intended use of the ID, a list of authorized users of the ID, and any related documentation, such as activity logs, password resets, and access permissions.

RSC and IVR access by plan providers and participants

Plan participants and Sponsors can manage their accounts in the RSC system. They use their access IDs and passwords, which are verified against an enterprise repository. The participant can create a user name and a password (both of which must be between 8 and 20 characters), and the process is supported by system prompts and system help messages. A password must be alphanumeric, and the account is suspended after five invalid logon attempts. Plan participants can access their information via IVR using their Account Number and unique PIN. If a PIN is not already established, participants can create a PIN within the IVR, when prompted, by entering a valid date of birth. A participant and a plan sponsor can also call in to the support team and have a team member provide services for them.

Physical Access

Data Center East (DCE)

Development, Test, Disaster Recovery and a portion of the IVR-RP Public Production Systems are housed at the Data Center East (DCE). DCE is a Tier IV facility located in New Albany, Ohio. The low profile building was constructed to withstand 250 mile-per-hour winds. No signs explicitly identify the building as a Nationwide data center. A security fence surrounds the entire building. Installed on the fence is an Oscillation system to detect vibrations. Security cameras surveying the grounds are monitored by the security officer on duty.

Nationwide's Corporate Security is responsible for the card key system and an officer is onsite 24x7x365. The officer monitors physical access, gates, video cameras and alarms. The key card system is configured to log each use. A hardcopy of the log is printed out at the security desk and is reviewed by one of the third shift security officers every day to insure all access is removed from ID Badges. External doors are equipped with alarms that are monitored and access to the building is restricted by card key.

For permanent badge access to DCE, an email request approval by the On-site Support Manager or Team Lead is needed. Access levels are programmed into the card key system according to the job functions performed. There are 15 access levels which can provide access per room/space. Temporary badges are issued by the security officer and must be returned upon leaving. The security officer keeps a record of all temporary badges issued.

A monthly permanent badge access report is generated and reviewed to determine if any change is needed. Badge access is immediately disabled from terminated personnel. Along with Security staff, IT Onsite Support analysts and Corporate Real Estate (CRE) building engineers are onsite 24x7x365.

Visitors who are not DCE employees are required to sign in and out at the security desk and must have a valid Request Item (RITM), Incident (INC) or Request for Change (RFC) (with a RITM attached). All IT personnel/vendors must sign into the Data Center Onsite Support Access database for all work beyond the office area. All CRE vendors performing work on the raised floor must also sign into the Access database.

Data Center North (DCN)

Production and Development systems are housed at the Data Center North (DCN), which is a Tier IV facility located in Lewis Center, Ohio. The low profile building was constructed to withstand 250 mile-per-hour winds. No signs explicitly identify the building as a Nationwide data center. A security fence surrounds the entire building. Security cameras surveying the grounds are monitored by the security officer on duty.

Nationwide's Corporate Security is responsible for the card key system and an officer is onsite 24x7x365. The glass wall of the security office located in front of the building is bullet proof. The officer monitors physical access, gates, video cameras and alarms. The key card system is configured to log each use. A hardcopy of the log is printed out at the security desk and is reviewed by one of the third shift security officers every day to insure all access is removed from ID Badges. External doors are equipped with alarms that are monitored and access to the building is restricted by card key.

For permanent badge access to DCN, an email request approval by the On-site Support Manager or Team Lead is needed. Access levels are programmed into the card key system according to the job functions performed. There are 6 access levels which can provide access per room/space. Temporary badges are issued by the security officer and must be returned upon leaving. The security officer keeps a record of all temporary badges issued.

A monthly permanent badge access report is generated and reviewed to determine if any change is needed. Badge access is immediately disabled from terminated personnel. Along with Security staff, IT Onsite Support analysts and CRE building engineers are onsite 24x7x365.

Visitors who are not DCN employees are required to sign in and out at the security desk and must have a valid RITM, INC or RFC (with a RITM attached). All IT personnel/vendors must sign into the Data Center Onsite Support Access database for all work beyond the office area. All CRE vendors performing work on the raised floor must also sign into the Access database. Cleaning crews are contractors and must have a valid RITM to enter each day to perform their work. Access will be added by Security when they arrive and removed when they leave.

Fire extinguishers, smoke detectors, and dry pipe fire suppression systems protect computing equipment from fire damage. The chillers and water side economizer are two ways we cool the data hall. Temperature sensors monitor the DCN data hall equipment. IT equipment and critical mechanical systems are powered by an uninterruptible power supply (UPS), two battery rooms, and two generator rooms create a fault tolerant environment.

TierPoint Data Center (TPDC)

TMS (Public) is housed in a data center controlled by the subservice organization TierPoint Data Center (TPDC) (which is considered out of the scope of this report). The IT controls which are considered carved-out for TMS (Public) are Control Objective 3 Physical Security (Control 3.1, 3.2, 3.3, and 3.4). All other controls for TMS (Public) are considered within the scope of this report.

Retail Service Center Data Transmissions

The flow of data through the RSC begins with a customer accessing the corresponding Nationwide website. At the Nationwide site, the user selects the participant account option and is taken to the customer login screen. New participants can call to request this type of web access to their accounts or complete the setup access request on the website. They must provide their Social Security number or tax ID number, date of birth, and account number. Once this information is authenticated, the user is prompted to select a user name and password, both of which must be between 8 and 20 alphanumeric characters. The user name and password are case sensitive. The user name must be unique. The password does not expire; however, the account will be suspended after five invalid password attempts. The user must call the Customer Service Center in order to get his/her password reset. A Customer Service Center Representative will perform the required user authentication procedures prior to resetting the user password.

Users must follow security standards in order to access Nationwide Retirement Plans information on the website. One of the security standards is encryption. If a user attempts to login without the required level of encryption, he/she will receive an error message indicating access was denied. The RSC uses 256-bit encryption for transactions between the user and the website and between the website and the firewall. The session is terminated after 15 minutes of inactivity with any browser.

Once the user name and password have been authenticated, the user can review account summaries and statements for past quarters, review fund performance, change user ID and/or password, and perform various types of exchanges and future allocation changes. User access is limited to the participant's own account(s). The Social Security number or tax ID number is an additional unique identifier, thus preventing unauthorized users from viewing any accounts other than their own. If a user has multiple accounts, he/she is prompted to select the account he/she wishes to access from the list of identified accounts.

Users can request loans through the Internet but cannot make withdrawals through the Internet. Users receive a confirmation via U.S. Mail for changes made to their account. If an address change is made, the confirmation is sent to the old address.

The RSC's transactions and Nationwide Retirement Plans' data are protected with a combination of routers, servers, network firewalls, and transaction encryption methods. The Nationwide Information Security Policy contains configuration standards for servers, firewalls and routers. A penetration test is performed at least annually to identify network vulnerabilities and network intrusion detection is used to monitor the servers that host the I-Media applications (RSC).

System Backups

The application owners and business management determines the backup schedule for each application commensurate with the risk of data loss based on the users' needs and criticality of the system. Operations personnel are responsible for ensuring that the backup schedule that is established is executed. Backup procedures have been documented which include processes for adding new backups, scheduling backups, and monitoring of backup jobs. If a scheduled backup job abends, the monitoring system automatically generates a problem ticket. The operations personnel then take necessary action to resolve the issue.

Approximately 95 percent of backup jobs are stored on a de-duplicated disk storage system. Offsite copies are automatically replicated to the reciprocal data center to provide an offsite copy. The remaining 5 percent of backup jobs are written to local SAN disk and then duplicated to two copies of tape. The primary copy is stored in a robotic tape silo in the primary data center. The second copy is transmitted to the remote reciprocal data center over secure links and written into a duplicate robotic tape silo for disaster recovery. Backup tapes maintained on-site are stored within physically secure data centers.

Tierpoint Data Center Management
Annual reviews of Independent reports such as SSAE 16 SOC reports for the Tierpoint Data Center will be conducted by the IT Director for RIA Managed Accounts and Information Risk Management personnel. The review will note any relevant control deficiencies identified in the reports and the IT Director for RIA Managed Accounts will coordinate with the vendo on recommended remediation actions.

Complementary User Entity Controls

The NRS Public Sector Retirement Plan Administration system was designed with the assumption that internal controls would be placed in operation by user entities. The application of such internal controls by user entities is necessary to achieve certain control objectives identified in this report. This section describes certain controls that user entities should consider for achievement of control objectives identified in this report. The complementary user entity controls presented below should not be regarded as a comprehensive list of all of the controls that should be employed by user entities.

Controls should be in place at the User Entity to provide reasonable assurance that:

Ref#	Complementary User Entity Controls	Related Control Objective
UC01	Instructions and information provided to NRS from User Entities should be in accordance with the provisions of the plan agreement, trust agreement or other applicable governing agreements or documents between NRS and the User Entity.	CO11
UC02	Timely written notification of changes to the plan, its objectives and its participants should be adequately communicated to NRS.	
UC03	Timely written notification should be provided of changes to individuals who can authorize NRS to perform activities on behalf of User Entities.	
UC04	Timely review of reports, including tax reports, provided by NRS of account balances and related activity should be performed by the User Entity, and written notice should be provided to NRS of discrepancies as compared to User Entity records.	CO10, CO11, CO14
UC05	Timely notification should be provided to NRS of changes in related parties for purposes of identifying party-in-interest transactions.	
UC06	Authorized Plan Representatives should be responsible for monitoring the timeliness of changes to User Entity accounts.	
UC07	Authorized Plan Representatives should ensure that participant enrollments are properly authorized.	CO7
UC08	Authorized Plan Representatives should maintain adequate physical and logical security controls over on-site terminals with the capability to interface with NRS's systems.	
UC09	Users of the RSC should implement controls surrounding User IDs and passwords established for account use.	CO4, CO8, CO11

Ref#	Complementary User Entity Controls	Related Control Objective
	The payroll officer of each employer should reconcile the contributions actually made with the employer's records (and related billings), notify NRS of any differences, and provide NRS with additional funds where necessary.	

Control Objectives and Related Controls

Nationwide Retirement Services, Inc.'s control objective and related controls are included in Section IV of this report, Control Objectives, Controls and Tests of Operating Effectiveness. Although the control objectives and related controls are presented in Section IV, they are, nevertheless, an integral part of Nationwide Retirement Services, Inc.'s description of its system as described in Section III.

IV. CONTROL OBJECTIVES, CONTROLS, AND TESTS OF OPERATING EFFECTIVENESS

NATIONWIDE FINANCIAL SERVICES, INC. NATIONWIDE RETIREMENT SOLUTIONS, INC. PUBLIC SECTOR RETIREMENT PLAN ADMINISTRATION

Tests of Operating Effectiveness of Specific Controls

KPMG's examination of the operating effectiveness of certain controls of the Company was restricted to the control objectives and the related controls specified by the Company in the "Testing Matrix" within this section and was not extended to procedures in effect at client locations or other controls that may be included in management's description of its system but not listed in the aforementioned matrix.

KPMG's tests of the effectiveness of controls included such tests as were considered necessary in the circumstances to evaluate whether those controls and the extent of compliance with them, were sufficient to provide reasonable, but not absolute, assurance that the specified control objectives were achieved during the specified period. KPMG's tests of the operating effectiveness of specific controls were designed to conclude on the operating effectiveness of controls throughout the specified period, for each of the controls listed in the matrices in Section IV. In selecting particular tests of the operating effectiveness of controls, the following were considered: (a) the nature of the items being tested; (b) the types and competence of available evidential matter; (c) the nature of the control objectives to be achieved; and (d) the expected efficiency and effectiveness of the test. In addition, when using information produced by NRS, we evaluated whether the information was sufficiently reliable for our purposes, including, as necessary, obtaining evidence about the completeness and accuracy of the information and evaluating whether the information was sufficiently precise and detailed for our purposes.

Test procedures performed in connection with determining the operating effectiveness of controls detailed in the matrices in Section IV are described below:

Test Procedure	<u>Description</u>
Inspection	Inspected documents, reports, or electronic files that contain evidence of the performance of the control. This includes, among other things, inspection of client-directed documents, reading of reconciliations and management reports that age and quantify reconciling items, to assess whether balances and reconciling items are properly monitored, controlled and resolved on a timely basis.
Reperformance	Re-applied the relevant control. This includes, among other things, reviewing reconciliations for proper sources of balances, reasonableness of reconciling items and accuracy of mathematical calculations.
Observation	Viewed the application of specific controls by the Company personnel.
Inquiries	Interviewed appropriate the Company personnel about the relevant controls.

The Management Response statements, provided by the management of the Company, included within Section IV, are the responsibility of management of the Company.

Computerized Information Systems

Program and System Software Change Control

Control Objective 1: Controls provide reasonable assurance that new applications and changes to existing systems are authorized, tested, approved, properly implemented, and documented.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	Change and emergency change management standards are documented, and reviewed by management on a periodic basis. The current version is posted on the Nationwide Intranet.	Inspected the Nationwide Change Management Policy to determine that change and emergency change management standards were documented. Inspected the Nationwide intranet to determine that the standards were available to employees. Inspected the standards to determine that the standards were reviewed and any changes were approved by management.	No exception noted.
2.	Systems are configured with separate Development/Test and Production environments.	Inspected the logical environments to determine that the systems were configured with separate Development/Test and Production environments.	No exception noted.
3.	User access is administered such that users with application development roles do not have the ability to migrate application changes into production.		Exception noted. Testing identified one (1) developer from the population of IT promoters, with the ability to promote code changes in the UrbanCode Deployment application.

Management Response: Promoter privileges granted to the user in question were removed on August 24, 2017. Management has validated that access to the development environment for the ID in question is appropriate, and commensurate with the job responsibilities of a developer.

Additional Procedures Performed by KPMG: KPMG obtained and inspected a system generated screenshot from the UrbanCode Deployment application which displayed that inappropriate promoter access was removed from the UrbanCode Deployment application as of August 24, 2017. Additionally, KPMG obtained and inspected a system generated screenshot from the UrbanCode Deployment application which displayed that the user did not use their promoter access for the period 1/1/2017 - 8/24/2017.

	 Management approves new applications and application changes before the changes are promoted into the production environment. 	Inspected a selection of application changes to determine whether management approved each change before it was promoted into production.	No exception noted.
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	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
5.	IT management and, if applicable, the end users test new applications and application changes and provide approvals before the changes are promoted into the production environment.	Inspected a selection of applications changes to determine whether each application change was tested and approved by IT prior to the change being promoted into the production environment.	No exception noted.
6.	Emergency changes follow the standard change management process with an expedited timeframe. Additionally, a special case ID has been established to migrate select emergency changes into the production environment. An e-mail notification is automatically generated and sent to the operations team when the ID is used to access the production environment. Additionally, emergency changes are logged using the enterprise incident management tool.	For a selection of emergency changes, inspected change documentation and/or incident tickets to determine whether changes were documented, approved and access was removed timely. Inspected system configurations to determine whether the special case ID was configured to generate and send an e-mail notification when the ID is used to access the production environment. Inspected lists of users with access to special case IDs to determine whether users were appropriate to have emergency migration access.	No exception noted.

Logical Access

Control Objective 2: Controls provide reasonable assurance that logical access to programs, data, and data transmissions is limited to properly authorized individuals.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	An Information Security policy is documented and includes the following password standards: • 8 characters in length • Required special characters • Expiration after 90 days • 5 failed logon attempts results in lock outs	Inspected the Nationwide Information Security Policy to determine whether enterprise information security standards were documented.	No exception noted.
2.	Applications are configured to require a valid user-ID and password to gain access to the application.	Inspected password configuration settings to determine whether the applications were configured to require a valid user ID and password to gain access.	No exception noted.
3.	Corporate password standards are required to be implemented on applications, databases and operating systems. Standards include minimum password lengths, password expiration, password complexity and account lockout.	Inspected password configuration settings to determine whether the applications, databases and operating systems were configured to meet corporate password standards.	No exception noted.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
4.	Administrative accounts are assigned to a limited number of individuals who require those rights to perform their job duties.	Inspected system-generated listings of application, operating system, and database administrators to determine whether users on the list were authorized and access was consistent with the individual's job function.	Exceptions noted. A) Testing identified that 1 of 10 PMTS administrative IDs belong to inappropriate users who have the ability to add/modify/delete users within the PMTS application. B) Testing identified that 1 of 8 DCDirect administrative IDs belong to inappropriate users who have the ability to add/modify/delete users within the DCDirect application.

A) Management Response: Administrative application access was not removed in a timely manner when the employee changed job positions. Management determined that the transferred employee did not access the PMTS application after their transfer date and the ID was revoked from the PMTS application on September 12, 2017.

Additional Procedures Performed by KPMG: KPMG obtained and inspected the PMTS applications and determined that the employee did not log into the PMTS application past their termination date. Additionally, KPMG obtained and inspected evidence that the PMTS ID was revoked on 9/12/2017.

B) Management Response: Administrative application access was not removed in a timely manner when the employee changed job positions. Management determined that the transferred employee did not access the DCDirect application after their transfer date and the ID was revoked from the DCDirect application on August 31, 2017.

Additional Procedures Performed by KPMG: KPMG obtained and inspected the DCDirect application last login date and determined that the employee did not log into the DCDirect application past their termination date. Additionally, KPMG obtained and inspected evidence that the DCDirect ID was revoked on 8/31/2017.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
5.	Generic IDs are registered and assigned a formal ID guardian to help ensure appropriateness and accountability.	Inspected the listing of powerful IDs to determine whether powerful generic IDs were appropriately registered and were assigned an ID guardian.	No exception noted.
6.	A periodic review of privileged accounts is performed to help ensure appropriateness.	Inspected a selection of quarterly application access reviews to determine whether periodic reviews of privileged accounts were performed. Inspected system generated evidence to determine that changes to access permissions noted by management were implemented.	No exception noted.
7.	Management approves new users before the user is granted access to the system.	For a selection of new users, inspected access request forms to determine that management approved the users before access was granted and access was granted appropriately.	No exception noted.
8.	Network access is automatically disabled upon termination. Application accounts not authenticated through active directory are disabled or removed in a timely manner.	Inspected the configuration that automatically disables network access when a user is set as terminated. For a sample of application IDs for terminated employees inspected requests for access removal and inspected application access listings to determine that access was removed timely.	No exception noted.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
9.	Semiannually, management reviews lists of users with access to the applications to determine whether access is limited to authorized individuals and is consistent with the individual's job function.	Inspected a selection of application user access reviews to determine whether management reviewed the list of users with access to the applications on a semiannual basis. Inspected system generated evidence to determine that changes to access permissions noted by management were implemented.	Exception Noted. A. Testing identified that 7 out of 40 users marked for access permission changes by management were not implemented appropriately from the DCDirect and Taxport application. B. Out of 380 reviewers,
			15 were randomly selected. Testing identified 11 of the 15 reviewers sampled did not have the adequate information to thoroughly perform the second quarter IIQ review.
Tax	sport application access for all IDs was revo	plication access for all ID's was revoked on Noven oked on December 5, 2017. G: KPMG obtained and inspected evidence that the	
	oked on November 15, 2017 and the Taxpo		Dedirect id's were
trai for the	ning is needed to ensure adequate informati ward. Actions being implemented to improv	repleted the required review. It was identified that a ion is provided to the reviewers via the IIQ tool to a ve the review process include updating role definiting for all reviewers and assessing the potential real	address this issue going ons that are viewable to
10.	Semiannually, management performs a secondary review of users with access to DCDirect, Taxport, RSC and Tax Calculator applications to determine whether access is limited to authorized individuals and is consistent with the individual's job function.	Inspected a selection of application user access reviews to determine whether management reviewed the list of users with access to the applications on a semiannual basis. Inspected system generated evidence to determine that changes to access permissions noted by management were implemented.	No exception noted.
11.	Server, firewall, and router configuration standards are documented.	Inspected the Nationwide Information Security Policy to determine whether standard configuration policies exist for servers, firewalls, and routers.	No exception noted.

Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
12. Valid user IDs and passwords are required to gain access to the Retail Service Center (RSC). Policy owner access is limited to their individual account.	Observed a user attempt to access the RSC using an invalid user name and password to determine that access was not allowed. Observed a user access the RSC using a valid user name and password to determine that access was allowed and access was limited to their individual account.	No exception noted.
13. Periodically, a third-party penetration test is performed to identify network vulnerabilities. Identified issues are prioritized in terms of risk and addressed accordingly.	Inspected the results of the 2017 Attack and Penetration test to determine whether a third-party penetration test was performed to identify network vulnerabilities. Inspected the prioritization of identified issues in the 2017 Attack and Penetration test to determine whether issues identified were prioritized and addressed.	No exception noted.

Physical Access

Control Objective 3: Controls provide reasonable assurance that physical access to computer equipment, storage media, and program documentation is limited to properly authorized individuals.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	Visitors are required to sign in and out when visiting the DCN and DCE.	Inspected a selection of visitor logs to determine whether they were maintained and utilized to identify and track visitors of the data centers.	No exception noted.
2.	Visitor access to the DCN and DCE requires data center management approval.	For a selection of daily visitor logs, inspected the corresponding Request For Change (RFC) documentation to determine whether management approved the visitor's data center access.	No exception noted.
3.	Management reviews the list of users with access to the DCN and DCE on a monthly basis to help ensure that access is limited to appropriate personnel based on job function.	Inspected a selection of monthly access reviews to determine whether management reviewed the list of users with access to the DCN and DCE.	No exception noted.
4.	Surveillance cameras and key card scanners are utilized to actively monitor entrances to the DCN and DCE.	Observed the DCN and DCE to determine that entrances are restricted via keycard scanners and that surveillance cameras monitor each entrance.	No exception noted.

System Backups

Control Objective 4: Controls provide reasonable assurance that administrative and operational procedures are established within the systems operations group to provide for complete processing of jobs and backup and retention of systems data.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	Backups for key applications and databases are performed on a defined timeframe in order to mitigate the risk of data loss.	Inspected system-generated screenshots of the backup schedule, and inspected evidence of the last successful backup for the application to determine that backups are configured to run on defined timeframes.	No exception noted.
2.	Critical jobs are scheduled utilizing job scheduling software and only appropriate users have update access to the job schedule software.	Inspected security files for job scheduling tools to determine whether users with access to modify the jobs were appropriate.	No exception noted.
3.	Job runs are logged and reviewed and appropriate procedures are in place in the event of an abnormal end (abend).	For a selection of job failures, inspected corresponding job incident tickets to determine whether the failed job had a resolution time within 7 days.	No exception noted.
4.	Data Center operations are performed as prescribed in policies and procedures which include the use of shift turnover logs to record all open issues and actions taken during each shift.	Inspected employee shift turnover logs for the Enterprise Command Center (ECC) for a selection of days to determine that job abends were documented. Inspected screenshots of the ECC Quickr site to determine that it contained a library of ECC operations procedures.	No exception noted.

Retirement Plan Administration - New Plan Setup

Control Objective 5: Controls provide reasonable assurance that new plans are approved by authorized individuals and processed accurately.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	authorizes a Pre-Production Checklist verifying required new plan documents are in good order, including that the document has been signed by the client and Nationwide personnel.	For a selection of new plan additions entered onto DCdirect, inspected the corresponding plan documents to determine that an authorized person requested the new plan as evidenced by the Plan Analyst on the Pre-Production Checklist.	No exception noted.
		For a selection of new plan additions entered onto DCdirect, compared the plan type, internal plan ID, and the legal name from the plan documents to that entered onto DCdirect to determine whether the information matched.	
2.	A secondary Plan Analyst performs a QC review using Pre-Production Checklist also verifying required new plan documents are in good order.	For a selection of new plan additions entered onto DCdirect, inspected corresponding Pre-Production Checklists to determine whether a secondary Plan Analyst performed a QC review of the Checklist for good order prior to plan establishment on DCdirect.	No exception noted.
3.	New plan setup documents are passed to a Manager for final verification and sign-off. Post review, the Manager completes and authorizes the Pre-Production Setup Checklist verifying required new plan documents are in good order.	For a selection of new plan additions entered onto DCdirect, inspected corresponding Pre-Production Setup Checklists to determine whether a Manager performed overall management review of the Checklist for good order prior to plan establishment on DCdirect.	No exception noted.

Retirement Plan Administration – Fund Release

Control Objective 6: Controls provide reasonable assurance that changes to funds are accurately documented, approved and tested as part of a corresponding fund release.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	Fund addition/change activity is documented and approved via email within the Fund Release Work Request Tool (WRT) by the Directors of Relationship Management (DRMs) or the Plan Relationship Manager.	For a selection of fund releases, inspected emails to determine whether the fund additions/changes included within the fund release were documented and approved within the Fund Release Work Request Tool prior to the fund release date.	No exception noted.
2.	Fund additions are documented and QC reviewed for accuracy upon being entered onto DCdirect.	For a selection of new fund releases, inspected the corresponding Fund Release Scope Document to determine whether fund additions were authorized and QC reviewed by an independent processor prior to the fund release date.	No exception noted.
		For a selection of fund additions included in a Fund Release, compared the fund ticker, plan name and internal ID that were entered onto DCdirect to the Fund Release Scope Document to determine whether the information matched.	
3.	Fund changes are tested by reconciling inflows and outflows immediately after the funds are transferred, and approved as part of the fund release process.	For a selection of new fund releases, inspected corresponding DCdirect 1305P (Financial Transaction Register by Plan) reports on the day after the fund release to determine that reconciliations of inflows and outflows between funds were performed.	No exception noted.

Retirement Plan Administration – Participant Enrollments

Control Objective 7: Controls provide reasonable assurance that new participant enrollments are approved by authorized individuals and processed accurately.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	Participant Agreement (PA) enrollment forms are completed and authorized by the participant.	For a selection of new participant enrollments on DCdirect, inspected Participant Agreement (PA) forms to determine whether they were completed and authorized by the enrolling participant. For a selection of new participant enrollments on	No exception noted.
		DCdirect, compared the participant name and address on the Participant Agreement (PA) enrollment form to the name and address listed on DCdirect to determine whether the information matched.	
2.	Participant Agreement (PA) enrollment forms are reviewed by a New Business Team member and secondary QC reviewed by an independent New Business Team member for "good order" data	For a selection of transactions (enrollments and non-financial hard copy changes), inspected the NRS Workflow tool to determine whether participant data entered onto DCdirect by a New Business Team member was in good order as evidenced by electronic approval.	No exception noted.
	entry.	Inspected DCdirect configurations to determine that the system was configured to flag a sample of transactions for secondary QC.	
3.	DCdirect edit checks prevent enrollments from being processed with an invalid SSN, address format, enrollment attempts over 100%, and to an invalid or terminated account.	Observed the entry of four transactions (invalid SSN, invalid address, enrollment attempt over 100% and an invalid or terminated account) to determine whether DCdirect edit checks rejected the transactions.	No exception noted.
4.	Nightly, DCdirect jobs are run that generate application confirmation notification back to the participant and plan sponsor.	Inspected the IBM Tivoli Maestro job schedule to determine that a program is scheduled to run which extracts participant enrollments from DCdirect and systematically prepares confirmations to participants and plan sponsor of the enrollment.	No exception noted.
		Inspected an enrollment request to determine whether a notification was generated and available to be sent to the participant and plan sponsor per the automated job schedule.	

Retirement Plan Administration – Participant Account Maintenance

Control Objective 8: Controls provide reasonable assurance that participant changes (non-monetary) are properly authorized and accurately recorded.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	Daily, DCdirect jobs are run that aggregate participant changes (address changes and beneficiary changes) for confirmation notification back to the participant via standard mail.	Inspected the IBM Tivoli Maestro job schedule to determine that a program is scheduled to run which extracts participant changes from DCdirect and systematically prepares confirmations to participants of changes. Inspected an address and beneficiary change to determine whether a notification was generated and available to be sent to the participant per the automated job schedule.	No exception noted.
2.	Nightly, a Purchase Suspense Report is produced from DCdirect for improperly processed participant maintenance transactions and reviewed by a New Business Processor.	For a selection of days, inspected the Purchase Suspense Report and corresponding emails to determine whether improperly processed participant maintenance transactions were reviewed by a New Business Processor. For a selection of improperly processed transactions, inspected the NRS Workflow tool to determine whether transaction items were researched and/or cleared in a timely manner.	No exception noted.
Re	ceived via Hard Copy (Mail or Fax)		
3.	For changes to participant accounts received via hard copy, requests are reviewed by a New Business Processor for proper participant authorization and QC reviewed by an independent New Business Processor.	For a selection of days, inspected the NRS Workflow tool for New Business transactions (enrollments and financial and non-financial hard copy changes) to determine whether participant data entered onto DCdirect by a New Business Team member was QC reviewed by an independent New Business Team member for "good order" data entry.	No exception noted.
Ele	Electronic Exchanges		
4.	For changes to participant accounts received via the RSC, the application first requires the participant to establish an account profile with a user name and password.	Observed a participant attempt to access the RSC using an invalid user name and password to determine that access was not allowed.	No exception noted.

Retirement Plan Contributions/Receipts

Control Objective 9: Controls provide reasonable assurance that contributions/receipts are recorded completely and accurately.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	Daily, the Recon Team reconciles deposits processed on DCdirect versus what was processed on the General Ledger. Month end reconciliations are reviewed and approved by Management.	For a selection of months, inspected a selection of month-end "40 CASS" reports to determine whether the reconciliations were performed and NRS management provided authorized approval of the reconciliation.	No exception noted.
2.	The NRS Open Item Report log, which is used to track unprocessed items in suspense longer than 60 days, is communicated to NRS Management on a weekly basis.	For a selection of weeks, inspected the weekly NRS Open Item Report and corresponding emails to determine whether suspense items over 60 days were communicated to NRS Management. For a selection of suspense items, inspected weekly suspense ledgers to determine whether suspense items were being appropriately researched and/or cleared in a timely manner.	No exception noted.
3.	Weekly, a random sample of payroll contributions are QC reviewed for the previous week's transactions.	For a selection of participant payroll contributions compared the payroll amount entered in DCdirect to the incoming check (from the Plan Sponsor) and supporting participant detail to determine whether the information matched.	No exception noted.
		For a selection of participant payroll contributions, inspected the NRS Workflow tool to determine whether a payroll analyst QC reviewed the contribution data entered onto DCdirect as evidenced by electronic approval.	

Retirement Plan Withdrawals/Disbursements

Control Objective 10: Controls provide reasonable assurance that withdrawals/disbursements are properly authorized, completely and accurately processed, and recorded in a timely manner.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results
1.	A Distributions Processor reviews Benefit Payout Option Forms received from participants for good order prior to the distribution being entered onto DCdirect.	For a selection of participant distributions, inspected Benefit Payout Option Forms to determine whether each withdrawal option selected was reviewed for good order by a Distributions Processor prior to the withdrawal being entered onto DCdirect.	No exception noted.
2.	A secondary Distributions Processor QC reviews Benefit Payout Election Forms received from participants for good order prior to the requested distribution being sent to the participant.	For a selection of participant withdrawal requests, inspected NRS Workflow to determine whether the participant withdrawal request was QC reviewed for good order by a secondary Distributions Processor prior to the requested distribution being sent to the participant.	No exception noted.
		For a selection of participant distributions, compared the participant distribution amount requested on the Payout Election Form to the distribution amount entered onto DCdirect to determine whether the amounts matched.	
Bei	neficiary Withdrawal due to death o	of participant	
3.	Death payouts are completed and authorized by a participant beneficiary prior to payout, with those payouts being QC reviewed	For a selection of death payouts, inspected the beneficiary claim form to determine whether the beneficiary authorized payout and the beneficiary signature matches the beneficiary name on DCdirect.	No exception noted.
	by independent Distributions Processors for "good order" data entry.	For a selection of death payouts, inspected Open Image workflow screens to determine whether the death payout was QC reviewed by a secondary Processor as evidenced by their electronic user ID.	
Dis	tribution Review		
4.	A daily balancing reconciliation between aggregate participant withdrawals listed in DCdirect and aggregate participant distributions to be initiated within PMTS is performed by a Distributions Team member and QC reviewed by a Distributions Manager.	Inspected a selection of daily balancing approval sheets to determine whether aggregate participant distributions within PMTS were reconciled to aggregate participant distributions listed in DCdirect by a Distributions Team member and QC reviewed by a Distributions Manager.	No exception noted.
5.	A quarterly review of access and distribution limit authority to PMTS is conducted by user and IT management. Exceptions are identified, investigated and resolved timely.	Inspected a selection of PMTS user access reviews and determined that management, on a quarterly basis, reviewed the list of users with access to the application and their respective distribution limit authority.	No exception noted.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results		
6.	The NRS Open Item Report log, which is used to track unprocessed items in suspense longer than 60 days, is communicated to NRS Management on a weekly basis.	For a selection of weeks, inspected the weekly NRS Open Item Report and corresponding emails to determine whether suspense items over 60 days were communicated to NRS Management.	No exception noted.		
	Management on a weekly basis.	For a selection of suspense items, inspected weekly suspense ledgers to determine whether suspense items were being appropriately researched and/or cleared in a timely manner.			
Wi	thdrawal Payment (disbursement) v	ria Manual Check			
7.	A Distributions Agent compares manual payment information entered into PMTS to the disbursement request for accuracy and authorization and evidences the review by signing the Request Form.	For a selection of participant withdrawals, inspected disbursement payments to determine whether they were authorized by an agent (with an adequate distribution limit authority) on the Nationwide Distributions Team.	No exception noted.		
8.	A Treasury Services Accountant performs a review of manual payment requests by comparing payment information entered into PMTS to the disbursement request for accuracy and reviews the approving agent to verify they have an adequate approval limit for the request. The Treasury Services Accountant evidences the review by signing the Request Form.	For a selection of participant withdrawals, inspected disbursement requests to determine whether they were authorized and QC reviewed by a Treasury Services Accountant - as an acting Distributions Manager. For a selection of participant withdrawals, compared the manual distribution amount to the amount in PMTS to determine whether the distribution was entered correctly into PMTS.	No exception noted.		
Wi	thdrawal Payment (disbursement) v	via Operations Check			
9.	A Print Operator performs a daily comparison of the actual number of check sheets fed to the expected check sheet fed number and evidences review by authorizing the Balancing Report.	For a selection of days, inspected Balancing Reports to determine whether the Report was authorized by a Print Operator and actual sheets fed and printed amount total matched to the expected sheets fed and expected printed amount total.	No exception noted.		
Wi	Withdrawal Payment (disbursement) via ACH or Wire				
10.	The PMTS system is configured with an automated workflow that requires electronic approval of manual ACH participant withdrawals, by authorized management personnel. Based upon the size of the disbursement and authorized approval level.	Inspected the PMTS system workflow associated with a check disbursement to determine that users who are set up with certain dollar limits are only able to view and approve PMTS distribution amounts less than or equal to the dollar amount they are assigned. For each approval authority level, observed a selection of users accessing payment screens and determined that users could not view or approve payments greater than their approval limit.	No exception noted.		

Retirement Plan Administration – Exchanges/Investment Election Changes

Control Objective 11: Controls provide reasonable assurance that exchanges/investment changes are properly authorized and accurately recorded.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results		
1.	Daily, DCdirect jobs are run that aggregate exchanges, and deferral allocation changes for confirmation notification back to the participant via standard mail.	Inspected the IBM Tivoli Maestro job schedule to determine that a program is scheduled to run which extracts participant changes from DCdirect and systematically prepares confirmations to participants of changes/exchanges.	No exception noted.		
		Inspected an exchange and deferral allocation change to determine whether a notification was generated and available to be sent to the participant per the automated job schedule.			
Re	ceived VIA Hard Copy (Mail or Fax	x)			
2.	For changes to participant accounts received via hard copy, requests are reviewed by a New Business Processor for proper participant authorization and QC reviewed by an independent New Business Processor.	For a selection of days, inspected the NRS Workflow tool for New Business transactions (enrollments and financial and non-financial hard copy changes) to determine whether participant data entered onto DCdirect by a New Business Team member was QC reviewed by an independent New Business Team member for "good order" data entry.	No exception noted.		
Ele	Electronic Exchanges				
3.	For changes to participant accounts received via the RSC, the application first requires the participant to establish an account profile with a user name and password.	Observed a participant attempt to access the RSC using an invalid user name and password to determine that access was not allowed.	No exception noted.		
4.	When utilizing the IVR system, the participant is prompted to enter his/her SSN or Account Number and PIN before accessing any account information or performing any transactions.	Observed both a successful and unsuccessful attempt to access the IVR to determine whether the participant was prompted to enter their SSN and PIN before accessing account information or performing transactions.	No exception noted.		
5.	For exchange and investment election changes received via telephone, a QC review is completed on all exchanges greater than or equal to \$100,000.	For a selection of exchange and investment election changes greater than or equal to \$100,000, inspected the service request to determine whether a QC review was performed.	No exception noted.		

Investment Transactions

Control Objective 12: Controls provide reasonable assurance that investment transactions are recorded accurately and completely.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results of Tests
1.	Daily, an Access report is produced from DCdirect (and other product administration systems that have an outbound interface with BUYS). Total balances for each investment fund from DCdirect (and other product administration systems) are manually compared to inbound information from BUYS. Variances are identified, reviewed and resolved on a daily basis by an Accounting Supervisor.	Inspected a selection of Buy/Sell Balancing Worksheets to determine whether the staff accountant reconciled buy/sell data interfaced between DCdirect and BUYS and resolved any differences. For a selection of reconciliations, compared the BUYS amount on the Buy/Sell Balancing report to the BUYS Summary Totals report and compared a selection of DCdirect amounts to the Buy/Sell Balancing report to determine whether the amounts on the reconciliations matched the source system.	No exception noted.
2.	Monthly, a staff accountant in the Portfolio Accounting Department manually reconciles Nationwide share balance totals in VIDS to ending-month share balance totals provided on monthly fund statements. This reconciliation shows share balance variances being researched and reconciled by Portfolio Accounting. This reconciliation is evidenced via the Accounting Supervisor signature.	Inspected a selection of reconciliation packets of the fund share balance total per the fund house and VIDS to determine whether they were completed and reviewed, and variances above the tolerable threshold were identified and resolved. For a selection of funds, compared the market values between monthly fund statements and the VIDS Share Balances Report to determine whether the amounts on the reconciliation matched the source. For investments held at unaffiliated and affiliated custodians, KPMG directly confirmed with the fund house or unaffiliated transfer agent December 31, 2017 fund share balance totals to determine recorded fund share balances matched the custodians' records.	No exception noted.
3.	Monthly, a staff accountant in the Portfolio Accounting Department manually reconciles the net assets of each investment fund per VIDS to the corresponding net assets for the investment fund per DCdirect and other product administration systems. Variances are identified, reviewed and resolved on a daily basis by an Accounting Supervisor.	Inspected a selection of summary worksheets to determine whether a staff accountant reconciled the net assets from the DCdirect to VIDS and resolved any differences. For a selection of reconciliations compared a selection of VIDS and DCdirect amounts to the summary worksheets to determine whether the amounts on the reconciliations matched the source.	No exception noted.

Unit Valuation

Control Objective 13: Controls provide reasonable assurance that variable and fixed investment option unit values are recorded accurately and completely, and that income from variable and fixed investment options is recorded accurately and timely.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results of Tests
1.	Monthly, a staff accountant in the Portfolio Accounting Department manually reconciles Nationwide share balance totals in VIDS to ending-month share balance totals provided on monthly fund statements. This reconciliation	Inspected a selection of reconciliation packets of fund share balance total per the fund house and VIDS to determine whether they were completed and reviewed, and variances above the tolerable threshold were identified and resolved.	No exception noted.
	shows share balance variances being researched and reconciled by Portfolio Accounting. This reconciliation is evidenced via the Accounting Supervisor signature.	For a selection of funds, compared the market values between monthly fund statements and the VIDS Share Balances Report to determine whether the amounts on the reconciliation matched the source.	
		For investments held at unaffiliated and affiliated custodians, KPMG directly confirmed with the fund house or unaffiliated transfer agent December 31, 2017 fund share balance totals to determine whether recorded fund share balances matched the custodians' records.	
2.	Monthly, a staff accountant in the Portfolio Accounting Department manually reconciles daily dividend income totals in VIDS to daily dividend income totals obtained from the fund house. This reconciliation reflects daily dividend income differences over \$500	Inspected a selection of reconciliation packets of daily dividend income totals in VIDS to fund house daily dividend income totals to determine whether reconciliations were completed and reviewed and variances above the tolerable threshold were identified and resolved.	No exception noted.
	researched and reconciled by Portfolio Accounting. This reconciliation is evidenced via Accounting Supervisor Signature.	For a selection of reconciliations and funds, compared the daily dividend income totals to VIDS and to fund house statements to determine whether the amounts on the reconciliation matched the source.	
3.	Quarterly, the AVP Retirement Plan Actuary performs a reasonableness review of significant income statement items for the Private Sector and Public Sector Retirement Plans. Current quarter account balances are compared to actual from same year prior quarter, as well as quarter forecast. If actual performance is outside of expectations by more than 10%, additional investigation is performed.	Inspected a selection of quarterly earnings reviews to determine whether an actuary performed a reasonableness review of significant income statement items compared to both the forecast and prior quarter actual amounts, and evidenced authorization. For a selection of quarterly earnings reviews, recalculated both the forecast and prior quarter actual amounts to determine whether those amounts on the reasonableness review were mathematically accurate.	No exception noted.

	rols Provided by tor Retirement Plans	Tests Performed	Results of Tests
Portfolio Acc manually reco each investme corresponding investment fu product admir Variances are	aff accountant in the counting Department onciles the net assets of ent fund per VIDS to the g net assets for the and per DCdirect and other nistration systems. Experiments the identified, reviewed and adaly basis by an supervisor.	Inspected a selection of summary worksheets to determine whether a staff accountant reconciled the net assets from the DCdirect to VIDS and resolved any differences. For a selection of reconciliations compared a selection of VIDS and DCdirect amounts to the summary worksheets to determine whether the amounts on the reconciliations matched the source.	No exception noted.

User Entity Reporting

Control Objective 14: Controls provide reasonable assurance that participant and tax statements are accurate.

	Controls Provided by Public Sector Retirement Plans	Tests Performed	Results		
Sta	Statements				
1.	The NRS Statement Unit Team performs a quarterly audit of outgoing participant statements and evidences review by preparing a Participant Statement Audit Checklist. Completed checklists are reviewed by the Unit Manager/Lead prior to release.	For a selection of quarterly statement audits, inspected corresponding Participant Statement Audit Checklists to determine whether quarterly participant statement audits were performed and QC reviewed by the NRS Statement Unit team.	No exception noted.		
Ta	Taxes				
2.	Taxpayer information is entered onto the record keeping systems by processors from the participant's tax form or, in the case where no tax form is received, the tax information is defaulted by the system based on the withdrawal request.	For a selection of quarterly statement audits, inspected corresponding Participant Statement Audit Checklists to determine whether statement audits were performed and QC reviewed by the Statement Unit team.	No exception noted.		
3.	Monthly, participant tax errors are identified, and cleared prior to year-end tax form generation.	Inspected system-generated screenshots from the Taxport application displaying tax errors existing prior to year end and compared to the Taxport application tax errors after year end to determine that errors identified were cleared prior to 1099 tax form generation.	No exception noted.		