

# **New Jersey USF Program**

## **Data Tracking System Specifications**

### **Final Report**

#### **Introduction**

The New Jersey Board of Public Utilities created the Universal Service Fund (USF) to help low- and fixed-income residents pay for electric and natural gas service. The BPU staff is responsible for developing policies and procedures for implementation of the USF program. As part of those responsibilities, the staff is developing a Data Tracking System that can furnish the information that the BPU needs to manage and evaluate the effectiveness of the USF program.

The USF Working Group is assisting BPU staff in developing USF policies and procedures. The Working Group consists of the seven electric and gas distribution companies, the Ratepayer Advocate, state agencies, and other interested parties. The Working Group serves as a forum for discussion of the appropriateness and feasibility of alternative procedures. The Working Group was consulted extensively in the development of these Data Tracking System specifications.<sup>1</sup>

This document furnishes a draft set of specifications and an implementation plan for the Data Tracking System. The specifications identify the information needed for three different purposes: operations, regulatory oversight, and evaluation. The specifications identify the questions or issues addressed in each area, the specific data needed, the potential sources of those data, and the proposed system for data access and reporting. The implementation plan identifies the process by which detailed specifications will be developed and the schedule for implementing different components of the Data Tracking System.

#### **Regulatory and Operational Information Requirements**

The Universal Service Fund was established by a BPU Order dated 3/20/2003. In that Order, the BPU identified the need for information to be developed on the USF program. The orders states that “during the first full year of implementation of the USF, staff will closely monitor the program.” It further states that with “real data on the USF” the Board will be able to “determine any necessary program modifications.”

In the Order, the Board recognized the importance of the Working Group to the process when it ordered that the “working group meetings will continue during the first year of implementation and periodically thereafter.” The Board also explicitly referred to the development of “an Oracle-based system for LIHEAP, Lifeline, and USF” by OIT.

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<sup>1</sup> APPRISE Incorporated worked with BPU staff and the members of the USF Working Group to develop the Data Tracking System Specifications. APPRISE staff led a discussion of the Data Tracking System at a USF Working Group meeting, met individually with each of the parties affected by the Data Tracking System, and contacted staff from other state utility commissions to discuss the tracking systems used in other jurisdictions.

The order included a number of references to information needed to track the USF program.

- Program Costs – In paragraph 17, the Order states that “the program Administrator will also monitor projected expenditures and determine if they are likely to exceed the budget in the given year” and that “all costs related to USF will be subject to further review and adjustment by the Board’s Division of Audits.”
- Payment Problems – In paragraph 18, the Order states that the Working Group will “determine reporting and review mechanisms that will provide useful data about USF participants, and all residential customers as a whole.” The Order explicitly indicates that the useful data should include information on service disconnections, deferred payment arrangements, and a statistic that gives information on the number of bills USF customers are behind in making payments.
- Program Statistics – In paragraph 19, the Order states that the information should be develop on the “number of customers that receive benefits” as well as “how funds and dollars are spent on administrative expenses.”
- Uncollectibles – In paragraph 20, the Order states that future base rate cases will “determine the prudence and reasonableness of costs, appropriate level of recovery, and the effect of uncollectibles due to the inclusion in USF of an arrearage component that will be collected through the SBC.” While paragraph 23 states that “all issues dealing with natural gas uncollectibles will be addressed in the companies’ base rate proceedings,” it is important for the BPU to have timely estimates of whether the implementation of the USF program has changed utility costs independent of ratemaking proceedings so that they can assess the USF program in terms of its long run cost implications.

The BPU Order dated 6/18/2003 included additional information on reporting requirements. These requirements included:

- Utility Reports – Quarterly reports by the utilities regarding USF and Lifeline operations.
- DHS/OIT Cost Reports – Quarterly reports by DHS and OIT regarding administrative costs.
- DHS/OIT Program Operation Reports – Quarterly reports by DHS regarding operational data on USF applications, complaints, approved benefits, and other information.

In addition to the specific information required by the BPU Orders, other considerations guided the development of the proposed Data Tracking System.

- Program Operations – Interviews with program operations staff identified key information that is needed to facilitate program operations.

- Program Management – The Working Group has identified a number of ad hoc reports that have been important in managing the USF program.
- Program Evaluation – The experience of APPRISE staff in conducting program evaluations was used to identify potential evaluation issues and procedures.

The proposed Data Tracking System is intended to fulfill the information requirements outlined by the BPU USF Orders, as well as information requirements that have been identified as a result of the program implementation process.

## **Overview of Data Tracking System Structure**

The proposed Data Tracking System is divided into three components – Program Operations, Regulatory Oversight, and Program Evaluation. Each component differs in terms of the issues addressed, type of data needed, the source of the data, and the data accessibility format.

- Program Operations – This refers to the information that is needed to enroll program participants, set benefit levels, and respond to participant and nonparticipant questions. Ideally, the Data Tracking System would furnish direct access to these data.
- Regulatory Oversight – This refers to the information that is needed by the BPU to fulfill its fiscal responsibility to ratepayers to ensure that the program is operating according to program guidelines. It is expected that these data would be obtained from periodic reports, as well as through ad hoc queries of the Data Tracking System.
- Program Evaluation – This refers to the information that is needed by the BPU to understand the efficiency and effectiveness of all aspects of the USF program procedures and operations, as well as the impact of USF program benefits on participants, utilities, and ratepayers. These data would be developed over time through special studies of program operations, billing and payment statistics, and participant outcomes.

There is an interaction among the components of the Data Tracking System. For example, the program operations data will be used in developing reports that are needed for regulatory oversight. The program evaluation will identify data that is needed for program operations and performance indicators that will become part of the normal regulatory oversight reporting. The separation of the system into components merely helps to clarify the requirements associated with a specific set of information.

## **Program Operations**

The USF program uses information on individual participants to assess program eligibility and determine program benefits. Those data will need to be kept in a database that is accessible to program operations staff to resolve questions and/or issues that arise with respect to a specific customer's USF benefit.

### ***Information Goals:***

There are two information goals in this component of the data tracking system.

- Eligibility and Benefit Determination: DHS and the utilities must work together to ensure that households are assigned USF benefits in accordance with the USF program specifications.
- Responding to Participants and Nonparticipants: DHS and the utilities must be able to respond to participant and nonparticipant inquiries regarding program eligibility, program benefits, program responsibilities, and payment responsibilities.

In terms of eligibility and benefit determination, each party has a responsibility to develop and maintain certain pieces of information. DHS/OIT is responsible for maintaining information on household income, household size, and LIHEAP and/or Lifeline program participation. The utilities are responsible for estimating annual energy bills for the household. Both are responsible for matching LIHEAP/Lifeline program participants with specific utility accounts and keeping track of USF benefits.

Once benefits have been distributed, participants and nonparticipants can be expected to contact DHS and the utilities with questions about the program. These are likely to include:

- 1) Client Enrollment and Benefit Determination
  - a. Is a household eligible for USF?
  - b. Is a household enrolled in USF?
  - c. What is the household's USF benefit?
- 2) Client Rights
  - a. How can the USF eligibility determination be appealed?
  - b. How can USF benefit determination be appealed?
  - c. How does one make the USF benefit portable?
- 3) Client Responsibilities
  - a. What are the participant's reenrollment responsibilities?
  - b. What are the participant's utility payment responsibilities?
  - c. What are the household's other program responsibilities?
- 4) Agency Information
  - a. What is a participant's benefit status with respect to LIHEAP?
  - b. What is a participant's benefit status with respect to LIFELINE?
  - c. What is a participant's status with respect to WAP?
  - d. What is a participant's status with respect to Comfort Partners?
- 5) Utility Information
  - a. Who is the customer of record at a specific address?
  - b. What is the customer's estimated annual usage?
  - c. What is the customer's outstanding arrearage?
  - d. What are the requirements and schedule for arrearage forgiveness?

The Data Tracking System must enable client service staff and utility customer service representatives to respond to these questions in a timely way. This implies that the data must be in an online system.

### ***Proposed Data Tracking System Structure***

In order to meet the ambitious program implementation schedule, the program eligibility and benefit determination process was completed through a series of ad hoc computer-based and manual procedures. As a result, the information that was used to set program benefits is not directly accessible in the way that would be required for access by client service staff.

In accordance with the Board Order, OIT is in the process of developing an Oracle based system for LIHEAP, Lifeline, and USF that supports the USF eligibility and benefit determination process. That system will store information on program participants and make those data accessible to USF client service staff. Components of that database could be made accessible to utility customer service staff. However, current plans do not include this data access option. Further, there are significant client confidentiality issues that would need to be addressed to implement a data access procedure.

Each utility has a customer information system. These systems have been updated to identify USF participants and to code USF benefits as a separate transaction type. [Note: Each utility has made changes necessary to implement the USF benefit crediting process. Additional changes may be required to support customer service staff and to develop reports.] In response to recent decisions on arrearage forgiveness, additional information will have to be recorded for forgiveness credits. Each utility will need to develop the ability to communicate with and respond to USF customers regarding their payment responsibilities and their arrearage forgiveness opportunities.

We considered two options for the Data Tracking System for Program Operations. The first alternative is to integrate all functions in one system operated by the program administrator. The second alternative is to allow each organization to manage the data that is generated from its system. [The USF program administrator has information on eligibility and benefit determination. The utility has information on USF customer payments, benefits, arrearages, and arrearage forgiveness credits.]

If there are two separate systems, procedures will have to be established to communicate changes in the status of participants that occur on the program administrator side (e.g., failure to recertify for the program) or on the utility side (e.g., customer moved from service territory).

### **PROPOSED APPROACH**

In the short run, we recommend implementing a two-part system in which the program administrator is responsible for one set of information and the individual utilities are responsible for another. The development of an integrated USF information system that captured both program data and utility payment data would require extensive communication between OIT and each utility regarding complex utility data structures. Furthermore, extensive training would be required for the program administrator client service staff to understand how to interpret utility company data.

However, even with separate systems, information sharing options could be pursued. For example, some of the utilities have developed web-based systems that allow social service agencies to obtain information on customer payments and arrearages. Implementing those procedures might make program operations more efficient and facilitate the “one-stop shopping” system discussed in the Board Order.

Using the proposed approach, responsibilities would be demarcated in the following way.

- 1) The program administrator is responsible for working with the other state agencies and the utilities to obtain the information that is needed to determine eligibility for the USF program and to set USF program benefits.
- 2) The program administrator is responsible for having information that will allow client service representatives to explain the participant’s eligibility and benefit determination status, including data used for income, household size, annual energy bill, and program participation.
- 3) The program administrator is responsible for having information that will allow client service representatives to explain the participant’s responsibility with respect to maintenance of program eligibility, including program enrollment date and program recertification requirements.
- 4) Each utility is responsible for having information that allows customer service representatives to explain to customers the status of their USF account, including the amount of their retail bill, the amount of energy assistance credited, the amount of USF benefits credited, and any outstanding USF balances.
- 5) Each utility is responsible for having information that allows customer service representatives to explain to customers the status of their pre-USF arrears, including the amount of the original arrears, the amount of arrearage forgiveness, the remaining arrears, and the payments that are required to obtain forgiveness for the remaining arrears. [Utility members of the USF Working Group note that achievement of this level of responsiveness would require additional training for customer service representatives.]
- 6) USF program operations staff at DHS and the utilities will inform each other when there is a change in the status for an individual program participant.

Access to utility payment records will depend on the mission outlined for the program administrator client service staff and the capabilities of the utility’s information system. JCPL has been successful in setting up this relationship on other programs and reports that it is an effective approach to client service.

***Proposed Data Elements, Source(s), and Tracking System Component:***

The following table lists each Data Tracking System component with the data elements it contains, the source(s) of the data element, and any notes on the definition of the data element.

**Table 1: Operations Data Tracking System Data Elements**

<b>Data System Component</b>	<b>Data Element</b>	<b>Source(s)</b>	<b>Notes</b>
OIT Database	Household SSN	Application	
	Address	Application	
	Contact information	Application	
	Account number	Application / Utility	Need number for gas company, electric company, and other fuel vendor. A standardization and verification process is being developed by OIT and the utilities
	Household income	Application	
	Household size	Application	
	Estimated electric bill	Electric utility	
	Electric arrearage at enrollment	Electric utility	Must be added to OIT business requirements
	Estimated gas bill	Gas utility	
	Gas arrearage at enrollment	Gas utility	Must be added to OIT business requirements
	Combination bill	Combination utility	
	Combination arrearage at enrollment	Combination utility	Must be added to OIT business requirements
	USF gas benefit	OIT computation	
	USF electric benefit	OIT computation	
	Excess energy bill	OIT computation	Amount of need above maximum benefit
	Enrollment date	OIT database	Needed for reenrollment
	Benefit program application status	OIT database	Needed for reenrollment
Refusal of LIHEAP or Lifeline		Must be added to OIT business requirements	
Individual Utility Customer System	Estimated bill	Customer Information System (CIS)	Electric, gas, or combination
	Preprogram arrears	CIS	Electric, gas, or combination
	USF benefit	OIT database	
	LIHEAP benefit	OIT database	
	Lifeline benefit	OIT database	
	Customer bills	CIS	
	Customer payments	CIS	
	Postprogram arrears	CIS	

## Regulatory Oversight

The BPU has a fiscal responsibility to track the USF program costs and the components of those costs. Program statistics on participants and the expected benefits to participants are needed to project annual USF costs for participant benefits. Information on activities by the program administrator and the utilities in support of USF program operations are needed to project the administrative costs of the program. Information on the utility cost reductions associated with USF are needed to estimate the net cost of the USF program.

### **Information Goals:**

The following types of information are needed by the BPU to fulfill its fiscal responsibility with respect to the USF program. Many of these were explicitly listed in Board USF Orders. Others were suggested by members of the Working Group or were included in the Pennsylvania reporting requirements and appeared to support prudent program management.

- 1) Program Enrollment Levels
  - a. How many households are enrolled in USF?
  - b. What is the distribution of households by electric and gas USF benefits?
  - c. What number of USF participants had preprogram arrears?
  - d. What was the amount of preprogram arrears for USF participants?
  
- 2) Program Budget and Costs
  - a. What is the projected cost of the USF program?
  - b. What is the actual cost of USF benefits?
  - c. What is the actual cost of USF arrearage forgiveness?
  - d. What is the actual direct program management cost for DHS/OIT?
  - e. What is the incremental direct program management cost for DHS/OIT?<sup>2</sup>
  - f. What is the actual direct program cost for the DHS hotline?
  - g. What is the incremental actual direct program cost for the DHS hotline?
  - h. What is the actual direct program administration cost for utilities?
  - i. What is the incremental direct program administration cost for utilities?
  - j. What were the start-up costs for DHS/OIT and the utilities?
  - k. What were the incremental start-up costs for DHS/OIT and the utilities?
  - l. What are the costs of payment counseling for the APP program?
  - m. What are the incremental costs of payment counseling for the APP program?
  
- 3) Customer Usage Levels
  - a. What is the average usage for USF customers
  - b. What is the distribution of usage for USF customers
  
- 4) Collections, Arrears, and Uncollectibles
  - a. What is the level of collection actions for USF customers?

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<sup>2</sup> Federal LIHEAP regulations govern program cost allocation requirements. Even if the USF program has little or no incremental impact on total costs at DHS, the USF program will have to pay for a share of DHS program costs under these regulations.



- b. What is the level of preprogram arrears for USF customers?
  - c. What is the level of USF arrears for USF customers?
  - d. What is the level of uncollectibles for USF customers?
- 5) Program Enrollment Activities
- a. What is the number of new participants?
  - b. What are the sources of enrollment for new participants?
  - c. What are the number of and reasons for USF denials?
  - d. What is the average benefit level for new participants?
  - e. What is the arrearage level of new participants?
- 6) Program Transfer and Disenrollment Activities<sup>3</sup>
- a. How many participants had benefits transferred to another utility?
  - b. How many participants no longer qualify for the program?
  - c. How many participants may qualify but failed to reenroll for the program?
  - d. How many participants had service terminated for nonpayment? Of those, how many were reconnected?
- 7) Program Compliance
- a. What is the distribution of USF participants by payment status (i.e., current, 30 days, 60 days, 90 days or more)?
  - b. What is the distribution of USF participants by the share of the utility bill paid for the year?
  - c. What is the distribution of USF participants by program status (i.e., participation in LIHEAP or LIFELINE)?
- 8) Client Service and Complaint Resolution
- a. How many USF calls did client service group receive?
  - b. How many USF calls did utility customer service staff receive?
  - c. How many USF complaints were logged in the month?
  - d. How many USF complaints were resolved?

### ***Proposed Data Tracking System Structure***

The proposed Data Tracking System for Regulatory Oversight will make use of the existing and planned data systems.

- OIT Database – OIT is responding to the Board USF Order by developing an oracle-based data system. The database will facilitate online access by client service representatives, will generate periodic reports for submission to the BPU, and will facilitate ad hoc reporting.
- Utility USF Filings – Each utility is required by Board Order (6/18/2003) to furnish quarterly reports on activities and expenses related to USF/Lifeline customers. The reports are expected to include information on dollars and units billed, dollars remitted to the trust account, dollars received from the trust account, details on USF credits issues, and other fiscal and program data. We expect that these data will be summarized and maintained by BPU staff.

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<sup>3</sup> Depending on the disenrollment rate, it may be important to have detailed reporting on disenrollment reasons.

- Utility Collections Filings – Each utility currently files a monthly collection report that includes information on accounts, collection actions, service terminations, uncollectibles, and arrearages to the Division of Customer Relations at the BPU. It is proposed that this system be modified to collect similar information for USF customers to fulfill the information requirements listed in the original USF Board Order (3/20/2003).

These data systems appear to have the capacity to meet most of the information goals that would fulfill the BPU’s Regulatory Oversight responsibilities.

**PROPOSED APPROACH**

The data needed to address the information needs of USF Regulatory Oversight will be generated from three different sources – the OIT Database, standardized USF filings from the utilities, and modified collections reports. The information will be consolidated by the BPU staff into a periodic report that furnishes the BPU with the information they need to monitor the performance of the USF program.

- 1) The program administrator will be responsible for maintaining program statistics as part of its database, including information on program enrollment, benefit assignment, benefit transfer, and program disenrollment.
- 2) The program administrator will be responsible for furnishing periodic reports on the program, including information on enrollment levels, changes in enrollment levels, and projected program benefits.
- 3) The program administrator will submit budgets to the BPU that project program administration costs and reimbursement requests to the SBC administrator that furnish detailed information on actual program administration costs.
- 4) The utilities will be responsible for modifying the monthly collections report to include a separate report on USF customers and will continue to submit the report on the existing schedule.
- 5) The utilities will submit a quarterly report to the BPU that furnishes monthly information on the levels of USF costs and status of USF customers.

***Proposed Reports by Tracking System Component:***

The following tables list the reports that will be furnished by each Data Tracking System component.

The DHS/OIT database reports are specified under a Memorandum of Understanding (MOU) between DHS and the BPU. The existing MOU lists DHS reporting responsibilities. Many of the items specified in Table 2 are not on the current MOU. Therefore the MOU must be modified to reflect the proposed reports.

**Table 2: OIT Database Reports**

Report	Frequency	Notes
Number of applications	Quarterly report on monthly data	

<b>Report</b>	<b>Frequency</b>	<b>Notes</b>
Number of approvals	Quarterly report on monthly data	
Number of denials	Quarterly report on monthly data	
Number pending	Quarterly report on monthly data	
Number who receive other benefits (LIHEAP/ Lifeline)	Quarterly report on monthly data	
Number who are eligible for, but refuse other benefits	Quarterly report on monthly data	
Existing enrollment by utility company	Quarterly report on monthly data	Report eligible households successfully matched to utility accounts as well as the number not matched.
Amount and distribution of benefits by utility company	Quarterly report on monthly data	Amounts furnished to utilities.
Projected cost of benefits by utility company	Quarterly report on monthly data	Based on amounts furnished to utilities.
Amount and distribution of preprogram arrears by utility company	Quarterly report on monthly data	If furnished by utilities
New enrollments	Quarterly report on monthly data	
Amount and distribution of new benefits	Quarterly report on monthly data	
Amount and distribution of new preprogram arrears	Quarterly report on monthly data	If furnished by utilities
Number of participants moved to a different utility	Quarterly report on monthly data	From portability records
Number of participants over income on recertification	Quarterly report on monthly data	
Number of participants that did not reenroll	Quarterly report on monthly data	
Number of participants moved without moving benefits	Quarterly report on monthly data	From utility
Number of participants terminated for nonpayment and not reconnected	Quarterly report on monthly data	From utility
Calls received	Quarterly report on monthly data	Client Service Group
Complaints received by type	Quarterly report on monthly data	Client Service Group
Program administration costs	Quarterly report	

**Table 3: Utility USF Reports**

<b>Report</b>	<b>Frequency</b>	<b>Notes</b>
Number of USF customers	Quarterly report on monthly data	
Amount and distribution of USF benefits	Quarterly report on monthly data	
Amount and distribution of arrearage forgiveness	Quarterly report on monthly data	
Distribution of full retail bills	Quarterly report on monthly data	
Number of participants terminated for nonpayment	Quarterly report on monthly data	Information furnished to OIT
Distribution of share of retail bill paid from all sources	Annual report	
Distribution of share of customer responsibility paid	Annual report	
Number of USF customers participating in Comfort Partners	Annual report	
Program administration cost	Quarterly report	Separate start-up costs and on-going program costs. Track APP costs separately.

**Table 4: Utility Collection Reports**

<b>Report</b>	<b>Frequency</b>	<b>Notes</b>
Number of accounts	Monthly	Active accounts
Number of discontinuance notices	Monthly	
Number of Fresh Start reminders	Monthly	New report, may take longer to implement
Number of Fresh Start final reminders	Monthly	New report, may take longer to implement
Telephone contacts	Monthly	Need to assess whether there can be a consistent format for tracking inbound and outbound calls among the utilities
Number of residential field visits	Monthly	
Number of residential terminations	Monthly	
Number of residential reconnections	Monthly	
Charge-Offs (Gross)	Monthly	Number of accounts and total dollars
New DPAs	Monthly	
Distribution of overdue accounts by dollar amount	Monthly	Number of accounts and total dollars (1-100, 101-500, 500-1000, 1000+)
Distribution of overdue accounts by payment status (i.e., current, 30 days, 60 days, 90 days or more)	Monthly	Number of accounts and total dollars (New report, may take longer to implement)

## Program Evaluation

More detailed information is needed to assess the effectiveness and efficiency of program operations, to determine the impact of the program on participants and utilities, and to assess the overall costs of the USF program. The program evaluation will make use of detailed information to answer a series of questions on program efficiency and effectiveness. The evaluation can be expected to identify the performance indicators that are correlated with program success and that should be tracked as part of program oversight.

### **Information Goals:**

The following types of information should be developed by the USF program evaluation.

- 1) Program Targeting
  - a. What population is eligible for benefits under the program?
  - b. What population is receiving benefits under the program?
  - c. Is the program serving the customers with the greatest need?
- 2) Program Accessibility
  - a. What are the barriers to program participation?
  - b. Do the barriers differentially affect different population groups?
  - c. What are the potential remediation alternatives?
- 3) Payment Compliance
  - a. What is the distribution of customers by payment rate?
  - b. What factors are associated with a failure to make payments?
  - c. What are the potential remediation alternatives?
- 4) Program Retention
  - a. What share of clients reenroll for the program?
  - b. What factors are associated with a failure to reenroll?
  - c. Are there appropriate remediation procedures?
- 5) Client Program Impacts
  - a. Does the program limit household energy burden?
  - b. Does the program enable households to reduce preprogram arrearages?
  - c. Does the program increase the household's ability to maintain service?
  - d. Does the program reduce the other consequences of high energy bills?
- 6) Utility Program Impacts
  - a. What is the net change in collection actions for participating customers?
  - b. What is the net change in arrearages for participating customers?
  - c. What is the net change in uncollectibles for participating customers?
  - d. How do these changes affect the costs incurred by the utilities?
  - e. In what other ways does the USF program affect utility costs?
- 7) Agency Program Impacts
  - a. How does the program affect the ability of DHS to fulfill its responsibilities to low-income households?

- b. How does the program affect the ability of service provider agencies to serve their low-income clients?
- 8) Program Linkages
  - a. Is the program effectively linked to other energy programs? (LIHEAP, LIFELINE, WAP, Comfort Partners, FEMA, NJ SHARES)
  - b. Is the program effectively linked to other social service programs?
- 9) Summary of Program Benefits and Costs
  - a. What are the set of benefits that have been delivered by the USF program?
  - b. In what way could the program benefits be enhanced?
  - c. What are the program costs for benefits, arrearage forgiveness, and administration?
  - d. In what ways could the program be more cost effective?

***Program Data Tracking System Structure:***

Ideally, a program evaluation should run concurrently with the implementation of a program. There are three reasons why this approach furnishes the best information for program assessment.

- Concurrent Process Research – If an evaluation team is in place during the program implementation, the process evaluation can be concurrent, rather than retrospective. In a concurrent process evaluation, the evaluator can directly observe program operations. In that way, program procedures can be linked to program outcomes. In a retrospective process evaluation, the evaluator must rely on reports of program operations, rather than direct observation.
- Data Capture – Certain data elements required for the evaluation, in particular utility data on transactions and collections, are routinely archived after a certain period of time. In addition, if a customer leaves a service address, the data associated with that customer at that service address is often lost.
- Client Retention Assessment – To understand the effectiveness of the program, it is very important to document program outcomes for clients who leave the program. Do clients who leave the program do so because they no longer need the program, or it is because they have extreme affordability problems? Clients who leave the program are likely to be the ones that are most difficult to contact and interview. Therefore, interviews must be conducted at the time that their departure from the program occurs.

For the NJ USF program, there is no evaluation contract in place. As noted by the AARP/Ratepayer Advocate Straw Proposal, this implies that the Data Tracking System must ensure that the data needed for evaluation will be captured. Further, as noted by the JCP&L response to the Straw Proposal, the utilities, DHS, OIT, and others must be informed of precisely what data need to be captured in order to capture those data and store them in a way that will facilitate the work of the evaluator.

### ***Data Elements and Source(s):***

For each of the evaluation areas, we furnish an overview of the type of data that are needed, the source of the data, and the time frame for data capture.

#### ***Program Targeting***

An assessment of program targeting requires demographic and energy data on the eligible population and on program participants.

- Work from the California Public Utility Commission demonstrates an effective way of using Census data, along with population updates to estimate the number and characteristics of households that would be eligible for the USF program.
- Data from the OIT database would furnish information on program participants.

The data on eligible households can be developed for any point in time. Therefore, there is no special output from the Data Tracking System that is needed.

Data on participating households is somewhat more complex. At least two issues need to be considered by the data tracking system.

1. Changes in Targeting Over Time – It is probably important for the BPU to track how targeting changes over time in response to various program initiatives. To track those data retrospectively, the OIT database must retain information on the date that a household first enrolled in the program. It also must retain data on households that are no longer participating.
2. One problem with the data on program participants highlighted by OIT staff is that participants who enter USF through the Lifeline program have data only for the Lifeline eligible individual, not the household in which they live. It may be appropriate to change the data capture routines for Lifeline if this represents an important policy issue.

To facilitate tracking of program targeting, the OIT database will have to anticipate the need for historical data and develop a system for retaining key data elements.

#### ***Program Accessibility***

An analysis of program accessibility should start with the output from the program targeting study. The program targeting study will answer the following questions.

- Is there evidence that eligible households are not participating in the program?
- Is there a certain demographic group that is less likely than others to participate?

If the study finds that the answer to at least one of the above questions is yes, then further study might be required. There are three sources of data for understanding what barriers may be resulting in underparticipation by certain groups.

- Administrative Interview – Program managers often have a good understanding of the existing barriers to enrollment. Administrative interviews would furnish the first insights on the reasons for nonparticipation.
- Surveys – Interviews with eligible nonparticipants can be expected to furnish information on the reasons for nonparticipation.
- Observations – If administrative interviews and surveys do not furnish an adequate understanding of the barriers to participation, field observations of intake procedures may be required.

There are no actions required of the Data Tracking System prior to the implementation of the evaluation to facilitate the analysis of program accessibility.

### *Payment Compliance*

Payment compliance consists of two elements. How much did the customer pay? What collection actions did the utility have to undertake to obtain the payment?

Usually payment compliance issues are examined over a two-year period. The analysis compares preprogram payment and collections patterns to postprogram payment patterns. Because of the variable timing of assistance payments each year, the analysis has to be completed with a full year of billing, payment, and collections data.

Many NJ utilities do not retain sufficient transaction and collections data to facilitate this analysis. In order to ensure that these data can be developed, the Data Tracking System will need to select a sample of participating households and request billing, payment, and collections data for those customers. Subsequently, an evaluator could use those data to assess the changes that result from the program.

One challenge faced by an evaluator who attempts to use these data relates to data attrition. Certain households that were initially enrolled in the USF program will no longer be receiving service at the time of the evaluation. The evaluator will need data that indicates the reasons for discontinuation of service. To the extent that can be captured by the Data Tracking System, it will facilitate the analysis.

A second challenge faced by an evaluator conducting this analysis is that there is no control group (i.e., a group of similar households that did not get the program benefits). In this program, where all eligible households were enrolled in the program, it is difficult to see how a reasonable control group could be developed. However, even without a control group, a pre/post analysis should be conducted to examine the gross change in customer behaviors.

### *Program Retention*

The NJ USF program is quite different from many other ratepayer funded low-income programs because USF program enrollment is directly linked to enrollment for other energy assistance programs. Since the OIT database is expected to capture information on LIHEAP, Lifeline, and USF, we expect that the analysis of program reenrollment will start with that data source. To be most effective, the database should capture information on both successful and unsuccessful applications. In that way, the analyst



will be able to tell whether a USF participant attempted to apply for LIHEAP or Lifeline. Those households that did not apply for program benefits can be interviewed to determine the reasons that they did not apply.

### *Client Program Impacts*

One important question for the evaluation is whether the client's energy burden was effectively limited. The USF program is targeted to restrict customer payments to 3% of income for electricity and 3% of income for gas. However, the USF benefit calculation is retrospective, it looks at the energy usage for last year and the energy assistance for last year. If a customer's energy usage goes up or assistance payment goes down, the customer's bill will be higher than the 3% target. Alternatively, if the energy usage goes down or the assistance payment goes up, the customer's bill will be less than the 3% target.

There was an electronic exchange of data for the benefit determination. A repeat of that electronic exchange for USF participants one year later would furnish information that would allow an evaluator to examine how the actual energy burdens for USF participants compared to the project levels. If at the same time, the utility furnished data on arrearages and customer service status, the data interchange would furnish an efficient approach to the assessment of other customer benefits.

The Data Tracking System should plan to have an annual electronic update of information from the utility companies for all of the current program participants.

The other component of the client program impact relates to a reduction in the other consequences of high bills. The LIHEAP program has worked with Roger Colton to develop an "energy insecurity scale" to quantify the impacts of high energy bills. That scale was used in the National Energy Assistance Survey that was funded by the National Energy Assistance Director's Association (NEADA). That scale might serve as an effective tool for examining the consequence of high energy bills.

To be most effective, the Data Tracking System would capture a household's status on the energy insecurity scale at the time of program enrollment. After a year on the program, a second administration of the scale questions would demonstrate whether the household experienced a change in those measures.

### *Utility Impacts*

The reports specified in the Regulatory Oversight component of the Data Tracking System will furnish information on utility cost reimbursement for USF administrative expenses and on the current levels of collection activities related to USF customers. However, that does not give the BPU comprehensive information on the net change in costs associated with the implementation of the USF program. In order for the BPU to make good policy decisions on the design of the USF program, it will need information on how the USF has affected utility costs for working with low-income customers. This is particularly important since there is an imbalance in the timing of cost reconciliation, particularly for gas uncollectibles, since utilities will be able to collect for USF program benefits during each fiscal year, while "issues dealing with natural gas uncollectibles will be address in the companies' base rate proceedings."

It will be challenging to measure the impact of the USF program on utility costs. None of the affected utilities has previously conducted an analysis of the costs associated with serving low-income customers. Many of the affected utilities do not have accounting systems with activity-based accounting capability. It will be difficult to isolate the impact of the USF program from other economic and organizational factors.

However, despite these limitations, there are evaluation tools that can furnish information that help to identify a reasonable range for estimates of the USF program impacts on utility costs. We recommend that the following research be conducted as part of the program evaluation.

- Customer Level Analysis – One needs to assess the extent to which the USF program has changed the number of collection actions, arrears, and uncollectibles associated with customers who are eligible for the USF program. The most effective way to measure that change is by tracking a random sample of USF customers as described in the Payment Compliance analysis discussed earlier in this document. Any such analysis should include information regarding the potential attrition bias associated with missing data for some sampled customers. The analysis should develop a comparison group to the extent feasible to help to control for exogenous factors.
- Estimate of Cost Savings – One needs to conduct an analysis of utility collection costs to translate the customer level changes in collections actions, arrears, and uncollectibles into a specific dollar value for avoided costs. Measurement of the changes in costs attributable to implementation of the USF program does not necessarily imply that utility costs have been reduced. Resources previously devoted to working with low-income customers may reasonably be diverted to other important activities. However, if the USF program results in making more resources available for other activities that information should be made available to the BPU. (There is an extensive literature on procedures for estimating collection cost savings. That literature notes the value of conducting both top down and bottom up analyses of costs, where feasible, and including a comprehensive assessment of changes in costs, including an assessment of the change in working capital requirements. Any such analysis should weigh the costs of conducting the analysis against the potential value of the information being developed.)
- Changes in Aggregate Collection Statistics – The analysis should examine the time series of collection reports that have been furnished to the BPU since 2000 to assess the extent to which changes in collection statistics are associated with USF program implementation. The analysis should consider other factors that also changed over the same time period.
- Other Reported Changes – The evaluation should work with individual utilities to document other changes (both increases and decreases) in budgets that appear to be related to the implementation of the USF program.

The sources of information for these analyses include the reports specified in the Regulatory Oversight component of the Data Tracking System, as well as the payment compliance component of the evaluation. Utilities can expect the USF evaluator to

request information on budgets/expenditures for collections and customer service departments for the relevant time periods.

*Agency Program Impacts*

This analysis will examine how the USF program affects the LIHEAP, Lifeline, and WAP programs, as well as the agency staff that support those programs. The primary sources of information for this analysis are interviews with the program managers, interviews with program staff, administrative data on the staff resources devoted by those agencies to the USF program, and administrative data on the reimbursement received by those agencies.

*Program Linkages*

This analysis will examine how the USF program is linked to other energy programs and other social service programs. The analysis needs to investigate two sources of information. First, it needs to conduct administrative research to identify the formal linkages among the programs. Second, it needs to conduct client research to assess the extent to which clients are able to take advantage of program linkages. The analysis might draw on some information from the Data Tracking System. However, much of this analysis task would require independent research.

*Summary of Program Benefits and Costs*

This analysis will bring together data from all of the other analyses to look at the overall set of benefits and costs.

**Summary of Data Tracking System Requirements**

The USF program evaluation will make use of data being captured by the Data Tracking System for Program Operations and/or for Regulatory Oversight. In addition, the program evaluator will have to develop some additional data using various research techniques. However, there are a number of data elements for evaluation that should be explicitly captured by the Data Tracking System. The following table furnishes a summary of the data needed for the USF Program Evaluation and source of the data.

**Table 5: Evaluation Data Requirements**

<b>Evaluation Task</b>	<b>Information Need</b>	<b>Information Source(s)</b>	<b>Notes</b>
Program Targeting	Eligible population	Special study	
	Recipient population	Data Tracking System – OIT Database	Need better data on Lifeline households
Program Accessibility	Program barriers for different population groups	Special study	Administrative interviews, client surveys, observations
Payment Compliance	Client level billing, payment, and collections data	Data Tracking System – Utility CIS System	Tracking data for a sample of program participants
Program Recertification	Data on LIHEAP/Lifeline reenrollment	Data Tracking System – OIT Database	Needs to capture data for applicants

<b>Evaluation Task</b>	<b>Information Need</b>	<b>Information Source(s)</b>	<b>Notes</b>
Client Program Impacts	Client affordability	Data Tracking System – Utility CIS System	Repeat of enrollment data capture
	Client energy insecurity	Special Study	Colton/NEADA Energy Insecurity Scale
Utility Impacts	Changes for USF customers	Data Tracking System – Utility CIS System	Tracking data for a sample of program participants
	Estimate cost savings	Special Study	Look at PA PUC specifications
	Net change in costs	Data Tracking System – BPU Collection Reports	
Agency Program Impacts	Impact on programs and operations staff	Special Study	Administrative interviews and budgetary analysis
Program Linkages	Formal program linkages	Special Study	Administrative interviews
	Client linkages	Special Study	Client surveys
Summary of Program Benefits and Costs	Bring together all findings	Data Tracking Systems and Special Studies	

## **Data Tracking System Implementation Plan**

The Proposed Data Tracking System consists of a Program Operations data system, a Regulatory Oversight data system, and a Program Evaluation data system. This document outlines the basic structure, data elements, and reports associated with each system. However, extensive work is required to implement each Data Tracking System component.

The schedule for program implementation is aggressive. It will place serious demands on the capacity of the BPU, DHS, OIT, and the utilities. Some organizations may not have the capacity to complete all of the required tasks in the targeted time frame. One option for utilities is to institute a “petition for waiver” process, by which a utility can identify the barriers to completion of a specific information task and get approval from BPU staff to modify or delay completion of the task. A procedure of this type is used in Pennsylvania where the reporting requirements are demanding.

### ***Program Operations Implementation***

The Program Operations data system consists of the DHS/OIT database and the components of each utility’s CIS system that allow customer service representatives to furnish USF participants with information on the status of their accounts.

Staff from OIT and the BPU, along with assistance from other members of the USF Working Group have completed the process of developing the business requirements for the DHS/OIT database. The database is scheduled for completion in November 2004. The information requirements outlined in this document would need to be added to the requirements for the DHS/OIT database.

It is recommended by this report that each utility develop procedures to facilitate communication with customers regarding USF benefits and responsibilities. It seems

that it is in the interest of a utility to complete this work in a timely way so that both staff and customers have the information that they need to meet USF requirements. We recommend that each utility report the current status of the capacity of its CIS to meet the requirements stated in this document and that each utility furnish a status update by the end of calendar year 2004.

### ***Regulatory Oversight Implementation***

The Proposed Data Tracking System furnishes information to the BPU for Regulatory Oversight through three reporting systems – DHS/OIT database reports, Utility USF reports, and Utility Collection reports.

#### *DHS/OIT Database Reports*

The DHS/OIT reporting process is defined in the Memorandum of Understanding between the BPU and DHS. It is our recommendation that the MOU be modified to expand the reports that DHS/OIT is asked to furnish for each of the program enrollment cycles that have been or will be implemented. Once there is continuous USF program enrollment (scheduled for the end of calendar year 2004), DHS/OIT should be asked to furnish quarterly reports as specified in Table 2.

BPU staff should work with DHS/OIT to clarify the reporting requirements. For the October 2003 program enrollment, we proposed a target reporting date of July 1, 2004. We recommend that the first quarterly report be furnished on May 1, 2005 covering January through March of 2005.

#### *Utility USF Reports*

The utilities currently furnish a quarterly report to the BPU Audit Division to document USF program costs. We recommend that the report be expanded to cover all of the data elements listed in Table 3. In this way, the participant statistics on the report will be directly comparable to the financial data that is reported.

We recommend that BPU staff work with a subcommittee of the USF Working Group to clearly define the information required in the report. We recommend that the first expanded report be targeted for the third quarter of calendar year 2004.

#### *Utility Collection Reports*

The utilities currently furnish a monthly report on collections actions to the BPU Division of Customer Relations. That report furnishes information on all customers and is generally consistent with the items listed in Table 4. We recommend that report be expanded to include separate information on USF customers.

We recommend two phases of the implementation. In the first phase, each utility would be asked to change certain tables in the report that it currently submits to the BPU to include data on both all customers and USF customers. In the second phase, BPU staff would work with the utilities to examine the consistency of reports currently furnish, to develop definitions for the new reports listed in Table 4, and to prepare a comprehensive data dictionary for all elements included in the report.

We recommend completion of phase one of the collection report revisions in time to report on collection activities for the month of July 2004 and completion of phase two of the collection report revisions in time to report on collection actions for the month of January 2005.

### ***Program Evaluation Implementation***

The USF program first delivered benefits to customers in October 2003. The BPU needs information on the overall program benefits and costs to assess what program changes, if any, are appropriate. We recommend that an impact evaluation be conducted to examine the program benefits and costs resulting from the program during the first program year (October 2003 through September 2004).

The BPU also needs to get information on the effectiveness and efficiency of USF program procedures. We recommend that a concurrent Process Evaluation be scheduled for the 2005 USF program year (October 2004 to June 2005).

Over the longer run, the BPU will need consistent information on the continuing performance of the USF program. Once the results from the FY 2004 impact evaluation and the FY 2005 process evaluation are complete, a longer-term evaluation plan should be developed.

During the third quarter of calendar year 2004, BPU staff should work with the USF Working Group to refine the evaluation scope and prepare an RFP to hire a third-party evaluator.<sup>4</sup> Given the timing of the RFP, it is expected that the evaluator should be hired by October 1, 2004, that the evaluation report for the first program year should be completed by the end of the first quarter of calendar year 2005. This would give the Working Group and the BPU time to decide how the findings from the evaluation should affect USF program guidelines for the program year starting July 1, 2005. The 2005 Process Evaluation should be completed by June 2005. That would give the USF Working Group information for making enhancements in program operations during the 2005-2006 USF Program Year.

This evaluation schedule is very aggressive. It will be particularly challenging for the utilities and DHS to develop the information that will be needed by the evaluator to make assessments of program effectiveness. To the extent possible, BPU staff can make use of this document to identify the evaluation information needs and make DHS and the utilities aware that data retrieval will need to be expedited once the final specifications have been received from the evaluator in October 2004.

Further, the Program Evaluation section of this document identifies a number of data collection activities that should be undertaken prior to the beginning of the program evaluation contract. These relate to measurement of Payment Compliance and Client Impacts. The data collection includes capturing billing, payment, and collections data for a sample of USF program participants and administering an Energy Insecurity survey to a sample of USF program participants. We recommend that the BPU hire a contractor to gather those data in the short run, prior to the implementation of the evaluation contract and that work start no later than July 1.

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<sup>4</sup> Both utilities and consumer advocates have requested that they have input into the development of the evaluation RFP and work scope, as well as in the selection of the evaluation contractor.

## Summary of Data Tracking System Implementation Schedule

Table 6 summarizes the implementation schedule for the data tracking system.

**Table 6: Data Tracking System Implementation Schedule**

System Component	Target Completion Date	Responsible Organizations	Notes
DHS/OIT program operations database	November 2004	BPU, DHS, and OIT	MOU must be modified to reflect proposed changes, OIT business requirements must be modified
Utility program operations customer service capabilities	June 2004	Utilities	Report on capabilities of customer service staff to respond to USF questions
	December 2004	Utilities	Update status report
DHS/OIT program reports	July 2004	BPU, DHS, OIT	Report on October 2003 enrollment
	September 2004	DHS, OIT	Report on April 2004 enrollment
	January 2004	DHS, OIT	Report on October 2004 enrollment
	May 2005	DHS, OIT	Report on enrollment for first quarter of calendar year 2005
Utility USF Reports	October 2004	BPU, Utilities	Quarterly report on monthly data for July, August, and September 2004
Utility Collections Reports	August 2004	BPU, Utilities	Each utility modifies its collections report to include reports for USF customers
	February 2005	BPU, USF Working Group	Subcommittee develops data dictionary to define consistent reports, first report in February covers January 2005
Preparation of RFP	June/July 2004	USF Working Group	Finalize by 8/1
Evaluation Data Capture	July 2004	BPU, DHS, OIT, Utilities	Organizations start to capture data that will be required for evaluation
Evaluation RFP	August 2004	BPU, USF Working Group	RFP issued 8/15, due 9/15, awarded 10/1
2003-2004 Impact Evaluation	March 2005	BPU, DHS, OIT, Utilities, Evaluator	Impact evaluation report due by 3/30/2005
2004-2005 Process Evaluation	June 2005	BPU, DHS, OIT, Utilities, Evaluator	Final process evaluation report due by 6/30/2005. Process evaluation

System Component	Target Completion Date	Responsible Organizations	Notes
			findings should be made available as the research activities are completed.
2004-2005 Impact Evaluation	Needs to be determined	BPU, USF Working Group	Ongoing evaluation schedule should be developed to meet perceived information needs