



pennsylvania

DEPARTMENT OF TRANSPORTATION

Project Title

Analysis of Staggered Apportioned
Registration Renewals

FINAL REPORT

Date: July 30, 2013

By

Delta Development Group, Inc.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CONTRACT # 355I01
PROJECT # 111001



DELTA DEVELOPMENT GROUP
I N C .

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16. Abstract The Pennsylvania Department of Transportation (PennDOT) Commercial Registration Section is responsible for all activities related to the International Registration Plan (IRP), i.e., the apportioned registration of commercial vehicles whose owners are located in Pennsylvania. In 2011, Pennsylvania registered 16,182 commercial fleets, representing 61,908 power units. Of the 16,182 fleets registered, 2,265 were new registrations and 13,917 were renewals. Currently, all apportioned registrations in Pennsylvania expire on May 31st of each year. Preparation for the activities associated with renewing registrations begins in August of the previous year, and renewal invoices are mailed to carriers in March. Upon receipt of renewal invoices, carriers have until May 31st to pay their invoices and receive new documentation. Delta Development Group, Inc. (Delta) conducted a costs/benefits analysis on staggered apportioned registrations and to evaluate the most cost-effective options for the physical location for in person renewals. Based on research findings, Delta recommended that PennDOT (1) implement staggered apportioned renewals; (2) stagger apportioned renewal dates monthly; (3) allow carriers to select apportioned renewal month; and (4) relocate IRP activities to a permanent stand-alone facility.		14. Sponsoring Agency Code	
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Apportioned Registration Renewal - RFQ #111001



**ANALYSIS OF STAGGERED APPORTIONED
REGISTRATION RENEWALS
EXECUTIVE SUMMARY
JULY2013**

EXECUTIVE SUMMARY

BACKGROUND AND RESEARCH APPROACH

The Pennsylvania Department of Transportation (PennDOT) Commercial Registration Section is responsible for all activities related to the International Registration Plan (IRP), i.e., the apportioned registration of commercial vehicles whose owners are located in Pennsylvania. In 2011, Pennsylvania registered 16,182 commercial fleets, representing 61,908 power units. Of the 16,182 fleets registered, 2,265 were new registrations and 13,917 were renewals.

Currently, all apportioned registrations in Pennsylvania expire on May 31st of each year. Preparation for the activities associated with renewing registrations begins in August of the previous year, and renewal invoices are mailed to carriers in March. Upon receipt of renewal invoices, carriers have until May 31st to pay their invoices and receive new documentation.

There are 16 staff members in the Commercial Registration Section who are dedicated to IRP registration renewals and who are based at PennDOT's Riverfront Office Center (ROC) in Harrisburg, PA. Currently, carriers have two options for renewing apportioned registration – either by mail or in person in Harrisburg. Payment can be made by cash, cashier's check, or a money order. Personal checks or credit cards are not accepted. Because the physical configuration of the ROC does not accommodate access to customers who may be driving commercial trucks, the Commercial Registration Section rents a building at the Pennsylvania Farm Show for three weeks each year (specifically, the last two weeks in May and the first week in June) and temporarily moves its operations to that location to allow easy access for carriers in commercial trucks or other large vehicles to renew their apportioned registrations in person.

While the majority of IRP jurisdictions stagger their renewal expiration dates throughout the year, PennDOT's ARP system does not currently allow for staggered renewals; however, a system upgrade is available that will allow for staggered renewals should PennDOT choose to migrate to that method of renewing registrations. In November 2012, PennDOT engaged Delta Development Group, Inc., headquartered in Mechanicsburg, PA, to conduct a costs/benefits analysis on staggered apportioned registrations and to evaluate the most cost-effective options for the physical location for in person renewals. The scope of the contracted services was broken down into four primary tasks:

Task 1: Survey and Compilation of Best Practices – Electronic surveys were deployed to IRP jurisdiction management to gather information regarding their experiences with staggered renewals, with specific emphasis on those who have recently experienced a migration to staggered renewals. Forty-three jurisdictions participated in the survey, and follow-up telephone interviews were conducted with six jurisdictions to obtain additional information. An interview was conducted with PennDOT's Commercial Registration Section management to gather information regarding current processes and baseline registration/renewal statistics. In addition, 15 selected carriers were interviewed via telephone to gather information on the IRP registration renewal process from customer perspectives. The "best practice" examples from other jurisdictions and the observations of carriers were summarized and used in making recommendations.

Task 2: Analysis of Pennsylvania’s Apportioned Renewal Process, Recommendations, Costs/Benefits, and Facility Specifications – Based on the information gathered in Task 1, baseline statistics were established, and recommendations were made for five potential staggered renewal scenarios. These scenarios were analyzed and compared to the baseline. Two facility options were analyzed and compared to the current process. The costs/benefits of migrating to staggered renewals and of each facility option were analyzed.

Task 3: Oral Presentation and Draft Final Report

Task 4: Final Report

SUMMARY OF BEST PRACTICE FINDINGS

Summary of Interviews with Jurisdictions and Best Practices

Based on results of the jurisdiction survey conducted in February 2013, several jurisdictions were identified for follow-up telephone interviews. Six jurisdictions were selected, based on their survey responses regarding, (1) the range of changes they experienced when migrating to staggered apportioned renewals; (2) their experience with online options; (3) their use of and experience with third-party business partners; (4) methods of staggering and use of surveys in determining expiration dates; and (5) changes in registrants after implementing online options. The following jurisdictions were selected for telephone interviews:

- Louisiana
- Maryland
- New York
- North Carolina
- Ohio
- Wisconsin

Interviews and follow-up telephone discussions, as necessary, were conducted between March 25, 2013, and April 9, 2013.

This document summarizes the jurisdiction interviews and identifies best practices for consideration as Pennsylvania seeks to modify IRP processes. In addition, select information from telephone interviews with California, Idaho, and Iowa are included. Interviews were conducted with these jurisdictions in November and December 2012 as part of the preparation for the jurisdiction survey conducted as part of Task 1.

Key findings from interviews conducted with the jurisdictions noted above include the following:

- Both Idaho and Louisiana added IRP processing locations across their respective states as part of implementing staggered apportioned renewals.
- North Carolina maintains a one-stop location to service the needs of the trucking industry by processing IRP registrations and renewals, International Fuel Tax Agreement (IFTA) services, oversize/overweight permits, federal Department of Transportation (DOT) number issuance, and other credentials at a location easily accessible by the carriers.

- Most jurisdictions interviewed have opted to renew apportioned registrations monthly, allowing carriers the opportunity to prioritize the top months for renewal due dates. A few states identified carrier renewal dates by EIN.
- Online apportioned renewal was used by several IRPs and is being contemplated in all jurisdictions interviewed.
- During staggered apportioned registration, Louisiana permitted carriers to divide 16 months of IRP fees into two equal payments.
- While state DOT employees typically process registrations and renewals, IRP processing functions are outsourced in Ohio and Louisiana. Additionally, California deploys private-sector, bonded registration agents.
- Jurisdictions that used both an online system for processing apportioned renewals and a staggered renewal system reported virtually no overtime hours expended by staff and an improved staff efficiency as staff were freed up to work on other assignments.
- Staff morale and customer satisfaction increased in jurisdictions that implemented staggered apportioned renewals.
- Earlier and frequent carrier outreach was noted as being key to successful staggered apportioned renewal implementation.

Summary of Interviews with Selected Carriers

- All of the interviewees indicated that they conduct transactions via mail, five indicated that they sometimes conduct transactions in person in Harrisburg, and six indicated that they sometimes use tag agents/messengers.
- All interviewees indicated that they would use online services if they are made available.
- The majority of interviewees indicated that having a single expiration date and that the timing of expirations (May) is not a problem from their perspectives; however, several observed that because all vehicles registered in Pennsylvania are expiring at the same time, staggering renewals could spread the workload for PennDOT staff over a longer time period and help to make the renewal process more efficient.
- The majority of interviewees also indicated that if renewals were staggered, they would still prefer to register all of their vehicles at the same time.
- Some of the processes that interviewees indicated they would like to see change include the following:
 - Improve customer service
 - Implement online services with the ability to:
 - Print/fill out MV1 forms
 - Obtain TAs
 - Submit mileage reports
 - Submit new registrations and renewals
 - Print stickers and cab cards to track truck serial numbers
 - Obtain replacement plates
 - Submit Form 2290 with schedule and invoices
 - Allow payments by credit card, PayPal, ACH, EFT, or personal check

- Decrease the length of time it takes to get registrations back
- Provide stickers that stay fixed and don't come off
- Establish a renewal location in the western part of the state
- Utilize email and fax more often
- Ensure that all PennDOT staff are properly trained and have adequate knowledge of apportioned registration and renewal processes to better assist customers
- Email invoices and send email notice when renewals are due
- Because companies often use office automation to complete the renewal processes internally, allow flexibility for accepting spreadsheets or mail documents
- Decrease the length of time between renewal submissions in March and the expiration date in May

Based on an analysis of the current apportioned registration renewal process, an assessment of the cost/benefits associated with staggering apportion renewals, and an analysis of three future facility alternatives, Delta recommends the following:

1. Implement Staggered Renewals
 - **Implementing staggered renewals will save at least \$95,818 each year through efficiencies created by a more consistent workload and the ARP system upgrade.**
 - Staggering renewals throughout the year provides the following advantages:
 - Eliminates overtime hours
 - Creates efficiencies with a more consistent workload throughout the year
 - Reduces the need to use an off-site location for renewals during "crunch" time
 - Improves employee morale
 - Improves customer satisfaction
 - Improves accuracy in processing
2. Stagger Renewal Dates Monthly
 - Distributing renewal dates consistently in each month provides the most consistent workload; however, up to two months can be skipped while still maintaining relative consistency.
 - **One-time costs associated with implementing staggered renewals are estimated at \$24,350** and include staff time required to develop the detailed implementation plan, communication with carriers throughout the process, and a webinar to educate carriers regarding the changes and how the changes will affect their operations.
3. Allow carriers to select the month their renewal is due by asking them to provide their top three preferences, and then distribute renewal dates accordingly to achieve a balanced workload.
 - Allowing carriers to select their renewal date allows for some ownership of the new process.
 - Carriers with multiple fleets should have the same renewal date for all fleets to avoid complications that could arise if vehicles are transferred between fleets.
 - New carriers would be assigned to the month in which their registration application is approved.
 - During the transition period, divide IRP fees for carriers with a longer implementation period into two payments to reduce the financial burden on the carrier and to ensure that PennDOT's fees are collected in a more timely manner.

4. Relocate IRP activities to a permanent stand-alone facility in the Harrisburg area independent of the ROC.
 - Facility could be either leased or new construction.
 - New construction provides the greatest long-term cost/benefit, while leasing provides more flexibility (see Table 1).
 - Colocate other commercial services at the facility, along with the Commercial Registration Section, to provide a conveniently accessible “one-stop” for services to customers at any time during the year. Other benefits of a new “one-stop” facility include the following:
 - Eliminating the need to move operations to the Farm Show complex each year
 - Eliminating the fragmentation of processing activities that occurs as a result of moving operations to a temporary location each year
 - Gaining efficiencies from defragmenting processing activities and from upgrading to the new ARP system means that staff will have more time to devote to improving customer service, thus increasing customer satisfaction.
 - Optimal location for a “one-stop” facility would be at or near an interchange along Interstate 81 in the Harrisburg area.

Table 1 – Summary of Comparative Costs for Facility Alternatives

	Alternative #1: Continue with Current Facility Arrangements (Baseline)	Alternative #2: Leased Facility in Harrisburg	Alternative #3: New Facility in Harrisburg
Total Facility Area (square feet)	4,100	4,100	4,100
Total Temporary Facility Area (square feet)	5,700		
Facility Lease Rate (per square foot per year)	\$9.50	\$20.50	\$9.50
Temporary Facility Lease Rate (per year)	\$23,000		
Annual Facility Lease	\$38,950	\$84,050	\$38,950
Annual Temporary Facility Lease	\$23,000	\$0	\$0
Annual Total Facility Lease	\$61,950	\$84,050	\$38,950
Annual Lease Escalation (%)	1.50%	1.50%	1.50%
Analysis Period (years)	20	20	20
Total Lease Expense During Analysis Period	\$1,453,999	\$1,972,697	\$914,177
Total Site Area (acres)			0.92
Acquisition Cost per Acre			\$1,125,000
Total Acquisition Cost			\$1,035,000
Construction Cost per Square Foot			\$180.15
Total Construction Cost			\$738,615
Total Acquisition and Construction Expense			\$1,773,615
Residual Property Value			
Base Year Land Value			\$1,035,000
Annual Land Value Escalation			1.50%
Year 20 Land Value			\$1,393,995
Base Year Building Value			\$738,615
Annual Building Value Escalation			1.50%
Year 20 Building Value before Depreciation			\$994,807
Less 20-Year Depreciation (Straight Line over 30 Years)			-\$492,410
Year 20 Building Value after Depreciation			\$502,397
Total Residual Property Value			\$1,896,392
Acquisition and Construction Expense less Total Residual Property Value			-\$122,777
Total Facility Expense	\$1,453,999	\$1,972,697	\$791,400

Based solely on the costs over a 20-year period, relocating to a “one-stop” facility is preferred over continuing with the current facility arrangements or leasing a facility. In addition to the lower long-term costs, other benefits of relocating to a “one-stop” location include:

- Convenience to PennDOT – Relocation would eliminate the inconvenience of moving operations to the Farm Show for three weeks each year and would also eliminate the fragmenting of processing activities that occurs as a result of this arrangement.
- Convenience to Customers – Customers would be able to access all services related to commercial registrations at any time during the year at a single, conveniently accessible facility.
- Commercial Carrier Focus – Staff at the facility would be totally focused on services related to commercial carriers.
- Increased Customer Satisfaction – Efficiencies gained from defragmenting processing activities and upgrading to the new ARP system would mean that the IRP staff will have more time to dedicate to improving customer service, thus increasing customer satisfaction.

In addition to the benefits listed above, two additional factors should be considered in making a final decision regarding future facilities. First, with the current facility arrangement, a number of “back office” support activities are performed by staff other than the 16 staff in the Commercial Registration Section (e.g., printing, document fulfillment, etc.). This recommendation assumes that being located at a location independent from the ROC would not compromise the efficiency of those services. Second, the clear preference of respondents to the carrier survey was the ability to renew apportioned registrations online. If and when that capability is implemented, the number of customers who would utilize a walk-in facility may be significantly reduced.

If the flexibility of leasing space is an attractive alternative, there are two primary options for leasing: (1) Space could be leased in an existing facility in the Harrisburg area; or (2) a new facility could be built to PennDOT’s specifications through a build-to-suit arrangement with a developer, and then PennDOT could lease the building from the developer. While the leasing alternative is the most costly of the three, it provides the flexibility of a lease while offering the conveniences of a state-owned independent “one-stop” facility. Another attractive feature of a lease is the fact that the lessor takes responsibility for building maintenance, and the lease rate often includes the cost of utilities.



Apportioned Registration Renewal - RFQ #111001



**DELIVERABLE #1 – TASK 1.1
SAMPLE JURISDICTION SURVEY AND
SURVEY METHODOLOGY
DECEMBER 28, 2012**



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***Pennsylvania Department of Transportation
Analysis of Staggered Apportioned Registration Renewals
(Contract #355I01, Project #111001)***

S u r v e y M e t h o d o l o g y
(Submitted for Review December 17, 2012)

The deliverables for Task 1.1 of the above-referenced analysis include (1) a sample survey, and (2) a methodology for deploying the survey. Based on the research conducted in the background review, interviews with PennDOT staff, and telephone interviews with three (3) International Registration Plan (IRP) jurisdictions, Delta has prepared a sample survey for PennDOT's review and approval. The survey questions were developed to gather information that will provide baseline information regarding apportioned registration renewal processes in IRP jurisdictions. Information gathered through the survey will allow us to identify jurisdictions with experiences and processes that could serve as best practice jurisdictions for further research. The information can also help to inform PennDOT's decisions regarding staggering of apportioned registration renewals. The survey was prepared using SurveyMonkey and upon approval by PennDOT, will be deployed via e-mail to the 59 IRP jurisdiction network contacts. Following is the proposed methodology and schedule for deploying the survey and conducting follow-up reminder e-mails and phone calls. Information and actions required by PennDOT staff are highlighted in bold italics.

Activity Methodology	Date
1. Delta will submit the sample survey to IRP for review. Robin Murphy at IRP indicated that they would be happy to review the survey and provide feedback to Delta based on their experience with surveys of their jurisdictions. They will also provide us with information regarding any data they may have related to the survey questions.	12/19/12
<i>2. Final approval of the survey by PennDOT.</i>	12/28/12

Activity Methodology	Date
<p>3. Using jurisdiction contacts suggested by PennDOT staff, Delta will develop a draft e-mail with e-mail addresses for each contact included, along with a link to the survey. The text of the e-mail message is proposed as follows:</p> <p><i>The Pennsylvania Department of Transportation is seeking information regarding the experiences of other International Registration Plan (IRP) jurisdictions with apportioned renewal processes. You have been identified as the individual in your jurisdiction who is best equipped to provide us with the information we are seeking. Below, please find a link to a brief survey regarding your jurisdiction's experiences. The survey is designed to provide information that will assist us in identifying the most successful processes in other jurisdictions and in evaluating the potential costs and benefits of migrating to a staggered renewal process. The survey should take approximately 5 to 10 minutes to complete. If you have any questions, please feel free to contact our consultant representative, Debbie Tollett, at dtollett@deltaone.com or 717-441-9053. Thank you in advance for taking the time to complete the survey.</i></p> <p>Delta will need the contact list from PennDOT staff by January 4, 2013. The e-mail addresses for the contacts will be obtained by Delta from the IRP website.</p>	1/8/13
<p>4. The agenda for January's status call will include a discussion and determination of who the survey will come from (PennDOT, IRP, or a joint e-mail); and a review and final approval of the draft deployment e-mail.</p>	1/9/13
<p>5. Delta will provide the deployment e-mail to PennDOT for distribution. The e-mail should be deployed on January 15, 2013. While the ultimate survey participation goal would be 100%, a more realistic goal is around 30% participation. A 30% participation rate should provide sufficient information to identify trends and best practice processes for further research.</p>	1/14/13
<p>6. Delta will provide a reminder e-mail to PennDOT for distribution to jurisdictions that have not responded to the survey. The reminder e-mail should be deployed on January 29, 2013.</p>	1/28/13

Activity Methodology	Date
7. Delta will make reminder phone calls to select jurisdictions that have not responded to encourage their participation in the survey to ensure maximum participation.	2/4/13 and 2/5/13
8. The survey will be closed and responses will be downloaded for summary and analysis.	2/7/13

PennDOT - Apportioned Registration Renewal Survey

The Pennsylvania Department of Transportation (PennDOT) is seeking information regarding the experiences of other International Registration Plan (IRP) jurisdictions with apportioned registration renewals. This survey seeks to obtain information that will assist us in identifying the most successful processes in other jurisdictions and in evaluating the potential costs and benefits of migrating to a staggered renewal process. If you have any questions, please feel free to contact our consultant representative, Debbie Tollett, at dtollett@deltaone.com or (717) 441-9053. Thank you for taking the time to complete our survey.

1. How many apportioned registrations/renewals did your jurisdiction process in 2011?

Total registrations/renewals:

Fleets renewed:

New fleets registered:

Number of power units:

2. Does your jurisdiction stagger its apportioned registration renewals throughout the year?

- Yes
- No

3. Has your jurisdiction always staggered its apportioned registration renewals?

- Yes
- No

4. Is your jurisdiction considering staggered apportioned registration renewals?

- Yes
- No

Comments:



**5. In what year did your jurisdiction begin staggering apportioned registration renewals?
Please select the year from the drop-down menu below.**

6. How long did it take to inform/prepare your customers for the shift to staggered renewals?

7. What methods did your jurisdiction use to inform your customers of a shift to staggered renewals? Check all that apply.

- Workshops/meetings
- Renewal notices
- Targeted mailings
- E-mail
- Advertising

Other (please specify):

PennDOT - Apportioned Registration Renewal Survey

8. Which of the following changes did your jurisdiction experience when you switched to staggered renewals?

	Increased	Decreased	No Change	N/A
Employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Renewal Locations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facility/Space Requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supplies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Printing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mailing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Private-Sector Business Partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify):

9. Did your jurisdiction conduct a survey of owners/operators to determine the best method for staggering renewals?

- Yes
- No

10. When your jurisdiction initially began to stagger registration renewals, were your customers given an option to renew within a 6- to 18-month timeframe, or a different timeframe?

- 6- to 18-month timeframe
- A different timeframe

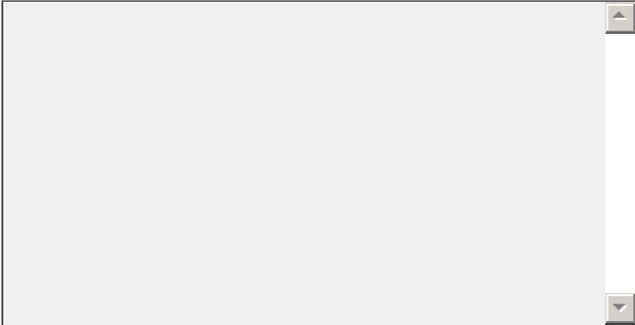
If a different timeframe, please describe:

11. What consideration was made, if any, to equally distribute registration renewals for larger carriers so that they were not all due the same month? Please provide your response in the text box below.

12. What method does your jurisdiction use to determine how registration renewals are staggered at specified intervals?

- Date of original registration
- Location within jurisdiction
- Month of original registration
- Selected by customer (carrier)
- Quarter of original registration
- Company's Tax Identification Number (TIN)
- Vehicle Identification Number (VIN)
- Social Security Number (SSN)

Other (please specify):



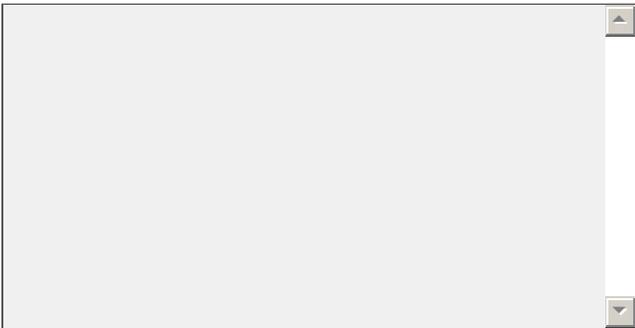
13. Are registration renewals staggered in all twelve months or do you skip certain months?

- All twelve months
- Skip certain months

14. Please check the months that are skipped for staggered registration renewals.

- | | |
|-----------------------------------|------------------------------------|
| <input type="checkbox"/> January | <input type="checkbox"/> July |
| <input type="checkbox"/> February | <input type="checkbox"/> August |
| <input type="checkbox"/> March | <input type="checkbox"/> September |
| <input type="checkbox"/> April | <input type="checkbox"/> October |
| <input type="checkbox"/> May | <input type="checkbox"/> November |
| <input type="checkbox"/> June | <input type="checkbox"/> December |

Comments:



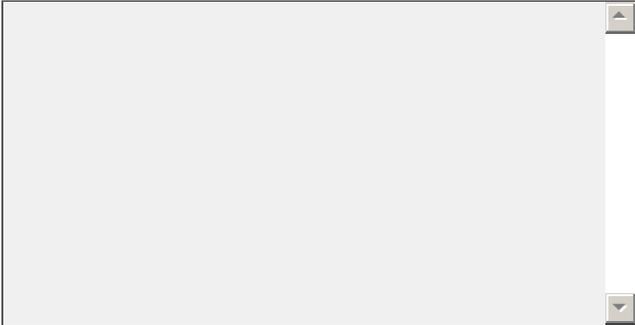
15. Does your jurisdiction offer an online option for submitting apportioned registrations/renewals?

- Yes
- No

16. When your jurisdiction implemented an online registration/renewal option, did you experience an increase in registrants over the first few years?

- Yes
- No

Comments:



17. When your jurisdiction implemented online registration, what change, if any, did you experience in staffing requirements?

- Increase
- Decrease
- No Change

18. How many months passed until your jurisdiction noticed the need to reconsider staffing requirements?

19. What percentage of your registrants utilize online capabilities?

20. What options are available to your customers for submitting apportioned registrations and renewals? Check all that apply.

	A Central Jurisdiction Location	Regional/Satellite Jurisdiction Locations	Private- Sector Business Partner Locations	Mail	Online	Other
New Registrations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Registration Renewals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Account Update	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

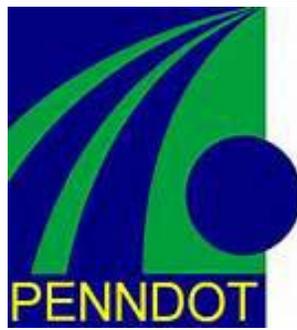
If other, please explain:

21. Please provide your contact information.

Name:	<input type="text"/>
Jurisdiction:	<input type="text"/>
Title:	<input type="text"/>
E-mail Address:	<input type="text"/>
Phone Number:	<input type="text"/>

22. May we contact you by phone if we need further information or clarification?

- Yes
- No



Apportioned Registration Renewal - RFQ #111001



DELIVERABLE #2 – TASK 1.2

**SURVEY WAS DEPLOYED ON
JANUARY 15, 2013 AND CLOSED ON FEBRUARY 7, 2013
43 JURISDICTIONS PARTICIPATED IN THE SURVEY
SURVEY RESULTS ARE INCLUDED IN TAB #4**



Apportioned Registration Renewal - RFQ #111001



**DELIVERABLE #3 – TASK 1.3
JURISDICTION SURVEY
SUMMARY OF RESULTS – APRIL 15, 2013**

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INTRODUCTION AND BACKGROUND

The overall purpose of the Analysis of Staggered Apportioned Registration Renewals engagement is to evaluate the current apportioned registration renewal process in Pennsylvania and provide recommendations for improving the process, including but not limited to a staggered apportioned renewal process and off-site or decentralized apportioned renewal process.

The scope of the contracted services is broken down into four primary tasks:

Task 1: Survey and Compilation of Best Practices

Task 2: Analysis of the Pennsylvania Apportioned Renewal Process and Recommendations

Task 3: Oral Presentation and Draft Final Report

Task 4: Final Report

The first two components of Task 1 have been completed and approved by PennDOT: (1) Conducting a review of background materials; and (2) Conducting a survey of IRP jurisdiction representatives to gather information regarding their apportioned registration renewals. The following pages present the deliverable for the final component of Task 1, which is a summary of the results of the survey. The summary information is presented in three sections:

1. A summary of the follow-up telephone interviews with selected jurisdictions who responded to the jurisdiction survey conducted in January 2013.
2. A summary of interviews with owners/operators selected by PennDOT to gather preliminary feedback regarding their experiences with the apportioned renewal process.
3. A summary of the responses to the survey conducted in January 2013.

The findings from Task 1, presented on the following pages, will be used in making recommendations in Task 2.

SUMMARY OF INTERVIEWS WITH JURISDICTIONS AND BEST PRACTICES

Based on results of the jurisdiction survey conducted in February 2013, several jurisdictions were identified for follow-up telephone interviews. Six jurisdictions were selected based on their survey responses regarding (1) the range of changes they experienced when migrating to staggered apportioned renewals, (2) their experience with online options, (3) their use of and experience with third-party business partners, (4) methods of staggering and use of surveys in determining expiration dates, and (5) changes in registrants after implementing online options. The following jurisdictions were selected for telephone interviews:

- Louisiana
- Maryland
- New York
- North Carolina
- Ohio
- Wisconsin

Interviews and follow-up telephone discussions, as necessary, were conducted between March 25, 2013, and April 9, 2013.

This document summarizes the jurisdiction interviews and identifies best practices for consideration as Pennsylvania seeks to modify IRP processes. In addition, select information from telephone interviews with California, Idaho, and Iowa are included. Interviews were conducted with these jurisdictions in November and December 2012 as part of the preparation of the jurisdiction survey conducted as part of Task 1.

KEY FINDINGS

Key findings from interviews conducted with the jurisdictions noted above include the following:

- Both Idaho and Louisiana added IRP processing locations across their respective states as part of implementing staggered apportioned renewals.
- North Carolina maintains a one-stop location to service the needs of the trucking industry by processing IRP registrations and renewals, IFTA, oversize/overweight permits, federal Department of Transportation (DOT) number issuance, and other credentials at a location easily accessible by carriers.
- Most jurisdictions interviewed have opted to renew apportioned registrations monthly, allowing carriers the opportunity to prioritize the top months for renewal due dates. A few states identified carrier renewal dates by EIN.
- Online apportioned renewal was used by several IRPs and is being contemplated in all jurisdictions interviewed.
- During staggered apportioned registration, Louisiana permitted carriers to divide 16 months of IRP fees into two equal payments.
- While state DOT employees typically process registrations and renewals, IRP processing functions are outsourced in Ohio and Louisiana, and California deploys private-sector, bonded registration agents.
- Jurisdictions that used both an online system for processing apportioned renewals and staggering those renewals throughout the year reported virtually no overtime hours expended by staff and improved staff efficiency by freeing up staff to work on other assignments.
- Staff morale and customer satisfaction increased in jurisdictions that implemented staggered apportioned renewals.
- Earlier and frequent carrier outreach was noted as being key to successful staggered apportioned renewal implementation.

The following chart summarizes key findings from the jurisdiction interviews.

**PennDOT Analysis of Staggered Apportioned Registration Renewal
Jurisdiction Telephone Interviews**

Overview						Staggered Apportioned Renewals					Renewals (Accounts/Power Units %)				
Jurisdiction	Total IRP Registrants	Total Fleets (Accounts) ⁽¹⁾	Power Units	Number of IRP Staff / Management ⁽²⁾	IRP Processing Location	Year Staggered Renewals Began	Non-staggered Renewal Date	Staggered Renewal Date	Method for Assigning Carriers' Renewal Dates	Overtime Reduction (estimated hrs/yr)	Headquarters Location / Walk-In	Mail	Fax	Online	E-Mail
California	18,558	19,322	58,554	44 / 5	DOT headquarters; 29 registration agents (bonded private- sector web users)	2008	December	Monthly	Carrier selected top 3 months	<i>Will provide per call on 04/08/13</i>					
Idaho	2,779	3,260	13,608	16 / 2	DOT headquarters plus 4 Ports of Entry locations	1995	December	Monthly	Carrier selected top 3 months		10%	10%	10%	20%	50%
Iowa	7,354	7,592	53,712	9 / 3	DOT headquarters	2012	December	Monthly	Carrier selected top 3 months	<i>Left message 04/08/13</i>					
Louisiana	3,153	4,133	23,668	14 vendor / 2	DOT headquarters; 4 new satellite locations	2010	December	Monthly except May & June	Last 2 digits of FEIN	200	20%	80%		Beginning online access	
Maryland	5,460	7,393	25,555	8 / 2	DOT headquarters; 23 branch offices accept renewals (no processing)	1999	April: trucks May: dump trucks	Quarterly: January, April, July, October	Carriers with more power units assigned quarters first	Not available	10%/10%	80%/80%	10%/10%		
New York	7,785	8,154	36,930	15	DOT headquarters	1999	All apportioned plates expire on Jan. 1.	Monthly except July & December	Carrier selected month	>100	100%				
North Carolina	11,317	11,649	69,541	27 / 3	Off-site, one-stop not located at DOT headquarters; 1 additional processing location	2006	December	Monthly	Divided accounts over 11 months, starting with oldest accounts	3,120	31%/24%	60%/34%		9%/42%	
Ohio	11,557	16,007	78,984	20 vendor / 3	4 processing centers (one at DOT headquarters)	2004	May	Monthly	Last 2 digits of FEIN or SS; by month	<i>call back</i>	<i>call back</i>				
Wisconsin	5,219	5,326	56,919	15 / 2	1 DOT headquarters location	1999	December	Monthly	Carrier selected top 3 months	11,250	5%/5%	65%/35%		30%/60%	

⁽¹⁾ Total fleets and power units from 2012 Annual IRP Audit Results for calendar year 2011.

⁽²⁾ Management is included in IRP staff total.

BEST PRACTICES

Each jurisdiction interviewed had unique features that are important for Pennsylvania to consider as changes are made to the IRP process. A summary of the unique features is categorized in this section by key factors that influence both overall IRP operations and staggering apportioned renewals.

LOCATION

The jurisdictions that were interviewed process apportioned registrations, renewals, and supplements at various locations. In some cases, the switch to staggered apportioned renewals impacted location and space while in other cases it did not. Each of the jurisdictions processes IRP-related activities at their headquarters in their respective state capitals. A summary of some of the location distinctions between each jurisdiction follows.

Idaho

In 2009 and in response to customer feedback, Port of Entry Registration Specialists were established at Ports of Entry (weigh stations) in three locations throughout Idaho. Customers (carriers) were concerned that the distance from the DOT headquarters in Boise is nearly 500 miles from some northern areas of the state. Full-service processing takes place at each Port of Entry. A fourth Port of Entry was added in early 2013. Each registration specialist has reduced central office staff workload by 5 percent (20 percent total). Carriers have commented that they like to get to know their registration specialist and how the specialist has personally helped them obtain proper credentials. Shifting workload to the Ports of Entry has freed up central office staff to work on other assignments.

Louisiana

Louisiana processed all IRP credentials at the state DOT headquarters in Baton Rouge until staggered apportioned renewals were implemented. At that time four new locations were added throughout the state, in addition to the state DOT headquarters, to process IRP credentials. IRP credentials are now processed by a vendor. The new locations do not require a significant amount of space. Prior to staggered apportioned renewal implementation, hundreds of registrants would travel to the renewal location at the end of the renewal period in December for credential processing. The switch to staggered apportioned renewals has eliminated the influx of processing at the end of the renewal period.

Maryland

All apportioned renewals are processed at DOT headquarters, but Maryland allows carriers to bring required paperwork to a branch office. The branch office faxes the renewal information to the central office. While a carrier (customer) waits, the renewal will be processed by the central office, the fee amount is provided back to the branch office, and the customer can walk away from the branch office with temporary credentials in a maximum of three hours. Customers can expect this level of service every day except the last day of the renewal month (January, April, July, and October).

New York

New York has one central location in Albany and 100 percent of the registrations are processed through this office. They are currently working with a vendor to design and migrate to an online registration system and anticipate that the new system will be online next year. This system will be centralized in Albany.

There was overall significant improvement of employee morale. Errors were decreased as a result of the registration process being spread throughout the year. Deposits were made more quickly, thereby

alleviating backup of the accounting process when dealing with large amounts of money. Customer service support calls were handled faster and better.

Switching to staggered registration freed up staff to do system design, testing, and other IRP work that was typically done by supervisors and managers. They did not have to relieve any staff because there was plenty of other work available. The volume still exists, but it is now spread out throughout the year. As a result of the economy, there was a downturn in registrations between 2008 and 2009. It is very expensive to do business in New York because businesses get taxed heavily.

North Carolina

Apportioned renewals are processed at two locations: DOT headquarters in Raleigh and in Charlotte. Walk-in, same-day service is provided for new accounts or processing renewals, provided that the carrier does not come in after 3:30 on the last day of the month. Branch offices and private offices contracted with the state can provide supplements but cannot process renewals or handle new registrations.

North Carolina's IRP is housed within a one-stop-shop location in Raleigh to serve the needs of the trucking industry and includes the following:

1. IRP
2. IFTA (managed by the North Carolina Department of Revenue)
3. Oversize/Overweight permits
4. Heavy vehicle tax (federal form 2290)
5. Issue federal DOT numbers

The one-stop location has ample parking for carriers to park tractor trailers.

Ohio

Apportioned renewals and new applications are processed at four IRP processing centers located throughout the state. These processing centers are staffed by Xerox and managed by three Ohio DOT administrators. Xerox has had the same processing locations since 2001. Staggered apportioned renewals in Ohio were implemented in 2004.

Wisconsin

Wisconsin IRP staff also process IFTA requirements. While Wisconsin did not increase the number of processing locations after technology upgrades and staggered apportioned renewal implementation, the amount of floor space required for staff reduced. This was due not only to staff decreases but space for housing paper documentation was no longer required. Unlike most of the states interviewed, Wisconsin does not process IRP credentials at the counter but rather on a first-come, first-served basis as applications are received either by mail, online, or walk-in. Applications can be dropped off at the counter but will not be processed while the carrier waits. Fees are accepted at counter.

STAFFING

The impact of staggered apportioned renewals on staffing varied by jurisdictions interviewed. While most staffing levels stayed the same, a few jurisdictions such as Wisconsin decreased in number of staff. The number of employees was reduced not only because of the switch to staggered apportioned renewals, which virtually eliminated overtime hours, but technology platforms for IRP and IFTA switched at the same time.

California notes that switching to staggered registration did not impact staffing levels; rather, workload tended to be modified among staff based on large carriers. In addition, staff has been freed up to assist with other assignments.

SELECTING STAGGERED APPORTIONED RENEWAL DATES

Most jurisdictions interviewed chose monthly renewal dates. Louisiana has monthly renewals with the exception of May and June, and New York has monthly renewals with the exception of June and December.

Maryland opted for quarterly renewals at the end of January, April, July, and October. As reported by Maryland, the main reason for opting to stagger renewals quarterly was the ability to lessen the workload throughout the year, which allows staff to assist with other tasks. In addition, mailing of credentials takes place quarterly, not every month.

METHODS FOR ASSIGNING CARRIERS TO RENEWAL DATES

Jurisdictions used several different methods for identifying which month their existing carriers' renewals would be due once the decision to switch to staggered apportioned renewals was made.

California

California sent a survey asking carriers to provide their top three choices of months for renewal. The intent of the survey was to let customers decide which month to have their renewal due based on business needs. It was noted that the initial survey was not well worded, prompting the state to provide an example of how to select a month for renewals. A second survey was sent to carriers. This survey was understood and well-received. In all cases, carriers were given their first choice and the number of registration renewals was fairly evenly split between the months. It was noted that the number of carriers that were renewed and processed during June and December is restricted to allow for staff vacations in summer and time off around the holidays.

Idaho

Idaho decided to stagger renewals on a monthly basis and surveyed carriers asking carriers to identify their first, second, and third choices for renewal expiration. The survey response rate was only 25 percent, prompting the state to send out a second survey with a stronger message. If the carrier failed to select, the state would select the renewal date. The second survey was well received. For the most part, carriers received their first choice of months, resulting in improved customer satisfaction. The staggered renewals are fairly proportioned throughout the year. Initially, Idaho allowed carriers with more than one IRP fleet to have a different renewal date. With vehicles routinely being transferred between fleets, Idaho now requires that carriers with multiple fleets have the same renewal date. Iowa adopted the same carrier renewal approach as Idaho.

Maryland

Maryland retained a consultant to distribute carriers evenly between the quarters at the end of January, April, July, and October. Larger carriers were placed in April and smaller owner operators were placed in October. As a result, October is the busiest deadline quarter, as there are more owner operators compared to large carriers.

North Carolina

At the time of staggered apportioned renewal implementation in 2006, North Carolina had approximately 11,000 active accounts (carriers). The decision was made to split the accounts relatively equally between January and November. December was reserved for carriers added during the registration process. Those carriers with lower account numbers were assigned first (i.e., the first 1,000 carriers with the lowest account numbers were assigned to January, the next 1,000 carriers with the next-lowest account numbers were assigned to February, etc.).

Ohio and Louisiana

Ohio uses the last two digits of the carrier's federal EIN number to evenly distribute carrier renewals monthly throughout the year. The last two digits correspond to specific months. Louisiana is similar, with the exception that it does not process in the months of May and June.

Wisconsin

Wisconsin sent a letter and gave carriers a choice of three months to choose from, on a first-come, first-served basis. A high percentage of carriers received one of their three choices. Carriers were staggered throughout the year, with lower IFTA activity months taken into consideration as IRP staff processes IFTA as well. Currently, 5 percent of IRP accounts are in January and February, 20 percent in May, 5 percent in June through August, 20 percent in September and October, and 5 percent in November and December.

New Carriers

In most jurisdictions interviewed, new carriers are typically assigned to the month in which their registration application is submitted, with the exception of Ohio and Louisiana, which assigned based on the last two digits of the carrier's EIN, and Maryland, which assigns on the quarter in which the new registration is received.

IMPLEMENTING STAGGERED APPORTIONED RENEWALS

During the switch from non-staggered to staggered apportioned renewals, one of the biggest challenges faced by carriers was paying registration renewals, particularly if a carrier was faced with paying more than a year's worth of renewal fees. To make the transition easier, Louisiana allowed carriers to split registration fees. For example, if a carrier was required to pay 16 months of registration fees, the first eight months were paid up-front, with the remainder paid at the end of the eight-month period.

The costs to implement staggered apportioned renewals were not readily available from most jurisdictions. California reported the total cost to implement its IRP System Replacement Project, which included a new system, staggered registration, and PRISM Management Information System software, was \$36,753,376. These changes were implemented in 2008. California reports the FY 2011-12 costs to manage IRP at approximately \$603,000, covering staffing and contracts but not including equipment or facility costs.

Maryland reported a \$38,000 programming cost associated with switching to staggered apportioned renewals. This was the cost for a consultant to assign carriers evenly by month.

North Carolina reported an increase in equipment costs when staggered apportioned renewals was implemented, as each staff member was supplied with a new printer and other equipment to enable printing of credentials directly from their desk.

OUTSOURCING APPORTIONED RENEWALS

Ohio and Louisiana outsource IRP processing to outside vendors. Ohio has been outsourcing apportioned renewals for many years, even prior to the switch to staggered renewals in 2004. Xerox is the vendor that manages Ohio's IRP. The same number of Xerox staff members was in place before and after the staggered apportioned renewal implementation. Prior to staggered apportioned renewal implementation, temporary staff was hired to assist from March through the end of May.

California uses private-sector bonded Registration Agents to assist with processing renewals online. Online renewals are not permitted by carriers. There are 29 Registration Agents (also known as web users) located throughout the state who assist carriers with renewals and additional supplements/changes, as required. Registration Agents are helpful in reducing paper work for central office staff. Before staggered apportioned renewals, along with an upgraded technology platform that was part of an overall IRP System Replacement Project, agents helped to fill out paperwork but would still send the paperwork to the central office for processing. Several of the agents were permitted to provide plates and stickers, but were still required to send paperwork to the central office. Registration Agents can now provide full-service processing.

Maryland carriers may use tag and title service agents to drop off or mail in forms, but they do not process IRP credentials.

BENEFITS OF SWITCHING TO STAGGERED APPORTIONED RENEWALS

The jurisdictions interviewed identified several benefits realized after implementing staggered apportioned renewals.

Elimination of Overtime Hours

The most significant benefit, from both a state and employee perspective, was the virtual elimination of overtime hours. Overtime hours had been necessary as the processing of renewals was concentrated at one time during the calendar year. Prior to staggered apportioned renewals, the jurisdictions interviewed had an annual renewal deadline either in May or December. From a staff perspective, elimination of this overtime allowed staff to take time off. This was particularly advantageous to those states with a former renewal deadline at the end of December.

A few of the jurisdictions interviewed provided data to reflect the reduction/elimination of annual overtime hours resulting from switching to staggered apportioned renewals:

Louisiana – 200 hours

North Carolina – 3,120 hours

Wisconsin – 11,250 hours

Elimination of a Renewal Grace Period

The switch to staggered apportioned renewals also eliminated the need to have a grace period. Prior to switching to staggered apportioned renewals, many states had a grace period between 30 to 45 days in which carriers could obtain their registration. The grace periods were in place due to the sheer volume of work required for respective states to process apportioned renewals. Grace periods were eliminated after staggered apportioned renewals were implemented, as workload was spread more evenly throughout the calendar year.

Improved Employee Morale

In most jurisdictions interviewed, employee morale was often low prior to staggered apportioned renewals. This was due to employees working significant amounts of overtime, particularly during the holidays at the end of the year and during the summer when vacation time is typically used. It was noted that employee morale improved as a result eliminating the time pressures of processing apportioned renewals and eliminating overtime. For state staff who handles both IRP and IFTA, such as Wisconsin, the switch to staggered apportioned renewals was extremely beneficial to employee morale.

Improved Customer Satisfaction

Jurisdictions noted that their level of customer satisfaction improved after implementing staggered apportioned renewals, as carriers did not have to wait in line to have their renewals processed. They resolved issues with people who did not agree to the switch. Now customers enjoy the staggered renewal process because they do not have to stand and wait in line for hours to renew.

Improved Accuracy in Processing

Several jurisdictions noted an overall increase in accuracy. The stress of trying to process renewals at one time often caused an increase in errors. After staggered apportioned renewals were implemented, the time constraints were significantly reduced, resulting in an overall improvement in accuracy.

A few jurisdictions noted that allocating renewals throughout the year has resulted in a decrease in errors and quicker fee deposits, which alleviate the need for backup of accounting due to dealing with large amounts of money.

Reduction in Walk-in Renewals

Several jurisdictions, particularly Maryland, noted a decrease in walk-in renewals once staggered apportioned renewals were implemented. Renewal notices are sent out two months in advance with an invoice amount. Carriers know they will receive their credentials on time. Payments are sent in through the mail for the most part.

Changes in Staff Responsibilities

Several jurisdictions noted that switching to staggered apportioned renewals has allowed staff members to manage apportioned renewal workload throughout the year. This has allowed staff to either work on tasks that were previously assigned but could not be accomplished during the period when apportioned renewals were due or allowed staff to take on new assignments.

METHODS FOR RENEWING APPORTIONED REGISTRATION

Jurisdictions interviewed used several methods for apportioned registration renewals: central location walk-in, mail, e-mail, online, and fax. The table in the Key Findings section summarizes the percentage of renewals processed by each of these methods, to the maximum extent the information was available from the jurisdictions.

Idaho has adopted an approach to meet “what works best for the customer.” This is reflected in the ability to use any method of processing renewals available to the customer based on their needs. Idaho is, however, seeing an increase in online registrations as technology is becoming more commonplace.

Online Application and Renewal

With the technology tools available to state DOTs and carriers, the use of online systems for processing apportioned renewals is becoming standard. All of the jurisdictions contacted were either using an online system for processing apportioned renewals or were evaluating the use of an online system. Frequently noted benefits of using an online system included improving the level of customer service and freeing up staff to work on other assignments.

North Carolina

North Carolina reported that once online registration was offered, starting around 2003, most of the larger carriers began renewing online and customer satisfaction improved. Online transactions are totally automated, eliminating/reducing staff time during the renewal process. Built-in checks in the system ensure that required information is not missed. Carriers certify that the information submitted online is accurate. Mailing functions are still performed by state IRP staff. North Carolina has its own information technology (IT) platform originally developed in 1996. A total system re-write is anticipated in 2014. The number of online renewals of power units has been increasing over time, as has the amount of fees collected online.

Table 1 - North Carolina’s Online Renewals and Fees Collected (2009 - 2012)

Year	Total Power Units	Online Renewal	EFT Online Renewal
2009	60,988	21,050	\$19,473,897
2010	61,811	21,404	\$12,548,067
2011	69,541	16,951	\$17,860,859
2012	66,884	28,204	\$30,299,225

Wisconsin

Wisconsin noted that the state is continually upgrading technology. The technology platform for IRP and staggered apportioned renewals took place in 1999, and IFTA took place in 1998. Online renewal capability occurred in 2006. Currently, 30 percent of carriers conduct transactions online, representing 60 percent of total power units.

Idaho

Idaho allows select, established carriers to process paperwork online. Online processing is by invitation only. Currently, 700 of Idaho’s 2,779 registrants process online.

Iowa

Iowa processes apportioned renewals online. Applications are reviewed with internal system checks and an invoice is generated and sent to the carrier. If there are significant application red flags, those red flags are noted in the carrier's invoice. Carriers must meet any outstanding requirements before credentials are issued. Iowa allows permit agents, third-party vendors working with carriers for a fee, to renew paperwork online on behalf of carriers.

While not a jurisdiction that was interviewed, Indiana's technology systems allow carriers to process an IRP application, pay IRP fees, and print cab cards without leaving their office. Other online transactions include plate renewal, adding vehicles, transfers, adding states, and replacement plates.

Credit Card Transactions

Several of the jurisdictions interviewed process IRP fees via credit card. Maryland has been processing IRP fees via credit card for approximately six years. The state does not pass the cost along to carriers, rather it absorbs the cost. Maryland also accepts certified checks and cash. North Carolina will begin processing credit card transactions in the fall of 2013. North Carolina currently allows for electronic fund transfers in addition to certified check and cash. Iowa would like to begin receiving payments online in the near future, as carriers have been requesting this service. Wisconsin does not accept credit card payment due to the number of credit card transactions and associated transaction fees.

CARRIER OUTREACH

Jurisdictions used several public outreach methods to inform carriers of various changes in statewide IRP processes. All reported working with their respective state trucking association, and all notified carriers of changes via newsletters, monthly renewal notifications, and statewide and regional meetings. With respect to staggered apportioned renewals, each state reported that it was important to communicate with carriers early and often.

California

California used every opportunity to talk about switching to staggered apportioned renewals. It was noted that it was important to let the carriers be part of the decision-making process.

Louisiana

Louisiana noted that the only change they would have made as part of implementing staggered apportioned renewals would have been to notify customers in advance. Information pertaining to the switch was sent to the carriers in their renewal packets. Many did not open the packets until the last minute or until they walked into a renewal location.

Idaho

Idaho migrated to staggered apportioned renewals in 1995. Starting in 1993, Idaho began an outreach campaign to determine if a staggered approach was something the industry was interested in. Predominantly positive feedback prompted Idaho to continue a more concerted outreach campaign in the summer of 1993. The outreach was conducted in conjunction with annual motor vehicle training workshops in which state and federal partners participated. Idaho continues to conduct annual IRP workshops.

Iowa

Iowa is currently in the process of implementing staggered apportioned renewals. For the past two years, Iowa has conducted outreach so that most carriers were on board with the switch to staggered renewals. The importance of repeating the message constantly was noted as a key way to obtain carrier buy-in. Iowa used the following outreach methods: notices by mail, website, and annual carrier meetings. By the time staggered apportioned renewal implementation began, everyone knew what was going to happen and there were relatively few concerns. Iowa noted that implementation should be complete by the end of March 2013.

Wisconsin

Wisconsin noted that one of the advantages of its staggered apportioned renewal implementation was working with carriers upfront. Upfront outreach made the transition easier for carriers and staff and resulted in improved customer service.

SUMMARY OF INTERVIEWS WITH OWNERS/OPERATORS

In addition to surveys of and interviews with jurisdiction representatives, Delta contracted scope of services included interviews with up to 15 owners/operators to gain an understanding of their experiences with PennDOT's apportioned renewal processes. While a more extensive survey will be conducted in Task 2, the preliminary information gathered through these surveys will be used to help shape the questions that will be asked in the online survey.

PennDOT staff provided Delta with 15 owners/operators across the state representing a cross section of sizes and regional locations. Of the 15 owners/operators called 14 participated in the interviews. One owner/operator has not returned our calls as of the date of this document.

Given the fact that the interviews conducted are with customers of PennDOT and their responses to the questions reflect both positive and negative feedback regarding PennDOT's process, the responses to the interview questions will be summarized so that survey participants can remain anonymous.

The owners/operators interviewed were asked six brief questions.

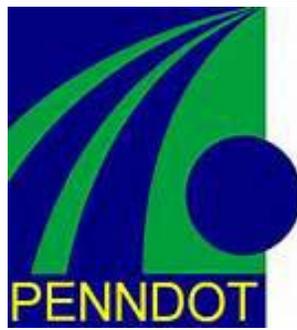
1. How do you currently handle renewals, changes, and new registrations and why?
 - a. Mail
 - b. In-person
 - c. Tag Agent/Messenger
2. From your perspective, what are the advantages and disadvantages of PennDOT's current processes for apportioned renewals?
 - a. Options for submitting
 - b. Locations
 - c. Expiration dates
3. If PennDOT were to stagger registrations for apportioned vehicles, would you prefer to register your fleet of vehicles during a different time of the year? If so, when?
4. Would you prefer to register your fleets at different times of the year, or all at the same time?
5. If you could make changes to the processes, what are the top three things you would change (e.g., submitting annual distances online)
6. If PennDOT offered an online option, would you take advantage of it?

Below is a summary of the key findings from the owner/operator surveys.

- All of the interviewees indicated that they conduct transactions via mail, five indicated that they sometimes conduct transactions in-person in Harrisburg, and six indicated that they sometimes use tag agents/messengers.
- All interviewees indicated that they would use online services if they are made available.
- The majority of interviewees indicated that having a single expiration date and the timing of expirations (May) is not a problem from their perspectives; however, several observed that because all vehicles registered in Pennsylvania are expiring at the same time that staggering renewals could spread the workload for PennDOT staff over a longer time period, and help to make the renewal process more efficient.
- The majority of interviewees also indicated that if renewals were staggered, they would still prefer to register all of their vehicles at the same time.
- The processes that interviewees indicated they would like to see change included:
 - PA state inspections are required for trucks that are not housed in PA. Would like to see this changed.
 - Better customer service.
 - Implement online services with ability to:
 - Print/fill out MV1 forms.
 - Obtain TAs online.
 - Submit mileage reports online.
 - Ability to submit new registrations and renewals.
 - Ability to print stickers and cab cards online and to track truck serial numbers online.
 - Ability to obtain replacement plates online.
 - Ability to submit 2290 with schedule and invoices online.
 - Ability to split expiration dates for renewals.
 - Allow payments by credit card, PayPal, ACH, EFT, or check
 - Decrease the length of time it takes to get registrations back
 - Provide stickers that stay fixed and don't come off
 - When PennDOT is in the midst of the renewal process, owner/operators can't risk sending in transfers because of the potential cross-over in the mail. May is a time when many carriers buy new trucks as they receive their income tax refunds.
 - Change the requirement to send in the driver's license. It is difficult to get a license from a driver who is out of state.
 - Establish a renewal location in the western part of the state.
 - Utilize email and fax more often.
 - Have high-speed printers up and running the first day of the renewal period. There are often long delays on the first day as "bugs" are being worked out.
 - Need more "checks and balances" on PennDOT's end.
 - Ensure that all PennDOT staff are properly trained and have adequate knowledge of apportioned registration and renewal processes to assist customers.
 - Email invoices and send email notice when renewals are due.
 - Communicate with registrants after their renewals are submitted to provide update on the status of stickers and registration cards.

- Because companies often use office automation to complete these processes internally, would like to see flexibility for accepting spreadsheets or mail docs.
- It is sometimes difficult to reach anyone when calling PennDOT.
- The length of time between renewal submissions in March and the expiration date in May is too long. A lot of changes can take place during that 90-day timeframe. Owners/operators are essentially anticipating in March what they will be doing in May.

SUMMARY OF SURVEY RESULTS – FEBRUARY 2013



Apportioned Registration Renewal - RFQ #111001



**DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS,
COST/BENEFIT ANALYSIS, FACILITIES
SPECIFICATIONS – JULY2013**

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INTRODUCTION AND BACKGROUND

The overall purpose of the Analysis of Staggered Apportioned Registration Renewals engagement is to evaluate the current apportioned registration renewal process in Pennsylvania and provide recommendations for improving the process, including but not limited to implementing a staggered apportioned renewal process and establishing a permanent off-site or decentralized apportioned renewal location.

The scope of the contracted services is broken down into four primary tasks:

Task 1: Survey and Compilation of Best Practices

Task 2: Analysis of Pennsylvania’s Apportioned Renewal Process, Recommendations, Costs/Benefits, and Facility Specifications

Task 3: Oral Presentation and Draft Final Report

Task 4: Final Report

Task 1 has been completed and a draft report of findings was reviewed and approved by PennDOT. Key activities in Task 1 included (1) conducting a review of background materials, (2) conducting a survey of International Registration Plan, Inc. (IRP) jurisdiction representatives to gather information regarding their apportioned registration renewals, (3) conducting follow-up telephone interviews with selected jurisdictions that responded to the jurisdiction survey, (4) conducting interviews with 15 owners/operators to gather preliminary feedback regarding their experiences with the apportioned renewal process, and (5) preparing a summary of best practices from other jurisdictions for consideration in Task 2.

The components of Task 2 include (1) conducting an analysis of PennDOT’s current renewal process, (2) making recommendations for changes/improvements to the process, (3) preparing a cost/benefit analysis for the recommendations, and (4) preparing modeling and specifications for any recommended facilities. The following pages represent the deliverable for Task 2 and provide a report of the results of the analyses above described.

SUMMARY OF RECOMMENDATIONS, COSTS, AND BENEFITS

Based on an analysis of the current apportioned registration renewal process, an assessment of the cost/benefits associated with staggering apportion renewals, and an analysis of three future facility alternatives, Delta recommends the following:

1. Implement Staggered Renewals – Staggering renewals throughout the year can provide the following advantages:
 - More consistent work-load throughout the year
 - Reduce the need to use an off-site location for renewals during “crunch” time
 - Eliminate overtime hours
 - Improve employee morale
 - Improve customer satisfaction
 - Improve accuracy in processing
2. Stagger Renewal Dates Monthly

- Distributing renewal dates consistently in each month provides the most consistent workload; however, up to two months can be skipped and still maintain relative consistency.
 - One-time costs associated with implementing staggered renewals are estimated at \$24,350 and include staff time required to develop the detailed implementation plan, communication with carriers throughout the process, and a webinar to education carriers regarding the changes and how the changes will affect their operations
3. Allow carriers to select the month their renewal is due by asking them to provide their top three preferences, and then distributing renewal dates accordingly to achieve a balanced workload.
- Allowing carriers to select their renewal date allows for some ownership of the new process.
 - Carriers with multiple fleets should have the same renewal date for all fleets to avoid complications that could arise if vehicles are transferred between fleets.
 - New carriers would be assigned to the month in which their registration application is approved.
 - During the transition period, divide IRP fees for carriers with a longer implementation period into two payments to reduce the financial burden on the carrier and to ensure that PennDOT's fees are collected in a more timely manner.
4. Relocate IRP activities to a permanent stand-alone facility in the Harrisburg area independent of the Riverfront Office Center.
- Facility could be either leased or new construction.
 - New construction provides the greatest long-term cost/benefit, while leasing provides more flexibility.
 - Co-locate other commercial services at the facility along with the Commercial Registration Section to provide a conveniently accessible "one-stop" for services to customers at any time during the year.
 - Other benefits of a new "one-stop" facility:
 - Eliminates the need to move operations to the Farm Show complex each year
 - Eliminates the fragmentation of processing activities that occurs as a result of moving operations to a temporary location each year
 - Efficiencies gained from defragmenting processing activities and from upgrading to the new ARP system means that staff will have more time to devote to improving customer service, thus increasing customer satisfaction.
 - Optimal location for a "one-stop" facility would be at or near an interchange along Interstate 81 in the Harrisburg area.

The analyses used to support the above recommendations are presented in the following pages.

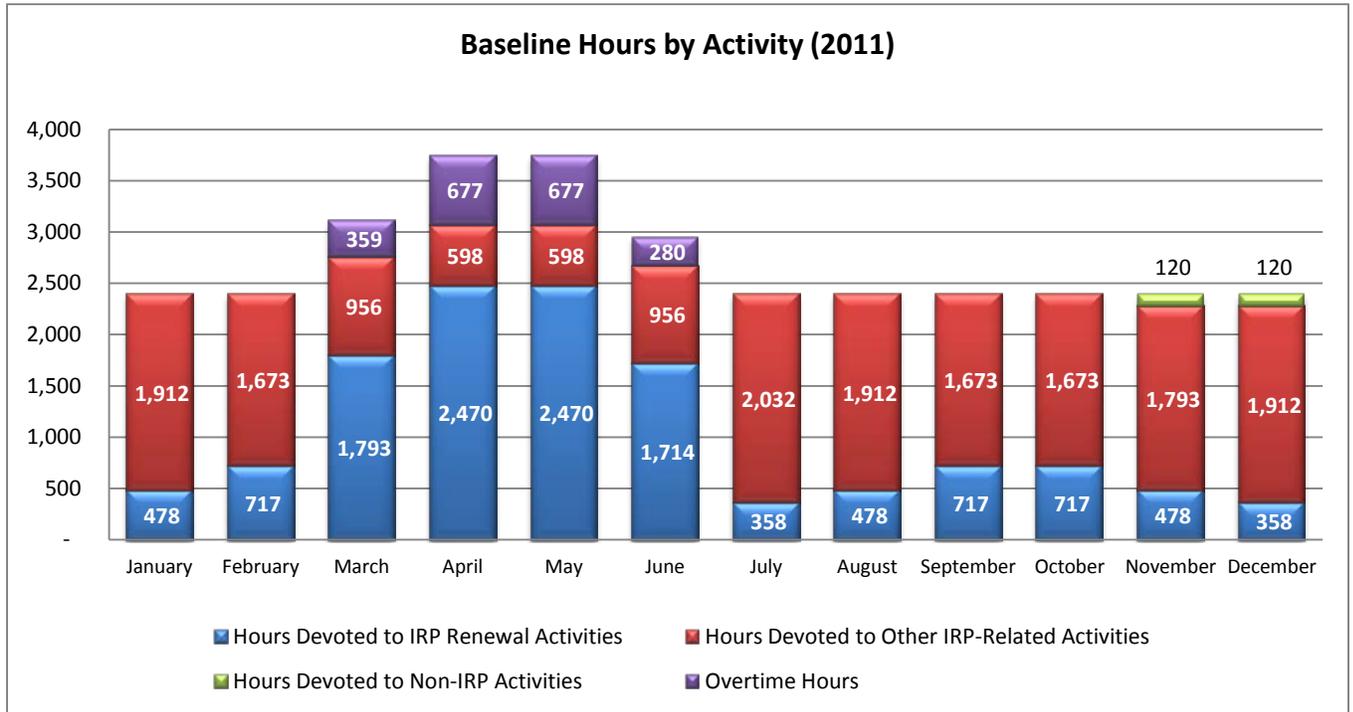
ANALYSIS OF CURRENT PROCESS

Apportioned registrations in Pennsylvania currently expire on May 31 of each year. The renewal process begins in August of each year, with a series of recurring activities as described below:

- August** An Apportioned Registration Plan (ARP) future database is created that contains current account information for active apportioned accounts.
- September** PennDOT mails letters to its active registrants requesting each to file their total miles travelled per jurisdiction during the last reporting period. The annual reporting period is July 1 to June 30. Registrants are asked to submit mileage information by October 31.
- February** PennDOT mails renewal invitations to its active registrants requesting the applicant to provide any updates to their apportioned account. Updates may include things such as change of address, vehicle additions or deletions, jurisdiction additions or deletions, change of vehicle weights, change of vehicles from one fleet to another, and another opportunity to provide mileage information from the reporting period (July 1 to June 30). Registrants are asked to return the renewals by mid-March.
- March** PennDOT processes the renewal application and mails a renewal invoice to each customer. Each customer is asked to verify the renewal invoice and submit certified payment as soon as possible to meet the June 1 deadline.
- March/April/May** PennDOT processes the renewal invoices and payments, and issues registration credentials to meet the June 1 renewal date.
- June 1** The new apportioned registration year is in effect. All apportioned motor vehicles are required to have in their possession valid registration credentials to operate their commercial vehicle.

A total of 16 PennDOT staff members are dedicated to handling apportioned registrations and renewals. While renewals are processed during March, April, May, and June, new registrations and registration changes are processed throughout the year. As Figure 1 shows, because registration expiration dates are not staggered throughout the year, regular staff time devoted to IRP renewal activities peaks significantly between March and June. In addition to regular hours, an estimated 1,994 overtime hours were worked between March and June in 2011 to process the high volumes of registration renewals during those months. With the exception of November and December, the apportioned registration unit staff time was totally dedicated to IRP-related activities. However, during November and December, 95% of staff time was dedicated to IRP-related activities and around 5% was utilized for non-IRP activities such as assisting with commercial registration audits and providing assistance to the commercial registration fleet unit.

Figure 1 – Estimated Distribution of Apportioned Registration Unit Staff Time (Baseline)



Source: PennDOT Staff Estimates

To develop assumptions for analyzing potential scenarios of changes to PennDOT’s current processes, PennDOT staff provided a series of baseline statistics (see Appendix A on page 21) that quantify customer statistics and trends, trends in off-site processing activity, trends in total annual revenue collected, and trends in other annual IRP statistics.

To provide a basis for assessing the changes that would take place in staff costs if apportioned registration expirations were staggered throughout the year, baseline data provided by PennDOT was further analyzed to quantify the estimated staff time and costs for IRP renewal activities by month (see Table 1).

Table 1 – Analysis of PennDOT’s IRP Processes and Estimated Staff Time per Activity (Baseline - 2011)

Month	Renewal Activity	Estimated Regular Hours Devoted to IRP Renewal Activities	Overtime Hours Devoted to IRP Renewal Activities	Total Estimated Staff Hours Devoted to IRP Renewal Activities	Estimated Minutes Required per Renewal
August	Future Database	478		478	2.1
September	Process Mileage Letters	717		717	3.1
October	Other	717		717	3.1
November	Other	478		478	2.1
December	Other	359		359	1.1
January	Other	478		478	2.1
February	Mail Renewal Invites	717		717	3.1
March	Mail Invoices	717		717	3.1
March	Process Renewals	717	359	1,076	29.1
April	Process Renewals	1,793	677	2,470	29.1
May	Process Renewals	1,793	677	2,470	29.1
June	Process Renewals	448	280	728	29.1
June	Other	986		986	4.3
July	Other	359		359	1.5
Total		10,755	1,994	12,749	

Source: PennDOT Staff Estimates and Consultant Calculations

Building on the baseline assumptions presented in Table 1, Delta analyzed five potential options for staggering renewals and identified the impacts and the costs/benefits of each. Expenses within PennDOT are captured at the bureau budget level, and many are not defined for specific unit functions; therefore, the cost scenarios are limited to information that is available. In addition to analyzing options for staggering renewals, Delta also conducted an analysis of facility requirements. The following section summarizes the results of these analyses.

ANALYSIS OF RECOMMENDED CHANGES

Methodology

The methodology used to assess the potential implementation of staggered apportioned renewals and location alternatives includes an analysis of qualitative and quantitative data points collected for this project.

Qualitative data included a review of existing business processes in the Commercial Registration Section, interviews with benchmark states, and interviews with selected carriers. Results from these data sources are summarized in the Deliverable #3 – Task 1.3 report.

Quantitative data included an assessment of data provided by the Commercial Registration Section, best practices obtained from the IRP jurisdiction survey, results of an owner/operator survey, and industry metrics for space requirements, lease rates, acquisition costs, and construction costs.

The recommendations outlined in this report are based on the qualitative and quantitative data collected and noted throughout this deliverable.

Two primary assumptions preface the methodology and results of this study:

1. An upgraded ARP system will be implemented.
2. Online registration and renewal transactions will occur; however, the extent of user access (state officials vs. non-state officials) was not known at the time this report was written. Analyses include comparative assumptions regarding user access to assist PennDOT officials in the decision-making process.

Recommendations for changes/improvements to PennDOT's apportioned registration renewal process are presented in the following pages, along with analyses of the costs and benefits of each, and qualitative information to support the recommendations.

RECOMMENDATION 1: IMPLEMENT STAGGERED APPORTIONED RENEWALS

Delta recommends that PennDOT implement staggered apportioned renewals. Based on information gathered through the survey of IRP jurisdictions and interviews with selected jurisdiction representatives, staggering apportioned renewals can provide the following advantages:

1. Allows for a more consistent apportioned renewal workload throughout the year.

Commercial Registration Section staff spends significant staff hours between the months of March and May processing apportioned renewals. While additional work assignments associated with apportioned renewals and other tasks are accomplished throughout the year, a heavier concentration of apportioned renewal work effort is focused during the months of March to June. Refer to Figure 1 on page 5, which illustrates the percentage of time spent on apportioned renewals throughout the year by the Commercial Registration Section.

The technology constraints of the existing ARP system are part of the reason why the apportioned renewal process is a one-time annual process rather than a consistent, staggered process. Staggered apportioned renewals are not possible with the current system. The new system will allow for continual customer account syncing, eliminating the need to rely on the current or future database protocols, which dictate when the renewal process begins.

2. Reduces the need to use an off-site location for apportioned renewals during "crunch" time.

The Pennsylvania Farm Show complex has been used by the Commercial Registration Section as an off-site location to process apportioned renewals during the month of May for approximately 15 years. While the location provides easy access for carriers compared to the Riverfront Office Center, using this alternative venue adds additional costs to IRP program. Based on the

experience of other states, a switch to staggered apportioned renewals will eliminate the annual “crunch” to renew a significant number of apportioned registrations during a small time frame. Staggering allows for a more consistent staff workload by spreading the apportioned renewal work effort throughout the year.

3. Eliminates overtime hours.

In several jurisdictions interviewed for this project, one of the most significant benefits of switching to staggered apportioned renewals, from both a state and employee perspective, was the virtual elimination of overtime hours. Overtime hours were necessary, as the processing of renewals was concentrated at one time during the calendar year. Prior to staggering apportioned renewals, the jurisdictions interviewed had an annual renewal deadline either in May or December. From a staff perspective, elimination of this overtime allowed staff to take time off. This was particularly advantageous to those states with a former renewal deadline at the end of December.

Data reflecting reduction/elimination of annual overtime hours resulting from switching to staggered apportioned renewals was provided by several jurisdictions as follows:

- Louisiana – 200 hours reduced or eliminated
- North Carolina – 3,120 hours reduced or eliminated
- Wisconsin – 11,250 hours reduced or eliminated

California implemented staggered apportioned renewals in fiscal year 2008/2009. In fiscal year 2005/2006, state Department of Transportation staff logged over 5,500 overtime hours, equivalent to nearly \$130,000. In fiscal year 2010/2011 after staggered apportioned renewal implementation, staff overtime hours totaled 48 (under \$1,000).

4. Improves employee morale.

In most jurisdictions interviewed, employee morale was often low prior to staggered apportioned renewals. This was due to employees working significant amounts of overtime, particularly during the holidays at the end of the year and during the summer when vacation time is typically taken. Jurisdictions that implemented staggered apportioned renewals reported improved staff morale and increased customer satisfaction. As the annual reporting period was at the end of the calendar year in many jurisdictions, switching to a staggered system helped to relieve pressure during the holiday months of November and December. For states that handle both IRP and International Fuel Tax Agreement (IFTA) activities in one unit, such as Wisconsin, the switch to staggered apportioned renewals was extremely beneficial to employee morale. Similarly, carriers reported improved customer satisfaction as processing

time for apportioned renewals decreased due to a balanced staff workload at the transportation agency.

5. Improves customer satisfaction.

Jurisdictions noted that their level of customer satisfaction improved after implementing staggered apportioned renewals, as carriers did not have to wait in line to have their renewals processed. In addition, jurisdictions that allowed carriers to choose their apportioned renewal deadline reported improved customer satisfaction, since carriers were included in the decision making process.

6. Improves accuracy in processing.

Several jurisdictions noted an overall increase in accuracy. The stress of trying to process renewals at one time of the year often caused an increase in errors. After staggered apportioned renewals were implemented, the time constraints were significantly reduced, resulting in an overall improvement in accuracy. A few jurisdictions noted that allocating renewals throughout the year has resulted in a decrease in errors and quicker fee deposits, which alleviate the backup of accounting activities due to dealing with large amounts of money.

Although Pennsylvania does not offer a grace period for apportioned renewals, many states that were interviewed had a grace period between 30 and 45 days prior to switching to staggered apportioned renewals. The switch to staggered apportioned renewals eliminated the need to have a grace period in several jurisdictions. These grace periods were in place due to the sheer volume of work required for respective states to process apportioned renewals. Grace periods were eliminated after staggered apportioned renewals were implemented, as workload was spread more evenly throughout the calendar year.

RECOMMENDATION 2: STAGGER APPORTIONED RENEWAL DATES MONTHLY

Delta recommends that PennDOT stagger apportioned renewals monthly, perhaps with the exception of either October and November, November and December, or July and December. Monthly staggering would provide a more consistent level of workload throughout the calendar year. Skipping the month of December for staggered apportioned renewals can help to accommodate reduced staff hours due to holidays. Several states adopted this approach, and New York skips July in addition to December to allow for reduced staff hours due to vacations as well. In the survey, the majority of the jurisdictions reported monthly apportioned renewals. A few states reported staggering apportioned renewals quarterly. North Dakota indicated that quarterly works well, as IRP staff processes IFTA as well. The month after IRP staggered renewals, IFTA quarterlies are due, providing staff adequate time to catch up on their workload. As reported by Maryland, the main reason for opting to stagger renewals quarterly was the ability to lessen the workload throughout the year, which allows staff to assist with other tasks. In addition, mailing of credentials takes place quarterly, not monthly.

The recommendation to stagger renewals monthly is based on observations from other states and on the following analysis. The benefits of staggering renewals would be enhanced by the full implementation of proposed ARP system upgrades, which would eliminate the need to create a future database in August of each year.

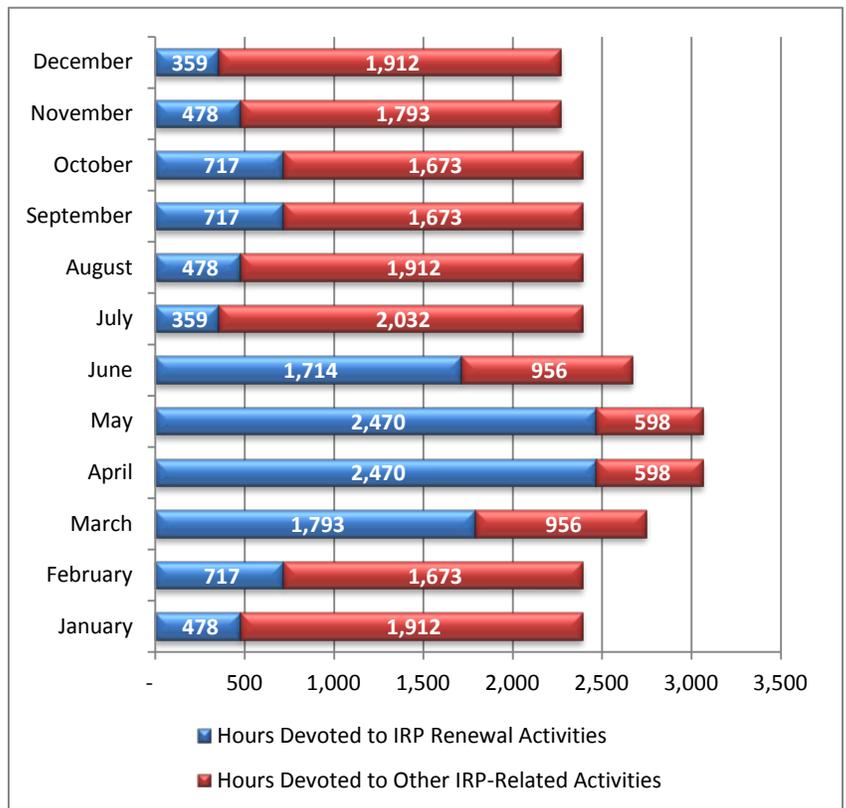
Using the assumptions from the analysis of PennDOT’s current process activities as a basis for analysis (see Table A-4 on page23) Delta estimated the distribution of hours using five approaches to staggering: (1) staggering quarterly, with expirations in February, May, August, and November (aligning the month prior to IFTA reporting deadlines), (2) staggering monthly with no months skipped, (3) staggering monthly, with the exception of November and December, (4) staggering monthly, with the exception of October and November, and (5) staggering monthly, with the exception of July and December.

Table 2 below shows the estimated distribution of hours required for IRP activities for each of the five scenarios compared to the baseline year. The number of commercial registration staff required to perform IRP activities is driven primarily by the heavy workload during the four-month time period when renewals are processed. Even with a full complement of 16 staff members, in 2011, a total of 1,994 overtime hours were worked during this four-month period. To ensure an adequate knowledge-base and the efficiency of the renewal process, the 16 staff members are permanent employees.

The estimates for the staggering options in Table 2 assume that (1) the workload

requirement for IRP renewal activities is driven by the estimated number of renewals expiring in a given period; and (2) that, unlike IRP renewal activities, the workload requirement for other IRP services is consistent throughout the year with no seasonal fluctuations. As shown in Figure 2, the high volumes of renewal activities between March and June mean that staff hours that are available for other IRP activities are significantly reduced during these months, creating a backlog of work to be done in the weeks following the renewal period. Assuming that the “demand” for other IRP services is consistent throughout the year, it is likely that staff was not fully utilized during the eight months of the year when renewals were not being processed; therefore the estimates in Table 2 reflect a

Figure 2 – Baseline Distribution of IRP Hours



conservative 95% staff utilization rate in the baseline year to capture the efficiencies gained through a more consistent distribution of work throughout the year. At least 885 hours would be saved through these efficiencies if a staggered renewal process is implemented. The analysis also assumed that the IRP renewal process activities and their schedules would remain the same in the staggering options; however, adjustments were made to reflect efficiencies gained through the upgrade to the new ARP

system. PennDOT staff estimated that processing renewal applications would take less time (approximately 63% of current time requirement) with the upgraded system, saving over 2,500 hours of staff time annually. The efficiencies gained through the implementation of staggered renewals, coupled with the upgrade to the ARP system can mean **savings of at least \$95,800 each year**. While the cost savings could be realized by reducing the size of the staff, the time saved could also be utilized to improve customer service and response time, to provide training to carriers for transitioning to online options (if it is determined that carriers will have access to the online system), or to provide additional support for PennDOT activities other than IRP activities.

Staggering monthly with no months skipped would provide the most consistent level of staff time per month; however, skipping months around the Thanksgiving and Christmas holidays reduces staff time during November and December (see Table 2 and Figure 3). Interestingly, using these assumptions, skipping October and November actually provides a greater reduction of staff hours in November and December than can be obtained through skipping November and December. The difference, however, is not significant.

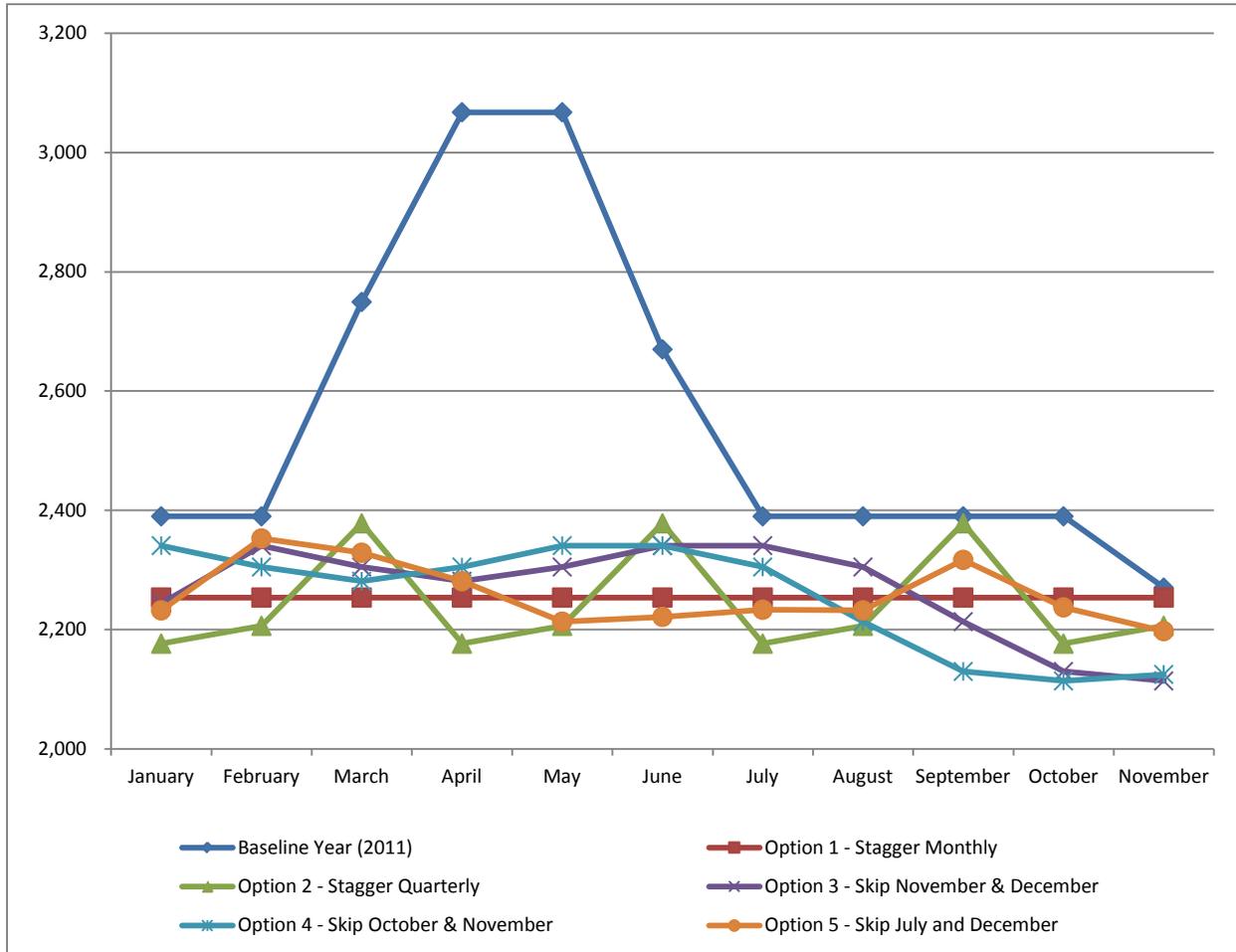
Table 2 – Comparative Distribution of Staff Hours by Staggering Scenario

Monthly	Baseline Year Estimates – May 31 st Expiration (2011)	Option 1 – Stagger Monthly	Option 2 – Stagger Quarterly	Option 3 - Stagger Monthly, Skip November & December	Option 4 – Stagger Monthly, Skip October & November	Option 5 – Stagger Monthly, Skip July & December
January	2,390	2,254	2,177	2,244	2,341	2,232
February	2,390	2,254	2,207	2,341	2,305	2,353
March	2,749	2,254	2,378	2,305	2,281	2,329
April	3,067	2,254	2,177	2,281	2,305	2,281
May	3,067	2,254	2,207	2,305	2,341	2,213
June	2,670	2,254	2,378	2,341	2,341	2,221
July	2,390	2,254	2,177	2,341	2,305	2,233
August	2,390	2,254	2,207	2,305	2,213	2,232
September	2,390	2,254	2,378	2,213	2,130	2,317
October	2,390	2,254	2,177	2,130	2,114	2,237
November	2,271	2,254	2,207	2,114	2,125	2,198
December	2,271	2,254	2,378	2,125	2,244	2,198
Total Hours	30,435	27,046	27,046	27,046	27,046	27,046
Hours Saved		3,389	3,389	3,389	3,389	3,389
Value of Hours Saved		\$95,818	\$95,818	\$95,818	\$95,818	\$95,818

Source: PennDOT statistics and consultant assumptions and calculations

Note: Calculations assume 95% utilization in baseline year.

Figure 3 –Distribution of Monthly Workload by Staggering Option Compared to Baseline Year



In preparation for changing to a staggered system, Delta recommends the following one-time processes, with **total estimated one-time costs of approximately \$24,350**. **Note that the costs below do not include costs for printing** (internal printing costs were not provided for this analysis):

- Prepare and mail flyers to carriers explaining the new staggered process, options for training, how they will benefit from the change in the process, their role in the process, and dates for workshops that they can attend to learn more about the process. Estimated cost (staff and mailing): \$7,500
- Prepare and conduct a webinar designed to prepare carriers for the upcoming changes. An initial webinar could be hosted live, and could be recorded and posted on PennDOT’s apportioned renewal web page for carriers to review at their convenience. Estimated cost (staff cost): \$2,250
- Prepare and mail letters to carriers asking for their top three preferences for expiration months. Estimated cost (staff and mailing); \$6,800
- Assign expiration dates to carriers. Estimated cost of staff time: \$1,000
- Prepare and mail letters to carriers informing them of their new expiration date and next steps in the process. Estimated costs (staff and mailing): \$6,800

RECOMMENDATION 3: ALLOW CARRIERS TO SELECT APPORTIONED RENEWAL MONTH

Delta recommends that PennDOT allow carriers to select the month their apportioned renewal is due. Carriers should be requested to provide PennDOT with their top three choices of months. When carriers are asked to provide PennDOT with their top three choices, they should be made aware (1) of any interim payments that might be required during the transition period (see discussion below and Table 6); and (2) that the assignment of expiration months will be made on a “first come, first served” basis. After this information is obtained, PennDOT should make the final decision on which month each carrier’s apportioned renewal is due based on projected workload. This recommendation is suggested based on the following observations:

1. Allowing carriers to select the month their renewal is due allows them some ownership of the new process. Many jurisdictions reported that allowing carriers to choose the month (or choose several months) for apportioned registration renewals provided carriers with a “say” in how the new process was being implemented. This provided a sense of partnership between the state transportation agency and the carriers.
2. Jurisdictions that allowed carriers to choose the month to stagger reported that staggered renewals turned out to be fairly proportioned throughout the year.
3. Carriers with multiple fleets would have the same apportioned renewal date for all fleets. Idaho provided a good reason for this recommendation. At first, Idaho allowed carriers with more than one IRP fleet to have a different expiration date. With vehicles routinely being transferred between fleets, having the same expiration date made more sense. Idaho now requires that carriers with multiple fleets have the same expiration date.
4. New carriers would be assigned to the month in which their registration application is approved.

The change to staggered renewals will include a transition period during which renewals could potentially cover a period of up to 18 months, depending on the month selected (or assigned) to the carrier. PennDOT should consider dividing the IRP fees for carriers with a longer implementation period into two payments. This process was successfully used in Louisiana and would help to reduce the financial burden on the carrier, as well as ensure that PennDOT’s fees are collected in a more timely manner. Assuming that expiration dates are distributed evenly, Table 3 below shows an example of how the fees could be distributed.

Table 3 – Potential Distribution of Interim Fees (assumes implementation in May 2014)

New Expiration Date	Transition Registration Period (number of months)	Interim Fee Due
December 2014	7	N/A
January 2015	8	N/A
February 2015	9	N/A
March 2015	10	N/A
April 2015	11	N/A
May 2015	12	N/A
June 2015	13	N/A
July 2015	14	January 2015
August 2015	15	January 2015
September 2015	16	January 2015
October 2015	17	February 2015
November 2015	18	February 2015

RECOMMENDATION 4: RELOCATE IRP ACTIVITIES TO A PERMANENT STAND-ALONE FACILITY

With the advent of a new ARP system, the ability to conduct apportioned registrations online and a more consistent volume of registration renewals should reduce the need to lease a facility such as the Farm Show complex for renewal activities. However, the configuration of the Riverfront Office Center limits the ability of carriers to use the facility if their mode of transportation to the facility happens to be one of their trucks. After analyzing three facility alternatives, Delta recommends relocating IRP activities to a stand-alone facility in the Harrisburg area in a location independent of the Riverfront Office Center, providing better access for trucking operations. Existing Commercial Registration Section staff would be relocated from the Riverfront Office Center to this new facility. To the extent practicable, it is suggested that other commercial trucking services be co-located with the Apportioned Registration Unit in an effort to create a “one-stop” location similar to what is found in North Carolina. North Carolina’s IRP unit is housed within a one-stop-shop location in Raleigh to serve the needs of the trucking industry. North Carolina’s one-stop location includes the following services:

- IRP
- IFTA (managed by the North Carolina Department of Revenue)
- Oversize/Overweight Permits
- Heavy Vehicle Tax (Federal Form 2290)
- Issuing federal DOT numbers

This one-stop location has ample parking for carriers to park tractor trailers.

Table 4 below shows a comparative summary of the three alternatives evaluated: (1) Continue with Current Facility Arrangements (ROC/Farm Show); (2) Relocate IRP Activities to a Leased Facility in Harrisburg; and (3) Relocate IRP Activities to a New Facility in Harrisburg (New Construction). The complete facility analysis and supporting calculations can be found in Appendix C.

Table 4 – Summary of Comparative Costs for Facility Alternatives

	Alternative #1 Continue with Current Facility Arrangements (Baseline)	Alternative #2 Leased Facility in Harrisburg	Alternative #3 New Facility in Harrisburg
Total Facility Area (square feet)	4,100	4,100	4,100
Total Temporary Facility Area (square feet)	5,700		
Facility Lease Rate (per square foot per year)	\$9.50	\$20.50	\$9.50
Temporary Facility Lease Rate (per year)	\$23,000		
Annual Facility Lease	\$38,950	\$84,050	\$38,950
Annual Temporary Facility Lease	\$23,000	\$0	\$0
Annual Total Facility Lease	\$61,950	\$84,050	\$38,950
Annual Lease Escalation (%)	1.50%	1.50%	1.50%
Analysis Period (years)	20	20	20
Total Lease Expense During Analysis Period	\$1,453,999	\$1,972,697	\$914,177
Total Site Area (acres)			0.92
Acquisition Cost per Acre			\$1,125,000
Total Acquisition Cost			\$1,035,000
Construction Cost per Square Foot			\$180.15
Total Construction Cost			\$738,615
Total Acquisition and Construction Expense			\$1,773,615
Residual Property Value			
Base Year Land Value			\$1,035,000
Annual Land Value Escalation			1.50%
Year 20 Land Value			\$1,393,995
Base Year Building Value			\$738,615
Annual Building Value Escalation			1.50%
Year 20 Building Value before Depreciation			\$994,807
Less 20-Year Depreciation (Straight Line over 30 Years)			-\$492,410
Year 20 Building Value after Depreciation			\$502,397
Total Residual Property Value			\$1,896,392
Acquisition and Construction Expense less Total Residual Property Value			-\$122,777
Total Facility Expense	\$1,453,999	\$1,972,697	\$791,400

Based solely on the costs over a 20-year period, relocating to a “one-stop” facility is preferred over continuing with the current facility arrangements or leasing a facility. In addition to the lower long-term costs, other benefits of relocating to a “one-stop” location include:

- Convenience to PennDOT – Relocation would eliminate the inconvenience of moving operations to the Farm Show for three weeks each year, and would also eliminate the fragmenting of processing activities that occurs as a result of this arrangement.
- Convenience to Customers – Customers would be able to access all services related to commercial registrations at any time during the year at a single, conveniently accessible facility.
- Commercial Carrier Focus – Staff at the facility could be totally focused on services related to commercial carriers.
- Increased Customer Satisfaction – Efficiencies gained from defragmenting processing activities and upgrading to the new ARP system would mean that the IRP staff will have more time to dedicate to improving customer service, thus increasing customer satisfaction.

In addition to the benefits listed above, two additional factors should be considered in making a final decision regarding future facilities. First, with the current facility arrangement, a number of “back office” support activities are performed by staff other than the 16 staff in the Commercial Registration Section (e.g., printing, document fulfillment, etc.). This recommendation assumes that being located at a location independent from the Riverfront Office Center would not compromise the efficiency of those services. Second, the clear preference of respondents to the carrier survey was the ability to renew apportioned registrations online. If and when that capability is implemented, the number of customers who would utilize a walk-in facility may be significantly reduced.

If the flexibility of leasing space is an attractive alternative, there are two primary options for leasing: (1) Space could be leased in an existing facility in the Harrisburg area; or (2) a new facility could be built to PennDOT’s specifications through a build-to-suit arrangement with a developer, and then PennDOT could lease the building from the developer. While the leasing alternative is the most costly of the three, it provides the flexibility of a lease while offering the conveniences of a state-owned independent “one-stop” facility. Another attractive feature of a lease is the fact that the lessor takes responsibility for building maintenance, and the lease rate often includes the cost of utilities.

The optimal location for a “one-stop” facility would be at or near an interchange along Interstate 81 in the Harrisburg area. The Interstate 81 corridor provides easy access to Interstate 83 and the Pennsylvania Turnpike, as well as to Interstate 78 and a number of major U.S. highways. Several business parks are located at these interchanges that would provide shovel-ready sites for either a construct/own or build-to-suit/lease arrangement.

Although likely limited along the Interstate 81 corridor, PennDOT could also explore available state-owned properties that could potentially be utilized for construction (e.g., underutilized property adjacent to the State Correctional Institution in Camp Hill near Interstate 83). Building on state-owned properties could eliminate acquisition costs, but would possibly increase the cost of site prep.

OTHER CONSIDERATIONS

Even though overall, the trucking industry in Pennsylvania has experienced a decline in employment since the economic downturn that began in 2008, an expansion of the Panama Canal that is currently underway could provide a boost to the trucking industry in the next few years. Scheduled for completion in 2014, the canal's expansion is expected to double the capacity of the canal for imports and exports. This increased capacity will make areas along the Atlantic coast more attractive to domestic manufacturers looking for speed to market. The increased capacity will also impact the volume of goods that is imported through ports along the Atlantic coast. While the impacts of this expansion to Pennsylvania are yet to be seen, its trucking industry will likely experience increases in demand, which could mean an increase in the number of trucks registered in Pennsylvania.

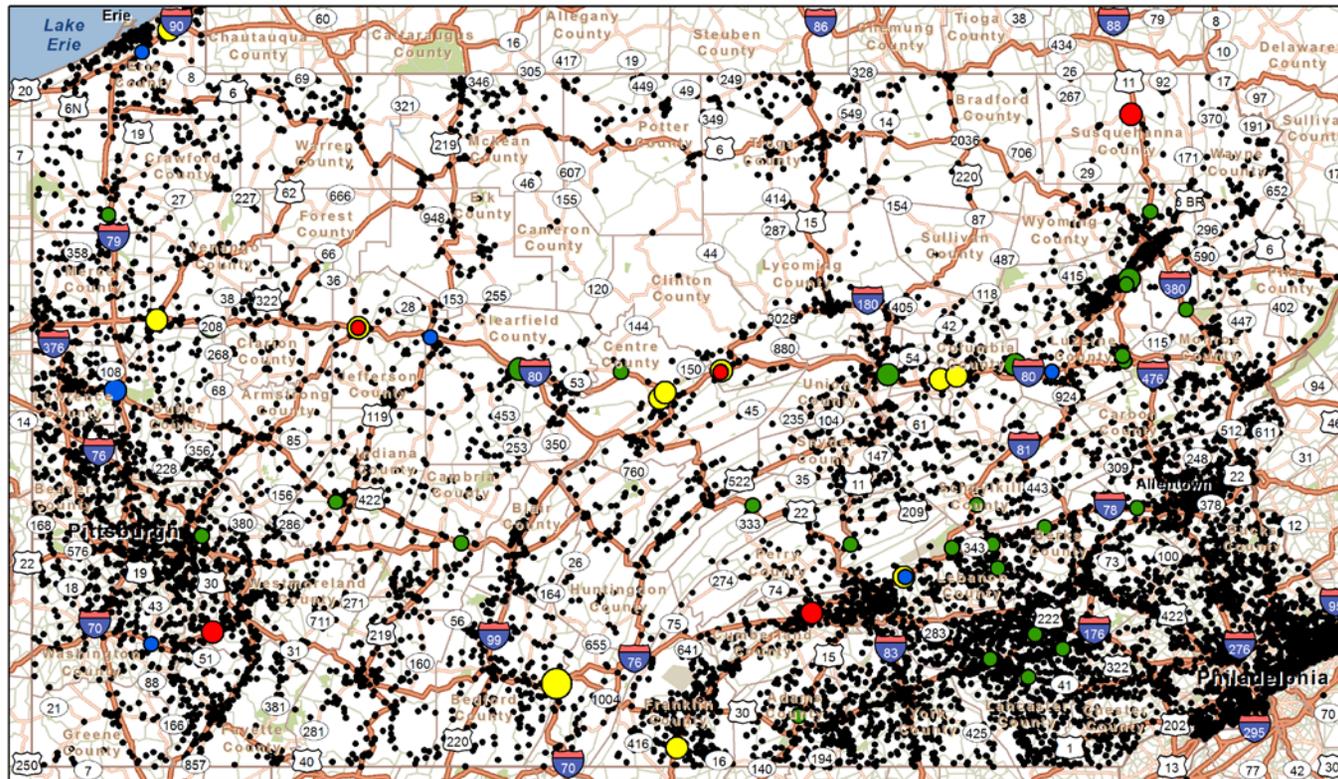
In addition to building a new IRP facility in Harrisburg, providing regional locations for renewals would be helpful to improve customer service, especially if the number of registrants in Pennsylvania continues to increase, or if fewer registrants than expected take advantage of online services.

Regional locations have been deployed by many IRP states. For example, in 2009 and in response to carrier feedback, Port of Entry Registration Specialists were established at Ports of Entry (weigh stations) in three locations throughout Idaho. Customers (carriers) were concerned that the distance from the Department of Transportation headquarters in Boise is nearly 500 miles from some northern areas of the state. Full-service processing takes place at each Port of Entry. A fourth Port of Entry was added in early 2013. Each registration specialist has reduced central office staff workload by 5% (20% total). Carriers have commented that their registration has helped them obtain proper credentials. Shifting workload to the Ports of Entry has freed up central office staff to work on other assignments.

While building stand-alone regional facilities may not be feasible at this time, a future option might be to establish the regional locations at existing Pennsylvania welcome centers to leverage the state's existing investment in land and infrastructure associated with welcome centers. The welcome center locations are positioned in proximity to Pennsylvania's borders along the major Interstates, providing convenient access for carriers.

Additional alternatives for regional locations might be at existing private-sector trucking travel plazas located throughout Pennsylvania. PennDOT could potentially lease space from a private-sector travel plaza owner, or perhaps contract with travel plaza owners as third-party business partners. To help assess where a regional location might be the most beneficial, Delta mapped the headquarters of existing Pennsylvania carriers to demonstrate the geographic dispersion of carriers in Pennsylvania, and the location of existing travel plazas (see Figure 2 below).

Figure 2 – Location of Pennsylvania Carriers and Existing Truck Plazas



Carrier/Fleet Locations and Truck Plazas by Annual Sales Volume (\$000)

Carrier/Fleet Locations	Other Truck Plazas	Travel Centers of America	Pilot Travel Center	Flying J Travel Plaza
•	● \$906.00 - \$21,344.00	● \$906.00 - \$21,344.00	● \$906.00 - \$21,344.00	● \$906.00 - \$21,344.00
	● \$21,344.01 - \$69,600.00	● \$21,344.01 - \$69,600.00	● \$21,344.01 - \$69,600.00	● \$21,344.01 - \$69,600.00
	● \$69,600.01 - \$116,000.00	● \$69,600.01 - \$116,000.00	● \$69,600.01 - \$116,000.00	● \$69,600.01 - \$116,000.00

Source: PennDOT's Database of Owner/Operators and ESRI

Recommended Customer Service Improvements

In addition to implementing staggered apportioned renewals, Delta recommends the implementation of the following customer service improvements. The customer service improvements could likely be accommodated within the Apportioned Registration System modernization project. Each of these suggestions has been successfully implemented in benchmarked states that were interviewed and/or researched for this project.

1. Consider allowing carriers and/or business partners to process Apportioned Registration credentials online, including IRP registration and renewals, pay fees, and printing cab cards. This would improve the level of customer service and help reduce staff workload.
2. Consider allowing for credit card transactions and electronic funds transfer. Several of the jurisdictions interviewed process IRP fees via credit card. Maryland has been processing IRP fees via credit card for approximately six years. The state does not pass the cost along to carriers; rather, it absorbs the cost. Maryland also accepts certified checks and cash. North Carolina will begin processing credit card transactions in the fall of 2013. North Carolina currently allows for electronic funds transfer in addition to accepting certified checks and cash. Iowa would like to begin receiving payments online in the near future, as carriers have been requesting this service. Wisconsin does not accept credit card payment due to the amount of credit card transactions and associated transaction fee.

The Commonwealth of Pennsylvania's Bureau of Financial Management, Office of Comptroller Operations provides a feasibility model that compares the cost of implementing e-commerce to the related cost savings in staff time. Using this model with estimated renewal volumes based on the estimated potential carriers that would utilize an online option (67% according to carrier survey results described in Appendix B), Delta estimates the annual cost for credit card transactions to be approximately \$1.178 million, which equals around 1.9% of the estimated total fees processed (see Appendix D on page 35). To implement e-commerce in the Commonwealth, an offsetting savings in staff costs is expected to be represented in the required business plan. The annual salaries of the entire Commercial Registration Section staff total just under \$830,000. Even if the entire staff time were devoted to payment processing, this salary amount is not sufficient to recoup the cost of implementing e-commerce; however, an e-commerce plan that would include all commercial services and "back office" support could potentially create enough savings to merit the implementation of an e-commerce option for IRP customers. We recommend that PennDOT conduct a further analysis of these options to see if sufficient savings could be created.

3. Consider issuing personalized license plates. This would bring in additional revenue, reduce plate theft, and provide additional, cost-effective carrier advertising. Indiana issues personalized license plates in addition to the following online transactions: plate renewal, adding vehicles, transfers, adding states, and replacement plates.

4. Consider providing carrier outreach before, during, and after staggered apportioned registration implementation. Each state interviewed reported that it was important to communicate with carriers early and often. Wisconsin noted that one of the advantages of its staggered apportioned renewal implementation was working with carriers upfront. Upfront outreach made the transition easier for both carriers and staff and resulted in improved customer service.

APPENDIX A – BASELINE STATISTICS FOR IRP-RELATED ACTIVITIES

Table A-1 – IRP Annual Customer Statistics and Trends

Calendar Year	ROC Counter Customers	New IRP Fleets	IRP Fleets Renewed	Total IRP Fleets	Total Power Units
2009	3,953	894	14,011	14,905	69,646
2010	2,755	1,249	12,777	14,021	73,669
2011	2,950	2,265	13,917	16,182	61,908

Source: PennDOT Staff

Table A-2 – IRP Annual Off-Site Processing, Deposits, and Total Revenues Collected

Calendar Year	Off-Site (3 wks) Renewal Drop-offs	Off-Site (3 wks) Invoices Processed	Off-Site (3 wks) Total Deposits	Total Apportioned Revenue Collected
2009	613	3,198	\$32.7 million	\$121.7 million
2010	784	3,094	\$36.3 million	\$158.1 million
2011	603	3,164	\$30.4 million	\$103.8 million

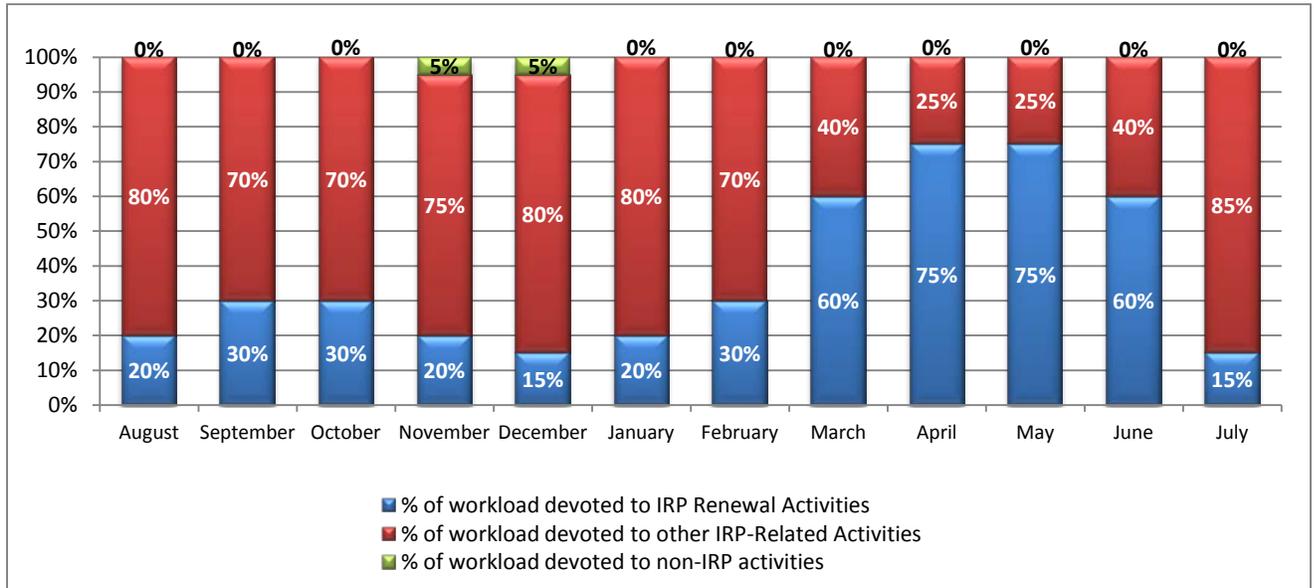
Source: PennDOT Staff

Table A-3 – IRP Annual Expense Statistics and Trends

Calendar Year	Building/Rental Expense and Operations	Annual Membership Fees	ARP Unit Overtime Hours	Office Supplies/Equipment	Clerk II Salaries & Benefits (2 @ \$47,772)	Clerk III Salaries & Benefits (13 @ \$59,614)	Supervisor II (1 @ \$76,095)
2009	\$20,000	\$35,000	2,480	\$28,000	\$95,544	\$657,982	\$76,095
2010	\$20,500	\$35,000	2,428	\$27,000	\$95,544	\$657,982	\$76,095
2011	\$21,300	\$35,000	1,994	\$24,000	\$95,544	\$657,982	\$76,095
2012	\$23,000						

Source: PennDOT Staff

Figure A-1 – Estimated Distribution of PennDOT Commercial Registration Section Staff Hours



Source: PennDOT Staff

Table A-4 – Analysis of PennDOT Processes and Estimated Staff Time per Activity

Month	Renewal Activity	Regular Hours devoted to IRP Renewal Activities ⁽¹⁾	OT hours devoted to IRP Renewal Activities ⁽²⁾	Hours devoted to other IRP Related Activities ⁽¹⁾	Hours devoted to non IRP activities ⁽¹⁾	Total Estimated Staff Hours Devoted to IRP Renewals ⁽³⁾	Estimated Minutes per Renewal ⁽⁴⁾
August	Future Database	478		1,912	-	478	2.1
September	Process Mileage Letters	717		1,673	-	717	3.1
October	Other	717		1,673	-	717	3.1
November	Other	478		1,793	120	478	2.1
December	Other	359		1,912	120	359	1.5
January	Other	478		1,912	-	478	2.1
February	Mail Renewal Invites	717		1,673	-	717	3.1
March	Mail Invoices	717		956	-	717	3.1
March	Process Renewals	717	359	-	-	1,076	29.1
April	Process Renewals	1,793	677	598	-	2,470	29.1
May	Process Renewals	1,793	677	598	-	2,470	29.1
June	Process Renewals	448	280	956	-	728	29.1
June	Other	986		-	-	986	4.3
July	Other	359		2,032	-	359	1.5
Total		10,755	1,994	17,686	239	12,749	

Source: PennDOT Estimates, Consultant Assumptions and Calculations

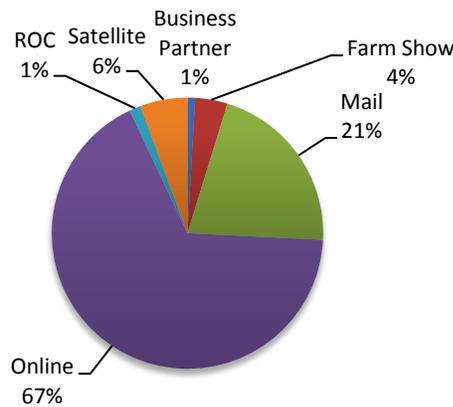
Notes:

- (1) Assumes total available staff hours at 1,793 hours/year, multiplied by estimated percentage of time devoted to various activities as shown in Figure A-1 on the previous page. Total available staff hours assume 37.5 hours/week, 11 holidays, and 10-day vacation benefits.
- (2) Overtime hours devoted to IRP renewal activities is based on overtime baseline overtime hours (2011) distributed during the months of March to June in proportion to the the regular hours devoted to processing renewals in each month.
- (3) Total estimated staff hours devoted to IRP renewals represents the total of regular and overtime hours devoted to IRP renewal activities.
- (4) Number of minutes per renewal for each activity estimated based on total number of hours divided by the number of renewals included in activity, converted to minutes. The number of renewals assumes the baseline number of renewals (13,917 in 2011) for all activities except processing renewals. To estimate the time required to process renewals, the baseline number of renewals was distributed during the months of March to June in proportion to the regular hours devoted to processing renewals each month.

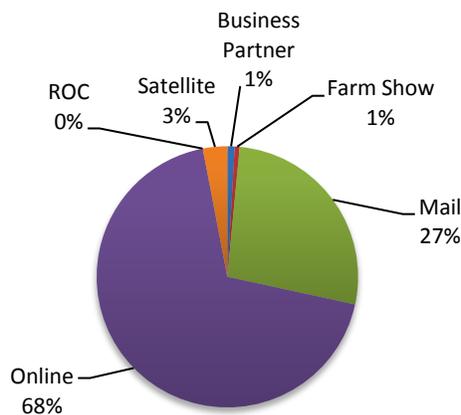
APPENDIX B – RESULTS OF CARRIER SURVEY

To understand how implementing online services would impact the volume of renewals by format, Delta conducted a survey of a sampling of commercial carriers registered in Pennsylvania. Postcard invitations to take the survey were mailed to 7,200 randomly selected carriers. In addition, 200 flyers were distributed by PennDOT staff during the renewal period at the Farm Show Complex in May. A total of 441 carriers participated in the survey, for a survey confidence level of 95% +/- 4.6. The following survey results were used to establish volumes by format for each of the scenarios below. Survey participants were asked (1) how they currently renew their apportioned registration and (2) the order of preference for six methods for renewing apportioned registrations, if all six methods were available. Of the 441 carriers, 75% indicated that they currently renew their registrations via mail; 19% renew their registrations at the Farm Show Complex, and 6% renew their applications at the ROC.

Overall, Respondents Prefer...

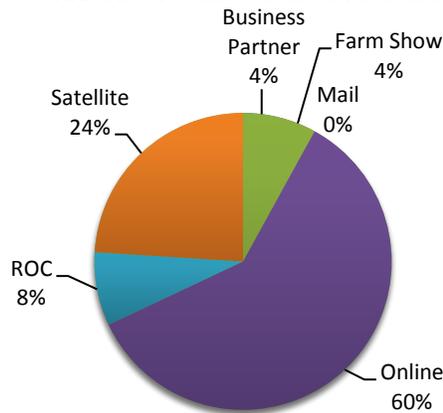


Respondents Currently Using Mail Prefer...

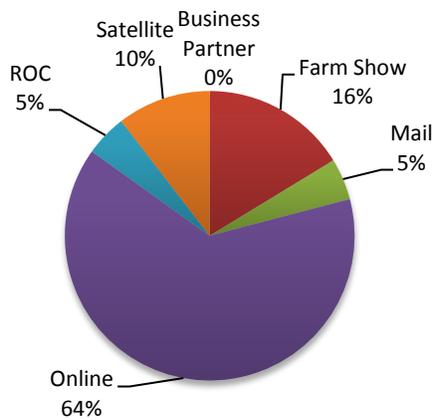


APPENDIX B – RESULTS OF CARRIER SURVEY

Respondents Currently Using PennDOT's Riverfront Office Center Prefer...



Respondents Currently Using The Harrisburg Farm Show Complex Prefer...



APPENDIX B – RESULTS OF CARRIER SURVEY

Applying the detailed survey results to reflect the facility alternatives evaluated in Appendix C, a summary of the estimated fleet renewal volume by format and option is included in Table B-1 below. Detailed survey results are provided in Table B-2.

Table B-1 – Estimated Volume of Renewals by Facility Alternative and Renewal Methods

Renewal Option	Current Renewal Method	Preferred Renewal Option with Online Upgrade and Online Processing Accessible to PennDOT Staff Only	Preferred Renewal Option with Online Upgrade and Online Processing Accessible to PennDOT Staff and 3rd Party Partners	Preferred Renewal Option with Online Upgrade and Online Processing Accessible to PennDOT Staff, 3rd Party Partners, and Carriers
Mail	9,315	11,211	10,824	3,085
Farm Show	3,767			
ROC	835			
Third-Part Business Partner			1,481	315
Online				9,761
IRP Activities Relocated to Stand-Alone Facility		2,706	1,612	756
Total	13,917	13,917	13,917	13,917

Table B-2 – Detailed Results of Carrier Survey - Top Three Renewal Options

Note: ROC = Riverfront Office Center; BP = 3rd Party Business Partner; Satellite = PennDOT Satellite Location
 Responses that ranked more than one option per choice were not included in final calculations

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
1	16875	Centre	1	5	Mail	Online	Mail	Satellite
2	16511	Erie	1	6	Mail	Online	Mail	Satellite
3	18901	Bucks	1	1	Mail	Online	Mail	
4	19310	Chester	1	8	Mail	Online	Mail	Satellite
5	17019	York	12	0	Mail	Online	Mail	ROC

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
6	17403	York	1	55	Mail	Online	Mail	Satellite
7	17301	Adams	2	4	Mail	Online	Mail	Satellite
8	15068	Westmoreland	1	1	Mail	Online	BP	Mail
9	15642	Westmoreland	1	3	Mail	Online	Mail	Satellite
10	18969	Montgomery	1	1	Mail	Online	Mail Satellite	
11	19029	Delaware	1	53	Mail	Online	Mail	Satellite
12	17403	York	2	5	Mail	Online	Mail	Satellite
13	19464	Montgomery	1	24	Mail	Online	Farm Show	Mail
14	18042	Northampton	6	0	Mail	Online		
15	15101	Allegheny	1	0	Mail	Online	Mail	Satellite
16	17077	Lebanon	1	2	Mail	Online	Mail	Farm Show
17	17836	Northumberland	1	1	Mail	Mail	Farm Show	ROC
18	19054	Bucks	1	1	Mail	Online	Mail	BP
19	17724	Bradford	1	0	Mail	Online	Mail	Satellite
20	17257	Cumberland	1	1	Mail	Online	Satellite	Mail
21	17856	Union	2	4	Mail	Online	Mail	Satellite
22	16137	Mercer	1	2	Mail	Online	Mail	Satellite
23	15644	Westmoreland	1	1	Mail	Online		
24	19116	Philadelphia	1	3	Mail	Online	Mail	Satellite
25	18458	Pike	1	1	Mail	Online	Satellite	Mail
26	17224	Franklin	5	0	Mail	Mail	Online	Satellite
27	18360	Monroe	1	37	Mail	Online	Satellite	Mail
28	17350	Adams	0	1	Mail	Mail	Satellite	Farm Show
29	15530	Somerset	1	9	Mail	Mail	Online	Farm Show
30	18964	Montgomery	1	0	Mail	Online	Mail	
31	18414	Lackawanna	1	1	Mail	Online	Mail	Satellite
32	17566	Lancaster	2	6	Mail	Online	Mail	Satellite
33	16115	Beaver	0	1	Mail	Mail	BP	Online
34	15017	Allegheny	1	18	Mail	Online	Mail	Satellite
35	19348	Chester	1	1	Mail	Online	Mail	Satellite
36	19061	Delaware	1	1	Mail	Online	Mail	Satellite
37	18458	Pike	1	2	Mail	Online	Mail	Satellite

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
38	16740	McKean	1	8	Mail	Online	Mail	Satellite
39	16038	Butler	1	1	Mail	Mail	Online	Satellite
40	16046	Butler	4	250	Mail	Online	Satellite	Mail
41	17404	York	1	1	Mail	Online	Mail	Satellite
42	15205	Allegheny	1	4	Mail	Online	Mail	Satellite
43	18944	Bucks	0	0	Mail	Online	Mail	Satellite
44	19472	Montgomery	1	1	Mail	Online/Mail		
45	19609	Berks	100	10	Mail	Online	Mail	Satellite
46	18847	Susquehanna	3	0	Mail	Mail	Online	Satellite
47	15301	Washington	2	20	Mail	Online	Mail	Satellite
48	17402	York	3	0	Mail	Online	Mail	Satellite
49	17225	Franklin	1	1	Mail	Online	Satellite	Mail
50	18914	Bucks	1	5	Mail	Online	Mail	Satellite
51	19460	Chester	1	150	Mail	Satellite	Online	Mail
52	18964	Montgomery	1	4	Mail	Online	Mail	Satellite
53	16404	Crawford	1	1	Mail	Online	Mail	Satellite
54	17240	Cumberland	1	6	Mail	Online	Satellite	Mail
55	17543	Lancaster	1	5	Mail	Online	Mail	Satellite
56	16057	Butler	0	1	Mail	Online	Satellite	Mail
57	15301	Washington	3	0	Mail	Online	Satellite	Mail
58	19401	Montgomery	3	0	Mail	Online	Mail	Satellite
59	18201	Luzerne	1	4	Mail	Online	Mail	Satellite
60	17222	Franklin	4	0	Mail	Mail	Online	Satellite
61	17864	Snyder	0	1	Mail	Online	Mail	Satellite
62	15234	Allegheny	1	3	Mail	Online	Mail	Satellite
63	17356	York	2	3	Mail	Online	Mail	Satellite
64	15147	Allegheny	1	4	Mail	Online	Mail	Satellite
65	17038	Lebanon	2	2	Mail	Online	Mail	
66	15122	Allegheny	1	2	Mail	Online	Mail	Satellite
67	18509	Lackawanna	1	4	Mail	Online	Mail	
68	16371	Warren	2	0	Mail	Online	Mail	Satellite
69	19380	Chester	1	28	Mail	Online	Mail	Satellite

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
70	18801	Susquehanna	2	12	Mail	Online	BP	Mail
71	19335	Chester	1	15	Mail	Online	Mail	Satellite
72	16125	Mercer	2	0	Mail	Online	Mail	Satellite
73	17540	Lancaster	1	37	Mail	Online	Mail	Satellite
74	15425	Fayette	1	150	Mail	Online	Satellite	BP
75	19390	Chester	2	10	Mail	Online	Mail	Satellite
76	15767	Jefferson	1	10	Mail	Online	Mail	Satellite
77	18853	Bradford	11	11	Mail	BP	Online	Mail
78	19344	Chester	2	29	Mail	Mail	Online	Satellite
79	17535	Lancaster	2	2	Mail	Online	Mail	Satellite
80	15562	Somerset	1	4	Mail	Online	Mail	Satellite
81	17517	Lancaster	1	42	Mail	Online	Mail	Satellite
82	19348	Chester	1	1	Mail	Online	Mail	Satellite
83	15552	Somerset	1	1	Mail	Online	Mail	Satellite
84	16059	Butler	1	4	Mail	Online	Mail	Satellite
85	17870	Snyder	0	1	Mail	Mail	Online	Satellite
86	16148	Mercer	1	86	Mail	Mail	Online	Satellite
87	15370	Greene	2	13	Mail	Online	Mail	Satellite
88	15946	Cambria	1	4	Mail	Online	Mail	Satellite
89	15110	Allegheny	1	0	Mail	Online	Mail	Satellite
90	18701	Luzerne	1	5	Mail	Online	Mail	Satellite
91	16406	Crawford	1	3	Mail	Satellite	BP	Online
92	16153	Mercer	0	1	Mail	Online	Satellite/BP	Mail
93	19480	Chester	1	7	Mail	Mail	Online	Satellite
94	17331	York	1	10	Mail	Online	Mail	Farm Show
95	17721	Clinton	0	1	Mail	Satellite	Mail	Farm Show
96	19021	Bucks	1	2	Mail	Online	Mail	Farm Show
97	19075	Montgomery	1	5	Mail	Online	Satellite	Mail
98	15086	Allegheny	1	81	Mail	Online	BP	Mail
99	17821	Montour	1	2	Mail	Online	Mail	BP
100	17331	York	0	5	Mail	Online	Mail	Satellite
101	16511	Erie	1	48	Mail	Online	Satellite	BP

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
102	16673	Blair	1	21	Mail	Mail	Online	Satellite
103	15090	Allegheny	1	0	Mail	Online	Mail	Satellite
104			1	4	Mail	Mail	Online	
105	16323	Venango	0	1	Mail	Mail	BP	Farm Show
106	19363	Chester	1	1	Mail	Online	Mail	Satellite
107	16441	Erie	1	5	Mail	Online	Mail	Satellite
108	17557	Lancaster	1	1	Mail	Online	Mail	Satellite
109	16046	Butler	1	5	Mail	Online	Mail	Satellite
110	16415	Erie	1	20	Mail	Online	Satellite	Mail
111	19113	Delaware	1	15	Mail	Online	Mail	BP
112	18103	Lehigh	10	0	Mail	Online	Mail	Satellite
113	18657	Wyoming	1	2	Mail	Online	Mail	Satellite
114	16922	Potter	0	1	Mail	Online	Mail	Satellite
115	17540	Lancaster	1	3	Mail	Online	Mail	Farm Show
116	19061	Delaware	4	0	Mail	Online	Mail	ROC
117	15142	Allegheny	1	5	Mail	Online	Satellite	Mail
118	19030	Bucks	1	1	Mail	Online	Satellite	Mail
119	16664	Bedford	1	130	Mail	Mail	Satellite	ROC
120	19547	Berks	1	1	Mail	Online/Mail	Satellite	Farm Show/ROC
121	15921	Cambria	1	0	Mail	Online	Mail	Satellite
122	18017	Northampton	1	0	Mail	Mail	Online	Satellite
123	17055	Cumberland	1	7	Mail	Online	Mail	ROC
124	16343	Venango	1	70	Mail	Online	Satellite	Farm Show
125	15853	Elk	1	2	Mail	Online	BP	Mail
126	17340	Adams	2	2	Mail	Mail	Online	Farm Show
127	17859	Columbia	1	22	Mail	Online	BP	Mail
128	16406	Crawford	1	3	Mail	Online	Mail	Satellite
129	16602	Blair	1	23	Mail	Online	Satellite	Mail
130	16415	Erie	1	4	Mail	Online	Mail	Satellite
131	16637	Blair	1	25	Mail	Online	Mail	Satellite
132	18049	Lehigh	1	0	Mail	Online	Mail	Satellite

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
133	16441	Erie	0	1	Mail	Farm Show/ROC/BP	Mail/Satellite	
134	19406	Montgomery	0	4	Mail	Online	Mail	BP
135	18969	Montgomery	1	14	Mail	Online	Mail	Satellite
136	19142	Philadelphia	1	4	Mail	Online	Mail	Satellite
137	18451	Pike	1	3	Mail	Online	Satellite	Mail
138	16365	Warren	1	1	Mail	Mail	Online	BP
139	19480	Chester	1	45	Mail	Online	Mail	Satellite
140	19446	Montgomery	1	4	Mail	Online	Mail	Satellite
141	19047	Bucks	2	35	Mail	Online	BP	Satellite
142	19030	Bucks	1	0	Mail	Online	Mail	Satellite
143	17557	Lancaster	0	2	Mail	Online	Mail	Satellite
144	18942	Bucks	2	19	Mail	Online	Satellite	BP
145	19503	Berks	1	1	Mail	Online	Mail	Satellite
146	17402	York	5	5	Mail	Mail	Online	Satellite
147	15066	Beaver	1	1	Mail	Mail	Online	Satellite
148	15056	Allegheny	1	3	Mail	Online	Mail	BP
149	16354	Crawford	1	7	Mail	Online	BP	Mail/Satellite
150	16354	Crawford	1	1	Mail	Online	Mail	Satellite
151	16145	Mercer	4	0	Mail	Online	Mail	Satellite
152	19154	Philadelphia	1	0	Mail	Online	Mail	Satellite
153	19543	Berks	2	12	Mail	Online	Mail	Satellite
154	19362	Chester	1	20	Mail	Online	Mail	BP
155	16037	Butler	1	8	Mail	Online	Mail	Satellite
156	16146	Mercer	1	4	Mail	BP	Mail/Satellite	Online
157	18049	Lehigh	1	1	Mail	Mail	Online	Satellite
158	16625	Blair	2	30	Mail	Online	Satellite	ROC
159	18960	Bucks	1	15	Mail	Online	Satellite	Mail
160	19343	Chester	1	11	Mail	Online	BP	Mail
161	16161	Mercer	1	86	Mail	Online	Satellite	BP
162	16701	McKean	1	0	Mail	Mail/Satellite		

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
						/Farm Show/ROC/BP		
163	18964	Montgomery	1	5	Mail	Mail	Online	Satellite
164	16930	Tioga	0	1	Mail	Mail	Online	Satellite
165	18942	Bucks	0	1	Mail	Online	Mail	Satellite
166	15330	Washington	1	0	Mail	Online	Mail	Satellite
167	16648	Blair	1	14	Mail	Online	Mail	Satellite
168	18504	Lackawanna	1	4	Mail	Online	Mail	Satellite
169	19510	Berks	1	2	Mail	Online	Satellite	Mail
170	19103	Philadelphia	1	2	Mail	Mail	Online	Satellite
171	18031	Lehigh	1	1	Mail	Online	Mail	Satellite
172	18949	Bucks	1	30	Mail	Online	Mail	Satellite
173	18915	Montgomery	1	5	Mail	Online	Mail	Satellite
174	16232	Clarion	1	3	Mail	Mail	Online	Satellite
175	15632	Westmoreland	1	15	Mail	Online	Mail	Satellite
176	16115	Beaver	2	0	Mail	Satellite	Online	Mail
177	16505	Erie	4	14	Mail	Online	Mail	Satellite
178	16120	Lawrence	1	1	Mail	Online	Mail	Satellite
179	16023	Butler	1	52	Mail	Mail	Satellite	Online
180	18102	Lehigh	1	5	Mail	Online	Mail	Satellite
181	16510	Erie	1	1	Mail	Mail	Online	Satellite
182	19007	Bucks	2	7	Mail	Online	Mail	Satellite
183	16509	Erie	1	88	Mail	Online	Mail	Satellite
184	19520	Chester	1	16	Mail	Online	Mail	ROC
185	16407	Erie	1	1	Mail	Online	Mail	Satellite
186	17557	Lancaster	1	2	Mail	Online	Mail	Satellite
187	18049	Lehigh	1	1	Mail	Mail	Online	Satellite
188	17325	Adams	10	0	Mail	Online	Satellite	Mail
189	18252	Schuylkill	0	1	Mail	Online		
190	17257	Cumberland	1	12	Mail	Online	Mail	BP
191	16508	Erie	1	12	Mail	Online	Mail	

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
192	15860	Jefferson	1	1	Mail	Online		
193	17517	Lancaster	1	2	Mail	Online	Mail	Satellite
194	17319	York	1	1	Mail	Online	Mail	ROC
195	18947	Bucks	1	1	Mail	Online/Satellite/BP		Mail
196	15146	Allegheny	1	1	Mail	Mail		
197	19382	Chester	1	1	Mail	Online	BP	Mail
198	17517	Lancaster	1	1	Mail	Online	BP	Mail
199	18944	Bucks	1	1	Mail	Mail	Online	Satellite
200	18458	Pike	1	1	Mail	Mail	Online	Satellite
201	18825	Susquehanna	1	1	Mail	Online	Mail	
202	15681	Indiana	0	1	Mail	Mail	Satellite	
203	19111	Philadelphia	0	1	Mail	Online	Mail	Farm Show
204	17522	Lancaster	0	1	Mail	Online	Mail	BP
205	19446	Montgomery	1	1	Mail	Mail	Online	Satellite
206	15601	Westmoreland	1	1	Mail	Online	Mail	Satellite
207	18902	Bucks	1	1	Mail	Online	Mail	
208	19440	Montgomery	0	1	Mail	Online	Satellite	Mail
209	19401	Montgomery	1	6	Mail	Online	Satellite	Mail
210	19508	Berks	1	2	Mail	Mail	Online	Satellite
211	19522	Berks	0	1	Mail	Mail	Satellite	ROC
212	18066	Lehigh	1	1	Mail	Online	Mail	Satellite
213	17042	Lebanon	1	3	Mail	Mail	ROC	Farm Show
214	16735	McKean	1	1	Mail	Mail	Satellite	Online
215	16233	Clarion	1	1	Mail	Online	BP	Satellite
216	16101	Lawrence	0	1	Mail	Satellite	Online	BP
217	15753	Clearfield	1	1	Mail	Mail	Online	Farm Show
218	18969	Montgomery	1	2	Mail	Online	Mail	Satellite
219	19344	Chester	1	1	Mail	Online	Mail	Satellite
220	18328	Pike	1	1	Mail	Mail	Online	Satellite
221	17509	Lancaster	0	1	Mail	Online	Mail	Satellite
222	18045	Northampton	1	1	Mail	Online	Mail	Satellite

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
223	18045	Northampton	1	1	Mail	Online	Mail	Satellite
224	19038	Montgomery	1	1	Mail	Mail	Online	Farm Show
225	15342	Washington	1	1	Mail	Online	Mail	Satellite
226	18840	Bradford	1	1	Mail	Online	Mail	Satellite/Farm Show/ROC
227	15317	Washington	1	9	Mail	Mail	Online	Satellite
228	15824	Jefferson	1	1	Mail	Online	Satellite	Mail
229	17529	Lancaster	0	3	Mail	Online	Satellite	Mail
230	17022	Lancaster	1	1	Mail	Online	Mail	Satellite
231	18519	Lackawanna	0	1	Mail	Online	Satellite	Mail
232	16602	Blair	1	0	Mail	Online	Mail	BP
233	16148	Mercer	1	1	Mail	Satellite	Online	Mail
234	18504	Lackawanna	0	1	Mail	Online	Mail	Satellite
235	17257	Cumberland	1	1	Mail	Online	Mail	Satellite
236	19539	Berks	1	1	Mail	Online	Mail	
237	17815	Columbia	1	1	Mail	Online	Mail	
238	17015	Cumberland	1	5	Mail	Online	Mail	Satellite
239	17540	Lancaster	1	2	Mail	Online	BP	Mail
240	17563	Lancaster	1	15	Mail	Mail	Satellite	Online
241	17520	Lancaster	2	0	Mail	Online	Mail	Satellite
242	17522	Lancaster	1	1	Mail	Online	Mail	Satellite
243	17403	York	2	3	Mail	Online	Mail	Satellite
244	17013	Cumberland	1	2	Mail	Online	Mail	ROC
245	17059	Juniata	1	0	Mail	Online	Satellite	Farm Show
246	16917	Tioga	1	1	Mail	Online/Mail		
247	17509	Lancaster	0	2	Mail	Online	Mail	Satellite
248	19518	Berks	1	42	Mail	Online	Satellite	BP
249	17403	York	1	0	Mail	Online	Mail	Satellite
250	17701	Lycoming	4	4	Mail	Satellite	Online	BP
251	19501	Lancaster	1	1	Mail	Online	Mail	Satellite
252	17238	Fulton	1	5	Mail	Mail	Online	BP
253	17042	Lebanon	1	90	Mail	Online	Mail	

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
254	17543	Lancaster	1	49	Mail	Online	Mail	Farm Show
255	17202	Franklin	1	3	Mail	Online	Mail	Satellite
256	17976	Schuylkill	1	2	Mail	Online	Satellite	Mail
257	17088	Lebanon	4	0	Mail	Mail	Online	ROC
258	16915	Potter	1	5	Mail	Online	Mail	Satellite
259	17756	Lycoming	1	12	Mail	Online	BP	Mail
260	17201	Franklin	1	31	Mail	Online	Mail	Satellite
261	17022	Lancaster	1	1	Mail	Mail	Farm Show	Online
262	16925	Bradford	1	1	Mail	Mail	Mail	Mail
263	19007	Bucks		1	Mail	Mail	Farm Show	Mail
264	17225	Franklin	5	5	Mail	Online	Online	Online
265	15401	Fayette	1	1	Mail	Online	Online	Online
266	15056	Allegheny	5	5	Mail	Online	Satellite	Mail
267	18801	Susquehanna	2	2	Mail	Mail	Satellite	Online
268	16428	Erie	1	1	Mail	Mail	Mail	Mail
269	17225	Franklin	1	1	Mail	BP	Mail	Satellite
270	17017	Northumberland	1	1	Mail	Farm Show	Farm Show	Mail
271	17026	Lebanon	1	1	Mail	Online	Mail	Farm Show
272	18346	Monroe	2	8	Mail	Online	Mail	Satellite
273	15725	Indiana	1	1	Mail	Mail	Farm Show	BP
274	16923	Potter	1	1	Mail	Mail	Farm Show	Satellite
275	17972	Schuylkill	1	1	Mail	Mail	Online	Satellite
276	15692	Westmoreland	1	1	Mail	Online	Mail	BP
277	15089	Westmoreland	1	1	Mail	Satellite	Mail	Online
278	18252	Schuylkill	1	1	Mail	Mail	ROC	Mail
279	17225	Franklin	1	2	Mail	Online	Mail	Satellite
280	19030	Bucks	1	1	Mail	Mail	Online	Mail
281	15330	Washington	3	1	Mail	Mail	Satellite	Mail
282	17976	Schuylkill	1	1	Mail	Online	Mail	ROC
283	17509	Lancaster	1	1	Mail	Online	Mail	Online
284	18936	Montgomery	8	8	Mail	Online	Mail	Satellite
285	16410	Erie	1	1	Mail	Mail	Satellite	Online

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
286	15801	Clearfield	5	0	Mail	Mail	Online	BP
287	17201	Franklin	11	11	Mail	Mail	ROC	Satellite
288			40	0	Mail	Mail	Mail	Online
289	17830	Northumberland	1	4	Mail	Mail	Online	Satellite
290	19132	Philadelphia	1	1	Mail	Online	Mail	Satellite
291	17563	Lancaster	1	1	Mail	Mail	Online	Satellite
292	16901	Tioga	1	1	Mail	Mail	Online	Satellite
293	16438	Erie	1	1	Mail	Mail	Farm Show	Online
294	19140	Philadelphia	1	0	Mail	Mail	Mail	ROC
295	18951	Bucks	1	1	Mail	Mail	Satellite	BP
296	15552	Somerset	1	1	Mail	Online	Mail	Satellite
297	19435	Montgomery	1	3	Mail	Mail	Farm Show	Satellite
298	19070	Delaware	1	1	Mail	Online	Mail	Satellite
299	15666	Westmoreland	1	1	Mail	Online	Mail	Satellite
300	18049	Lehigh	1	2	Mail	Mail	Mail	Satellite
301	18091	Northampton	1	1	Mail	Online	Mail	Online
302	19022	Delaware	7	80000	Mail	Mail	BP	Farm Show
303	15530	Somerset	1	1	Mail	Mail	Online	Satellite
304			1	1	Mail	Mail	Online	Satellite
305	16935	Tioga	1	1	Mail	Mail	Satellite	Online
306	16740	McKean	1	1	Mail	Mail	Mail	Satellite
307	17362	York	1	12	Mail	Mail	Satellite	Online
308	17519	Lancaster	1	1	Mail	Online	Mail	Online
309	19063	Delaware	1	1	Mail	Online	Mail	BP
310	15646	Westmoreland	1	10	Mail	Mail	Online	BP
311	16159	Mercer	1	5	Mail	Online	Mail	Satellite
312	15717	Indiana	1	2	Mail	Mail	Online	BP
313	16602	Blair	20	20	Mail	Satellite	Mail	BP
314	15501	Somerset	1	1	Mail	Mail	Online	BP
315	19050	Delaware	3	0	Mail	Mail	Online	Satellite
316	19344	Chester	1	1	Mail	Online	Online	Online
317	15050	Beaver	1	0	Mail	Online	Mail	Mail

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
318	18414	Lackawanna	1	1	Mail	Online	Mail	Satellite
319	19446	Montgomery	1	1	Mail	Online	Mail	Satellite
320	18252	Schuylkill	2	2	Mail	Mail	Online	Satellite
321	18944	Bucks	2	2	Mail	Mail	Mail	Satellite
322	18064	Northampton	1	1	Mail	Mail	Satellite	BP
323	18013	Northampton	1	1	Mail	Satellite	BP	Mail
324	19073	Delaware	1	1	Mail	Online	Mail	BP
325	16254	Clarion	1	5	Mail	Online	BP	Satellite
326	17522	Lancaster	1	1	Mail	Mail	Satellite	Online
327	17356	York	2	2	Mail	Mail	BP	Online
328	17301	Adams	1	1	Mail	Farm Show	Farm Show	Mail
329	17004	Mifflin	1	1	Mail	Mail	Online	BP
330	17563	Lancaster	2	2	Mail	Mail	Satellite	ROC
331	17059	Juniata	1	1	Mail	Mail	ROC	Online
332	17810	Union	2	2	Mail	Mail	Online	Satellite
333	17901	Schuylkill	5	5	Mail	Online	Mail	Satellite
334	17231	Franklin	1	3	Mail	Online	Mail	Satellite
335	16926	Bradford	110	110	Mail	Online	Online	Mail
336	17066	Mifflin	1	1	Mail	Mail	Mail	Mail
337	17088	Lebanon	4	0	Mail	Mail	Online	ROC
338	16829	Centre	13	13	ROC	Online	Mail	Satellite
339	17201	Franklin	3	8	ROC	Satellite	BP	Online
340	17049	Juniata	1	1	ROC	Online/ROC		
341	18822	Susquehanna	1	2	ROC	Online	Satellite	BP
342	17845	Union	1	1	ROC	Online	Satellite	ROC
343	16055	Butler	1	10	ROC	Satellite	BP	Online
344	16056	Butler	1	22	ROC	Online	Satellite	Mail
345	15108	Allegheny	1	1	ROC	Satellite	Farm Show	ROC
346	17602	Lancaster	2	9	ROC	Online	Satellite/BP	ROC
347	17233	Fulton	1	15	ROC	Online		
348	15401	Fayette	1	57	ROC	Online	Satellite	BP
349	17522	Lancaster	1	12	ROC	BP		

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
350	15771	Indiana	1	40	ROC	Online	BP	ROC
351	17545	Lancaster	1	1	ROC	Online	Satellite	BP
352	17327	York	1	3	ROC	Online	Mail	ROC
353	15345	Washington	1	2	ROC	Online	Mail	Satellite
354			1	1	ROC	ROC	Online	Mail
355	19143	Philadelphia	0	0	ROC	Online	Satellite	Mail
356	16153	Mercer	1	1	ROC	Online	Satellite	Mail
357	17350	Adams	1	1	ROC	Online	ROC	Satellite
358	17870	Snyder	1	24	ROC	Online	Satellite	ROC
359			8000 0	1	ROC	Farm Show	Farm Show	Farm Show
360	16404	Crawford	1	2	ROC	Satellite	BP	Mail
361	16038	Butler	1	1	ROC	Satellite	Online	Farm Show
362	18517	Lackawanna	1	1	ROC	Satellite	Online	Online
363	17557	Lancaster	2	2	ROC	ROC	Satellite	Satellite
364	16877	Huntingdon	1	1	Farm Show	Online		
365	18801	Susquehanna	1	4	Farm Show	Farm Show	Satellite	Online
366	19007	Bucks	1	5	Farm Show	Online	Satellite	Mail
367	16655	Bedford	1	2	Farm Show	Online	Farm Show	ROC
368	17601	Lancaster	1	11	Farm Show	Farm Show	Online	ROC
369	15088	Allegheny	0	32	Farm Show	Online	Mail	
370	17512	Lancaster	1	37	Farm Show	Online	Satellite	Farm Show
371	17053	Perry	1	1	Farm Show	Online	Farm Show	Satellite
372	18332	Monroe	0	1	Farm Show	Online	Satellite	Farm Show
373	17801	Northumberland	1	1	Farm Show	Online/Farm Show	Satellite	
374	16601	Blair	1	1	Farm Show	Online	Mail	BP
375	17070	York	1	1	Farm Show	Online	Farm Show	Satellite
376	19406	Montgomery	1	20	Farm Show	Online	Satellite	Farm Show
377	17331	York	1	60	Farm Show	Satellite	ROC	Farm Show
378	17552	Lancaster	1	15	Farm Show	Online	Mail	Satellite
379	17584	Lancaster	1	44	Farm Show	Farm Show	Satellite	ROC

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS
DELIVERABLE #4 – TASK 2
PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001
JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
380	17202	Franklin	0	1	Farm Show	Online	Mail	Satellite
381	17522	Lancaster	1	2	Farm Show	Online	BP	Satellite
382	19067	Bucks	1	11	Farm Show	Online	Satellite	BP
383	17545	Lancaster	2	2	Farm Show	Online	Farm Show	Mail
384	18470	Susquehanna	1	1	Farm Show	Online	Satellite	Farm Show
385	17509	Lancaster	1	1	Farm Show	Online	Mail	Satellite
386	17844	Union	1	4	Farm Show	Online	Satellite	Farm Show
387	17777	Northumberland	1	12	Farm Show	Online	Mail	Satellite
388	15729	Indiana	1	5	Farm Show	Online	Satellite	Farm Show
389	19029	Delaware	1	4	Farm Show	Online	Satellite	BP
390	19380	Chester	1	24	Farm Show	Farm Show	Satellite	ROC
391	15535	Bedford	1	1	Farm Show	Online	Satellite	Mail
392	18431	Wayne	2	6	Farm Show	Farm Show	ROC	Online
393	17403	York	1	13	Farm Show	Farm Show	Online	Satellite
394	18237	Schuylkill	1	30	Farm Show	Online	Satellite	BP
395	17059	Juniata	1	1	Farm Show	Online	Mail	Farm Show
396	17543	Lancaster	1	1	Farm Show	Online	Satellite	Farm Show
397	18252	Schuylkill	1	1	Farm Show	Online	Mail	Farm Show
398	15552	Somerset	2	9	Farm Show	Online	Mail	Satellite
399	16701	McKean	1	15	Farm Show	Online	Mail	Satellite
400	15301	Washington	1	2	Farm Show	Online	Satellite	Mail
401	17581	Lancaster	2	13	Farm Show	Farm Show	ROC	
402	17845	Union	1	2	Farm Show	Farm Show	Satellite	ROC
403	18821	Susquehanna	1	3	Farm Show	Online	Farm Show	ROC
404	19052	Delaware	1	1	Farm Show	Online	Satellite	BP
405	17889	Union	1	4	Farm Show	Online	Mail	Farm Show
406	16112	Lawrence	1	41	Farm Show	Satellite	Online	BP
407	16669	Huntingdon	1	8	Farm Show	Satellite	Online	BP
408	18411	Lackawanna	1	8	Farm Show	Online		
409	17331	York	3	23	Farm Show	Online	Satellite	ROC
410	19047	Bucks	1	12	Farm Show	Online	Satellite	BP
411	18914	Bucks	1	0	Farm Show	Online	Mail	Satellite

PENNDOT ANALYSIS OF STAGGERED APPORTIONED REGISTRATION RENEWALS

DELIVERABLE #4 – TASK 2

PROCESS ANALYSIS, RECOMMENDATIONS, COST/BENEFIT ANALYSIS

RFQ #111001

JULY 2013

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
412	17350	Adams	1	3	Farm Show	ROC	Online	Farm Show
413	15501	Somerset	1	1	Farm Show	Satellite	Online	ROC
414	19518	Berks	1	2	Farm Show	Farm Show	Mail	Online
415	15012	Westmoreland	8	10	Farm Show	Farm Show	Online	Mail
416	17519	Lancaster	1	26	Farm Show	Online	Farm Show	Mail
417	17601	Lancaster	3	25	Farm Show	Online	Farm Show	BP
418	19601	Berks	2	25	Farm Show	Online	Mail	Farm Show
419	19067	Bucks	0	4	Farm Show	Online	Satellite	
420	17322	York	0	1	Farm Show	Online	BP	Farm Show
421	17842	Snyder	1	1	Farm Show	Satellite	Farm Show	ROC
422	17540	Lancaster	1	1	Farm Show	Online	Mail	Farm Show
423	17406	York	0	1	Farm Show	Farm Show	Online	Mail
424	17250	Franklin	1	1	Farm Show	Online	Mail	Farm Show
425	15668	Westmoreland	1	4	Farm Show	Satellite	Online	Farm Show
426	19053	Bucks	1	111	Farm Show	Online	BP	Satellite
427	17509	Lancaster	0	1	Farm Show	Satellite	Mail	Farm Show
428	19015	Delaware	0	1	Farm Show	Online	Farm Show	ROC
429	17331	York	1	1	Farm Show	Online	Mail	Farm Show
430	17002	Huntingdon	1	1	Farm Show	Online	Farm Show	Mail
431	17520	Lancaster	1	2	Farm Show	Online	Mail	Satellite/Farm Show
432	17201	Franklin	1	1	Farm Show	Online	Mail	Farm Show
433	17050	Cumberland	1	0	Farm Show	Mail	ROC	Farm Show
434	17050	Cumberland	1	195	Farm Show	Online	Mail	Farm Show
435	17972	Schuylkill	3	22	Farm Show	Online	Farm Show	ROC
436	17547	Lancaster	1	39	Farm Show	Online	Farm Show	ROC
437	17111	Dauphin	4	64	Farm Show	Online	Mail	Satellite
438	17557	Lancaster	1	25	Farm Show	Farm Show	BP	Satellite
439	19135	Philadelphia	2	2	Farm Show	Farm Show	ROC	Satellite
440	16373	Venango	6	5	Farm Show	ROC	Satellite	Farm Show
441	17847	Northumberland	6	6	Farm Show	Mail	Farm Show	Online
442	16625	Blair	1	11	Farm Show	Online	Online	Satellite

ID	Zip Code	County	# of Fleets	# of Power Units	Current Renewal Method	Preferred Renewal Method (If Available)		
						First Choice	Second Choice	Third Choice
443	16650	Bedford	2	4	Farm Show	ROC	Farm Show	ROC
444	15102	Allegheny	3	10	Farm Show	Satellite	BP	Farm Show
445	18237	Schuylkill	11	11	Farm Show	Mail	Online	Satellite
446	17331	York	1	1	Farm Show	ROC	Farm Show	Satellite
447	17569	Lancaster	1	1	Farm Show	Mail	Online	Satellite
448	17363	York	1	1	Farm Show	Farm Show	Farm Show	Farm Show
449	17543	Lancaster	3	3	Farm Show	Satellite	Farm Show	ROC
450	17356	York	2	5	Farm Show	Online	Satellite	Online

APPENDIX C – FACILITY ANALYSIS

The facility analysis reviewed data collected for the existing space utilization and related expenses to establish a baseline scenario from which to compare three facility alternatives:

Alternative #1 - Continue with Current Facility Arrangements (ROC/Farm Show)

Alternative #2 - Relocate IRP Activities to a Leased Facility in the Harrisburg Area

Alternative #3 - Relocate IRP Activities to a New in Harrisburg (New Construction)

As shown in Table C-1, over a 20-year period, Alternative #3 provides a cost savings of around \$662,600, compared to Alternative #1. The cost of Alternative #2 is approximately \$518,700 greater than the cost of Alternative #1. In order to compare alternatives, each scenario is summarized for a 20-year period to adequately portray the costs and benefits of the acquisition and construction in Alternative 3. Lease rates are projected to increase by 1.5% each year. Similarly, the land and building value are projected to increase at a rate of 1.5% over the 20 year analysis period. The building value is reduced by an annual depreciation assuming a straight line method over the 30 year useful life of the facility. The results show significant savings over the 20 year analysis period for constructing a new standalone facility in Harrisburg.

Table C-1 on the following page presents a summary of the comparative costs of each alternative, and the following pages provide the methodology and assumptions that were used to develop the comparative costs.

APPENDIX C – FACILITY ANALYSIS

Table C-1 – Summary of Comparative Costs for Facility Alternatives

	Alternative #1 Continue with Current Facility Arrangements (Baseline)	Alternative #2 Leased Facility in Harrisburg	Alternative #3 New Facility in Harrisburg
Total Facility Area (square feet)	4,100	4,100	4,100
Total Temporary Facility Area (square feet)	5,700		
Facility Lease Rate (per square foot per year)	\$9.50	\$20.50	\$9.50
Temporary Facility Lease Rate (per year)	\$23,000		
Annual Facility Lease	\$38,950	\$84,050	\$38,950
Annual Temporary Facility Lease	\$23,000	\$0	\$0
Annual Total Facility Lease	\$61,950	\$84,050	\$38,950
Annual Lease Escalation (%)	1.50%	1.50%	1.50%
Analysis Period	20	20	20
Total Lease Expense During Analysis Period	\$1,453,999	\$1,972,697	\$914,177
Total Site Area (acres)			0.92
Acquisition Cost per Acre			\$1,125,000
Total Acquisition Cost			\$1,035,000
Construction Cost per Square Foot			\$180.15
Total Construction Cost			\$738,615
Total Acquisition and Construction Expense			\$1,773,615
Residual Property Value			
Base Year Land Value			\$1,035,000
Annual Land Value Escalation			1.50%
Year 20 Land Value			\$1,393,995
Base Year Building Value			\$738,615
Annual Building Value Escalation			1.50%
Year 20 Building Value before Depreciation			\$994,807
Less 20-Year Depreciation (Straight Line over 30 Years)			-\$492,410
Year 20 Building Value after Depreciation			\$502,397
Total Residual Property Value			\$1,896,392
Acquisition and Construction Expense less Total Residual Property Value			-\$122,777
Total Facility Expense	\$1,453,999	\$1,972,697	\$791,400

APPENDIX C – FACILITY ANALYSIS

Alternative #1 – Baseline Assumptions and Methodology

The assumptions for Alternative #1 are estimated based on the current use of the Riverfront Office Center (ROC) and the Farm Show Complex for IRP activities. This alternative assumes continuing with the current facility arrangements. The allocated space at the ROC was estimated by applying the Urban Land Institute’s space allocation factor of 250 square feet per employee to the current 16 employees involved directly in the apportioned registration renewal process. The staff space allocation is approximately 4,000 square feet (See Table C-2).

Table C-2 – Alternative #1 Facility Space Estimate

	ROC		Farm Show Complex	
Staff Space				
Current Staff	16		16	
Allocated Space per Staff (sf)	250	s.f.	250	s.f.
Total Allocated Staff Space	4,000	s.f.	4,000	s.f.
Customer Queuing Space				
Current Peak Customers / Hour	5		100	
Allocated Space per Customer (s.f)	17	s.f.	17	s.f.
Total Allocated Customer Space	85	s.f.	1,700	s.f.
Total Staff and Customer Space	4,100	s.f.	5,700	s.f.

Additional space was allocated at the ROC based on the queuing area required to support the current volume of apportioned registration renewal customers served at the ROC. PennDOT provided the most recently available data, which showed that approximately 2,950 customers (including renewal and all other activity) used the ROC counter per year. The 2,950 annual customer volume was converted to daily customer volume by dividing the total annual customers by 250 days (52 weeks x 5 days per week less 10 days for holidays), approximately 12 customers per day. Daily customer volume was then converted by further dividing by 7.5 hours per day, resulting in 1.6 customers per hour. Peak volume assumes 300% of the average, resulting in a rounded 5 customers per hour (See Table C-3). The peak customer volume per hour was then multiplied by 17 square feet to estimate queuing area requirements, an estimate provided by the Pennsylvania Bureau of Real Estate.

Table C-3 – Baseline ROC Customer Volume

2011 ROC Counter Volume	2,950
Weeks per Year	52
Operating Days per Week	5
Total Operating Days before Holidays	260
Less Holidays	10
Total Operating Days	250
Customers per Day	12
Hours per Day	7.5
Customers per Hour	1.6
Peak Customers per Hour (300% x average)	5.0

APPENDIX C – FACILITY ANALYSIS

The Alternative #1 scenario also reviewed the use of the Farm Show Complex and estimated space requirements using factors for staff and customer queuing. The staff allocation of 4,000 square feet was consistent with the ROC. However, the customer volume and the queuing area requirements are substantially different. Each year during the three week period in May the Farm Show Complex receives more than 3,700 customers. This results in approximately 250 customers per day (3,767 customers divided by 15 operating days), or 34 customers per hour (251 customers per day divided by 7.5 hours per day). Again the peak volume per hour was calculated by multiplying the average hourly customer volume of 34 per hour by 300%, resulting in an estimated 100 customers per hour during peak periods (See Table C-5). This high volume of customers requires a queuing area of approximately 1,700 square feet, bringing the total area at the Farm Show Complex to an estimated 7,000 square feet. Actual Farm Show Complex expenses for the 2011 fiscal year (the most recently available data) total \$23,000 for the temporary use of the facility for apportioned renewal registration.

Table C-5 – Baseline Estimated Farm Show Customer Volume

2011 Farm Show Complex Volume	3,767
Weeks per Year	3
Operating Days per Week	5
Total Operating Days	15
Customers per Day	251
Hours per Day	7.5
Customers per Hour	33.5
Peak Customers per Hour (300% x average)	100.0

The 17 square foot per customer queuing requirement was considered in the analysis to arrive at a combined 4,100 square feet (rounded) when added with the staff space allocation. The 4,100 total square feet estimate was multiplied by the Pennsylvania Bureau of Real Estate’s state-owned facility lease rate of \$9.50 (for properties that are part of the Harrisburg Capitol Complex), totaling an estimated \$38,950 per year (See Table C-4). The combined annual expense associated with the current ROC facility and the temporary use of the Farm Show Complex totals an estimated \$61,950 (See Table C-4).

Table C-4 – Alternative #1 Facility Cost Estimate

	ROC		Farm Show Complex	
Space Expense (2012 dollars)				
Estimated Total Square Feet	4,100	s.f.	5,700	s.f.
Lease Rate	\$9.50	s.f./yr	\$23,000	/period
Lease Period	1	year	3	weeks
Lease Amount	\$38,950		\$23,000	
Total Annual Space Expense	\$61,950			

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Alternative #2 – Lease Alternative Assumptions and Methodology

The alternative leasing scenario assumptions are nearly identical to the Alternative #1 scenario with the key difference being the elimination of the Farm Show Complex as a result of staggered apportioning, changes in customer volume at the new facility, and the lease rate. The allocated space for a new standalone facility in Harrisburg was estimated by applying the Urban Land Institute’s space allocation factor of 250 square feet per employee to the current 16 employees involved directly in the apportioned registration renewal process. The staff space allocation is approximately 4,000 square feet.

Additional space was allocated at the proposed new standalone facility in Harrisburg based on the queuing area required to support the projected volume of apportioned registration renewal and other customers served at the facility. To understand how implementing online services would impact the volume of renewals by format, Delta conducted a survey of a sampling of commercial carriers registered in Pennsylvania (see Appendix B). Based on the results of this survey and the most recently available ROC counter volume data, the maximum projected volume at the standalone facility is estimated at 4,821 customers per year (See Table C-6).

Table C-6 – Projected Volume of Fleet Renewals by Type/Location

	Baseline	Option 1 Online Upgrade/ PennDOT Access Only	Option 2 Online Upgrade/ PennDOT and 3rd Party Access	Option 3 Online Upgrade/ All Access
Renewal Counter Customers	835	2,706	1,612	756
Other Counter Customers	2,115	2,115	2,115	2,115
Total Volume	2,950	4,821	3,727	2,871

The 4,821 annual customer volume was converted to daily customer volume by dividing the total annual customers by 250 days (52 weeks x 5 days per week less 10 days for holidays), approximately 19 customers per day. Daily customer volume was then converted by further dividing by 7.5 hours per day, resulting in 2.6 customers per hour. Peak volume assumes 300% of the average, resulting in a rounded 8 customers per hour (See Table C-7).

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Table C-7 – Projected Maximum Customer Volume at Standalone Facility

Stand-Alone Facility Maximum Customer Volume	4,821
Weeks per Year	52
Operating Days per Week	5
Total Operating Days before Holidays	260
Less Holidays	10
Total Operating Days	250
Customers per Day (Annual Customers / Total Operating Days)	19
Hours per Day	7.5
Customers per Hour	2.6
Peak Customers per Hour (300% x average)	8.0

The peak customer volume per hour was then multiplied by 17 square feet to estimate queuing area requirements, resulting in an additional 136 square feet. The result is a rounded 4,100 square foot standalone facility when added with the staff space allocation (See Table C-8).

Table C-8 – Standalone Facility in Harrisburg, Space Requirements

Allocated Staff Space		
Proposed Staff	16	
Allocated Space per Staff (s.f)	250	s.f.
Total Allocated Staff Space	4,000	s.f.
Allocated Customer Queuing Space		
Projected Peak Customers / Hour	8	
Allocated Space per Customer (s.f)	17	s.f.
Total Allocated Customer Space	136	s.f.
Total Staff and Customer Space	4,100	s.f.

The 4,100 total square feet was multiplied by the Pennsylvania Bureau of Real Estate’s average lease rate of \$20.50, which is based on low and high lease rates for Harrisburg of \$17.00 and \$24.00, respectively. Applying the average lease rate of \$20.50 to the total 4,100 square feet results in an estimated annual lease of \$84,050 (See Table C-9).

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Table C-9 – Standalone Facility in Harrisburg, Annual Lease

Space Expense (2012 dollars)		
Estimated Total Square Feet	4,100	s.f.
Lease Rate	\$20.50	/s.f./yr.
Lease Period	<u>1</u>	year
Lease Amount	\$84,050	

Total Annual Space Expense \$84,050

Alternative #3 – New Facility Alternative Assumptions and Methodology (New Construction)

The alternative land acquisition and building construction scenario assumptions are nearly identical to the Alternative #1 scenario and leasing Alternative #2, with the key differences being the elimination of the Farm Show Complex, changes in customer volume at the new facility, lot size requirements, and acquisition and construction cost estimates. The Pennsylvania Department of General Services typically provides Commonwealth-owned buildings within the capitol complex and leases those facilities to State agencies at a rate of \$9.50 per square foot to cover utilities and maintenance costs. The allocated space for a new standalone facility in Harrisburg is identical to the assumptions and methodology used for determining the facility size under the lease Alternative #2. The result is a rounded 4,100 square foot standalone facility and was multiplied by the lease rate of \$9.50 (See Table C-10).

Table C-10 – Standalone Facility in Harrisburg, Lease Rate

Space Expense (2012 dollars)		
Estimated Total Square Feet	4,100	s.f.
Lease Rate	\$9.50	/s.f./yr.
Lease Period	<u>1</u>	year
Lease Amount	\$38,950	

A construction cost estimate was obtained using Reed Construction Data for a one story commercial office building constructed in the Harrisburg market using prevailing wage rates. The estimated rate of \$180.15 per square foot was multiplied by the estimated facility size of 4,100 square feet to calculate a total building construction cost of \$738,615.

In addition to estimating the building size and cost, the lot size was also assessed. The lot size was estimated based on the footprint of the building, standard parking, tractor trailer parking, and tractor trailer turning radius. The total standard parking spaces is a function of the building square footage. A typical standard of 1 parking space for every 300 square feet was applied to the building of 4,100 square feet to arrive at an estimated 14 parking spaces. An average parking space of 200 square feet was then multiplied by the total spaces to determine a total standard parking area coverage of 2,800 square feet. An allowance for tractor trailer parking was also included based on one space for every customer during peak customer volume, which resulted in 8 spaces for an additional 6,720 square feet. To accommodate tractor trailers at the site an additional allowance for a turning

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radius was included. A typical turning circle requires a radius of approximately 45 linear feet. A full circle with a 45 linear foot radius covers an area of approximately 6,400 square feet. The sum of the building footprint, standard parking, tractor trailer parking, and turning radius coverage was then multiplied by a factor of 2 to accommodate setbacks and other allowances. The result is a total lot size of 40,040 square feet or 0.92 acres (See Table C-11).

Table C-11 – Lot Size Requirements Calculation

Building Size		4,100	s.f.
Required Standard Parking	14 spaces		
Standard Parking Coverage		2,800	s.f.
Required Semi-Truck Parking	8 spaces		
Semi-Truck Parking Coverage		6,720	s.f.
Semi-Truck Turning Area		6,400	s.f.
Total Coverage		20,020	s.f.
Setback/Other Allowances		20,020	s.f.
Total Lot Size		40,040	s.f.
Acres Conversion		0.92	acres

1 parking space per 300 square feet of retail/office space

Standard Space (20' x 10')	200	square feet per parking space
Semi-Truck Space (60' x 14')	840	square feet per parking space
Semi-Truck Turning Area (45' radius, full circle)	6400	square feet

The lot size of 0.92 acres was then multiplied by an estimated \$1,125,000 per acre. The purchase amount per acre is an average of the low and high ranges for retail and commercial land purchases in the Harrisburg market area. Ranges were determined using the 2010 NAICIR Global Market Profile Report. The estimated land acquisition cost is \$1,035,000. Combining this acquisition cost with the estimated building construction cost of \$738,615 results in a total cost of \$1,773,615 for acquiring land and constructing a new standalone facility in Harrisburg (See Table C-12).

Table C-12 – Standalone Facility in Harrisburg, Land Acquisition and New Construction

Estimated Total Square Feet	4,100	s.f.
Estimated Land Acres	0.92	acres
Price per Acre	\$1,125,000	/ acre
Total Land Acquisition	\$1,035,000	
Construction Cost per Square Foot	\$180.15	/ s.f.
Total Construction	\$738,615	
Total Acquisition and Construction	\$1,773,615	

APPENDIX D – BENEFITS OF THE ONLINE OPTION FOR CREDIT CARD TRANSACTIONS

e-Commerce Developer's Guide - Business Plan Development Spreadsheet					
PROJECTED COST TO PROCESS CREDIT CARDS ANNUALLY					
Name of Service	# of Services performed/year	Est. % of Services utilizing Credit Cards	# of Credit Card Transactions	Fee for Service	Fees Collected from Credit Cards
Commercial Apportioned Registration Renewals and Services	13,917	67%	9,324	\$ 6,416	59,823,607.85
	0	0%	-	0	-
	0	0%	-	0	-
	0	0%	-	0	-
TOTALS:	13917.00		9,324		59,823,607.85
COSTS per txn:					
Transaction Fee	0.045	419.60			
Interchange txn Fee	0.10	932.44			
Interchange Fee	1.85%	1,106,736.75			
Assessment Fee	0.11%	65,805.97			
Internet txn Fee	0	-			
Access/Acquirer Fees	0.0191	178.10			
Debit Fee/txn	0.029	-			
# of txn/year	0				
Network Fee	0.12	-			
			1,174,072.85		
One Time Setup Fee		1,050.00			
Bank Acct Fee(# of Accounts)	3	630.00			
Total Equipment - Complete Equip Tab		-			
			1,680.00		
TRANSFER FUNDS (only one needed):					
Wire (# of/year)	72	1,800.00			
Automated Standing wire, specific time or \$ amt (# of/year)	72	576.00			
Phone Initiated (# of/year)					
Repetitive (\$20+2/mnth)		-			
NonRepetitive (\$25)		-			
			2,376.00		
OPTIONAL SERVICES:					
ACH-Pinnacle Express Select (estimate)		-			
ACH-Pinnacle Standard (estimate)		-			
Electronic Advice	3	108.00			
Confirmation File	0	-			
			108.00		
TOTAL CREDIT CARD COST:			1,178,236.85		
COST TO PROCESS CHECKS AND CASH					
Monthly Salary Cost:	Processing Step 1	Processing Step 2	Processing Step 3		
Hourly Wage					
Benefits @					
Hours per Day					
Days per Month					
Salary Cost	-	-	-		
TOTAL SALARY COST:				-	
PROJECTED SAVINGS					
Net Revenue	58,645,371.00				
Commonwealth General Fund Interest Yield	1.00%				
# of Days Earning	5				
Interest Benefit:	8,033.61				
Cost of Credit Card Transactions		1,178,236.85			
Less Interest Benefit		(8,033.61)			
Less Total Salary Cost		-			
Less Other Savings:					
NET COST/(NET SAVINGS):		1,170,203.23			
% OF REVENUE:	1.96%				
Nominal Fee					
if applicable, =	125.50				
ASSUMPTIONS:					
Bank Acct Fee = Assumes establishing 3 credit card deposit accounts					
Equipment = Does not assume any additional equipment such as wireless terminals for offsite processing of credit cards					
Estimated Percent of Services Using Credit Cards = Assumes 67% utilization per survey results					
Estimated Services Performed Per Year = Assumes average fleets per year of 13,917					
Fee for Service = Assumes and average of \$6,415.82 per power unit using 2011 revenue data.					
Wire Transfers = Assumes 2 per month from each Credit Card Bank Acct to Treasury Depository Established as Automatic					