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# Appendix A: Good To Go! Customer Experience Survey Report

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*Good To Go!*  
Customer  
Experience  
Survey  
Report

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Prepared for the  
Washington State  
Department of  
Transportation

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Prepared by PRR, Inc.

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# EXECUTIVE SUMMARY

## **PURPOSE**

The Washington State Department of Transportation conducted this survey to evaluate the customer experience and satisfaction with the services provided by the *Good To Go!* Customer Service Center. These services include the *Good To Go!* website ([www.mygoodtogo.com](http://www.mygoodtogo.com))<sup>1</sup>, the customer service center, and written correspondence. The findings from this survey will be used to inform customer service improvement initiatives.

## **METHODOLOGY**

PRR, in collaboration with WSDOT and ETCC staff, developed questions for the survey. The survey was designed to take about seven minutes and to focus on key customer satisfaction issues. See Appendix A for a copy of the paper and online survey instruments. Participants with known email addresses were emailed the survey link, and those without known email addresses were mailed the paper version of the survey.

PRR, WSDOT, and ETCC staff designed the survey to ensure that the results would provide a representative sample of the opinions of customers with recent interactions with *Good To Go!* services. A recent interaction included either paying a toll via a Pass or by contacting the customer service center within 90 days prior to the launch of the survey (May, June, and July 2013). The survey was sent on July 30, 2013 to a proportionate, stratified random sample of 24,077 customers (20,787 via email link and 3290 via mail) and was open until August 30, 2013. The sample was stratified by the following four account types:

- Pay By Mail
- Pass
- Pay By Plate
- Short Term Account

A total of 2,815 completed questionnaires were received of which 2,567 were completed online and 248 were completed via mail. A small amount (144) of the sample was self-reported as business vehicles. This resulted in a response rate of 12 percent. The margin of error for the 2,815 completed questionnaires was +/- 1.84 percent.

## **KEY FINDINGS**

Below are high level findings in regard to key survey questions addressing satisfaction with *Good To Go!* customer service.

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<sup>1</sup> The [www.mygoodtogo.com](http://www.mygoodtogo.com) website is separate from the WSDOT tolling website.

### *Typical Good To Go! Customer*

- More than two-thirds (67 percent) of respondents used the SR 520 Bridge and almost half (47 percent) used the Tacoma Narrows Bridge in the last 90 days.
- More than one-third (38 percent) of respondents paid tolls on Puget Sound roads one or more times a week, and slightly less (32 percent) paid tolls one to three times per month.
- Most respondents (57 percent) used toll roads for leisure or non-business driving, only a quarter (24 percent) reported using toll roads for commuting to and from work.

### *Overall Satisfaction with Good To Go!*

- Most respondents (88 percent) are *satisfied* to *very satisfied* with *Good To Go!* customer service.
  - Respondents were likely to be more satisfied with *Good To Go!* customer service if they supported tolling, if they were aware of all the fees associated with their tolls, if they were older, or if they use a *Good To Go!* pass.
  - For the most part, a vast majority of respondents were satisfied with *Good To Go!*, but they were less likely to be satisfied if they had a dispute (toll, fee, or civil penalty), if they contacted customer service via phone or email, or if they paid their tolls via the mail.

### *How Customers Pay for Tolls and Awareness of Fees*

- The majority of respondents (77 percent) paid their tolls automatically with a *Good To Go!* pass associated with their vehicle.
- Almost half of respondents (46 percent) were aware of the \$.25 fee for not having a *Good To Go!* pass, but even more (65 percent) understood the fee is to pay for additional processing required when photographing plates.
  - Respondents were more aware of fees and their purpose if they had contacted customer service to manage their account, and if they used toll roads more frequently.
  - Respondents were less likely to be aware of fees if they recently had a dispute with a toll, fee, or civil penalty.

### *Attitudes towards Tolls*

- Most of the respondents (86 percent) will continue to use the tolled roadways, and two-thirds (65 percent) agreed or strongly agreed that tolled roadways are a viable option to pay for transportation improvements.
  - Response was more favorable to tolls if they paid tolls on SR 520, if they were older, if they had a higher income, had a newer *Good To Go!* account, or if they had recently contacted customer service to manage their account (pay a toll, change settings, add/remove a pass).
  - Respondents were less favorable to tolls if they paid tolls on the Tacoma Narrows Bridge or

if they had recently had a dispute with *Good To Go!* regarding a toll, fee, or civil penalty.

#### *Customer Interaction with Good To Go!*

- Most respondents who had contacted customer service in the last 90 days (N=894) did so via phone (66 percent), their issue was resolved (77 percent), and they only had to contact customer service one time (61 percent).

#### *Satisfaction and Importance of Person-to-Person Interactions*

- Most respondents (82 percent) indicated that knowledgeable and respectful representatives were the most important factor of customer service.
- Of those respondents that contacted customer service, most were satisfied with representatives being respectful and friendly (69 percent), and that their issue is resolved by one representative rather than several (65 percent).
  - Respondents were more likely to be satisfied with all aspects of customer service if they had contacted customer service to manage their account, if they were favorable to tolling, if they were older, if they were more aware of fees associated with tolling, or if they had a pass.
  - Respondents were less likely to be satisfied with all aspects of customer service if they had a dispute (toll, fee, civil penalty), if they contacted customer service via phone or email, if they paid tolls via mail, or they have had a *Good To Go!* account for a longer period of time (since 2007).

#### *Service Features that are the MOST important*

- When forced to choose the top two most important aspects of customer service, respondents (41 percent) indicated they want their issue or dispute resolved the first time they call, and they want the representative to be knowledgeable (35 percent).
- When forced to choose the top two most important self-serve customer functions, respondents (48 percent) want the ability to view their account history and add funds to their account (44 percent) using the website.

#### *Services MOST wanted*

- Improving the *Good To Go!* website is the most wanted customer function (54 percent), as well as developing a mobile application to view and manage accounts (34 percent).
- Overall friendly, helpful, and polite staff was reported as a *Good To Go!* strength, and website malfunctions and difficulty were reported as a weaknesses.
- The one thing respondents wanted to change most about *Good To Go!* is the website.

# INTRODUCTION

## Background and Purpose

The Washington State Department of Transportation conducted this survey to evaluate customer importance of the services provided by the *Good To Go!* Customer Service Center. These services include person-to-person interactions with the customer service center, as well as “self-service” functions.

WSDOT and ETCCC (the company that provides customer service for the *Good To Go!* program in Washington state) were particularly interested in:

- The typical *Good To Go!* customer (how, when, where do they pay tolls)
- Overall satisfaction with *Good to Go!* customer service
- Understanding how customers pay for their tolls
- Customer awareness of fees associated when using “Pay by Plate”
- Customer attitudes towards tolling
- Customer satisfaction with recent interactions with *Good To Go!* customer service
- Customer ratings of importance and satisfaction of specific person-to-person service interactions
- Understanding the features of *Good To Go!* customer service that are the most important to customers
- Discovering the service functions customers want most

The findings from this survey will be used to inform future customer service improvement initiatives.

## Methodology Overview

### Survey Question Development

PRR, in collaboration with WSDOT and ETCC staff, developed questions for the survey. The survey was designed to take about seven minutes and to focus on key customer satisfaction issues. See Appendix A for a copy of the paper and online survey instruments. Participants with known email addresses were emailed the survey link, and those without known email addresses were mailed the paper version of the survey.

### Survey Implementation

PRR, WSDOT, and ETCC staff designed the survey to ensure that the results would provide a representative sample of the opinions of customers with recent interactions with *Good To Go!* services. A recent interaction included either paying a toll via a pass or by contacting the customer service center within 90 days prior to the launch of the survey (May, June, and July 2013). The survey was sent on July 30, 2013 to a proportionate, stratified random sample of 24,077 customers (20,787 via email link and 3,290 via mail) and was open until August 30, 2013. The sample was stratified by the following four account types:

- Pay By Mail
- Pass
- Pay By Plate

- Short Term Account

A total of 2,815 completed questionnaires were received of which 2,567 were completed online and 248 were completed via mail. A small amount (144) of the sample was self-reported as business vehicles. This resulted in a response rate of 12 percent. The margin of error for the 2,815 completed questionnaires was +/- 1.84 percent.

### Variable Indexes

Index scores were created for understanding the importance of person-to-person service, satisfaction of person-to-person service, favorability towards tolling, and awareness of fees associated with accounts. These index scores were created by adding up the response items for these questions and dividing them by the number of items. For example a respondents' ratings for each of the eight items asking them about the importance of person-to-person customer service features (with low importance rated as 1 and high importance rated as 4) are added together and then divided by eight (the number of items) for a total index score. Items responded to as 'not applicable' were not included in the index calculation.

### Data Analysis

The data from the paper and online versions of the survey were merged into one database. Response range and logic checks were conducted prior to the analysis to ensure clean data. Logic checks are especially important with paper questionnaires because respondents sometimes do not follow the skip patterns correctly or they choose to not answer certain questions.

The data was further analyzed through cross-tabulations to see whether there were statistically significant relationships among the variables. The cross-tabulation analysis used statistical techniques (Cramer's V, Kendall's Tau c, Spearman, Pearson's R<sup>2</sup>).

The crosstab analyses presented only investigated the relationship between two variables at a time, without controlling for other variables or any interaction effects. To address this issue, t-tests were conducted to further identify the key drivers of customer satisfaction.

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<sup>2</sup> Cramer's V is a measure of the relationship between two variables and is appropriate to use when one or both of the variables are at the nominal level of measurement. Cramer's V ranges from 0 to +1 and indicates the strength of a relationship. The closer to +1, the stronger the relationship between the two variables. Kendall's Tau c is a measure of the relationship between two variables and is appropriate to use when both of the variables are at the ordinal level of measurement. Tau c ranges from -1 to +1 and indicates the strength and direction of a relationship. Pearson's R is also a measure of the relationship between two variables at the ordinal or interval level of measurement. It ranges from -1 to +1 and indicates the strength and direction of a relationship.

Statistical significance means that the p-value is less than .05. Level of statistical significance is routinely set at this level. This essentially means that there are only 5 chances out of 100 that what appears to be a relationship between the variables is in fact not a true relationship, but rather has occurred by chance.

## How to read this report

In this report, overall findings are presented for each of the substantive survey questions, followed by a table or chart that shows those results. Then, cross-tabulation results are presented.

Throughout this report, only relationships between variables that are statistically significant at the .05 level or better and that are meaningful to an understanding of the data are reported. For example, if gender is not reported as significant for a particular question, it was not a statistically significant relationship or the relationship was too weak to be reported.

In interpreting the strength of the reported relationships the following cut-offs were used. It should be noted that in social science survey research it is very unlikely to get correlation coefficients higher than .4.

- +/- .4 and above --- very strong
- +/- .3 and above—strong
- +/- .2 to +/- .29—moderate
- +/- .1 to +/- .19—slight
- less than +/- .1—weak (weak relationships were not reported)

It should also be noted that some of the charts and tables presented in the report are for “multiple response variables”, meaning that the survey respondent (case) could select more than one answer (response). In such charts and tables the percentages can add up to more than 100 percent. The percents shown are for the “percent of cases” and not the “percent of responses,” thereby keeping the percents for these variables in line with those for all other variables which also report the “percent of cases.”

Crosstabs for multiple response questions do not have coefficients because statistical tests with multiple response variables are not possible. In those cases the crosstab tables were viewed and reported what appeared to be important differences.

Finally, the base statement in the charts represents the group or subgroup of the sample that was asked a particular question and the “n” that follows this statement represents the number of respondents who answered that particular question.

# SURVEY RESULTS

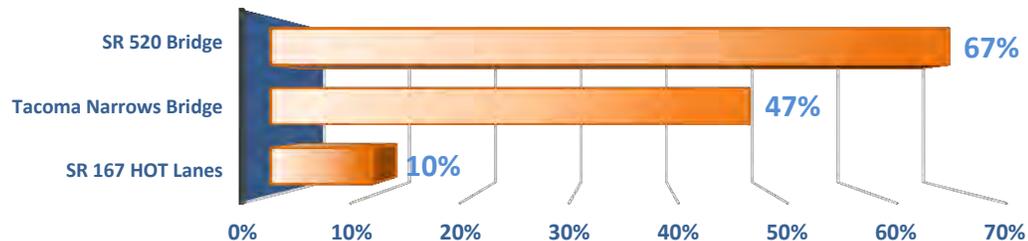
## Typical *Good To Go!* Customer

### More than two-thirds used the SR 520 Bridge and almost half used the Tacoma Narrows Bridge

Customers were asked on which Puget Sound area roadways they had paid tolls and were allowed to give multiple responses to this question. More than two-thirds (67 percent) had paid tolls on the SR 520 Bridge, while almost half (47 percent) had paid tolls on the Tacoma Narrows Bridge. Far fewer (10 percent) had paid tolls on the SR 167 HOT lanes.

#### On which of the following roadways have you paid a toll?

Base: All Respondents, Multiple Responses Allowed (N=2797)

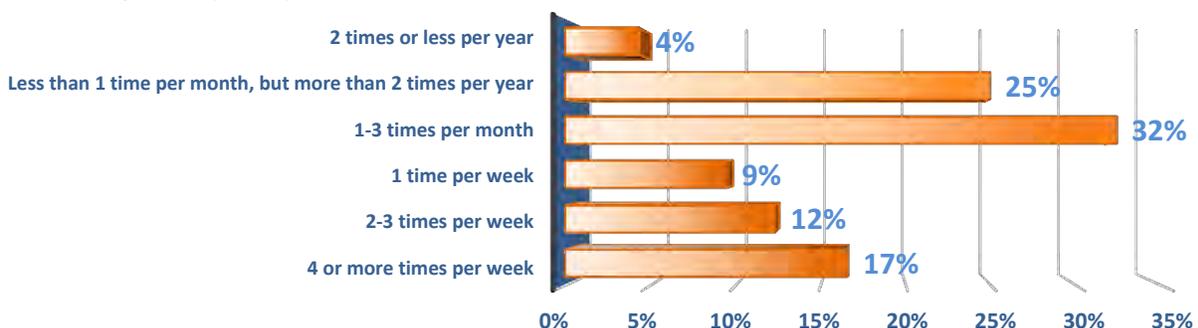


### More than two-thirds paid tolls one or more times a week

The frequency of paying tolls varied, with almost two-fifths paying tolls one or more times a week (38 percent). A slightly lower percent paid tolls 1 to 3 times a month (32 percent). There was also a similar percent (29 percent) that paid tolls less than once a month.

#### How frequently do you pay tolls on the SR 520 Bridge, the SR 167 HOT lanes, and the Tacoma Narrows Bridge?

Base: All Respondents (N=2798)

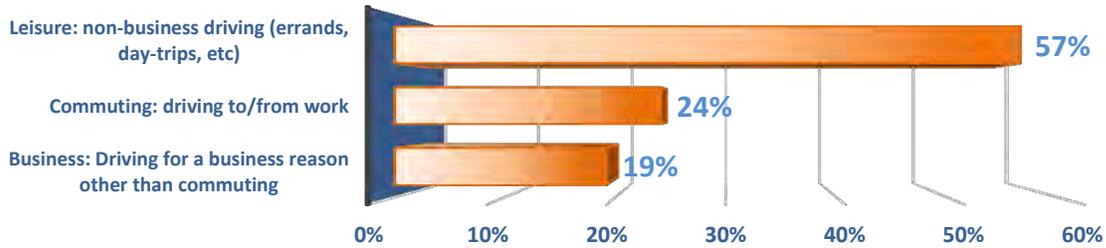


### Most used the toll roads for leisure/non-business driving

More than half (57 percent) used toll roads for leisure and non-business driving (errands, day-trips, etc.), while around a fifth used toll roads for commuting (24 percent) and business (19 percent).

**Would you say you use these tolled roads or bridges mostly for:**

Base: All Respondents (N=2772)



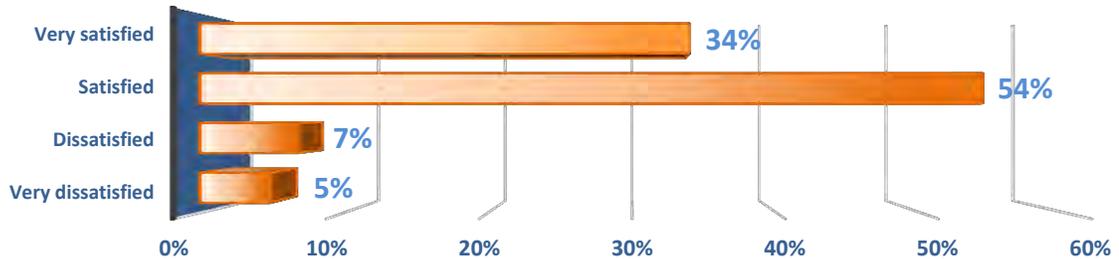
**Overall Satisfaction with *Good To Go!***

**Most respondents were satisfied**

When asked to rate (on a 4-point scale) their level of satisfaction with *Good To Go!* customer service, more than four-fifths (88 percent) indicated they were *satisfied* or *very satisfied* (with 54 percent satisfied and 34 percent very satisfied). Very importantly, few respondents (12 percent) indicated they were *dissatisfied* or *very dissatisfied*.

**Overall, how satisfied are you with *Good To Go!* Customer service?**

Base: All Respondents (N=2380)



**Statistical Relationships Found<sup>3</sup>:**

**Respondents MORE likely to be overall Satisfied:**

- Favorable towards tolling items (*strong*)
- Aware of service fees on pay by plate accounts (*moderate*)
- Older respondents (*moderate*)
- Use a *Good To Go!* Pass and auto pay tolls (*slight*)

**Respondents LESS likely to be overall Satisfied:**

- Disputed a toll, fee, or Civil Penalty (*strong*)
- Contacted customer service via phone (*moderate*)
- Contacted customer service via email (*moderate*)
- Pay tolls by mail (*slight*)

<sup>3</sup> Note: The strength of the reported relationships (strong, moderate, and slight) are represented in the ranges on [pg. 7.](#)

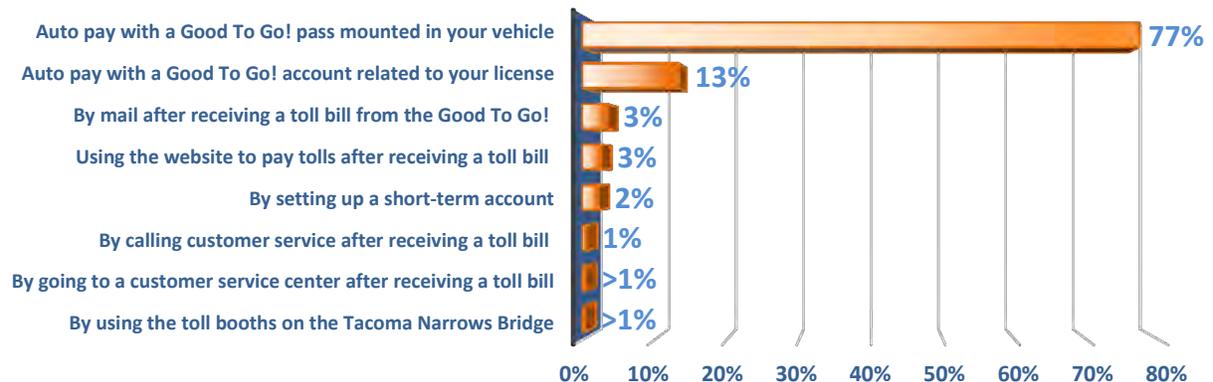
## How Customers Pay for Tolls

### Most typically paid tolls with a pass

The vast majority (77percent) paid their tolls with a pass. The next most frequently used method (13 percent) was a *Good To Go!* account related to the person's license plate (also known as Pay By Plate). Less than 10 percent were those without an account of any kind that paid either when they received a bill or by using the toll booths on the Tacoma Narrows Bridge.

#### How do you typically pay for your tolls?

Base: All Respondents (N=2774)

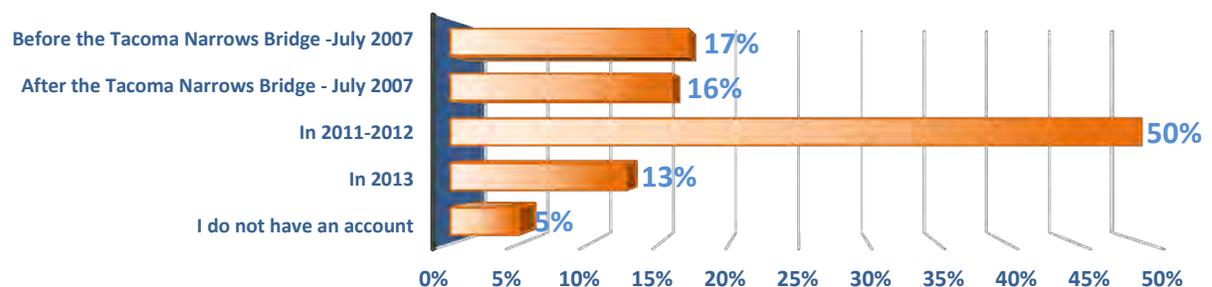


### Most established their *Good To Go!* account in 2011-2012

Customers were asked when they had established their *Good To Go!* account. Of those who had an account, half (50 percent) established their account in 2011-2012, while a few (13 percent) reported doing so in in the last year (2013). A third (33 percent) of respondents reported opening their accounts prior to 2011.

#### When did you open your Good To Go! account?

Base: All Respondents (N=2774)



## Awareness of Fees

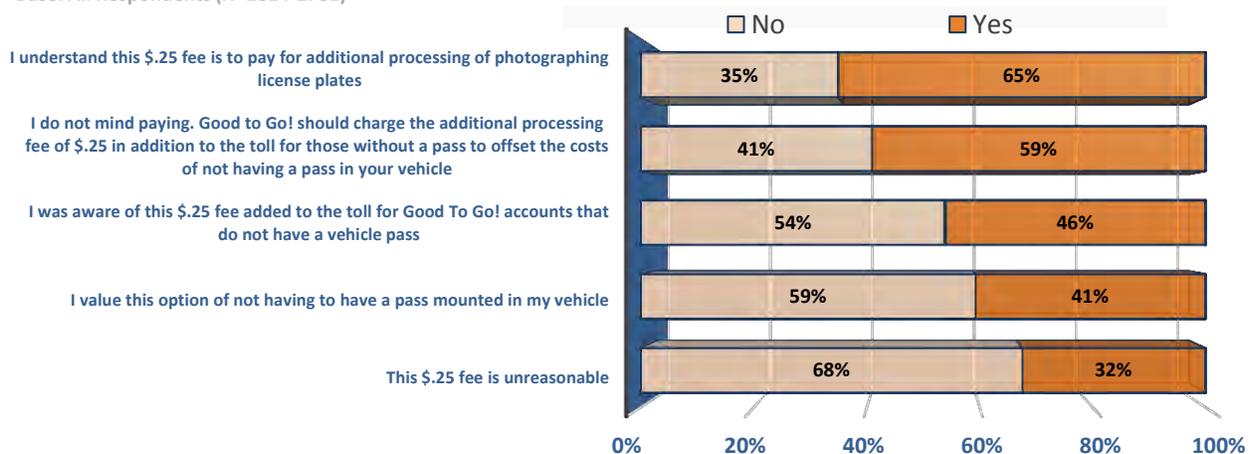
Almost half were aware of the \$0.25 fee for not having a *Good To Go!* pass, and most understand this

## fee is necessary to pay for additional processing of photographing plates

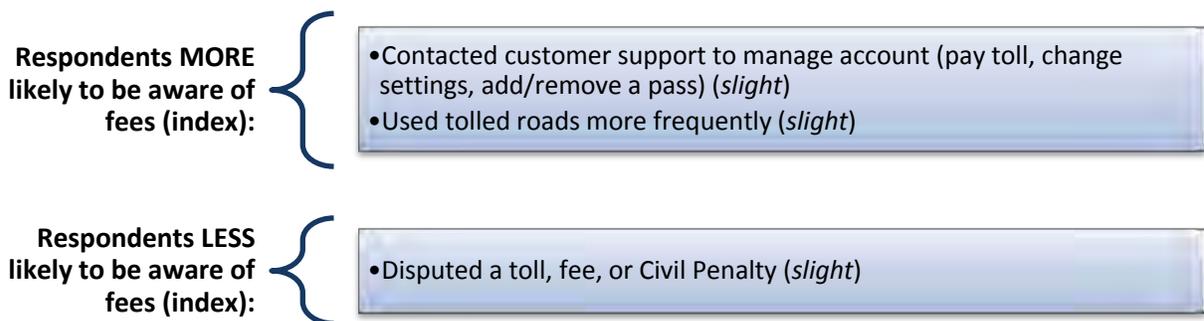
Respondents were informed that the *Good To Go!* program charges a \$0.25 processing fee in addition to the toll for vehicles that do not have a pass, and they were asked several items assessing their knowledge and attitudes towards this fee. Less than half (46 percent) were actually aware of this fee, but more importantly almost two-thirds (65 percent) understood that the fee pays for additional processing to photograph license plates. Additionally three-fifths of respondents (59 percent) did not mind paying the fee knowing that the fee offsets the costs of not having a pass in their vehicle. Lastly, more than two-thirds of respondents (68 percent) did not think the \$0.25 fee is unreasonable.

### Understanding of \$0.25 processing fee for vehicles that do not have a Good To Go! Pass

Base: All Respondents (N=2614-2781)



### Statistical Relationships Found:



Respondents that pay by plate are specifically more likely to be aware of the \$.25 fee (*slight*). Respondents who pay by plate and by mail are more likely to value the option of not having a pass mounted in their vehicle (*moderate*), whereas those with auto pay accounts do not value this option (*moderate*).

## Attitudes towards Tolls

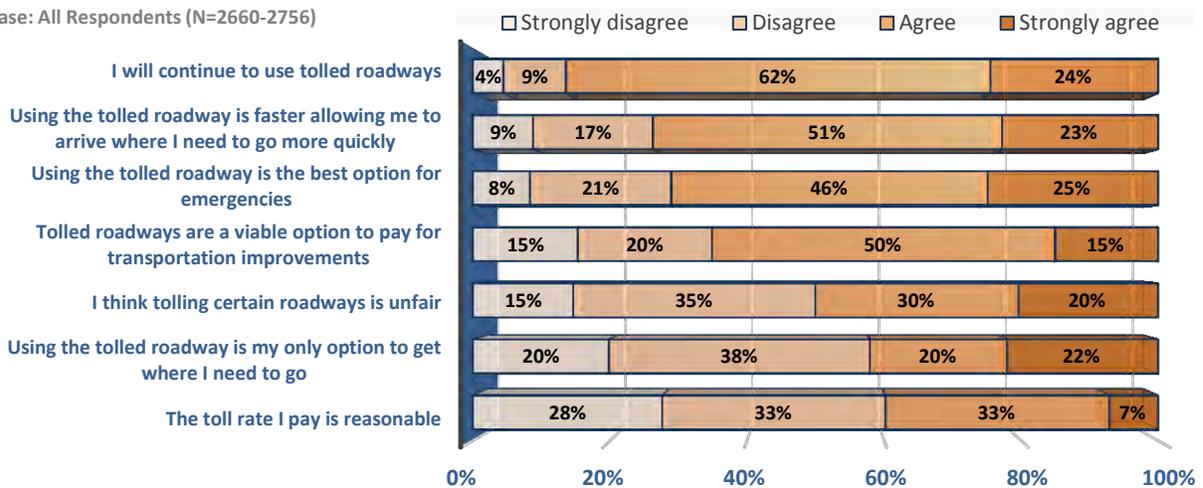
### Most will continue to use tolled roadways, and will continue to pay tolls

Respondents were asked how much they agreed or disagreed with statements regarding tolled

roadways in Puget Sound. Most respondents (86 percent) *agreed* or *strongly agreed* that they will continue to use tolled roadways. Almost three-fourths of respondents (74 percent) also *agreed* or *strongly agreed* that using tolled roadways is faster and the best option for emergencies (71 percent). Almost two-thirds of respondents (65 percent) *agreed* or *strongly agreed* that tolled roadways are a viable option to pay for transportation improvements. Lastly, half (50 percent) of respondents *agreed* or *strongly agreed* that tolling is unfair, and slightly less (40 percent) *agreed* or *strongly agreed* the toll rate is unreasonable.

**How much do you agree/disagree with the statements describing your use of tolled roads:**

Base: All Respondents (N=2660-2756)



**Statistical Relationships Found:**

**Respondents MORE likely to be favorable to tolling (index):**

- Paid tolls on SR 520 (*slight*)
- Older respondents (*slight*)
- Higher income (*slight*)
- Have newer *Good To Go!* accounts (*slight*)
- Contacted customer support to manage account (pay toll, change settings, add/remove a pass) (*slight*)

**Respondents LESS likely to be favorable to tolling (index):**

- Paid tolls on Tacoma Narrows Bridge (*slight*)
- Disputed a toll, fee, or Civil Penalty (*slight*)

**Customer Interactions with *Good To Go!***

**Most reported their contact with customer service in last 90 days involved managing their account**

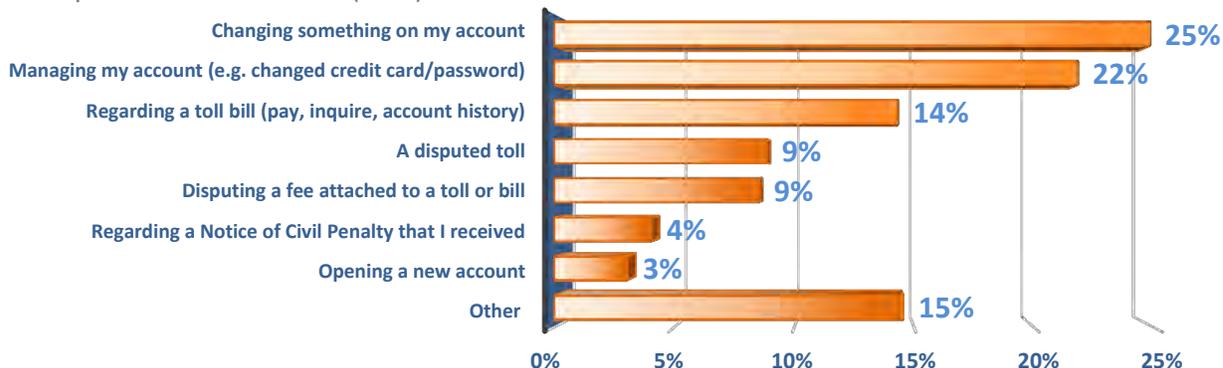
About a third of respondents (32 percent), reported they had contact with *Good To Go!* customer service in the last 90 days. Most of those who reported they had contact with *Good To Go!* customer

service in the last ninety days indicated that the contact centered around the following three types of contact:

- Changing something on their account such as add/remove/replace vehicle (25 percent)
- Managing their account such as changing a credit card, address, or password (22 percent)
- Regarding a toll bill such as paying, inquiring about, or on account history (14 percent)

**What was your most recent contact with Good To Go! customer service regarding?**

Base: Respondents Contact Good To Go! (N=893)

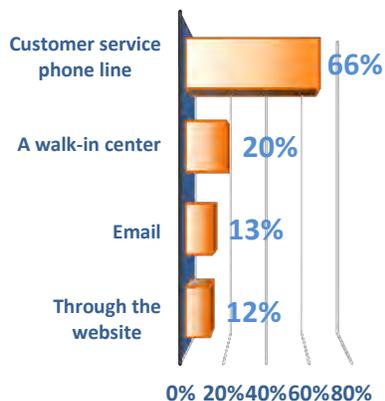


**Most who had contact with customer service in the last 90 days did so via the customer service phone line, their issue was resolved, and they only contacted customer service one time**

Of those that contacted *Good To Go!* customer service in the last 90 days (n=894), two-thirds (66 percent) had contacted *Good To Go!* using the customer service phone line, whereas few respondents reporting using email (13 percent) or the website (12 percent). For more than three-fourths of respondents (77 percent) their issue was resolved. Also almost two-thirds of respondents (61 percent) only had to contact customer service one time regarding their issue.

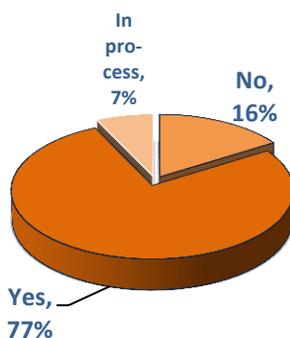
**How did you contact customer service?**

BASE: RESPONDENTS CONTACT GOOD TO GO! (N=898): MULTIPLE RESPONSES



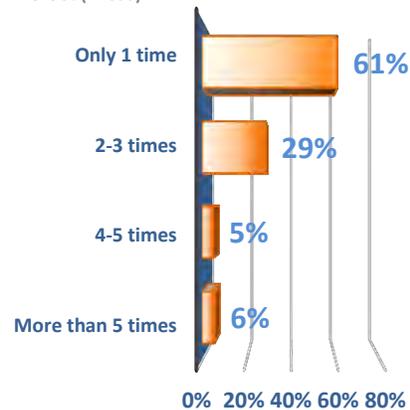
**Was this issue resolved?**

BASE: RESPONDENTS CONTACT GOOD TO GO! (N=887)



**How many times have you contacted Good To Go! regarding this issue?**

BASE: RESPONDENTS CONTACT GOOD TO GO! (N=893)



## Satisfaction and Importance of Person-to-Person Interactions

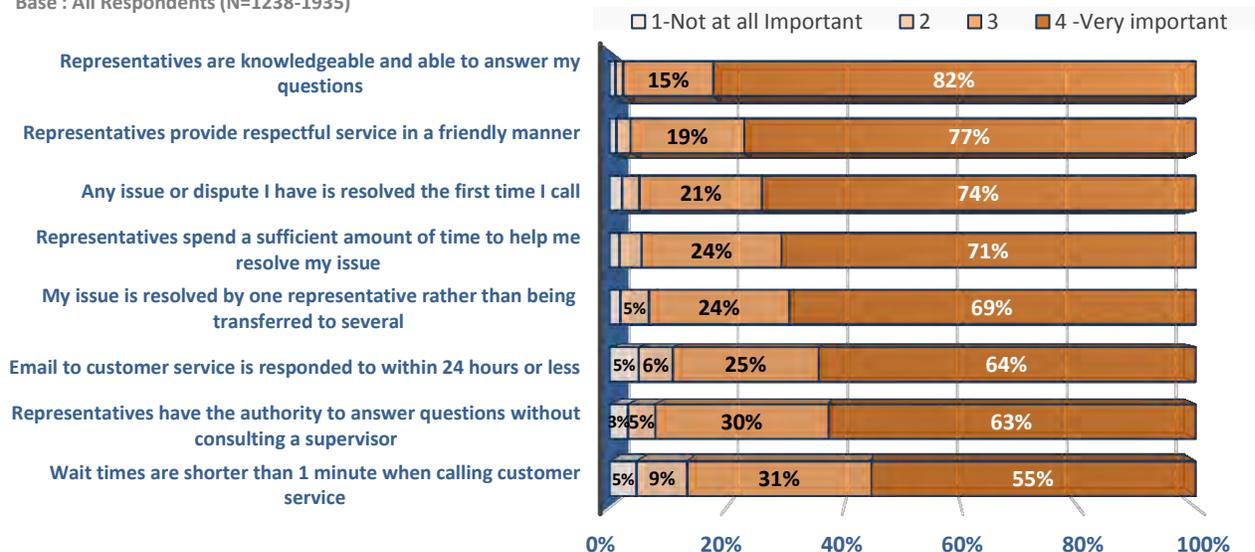
### Most indicated that knowledgeable and respectful representatives are the most important factors of customer service

Respondents were asked to consider any person-to-person interactions with *Good To Go!* customer service, and then asked to rate how important and satisfied they were with specific factors of customer service. Generally all aspects of customer service *were important to very important* to respondents, but the following were the most important customer service factors (Respondents indicated a 4, where 1 is not at all important and 4 is very important):

- Representatives are knowledgeable and able to answer my questions (82 percent)
- Representatives provide respectful service in a friendly manner (77 percent)
- Any issue or dispute I have is resolved the first time I call (74 percent)
- Representatives spend a sufficient amount of time to help me resolve my issue (71 percent)

### With person-to-person interactions with Good To Go!, how important are the following customer service factors?

Base : All Respondents (N=1238-1935)



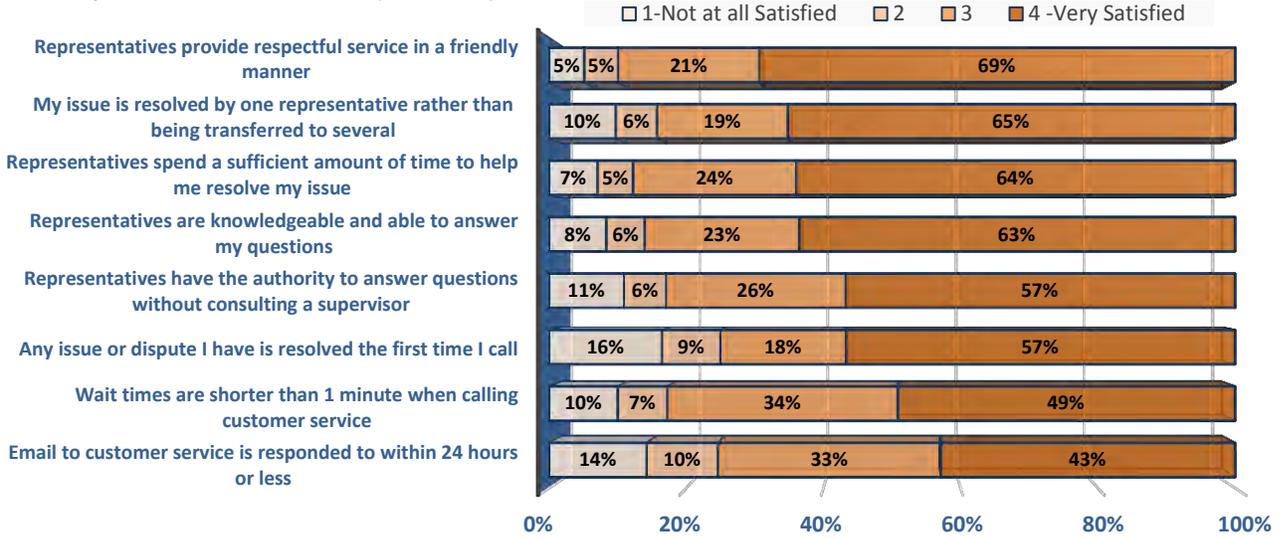
### Respondents were most satisfied with the respectful manner of representatives, and that their issue was resolved by one representative rather than being transferred to several

As with importance, respondents generally rate all aspects of customer service as *satisfied to very satisfied*, but respondents were the most satisfied with the following customer service factors (Respondents indicated a 4, where 1 is not at all satisfied and 4 is very satisfied):

- Representatives provide respectful service in a friendly manner (69 percent)
- My issue is resolved by one representative rather than being transferred to several (65 percent)
- Representatives spend a sufficient amount of time to help me resolve my issue (64 percent)
- Representatives are knowledgeable and able to answer my questions (63 percent)

**With person-to-person interactions with Good To Go!, how satisfied are you with the following customer service factors?**

Base: Respondents interaction with GTG, (N=617-1238)



**Statistical Relationships Found:**

**Respondents MORE likely to be Satisfied with aspects of service (index):**

- Contacted customer support to manage account (pay toll, change settings, add/remove a pass) (*very strong*)
- Favorable to tolling items (index) (*very strong*)
- Older respondents (*strong*)
- Aware of tolling fees (index) (*strong*)
- Have auto pay accounts (*slight*)
- Paid a toll on the Tacoma Narrows Bridge (*slight*)

**Respondents LESS likely to be Satisfied with aspects of service (index):**

- Disputed a toll, fee, or Civil Penalty (*very strong*)
- Used customer service phone line (*moderate*)
- Used email to contact customer service (*slight*)
- Use pay by mail (*slight*)
- Have had Good To Go! account longer (*slight*)

**Having an issue or dispute be resolved the first time someone calls has the largest service gap between importance and satisfaction**

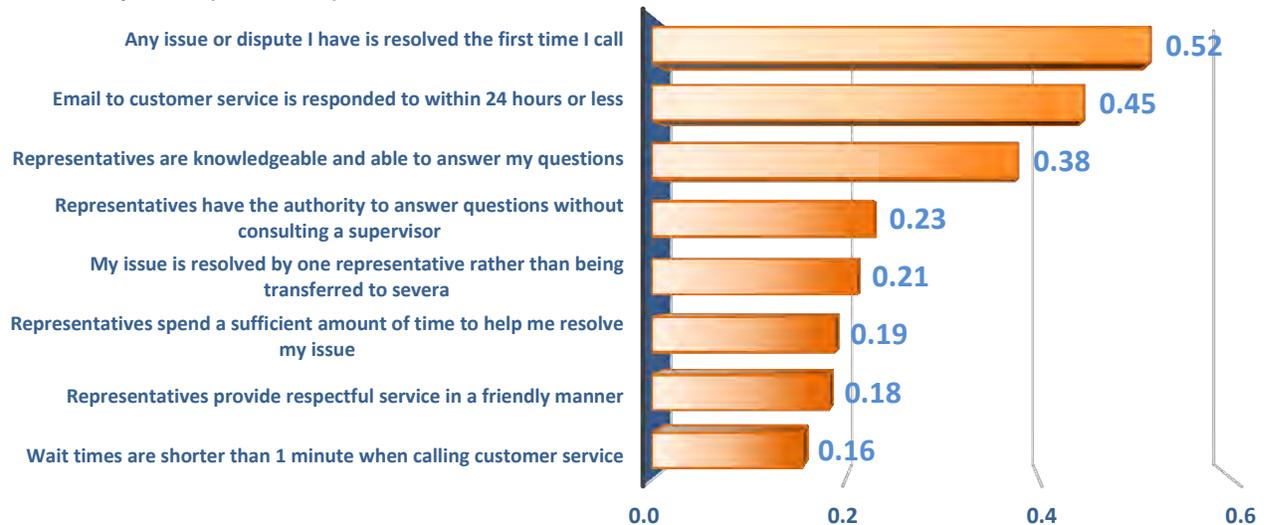
Gaps in customer service can be calculated by taking the average importance score (where 1 is not important to 4 is very important) minus the average satisfaction score (where 1 is not at all satisfied and 4 is very satisfied). These gaps can indicate where customer service is not meeting, or exceeding, respondents' expectations. No customer service factors exceeded respondent expectations, however

gaps where service did not meet expectations were small (less than .5). Still though, these gaps can be seen as factors to make improvements. The factors with the largest gaps in not meeting respondents' expectations were:

- Any issue or dispute I have is resolved the first time I call (.52 difference)
- Email to customer service is responded to within 24 hours or less (.45 difference)
- Representatives are knowledgeable and able to answer my questions (.38 difference)

### Difference between Average IMPORTANCE and SATISFACTION rating when contacting Good To Go! Customer Service

Base: All Respondents (N= 617 -1935)



## Service Features that are the MOST Important

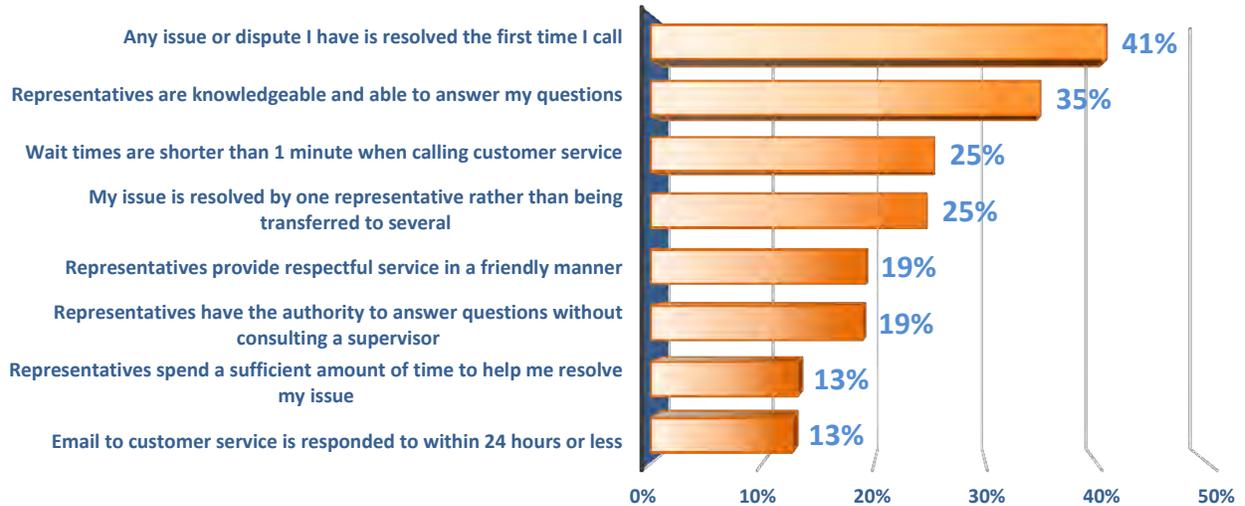
**Most respondents indicated that having their issue or dispute resolved the first time they call was the most important, as well as representatives being knowledgeable**

In addition to rating importance, respondents were also asked to choose the top two most important aspects of *Good To Go!* customer service. When forced to choose, respondents indicate the following as the most important aspects of customer service:

- Any issue or dispute I have is resolved the first time I call (41 percent)
- Representatives are knowledgeable and able to answer my questions (35 percent)
- Wait times are shorter than 1 minute when calling customer service (25 percent)

**Of all these factors of Good To Go! customer service, which are the TWO most important to you?**

BASE: ALL RESPONDENTS (N=2262): MULTIPLE RESPONSES



**Statistical Relationships Found:**

**Respondents MORE likely to choose "any issue...be resolved first time ":**

- Contacted customer service via phone line (*slight*)
- Had contact with customer service in the last 90 days (*slight*)
- Disputed a toll, fee, or Civil Penalty (*slight*)

**Respondents LESS likely to choose "any issue...be resolved first time ":**

- Younger respondents (*slight*)

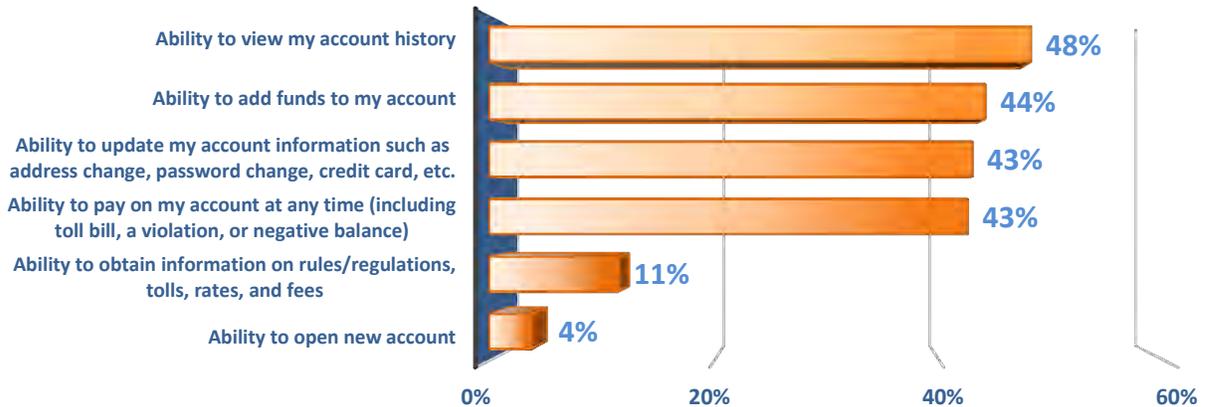
**Most respondents want the ability to view account history and add funds to their account using the Good To Go! website**

Respondents were also asked to choose the top two most important "self-serve" functions of Good To Go! customer service. When forced to choose the most important, respondents indicated the following as the most important "self-serve" functions:

- Ability to view account history (48 percent)
- Ability to add funds to my account (44 percent)
- Ability to update my account information such as address change, password change, or credit card, ETCC. (43 percent)

**Of the following "self-serve" functions of Good To Go! customer service, which are the TWO MOST important to you?**

BASE: ALL RESPONDENTS (N=2413): MULTIPLE RESPONSES



**Statistical Relationships Found:**

Respondents MORE likely to choose "Ability to view account history":

- Disputed a toll, fee, or Civil Penalty (*slight*)

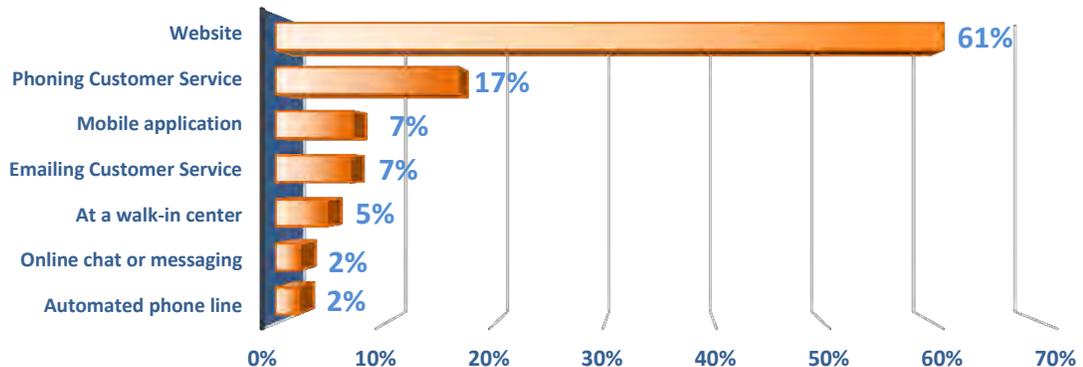
Respondents MORE likely to choose "Ability to add funds":

- Older respondents (*slight*)

When asked how they would most prefer to accomplish these top two "self-serve" functions, most of the respondents (61 percent) indicated they would prefer to use the website. However, just under a fifth (17 percent) of respondents would still prefer to accomplish these functions by calling in to customer service.

**Setting aside your experience with current functionality of Good To Go! customer service, how would you MOST prefer to accomplish these top two functions?**

BASE: ALL RESPONDENTS (N=2433)



## Services MOST Wanted

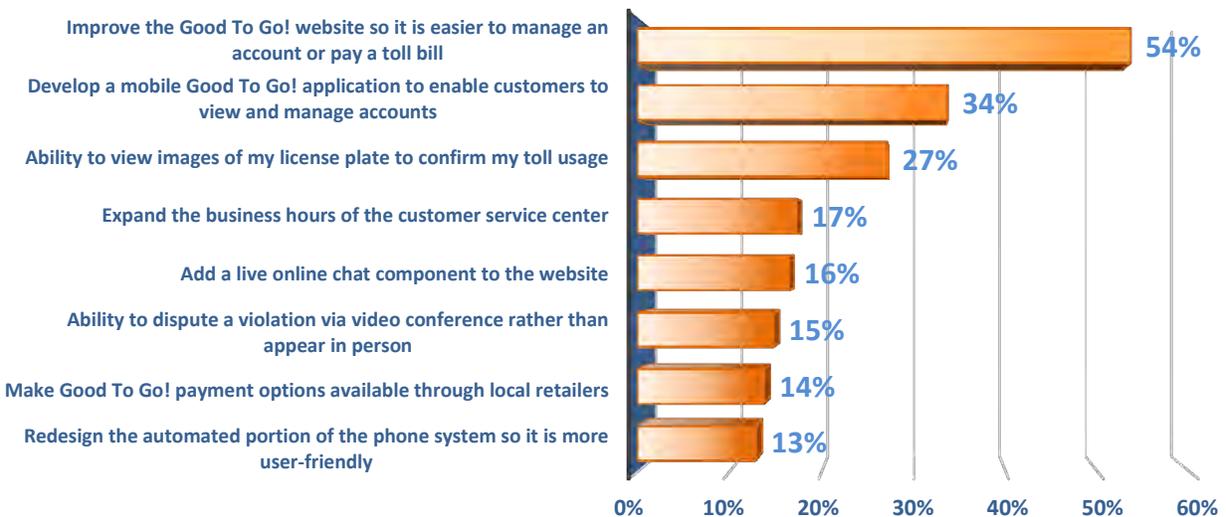
### Most respondents want an improved *Good To Go!* website

Respondents were also asked to choose the top two most important customer service functions they wish were available. When forced to choose the most important, respondents indicated the following as the most important:

- Improve the *Good To Go!* website so it is easier to manage an account or pay a toll bill (54 percent)
- Develop a mobile *Good To Go!* application to enable customers to view and manage accounts (34 percent)
- Ability to view images of my license plate to confirm my toll usage (27 Percent)

Of all the following possible *Good To Go!* customer functions, which are the TWO options you MOST WISH were available?

BASE: ALL RESPONDENTS (N=2294) MULTIPLE RESPONSES



### Statistical Relationships Found:

Respondents MORE likely to choose "Develop a mobile application":

- Younger respondents (*moderate*)

### Friendly, helpful, polite staff was reported as number one customer service strength

Respondents were asked to identify the top two strengths of *Good To Go!* customer service. A total of 897 respondents answered this question. Verbatim comments were taken and coded them into

categories. The following were the strengths mentioned most frequently.

- Overall friendly staff/helpful/polite/good service (59 percent)
- Convenient and easy to use (20 percent)
- Good and quick problem resolution (19 percent)
- Website, online, email functionality available (19 percent)
- Good payment options (12 percent)

### **Website malfunctions and difficulty to use are reported as biggest customer service weaknesses**

Respondents were also asked to identify the top two weaknesses of *Good To Go!* customer service. A total of 696 respondents answered this question. Verbatim comments were taken and coded them into categories. The following were the weaknesses mentioned most frequently.

- Website malfunctions and difficulty to use (29 percent)
- Takes too long to resolve issues (21 percent)
- Long waits and lines for service (15 percent)

### **Improving the website is reported as the ONE thing respondents would like to change most about *Good To Go!***

Lastly respondents were asked to identify one thing they would like changed about *Good To Go!* customer service. A total of 755 respondents answered this question and the most recommended changes were to improve the website (21 percent) and reduce the fees (20 percent).

**APPENDIX A: Survey Questions**

(See next page)

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ALGONA WA 98001-6521

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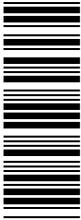
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**Washington State  
Department of Transportation**

Lynn Peterson  
Secretary of Transportation

Toll Division  
401 2nd Avenue South, Ste. 300  
Seattle, WA 98104  
206-464-1220 / FAX: 206-464-1189  
TTY: 1-800-833-6388  
www.wsdot.wa.gov



KGK

**August 2, 2013**

**Dear Resident:**

As part of our effort for continuous improvement the Washington State Department of Transportation is conducting this survey to evaluate customers' experience with the *Good To Go!* Program. Specifically we want to hear about your experience with the *Good To Go!* website, the call/walk-in centers, and written correspondence. In addition we want to better understand what services and/or functionality you would like from the *Good To Go!* program in the future.

The questionnaire will take about 7 minutes and your answers are completely anonymous. Your address was randomly selected to participate in the survey and your participation will ensure a representative sample. After answering the questions, simply fold so that the return address to PRR, Inc. shows, please secure with one small piece of tape and drop in the mail. No postage is required.

**Please mail no later than August 16, 2013.**

If you prefer, you can complete the survey online by entering this online address into your browser <https://www.surveymonkey.com/s/ETCCsurvey2>.

If you have any questions about the survey, please contact [research@prrbiz.com](mailto:research@prrbiz.com).

We thank you in advance for your participation!

Sincerely,

Patty Rubstello, P.E.  
Director of Policy and Systems Development, Toll Division

15. Of all the following "self-serve" functions of *Good To Go!* customer service, which are the *two MOST* important to you? (Choose **ONLY 2**)

Ability to pay on my account at any time (including toll bill, a violation, or negative balance)

Ability to view my account history

Ability to obtain information on rules/regulations, tolls, rates, and fees

Ability to update my account information such as address change, password change, credit card, etc.

Ability to add funds to my account

Ability to open new account

16. Setting aside your experience with the current functionality of *Good To Go!* customer service, how would you *MOST prefer* to accomplish these top two functions? (Choose **only one**)

Automated phone line  Website  Phoning customer service  Emailing customer service

Mobile application  At a walk-in center  Online chat or messaging

17. Of all the following possible *Good To Go!* customer functions, which are the *TWO* options you most wish were available? (Choose **ONLY 2**)

Make *Good To Go!* payment options available through local retailers

Add a live online chat component to the website

Expand the business hours of the customer service center

Redesign the automated portion of the phone system so it is more user-friendly

Improve the *Good To Go!* website so it is easier to manage an account or pay a toll bill

Develop a mobile *Good To Go!* application to enable customers to view and manage accounts

Ability to view images of my license plate to confirm my toll usage

Ability to dispute a violation via video conference rather than appear in person



K8S

18. Overall, how would you rate your level of satisfaction with *Good To Go!* customer service?

Very satisfied  Satisfied  Dissatisfied  Very dissatisfied

19. What are the top 2 *strengths* of the customer service provided by the *Good To Go!* program?

1. \_\_\_\_\_

2. \_\_\_\_\_

20. What are the top 2 *weaknesses* of the customer service provided by the *Good To Go!* program?

1. \_\_\_\_\_

2. \_\_\_\_\_

21. If you could change just *ONE* thing about *Good To Go!* customer service, what would that be?

\_\_\_\_\_

*We ask the following questions to make sure we are getting feedback from a representative sample. Remember, your answers are anonymous.*

22. What is your gender? Male  Female

23. Which of the following categories includes your age?

16 to 19	25 to 34	45 to 54	65 to 74
20 to 24	35 to 44	55 to 64	75 and older

24. Are you from a Hispanic, Latino, or Spanish-speaking background? No  Yes

25. What race would you classify yourself as? (Choose **just one**)

American Indian or Alaska Native <input type="checkbox"/>	Black/African American <input type="checkbox"/>	Some other race or combination of races _____
Asian <input type="checkbox"/>	Native Hawaiian or other Pacific Islander <input type="checkbox"/>	White/Caucasian <input type="checkbox"/>

Please specify \_\_\_\_\_

26. What was your total household income (before taxes) in 2012?

Less than \$10,000 <input type="checkbox"/>	\$25,000 to less than \$35,000 <input type="checkbox"/>	\$75,000 to less than \$100,000 <input type="checkbox"/>	\$200,000 and over <input type="checkbox"/>
\$10,000 to less than \$15,000 <input type="checkbox"/>	\$35,000 to less than \$50,000 <input type="checkbox"/>	\$100,000 to less than \$150,000 <input type="checkbox"/>	
\$15,000 to less than \$25,000 <input type="checkbox"/>	\$50,000 to less than \$75,000 <input type="checkbox"/>	\$150,000 to less than \$200,000 <input type="checkbox"/>	



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WSDOT is undergoing a continuous improvement process to improve services and would like to understand your experience with *Good To Go!* customer service.

This questionnaire will only take about 7 minutes of your time, and your answers are completely anonymous. After completing the questionnaire, please fold the page so the return address shows, secure with one small piece of tape and drop in the mail. No postage is required. **Please mail no later than August 16, 2013.** If you prefer you can complete the survey online at: <https://www.surveymonkey.com/s/ETCCsurvey2>. **Thank you for participating!**



1. On which of the following roadways have you paid tolls? (Choose all that apply)  
 SR 520 Bridge  SR 167 HOT Lanes  Tacoma Narrows Bridge

2. How frequently do you pay tolls on the SR 520 Bridge, the SR 167 HOT Lanes, and/or the Tacoma Narrows Bridge?  
 ▲ 4 or more times per week  1-3 times per month   
 2-3 times per week  Less than 1 time per month, but more than 2 times per year   
 1 time per week  2 times or less per year

3. Would you say you use these tolled roads or bridges *mostly* for: (Choose only one)  
 Commuting: Driving to/from work   
 Leisure: Non-business driving (errands, day-trips, etc.)   
 Business: Driving for a business reason other than commuting

4. In Puget Sound we currently have three tolled roadways: the 520 Bridge, the Tacoma Narrows Bridge, and the SR 167 HOT Lanes. How much do you agree or disagree with the following statements describing your use of these tolled roads.

	Strongly disagree	Disagree	Agree	Strongly Agree
• Using the tolled roadway is faster allowing me to arrive where I need to go more quickly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Using the tolled roadway is my only option to get where I need to go	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Using the tolled roadway is the best option for emergencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• I will continue to use tolled roadways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• The toll rate I pay is reasonable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Tolled roadways are a viable option to pay for transportation improvements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• I think tolling certain roadways is unfair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. How do you typically pay your tolls? (Choose only one)  
 Auto pay with a *Good To Go!* pass mounted in your vehicle   
 Auto pay with a *Good To Go!* account related to your license plate   
 Using the website to pay tolls after receiving a toll bill from *Good To Go!*   
 By calling customer service after receiving a toll bill from the *Good To Go!* program   
 By mail after receiving a toll bill from the *Good To Go!* program   
 By going to a customer service center after receiving a toll bill from the *Good To Go!* program   
 By using the toll booths on the Tacoma Narrows Bridge   
 By setting up a short-term account

6. When did you open your *Good To Go!* account?  
 Before the Tacoma Narrows Bridge opened in July 2007   
 After the Tacoma Narrows Bridge opened in July 2007, but before 2011   
 In 2011 - 2012   
 In 2013   
 I do not have an account

7. Currently the *Good To Go!* program charges a \$0.25 processing fee in addition to the toll for vehicles that do not have a pass. Please answer No or Yes for the following statements:

	No	Yes
• I was aware of this \$0.25 fee added to the toll for <i>Good To Go!</i> accounts that do not have a vehicle pass	<input type="checkbox"/>	<input type="checkbox"/>
• I value this option of not having to have a pass mounted in my vehicle	<input type="checkbox"/>	<input type="checkbox"/>
• I understand this \$0.25 fee is to pay for additional processing of photographing license plates	<input type="checkbox"/>	<input type="checkbox"/>
• I do not mind paying. <i>Good To Go!</i> should charge the additional processing fee of \$0.25 in addition to the toll for those without a pass to offset the costs of not having a pass in your vehicle	<input type="checkbox"/>	<input type="checkbox"/>
• This \$0.25 fee is unreasonable	<input type="checkbox"/>	<input type="checkbox"/>

**CONTACT WITH THE GOOD TO GO! PROGRAM**

8. In the last 90 days have you contacted *Good To Go!* customer service with a request, question, or issue?  
 No (Skip to Q13)  Yes (Go to Q9)

9. What was your most recent contact with *Good To Go!* customer service regarding? (Choose only one)  
 A disputed toll   
 Disputing a fee attached to a toll or bill   
 Changing something on my account (add/remove/replace vehicle/pass)   
 Managing my account (e.g. changed credit card/address/password change)   
 Opening a new account   
 Regarding a toll bill (pay, inquire, account history)   
 Regarding a Notice of Civil Penalty that I received   
 Other (Please specify) \_\_\_\_\_

10. Thinking of the last contact with *Good To Go!* customer service, how did you contact them? (Choose all that apply)  
 Customer service phone line  A walk-in center  Email  Through the website

11. Was the issue resolved?  
 No  Yes  Still in process

12. How many times have you contacted *Good To Go!* regarding this issue?  
 Only 1 time  2-3 times  4-5 times  More than 5 times

13. When considering any *person to person* interactions you may have had with *Good To Go!* customer service (via phone, walk-in center, or email), how important are the following factors and how satisfied are you with *Good To Go!* customer service for each factor? N/A

	Not at all important				Very important				Have not experienced
	1	2	3	4	1	2	3	4	
• Wait times are shorter than 1 minute when calling customer service.	<input type="checkbox"/>								
• Representatives have the authority to answer questions without consulting a supervisor	<input type="checkbox"/>								
• Email to customer service is responded to within 24 hours or less	<input type="checkbox"/>								
• Any issue or dispute I have is resolved the first time I call	<input type="checkbox"/>								
• Representatives provide respectful service in a friendly manner	<input type="checkbox"/>								
• Representatives spend a sufficient amount of time to help me resolve my issue	<input type="checkbox"/>								
• Representatives are knowledgeable and able to answer my questions	<input type="checkbox"/>								
• My issue is resolved by one representative rather than being transferred to several	<input type="checkbox"/>								

14. Of all these factors of *Good To Go!* customer service, which are the two MOST important to you? (Choose ONLY 2)  
 ▲ Wait times are shorter than 1 minute when calling customer service   
 Representatives have the authority to answer questions without consulting a supervisor   
 Email to customer service is responded to within 24 hours or less   
 Any issue or dispute I have is resolved the first time I call   
 Representatives provide respectful service in a friendly manner   
 Representatives spend a sufficient amount of time to help me resolve my issue   
 Representatives are knowledgeable and able to answer my questions   
 My issue is resolved by one representative rather than being transferred to several

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Please continue on next page

## APPENDIX B: Demographic Profile

<b>Gender</b>	<b>n=2,815</b>
Male	51 percent
Female	49 percent
<b>Age</b>	<b>N=2,479</b>
16-19	>1 percent
20-24	2 percent
25-34	11percent
35-44	15 percent
45-54	19 percent
55-64	26 percent
65-74	19 percent
75 and older	8 percent
<b>Hispanic/Latino</b>	<b>n=2,389</b>
Not Hispanic/Latino	96 percent
Hispanic/Latino	4 percent
<b>Race</b>	<b>n=2,388</b>
Black	1 percent
White	87 percent
American Indian/Alaska Native	1 percent
Asian	5 percent
Native Hawaiian/Pacific Islander	>1 percent
Some other race	5 percent
<b>Income</b>	<b>n=1,986</b>
Less than \$10,000	2 percent
\$10,000 to less than \$15,000	2 percent
\$15,000 to less than \$25,000	3 percent
\$25,000 to less than \$35,000	6 percent
\$35,000 to less than \$50,000	10 percent
\$50,000 to less than \$75,000	17 percent
\$75,000 to less than \$100,000	17 percent
\$100,000 to less than \$150,000	23 percent
\$150,000 to less than \$200,000	9 percent
\$200,000 or over	11 percent

## APPENDIX C: Frequency Tables

**q1. On which of the following roadways have you paid toll? (Multiple response allowed)**

	Count	Column Response % (Base: Count)
\$q1 multi SR 520 Bridge	1880	67.2%
SR 167 HOT Lanes	283	10.1%
Tacoma Narrows Bridge	1328	47.5%
Total	2797	124.8%

Note: Multiple response allowed, total may be more than 100%

**q2. How frequently do you pay tolls on the SR 520 Bridge, the SR 167 HOT Lanes, and/or the Tacoma Narrows Bridge?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 4 or more times per week	464	16.5	16.6	16.6
2-3 times per week	344	12.2	12.3	28.9
1 time per week	264	9.4	9.4	38.3
1-3 times per month	906	32.2	32.4	70.7
Less than 1 time per month, but more than 2 times per year	698	24.8	24.9	95.6
2 times or less per year	122	4.3	4.4	100.0
Total	2798	99.4	100.0	
Missing System	17	.6		
Total	2815	100.0		

**q3. Would you say you use these tolled roads or bridges mostly for:**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Commuting: driving to/from work	668	23.7	24.1	24.1
Leisure: non-business driving (errands, day-trips, etc)	1572	55.8	56.7	80.8
Business: Driving for a business reason other than commuting	532	18.9	19.2	100.0
Total	2772	98.5	100.0	
Missing System	43	1.5		
Total	2815	100.0		

**q4.1 Using the tolled roadway is faster allowing me to arrive where I need to go more quickly**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	238	8.5	8.8	8.8
Valid Disagree	473	16.8	17.5	26.3
Valid Agree	1380	49.0	51.0	77.2
Valid Strongly agree	617	21.9	22.8	100.0
Total	2708	96.2	100.0	
Missing System	107	3.8		
Total	2815	100.0		

**q4.2 Using the tolled roadway is my only option to get where I need to go**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	547	19.4	19.8	19.8
Valid Disagree	1050	37.3	38.1	57.9
Valid Agree	551	19.6	20.0	77.9
Valid Strongly agree	608	21.6	22.1	100.0
Total	2756	97.9	100.0	
Missing System	59	2.1		
Total	2815	100.0		

**q4.3 Using the tolled roadway is the best option for emergencies**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	222	7.9	8.3	8.3
Valid Disagree	548	19.5	20.6	28.9
Valid Agree	1228	43.6	46.2	75.1
Valid Strongly agree	662	23.5	24.9	100.0
Total	2660	94.5	100.0	
Missing System	155	5.5		
Total	2815	100.0		

**q4.4 I will continue to use tolled roadways**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	122	4.3	4.5	4.5
Valid Disagree	249	8.8	9.1	13.6
Valid Agree	1694	60.2	61.9	75.5
Valid Strongly agree	670	23.8	24.5	100.0
Total	2735	97.2	100.0	
Missing System	80	2.8		
Total	2815	100.0		

**q4.5 The toll rate I pay is reasonable**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	761	27.0	27.6	27.6
Valid Disagree	898	31.9	32.6	60.2
Valid Agree	901	32.0	32.7	92.9
Valid Strongly agree	196	7.0	7.1	100.0
Total	2756	97.9	100.0	
Missing System	59	2.1		
Total	2815	100.0		

**q4.6 Tolled roadways are a viable option to pay for transportation improvements**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	419	14.9	15.3	15.3
Valid Disagree	535	19.0	19.6	34.9
Valid Agree	1370	48.7	50.1	84.9
Valid Strongly agree	412	14.6	15.1	100.0
Total	2736	97.2	100.0	
Missing System	79	2.8		
Total	2815	100.0		

**q4.7 I think tolling certain roadways is unfair**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	400	14.2	14.6	14.6
	Disagree	964	34.2	35.3	49.9
	Agree	811	28.8	29.7	79.6
	Strongly agree	557	19.8	20.4	100.0
	Total	2732	97.1	100.0	
Missing	System	83	2.9		
Total		2815	100.0		

**q5 How do you typically pay your tolls?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Auto pay with a Good To Go! pass mounted in your vehicle	2142	76.1	77.2	77.2
	Auto pay with a Good To Go! account related to your license	371	13.2	13.4	90.6
	Using the website to pay tolls after receiving a toll bill f	71	2.5	2.6	93.2
	By calling customer service after receiving a toll bill from	14	.5	.5	93.7
	By mail after receiving a toll bill from the Good To Go! pro	95	3.4	3.4	97.1
	By going to a customer service center after receiving a toll	11	.4	.4	97.5
	By using the toll booths on the Tacoma Narrows Bridge	9	.3	.3	97.8
	By setting up a short-term account	61	2.2	2.2	100.0
Total		2774	98.5	100.0	
Missing	System	41	1.5		
Total		2815	100.0		

**q6. When did you open your Good To Go! account?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Before the Tacoma Narrows Bridge opened in July 2007	474	16.8	17.1	17.1
	After the Tacoma Narrows Bridge opened in July 2007, but bef	440	15.6	15.9	32.9
	In 2011-2012	1376	48.9	49.6	82.6
	In 2013	349	12.4	12.6	95.1
	I do not have an account	135	4.8	4.9	100.0
Total		2774	98.5	100.0	
Missing	System	41	1.5		
Total		2815	100.0		

**q7.1 I was aware of this \$.25 fee added to the toll for Good To Go! accounts that do not have a vehicle pass**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1473	52.3	54.0	54.0
	Yes	1256	44.6	46.0	100.0
	Total	2729	96.9	100.0	
Missing	System	86	3.1		
Total		2815	100.0		

**q7.2 I value this option of not having to have a pass mounted in my vehicle**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1549	55.0	59.3	59.3
	Yes	1065	37.8	40.7	100.0
	Total	2614	92.9	100.0	
Missing	System	201	7.1		
Total		2815	100.0		

**q7.3 I understand this \$.25 fee is to pay for additional processing of photographing license plates**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	932	33.1	35.0	35.0
Valid Yes	1734	61.6	65.0	100.0
Total	2666	94.7	100.0	
Missing System	149	5.3		
Total	2815	100.0		

**q7.4 I do not mind paying. Good to Go! should charge the additional processing fee of \$.25 in addition to the toll for those without a pass to offset the costs of not having a pass in your vehicle**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	1076	38.2	40.9	40.9
Valid Yes	1553	55.2	59.1	100.0
Total	2629	93.4	100.0	
Missing System	186	6.6		
Total	2815	100.0		

**q7.5 This \$.25 fee is unreasonable**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	1779	63.2	67.5	67.5
Valid Yes	855	30.4	32.5	100.0
Total	2634	93.6	100.0	
Missing System	181	6.4		
Total	2815	100.0		

**q8. In the last 90 days have you contacted Good To Go! customer service with a request, question, or issue?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	1887	67.0	67.9	67.9
Valid Yes	894	31.8	32.1	100.0
Total	2781	98.8	100.0	
Missing System	34	1.2		
Total	2815	100.0		

**q9. What was your most recent contact with Good To Go! customer service regarding?**

	Frequency	Percent	Valid Percent	Cumulative Percent
A disputed toll	79	2.8	8.8	8.8
Disputing a fee attached to a toll or bill	76	2.7	8.5	17.4
Changing something on my account (add/remove/replace vehicle	222	7.9	24.9	42.2
Managing my account (e.g. changed credit card/address/passwo	195	6.9	21.8	64.1
Valid Opening a new account	27	1.0	3.0	67.1
Regarding a toll bill (pay, inquire, account history)	128	4.5	14.3	81.4
Regarding a Notice of Civil Penalty that I received	36	1.3	4.0	85.4
Other (please specify below)	130	4.6	14.6	100.0
Total	893	31.7	100.0	
Missing System	1922	68.3		
Total	2815	100.0		

**q9 OTHER: What was your most recent contact with Good To Go! customer service regarding - Other?**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Add money to account	29	1.0	30.5	30.5
	General inquiry on account	8	.3	8.4	38.9
	Issues with online services/account	30	1.1	31.6	70.5
Valid	Closing an account	4	.1	4.2	74.7
	Problems with pass/not working, plates unrecognizable	24	.9	25.3	100.0
	Total	95	3.4	100.0	
Missing	System	2720	96.6		
Total		2815	100.0		

**q10. Thinking of the last contact with Good To Go! customer service, how did you contact them? (Multiple response allowed)**

		Count	Column Response % (Base: Count)
	Customer service phone line	595	66.3%
	A walk-in center	182	20.3%
\$q10multi	Email	119	13.3%
	Through the website	108	12.0%
	Total	898	111.8%

Note: Multiple response allowed, total may be more than 100%

**q11. Was this issue resolved?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	143	5.1	16.1	16.1
	Yes	681	24.2	76.8	92.9
	Still in process	63	2.2	7.1	100.0
	Total	887	31.5	100.0	
Missing	System	1928	68.5		
Total		2815	100.0		

**q12. How many times have you contacted Good To Go! regarding this issue?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Only 1 time	543	19.3	60.8	60.8
	2-3 times	255	9.1	28.6	89.4
	4-5 times	45	1.6	5.0	94.4
	More than 5 times	50	1.8	5.6	100.0
	Total	893	31.7	100.0	
Missing	System	1922	68.3		
Total		2815	100.0		

**q13\_1a. Wait times are shorter than 1 minute when calling customer service - Importance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all important	90	3.2	4.7	4.7
	2	167	5.9	8.6	13.3
	3	608	21.6	31.4	44.7
	4 - very important	1070	38.0	55.3	100.0
	Total	1935	68.7	100.0	
Missing	System	880	31.3		
Total		2815	100.0		

**q13\_1b. Wait times are shorter than 1 minute when calling customer service - Satisfaction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all satisfied	115	4.1	10.0	10.0
	2	83	2.9	7.2	17.2
	3	386	13.7	33.6	50.9
	4 - very satisfied	564	20.0	49.1	100.0
	Total	1148	40.8	100.0	
Missing	5 - Not applicable/have not experienced	696	24.7		
	System	971	34.5		
Total		1667	59.2		
Total		2815	100.0		

**q13\_2a. Representatives have the authority to answer questions without consulting a supervisor**

**- Importance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all important	60	2.1	3.2	3.2
	2	89	3.2	4.7	7.8
	3	563	20.0	29.6	37.4
	4 - very important	1192	42.3	62.6	100.0
	Total	1904	67.6	100.0	
Missing	System	911	32.4		
Total		2815	100.0		

**q13\_2b Representatives have the authority to answer questions without consulting a supervisor - Satisfaction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all satisfied	118	4.2	10.9	10.9
	2	66	2.3	6.1	17.1
	3	282	10.0	26.2	43.2
	4 - very satisfied	612	21.7	56.8	100.0
	Total	1078	38.3	100.0	
Missing	5 - Not applicable/have not experienced	725	25.8		
	System	1012	36.0		
Total		1737	61.7		
Total		2815	100.0		

**q13\_3a Email to customer service is responded to within 24 hours or less - Importance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all important	88	3.1	5.0	5.0
	2	102	3.6	5.8	10.8
	3	438	15.6	24.9	35.7
	4 - very important	1132	40.2	64.3	100.0
	Total	1760	62.5	100.0	
Missing	System	1055	37.5		
Total		2815	100.0		

**q13\_3b Email to customer service is responded to within 24 hours or less - Satisfaction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all satisfied	88	3.1	14.3	14.3
	2	64	2.3	10.4	24.6
	3	201	7.1	32.6	57.2
	4 - very satisfied	264	9.4	42.8	100.0
	Total	617	21.9	100.0	
Missing	5 - Not applicable/have not experienced	1130	40.1		
	System	1068	37.9		
	Total	2198	78.1		
Total		2815	100.0		

**q13\_4a Any issue or dispute I have is resolved the first time I call - Importance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all important	39	1.4	2.1	2.1
	2	55	2.0	3.0	5.1
	3	382	13.6	20.9	26.0
	4 - very important	1353	48.1	74.0	100.0
	Total	1829	65.0	100.0	
Missing	System	986	35.0		
Total		2815	100.0		

**q13\_4b. Any issue or dispute I have is resolved the first time I call - Satisfaction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all satisfied	163	5.8	16.5	16.5
	2	84	3.0	8.5	25.0
	3	181	6.4	18.3	43.3
	4 - very satisfied	560	19.9	56.7	100.0
	Total	988	35.1	100.0	
Missing	5 - Not applicable/have not experienced	786	27.9		
	System	1041	37.0		
	Total	1827	64.9		
Total		2815	100.0		

**q13\_5a Representatives provide respectful service in a friendly manner - Importance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all important	22	.8	1.2	1.2
	2	45	1.6	2.4	3.6
	3	364	12.9	19.4	23.0
	4 - very important	1444	51.3	77.0	100.0
	Total	1875	66.6	100.0	
Missing	System	940	33.4		
Total		2815	100.0		

**q13\_5b Representatives provide respectful service in a friendly manner - Satisfaction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all satisfied	64	2.3	5.2	5.2
	2	61	2.2	4.9	10.1
	3	255	9.1	20.6	30.7
	4 - very satisfied	858	30.5	69.3	100.0
	Total	1238	44.0	100.0	
Missing	5 - Not applicable/have not experienced	553	19.6		
	System	1024	36.4		
	Total	1577	56.0		
Total		2815	100.0		

**q13\_6a Representatives spend a sufficient amount of time to help me resolve my issue -**

**Importance**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 - not at all important	32	1.1	1.7	1.7
2	70	2.5	3.8	5.5
3	444	15.8	23.9	29.4
4 - very important	1313	46.6	70.6	100.0
Total	1859	66.0	100.0	
Missing System	956	34.0		
Total	2815	100.0		

**q13\_6b Representatives spend a sufficient amount of time to help me resolve my issue - Satisfaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 - not at all satisfied	84	3.0	7.1	7.1
2	62	2.2	5.2	12.3
3	282	10.0	23.8	36.1
4 - very satisfied	759	27.0	63.9	100.0
Total	1187	42.2	100.0	
Missing System 5 - Not applicable/have not experienced	607	21.6		
Total	1628	57.8		
Total	2815	100.0		

**q13\_7a Representatives are knowledgeable and able to answer my questions - Importance**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 - not at all important	19	.7	1.0	1.0
2	25	.9	1.3	2.3
3	288	10.2	15.4	17.7
4 - very important	1542	54.8	82.3	100.0
Total	1874	66.6	100.0	
Missing System	941	33.4		
Total	2815	100.0		

**q13\_7b Representatives are knowledgeable and able to answer my questions - Satisfaction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all satisfied	104	3.7	8.4	8.4
	2	69	2.5	5.6	14.0
	3	279	9.9	22.5	36.5
	4 - very satisfied	786	27.9	63.5	100.0
	Total	1238	44.0	100.0	
Missing	5 - Not applicable/have not experienced	550	19.5		
	System	1027	36.5		
Total		1577	56.0		
Total		2815	100.0		

**q13\_8a My issue is resolved by one representative rather than being transferred to several -**

**Importance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - not at all important	34	1.2	1.8	1.8
	2	91	3.2	4.9	6.7
	3	446	15.8	24.0	30.7
	4 - very important	1289	45.8	69.3	100.0
	Total	1860	66.1	100.0	
Missing	System	955	33.9		
Total		2815	100.0		

**q13\_8b My issue is resolved by one representative rather than being transferred to several - Satisfaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
1 - not at all satisfied	111	3.9	9.7	9.7
2	69	2.5	6.1	15.8
3	217	7.7	19.0	34.8
4 - very satisfied	743	26.4	65.2	100.0
Total	1140	40.5	100.0	
Missing				
5 - Not applicable/have not experienced	647	23.0		
System	1028	36.5		
Total	1675	59.5		
Total	2815	100.0		

**q14. Of all these factors of Good To Go! customer service, which are the 2 MOST important to you?**

**(Multiple response allowed)**

	Count	Column Response % (Base: Count)
\$q14multi	Wait times are shorter than 1 minute when calling customer service	574 25.4%
	Representatives have the authority to answer questions without consulting a supervisor	429 19.0%
	Email to customer service is responded to within 24 hours or less	287 12.7%
	Any issue or dispute I have is resolved the first time I call	924 40.8%
	Representatives provide respectful service in a friendly manner	434 19.2%
	Representatives spend a sufficient amount of time to help me resolve my issue	297 13.1%
	Representatives are knowledgeable and able to answer my questions	790 34.9%
	My issue is resolved by one representative rather than being transferred to several	559 24.7%
	Total	2262 189.8%

Note: Multiple response allowed, total may be more than 100%

**q15. Of the following "self-serve" functions of Good To Go! customer service, which are the 2 MOST important to you? (Multiple response allowed)**

		Count	Column Response % (Base: Count)
\$q15mult	Ability to pay on my account at any time (including toll bill, a violation, or negative balance)	1026	42.5%
	Ability to view my account history	1162	48.2%
	Ability to obtain information on rules/regulations, tolls, rates, and fees	276	11.4%
	Ability to update my account information such as address change, password change, credit card, etc.	1036	42.9%
	Ability to add funds to my account	1064	44.1%
	Ability to open new account	91	3.8%
	Total	2413	192.9%

Note: Multiple response allowed, total may be more than 100%

**q16 Setting aside your experience with the current functionality of Good To Go! customer service, how would you MOST prefer to accomplish these top two functions?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Automated phone line	48	1.7	2.0	2.0
	Website	1481	52.6	60.9	62.8
	Mobile application	170	6.0	7.0	69.8
	Phoning Customer Service	406	14.4	16.7	86.5
	At a walk-in center	112	4.0	4.6	91.1
	Emailing Customer Service	164	5.8	6.7	97.9
	Online chat or messaging	52	1.8	2.1	100.0
Total	2433	86.4	100.0		
Missing	System	382	13.6		
Total		2815	100.0		

**q17. Of the following possible Good To Go! customer functions, which are the 2 options you MOST wish were available? (Multiple response allowed)**

		Count	Column Response % (Base: Count)
\$q17multi	Make Good To Go! payment options available through local retailers	316	13.8%
	Add a live online chat component to the website	377	16.4%
	Expand the business hours of the customer service center	396	17.3%
	Redesign the automated portion of the phone system so it is more user-friendly	295	12.9%
	Improve the Good To Go! website so it is easier to manage an account or pay a toll bill	1229	53.6%
	Develop a mobile Good To Go! application to enable customers to view and manage accounts	772	33.7%
	Ability to view images of my license plate to confirm my toll usage	622	27.1%
	Ability to dispute a violation via video conference rather than appear in person	339	14.8%
	Total	2294	189.5%

Note: Multiple response allowed, total may be more than 100%

**q18. Overall, how would you rate your level of satisfaction with Good To Go! customer service ?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	117	4.2	4.9	4.9
	Dissatisfied	161	5.7	6.8	11.7
	Satisfied	1293	45.9	54.3	66.0
	Very satisfied	809	28.7	34.0	100.0
	Total	2380	84.5	100.0	
Missing	System	435	15.5		
Total		2815	100.0		

**q22. What is your gender?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	1269	45.1	51.2	51.2
	Female	1210	43.0	48.8	100.0
	Total	2479	88.1	100.0	
Missing	System	336	11.9		
Total		2815	100.0		

**q23. Which of the following categories includes your age?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-19	2	.1	.1	.1
	20-24	45	1.6	1.8	1.9
	25-34	281	10.0	11.3	13.2
	35-44	377	13.4	15.2	28.4
	45-54	481	17.1	19.4	47.8
	55-64	638	22.7	25.7	73.6
	65-74	468	16.6	18.9	92.5
	75 and older	187	6.6	7.5	100.0
Total		2479	88.1	100.0	
Missing	System	336	11.9		
Total		2815	100.0		

**q24. Are you from a Hispanic, Latino, or Spanish-speaking background?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2294	81.5	96.0	96.0
	Yes	95	3.4	4.0	100.0
	Total	2389	84.9	100.0	
Missing	System	426	15.1		
Total		2815	100.0		

**q25. What race would you classify yourself as? (choose just one)**

		Frequency	Percent	Valid Percent	Cumulative Percent
	American Indian or Alaskan Native	25	.9	1.0	1.0
	Asian	125	4.4	5.2	6.3
	Black/ African American	30	1.1	1.3	7.5
Valid	Native Hawaiian or other Pacific Islander	11	.4	.5	8.0
	White/Caucasian	2079	73.9	87.1	95.1
	Some other race or combination of races (please specify bel	118	4.2	4.9	100.0
	Total	2388	84.8	100.0	
Missing	System	427	15.2		
Total		2815	100.0		

**q26. Are you answering this survey in regard to:**

		Frequency	Percent	Valid Percent	Cumulative Percent
	A personal vehicle(s)	2402	85.3	94.3	94.3
Valid	A business vehicle(s)	144	5.1	5.7	100.0
	Total	2546	90.4	100.0	
Missing	System	269	9.6		
Total		2815	100.0		

**q27. Was your total household income (before taxes) in 2012?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than \$10,000,	34	1.2	1.7	1.7
\$10,000 to less than \$15,000	33	1.2	1.7	3.4
\$15,000 to less than \$25,000	59	2.1	3.0	6.3
\$25,000 to less than \$35,000	123	4.4	6.2	12.5
\$35,000 to less than \$50,000	202	7.2	10.2	22.7
Valid \$50,000 to less than \$75,000	334	11.9	16.8	39.5
\$75,000 to less than \$100,000	345	12.3	17.4	56.9
\$100,000 to less than \$150,00	457	16.2	23.0	79.9
\$150,000 to less than \$200,000	180	6.4	9.1	89.0
\$200,000 and over	219	7.8	11.0	100.0
Total	1986	70.6	100.0	
Missing System	829	29.4		
Total	2815	100.0		

**q19. What are the top two strengths of the customer service provided by the Good To Go! program?**

	Count	Column Response % (Base: Count)
Website functionality, online services, email	172	19.0%
Purchasing passes at local retailers	50	5.5%
Good/quick problem resolution	173	19.1%
Good payment options	107	11.8%
Friendly staff, knowledgeable	538	59.4%
Generally happy	32	3.5%
Quick phone access	49	5.4%
Keeping customers notified	10	1.1%
Convenient/easy	183	20.2%
Easy access to account info	32	3.5%
Saves money	5	0.6%
Good hours of operation	0	0.0%
19	2	0.2%
General positive	0	0.0%
General negative	0	0.0%
Total	905	149.5%

Multiple Responses are Allowed, will not equal 100%

**q20. What are the top two weaknesses of the customer service provided by the Good To Go! program?**

	Count	Column Response % (Base: Count)
1	1	0.1%
Poor automated phone system	48	6.8%
Too many additional fees	33	4.7%
Billing errors	34	4.8%
Long waits/lines	104	14.8%
Need more retailers to sell pass	35	5.0%
Website malfunctions/difficult	205	29.2%
Too expensive	51	7.3%
Not enough information given	35	5.0%
Hours of operation	61	8.7%
Takes too long to resolve issues	148	21.1%
Rude staff/unprofessional	56	8.0%
Reps not knowledgeable	45	6.4%
Hard to obtain account info	30	4.3%
Method of payment/adding funds	47	6.7%
Billing statements difficult	17	2.4%
Dealing with civil penalties	5	0.7%
Pass/license photo malfunctions	7	1.0%
General positive	0	0.0%
General negative	30	4.3%
Total	702	141.3%

Multiple Responses are Allowed, will not equal 100%

**q21. If you could change just ONE thing about Good To Go! customer service, what would that be?**

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Reduce fees	151	5.4	20.0	20.0
	Billing accuracy	18	.6	2.4	22.4
	Improve website/online functions	156	5.5	20.7	43.0
	Need more retailers to sell pass	17	.6	2.3	45.3
	Fix automated phone system	16	.6	2.1	47.4
	Need more customer service reps	38	1.3	5.0	52.5
	Need to provide more information	18	.6	2.4	54.8
	Add mobile app	31	1.1	4.1	58.9
	Keep customer notified	28	1.0	3.7	62.6
	Make it easier to manage account	40	1.4	5.3	67.9
	Extend hours of operation	35	1.2	4.6	72.6
	Improve customer service reps	63	2.2	8.3	80.9
	Make it easier to pay bills, improve billing system	45	1.6	6.0	86.9
	Quicker problem resolution	36	1.3	4.8	91.7
	General positive	23	.8	3.0	94.7
	General negative	40	1.4	5.3	100.0
	Total	755	26.8	100.0	
Missing	N/A / Did not use / Don't know	274	9.7		
	System	1786	63.4		
	Total	2060	73.2		
Total	2815	100.0			

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## Appendix B: Lean Review Report for \$0.25 Pay By Plate Fee Reversals

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v0.2

# Lean Review Report for \$0.25 Pay By Plate Fee Reversals

Developed for



**Washington State  
Department of Transportation**

October 17, 2013

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## CHANGE LOG

Version #	Date	Revised By	Description
0.1	10/11/13	J. Hall	Initial draft.
0.2	10/17/13	A.Rudell	Edits and comments

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## EXECUTIVE SUMMARY

Some of the customers who sign-up for pre-paid *Good to Go!* accounts choose the option to be billed by their license plate instead of a *Good to Go!* transponder. Because they have chosen not to install a transponder, these customers agree to pay an additional fee for each posted toll transaction. As a result, whenever a toll is posted to their customer account based on a license plate image, a \$0.25 Pay By Plate Fee is added to the toll amount. For reasons which will be detailed below, there are more than 600 requests for “reversals” of this fee and that reversal process is labor intensive. This Lean review project focuses on how to reduce both the occurrence of such requests and the costs to process a fee reversal.

## PROBLEM STATEMENT / DESCRIPTION

Customers request fee reversals for a variety of reason including customer errors. The procedure for reversing these fees as a customer courtesy is labor intensive and requires a great deal of paperwork to support the reversal. This creates an imbalance between the value of the Pay By Plate fee and the cost of the process to reverse a fee.

## OBJECTIVE STATEMENT

*Reduce the amount of time required to process a Pay By Plate Fee reversal by 40 percent through the reduction of non-value added steps associated with transferring reversal requests to the research team and streamlining paperwork required for back-up.*

## SUMMARY OF PROBLEM-SOLVING APPROACH

During an August meeting, the Operations team developed a list of data points to be used for investigation to determine the size and scope of the challenge. It was determined that the best place to look for root causes of the process challenge was to measure the level of understanding customers have in a number of areas: the fee and its fairness in terms of cost and when it is applied, the top reasons customers request a reversal, the number of reversals requested, the time required to process a reversal and the cost of processing a reversal.

## MAJOR PROJECT RESULTS, FINDINGS, AND RECOMMENDATIONS

Based on the Objective Statement, several process improvement initiatives are envisioned.

1. **Customer Education** – several of the Lean reviews conducted by the Operations team have found that there is a need for continued customer education related to how the tolling program works.
2. **Empower Frontline Staff** – the current process involves “transferring” a reversal request to a research representative for review, processing of the reversal in the system and gathering back up documentation.
3. **Streamline Process for Gathering Back-Up Documentation** – currently, based on WSDOT requirements, a reversal can involve gathering as many as 20 pages of background documentation. The reason for the large number of pages is based on the customer usage and history. For customers who use the toll facilities a great deal or request reversals on a regular

basis, a multipage history is required as back up to capture all of the relevant information regarding the reversal.

The Operations group is confident that by implementing these process improvements, the objectives of this Lean review can be achieved.

## IMPROVEMENT OPPORTUNITY: DEFINE PHASE

Some of the customers who sign-up for pre-paid accounts choose the option to be billed by their license plate instead of a *Good to Go!* transponder. Because they have chosen not to install a transponder, these customers agree to pay an additional fee for each posted toll transaction. As a result, whenever a toll is posted to their customer account based on a license plate image, a \$0.25 Pay By Plate Fee is added to the toll amount. The purpose of this fee is to offset the added cost of processing the license plate image.

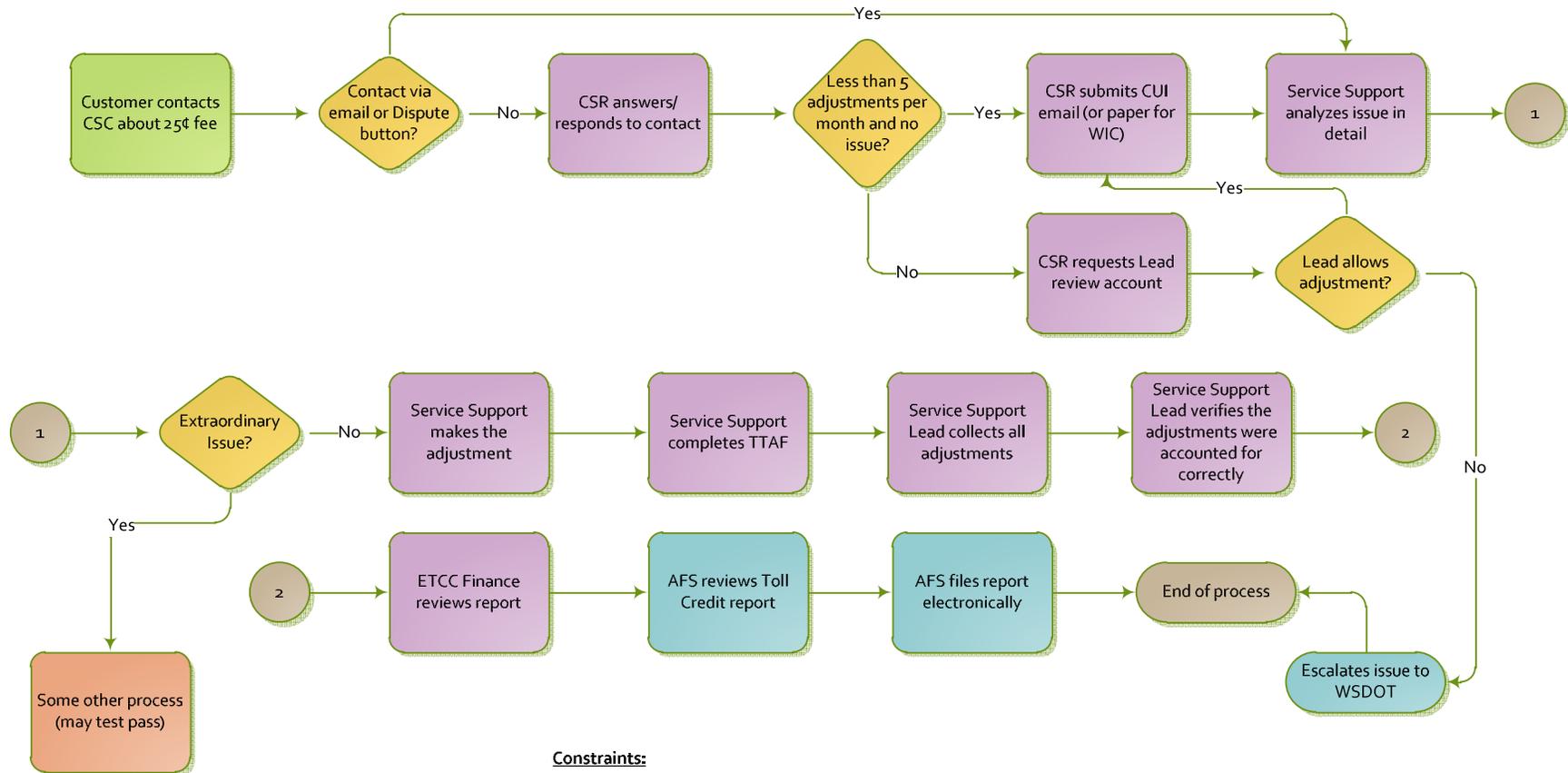
Customers with prepaid transponder accounts can also be assigned a Pay By Plate fee if their transponder fails to read or they do not have their transponder in their vehicle. For these customers, the Pay By Plate fee is charged based on either a system error or user error. In either case, WSDOT has developed business rules which allow for the reversal of a limited number of these fees as a customer courtesy. Approximately \$56,000 worth of \$0.25 Pay By Plate fees are charged each month.

As can be seen from the “current state” process map (Figure 1), the procedure for reversing these fees as a customer courtesy is labor intensive and requires a great deal of paperwork to support the reversal. This creates an imbalance between the value of the Pay By Plate fee and the cost of the process to reverse a fee.

In August, the Operations group met to further define the critical candidate processes that had been identified. One of the tools used in this analysis was process mapping. The maps (Figures 1 and 2) represent the “current state” and proposed “future state” of a process map for what is required to reverse a \$0.25 Pay By Plate fee.

FIGURE 1: CURRENT STATE OF \$.25 FEE REVERSAL PROCESS

### Current State 25¢ Fee Reversal Process

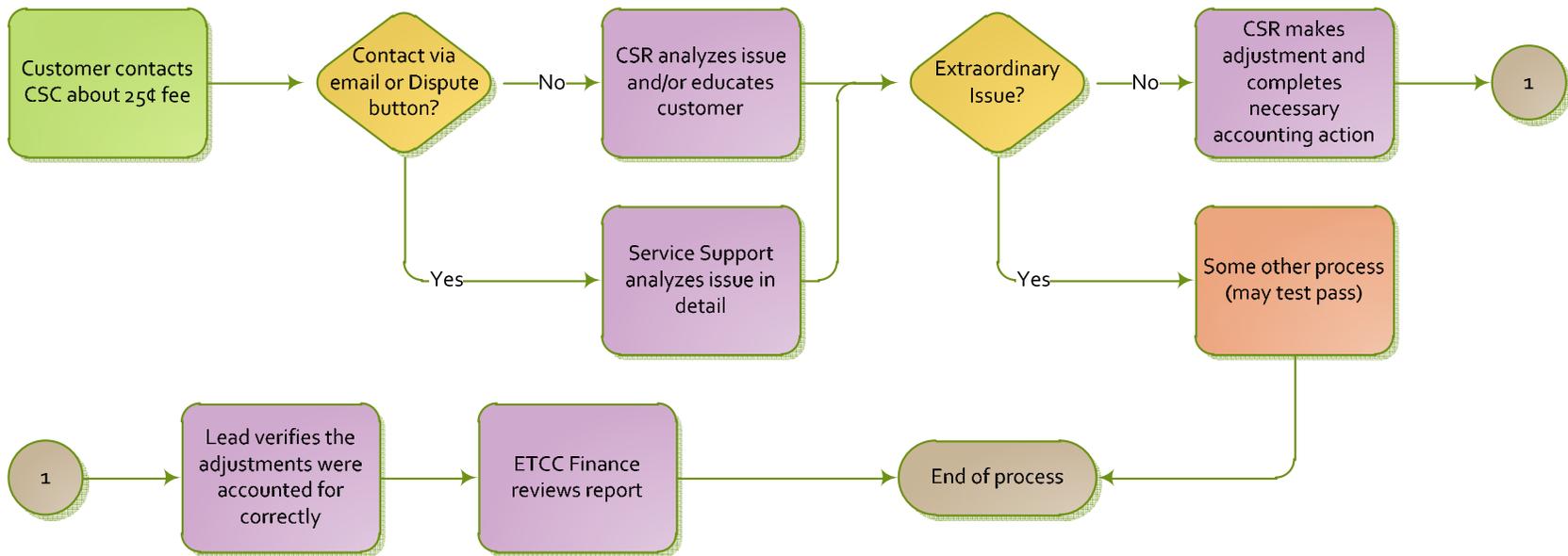


**Constraints:**

- 1) ETCC can only adjust five 25¢ fees per month per account.
- 2) ETCC can not adjust fees past 60 days.
- 3) Call answering KPI requires hand-off of calls from CSR to higher level.

FIGURE 2: FUTURE STATE OF \$.25 FEE REVERSAL PROCESS

### Future State 25¢ Fee Reversal Process



**Assumptions:**

- 1) ETCC can make unlimited reasonable 25¢ fees per month per account.
- 2) ETCC can adjust fees all fees, regardless of age.
- 3) Call answering KPI is revised or removed to allow one call resolution.

## OBJECTIVE STATEMENT

During an August meeting, the Operations team developed the following objective statement to guide the process improvement decisions and assist in measuring the results.

*Reduce the amount of time required to process a Pay By Plate fee reversal by 40 percent through the reduction of non-value added steps associated with transferring reversal requests to the research team and streamlining paperwork required for back-up.*

If this goal can be achieved, the expected time savings would result in approximately \$27,000 in cost savings to the Customer Service Center Vendor, annually. Although the direct cost savings will initially benefit the vendor, WSDOT expects to see improvements in the Vendor's overall achievement of its performance metrics based on customer service staff time freed up by these improvements which will reduce the amount of resources WSDOT must expend to manage the contract. In addition, WSDOT expects that future growth will not result in a linear growth in the CSC Vendor contract price.

## CURRENT STATE OF THE PROCESS: MEASURE PHASE

During the August meeting, the Operations team developed a list of data points to be used for investigation to determine the size and scope of the challenge. It was determined that the best approach to determine root causes of the process challenge was to measure the level of understanding customers have of: the Pay By Plate fee and its perceived fairness in terms of cost and when it is applied, the top reasons customers request a reversal, the number of reversals requested, the time required to process a reversal and the cost of processing a reversal.

## ANALYSIS AND FINDINGS: THE ANALYZE PHASE

Data was gathered in each of the key measurement areas (1) Level of understanding customers have of the Pay by Plate Fee and its fairness (2) the top reasons customers request a reversal, and (3) the number of reversals processed, the time required to process a reversal and the cost of processing a reversal. The following is the analysis of these data points:

(1) Level of Customer Understanding of by Pay by Plate Fee – this question was posed to customers during a recent Customer Satisfaction Survey.

- Customers who understand reasons for \$0.25 Fee - 65.0 percent
- Customers willing to pay \$0.25 Fee - 59.0 percent
- Is \$0.25 Fee unreasonable? - 67.5 percent

Based on these results, it was concluded that customers had a reasonable understanding and appreciation of value and use of the \$0.25 Pay By Plate fee. There is an opportunity to improve customer understanding and acceptance and, thereby, possibly reduce the number of reversal requests. This could add to the potential time savings in processing reversals.

(2) Top Reasons Customers Request Reversal – an audit of past reversal calls and interviews with customer service representatives led to the following list:

- Transponder did not read
- Customer has prepaid account, but did not have transponder in vehicle
- Customer failed to switch transponder to “on” (switchable tags only)
- Customer did not have an account at the time of crossing
- Customer account was not in good standing at the time of crossing

These results demonstrate that a majority of the reversals are based on customer errors. This opens an opportunity for a customer education campaign which could help to reduce the number of reversal requests.

(3) Number of Reversals Processed – data shows that Pay By Plate reversal requests represent approximately 1.0 percent of total customer contacts (phone and email) and 1.6 percent of the total numbers of fees assigned.

Based on the data above, reversals average \$900 per month out of a total \$56,000 fees assigned or 1.61 percent. Although this does not seem to represent a large issue in terms of total call volume or fee revenues collected, the following time and cost analysis will show that a disproportionate amount of time (and cost) is utilized to process these customer courtesy reversals.

- Time required processing a reversal – working with team members at the customer service center, time values were assigned to the “current state” process map (Figure 1). This analysis showed that it required approximately 21 minutes to process a reversal request. On a monthly basis this represents more than 200 hours of processing time (or approximately 1.25 FTEs).

By focusing on the individual steps in the reversal process, several waste areas were identified for process improvement. These improvement areas are discussed in detail below.

- Cost of processing a reversal – A review of the salaries of the customer service center staff who are involved in the reversal process was conducted. An average staff hourly rate of \$26.00 per hour was calculated. Based on this hourly rate and the reversal time analysis above, it was determined that the average fee reversal customer contact costs ETCC \$9.15.

The average customer contact involves six Pay By Plate Fees. Therefore, \$9.15 is spent to reverse \$1.50 in fees.

This data analysis demonstrates that there are opportunities to educate customers which will reduce the total number of reversal requests. In addition, streamlining the process will result in reduced time to process reversals and reduced associated costs.

## RECOMMENDATIONS: THE IMPROVE PHASE

Based on the Objective Statement and data analysis above, several process improvement initiatives are envisioned.

- Customer Education – several of the Lean reviews conducted by the Operations group have found that there is a need for continued customer education related to how the tolling program works. Key areas of education are:
  - - Importance of a properly mounted transponder
    - Importance of keeping customer accounts current (positive prepaid balance)
    - Value of having a prepaid account (versus a pay by mail option)

The Operations team is working with the Communication team to improve the information provided in various customer contact points – website, account statements, other routine customer correspondences, and customer service scripts used during customer calls. Educating customers and future customers on the benefits (and consequences) of establishing and properly managing a prepaid account should have measurable benefits. For example, a portion of the Pay By Plate fee reversals comes from offering an incentive for Pay By Mail customers to establish a prepaid account. Increasing the number of prepaid accounts should have a direct effect on the number of Pay By Mail customers and thereby the number of Pay By Plate fee reversal requests.

- Empower Customer Service Representatives – the current process involves “transferring” a reversal request to a research representative for review, processing of the reversal in the system and gathering back up documentation. This transfer process adds approximately 7 minutes of “non-value added” time to the process.

By empowering frontline staff to research and process the reversal from their desk, this non-value added time can be eliminated. Empowerment will require training and as well as adding an oversight process to verify that frontline staff does not abuse the fee reversal process.

- Streamline Process for Gathering Back-Up Documentation – currently a reversal can involve gathering as many as 20 pages of background documentation. Based on the value of the transaction and the limited opportunity to abuse the process, a streamlining review of the back-up document requirements will be conducted.

The goal is to reduce the need for back-up documentation and ultimately provide an online interface for gathering and storing this documentation for quality assurance purposes. By working with WSDOT stakeholders, the Operations team believes it can reduce the need for volumes of back up and still provide the level of accountability required. Reducing the time to gather back up is a large part of the planned savings.

The Operations team is confident that by implementing these process improvements, the objectives of this Lean review can be achieved.

## MONITORING AND CONTROL: THE CONTROL PHASE

A key step in the Lean process is to measure and analyze the results of the process improvements. The Operations team plans to implement measuring points and metrics which will inform decision makers as to the success of this Lean analysis. These will include:

- Measurement of the number of reversals requested (Is the customer education campaign working?)
- Measurement of time required to process a reversal (Is there time savings or just time shifting?). An unintended consequence of this improvement effort would be if one group of team members achieved a time savings while another actually increased their time to support the process due to the changes.
- Measurement of results of oversight program (Is the new process being abused?). The criteria for what qualifies as “abuse” will be determined during the process change implementation phase.
- Measurement of customer satisfaction (include questions regarding \$0.25 fee program)
- Measurement of “single contact” resolution rates. One positive result would be if more customers could get their issue resolved while on the phone or at the first email with no need for any follow on contacts.

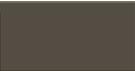
## NEXT STEPS

The following is the schedule for the next steps in the \$0.25 Pay By Plate Fee Reversal improvement program:

Lean Process Stage	Major Tasks	Complete by
Implement Process Improvements	Update Standard Operating Procedures; train on new process	11/30/2013
Measure Results	Implement control measurement data points; gather data; analyze results and offer improvements	12/31/2013

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# Appendix C: Lean Review Report for Escalated Customer Inquiries



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# Lean Review Report for Escalated Customer Inquiries

Developed for



**Washington State  
Department of Transportation**

October 17, 2013

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## CHANGE LOG

Version #	Date	Revised By	Description
0.1	10/11/13	J. Hall	Initial draft.
0.2	10/17/13	A. Rudell	Review and edits

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## EXECUTIVE SUMMARY

WSDOT staff is spending more time than anticipated responding to customer inquiries that have been forwarded from the Electronic Transaction Consultants Corporation (ETCC) customer service center (CSC). Although some level of direct customer interaction is unavoidable, with the WSDOT Toll Division being the owner of tolling in Washington State, one of WSDOT's goals in contracting with an outside customer service vendor was to limit the amount of internal resources needed to respond to escalated customer inquiries.

## PROBLEM STATEMENT / DESCRIPTION

Currently, WSDOT receives approximately one new customer inquiry that has been escalated from the CSC each day. The research involved in properly responding to these escalated inquiries requires 3 hours of WSDOT staff time (or 0.4 FTEs) on average per day. During a process mapping exercise, it was determined that in order for WSDOT to reduce the number of escalated customer inquiries received, the CSC vendor would need to be empowered to take certain remediating actions to solve the customer issue which are currently not available to them.

## OBJECTIVE STATEMENT

*Reduce the number of customer inquiries which are forwarded to WSDOT by 40 percent through customer education and empowering CSC staff to take the necessary remediation actions which will resolve the customer's issue (e.g., dismiss a \$5.00 reprocessing fee).*

## SUMMARY OF PROBLEM-SOLVING APPROACH

During a meeting in August 2013, the Toll Division's Operations team developed a list of data points that could be investigated to determine the size and scope of the challenge. It was determined that the best way to determine root causes of the process challenge was to measure:

- the level of service the customers expect when contacting the CSC,
- the top reasons customers request an escalation to WSDOT,
- the number of escalated customer inquiries to WSDOT, and
- the time and cost required to respond to a customer inquiry.

## MAJOR PROJECT RESULTS, FINDINGS, AND RECOMMENDATIONS

Based on the Objective Statement, several process improvement initiatives are envisioned.

1. **Customer Education** – Several of the Lean reviews conducted by the Operations team have found that there is a need for continued customer education related to how the tolling program works.
2. **Empower Frontline Staff** – Currently CSC staff are not empowered to dismiss fees or penalties assessed on toll bills or notices of civil penalty in error or even as a one-time courtesy as a part of a customer education strategy.

The Operations group is confident that by implementing these process improvements, the objectives of this Lean review can be achieved.

### IMPROVEMENT OPPORTUNITY: DEFINE PHASE

WSDOT staff is spending more time than anticipated responding to customer inquiries that have been forwarded from the CSC. Although some level of direct customer interaction is unavoidable, with the WSDOT Toll Division being the owner of tolling, one of WSDOT's goals in contracting with an outside customer service vendor was to limit the amount of internal resources needed to respond to these escalated customer inquiries.

Currently, WSDOT receives approximately one new customer inquiry that has been escalated from the CSC each day. The research involved in properly responding to these escalated inquiries requires 3 hours of WSDOT staff time (or 0.4 FTEs) on average per day. During the August process mapping exercise, it was determined that in order for WSDOT to reduce the number of escalated customer inquiries received, the CSC vendor would need to be empowered to take certain remediating actions to solve the customer issue which are currently not available to them.

The Operations team met again to further define the two process improvement initiatives. One of the definition tools used was process mapping. Figures 1 and 2 represent the "current" state and proposed "future" state of the process to Escalate Customer Inquiries.

### Current State Escalations Process

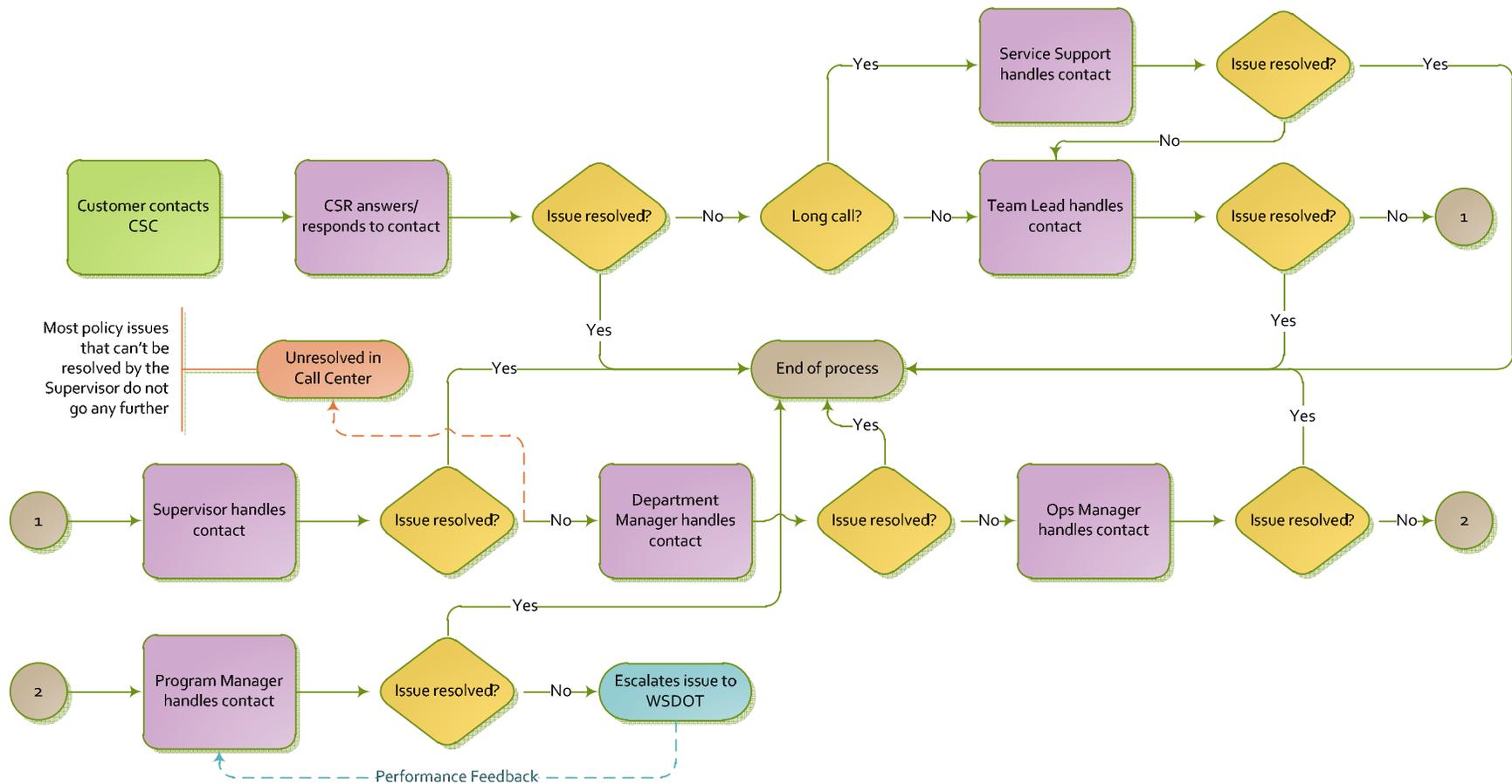


FIGURE 1: CURRENT STATE ESCALATIONS PROCESS

### Future State Escalations Process

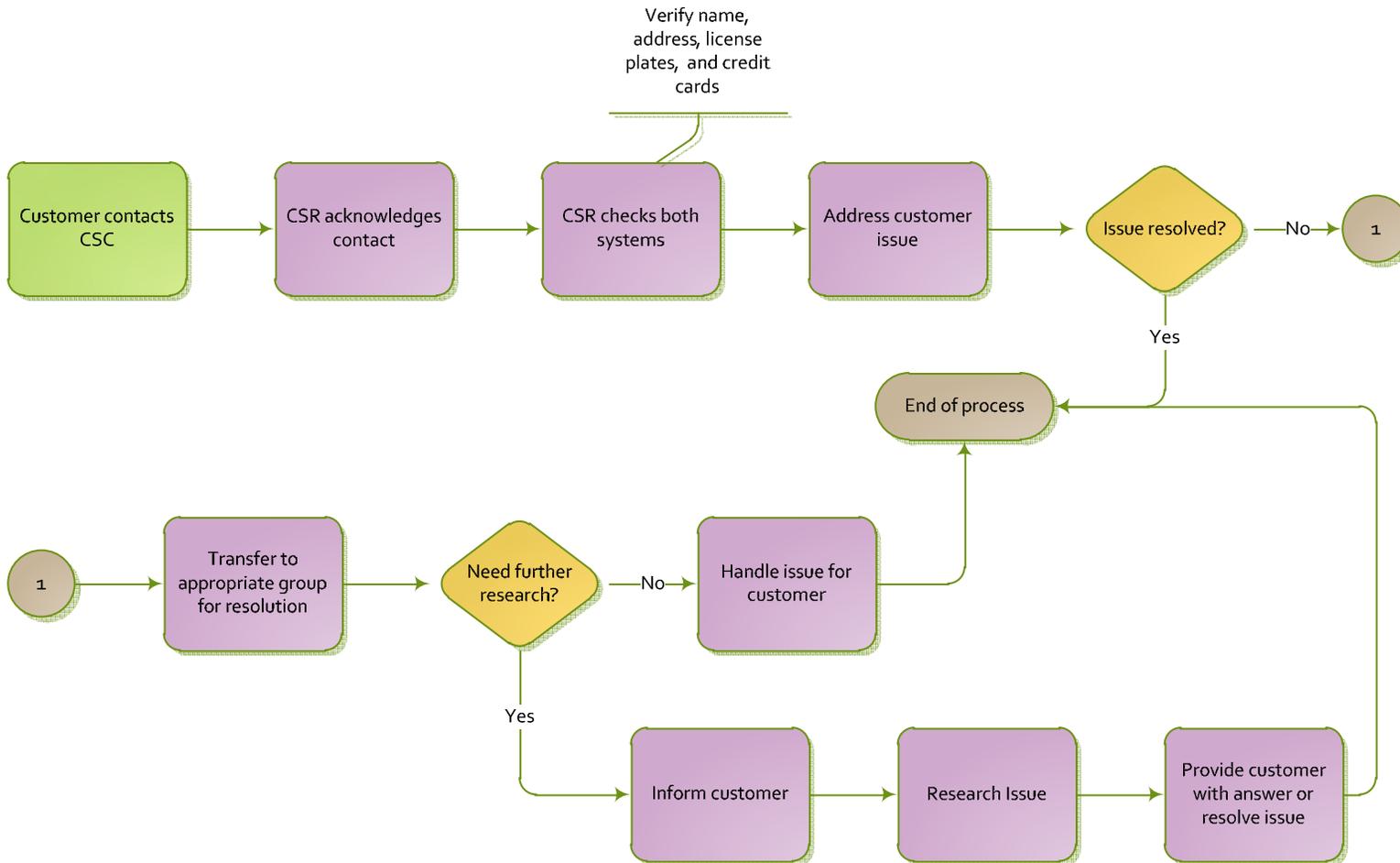


FIGURE 2: FUTURE STATE ESCALATIONS PROCESS

## OBJECTIVE STATEMENT

During the August meeting, the Operations team developed the following objective statement to guide the process improvement decisions and assist in measuring the results.

*Reduce the number of customer inquiries which are forwarded to WSDOT by 40 percent through customer education and empowering CSC staff to take the necessary remediation actions which will resolve the customer's issue (e.g., dismiss a \$5.00 reprocessing fee).*

If this goal can be achieved, the expected WSDOT staff time savings would result in approximately \$15,600 in cost savings annually. This reduction would allow WSDOT customer service, communications and management staff to focus the time savings on other, more critical, customer/stakeholder issues. In addition, improvements such as these, despite their apparent small size, will allow WSDOT to absorb future growth without the need for additional staff.

*Note: The focus of this Lean review is strictly on limiting the number of escalated customer inquiries received from the CSC. A second phase of Lean review will focus on improving the process WSDOT uses to research an issue, develop a response and communicate with the customer (and other interested stakeholders).*

## CURRENT STATE OF THE PROCESS: MEASURE PHASE

During the August meeting, the Operations team developed a list of data points that could be investigated to determine the size and scope of the challenge. It was determined that the best option to determine the root cause of the process challenge was to measure:

- the level of service the customers expect when contacting the CSC,
- the top reasons customers request an escalation to WSDOT,
- the number of escalated customer inquiries to WSDOT, and
- the time and cost required to respond to a customer inquiry.

## ANALYSIS AND FINDINGS: THE ANALYZE PHASE

Data was gathered in each of the four key measurement areas outlined in the Measure Phase. The following is the analysis of these data points:

(1) Level of service the customers expect when contacting the CSC – this question was posed to customers during a recent Customer Satisfaction Survey.

*Importance Questions:*

- Number of contacts to get to resolution – 60.8 percent of customers surveyed stated that getting resolution in one contact is important to them.
- Importance of customer service representative (CSR) authority to resolve issues - No Supervisor – 62.6 percent of respondents strongly agreed that it was very important.
- *Importance of receiving a response to an email inquiry within 24 hours – 64.3 percent of respondents rated this very high in importance.*
- *Most importance customer service factors – 40.8 percent of respondents stated 1st call resolution was the most important factor. 34.9 percent of respondents stated that customer service representative knowledge was the most important factor.*

*Other Questions*

- *Good to Go!* CSRs have adequate authority to resolve issues – more than half of the customers surveyed (58.6 percent) stated that they felt customer service staff had adequate authority to resolve their issue.
- *Good to Go!* email responses are timely and relevant – only 42.8 percent of respondents were very satisfied with email response timelines and relevance.
- Preferred way for customers to self-serve – 60.9 percent of respondents chose the website as their preferred method to self-serve. An additional 16.7 percent responded that they preferred phone interaction.

Based on these results, it was concluded that customers had a reasonable understanding and appreciation of the value of a well-trained and authorized customer service staff when it comes to receiving a premium service. Armed with this understanding of customer expectations, WSDOT can develop a plan for improving the self-service tools available to customers and develop an improved customer service training program which will allow frontline staff to resolve customer issues without the need to transfer to a supervisor should the customer choose to contact WSDOT by phone or email. Improving customer self-service tools and customer service staff training will contribute to a reduction of the number of customer inquiries which require escalation.

- Top Reasons Customers Request Escalations to WSDOT – an audit of past escalated customer inquiries and interviews with customer service representatives led to the following list of the top escalation reasons:
  - \$5 Reprocessing fee - perceived as unfair; common assertion is that customer never received first bill.
  - Notice of Civil Penalty (NOCP) Issues – customer requests NOCP Fee amount reduction or dismissal; complaints regarding dispute process; complaints regarding missing deadline to schedule hearing and not being able to schedule a hearing.

- Perceived unwillingness of customer service staff to assist – despite the customer service staff correctly explaining the policy in question, customers are not satisfied with the answer and request escalation to WSDOT.
- Toll Bill or NOCP payment issues – errors in posting which caused transactions to escalate to Toll Bill 2 or NOCP and incur additional fees.
- Delay in posting older transactions – WSDOT had transactions which had been held for quality assurance review which were ultimately released for processing as much as one year after the trip date.

These top reasons demonstrate that several of the key issues can be remediated by improving transaction processing and customer notification processes. For others, empowering the customer service staff to remediate issues through one-time courtesy dismissals or fee waivers might be a workable option. The impacts of these policy changes are discussed in detail below.

- Number of Escalated Customer Inquiries – data shows that the CSC vendor forwarded 24 escalated customer inquiries to WSDOT per month.

<b>Escalation Statistics (June - Sept 2013; 4 Months)</b>	<b>Count</b>	<b>Note</b>
ETCC Complaint	3	Poor Service
PASS Complaint	3	Not Functioning
General Account Complaint	13	Business-rule related
NOCP Complaint	27	Late delivery, have account,
NOCP Fee Complaint	12	Unfair, too costly, had account
Policy Issue	5	General Policy issues
Toll Bill Complaint	12	Had account, late delivery
\$0.25 Fee Complaint	4	Unread tag
Adjudication Process Complaint	3	
Web Issues	1	Couldn't Pay Toll Bill
\$5.00 Fee Complaint	3	Never received 1st notice
Discount Plan Inquiry	8	
DOL Hold Inquiry	2	Don't own vehicle
Total Referrals Received (WSDOT)	96	

Based on the data above, the Operations team decided to focus process improvements on issues related to fees, toll bills and notices of civil penalties. Looking for the root cause of these issues and developing remediation strategies would help to reduce the number of escalated customer inquiries forwarded to WSDOT.

- Time required responding to an escalated customer inquiry – working with team members within the Toll Division, time values were assigned to the “current state” process map (Figure 1). This analysis showed that it required approximately 3 hours of management time to respond to an escalated customer inquiry. On a monthly basis this represents 72 hours of processing time (or approximately 0.4 FTEs).

By focusing on the individual reasons why the customer service vendor could not resolve the customer inquiry without assistance by WSDOT, several business rule and policy issues were identified which could be amended to allow more customer issue resolution by frontline staff. These are discussed in detail below.

*Note: This analysis is focused on empowering the CSC vendor to handle customer inquiries without the need to forward to WSDOT. As a second phase of Lean review, the Operations team will review the steps and process involved in responding to an escalated inquiry at WSDOT in order to find ways to improve that piece of the overall process and reduce the time required to respond to inquiries.*

- Cost of responding to an escalated customer inquiry – A review of the salaries of Toll Division staff who are involved in responding to escalated customer inquiries was conducted. An average staff hourly rate of \$45.50 per hour was calculated. Based on this hourly rate and the response time analysis above, it was determined that the average response costs \$136.50. This represents almost \$40,000 of staff time annually. A reduction in this staff time would allow WSDOT to either eliminate these costs or redeploy associated resources.

This data analysis demonstrates that there are opportunities to educate customers on general tolling policies and, more specifically, on how the Pay by Mail billings and notices of civil penalty work. In addition, empowering the CSC vendor staff to make judgment calls regarding the accuracy of a bill or fee as well as allowing them to dismiss an erroneously billed charge will result in a reduced number of customer inquiries which require forwarding to WSDOT.

## RECOMMENDATIONS: THE IMPROVE PHASE

Based on the Objective Statement and data analysis above, several process improvement initiatives are envisioned.

- Customer Education – several of the Lean reviews conducted by the Operations team have found that there is a need for continued customer education related to how the tolling program works. Key areas of education are:
  - Importance of a properly mounted transponder to avoid receiving a toll bill with an additional fee if a customer has a prepaid account.
  - Importance of keeping customer accounts current (positive prepaid balance)
  - Value of having a prepaid account (versus a non-pre-paid Pay by Mail option)

The Operations group is working with the Communication group to improve the information provided in various customer contact points – website, account statements, other routine customer correspondences, and customer service scripts used during customer calls.

- Empower Frontline Staff – currently CSC staff are not empowered to dismiss fees or penalties assessed on toll bills or notices of civil penalty in error or even as a one-time courtesy as a part of a customer education strategy.

By empowering frontline staff to research and mitigate customer inquiries such as this, several escalated customer inquiries could be avoided and the customer could receive what the customer satisfaction survey identified – one contact resolution. In conjunction with this, an oversight program which tracks the number and reason for fee or charge dismissals would need to be established to make sure that the empowerment is being deployed effectively.

The Operations team is confident that by implementing these process improvements, the objectives of this Lean review can be achieved.

## MONITORING AND CONTROL: THE CONTROL PHASE

A key step in the Lean process is to measure and analyze the results of the process improvements. The Operations team plans to implement measuring points and metrics which will inform decision makers as to the success of this Lean analysis. These will include:

- Measurement of the number of escalated customer inquiries (Is the customer education campaign working?)
- Measurement of results of oversight program (Is the new process being abused?)
- Measurement of customer satisfaction
- Measurement of “single contact” resolution rates.

## NEXT STEPS

The following is the schedule for the next steps in the Escalated Customer Inquiry improvement program:

Lean Process Stage	Major Tasks	Complete by
Implement Process Improvements	Update Standard Operating Procedures; train on new process	11/30/2013
Measure Results	Implement control measurement data points; gather data; analyze results and offer improvements	12/31/2013

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# Appendix D: Lean Review Interim Report for Image Review of Photo Enforced Transactions

# Lean Review Interim Report for Image Review of Photo Enforced Transactions

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Developed for



Washington State  
Department of Transportation

October 17, 2013

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**CHANGE LOG**

<b>Version #</b>	<b>Date</b>	<b>Revised By</b>	<b>Description</b>
<b>0.1</b>	10/11/13	J. Hall	Initial draft.
<b>0.2</b>	10/11/13	T. Patterson	Initial edits and comments
<b>0.3</b>	10/17/13	A.Rudell	Edits and comments

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## EXECUTIVE SUMMARY

In order to accurately bill Pay By Mail transactions, a license plate number must be retrieved from an image taken of a license plate as a vehicle travels on a phototolling facility. Receiving readable images and accurately reviewing those images is a critical part of the process. Although optical character recognition software identifies 65 percent, manually reviewing the license plate images of photo-enforced toll transactions is critical to accurately identifying the correct registered owner in order to bill the correct prepaid customer account by license plate or to send the customer a toll bill in a timely manner. Errors in this manual review process can result in creating a lack of confidence in the Pay By Mail program which could ultimately reduce the number of customers who take advantage of this payment option. From customer feedback and image review rejection reports, it appears that there are opportunities for improvement in the image review process. The Operations team conducted a comprehensive Lean review of the image review process. The following are the results of this analysis.

## PROBLEM STATEMENT / DESCRIPTION

Image-based transactions are assigned a confidence level value by the toll collection system's optical character recognition (OCR) software. When this confidence level is above 90 percent, the related transaction is posted directly to a prepaid customer account based on the license plates associated with that account or to a Pay By Mail customer account based on the registered owner information retrieved from the Department of Licensing without the need for manual review. Of the 3.07 million image-based transactions that occurred in March 2013, 65 percent were processed without the need for manual review. Of the remaining 35 percent of the image-based transactions which required manual review, 1.1 percent were rejected. This project is focused on reducing those rejects as they have the potential to represent \$1.6 million in uncollected revenue annually. If rejected transactions are defined as errors, the image review value stream performance equals 3.74 sigma or 12,453 errors per million. The *Good to Go!* service center challenge is to move from good to best, by making small continuous improvements to reduce errors to reach a performance level of 4 sigma or 60 errors per million.

## OBJECTIVE STATEMENT

*Reduce the number of rejected image-based transactions and enable tolls to be collected.*

## SUMMARY OF PROBLEM-SOLVING APPROACH

To conduct the root cause analysis the Operations team grouped the reasons for rejecting an image transaction into four major categories: (1) Image Capture, Saving, and Sharing; (2) Image Processing – System and Reviewer Interaction; (3) Canadian Plates; and (4) Customer related. The Operations team randomly selected a statistically valid sample of 400 images. Based on criteria developed by the Operations team, the quality assurance staff identified and quantified the errors that occurred in each category.

## MAJOR PROJECT RESULTS, FINDINGS, AND RECOMMENDATIONS

The root cause analysis of the errors indicated:

- Rejected images that are 'too dark' often occur on sunny days. They are a direct result of dark shadows created by the bridge super structure.

The Operations team designed and is currently testing the following improvements:

- One of the issues identified was images sent from the lane side that were “too dark”. WSDOT and the lane vendor conducted an analysis that pinpointed which cameras were having problems and when the errors were occurring. WSDOT is now working with the lane vendor on solutions.
- Remedies to customer impacts on photo-tolling will focus on customer education regarding important responsibilities on their part. The *Good To Go!* program will communicate with customers on the importance of keeping the information on their accounts up-to-date and remind them to eliminate license plate obstructions. Suggestions will be provided on the appropriate locations for the mounting of license plates as well as how to enter any specialty plate information while filling out an electronic application. The *Good To Go!* program will partner with auto dealerships to remind customers of their responsibilities related to replacing their temporary plates with Department Of Licensing issued plates within the required timeframe.
- WSDOT and ETCC are currently updating the standard operating procedures related to reviewing and certifying images. Based on the revised standard operating procedures, a refresher training course will be taught on evaluating images. Post training feedback will be provided to supervisors on the performance of image review staff and certifiers.
- The WSDOT team analyzed Canadian and specialty plates to determine where issues were taking place and established a feedback loop to help improve the image review process.

The Operations team currently estimates implementation of recommended improvements will lead to a 10 to 20 percent reduction in errors and an increase in revenues.

## IMPROVEMENT OPPORTUNITY: DEFINE PHASE

Image review is a central component of the toll collection process and is connected with many systems and organizations beyond the control of the Operations team. Image review cannot be improved in isolation and reinserted into the system. Defining variables and identifying the parties that influence them has become a repeated theme throughout this investigation. Variables include the following:

1. **License Plate Design** – the design, colors used and overall human-readability of license plates by the Department of Licensing (DOL);
2. **Registered Plate Database** – the accuracy of the database maintained by DOL;
3. **License Plate Mounting on Vehicles** – the plates are mounted on the vehicle by the customer and enforcement of proper mounting is done by Washington State Patrol (WSP);
4. **Quality Images** – the quality of the image that is captured, saved, and shared by the roadside vendor;
5. **Training and Information** – the training materials and information available from DOL and WSP; and
6. **Laws and Constraints** – governing legislation and circumstantial constraints dictated by federal, state and local governments.

Due to these variables, the breadth of the topic and the multiple roles played by each player, the Operations team defined (narrowed) the scope in the following ways for this interim draft report.

1. **SR 520 Focused:** Image-based transactions from SR 520 are the primary focus because (a) over 80 percent of image-based transactions in Washington State occur on SR 520, (b) the system is very similar to the planned future systems and improvements made now will be implemented on future projects, and (c) the constraints on SR 520 make image capture more challenging (e.g. lighting, vibrations, superstructure).
2. **WSDOT as a Customer:** Discussions were held defining who the tolling customers are. It was clear that owners of vehicles crossing tolling lanes are the primary customer. It was less clear what role ETCC and WSDOT played. ETCC is a customer when it receives images from the lane vendor. As WSDOT's customer service center vendor, ETCC reviews images, issues toll bills and posts payments. WSDOT is a customer of ETCC. However, in relationship to the driving public, WSDOT is both a service provider and an enforcement agency. A decision was made to define WSDOT's role as a customer for the purpose of this investigation.

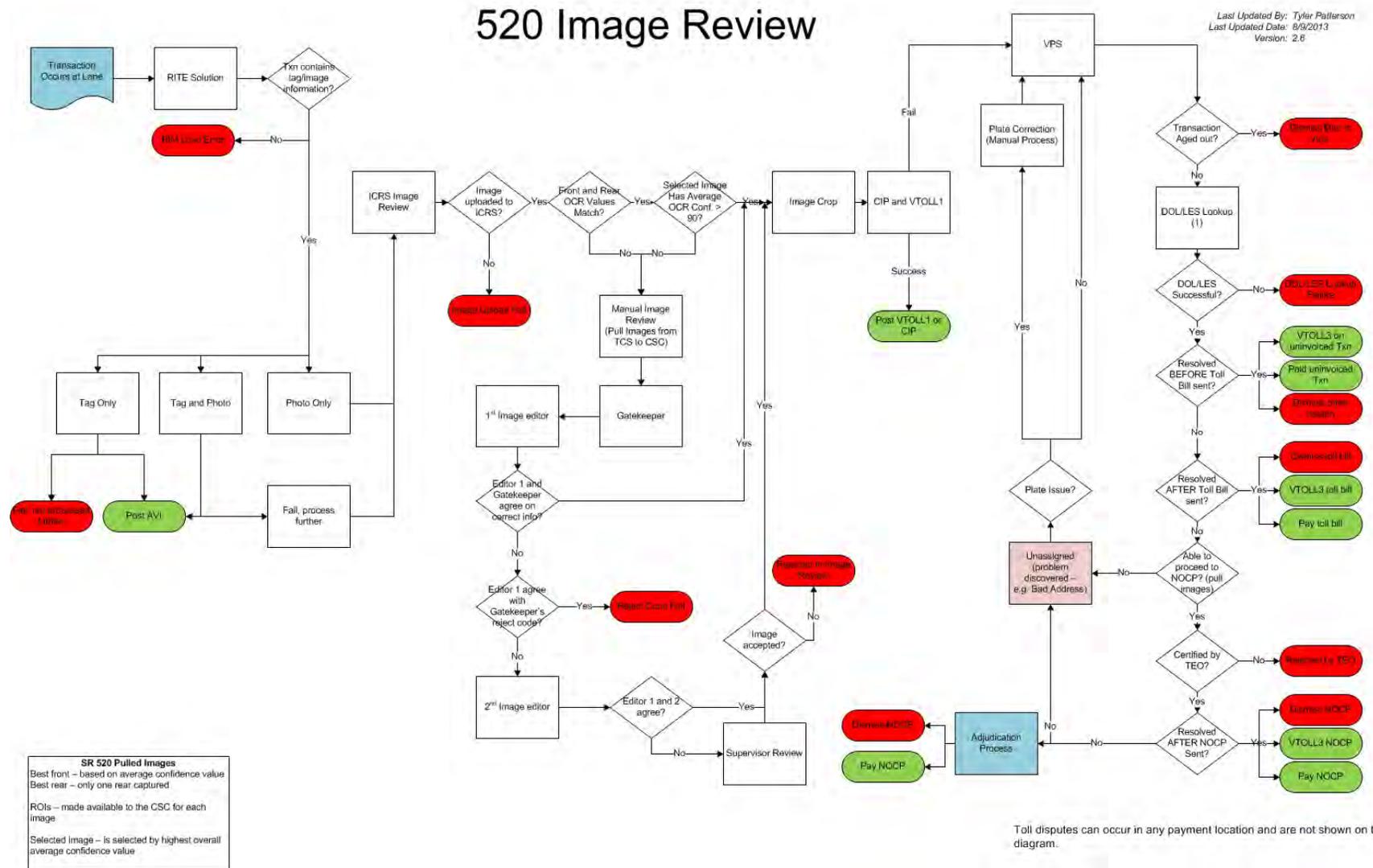
To address the customer needs and define the requirements, the Operations team defined errors as "rejected transactions" and began the investigation. The Six Sigma team members participated in a fish-bone cause and effect analysis to identify reasons why images/transactions were rejected. This is a complex issue as shown in Table 1 where the team identified 158 reasons in 29 different categories for why an image/transaction might be rejected.

TABLE 1: TRANSACTION REJECTION REASONS

Possible Reasons for Rejecting an Image (Fish Bone Analysis Results)	
Accurate Vehicle Information	8
Address Incorrect/ Missing	14
Adjudication	1
Aging	3
Business Rules	6
Class Mismatch	1
Collections	8
DOL/ LES	7
Environmental/ Weather	5
Human Image Review	8
Image Crop	4
Image Quality	6
Image Quality	8
Malformed Transactions	7
Non-Viable Transactions	3
Obstruction	8
OCR/Autopass	9
Plate Types/ Out of State	4
Posting and Posting Rules	4
Reporting	1
Skip Tracing	2
Stuck Transactions	8
Tag Capture	5
Toll Enforcement Officers	2
Toll Rate Assignment	1
Transaction Upload	8
Transponder Mounting	3
TVL (Tag Validation List) File	6
Type 99/ Rim Load	8
<b>Total</b>	<b>158</b>

Additionally, WSDOT and ETCC jointly produced a detailed flow chart showing the path that an image/transaction follows from the time a car crosses the bridge until a payment is received. Figure 1 details the process flow. As the team gained knowledge of the value stream, the flowchart was revised (9 times). As a result, WSDOT and ETCC reached consensus on defining the “Photo Enforced Transaction” value stream.

FIGURE 1: TRANSACTION FLOW DIAGRAM



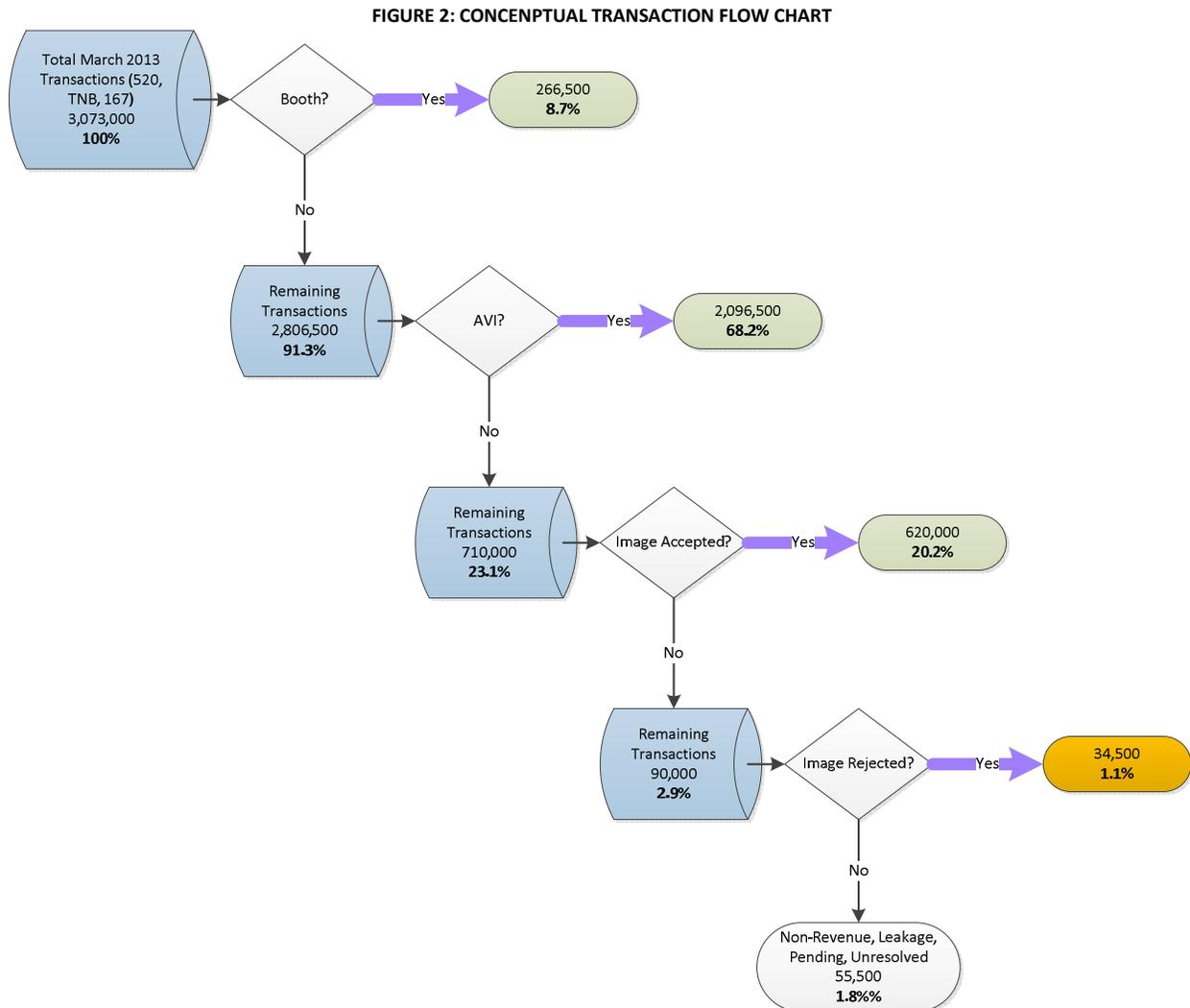
## OBJECTIVE STATEMENT

During meetings in July and August of this year, the Operations team developed the following objective statement to guide the process improvement decisions and assist in measuring the results.

*Reduce the number of rejected image-based transactions and enable tolls to be collected.*

## Current State of the Process: Measure Phase

To better understand what constitutes a rejected image, the Operations team used a variety of reports to track the flow of transactions as they move through the image value stream. Figure 2 demonstrates the conceptual level flow chart and shows the steps in the image value stream. Of the 3.1 million transactions of all collection types on all facilities that occurred in March 2013, 1.1 percent were rejected.



If rejected transactions are defined as errors, the image review value stream performance equals 3.74 sigma or 12,453 errors per million. The *Good To Go!* project's challenge is to move from good to best, by making small continuous improvements to reduce errors to reach a performance level of 4 sigma or 60 errors per million.

In addition, the Operations team will track the number of customer requests for payment of toll bills via an existing customer account (VTOLL3) as a way to test the effectiveness of the customer outreach

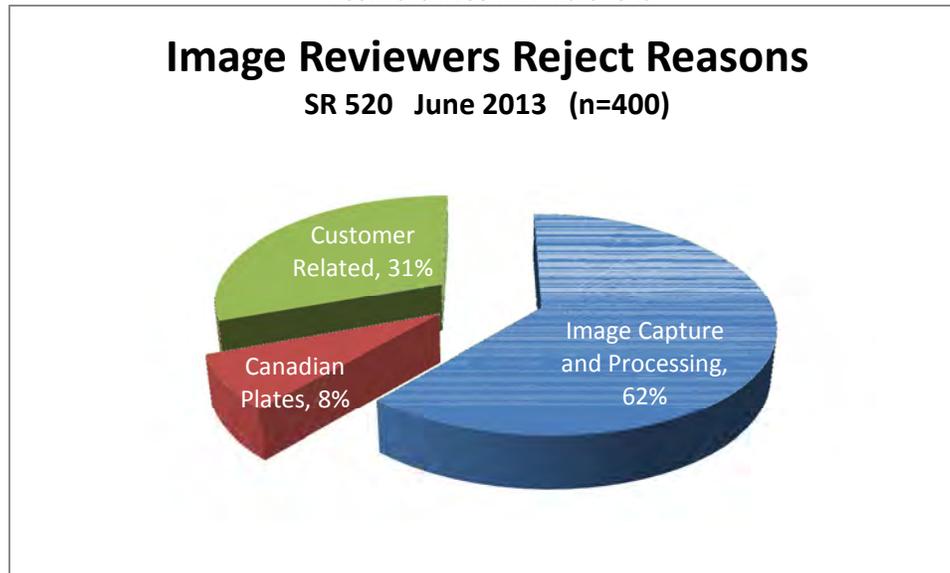
program. A VTOLL is when an image is used to post a transaction to an existing *Good to Go!* Account. One of the main reasons customers request a VTOLL is due to a customer failing to add or update their license plate(s) on their account(s). A reduction in these requests can be directly attributed to customer education.

It is difficult to measure the impact of many customer outreach programs. Direct measurements of the results are not always obvious. For this analysis, the team has set a goal of reducing customer-related image challenges by 10 percent. This will be measured by conducting a similar data analysis of image-based challenges as the one conducted at the beginning of this process (data sampling).

## ANALYSIS AND FINDINGS: THE ANALYZE PHASE

To conduct the root cause analysis, the Operations team employed multiple techniques, including an examination of 400 randomly selected image reviewer rejection reasons. These results helped establish categories and clarified the team's direction (Figure 3).

FIGURE 3: CATEGORIZED REJECTIONS



The analysis, findings and challenges are categorized into four areas:

1. Image Capture, Saving, and Sharing
2. Image Processing – System and Reviewer Interaction
3. Canadian Plates
4. Customer Related

### Image Capture, Saving, and Sharing

The Operations team's initial analysis indicated that many of the issues seemed to be associated with the image quality received. This, however, does not appear to be completely true because the existing reject categories do not have enough detail to determine the root cause conclusively; additional manual image review and data analysis is necessary. For example, the team initially categorized all transactions rejected as 'too dark' to be based on the quality of the image received from the lane. This categorization fails to allow for other causes, such as – the reviewer only looking at the primary image, the reviewer only looking at the Region of Interest (ROI) on the reviewer screen, and the reviewer's computer monitor settings. Despite the categorization confusion, the team recognized that a challenge existed.

1. **Too Dark Images** – Investigating the rejected image transactions from the roadside vendor's point of view yielded a significant finding: images that are 'too dark' often occur on sunny days. They are a direct result of dark shadows created by the bridge superstructure. The light sensors adjust the F stop based on lighting conditions of the entire image, not the just the license plate.
2. **Specialty Plates** – The system forces all specialty plates to be reviewed by image reviewers by assigning low confidence level values. On SR 520, WSDOT is unable to use white light because of

environmental constraints and uses a near ultra-violet light and a black and white camera. This combination was designed to read standard Washington Plates and has difficulty differentiating between certain colors. See Image Processing section below.

### Image Processing – System and Reviewer Interactions

The system processing portion has been the most challenging to understand due to a lack of documentation. Highlights of the process include the following findings:

3. **Primary Image Selection** – The initial selection of the Primary Image (the one that will be placed on the NOCP) is done by the roadside vendor based on their confidence in the license plate number, but the image reviewer must validate the image and finalize the image selection.
4. **Region of Interest (ROI) Inclusion** – The inclusion of the ROI on the review screen invites reviewers to look at it and use it to determine the plate number, instead of the Primary Image. The image reviewer must validate the Primary Image. The ROI cannot be used to issue an NOCP and can only introduce uncertainty and confusion.
5. **Image Crop** – After the image reviewer has confirmed the primary image selection and has scrolled and saved the image, the system then runs the image cropping program. If the image reviewer is doing their job, this program is redundant and introducing error for transactions that have been manually reviewed.
6. **Specialty Plates** – Specialty and customized plates add complexity to the process, as each plate has its own set of rules to follow. In the University of Washington plates below (Figure 4), the purple 'W' on the left is part of the plate ID, unless the characters following are customized. In the plate on the right, the husky head stands for 'UW' and is included in the plate ID.

FIGURE 4: UNIVERSITY OF WASHINGTON CUSTOMIZED PLATES



State: WA  
Type: Special – UW  
Plate: W0000A



State: WA  
Type: Special – UW  
Plate: UW00000

Another example is the stacked letters and prefix and suffix issues associated with the WSU series of plates (Figure 5).

FIGURE 5: WASHINGTON STATE UNIVERSITY CUSTOMIZED PLATES



State: WA  
 Type: Special – WSU  
 Plate: SMPLWSU



State: WA  
 Type: Special – WSU  
 Plate: WSU9999

With roughly 50 specialty plates in circulation, it is understandable why image reviewers (and customers) have a difficult time learning DOL's syntax.

- Standard Operating Procedures (SOPs)** – during the investigative inquiries, the Operations team discovered that the TEOs had been operating without a standard operating procedure and a pre-activity safety plan

### Canadian Plates

Canadian plates are unable to be used to identify drivers due to restrictions associated with the Canadian response to the Patriot Act.

### Customer Related

Of the 126 transactions identified as having a customer behavior root cause, the sub-causes are included in Table 2.

TABLE 2: CUSTOMER RELATED REJECTION REASONS

NO FRONT LP	1	1%
WORN OUT PLATE	1	1%
TWO LPS IN ONE IMAGE	3	2%
TEMPORARY PLATE	11	9%
PLATE OBSTRUCTED	32	25%
NO PLATE	78	62%
<b>TOTAL IMAGES</b>		<b>126</b>

As is common with other toll facilities which operate photo-tolling (or violation) systems, the lack of an image of the customer's license plate is a large challenge. In many cases, these issues are a result of a camera that is not aligned or programmed properly. System challenges and remedies will be addressed as part of a remediation strategy for reducing the lane vendor's errors. Systems issues attributed to the lane vendor represent 46 percent of the errors sampled.

As can be seen, Customer Impacts represent 31 percent of the total challenges found in the sample. This is not unusual as there are many things a customer can do (or not do) which will make their license plate difficult to read by even the most advanced systems. This assertion is not to imply fraud on the part of customers – simply a lack of understanding and education on how the photo tolling system works.

One of the highest ranking customer issues is obstructed plates. Again, often the obstruction is by accident (e.g. trailer hitch or dirt/debris). The goal of this analysis will be to assume that obstructions are unintended and a result of a misunderstanding of the importance of having a license plate on one's vehicle which is easily identifiable.

One additional issue which is not included above relates to how a customer enters their specialty plates into their customer account. Inputting an incorrect number or a specialty number in the incorrect order per the Department of Licensing can result in a license plate misidentification. This unnecessarily utilizes image review and Customer Service staff time to remediate.

## RECOMMENDATIONS: THE IMPROVE PHASE

### Image Capture, Saving, and Sharing

1. **Too Dark Images** – The roadside vendor will adjust the F stop on the light sensors based on seasonal lighting conditions and the time of day.
2. **Specialty Plates** – WSDOT will work with DOL to develop a specialty plate guidance document. Additionally, WSDOT and DOL will explore embedding infrared barcodes on license plates.

### Image Processing – System and Reviewer Interactions

The system documentation created as part of this review will be saved in a location available to all parties

3. **Primary Image Selection** – The Operations team will improve the selection of the Primary Image and make it more explicate in the Image Reviewer SOP.
4. **Region of Interest (ROI) Inclusion** – The team will remove the ROI from the reviewer's screen.
5. **Image Crop** – Since manual image reviews involve a human operator choosing the best image and angle of view for the associated image, the Team needs to investigate image crop and revise the program to only perform it on the Autopassed images where no human intervention is used to validate the best image and angle for use on Notices of Civil Penalty.
6. **Specialty Plates** – See #2.
7. **Standard Operating Procedures (SOPs)** – WSDOT will establish SOPs for all image review related activities.

### Canadian Plates

WSDOT will continue to establish a positive relationship with British Columbian toll agencies to lay the groundwork for a potential partnership in the future.

### Customer Related

After reviewing the image value stream the Operations team identified the duties assigned to the Gate Keeper as non-value added and is recommending the elimination of this function.

The Operations team is currently working on evaluating and selecting possible improvements to reduce errors. WSDOT has met with the roadside vendor and together they identified opportunities for improvement. To capitalize on those opportunities WSDOT started a detailed daily analysis of the OCR cameras. This analysis was able to pinpoint which cameras were having problems and when the errors were occurring. One of the issues identified was images that were sent from the lane side that were "too dark". The OCR camera analysis was able to help identify these times when the collected images were too dark. WSDOT is now working with the lane vendor on solutions for the identified issues.

Remedies to customer impacts on photo-tolling will focus on customer education. Due to the complexity of tolling in Washington State with its multiple variations of payment methodologies, transponders and facility configurations, a robust and continuous customer educational outreach plan is critical.

The following is a list of customer outreach initiatives which can be readily implemented at a relatively low price:

- Add or enhance content regarding the importance of maintaining accurate customer license plate information on a customer account on the *Good to Go!* website, transponder welcome kits, and routine customer emails (e.g., statements).
  - Include language regarding the optimal location of a license plate, the importance of a front plate, how to enter a specialty plate, and reminders about common license plate obstructions (e.g., trailer hitch, dirt/snow, bicycles)
- Add or enhance customer service representative scripts to focus on license plate issues during customer contacts.
- Work with auto dealerships to remind customers of their responsibilities related to changing out their temporary plates with DOL-issued plates.

Within the population of rejected Images, sixteen percent of the errors were attributable to human error. Most commonly the Image Reviewer did not assign the correct reject reason code. This is important as it provides the source data to accurately identify camera image related problems and eliminate the errors.

A determination was made to provide refresher image review training. In developing the curriculum the question arose: Do we train to the standard operating procedures used by ETCC's Image Reviewers or those used by WSDOT's Toll Enforcement Officers (TEOs). A major deliverable of this project is an analysis conducted by WSDOT as to the differences between these two sets of performance expectations. A result of this analysis showed that there are no current performance standards documented for TEOs. Additionally, the analysis revealed that there are two different sets of criteria: one for the Image Reviewers and a separate one for the TEOs. The WSDOT team is currently working on drafting a SOP for TEOs. Additionally, the WSDOT team is reviewing the SOP for Image Reviewers. The team is looking at standardizing the image review process. Currently ETC is conducting a cost benefit analysis to determine how standardizing the two image review processes into a uniform standard would impact revenue.

ETCC employs a third party vendor to review images. ETCC's quality assurance (QA) manager recently reviewed the vendor's quality control plan. The plan involves weekly control checks of the vendor's image reviewers. If a reviewer's work does not conform to ETCC's SOP that individual receives coaching. The third party vendor has agreed to periodic reviews by the ETC's QA staff and to participate in any refresher training.

The root cause analysis showed that image review of Canadian plates was associated with 8 percent of the errors. ETCC provided data to WSDOT and they are using the information to investigate different performance feedback on key issues, such as Canadian and specialty plates. The team analyzed data to determine where issues were taking place and then provided a feedback loop to help improve the image review process.

## MONITORING AND CONTROL: THE CONTROL PHASE

A key step in the Lean process is to measure and analyze the results of the process improvements. The Operations team plans to implement measuring points and metrics which will inform decision makers as to the success of this Lean analysis. These will include:

- Measurement of percentage of total image-based transactions which require manual review (Are improvements to toll collection systems working?).
- Measurement of percentage of total transactions which are image-based (Is customer education program resulting in fewer customers without a transponder or prepaid license plate account?).
- Measurement of hours spent conducting image reviews (Is training program working?).
- Measurement of image rejection rate (Are toll collection system improvements and training working?).
- Measurement of customer satisfaction (include questions regarding understanding why some transactions are billed by plate ( Is customer education program working?).
- Measurement of percentage of toll bills paid (Is revenue increasing?).

## NEXT STEPS

The following is the schedule for the next steps in the Image Review improvement program:

Lean Process Stage	Major Tasks	Complete by
Implement Process Improvements	Update Standard Operating Procedures; train on new process; implement toll collection system improvements; implement customer education program	12/31/2013
Measure Results	Implement control measurement data points; gather data; analyze results and offer improvements	01/31/2014