2011

2011 Pacific Highway Southbound FAST Lane Study: Final Report

Border Policy Research Institute

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Border Policy Research Institute
Western Washington University

www.wwu.edu/bpri

Whatcom Council of Governments

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Introduction

In the spring of 2011, a pilot test was conducted at the U.S. commercial port of entry (POE) at Blaine, Washington. The test was designed to determine whether a reconfiguration of operations at the POE would lead to improved southbound freight mobility. This report documents the methods and results of the pilot test.

In the pre-pilot configuration, one of Blaine's three commercial booths (together with a dedicated southbound approach lane on B.C. Highway 15) has been used to serve trucks that participate in the Free and Secure Trade (FAST) program that is jointly managed by U.S. Customs and Border Protection (CBP) and the Canada Border Services Agency (CBSA). Blaine's remaining two booths have been used to process standard truck traffic. During the pilot test, the dedicated FAST booth was instead used as a standard booth, and all three booths were used to process a mingled stream of FAST and standard trucks. The FAST highway approach lane was converted to use for buses, NEXUS autos, and standard autos. To evaluate effectiveness of the pilot configuration, a two-phase program of field data collection was conducted: "baseline" data was collected prior to the test, and "pilot" data was collected once the new configuration was in place. The data collection program was designed to measure wait time for trucks, buses, NEXUS cars, and standard automobiles. The primary hypothesis was that the pilot configuration would result in significantly less aggregate average wait time for trucks. A secondary hope was that wait time for other modes would be somewhat improved.

Genesis of the Pilot Test

Prior studies. The efficacy of the FAST program at Blaine has been the subject of several studies, all motivated by the fact that the dedicated FAST infrastructure (booth and highway lane) handles a relatively small proportion of the traffic stream. Trucks eligible to use the FAST lane have thus moved through the POE very quickly, whereas standard trucks often experience long wait times. Stakeholders have questioned whether the dedicated FAST facilities are a rational use of valuable infrastructure. Relevant studies and reports include:

- 2007. "Pacific Highway Port of Entry Commercial Vehicle Operations (CVO) Survey," by Halcrow Consulting Inc. Retrievable at: http://resources.wcog.org/border/cvo_2007finalreport.pdf. In this report, Halcrow documented low usage rates of the FAST lane and large differentials between the wait times experienced by FAST trucks and standard trucks.
- 2008. "Cross Border Transportation Patterns at the Western Cascade Gateway and Trade Corridor: Implications for Mitigating the Impact of Delay on Regional Supply Chains," by Anne Goodchild, Ph.D., Susan Albrecht, and Li Leung. Retrievable as *Research Report No. 6* under the Publications tab at: www.wwu.edu/bpri. In this report, Goodchild began to document the reasons for poor usage of FAST within the Cascade Gateway region.
- 2010. "2009 IMTC Commercial Vehicle Operations (CVO) Survey," by the Whatcom Council of Governments and the Border Policy Research Institute. Retrievable at: http://resources.wcog.org/border/2009CVOFinalReport.pdf. This project involved collection of detailed information (trip origin/destination, commodity carried, carrier company, wait time) for trucks crossing both north- and southbound at Blaine, Lynden, and Sumas, during the summer of 2009. Low usage of FAST was again evident, and the prevalence of many empty southbound trucks (both standard and FAST) was documented.

- 2009. "Issues with Efficacy of FAST at the Cascade Gateway," by the Border Policy Research Institute, retrievable as Vol. 4, No. 4, of the *Border Policy Brief* at: www.wwu.edu/bpri. This report used data from the above-mentioned 2009 IMTC CVO project to emphasize the relatively light usage of FAST, both north- and southbound.
- 2010. "An Update on Congestion Pricing Options for Southbound Freight at the Pacific Highway Crossing," by Mark Springer, Ph.D., retrievable as *Research Report No. 11* at: www.wwu.edu/bpri. Springer constructed a queuing model using the 2009 IMTC CVO dataset and postulated that wait times would be significantly reduced if the FAST booth were eliminated and all three booths were made available for mingled FAST and standard traffic.
- 2010. "Near Border Operations and Logistical Efficiency: Implications for Policy Makers," by Anne Goodchild, Ph.D., and Matthew Klein, published as a paper within the proceedings of a seminar on Canada-U.S. border management policy issues, retrievable in the "Other Papers" tab at: www.wwu.edu/bpri. Goodchild commented upon the manner in which the FAST lanes in Blaine contribute to inefficiencies in freight logistics in the Cascade Gateway region. Her research also made use of the 2009 IMTC CVO dataset, combined with some surveys of carriers she undertook in the summer of 2009.

IMTC. The production of the above reports was intertwined with the workings of the International Mobility and Trade Corridor (IMTC) project, which is a regional stakeholder forum that seeks to improve mobility at the four POEs that serve the I-5 corridor. The IMTC forum provides an opportunity for regular interaction between a wide variety of stakeholders, including: CBP, CBSA, the transportation agencies (federal, state, provincial, local) that manage the roads serving the POEs, the private sector (customs brokers, carriers, trucking associations), other government entities (U.S. and Canadian consulates), academia, and NGOs. At the IMTC forum, stakeholders jointly establish prioritized lists of desirable research and planning. Both the 2007 Halcrow CVO project and the 2009 IMTC CVO project were undertaken because they emerged as important regional priorities, as memorialized in the IMTC project list.

CBP request. On November 18, 2010, CBP officials from the Blaine POE proposed that this pilot test be conducted. Permission to conduct the test had been received from both regional and national CBP headquarters, based upon some of the reports described above. CBP (Blaine) desired that the test be conducted as soon as possible, so a project team was assembled.

Project Team

The following entities agreed to participate in the pilot test, with participation being in the form of funding, in-kind staff efforts, materials, equipment, and/or labor.

- U.S. Customs and Border Protection (CBP). CBP was the initiating agency of this project and the primary client. CBP assisted in the design of the project and provided necessary on-site liaison and access. CBP also gathered wait time data for standard automobile traffic.
- Washington State Department of Transportation (WSDOT). WSDOT agreed to fund the project, making use of federal Coordinated Border Infrastructure funds flowing to the state from the Federal Highway Administration. In addition, WSDOT was responsible for making changes to highway striping south of the Canada-U.S. border in order to support the lane reconfiguration required in the pilot phase.

- Whatcom Council of Governments (WCOG). WCOG, the entity that facilitates the IMTC forum, is a Regional Transportation Planning Organization that has had many contractual and financial dealings with WSDOT. WCOG agreed to manage and undertake the project, serving as prime contractor to WSDOT, but with some tasking to be performed by subcontractors and by personnel procured from a temporary employment agency.
- Border Policy Research Institute (BPRI). BPRI is a research institute affiliated with Western Washington University in Bellingham, WA. BPRI has been involved in many of the prior studies/projects and was the primary funder of the 2009 IMTC CVO project. BPRI agreed to serve as a subcontractor to WCOG, providing management and analytical capabilities to the team, as well as handheld devices (and custom programming) with which to make field measurements.
- British Columbia Ministry of Transportation (BCMOT). BCMOT agreed to make necessary changes to highway signage and striping north of the Canada-U.S. border in order to support the lane reconfiguration required in the pilot phase.
- Canada Border Services Agency (CBSA). CBSA provided authorization and access so that the field crew was able to perform tasks in the Canadian portion of the inspection plaza and the approaching highway lanes.

Schedule

Major milestones in the pilot test were as follows:

- WCOG prepared a draft scope of work in late November 2010, which identified the various partners along with a proposed data-collection method and schedule.
- CBP sponsored a Strategic Problem Solving forum on January 4, 2011. At the forum, the wishes and needs of various stakeholders were made clear, and a modified scope, methodology, and schedule were established.
- WCOG published a Preliminary Work Plan on January 7, 2011, that reflected the agreements reached within the January 4 forum.
- WSDOT executed a funding agreement with WCOG in January 2011. The agreement specified aspects of the project scope, the available funding, and the deliverable products.
- WCOG executed a subcontract with BPRI in February 2011. The subcontract identified the tasks that BPRI would undertake and established a budget for those tasks.
- WCOG hired temporary personnel in mid-February 2011, following interviews conducted jointly with the BPRI.
- WCOG and BPRI trained the field crew on February 22 and 23, 2011.
- The baseline phase of the project was conducted between February 25 and March 10, 2011, comprising 11 days of data collection, as shown in the following figure.
- The reconfiguration of highway signage and striping upstream of the POE was performed by WSDOT and BCMOT on March 20 and 21, 2011.
- The pilot phase of the project was conducted between March 21 and April 7, 2011, comprising 15 days of data collection, as shown in the following figure.

- An interim report was produced by the BPRI on April 1, 2011. It is included as an appendix to this report.
- Preliminary results of the project were shared in a briefing by the BPRI to the IMTC forum on April 14, 2011. An article produced by the BPRI titled "Testing a Reconfiguration of FAST at the Blaine POE" was distributed at that time and thereafter made available on the web at: www.wwu.edu/bpri. The article is included as an appendix to this report.
- Additional discussion of project results was included within a report published by Mark Springer (BPRI) on May 19, 2011, titled "Eliminating the FAST Lane at the Pacific Highway Crossing: Results of a Pilot Project." The report is available at: www.wwu.edu/bpri.
- Project results derived from use of an updated queuing model will be included within a report by Mark Springer (BPRI) published in summer 2011. The report will be available at: www.wwu.edu/bpri.

The baseline phase contained two each of Monday – Thursday and one each of Friday – Sunday. There were seven hours of data collection within each field day, with earlier hours on Friday – Sunday in order to capture volumes of NEXUS and bus traffic anticipated to then be present. The pilot phase contained three each of Monday – Thursday and one each of Friday – Sunday.

Figure 1. Calendar of Field Data Collection Days & Hours.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
20 **Feb.**	21	22 Training	23 Training	24	25 Baseline 6:30 – 13:30	26 Baseline 6:30 – 13:30
27	28 Baseline 8:00 – 15:00	1 **March** Baseline 8:00 – 15:00	2 Baseline 8:00 – 15:00	3 Baseline 8:00 – 15:00	4	5
6 Baseline 6:30 – 13:30	7 Baseline 8:00 – 15:00	8 Baseline 8:00 – 15:00	9 Baseline 8:00 – 15:00	10 Baseline 8:00 – 15:00	11	12
13	14	15	16	17	18	19
20	21 Pilot 8:00 – 15:00	22 Pilot 8:00 – 15:00	23 Pilot 8:00 – 15:00	24 Pilot 8:00 – 15:00	25 Pilot 6:30 – 13:30	26
27 Pilot 6:30 – 13:30	28 Pilot 8:00 – 15:00	29 Pilot 8:00 – 15:00	30 Pilot 8:00 – 15:00	31 Pilot 8:00 – 15:00	1 **April**	2 Pilot 6:30 – 13:30
3	4 Pilot 8:00 – 15:00	5 Pilot 8:00 – 15:00	6 Pilot 8:00 – 15:00	7 Pilot 8:00 – 15:00	8	9

Methodology

Wait time measurement. A methodology was designed to collect accurate wait times for vehicles moving southbound through the POE. Wait times are defined as the amount of time spent waiting in the queue prior to arrival at the primary inspection booth. In order to measure a wait time, a record must be made of the time that a vehicle arrives at the back of the queue, and a second record must be made of its arrival time at the booth. The two records typically are gathered at widely separated locations, so the records must be captured on separate time-synchronized devices and then joined in post-processing. The truck's front license plate is used as the means to join records for a given vehicle – i.e., a person at the back of the queue must capture both the license plate and the arrival time at the queue, and a person at a booth similarly must capture a license plate and a timestamp.

Data for queuing model. In addition to the data items needed for wait time measurement, other data was collected in order to construct and validate a queuing model.

- Radiation Portal Monitor (RPM). Prior to reaching the booth, a truck comes to a halt just upstream of an RPM, waiting at that point until the booth is clear. A record was captured of the time at which the truck began moving from the RPM to the booth. When compared to the time of arrival at the booth, this "RPM departure" record allowed the computation of the amount of time it takes to roll forward from RPM to booth, which is called the "transition time" within various reports.
- Booth departure. A record was made of the time at which the truck's inspection was completed. Comparing this record to the booth-arrival record allows computation of the amount of time involved in the inspection process, which is the "service rate" value needed within a queuing model.
- Departure obstruction. A simple yes/no record was made of whether a truck was able to roll away from the booth in an unobstructed manner upon conclusion of the inspection. At times trucks are unable to do so, typically because they have been directed to enter a secondary queue of trucks waiting for a non-intrusive inspection via a VACIS scanner. If a truck has an obstructed departure, then the next truck in line is unable to advance to the booth. A modeler needs to know that the normal flow of trucks has been suspended due to obstructions.

Equipment and software. Records were collected on two different kinds of personal digital assistant (PDA) handheld devices. Most PDAs were Palm Tungsten E2, which were chosen by the BPRI several years ago because of their long battery life and their programmability. The Palm PDAs are no longer available, though, and the PDA inventory was therefore augmented for this project with Apple iPod Touch devices, which were chosen primarily because of the possibility of using the same programming software.

Custom data-collection screens were developed with Pendragon Forms software. Version 5.1 was used to build the screens used on the Palm PDAs, and Version 6 was used for the iPods. The same basic screen-definition program was portable between Version 5.1 and Version 6, allowing for essentially identical operation of the two kinds of PDAs.

Time synchronization. It is possible to set the time on a Palm PDA to the nearest second, so the entire set of Palms was kept in good synchronization. The iPods could be set only to the nearest minute, so care was taken to deploy certain kinds of PDAs only at certain stations. (*A detailed description of the stations follows below.*) For all stations at which it was important that timestamps be accurately comparable to those collected elsewhere (e.g., the booths and the queue end for trucks, where one measurement is later subtracted from the other), the Palm PDAs were deployed. Two stations were relatively insensitive to exact timing—the "parking lot" station, at which it was only necessary to record the presence of a given truck, and the "bus" station, where both the queue-end and booth measurements were collected upon a single PDA. The iPods were used primarily for those stations.

For the NEXUS traffic, a crew member recorded the time at which a vehicle entered the queue, but no crew member was deployed at the booths. Instead, CBP provided a daily record of the license-plate readings captured automatically at the booth. It was therefore necessary to collect "dummy" readings using the PDAs in order to calculate the differential between the timestamps we collected and the timestamps assigned by CBP (which are based upon a nationwide clock-time used for passenger processing). When receiving a CBP data file, we would then apply the necessary differential to CBP timestamps, prior to performing the subtraction that would indicate the wait time for a NEXUS car.

Data processing. At the end of each day, data from all PDAs was uploaded to a single computer, with the Pendragon software placing all records into a single Microsoft Access data file. NEXUS data was received from CBP in the form of an Excel file. A correction factor was applied to the NEXUS timestamps, as discussed above. The combined data file was then sorted by license plate number, and obvious license-plate mismatches were corrected (i.e., one person enters a zero, another enters the letter "O"). Some custom SQL queries were then run to merge records pertaining to a single vehicle and to compute wait times. Any truck that stopped in the parking lot while proceeding through the queue to the booths was excluded from the wait time calculations. Data was then summarized in a format as specified by CBP, for email delivery to CBP the following morning.

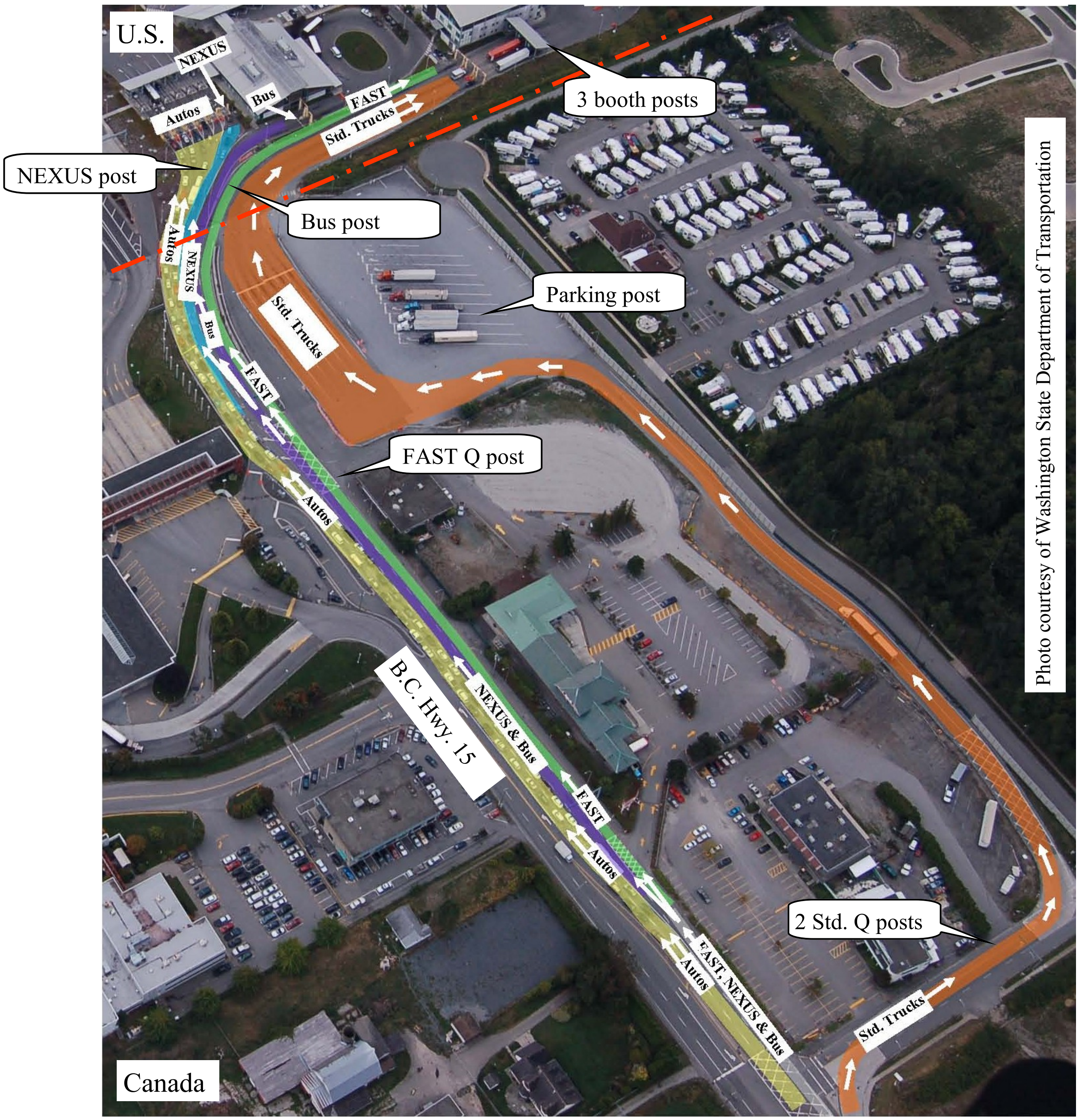
Upon conclusion of both field phases, a more extensive "data cleaning" effort was undertaken, in which the less obvious license-plate mismatches were resolved. This effort resulted in the addition of over 500 records to the database, so results presented in the earliest reports are revised in this report, taking advantage of the larger set of data.

Site Geography and Data Collection Posts

Photos 1 and 2 show the geography of the southbound approach to the Blaine POE. Photo 1 shows the historic configuration of lane and booth usage. Of particular note is the green FAST lane shown on B.C. Highway 15. Using that lane, FAST trucks typically proceed directly to a dedicated FAST booth, while standard trucks follow the orange route through a parking lot, eventually reaching the other two booths. In the pilot configuration (Photo 2), FAST trucks follow the path of standard trucks, and the three truck booths are shared among all truck traffic.

In the pilot configuration, the highway lane released from FAST usage was made available for other modes. Specifically, buses benefited from a dedicated lane that extended much farther upstream from the POE than had been the case in the historic configuration. It was intended that this dedicated bus lane would alleviate some issues related to the inability of buses to reach the booths because of blockages by other traffic modes. Additionally, in the region immediately upstream of the automobile booths, a third automobile approach lane was provided in the pilot configuration. It was believed that the third lane might facilitate a better flow of vehicles to the inspection booths for both standard and NEXUS cars.

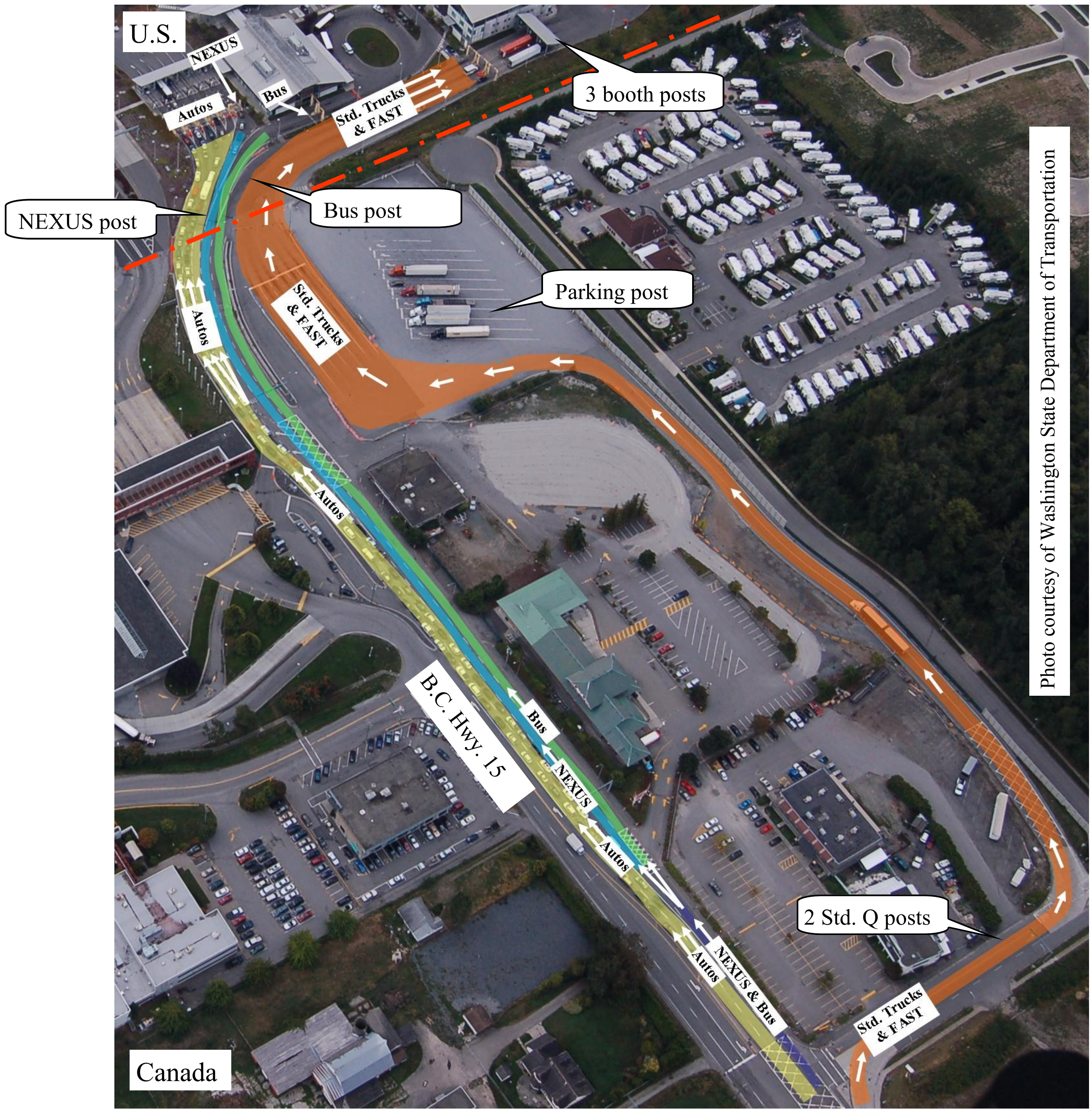
Photo 1: B.C. Highway 15 Historical Configuration:
Dedicated FAST Highway Lane and Inspection Booth



9 Field Crew Posts (Baseline):

- 1 each within 3 booths
- 1 in parking area
- 2 to jointly measure the end of the standard queue
- 1 to measure the end of the FAST queue
- 1 to measure the end of the NEXUS queue
- 1 to measure the bus queue (both ends)

Photo 2: B.C. Highway 15 Pilot Configuration:
FAST and Standard Trucks Mingled



8 Field Crew Posts (Pilot):

- 1 each within 3 booths
- 1 in parking area
- 2 to jointly measure the end of the standard queue
- 1 to measure the end of the NEXUS queue
- 1 to measure the bus queue (both ends)

Beneath each photo is a listing of the field-crew posts established during each of the two phases, and the approximate location of each post is indicated upon the photos. It was necessary to post two crew members at the end of the standard truck queue, as the arrival rate of trucks was at times so high that one person was incapable of capturing all arrivals. In the baseline configuration it was necessary to deploy a person at the end of the FAST queue, which was distinct from the standard truck queue. In the pilot phase, all trucks followed a single route, so no FAST-queue post was required. For the four queue-end posts (NEXUS, bus, FAST, and standard truck), a person had to rove constantly to the place at which the queue was actually forming. At times, the queue for standard trucks extended north on Highway 15 for close to a kilometer, so the person staffing the post would be located very distant from the POE. Walkie-talkies were used to maintain contact between crew members and supervisors.

Results

Comparability of conditions – baseline vs. pilot. When two field efforts occur sequentially in time, an issue arises as to whether the underlying characteristics of the system remained constant. Of particular importance is the question of whether the traffic volume remained constant, and whether the “service rate” at the inspection booths remained constant. A significant difference in either of those two variables would distort the comparability of wait times between the two phases. In his report of 19 May 2011, Springer presents an analysis of this topic, which will not be repeated here. Suffice to say that the service rate was very slightly lower in the pilot phase (i.e., each inspection took a bit longer, on average), and traffic volumes were significantly higher in the pilot phase. In each case, the changed condition would tend to generate *longer* wait times in the pilot phase, all else being equal. As is seen below, wait times were significantly shorter in the pilot phase, despite this unfavorable change in underlying conditions.

Excel spreadsheet containing data. The data collected pursuant to this project is available within an Excel 2003 spreadsheet. Interested persons can contact WCOG to request a copy of the data. In summary, the spreadsheet contains:

- Baseline Phase:
  - 3,470 wait-time records of NEXUS vehicles
  - 173 wait-time records of buses
  - 3,250 wait-time records of trucks (2,454 standard, 796 FAST)
  - 3,702 arrival records of trucks (2,861 standard, 841 FAST)
- Pilot Phase:
  - 5,847 wait-time records of NEXUS vehicles
  - 283 wait-time records of buses
  - 6,030 wait-time records of trucks
  - 6,247 arrival records of trucks

Detailed summary tables. Appendix III contains summary tables compiled from the Excel spreadsheet. For each vehicle mode (bus, NEXUS, truck), the tables show descriptive wait-time statistics (mean, minimum value, maximum value, standard deviation, count) for each of the survey hours throughout the two project phases. Also shown in the truck tables is a count of trucks completing primary inspection each hour, as reflected in the records of CBP’s Automated

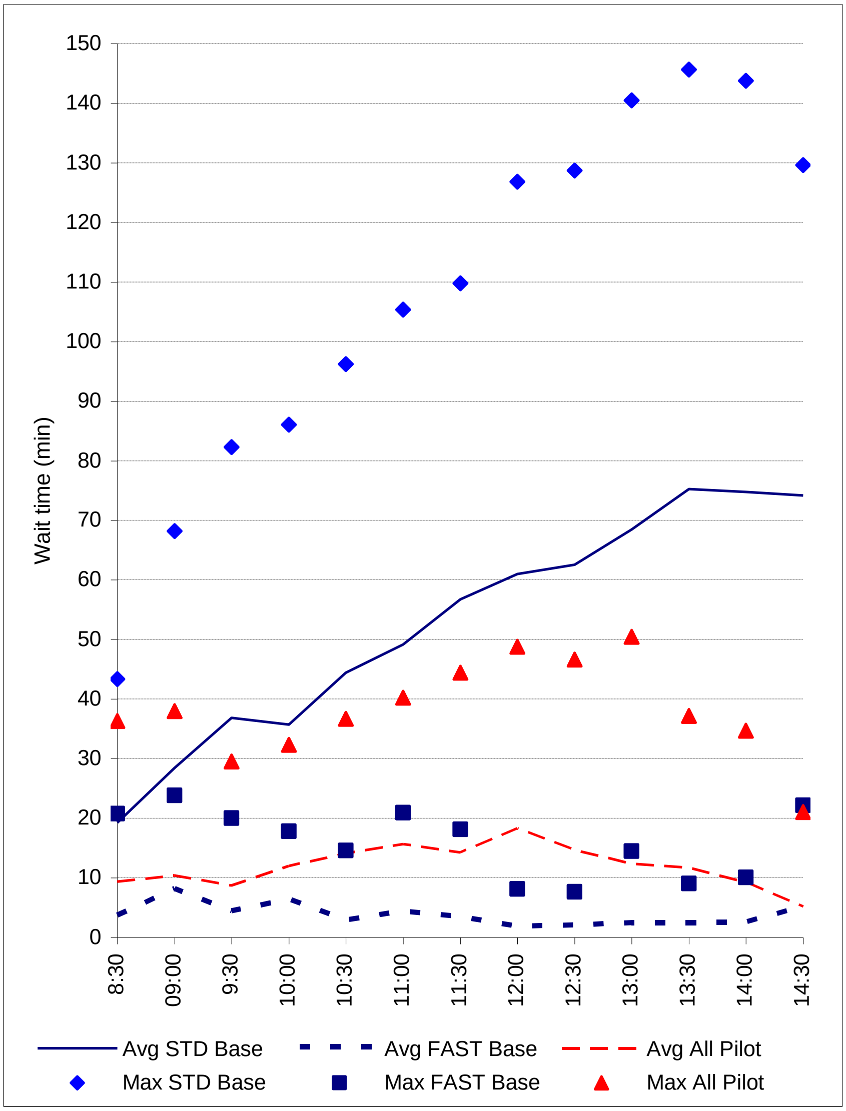
Commercial Environment (ACE) computer system. These ACE hourly counts allowed us to determine what proportion of truck traffic was captured by our field crew each hour.

ACE daily counts. In addition to the hourly ACE records in Appendix III, CBP provided the following 24-hour counts of the trucks clearing the POE throughout the two phases:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
20 **Feb.**	21	22	23	24	25 999	26 579
27 387	28 1,021	1 **March** 1,121	2 1,162	3 1,072	4 1,036	5 471
6 426	7 1,109	8 1,107	9 1,150	10 1,105	11 990	12 489
13 411	14 1,130	15 1,163	16 1,170	17 1,205	18 1,103	19 566
20 408	21 1,149	22 1,208	23 1,138	24 1,201	25 1,103	26 529
27 420	28 1,181	29 1,233	30 1,212	31 1,193	1 **April** 1,090	2 560
3 482	4 1,132	5 1,227	6 1,125	7 1,182	8	9

Wait times – trucks. For the truck data, three different scenarios are shown below, each related to weekdays, the peak traffic days. Each scenario includes a graph showing a profile of average and maximum wait times experienced over the course of a day (for baseline FAST, baseline Standard, and pilot All). Also included is a graph of the frequency distribution of wait times (by 5-minute intervals) for the scenario, contrasting the two phases. From this latter graph, an aggregate average reduction in wait time is calculated. Springer's report and Appendix III provide alternate ways of viewing results, and the Excel database can be used by interested persons to perform custom analyses.

In last month's *Border Policy Brief* (Appendix II), we included graphs based upon the data collected during pilot-phase weekdays (Mon – Thur) in which *all three booths operated normally for the entire day*. We excluded four weekdays in which operations were disrupted by booth closures, reasoning that such days are not representative of the pilot configuration, but rather of the baseline configuration—i.e., trucks being processed through just two booths. Scenario 1 is an updated version of these graphs, based upon the full "clean" data set. We were asked by some stakeholders to show results for all the pilot-phase days, on the grounds that disruptions in CBP operations are a regular occurrence. Scenario 2 is produced in response to this request. However, while disruptions occurred during the pilot phase, they did not occur during the baseline phase, so Scenario 2 contains a bias. It likely is a valid representation of the maximum waits that might occur in the pilot configuration on days when disruptions occur, but using it to compare the average wait times of the two configurations is inappropriate. In essence, smooth baseline conditions are being compared to disrupted pilot conditions. In Scenario 3 we exclude just two of the 13 pilot-phase weekdays (Mon – Fri), which serves to partially mitigate the bias. This scenario's profile of average wait times is likely the best representation of what will occur over many weeks of pilot configuration operations, including both good days and bad. But no scenario depicts what the baseline configuration yields on a disrupted day, and only Scenario 1 is an "apples to apples" comparison of average wait times (and cumulative aggregate average waits).



Truck Scenario 1: Mon – Thur, disrupted pilot days excluded.

Uses 8 baseline days and 8 pilot days in which all booths were open all day. Excludes 3/23, 4/4, 4/6, 4/7, all of which were disrupted as described in Appendix III.

Identical to scenario used to produce graphs shown in *Border Policy Brief* (Appendix II), but now using full "clean" data set.

n = 2,547 baseline

n = 3,557 pilot

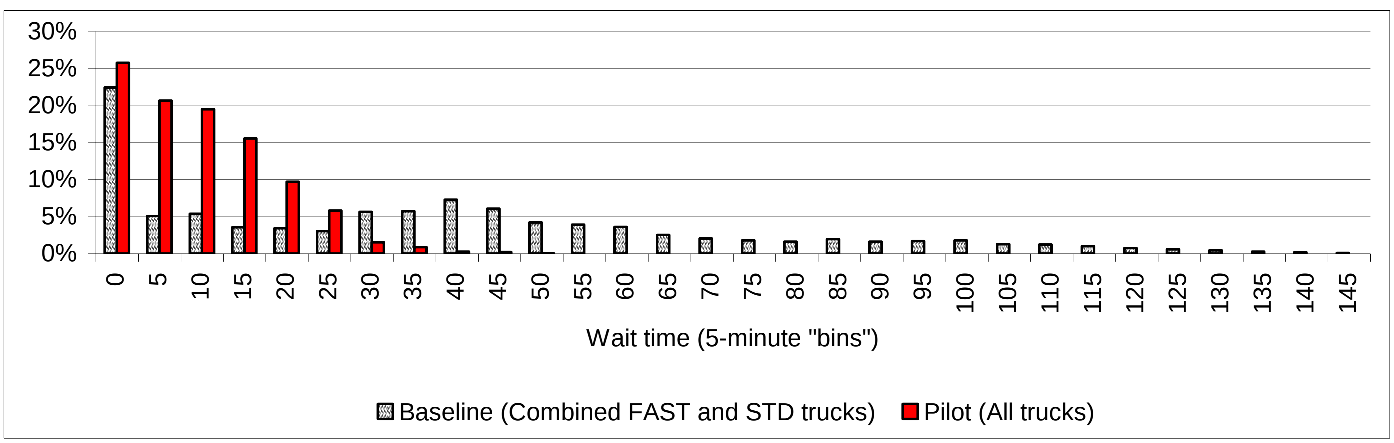
Overall averages:

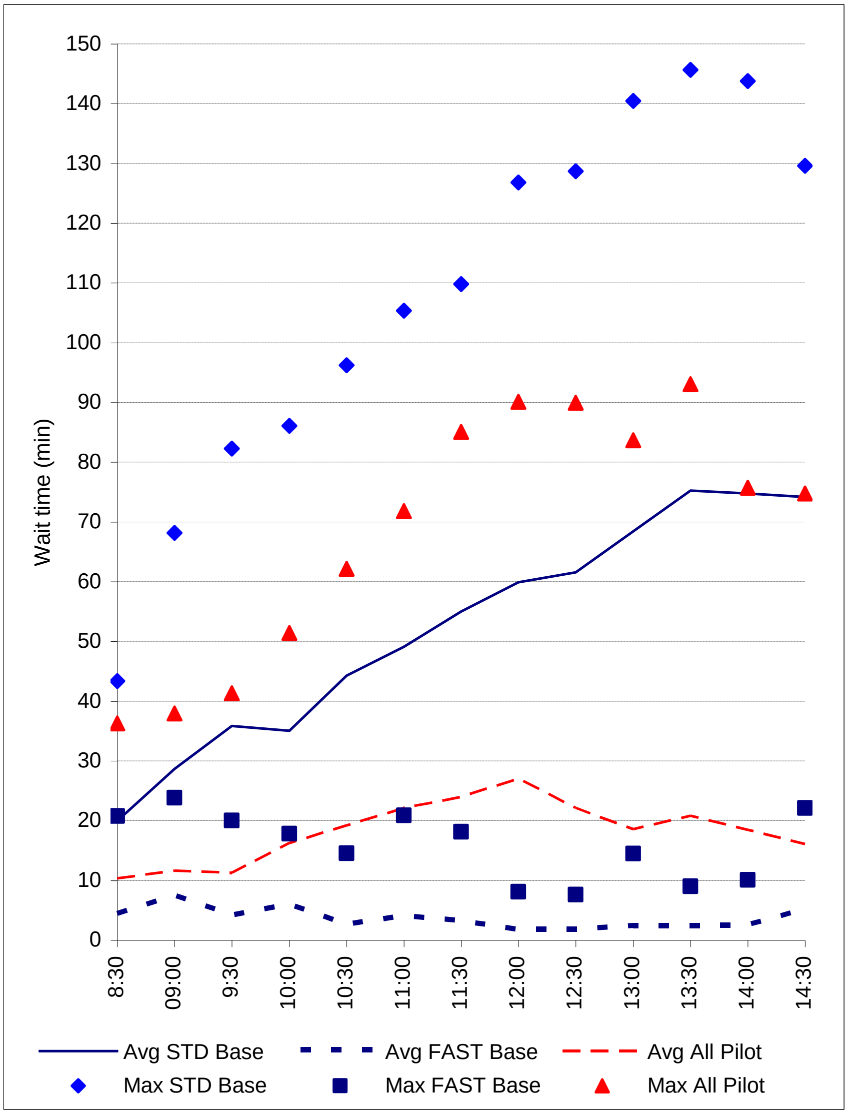
52.1 min. STD baseline

4.0 min. FAST baseline

12.1 min. All pilot

Cumulative 69.4% reduction in aggregate average wait time.





Truck Scenario 2: Mon – Fri, no pilot data excluded.

Uses 9 baseline days and 13 pilot days, regardless of whether booths were closed due to disruptions.

Similar to the "all weekdays" scenario discussed by Dr. Springer in his report of 19 May 2011.

n = 2,786 baseline

n = 5,439 pilot

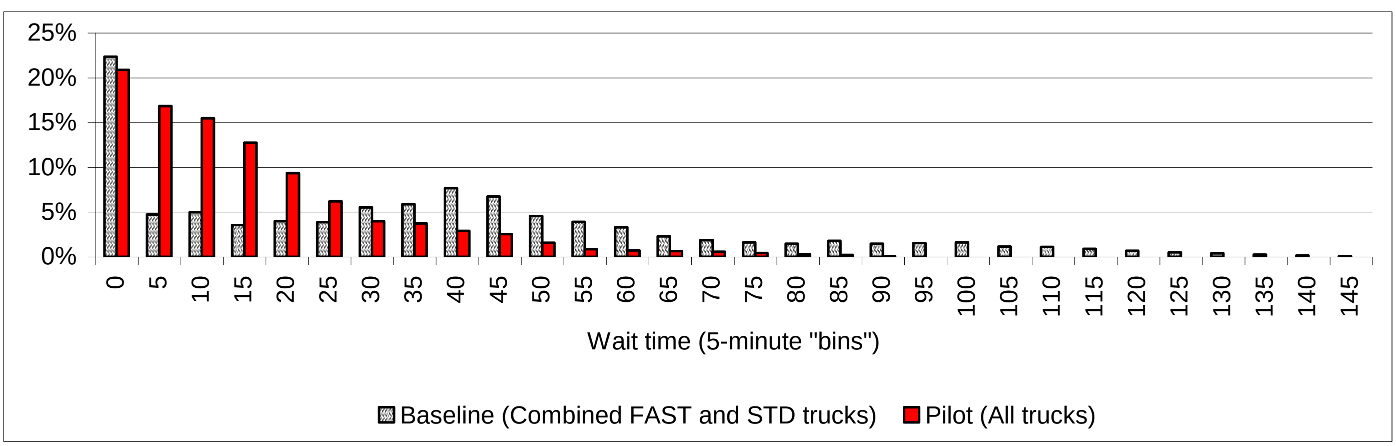
Overall averages:

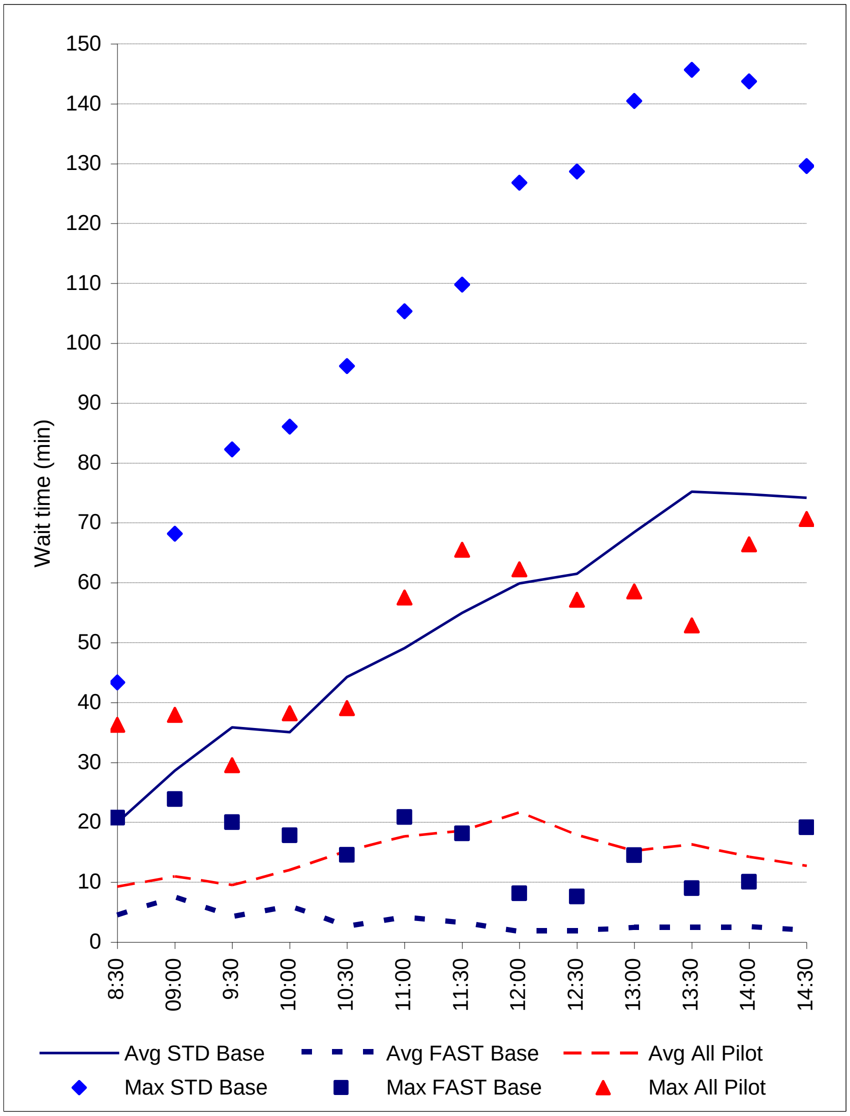
50.9 min. STD baseline

3.9 min. FAST baseline

18.2 min. All pilot

Cumulative 52.9% reduction in aggregate average wait time.





Truck Scenario 3: Mon – Fri, some data excluded.

Uses 9 baseline days and 11 pilot days, excludes 3/23 and 4/7, which were days with lengthy booth closures during mid-morning peak-arrival time.

n = 2,777 baseline

n = 4,714 pilot

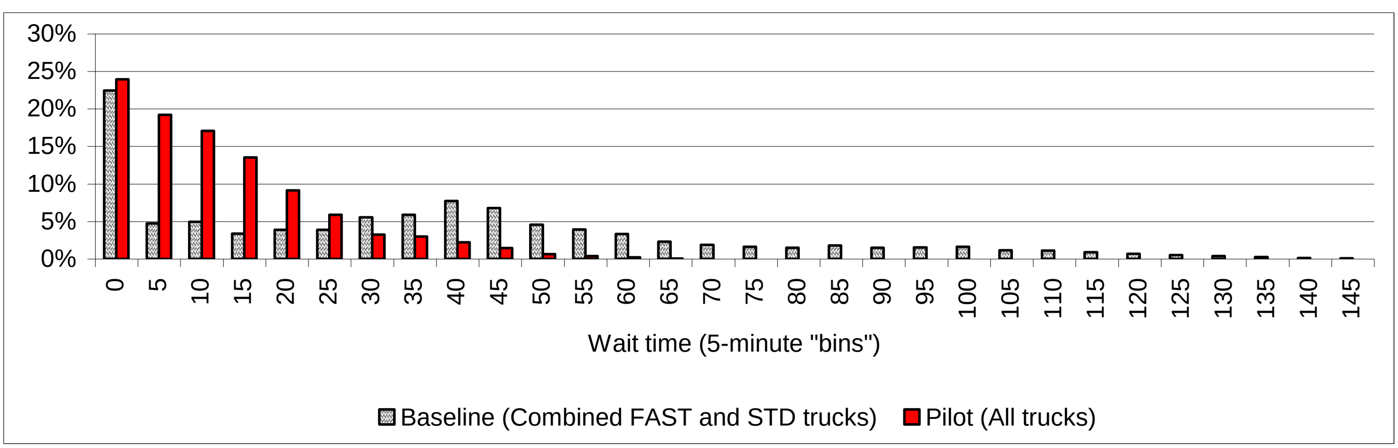
Overall averages:

50.9 min. STD baseline

3.7 min. FAST baseline

14.6 min. All pilot

Cumulative 62.1% reduction in aggregate average wait time.



Wait times – buses. We believe that *at the low traffic levels present during this project*, the pilot configuration of the approach lane to the bus plaza had no effect upon the wait times experienced by buses. In neither the baseline nor the pilot phase did our field supervisors notice an instance in which there was a significant traffic conflict between buses and the other traffic streams (i.e., the NEXUS cars during pilot phase, and NEXUS cars / FAST trucks during baseline). Basically, in neither phase of the project was the volume of bus traffic so high as to produce a queue long enough that buses were mixed in a queue with other modes. Bus traffic volumes are much higher in the period from late spring through early fall, during the Alaska cruise-ship season. It is then that the bus queue extends upstream far enough to suffer interference from other vehicle modes, so it is then that the most meaningful data could be collected.

That said, we collected the following data:

- Weekdays (Mon – Thur, 08:00 – 15:00):
    - Baseline (8 days): 103 buses, avg. 12.9/day, 00:06:17 avg. wait
    - Pilot (12 days): 199 buses, avg. 16.6/day, 00:05:56 avg. wait
- Weekends (Fri – Sun, 06:30 – 13:30):
    - Baseline (3 days): 70 buses, avg. 23.3/day, 00:09:57 avg. wait
    - Pilot (3 days): 84 buses, avg. 28/day, 00:06:56 avg. wait

The volume of bus traffic rose over the course of the seven-week project, as spring progressed and peak tourism season approached. In the pilot phase, the average wait times were slightly lower than in the baseline, despite the higher traffic volumes.

We collected our data on the outside of a "black box" about which we know nothing of the internal workings—i.e., we have no knowledge of whether CBP's service rate within the bus processing building was constant over the span of the project. Given that queues were so short as to preclude interference between vehicle modes, it was that service rate that determined the wait times experienced by buses.

As a matter of common sense, the long dedicated bus lane that is a feature of the pilot configuration will obviously provide full separation between the bus queue and other vehicle modes during times of peak bus traffic, so the possibility of buses experiencing delays caused by other modes will be negligible.

<u>Wait times – NEXUS</u>. We believe that the pilot configuration of the approach lane to the NEXUS booth had no effect upon the wait times experienced by NEXUS traffic. In neither the baseline nor the pilot phase did our field supervisors notice an instance in which there was a significant traffic conflict between the NEXUS cars and the neighboring traffic stream (i.e., the buses during pilot phase, and the buses / FAST trucks during baseline). Below are statistics and a graph pertaining to the weekday (Mon – Thur) NEXUS traffic. The average wait times for NEXUS traffic were slightly higher during the pilot phase, but the change is attributable to traffic volumes, not to approach geometry. In the pilot phase, the NEXUS volume was 14 percent higher than in the baseline.

Baseline:

8 weekdays (Mon – Thur)

4,406 recorded by CBP, average of 551 per day

n = 2,389, 54% of CBP's total

Overall average wait: 00:01:43

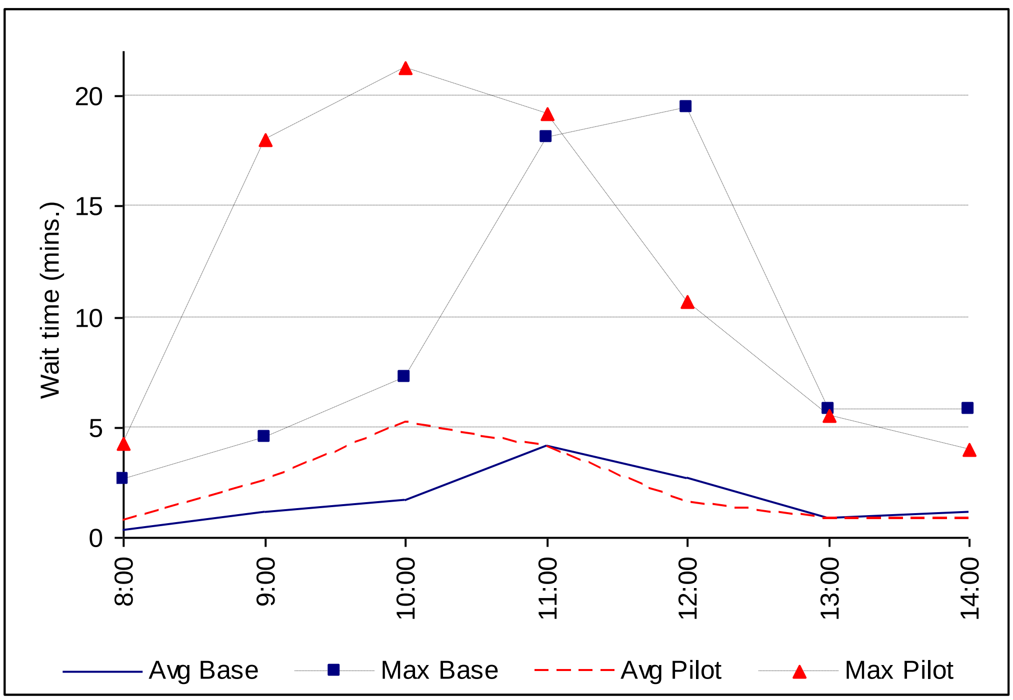
Pilot:

12 weekdays (Mon – Thur)

7,536 recorded by CBP, average of 628 per day

n = 4,653, 62% of CBP's total

Overall average wait: 00:02:27



The results for weekends (Fri – Sun) are consistent with those reported above for weekdays. The overall average waits were: 00:04:17 baseline, 00:04:22 pilot. CBP's count of traffic was: 2,208 baseline, 2,342 pilot. Each phase contained one each of Friday – Sunday.

Miscellaneous field observations. Having observed traffic behavior in the area immediately upstream of the inspection booths for many days, we noticed the following:

- **Lane striping is not optimal.** Temporary white striping and a row of candlesticks were put in place to separate the NEXUS traffic stream from the standard auto traffic. The location of the striping did not facilitate the flow of cars to the western-most standard auto inspection booth. This picture looks upstream from a point near the RPM, between the NEXUS lane (at left) and the standard auto queue (at right). CBP staff and our staff tinkered with the placement of candlesticks in an effort to coax a steady stream of autos to the western-most standard booth. Note that the candlesticks are placed well to the west of the temporary striping, bulging into the NEXUS lane. Despite this encroachment, adequate width remains in the NEXUS lane.
- **There is unequal treatment of standard auto traffic.** From the duty-free store south to the standard auto booths, the pilot configuration resulted in the presence of three highway approach lanes. These three lanes feed five standard booths (when all booths are open). We noticed that left to its own devices, the auto queue devolved into a skewed pattern. The eastern-most highway lane would funnel directly to the eastern-most booth, the middle lane would funnel to the adjacent booth, and the western-most lane would use all three remaining booths. Thus, two of the lanes crept along very slowly, while the third lane benefited from service at three booths. Some use of candlesticks in the "no-man's land" upstream of the booths would be useful to resolve this inequity.
- **Truck booth 3 is much less productive.** When trucks at booths 1 or 2 (the booths closest to the building) are sent to the VACIS, those trucks must veer north in order to reach the approach lane to the VACIS. This causes these trucks to block other trucks that are attempting to depart in a normal manner (with a turn to the south) from booth 3. The net result is that departures from booth 3 are frequently obstructed.
- **A "traffic cop" would be useful.** In the region upstream of the booths, many times each day there are traffic disruptions that would be best resolved by the presence of a person. Examples include: a truck mistakenly entering the bus lane, resulting in the need to back up far enough to make the turn onto the correct side of the median that separates the two lanes; a car mistakenly reaching the plaza, having failed to turn off Highway 15 at the last possible exit; a vehicle stalled within an approach lane, resulting in the need to divert other traffic around the vehicle; standard auto traffic failing to notice the availability of the western-most booth.
- **Trucks jump the queue.** When the queue extends well up Highway 15 (i.e., beyond 4th Avenue), a significant number of standard trucks jump the queue. They drive south from 8th Avenue in the FAST lane and then either pull into the standard queue between other trucks or make the turn onto 2nd Avenue, having bypassed many of their well behaved peers.

Appendix I

Interim Results – Blaine POE Pilot Test – FAST Lane Elimination

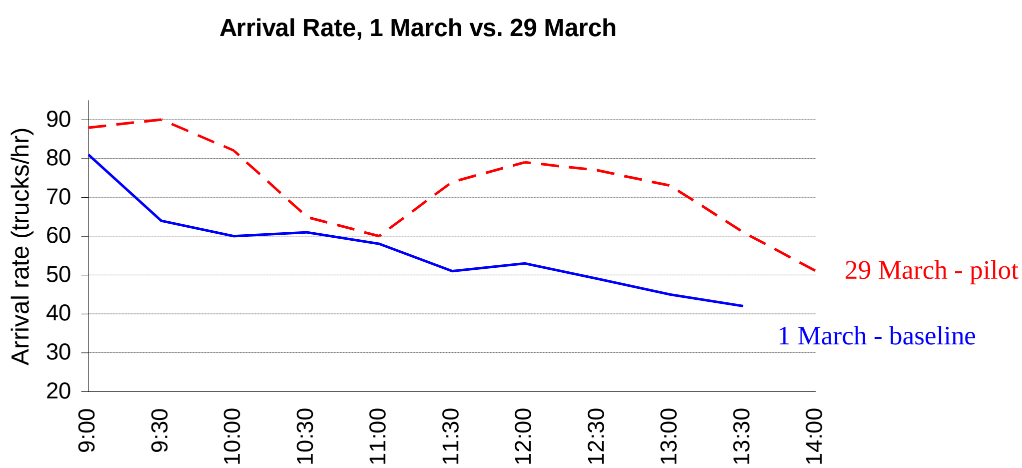
April 1, 2011

David L. Davidson
Border Policy Research Institute

Introduction. A pilot test is underway at the Blaine commercial POE, and this report provides some interim results. In this pilot test, an inspection booth and highway lane previously dedicated exclusively to FAST trucks have been eliminated, and FAST trucks have mingled with standard truck traffic traversing the POE. The inspection booth has been made available for use by all trucks, and the highway lane has been used to provide a third approach lane for automobiles. Detailed wait-time data collected in 2009, together with a queuing model, had indicated that such a configuration would greatly improve commercial throughput. USCBP issued permission to pilot-test the concept, funding was provided by the WA State Department of Transportation, and the ongoing project is being jointly undertaken by the Whatcom Council of Governments and the Border Policy Research Institute at Western Washington University.

Methodology. A field crew was deployed for 11 days (2 each of Monday – Thursday, 1 each of Friday – Sunday) to collect baseline data, in the period from 25 February through 10 March. The team collected exact wait times for over 85% of the trucks passing through the POE, using time-synchronized handheld devices stationed at the end of the queue and at the booths. The crew also measured wait times for buses and NEXUS traffic. Data for wait times in the standard automobile lanes is being collected by USCBP. After the baseline phase, the highway signage and striping upstream of the POE were modified by the B.C. Ministry of Transportation. The pilot phase is ongoing, involving 15 field days (3 each of Monday – Thursday, 1 each of Friday – Sunday) in the period from 21 March through 7 April. Ten days of pilot data are available as of this writing.

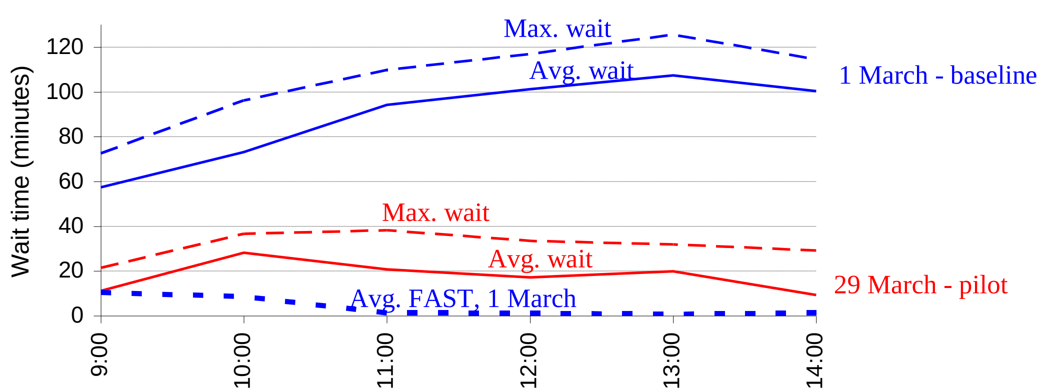
Unfavorable Traffic Scenario Has Materialized. Ideally, commercial traffic volumes would be consistent throughout the baseline and pilot phases, allowing direct comparison of data. The threat of a strike by longshoremen in B.C. has resulted in the diversion of ships to the Seattle seaport, though, resulting in significant increases in the amount of cross-border truck traffic. The traffic volume in the pilot phase has been, on average, 7% higher than during the baseline. The figure below shows the number of trucks arriving at the POE per hour for representative days in the baseline phase (1 March) and the pilot phase (29 March). Note that the pilot-phase rate is as much as 50% higher at points in the day (e.g., 80 trucks per hour at 12:00 on 29 March, vs. 53 per



hour on 1 March). ACE data shows that total truck traffic through the POE was 10% higher on 29 March than on 1 March (1,233 and 1,121, respectively). *This traffic scenario serves to make the pilot configuration appear less effective than it otherwise would.* Prior to production of our final report, our queuing model will be used to estimate the reduction in wait times that would have been experienced if the traffic had been constant in both phases.

Truck Wait Times Substantially Reduced. Despite the unfavorable traffic scenario described above, measured wait times have been substantially lower in the pilot configuration. The figure below shows the average and maximum wait times for 1 March (baseline) and 29 March (pilot). These days were chosen because they are representative of typical weekday patterns observed during each phase – i.e., there were several weekdays in the baseline phase where the average wait time behaved as shown, climbing gradually to a peak of about 105 minutes in early afternoon and then falling gradually thereafter. Likewise, most weekdays in the pilot phase have exhibited wait times *no worse* than shown, with average waits rarely approaching 25 minutes.[1] Of course, the pilot configuration is *increasing* the wait time for FAST trucks. The dotted blue line shows the average wait for a FAST truck on 1 March (baseline). During the pilot, FAST trucks experience the same waits as *all* trucks, as represented by the red lines for 29 March. The gap between the two bottom-most lines represents the added average wait time experienced by FAST trucks. The gap hovers at about 17 minutes in the figure below, but that value overstates the typical increase, because weekdays in the pilot phase have been *no worse* than shown here – i.e., some days have been much better, with average waits of less than 10 minutes through most of the day. Overall, *the pilot configuration is resulting in a reduction in aggregate average wait times of at least 65%.*

Wait Times, 1 March vs. 29 March



Why the Pilot Is So Effective. At the Blaine POE, there is a surge of southbound trucks early each weekday, as witnessed by the peak arrival rates shown in the first graph (i.e., ~80 trucks per hour at 09:00). These graphs show data from 09:00 onward, but the surge begins even earlier – we typically found lineups of 40+ trucks upon our 08:00 arrival at the POE during the baseline phase. In contrast, the aggregate service rate at the booths is about *67 per hour* in the baseline configuration (with 2 booths for standard trucks and 1 booth for FAST). In that configuration, the FAST booth is unused much of the time because of a lack of FAST-eligible traffic. With the arrival rate exceeding the aggregate service rate, the queue builds and wait times climb. Once the arrival rate falls below the aggregate service rate, the queue dissipates. Now, in the pilot

[1] There was a single day (23 March) in which the average wait time climbed to a peak of 74 minutes, but a truck stalled at a booth that morning for 30 minutes, cutting inspection capacity by 33%, and the resulting 74-minute peak still falls well short of the 105-minute peaks routinely observed during the baseline phase.

configuration, the aggregate service rate is about *76 trucks per hour*, because all 3 booths are continuously productive. That service rate almost matches the a.m. peak arrival rate of ~80 per hour, which prevents morning surges from producing large queues. Later in the day, the improved service rate is so much greater than the arrival rate that any queue caused by a cluster of arrivals is rapidly dealt with.

Final Remarks. This report focuses upon trucks. We are also gathering data for buses and NEXUS traffic, as mentioned above. Detailed analysis will be conducted at the conclusion of the pilot, but at this point it is evident from field observation that the pilot configuration is not hindering throughput of other vehicle modes. We again note that a substantial reduction in aggregate average wait time is evident even while experiencing increased traffic volumes compared to the baseline phase. We expect subsequent analysis and modeling to show that, all other things equal, the pilot configuration results in a reduction in aggregate average wait time of greater than 70%. This is an interim report, and a complete final report will be produced after the conclusion of the pilot test.

Appendix II – Spring 2011 *Border Policy Brief*
"Testing a Reconfiguration of FAST at the Blaine POE"

BORDER POLICY RESEARCH INSTITUTE
WESTERN WASHINGTON UNIVERSITY

BORDER POLICY BRIEF | SPRING 2011

Testing a Reconfiguration of FAST at the Blaine POE

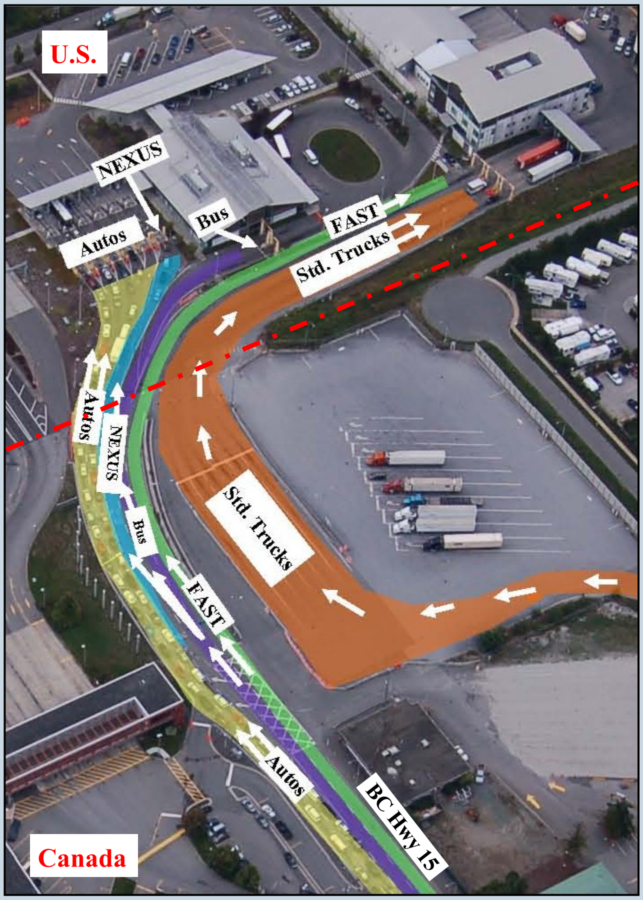
Volume 6, No. 2 Spring 2011 by David Davidson* Web Address: www.wwu.edu/bpri

There has been light usage of a dedicated southbound FAST lane and booth at the Blaine, Washington, truck crossing. A 2009 queuing model revealed that overall wait times at the port would be greatly reduced if the dedicated booth was instead made available to all trucks. In November 2010, USCBP invited our institute to conduct a pilot test of such a scenario. Working with the Whatcom Council of Governments, we completed the test in the spring of 2011. In peak traffic periods (8 a.m. to 3 p.m., Monday through Thursday), the pilot configuration resulted in an average wait time of 11.8 min. for the mingled truck traffic, as compared to wait times of 3.9 min. and 49.2 min. for FAST trucks and standard trucks, respectively, in the baseline condition.

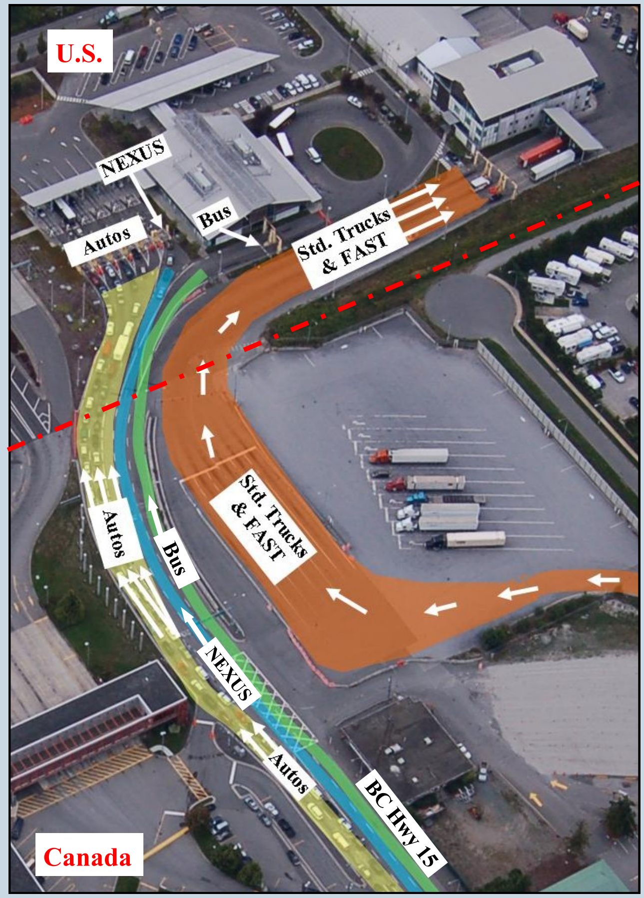
Introduction. In prior articles we have described problems with efficacy of the Free and Secure Trade (FAST) trusted-shipper program at the Blaine, Washington, port-of-entry (POE).[1] At Blaine, state and provincial transportation agencies invested in the construction of highway lanes dedicated to FAST trucks, but there has been relatively light usage of those lanes. In a 2009 field study we found that 23 percent of southbound trucks and just 2 percent of northbound trucks used the FAST lanes. Of the southbound FAST traffic, 73 percent of the trucks were empty. Southbound, the FAST lane seems primarily to be a rapid path by which a FAST carrier and driver can travel empty across the border—i.e., rather than expediting the cross-border flow of goods, FAST expedites empty backhauls and therefore serves as an incentive to inefficient freight transport, from an environmental point of view. Meanwhile, long delays are a frequent occurrence in the standard truck lanes.

Birth of a Pilot Project. Using our 2009 data, BPRI economist Mark Springer constructed a queuing model of the southbound traffic flow and analyzed some alternate highway configurations, including one in which dedicated FAST facilities were eliminated and FAST trucks mingled with standard trucks.[2] In that scenario, the aggregate wait times experienced at Blaine were predicted to be greatly reduced, albeit at the expense of trucks that now make use of the FAST lane. In November 2010, U.S. Customs and Border Protection (USCBP) proposed that a pilot project be undertaken to evaluate exactly that scenario. The proposal was broached at a meeting of the International Mobility and Trade Corridor (IMTC) project, which is a region-specific stakeholder forum that seeks to improve mobility at the four POEs that serve the I-5 corridor.[3] The IMTC is an ideal forum through which to implement such a project, in that it is attended by federal, state, and provincial transportation agencies, as well as USCBP and the Canada Border Services Agency. The BPRI agreed to conduct the project in partnership with the Whatcom Council of Governments (WCOG), which facilitates the IMTC forum. The Washington State Dept. of Transportation agreed to pay the bulk of the project cost, making use of federal Coordinated Border Infrastructure funds. The B.C. Ministry of Transportation agreed to make the necessary temporary alterations to the signage and striping that guide southbound trucks to the Blaine POE.

B.C. Hwy 15 Historical Configuration: 2 auto lanes + NEXUS + Bus + FAST



B.C. Hwy 15 Pilot Test Reconfiguration: 3 auto lanes + NEXUS + Bus



Photos courtesy of Washington State Department of Transportation

Highway Reconfiguration. The diagrams above show the configuration of the highway lanes on B.C. Highway 15 during the pilot test and during prior years. As seen in the left photo, FAST trucks typically remain on the highway, while other trucks are diverted (at a location upstream of the photo) into a queue that forms to the west (right) of the highway. The FAST trucks proceed directly to a dedicated USCBP inspection booth, and standard trucks share the remaining two booths. In the pilot configuration (right photo), the FAST trucks follow the path of standard trucks, and the three inspection booths are shared among all truck traffic. Every booth is capable of processing a FAST shipment, so a FAST truck still receives other program benefits, such as a more rapid primary inspection, less frequent referrals to secondary inspection, and “head of the line” treatment if referred to secondary. The highway lane relinquished by FAST makes possible a shuffle of modes on the highway, with the bus and NEXUS lanes shifting to the right, and the standard auto traffic gaining a third approach lane.

Methodology. A field crew was deployed for 11 days (2 each of Monday – Thursday, 1 each of Friday – Sunday) to collect baseline data in the period from February 25 through March 10, 2011. Using time-synchronized handheld devices stationed at the end of the queues and at the booths, the crew collected exact wait times for trucks, buses, and NEXUS automobiles passing through the POE between the hours of 8:00 a.m. and 3:00 p.m. After the baseline phase, the highway signage and striping upstream of the POE were modified by the B.C. Ministry of Transportation. The pilot phase involved 15 field days (3 each of Monday – Thursday, 1 each of Friday – Sunday) in the period from March 21 through April 7, 2011. During both the baseline and pilot phases, USCBP measured the wait times of standard automobile traffic using a separate methodology.

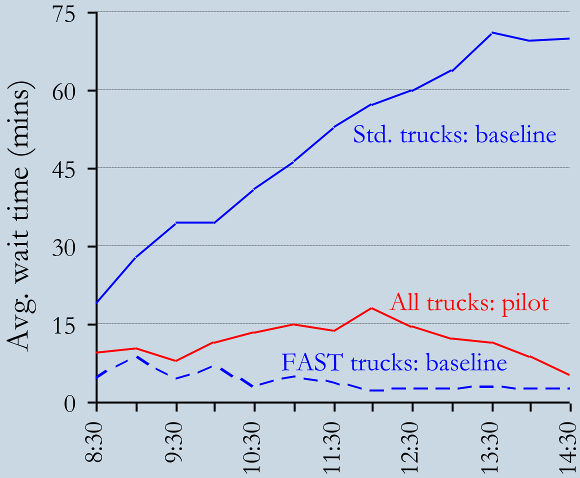


Figure 1: Hourly Profiles of Average Wait Times in Baseline (FAST & Std. Trucks) and Pilot Phases

Baseline

- Data includes 8 weekdays (Monday – Thursday)
- n = 2,226 trucks
- Overall average of 49.2 minutes for standard trucks and 3.9 minutes for FAST

Pilot

- Data includes 8 weekdays (Monday – Thursday)
- 4 other weekdays excluded because 1 or more booths were at times closed, resulting in non-pilot conditions
- n = 3,012 trucks
- Overall average of 11.8 minutes for mingled truck traffic

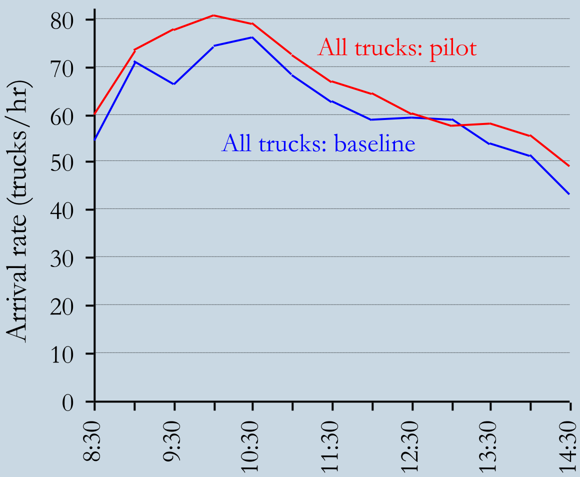


Figure 2: Hourly Profiles of Average Arrival Rates of Trucks in Baseline and Pilot Phases

Baseline

- Data includes 6 weekdays (Monday – Thursday)
- Equipment failure spoiled arrival data on 2 other weekdays
- n = 2,359 trucks
- Average 24-hour daily traffic (ACE) = 1,106 trucks[4]
- Plot line adjusted upward to account for estimated number of trucks that jumped the queue (4 per hour)

Pilot

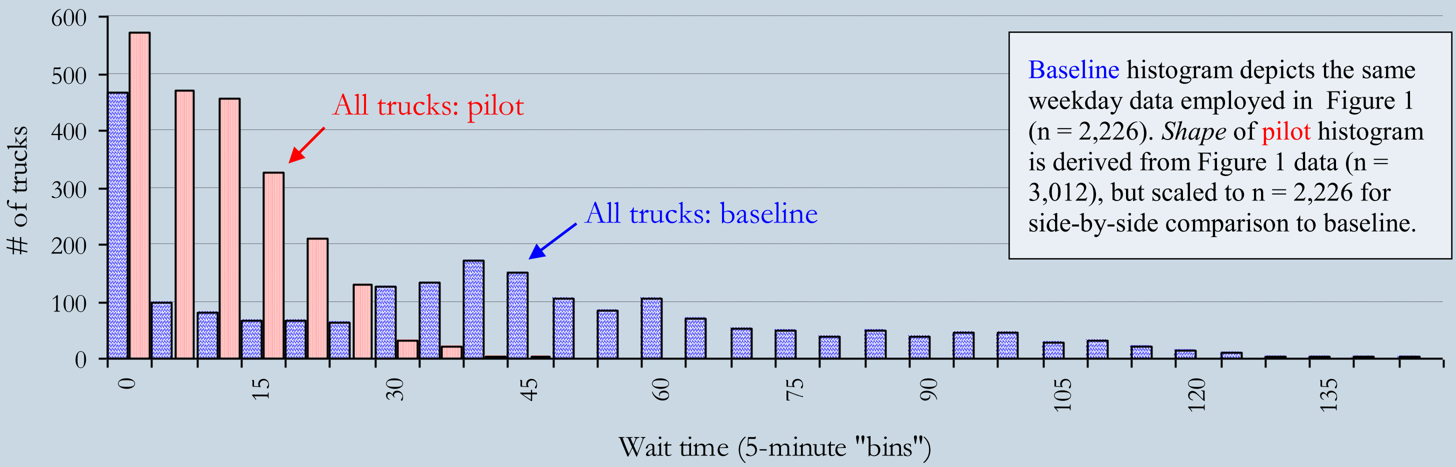
- Data includes 12 weekdays (Monday – Thursday)
- n = 5,426 trucks
- Average 24-hour daily traffic (ACE) = 1,182 trucks[4]

Results. As seen in Figure 1, FAST trucks traversed the POE very quickly in the baseline configuration, experiencing average waits no greater than 8 minutes early in the day and faring even better in the afternoon. Standard trucks experienced much greater delays, with the average climbing steadily through the morning to a plateau of about 70 minutes by early afternoon. In the pilot phase (for which a single plot line serves to depict the mingled truck traffic), average delays rose slowly to a peak of about 18 minutes at noon, then fell to less than 8 minutes by early afternoon. Figure 1 portrays the conditions on the peak traffic days, Monday through Thursday, during the hours when all booths were in use and the FAST booth was open (in baseline phase). On weekends, traffic volumes are much lower, fewer booths are in use, and no dedicated FAST booth is provided—in essence, there is no difference between the two configurations on weekends.

Clearly, the standard truck traffic stream benefits greatly from the pilot configuration. For the days and times depicted in Figure 1, *the overall average wait for standard trucks was 49.2 minutes in the baseline phase, falling to 11.8 minutes in the pilot.* Of course, the pilot configuration *increased* the wait time for FAST trucks, which had experienced an overall average of just 3.9 minutes in the baseline configuration.

Figure 2 is included in order to demonstrate the extent to which traffic volumes were comparable during the two data-collection phases. The figure shows the average number of trucks arriving per hour throughout the course of two “model” weekdays—one in the baseline phase and one in the pilot. The “model” weekdays are generated by averaging the arrival rates for a total of 18 weekdays. While the pilot-phase plot (red) is derived directly from measurements, the baseline plot (blue) includes an upward adjustment to compensate for queue-jumpers that we observed during

Figure 3: Frequency Distributions of Wait Times: Baseline vs. Pilot



that phase. The highway configuration and lengthy queues that existed in the baseline phase were conducive to queue jumping, but the conditions prevalent in the pilot phase were not.

Figure 2 demonstrates that the traffic load was slightly higher during the pilot phase. This finding is confirmed by data from USCBP's Automated Commercial Environment (ACE) system showing that the average level of daily traffic was about 6.9 percent higher during the pilot test, when focusing upon the specific weekdays used to construct Figure 2 (i.e., 1,182 trucks per day, vs. 1,106). When focusing upon the specific days used to generate Figure 1, ACE data shows a pilot-phase traffic volume that is 8.5 percent greater. *A substantial reduction in wait times was evident during the pilot test, even though traffic volumes had risen significantly since the baseline phase.* Our queuing model will be used to estimate the reduction in wait times that would have been experi-enced if the traffic had been constant in both phases.

Figure 3 is provided in order to derive an estimate of the aggregate reduction in delay that was achieved in the pilot configuration. The total delay experienced by the trucks during a given phase can be estimated by summing the delay attributable to each "bin" along the bottom axis of the plot. For example, the delay experienced by the 327 pilot-phase trucks that waited between 15 and 20 minutes (the column identified with the red arrow) can be estimated as 327 multiplied by 17.5 minutes (the midpoint of the "bin") per truck. In this manner, an estimate of 1,568 hours of wait time was derived for the baseline sample, as compared to 449 hours for the pilot. *The pilot configuration appears to yield a 71 percent reduction in aggregate wait time,* when focusing upon the peak weekday (Monday – Thursday) hours.

Final Remarks. This kind of research is invaluable when deliberating upon whether to deploy (or curtail) programs at specific POEs. Permanent deployment of the pilot configuration would yield very substantial reductions in aggregate wait time at the Blaine POE, thus helping Washington State and B.C. promote efficient trade and reduce environmental impacts. POE-specific stake-holder forums like the IMTC are a necessary kind of organizational infrastructure when striving to plan and conduct a field project within such a brief window of time. An extensive report of findings is forthcoming, and the preliminary results presented here are subject to minor revision.

Endnotes

* David Davidson is Associate Director of the BPRI.

1. See *Border Policy Brief* Vol. 4, No. 4, "Issues with Efficacy of FAST at the Cascade Gateway," retrievable from the Publications pane of our website: www.wwu.edu/bpri
2. See Research Report No. 11, "An Update on Congestion Pricing Options for Southbound Freight at the Pacific Highway Crossing," by Mark Springer, Ph.D., retrievable at www.wwu.edu/bpri
3. See information related to the IMTC at the WCOG website: www.wcog.org/Border/About-IMTC/58.aspx
4. ACE data provided by Chief (Trade/Cargo) Ronald McMillan, USCBP, April 2011

Appendix III – Tables of Detailed Summary Data

Field Definitions. These fields are found in the following tables:

- ACE hourly #. The number of trucks cleared through primary inspection (all 3 booths) within a given hour, as per the records within the Automated Commercial Environment (ACE) computer system used by CBP. ACE records provided by Chief (Trade/Cargo) Ronald McMillan, CBP.
- Total #. Similar to the above, except related to NEXUS. The number of NEXUS cars cleared through primary inspection within a given hour, as per CBP's records. NEXUS records provided by Chief (Trade/Cargo) Ronald McMillan, CBP.
- # Captured. The number of vehicles that began primary inspection within a given hour, and for which we assembled a valid wait-time record. I.e., we know when the vehicle joined the queue, when it arrived at the booth, and that it remained continuously within the queue.
- % Captured. The ratio of "# Captured" divided by either "ACE hourly #" (for trucks) or "Total #" (for NEXUS).
- Min Wait. The minimum wait time recorded for any single vehicle that began primary inspection within a given hour.
- Max Wait. The maximum wait time recorded for any single vehicle that began primary inspection within a given hour. This field is shaded for ease of reading.
- Avg Wait. The average wait time recorded for the set of vehicles that began primary inspection within a given hour. This field is shaded for ease of reading.
- Std. Dev. The standard deviation of the wait times recorded for the set of vehicles that began primary inspection within a given hour. This field is blank if the "# Captured" is 2 or less.
- # Arrivals. The number of trucks that entered the queue within a given hour. When wait times are short, arrivals generally reach the booth within that same hour, but when queues are long, arrivals do not reach the booth until a subsequent hour.

Disrupted Operations. A light gray shading is used within the tables to indicate days/hours within which CBP's operations were significantly disrupted. In some of the analyses presented within this report, data from periods of service disruption is omitted. Specific events were:

- March 7 (baseline). One of the PDAs stationed at the queue-end for standard trucks failed. As a result, the number of standard truck arrivals measured that day is erroneously low.
- March 8 (baseline). At 14:15, CBP opened the FAST booth for all trucks, leading to nonrepresentative wait-time values for the remainder of the day.
- March 23 (pilot). A truck broke down between 09:00 and 10:00, blocking one booth for at least 25 minutes.
- April 4 (pilot). Prior to 09:00, one truck booth was not in operation.
- April 6 (pilot). From 13:00 onward, truck processing was disrupted by two events: a radiation alert caused one booth to halt operations for over 10 minutes; computer system errors caused one or more booths to halt operations for over 15 minutes.
- April 7 (pilot). Between 08:00 and 11:00, computer system errors caused one truck booth to halt operations for 80 minutes and a second booth to halt for less than 15 minutes.

Trucks: Mondays, Baseline Phase

		8 to 9		9 to 10		10 to 11		11 to 12		12 to 13		13 to 14		14 to 15		15 to 16	
		FAST	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD
Mon	ACE hourly #	97		76		68		55		61		62		58		63	
28-Feb	% Captured	6%		67%		76%		55%		77%		69%		71%		6%	
274	# Captured	*4*	2	*4*	47	*10*	42	*1*	29	*5*	42	*14*	29	*15*	26	*1*	3
	Min Wait	*0:08:17*	0:20:32	*0:00:17*	0:20:52	*0:00:20*	0:07:55	*0:00:39*	0:50:25	*0:00:28*	0:55:43	*0:00:18*	0:25:29	*0:00:11*	1:12:48	*0:00:12*	0:32:39
	Avg Wait	*0:12:23*	0:20:33	*0:00:36*	0:30:43	*0:01:42*	0:44:55	*0:00:39*	1:06:39	*0:01:28*	1:09:48	*0:01:37*	1:13:22	*0:05:51*	1:37:12	*0:00:12*	1:13:55
	Std. Dev.	*0:02:41*	-	*0:00:26*	0:04:50	*0:01:11*	0:10:31	-	0:09:15	*0:01:07*	0:08:30	*0:00:48*	0:13:23	*0:04:40*	0:11:40	-	0:33:09
	Max Wait	*0:15:47*	0:20:34	*0:01:21*	0:44:56	*0:03:13*	1:06:22	*0:00:39*	1:35:03	*0:03:39*	1:31:23	*0:03:04*	1:28:36	*0:19:10*	1:57:07	*0:00:12*	1:53:48
	# Arrivals	*4*	26	*4*	68	*10*	46	*1*	47	*7*	50	*21*	37	*15*	29	*2*	0
Mon	ACE hourly #	93		63		65		66		62		60		63		50	
7-Mar	% Captured	34%		48%		58%		56%		48%		52%		51%		0%	
230	# Captured	*11*	21	*11*	19	*14*	24	*18*	19	*11*	19	*16*	15	*12*	20	*0*	0
	Min Wait	*0:00:00*	0:14:34	*0:00:38*	0:18:02	*0:00:03*	0:33:33	*0:00:06*	1:03:32	*0:00:00*	1:19:25	*0:00:00*	0:32:34	*0:00:02*	1:31:37		
	Avg Wait	*0:03:15*	0:21:28	*0:03:22*	0:33:42	*0:05:58*	0:51:41	*0:01:48*	1:12:24	*0:00:52*	1:30:39	*0:02:04*	1:34:33	*0:01:42*	1:50:07		
	Std. Dev.	*0:05:07*	0:03:52	*0:02:10*	0:09:29	*0:06:08*	0:09:07	*0:01:34*	0:05:29	*0:00:40*	0:07:52	*0:02:12*	0:19:51	*0:01:53*	0:09:11		
	Max Wait	*0:18:01*	0:28:06	*0:08:14*	0:45:48	*0:16:17*	1:06:27	*0:05:34*	1:22:05	*0:02:11*	1:46:45	*0:06:45*	1:57:22	*0:06:15*	2:09:10		
	# Arrivals	*11*	30	*16*	36	*10*	28	*18*	18	*15*	21	*17*	19	*14*	7	*0*	0

Trucks: Mondays, Pilot Phase

		8 to 9		9 to 10		10 to 11		11 to 12		12 to 13		13 to 14		14 to 15		15 to 16	
		FAST	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD
Mon	ACE hourly #	79		85		75		79		81		78		67		63	
21-Mar	% Captured	58%		89%		93%		84%		79%		78%		90%		3%	
445	# Captured		46		76		70		66		64		61		60		2
	Min Wait		0:01:18		0:02:10		0:05:01		0:06:37		0:11:18		0:04:05		0:04:00		0:08:01
	Avg Wait		0:05:56		0:10:26		0:13:40		0:21:37		0:25:16		0:18:37		0:11:21		0:12:56
	Std. Dev.		0:03:07		0:02:53		0:04:43		0:08:19		0:10:32		0:10:06		0:04:01		-
	Max Wait		0:15:15		0:19:33		0:24:23		0:44:27		0:48:48		0:50:28		0:21:11		0:17:51
	# Arrivals		50		82		85		66		54		61		47		0
Mon	ACE hourly #	77		79		89		76		69		76		58		63	
28-Mar	% Captured	81%		99%		94%		97%		88%		97%		90%		0%	
485	# Captured		62		78		84		74		61		74		52		0
	Min Wait		0:00:19		0:00:22		0:02:21		0:01:46		0:06:39		0:07:16		0:00:18		
	Avg Wait		0:03:06		0:05:49		0:09:09		0:07:01		0:15:24		0:20:00		0:09:24		
	Std. Dev.		0:01:52		0:03:34		0:04:53		0:03:14		0:04:11		0:06:18		0:05:38		
	Max Wait		0:08:13		0:17:56		0:24:22		0:13:42		0:27:25		0:37:11		0:23:49		
	# Arrivals		64		90		80		77		80		58		47		0
Mon	ACE hourly #	61		86		71		75		71		65		68		70	
4-Apr	% Captured	62%		98%		93%		85%		82%		86%		79%		0%	
420	# Captured		38		84		66		64		58		56		54		0
	Min Wait		0:07:09		0:02:31		0:02:12		0:27:34		0:29:31		0:27:12		0:17:36		
	Avg Wait		0:14:19		0:11:13		0:19:51		0:42:01		0:41:10		0:42:56		0:42:35		
	Std. Dev.		0:04:46		0:07:26		0:08:19		0:09:27		0:07:48		0:05:07		0:09:07		
	Max Wait		0:26:19		0:32:32		0:36:22		1:05:32		1:02:17		0:58:35		1:06:42		
	# Arrivals		54		74		110		64		54		58		38		0

Trucks: Tuesdays, Baseline Phase

		8 to 9		9 to 10		10 to 11		11 to 12		12 to 13		13 to 14		14 to 15		15 to 16	
		FAST	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD
Tue	ACE hourly #	84		71		72		57		56		62		51		84	
1-Mar	% Captured	11%		69%		81%		77%		59%		65%		67%		0%	
267	# Captured	*8*	1	*17*	32	*23*	35	*11*	33	*9*	24	*10*	30	*7*	27	*0*	0
	Min Wait	*0:00:24*	0:17:34	*0:00:31*	0:28:36	*0:00:28*	0:43:42	*0:00:14*	0:00:24	*0:00:22*	1:30:48	*0:00:06*	0:46:39	*0:00:08*	1:28:11		
	Avg Wait	*0:01:03*	0:17:34	*0:10:27*	0:57:27	*0:08:10*	1:13:06	*0:01:25*	1:31:24	*0:01:14*	1:40:49	*0:00:44*	1:45:05	*0:00:49*	1:40:47		
	Std. Dev	*0:00:37*	-	*0:05:47*	0:09:10	*0:05:18*	0:09:45	*0:00:53*	0:17:50	*0:00:41*	0:06:00	*0:00:32*	0:16:41	*0:00:38*	0:07:19		
	Max Wait	*0:02:01*	0:17:34	*0:18:20*	1:12:38	*0:17:49*	1:36:13	*0:03:07*	1:49:47	*0:02:38*	1:56:54	*0:01:55*	2:05:37	*0:01:41*	1:54:29		
	# Arrivals	*16*	38	*18*	51	*16*	46	*11*	31	*10*	36	*10*	26	*7*	30	*0*	0
Tue	ACE hourly #	86		66		59		64		55		60		67		71	
8-Mar	% Captured	14%		80%		78%		92%		75%		90%		81%		1%	
320	# Captured	*11*	1	*16*	37	*14*	32	*23*	36	*13*	28	*17*	37	*12*	42	*1*	0
	Min Wait	*0:02:22*	0:43:22	*0:00:15*	0:52:47	*0:01:19*	0:39:16	*0:01:25*	0:38:01	*0:01:20*	1:28:24	*0:01:18*	0:54:23	*0:01:31*	0:30:11	*0:18:52*	
	Avg Wait	*0:09:58*	0:43:22	*0:02:20*	1:04:32	*0:02:38*	1:13:48	*0:12:08*	1:28:56	*0:04:19*	1:53:33	*0:06:25*	2:08:10	*0:15:31*	1:44:44	*0:18:52*	
	Std. Dev	*0:06:44*	0:00:00	*0:01:13*	0:06:34	*0:01:01*	0:11:01	*0:04:54*	0:11:09	*0:02:29*	0:07:20	*0:04:26*	0:14:15	*0:06:13*	0:26:08	*0:00:00*	
	Max Wait	*0:20:45*	0:43:22	*0:05:17*	1:22:16	*0:04:31*	1:30:38	*0:20:54*	1:45:22	*0:07:37*	2:08:41	*0:14:29*	2:25:39	*0:22:08*	2:23:45	*0:18:52*	
	# Arrivals	*12*	39	*16*	53	*16*	52	*21*	40	*15*	25	*17*	25	*20*	22	*0*	0

Trucks: Tuesdays, Pilot Phase

		8 to 9		9 to 10		10 to 11		11 to 12		12 to 13		13 to 14		14 to 15		15 to 16	
		FAST	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD
Tue	ACE hourly #	85		100		74		83		65		68		77		60	
22-Mar	% Captured	35%		88%		95%		88%		89%		94%		79%		0%	
444	# Captured		30		88		70		73		58		64		61		0
	Min Wait		0:15:00		0:03:35		0:02:56		0:08:24		0:00:17		0:00:21		0:00:21		
	Avg Wait		0:23:07		0:17:29		0:11:12		0:17:44		0:12:25		0:04:20		0:03:53		
	Std. Dev		0:06:58		0:07:19		0:04:23		0:06:48		0:07:13		0:03:02		0:03:01		
	Max Wait		0:36:17		0:37:58		0:24:12		0:40:13		0:28:02		0:14:49		0:13:56		
	# Arrivals		55		74		77		73		43		65		63		0
Tue	ACE hourly #	79		71		71		84		86		67		80		63	
29-Mar	% Captured	71%		96%		83%		90%		90%		78%		89%		0%	
459	# Captured		56		68		59		76		77		52		71		0
	Min Wait		0:01:28		0:01:20		0:13:35		0:06:04		0:07:44		0:09:22		0:00:23		
	Avg Wait		0:06:46		0:11:52		0:26:15		0:20:41		0:18:08		0:19:39		0:09:34		
	Std. Dev		0:02:23		0:05:21		0:05:11		0:06:37		0:06:04		0:05:03		0:09:39		
	Max Wait		0:12:04		0:26:50		0:36:42		0:38:10		0:33:34		0:31:59		0:34:41		
	# Arrivals		64		87		64		73		72		54		62		1
Tue	ACE hourly #	101		79		71		70		90		69		75		58	
5-Apr	% Captured	62%		99%		99%		97%		94%		96%		100%		0%	
505	# Captured		63		78		70		68		85		66		75		0
	Min Wait		0:07:26		0:00:19		0:01:49		0:10:34		0:07:34		0:11:00		0:02:34		
	Avg Wait		0:13:58		0:06:03		0:10:35		0:20:34		0:18:24		0:18:10		0:14:26		
	Std. Dev		0:03:25		0:05:02		0:03:46		0:04:57		0:05:31		0:04:40		0:05:51		
	Max Wait		0:20:30		0:19:05		0:18:23		0:34:01		0:40:33		0:30:26		0:31:23		
	# Arrivals		82		64		88		72		79		68		59		0

Trucks: Wednesdays, Baseline Phase

		8 to 9		9 to 10		10 to 11		11 to 12		12 to 13		13 to 14		14 to 15		15 to 16	
		FAST	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD
Wed	ACE hourly #	37		70		92		75		55		72		57		56	
2-Mar	% Captured	24%		96%		77%		80%		78%		75%		88%		2%	
355	# Captured	*7*	2	*19*	48	*14*	57	*17*	43	*5*	38	*9*	45	*12*	38	*0*	1
	Min Wait	*0:00:30*	0:25:47	*0:00:32*	0:32:58	*0:00:35*	0:29:21	*0:00:13*	0:33:11	*0:00:20*	0:35:36	*0:00:08*	0:37:36	*0:00:14*	0:35:17		0:57:19
	Avg Wait	*0:01:20*	0:27:22	*0:16:36*	0:44:25	*0:07:37*	0:43:49	*0:01:53*	0:44:19	*0:01:29*	0:50:57	*0:01:36*	0:55:39	*0:01:24*	0:44:02		0:57:19
	Std. Dev.	*0:00:58*	-	*0:06:43*	0:06:53	*0:04:58*	0:08:30	*0:01:28*	0:06:52	*0:01:43*	0:08:46	*0:01:51*	0:15:28	*0:01:21*	0:04:39		-
	Max Wait	*0:03:29*	0:28:57	*0:23:51*	1:08:12	*0:14:34*	1:04:57	*0:04:50*	0:59:33	*0:04:52*	1:13:10	*0:06:30*	1:29:21	*0:04:19*	0:54:38		0:57:19
	# Arrivals	*13*	42	*13*	50	*16*	59	*17*	49	*4*	48	*11*	38	*13*	31	*0*	0
Wed	ACE hourly #	83		69		90		52		69		56		50		54	
9-Mar	% Captured	41%		87%		83%		90%		93%		86%		80%		0%	
368	# Captured	*14*	20	*9*	51	*22*	53	*8*	39	*13*	51	*13*	35	*11*	29	*0*	0
	Min Wait	*0:00:16*	0:30:23	*0:00:17*	0:26:16	*0:00:17*	0:23:44	*0:00:14*	0:29:46	*0:00:12*	0:24:12	*0:00:13*	0:31:05	*0:00:14*	0:47:09		
	Avg Wait	*0:02:48*	0:36:51	*0:01:09*	0:39:35	*0:02:50*	0:37:28	*0:00:46*	0:42:00	*0:01:12*	0:42:42	*0:02:44*	0:45:54	*0:00:48*	1:02:18		
	Std. Dev.	*0:03:29*	0:03:45	*0:00:51*	0:05:46	*0:01:56*	0:09:11	*0:00:43*	0:09:46	*0:01:08*	0:09:22	*0:03:05*	0:10:46	*0:00:37*	0:11:46		
	Max Wait	*0:10:25*	0:42:15	*0:02:29*	0:49:38	*0:07:02*	1:03:18	*0:02:17*	1:12:18	*0:04:18*	1:19:11	*0:09:01*	1:28:41	*0:02:01*	1:33:57		
	# Arrivals	*14*	53	*9*	53	*22*	52	*8*	45	*15*	47	*12*	41	*11*	28	*0*	0

Trucks: Wednesdays, Pilot Phase

		8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16
		FAST STD	*FAST* STD	*FAST* STD	*FAST* STD	*FAST* STD	*FAST* STD	*FAST* STD	*FAST* STD
Wed	ACE hourly #	90	55	77	64	73	64	77	73
23-Mar	% Captured	36%	82%	73%	69%	82%	78%	86%	0%
353	# Captured	32	45	56	44	60	50	66	0
	Min Wait	0:12:19	0:10:12	0:38:40	0:52:57	0:39:03	0:20:26	0:14:10	
	Avg Wait	0:23:32	0:25:33	0:48:31	1:08:32	1:15:19	1:07:07	0:44:46	
	Std. Dev.	0:04:06	0:08:56	0:04:38	0:06:53	0:09:22	0:14:08	0:13:37	
	Max Wait	0:30:08	0:41:19	1:02:08	1:25:03	1:30:08	1:33:05	1:15:44	
	# Arrivals	49	81	70	51	43	46	40	0
Wed	ACE hourly #	54	67	84	81	74	70	62	51
30-Mar	% Captured	63%	97%	93%	95%	95%	94%	84%	0%
442	# Captured	34	65	78	77	70	66	52	0
	Min Wait	0:00:13	0:00:17	0:01:48	0:00:42	0:00:26	0:00:25	0:00:08	
	Avg Wait	0:01:19	0:03:17	0:08:05	0:06:18	0:09:26	0:07:15	0:02:19	
	Std. Dev.	0:01:10	0:02:24	0:04:01	0:03:52	0:04:07	0:03:36	0:02:13	
	Max Wait	0:05:20	0:12:44	0:18:11	0:16:42	0:21:48	0:13:36	0:11:45	
	# Arrivals	35	71	83	75	74	61	52	0
Wed	ACE hourly #	72	86	74	77	88	50	60	67
6-Apr	% Captured	65%	90%	89%	82%	78%	82%	60%	0%
399	# Captured	47	77	66	63	69	41	36	0
	Min Wait	0:04:08	0:08:57	0:13:25	0:25:16	0:19:25	0:20:42	0:36:19	
	Avg Wait	0:11:05	0:17:38	0:24:59	0:37:51	0:33:45	0:38:34	0:52:56	
	Std. Dev.	0:04:51	0:04:36	0:06:17	0:05:03	0:05:41	0:08:49	0:07:47	
	Max Wait	0:26:58	0:28:58	0:39:05	0:51:45	0:45:37	0:52:53	1:10:41	
	# Arrivals	67	82	86	58	67	53	43	0

Trucks: Thursdays, Baseline Phase

		8 to 9		9 to 10		10 to 11		11 to 12		12 to 13		13 to 14		14 to 15		15 to 16	
		FAST	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD
Thur	ACE hourly #	74		73		62		64		62		65		52		44	
3-Mar	% Captured	54%		93%		98%		95%		87%		85%		75%		0%	
378	# Captured	*10*	30	*11*	57	*14*	47	*19*	42	*10*	44	*13*	42	*10*	29	*0*	0
	Min Wait	*0:00:19*	0:05:28	*0:00:13*	0:00:17	*0:00:14*	0:00:13	*0:00:18*	0:19:35	*0:00:26*	0:30:20	*0:00:12*	0:22:32	*0:00:15*	0:25:25		
	Avg Wait	*0:02:51*	0:12:51	*0:01:02*	0:09:23	*0:01:50*	0:06:58	*0:02:35*	0:27:43	*0:02:43*	0:45:52	*0:01:08*	0:42:42	*0:01:10*	0:37:58		
	Std. Dev.	*0:02:38*	0:03:35	*0:00:46*	0:04:43	*0:01:17*	0:06:10	*0:01:48*	0:05:59	*0:02:35*	0:08:56	*0:00:56*	0:09:44	*0:00:50*	0:07:54		
	Max Wait	*0:09:40*	0:21:43	*0:02:29*	0:18:37	*0:04:47*	0:22:11	*0:07:40*	0:43:00	*0:08:07*	1:04:05	*0:03:27*	1:06:51	*0:02:44*	0:53:24		
	# Arrivals	*10*	46	*12*	42	*16*	64	*16*	64	*10*	37	*15*	34	*9*	31	*0*	0
Thur	ACE hourly #	79		63		75		70		60		44		67		57	
10-Mar	% Captured	77%		92%		97%		96%		88%		89%		75%		0%	
401	# Captured	*15*	46	*12*	46	*22*	51	*10*	57	*14*	39	*7*	32	*8*	42	*0*	0
	Min Wait	*0:00:17*	0:05:12	*0:00:21*	0:00:13	*0:00:16*	0:08:54	*0:00:14*	0:13:59	*0:00:09*	0:18:07	*0:00:14*	0:42:12	*0:00:12*	0:45:04		
	Avg Wait	*0:07:14*	0:11:50	*0:05:04*	0:04:15	*0:05:03*	0:16:09	*0:00:33*	0:26:43	*0:01:42*	0:31:09	*0:01:18*	0:55:31	*0:01:19*	0:57:24		
	Std. Dev.	*0:05:20*	0:03:04	*0:03:59*	0:03:37	*0:04:29*	0:04:21	*0:00:36*	0:09:59	*0:01:12*	0:08:13	*0:00:59*	0:07:22	*0:00:57*	0:05:44		
	Max Wait	*0:13:14*	0:19:27	*0:12:06*	0:14:13	*0:12:37*	0:26:25	*0:02:21*	0:52:10	*0:04:01*	0:57:26	*0:02:58*	1:08:04	*0:03:13*	1:16:46		
	# Arrivals	*19*	50	*9*	52	*22*	66	*10*	50	*15*	52	*7*	43	*8*	22	*0*	0

Trucks: Thursdays, Pilot Phase

		8 to 9		9 to 10		10 to 11		11 to 12		12 to 13		13 to 14		14 to 15		15 to 16	
		FAST	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD
Thur	ACE hourly #	85		64		63		71		53		66		65		64	
24-Mar	% Captured	71%		95%		102%		94%		98%		95%		98%		2%	
432	# Captured		60		61		64		67		52		63		64		1
	Min Wait		0:00:26		0:00:01		0:00:15		0:00:17		0:00:12		0:00:24		0:00:11		0:03:28
	Avg Wait		0:04:46		0:03:30		0:06:16		0:05:08		0:01:57		0:04:06		0:02:45		0:03:28
	Std. Dev.		0:02:20		0:02:46		0:04:03		0:03:10		0:01:40		0:03:13		0:02:22		-
	Max Wait		0:10:14		0:10:34		0:20:14		0:11:55		0:07:07		0:14:08		0:12:03		0:03:28
	# Arrivals		66		59		68		62		57		69		60		0
Thur	ACE hourly #	81		79		92		80		86		55		54		53	
31-Mar	% Captured	75%		94%		88%		95%		83%		93%		93%		0%	
464	# Captured		61		74		81		76		71		51		50		0
	Min Wait		0:09:17		0:05:16		0:09:10		0:11:54		0:02:17		0:00:15		0:00:15		
	Avg Wait		0:15:48		0:15:02		0:21:04		0:20:36		0:24:50		0:02:48		0:02:15		
	Std. Dev.		0:03:04		0:04:35		0:04:47		0:05:46		0:08:12		0:02:38		0:02:11		
	Max Wait		0:22:53		0:28:07		0:32:06		0:35:39		0:46:26		0:13:53		0:09:04		
	# Arrivals		78		88		77		79		48		50		50		0
Thur	ACE hourly #	53		45		66		85		77		71		59		75	
7-Apr	% Captured	81%		109%		92%		82%		88%		85%		71%		0%	
393	# Captured		43		49		61		70		68		60		42		0
	Min Wait		0:00:18		0:08:18		0:32:54		0:34:18		0:11:22		0:11:50		0:09:52		
	Avg Wait		0:06:01		0:18:59		0:41:55		0:48:33		0:30:33		0:22:17		0:26:26		
	Std. Dev.		0:07:09		0:05:38		0:05:50		0:05:59		0:07:42		0:05:21		0:08:54		
	Max Wait		0:28:11		0:34:15		0:59:37		0:58:20		0:49:27		0:35:16		0:46:54		
	# Arrivals		61		86		64		58		59		58		34		0

Trucks: Baseline Phase, Off-Peak Days of Week

		6 to 7		7 to 8		8 to 9		9 to 10		10 to 11		11 to 12		12 to 13		13 to 14	
		FAST	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD	*FAST*	STD
Fri	ACE hourly #	58		71		87		70		62		70		46		49	
25-Feb	% Captured	0%		44%		84%		77%		87%		84%		83%		0%	
309	# Captured	*0*	0	*0*	31	*13*	60	*12*	42	*15*	39	*11*	48	*8*	30	*0*	0
	Min Wait				0:11:56	*0:00:19*	0:13:36	*0:00:19*	0:17:44	*0:00:09*	0:20:25	*0:00:17*	0:35:49	*0:00:08*	0:41:36		
	Avg Wait				0:25:26	*0:07:46*	0:26:00	*0:02:36*	0:28:59	*0:01:03*	0:35:48	*0:01:10*	0:46:15	*0:00:47*	0:50:52		
	Std. Dev.				0:06:32	*0:06:56*	0:05:09	*0:02:11*	0:08:02	*0:01:02*	0:08:12	*0:00:49*	0:04:58	*0:00:31*	0:04:11		
	Max Wait				0:43:36	*0:19:40*	0:37:19	*0:06:15*	0:51:41	*0:03:31*	0:49:26	*0:02:26*	0:59:01	*0:01:45*	0:59:53		
	# Arrivals	*0*	0	*0*	65	*15*	46	*12*	54	*15*	47	*12*	45	*9*	23	*0*	0
Sat	ACE hourly #	22		24		29		28		32		49		30		27	
26-Feb	% Captured	5%		96%		90%		93%		88%		86%		93%		56%	
189	# Captured	*0*	1	*0*	23	*0*	26	*0*	26	*2*	26	*10*	32	*3*	25	*0*	15
	Min Wait		0:01:09		0:00:31		0:12:21		0:14:27	*0:17:39*	0:18:31	*0:08:00*	0:27:21	*0:02:39*	0:00:23		0:06:13
	Avg Wait		0:01:09		0:05:38		0:21:23		0:34:34	*0:17:56*	0:46:42	*0:17:08*	0:43:22	*0:10:03*	0:14:36		0:08:51
	Std. Dev.		-		0:02:58		0:05:58		0:14:24	-	0:18:11	*0:04:15*	0:08:12	*0:05:49*	0:14:30		0:01:32
	Max Wait		0:01:09		0:10:43		0:33:11		0:57:11	*0:18:13*	1:15:53	*0:21:57*	1:05:07	*0:16:52*	0:42:21		0:11:36
	# Arrivals	*0*	2	*0*	35	*0*	37	*0*	25	*5*	35	*8*	17	*2*	20	*0*	19
Sun	ACE hourly #	19		20		19		22		30		29		28		18	
6-Mar	% Captured	37%		95%		95%		100%		83%		100%		96%		67%	
159	# Captured	*0*	7	*2*	17	*2*	16	*4*	18	*7*	18	*9*	20	*7*	20	*4*	8
	Min Wait		0:00:17	*0:02:36*	0:00:27	*0:00:31*	0:00:11	*0:00:35*	0:00:26	*0:00:30*	0:00:10	*0:00:24*	0:00:15	*0:00:48*	0:00:38	*0:00:26*	0:00:32
	Avg Wait		0:00:45	*0:02:57*	0:01:38	*0:00:37*	0:02:31	*0:01:28*	0:02:58	*0:01:50*	0:04:39	*0:01:19*	0:06:10	*0:01:43*	0:04:36	*0:00:28*	0:03:31
	Std. Dev.		0:00:28	-	0:00:51	-	0:01:49	*0:00:54*	0:02:38	*0:00:59*	0:03:17	*0:01:19*	0:02:54	*0:00:54*	0:02:45	*0:00:02*	0:02:05
	Max Wait		0:01:47	*0:03:18*	0:03:13	*0:00:43*	0:05:34	*0:02:45*	0:09:03	*0:03:33*	0:09:56	*0:04:45*	0:09:58	*0:03:44*	0:09:02	*0:00:32*	0:06:04
	# Arrivals	*1*	8	*1*	19	*3*	17	*3*	16	*9*	19	*9*	21	*7*	21	*4*	5

Trucks: Pilot Phase, Off-Peak Days of Week

		6 to 7 STD	7 to 8 STD	8 to 9 STD	9 to 10 STD	10 to 11 STD	11 to 12 STD	12 to 13 STD	13 to 14 STD
Fri	ACE hourly #	48	96	84	78	76	61	66	72
25-Mar	% Captured		31%	95%	95%	100%	98%	95%	75%
437	# Captured	0	30	80	74	76	60	63	54
	Min Wait		0:17:42	0:00:17	0:00:23	0:00:20	0:00:06	0:00:20	0:00:14
	Avg Wait		0:26:35	0:09:47	0:07:14	0:03:25	0:02:58	0:12:47	0:05:03
	Std. Dev.		0:06:33	0:07:59	0:03:32	0:02:52	0:02:41	0:06:32	0:02:29
	Max Wait		0:43:01	0:31:32	0:15:47	0:13:59	0:12:22	0:24:40	0:11:13
	# Arrivals	0	50	62	85	67	78	45	55
Sat	ACE hourly #	31	39	33	32	31	39	27	34
2-Apr	% Captured	0%	92%	97%	100%	94%	90%	100%	3%
192	# Captured	0	36	32	32	29	35	27	1
	Min Wait		0:00:15	0:00:15	0:00:16	0:00:19	0:00:27	0:00:11	0:04:31
	Avg Wait		0:04:37	0:01:25	0:02:56	0:02:51	0:05:17	0:01:56	0:04:31
	Std. Dev.		0:05:34	0:01:30	0:02:47	0:02:25	0:02:38	0:02:00	-
	Max Wait		0:17:40	0:05:30	0:10:38	0:07:52	0:11:46	0:07:15	0:04:31
	# Arrivals	7	33	29	32	33	37	24	0
Sun	ACE hourly #	16	21	25	28	28	25	24	13
27-Mar	% Captured	6%	100%	100%	96%	100%	92%	100%	85%
160	# Captured	1	21	25	27	28	23	24	11
	Min Wait	0:02:43	0:00:15	0:00:09	0:00:03	0:00:10	0:00:09	0:00:11	0:00:15
	Avg Wait	0:02:43	0:01:00	0:01:08	0:00:45	0:01:14	0:01:08	0:01:34	0:01:26
	Std. Dev.	-	0:01:15	0:01:17	0:00:46	0:01:12	0:01:24	0:01:32	0:02:15
	Max Wait	0:02:43	0:05:01	0:04:47	0:03:37	0:05:25	0:04:54	0:06:08	0:07:28
	# Arrivals	1	21	25	27	28	24	23	11

Bus: Weekend Days, Baseline Phase

		6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14
Fri	Count	0	5	6	1	5	1	1	0
25-Feb	Min		0:00:38	0:00:52	-	0:00:09	-	-	
	Avg		0:02:38	0:11:12	0:53:40	0:06:32	0:02:26	0:05:28	
	Max		0:03:34	0:23:48	-	0:18:19	-	-	
Sat	Count	0	4	7	5	1	2	1	2
26-Feb	Min		0:01:29	0:04:30	0:04:51	-	0:01:37	-	0:02:46
	Avg		0:12:37	0:23:17	0:21:47	0:03:33	0:03:50	0:05:37	0:03:32
	Max		0:16:30	0:34:24	0:30:54	-	0:06:02	-	0:04:17
Sun	Count	3	6	8	1	5	2	3	1
6-Mar	Min	0:00:38	0:00:56	0:01:44	-	0:00:20	0:02:32	0:02:14	-
	Avg	0:01:20	0:02:41	0:07:26	0:29:43	0:05:54	0:03:33	0:05:21	0:13:45
	Max	0:01:50	0:05:40	0:17:24	-	0:21:06	0:04:34	0:08:30	-

Bus: Weekend Days, Pilot Phase

Fri	Count	3	8	5	2	5	1	3	4
25-Mar	Min	0:01:19	0:03:34	0:00:13	0:14:27	0:13:33	-	0:02:07	0:06:23
	Avg	0:02:27	0:10:31	0:09:57	0:20:05	0:24:43	0:12:29	0:03:09	0:07:58
	Max	0:03:35	0:30:37	0:20:35	0:25:43	0:33:38	-	0:03:42	0:10:59
Sat	Count	1	9	8	5	1	3	0	0
2-Apr	Min	-	0:01:16	0:09:03	0:00:22	-	0:00:05		
	Avg	0:02:42	0:04:35	0:20:05	0:06:50	0:00:57	0:04:20		
	Max	-	0:08:09	0:26:10	0:24:39	-	0:10:26		
Sun	Count	2	2	7	5	3	0	4	3
27-Mar	Min	0:01:37	0:01:59	0:01:15	0:02:49	0:00:55		0:00:17	0:00:28
	Avg	0:05:41	0:02:39	0:06:31	0:08:24	0:01:57		0:05:32	0:02:10
	Max	0:09:46	0:03:19	0:11:55	0:13:24	0:03:49		0:13:59	0:04:09

Bus: Weekdays, Baseline Phase

		7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15
Mon	Count	0	0	4	0	1	1	4	0
28-Feb	Min			0:01:00		-	-	0:03:43	
	Avg			0:03:11		0:23:57	0:02:59	0:08:01	
	Max			0:05:35		-	-	0:10:32	
Tue	Count	0	2	4	2	1	3	1	0
1-Mar	Min		0:00:47	0:00:19	0:00:39	-	0:00:58	-	
	Avg		0:01:38	0:03:46	0:01:03	0:01:23	0:02:06	0:01:13	
	Max		0:02:30	0:09:50	0:01:27	-	0:04:00	-	
Wed	Count	0	2	2	1	1	3	1	0
2-Mar	Min		0:00:36	0:01:37	-	-	0:01:03	-	
	Avg		0:00:55	0:02:12	0:01:34	0:12:53	0:03:54	0:02:02	
	Max		0:01:14	0:02:47	-	-	0:08:21	-	
Thur	Count	0	3	2	3	2	3	1	0
3-Mar	Min		0:00:24	0:01:01	0:01:55	0:01:07	0:00:08	-	
	Avg		0:01:16	0:01:24	0:07:35	0:01:16	0:01:51	0:00:40	
	Max		0:02:22	0:01:47	0:17:59	0:01:26	0:02:57	-	
Mon	Count	0	2	5	1	2	3	2	0
7-Mar	Min		0:03:37	0:01:52	-	0:11:47	0:01:49	0:01:32	
	Avg		0:05:41	0:08:14	0:07:56	0:14:24	0:13:23	0:05:11	
	Max		0:07:45	0:14:44	-	0:17:01	0:19:10	0:08:50	
Tue	Count	0	2	5	2	1	1	1	0
8-Mar	Min		0:00:30	0:09:12	0:02:18	-	-	-	
	Avg		0:00:52	0:19:29	0:06:45	0:01:44	0:03:06	0:10:46	
	Max		0:01:14	0:26:41	0:11:12	-	-	-	
Wed	Count	0	5	2	1	3	1	1	0
9-Mar	Min		0:00:04	0:01:18	-	0:07:54	-	-	
	Avg		0:02:12	0:02:19	0:07:22	0:14:23	0:04:27	0:07:33	
	Max		0:04:20	0:03:20	-	0:27:00	-	-	
Thur	Count	0	4	1	3	5	1	1	1
10-Mar	Min		0:02:58	-	0:18:06	0:01:35	-	-	-
	Avg		0:04:24	0:18:03	0:37:17	0:33:50	0:05:05	0:05:23	0:07:20
	Max		0:06:56	-	1:02:15	0:54:23	-	-	-

Bus: Weekdays, Pilot Phase

		7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15
Mon	Count	0	3	5	1	3	2	4	0
21-Mar	Min		0:00:43	0:02:25	-	0:05:06	0:18:50	0:03:07	
	Avg		0:03:53	0:11:16	0:04:36	0:06:28	0:18:53	0:10:23	
	Max		0:06:36	0:24:41	-	0:07:19	0:18:56	0:22:36	
Tue	Count	0	2	5	1	3	2	1	0
22-Mar	Min		0:01:51	0:00:30	-	0:02:54	0:03:31	-	
	Avg		0:03:04	0:04:13	0:07:29	0:07:11	0:05:39	0:01:48	
	Max		0:04:17	0:12:20	-	0:12:30	0:07:47	-	
Wed	Count	0	2	8	2	3	2	2	0
23-Mar	Min		0:03:04	0:03:08	0:13:38	0:08:37	0:03:16	0:05:44	
	Avg		0:07:55	0:20:14	0:17:49	0:16:36	0:11:34	0:07:33	
	Max		0:12:45	0:36:34	0:22:00	0:31:14	0:19:52	0:09:23	
Thur	Count	0	3	6	3	2	1	2	0
24-Mar	Min		0:00:51	0:00:02	0:01:45	0:01:17	-	0:02:40	
	Avg		0:03:54	0:03:24	0:05:05	0:02:59	0:09:00	0:12:16	
	Max		0:06:52	0:08:47	0:08:59	0:04:41	-	0:21:52	
Mon	Count	0	5	5	0	2	1	4	2
28-Mar	Min		0:00:18	0:01:30		0:10:31	-	0:06:48	0:00:05
	Avg		0:06:51	0:03:02		0:12:44	0:03:56	0:14:06	0:05:07
	Max		0:12:26	0:05:01		0:14:57	-	0:25:16	0:10:08
Tue	Count	0	4	4	2	2	2	2	0
29-Mar	Min		0:01:21	0:03:58	0:08:58	0:01:45	0:04:49	0:00:29	
	Avg		0:04:31	0:05:39	0:10:23	0:07:41	0:11:05	0:00:59	
	Max		0:11:21	0:06:56	0:11:47	0:13:38	0:17:21	0:01:30	
Wed	Count	0	1	6	0	3	2	1	1
30-Mar	Min		0:01:38	0:01:35		0:04:07	0:01:16	-	-
	Avg		0:01:38	0:08:09		0:04:15	0:04:55	0:01:48	0:48:10
	Max		0:01:38	0:17:47		0:04:24	0:08:33	-	-
Thur	Count	0	3	5	5	2	1	3	2
31-Mar	Min		0:01:17	0:07:08	0:00:34	0:04:21	-	0:08:14	0:11:54
	Avg		0:06:22	0:15:23	0:04:12	0:05:43	0:04:03	0:18:19	0:12:30
	Max		0:09:00	0:25:54	0:09:32	0:07:06	-	0:34:04	0:13:05

Bus: Weekdays, Pilot Phase

		7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15
Mon	Count	0	3	2	2	1	1	2	1
4-Apr	Min		0:01:27	0:02:28	0:02:56	-	-	0:00:24	-
	Avg		0:03:44	0:03:46	0:03:21	0:01:50	0:02:20	0:00:39	0:03:28
	Max		0:05:30	0:05:04	0:03:46	-	-	0:00:54	-
Tue	Count	0	5	3	5	1	1	0	1
5-Apr	Min		0:00:31	0:01:55	0:00:38	-	-		-
	Avg		0:02:43	0:07:36	0:05:42	0:00:38	0:04:30		0:42:05
	Max		0:08:22	0:17:10	0:14:28	-	-		-
Wed	Count	0	3	3	2	1	1	1	0
6-Apr	Min		0:01:02	0:00:34	0:01:04	-	-	-	
	Avg		0:01:39	0:01:03	0:11:10	0:05:23	0:01:23	0:01:28	
	Max		0:02:47	0:01:38	0:21:15	-	-	-	
Thur	Count	0	5	3	6	3	2	1	1
7-Apr	Min		0:01:49	0:00:13	0:02:04	0:01:46	0:14:00	-	-
	Avg		0:02:49	0:02:52	0:11:46	0:05:25	0:18:06	0:04:23	0:27:28
	Max		0:03:47	0:06:19	0:20:47	0:09:36	0:22:12	-	-

NEXUS: Weekend Days, Baseline Phase

		7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14
Fri	Total #	55	62	118	112	114	124	119
25-Feb	# Captured	37	51	58	50	68	84	
	% Captured	67%	82%	49%	45%	60%	68%	
	Min	0:00:00	0:00:00	0:00:00	0:03:44	0:11:00	0:00:04	
	Avg	0:00:27	0:00:17	0:01:27	0:10:08	0:17:36	0:06:49	
	Max	0:02:34	0:01:16	0:04:20	0:15:59	0:23:16	0:15:05	
Sat	Total #	37	89	103	115	106	129	98
26-Feb	# Captured	15	65	54	61	39	81	31
	% Captured	41%	73%	52%	53%	37%	63%	32%
	Min	0:00:09	0:00:00	0:00:26	0:00:32	0:00:24	0:00:36	0:00:26
	Avg	0:01:14	0:00:36	0:01:40	0:02:22	0:09:42	0:08:23	0:01:01
	Max	0:02:24	0:02:31	0:04:37	0:05:47	0:14:50	0:16:39	0:02:25
Sun	Total #	59	70	96	129	114	97	133
6-Mar	# Captured	24	33	62	77	67	67	57
	% Captured	41%	47%	65%	60%	59%	69%	43%
	Min	0:00:42	0:00:07	0:00:08	0:00:09	0:00:01	0:00:06	0:00:09
	Avg	0:02:05	0:00:50	0:02:39	0:01:10	0:00:53	0:01:36	0:02:20
	Max	0:04:49	0:02:16	0:07:07	0:02:53	0:03:50	0:04:19	0:05:09

NEXUS: Weekend Days, Pilot Phase

Fri	Total #	36	86	102	125	146	138	134
25-Mar	# Captured	25	61	67	53	56	65	68
	% Captured	69%	71%	66%	42%	38%	47%	51%
	Min	0:00:00	0:00:08	0:00:00	0:02:25	0:00:12	0:06:27	0:06:15
	Avg	0:00:08	0:01:47	0:01:18	0:05:42	0:06:05	0:12:57	0:08:41
	Max	0:00:31	0:04:36	0:05:01	0:12:38	0:13:01	0:18:13	0:12:15
Sat	Total #	51	75	104	149	124	125	145
2-Apr	# Captured	42	37	64	68	68	53	11
	% Captured	82%	49%	62%	46%	55%	42%	8%
	Min	0:00:00	0:00:00	0:00:01	0:02:34	0:03:03	0:00:51	0:10:58
	Avg	0:00:15	0:00:44	0:02:57	0:06:34	0:08:48	0:08:14	0:12:35
	Max	0:01:57	0:05:32	0:09:08	0:10:17	0:12:11	0:15:09	0:15:20
Sun	Total #	31	70	85	110	86	102	100
27-Mar	# Captured	25	57	71	86	67	81	68
	% Captured	81%	81%	84%	78%	78%	79%	68%
	Min	0:00:04	0:00:01	0:00:09	0:00:00	0:00:03	0:00:09	0:00:15
	Avg	0:00:30	0:00:51	0:01:01	0:01:22	0:01:10	0:01:36	0:03:49
	Max	0:01:21	0:04:29	0:04:11	0:04:32	0:03:21	0:05:08	0:07:34

NEXUS: Weekdays, Baseline Phase

		8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15
Mon	Total #	48	97	80	93	88	85	101
28-Feb	# Captured	14	68	51	28	58	42	81
	% Captured	29.2%	70.1%	63.8%	30.1%	65.9%	49.4%	80.2%
	Min	0:00:02	0:00:00	0:00:01	0:00:02	0:00:03	0:00:00	0:00:00
	Avg	0:00:42	0:00:46	0:00:31	0:00:56	0:01:25	0:00:35	0:01:28
	Max	0:01:56	0:03:13	0:01:22	0:02:31	0:03:43	0:02:04	0:05:47
Tue	Total #	57	94	88	84	61	77	53
1-Mar	# Captured	27	40	26	38	33	55	37
	% Captured	47.4%	42.6%	29.5%	45.2%	54.1%	71.4%	69.8%
	Min	0:00:00	0:00:06	0:00:00	0:00:00	0:00:00	0:00:00	0:00:02
	Avg	0:00:23	0:01:09	0:00:47	0:02:20	0:00:33	0:01:06	0:00:57
	Max	0:00:57	0:04:32	0:02:35	0:06:37	0:02:24	0:05:46	0:03:13
Wed	Total #	54	68	68	93	64	74	53
2-Mar	# Captured	33	50	33	36	29	39	28
	% Captured	61.1%	73.5%	48.5%	38.7%	45.3%	52.7%	52.8%
	Min	0:00:02	0:00:00	0:00:00	0:00:00	0:00:00	0:00:03	0:00:08
	Avg	0:00:24	0:00:44	0:00:51	0:00:56	0:01:13	0:00:35	0:00:26
	Max	0:01:48	0:04:16	0:02:49	0:03:40	0:04:13	0:04:05	0:00:59
Thur	Total #	52	103	121	100	89	66	67
3-Mar	# Captured	34	68	49	40	29	42	45
	% Captured	65.4%	66.0%	40.5%	40.0%	32.6%	63.6%	67.2%
	Min	0:00:05	0:00:05	0:00:06	0:00:02	0:00:10	0:00:01	0:00:01
	Avg	0:00:18	0:00:50	0:01:40	0:02:41	0:01:12	0:00:32	0:01:03
	Max	0:01:12	0:03:33	0:04:41	0:07:38	0:03:25	0:02:37	0:02:47

NEXUS: Weekdays, Baseline Phase

		8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15
Mon	Total #	69	132	109	125	81	82	51
7-Mar	# Captured	46	74	53	44	32	56	19
	% Captured	66.7%	56.1%	48.6%	35.2%	39.5%	68.3%	37.3%
	Min	0:00:00	0:00:04	0:00:06	0:00:12	0:00:00	0:00:00	0:00:00
	Avg	0:00:27	0:01:56	0:03:09	0:04:00	0:00:55	0:00:22	0:00:14
	Max	0:02:36	0:04:16	0:06:13	0:08:10	0:03:42	0:03:01	0:00:55
Tue	Total #	62	76	87	77	82	65	59
8-Mar	# Captured	30	48	38	45	47	39	37
	% Captured	48.4%	63.2%	43.7%	58.4%	57.3%	60.0%	62.7%
	Min	0:00:02	0:00:01	0:00:01	0:00:09	0:00:00	0:00:01	0:00:01
	Avg	0:00:27	0:01:17	0:00:45	0:08:04	0:01:52	0:01:05	0:00:25
	Max	0:01:25	0:03:54	0:02:07	0:16:12	0:07:56	0:03:11	0:01:35
Wed	Total #	59	81	88	75	65	81	51
9-Mar	# Captured	28	36	34	47	44	59	36
	% Captured	47.5%	44.4%	38.6%	62.7%	67.7%	72.8%	70.6%
	Min	0:00:00	0:00:00	0:00:06	0:00:00	0:00:20	0:00:00	0:00:00
	Avg	0:00:07	0:00:37	0:03:17	0:02:33	0:07:06	0:00:36	0:00:56
	Max	0:00:35	0:02:30	0:07:14	0:08:56	0:19:27	0:01:41	0:03:16
Thur	Total #	53	96	82	72	66	61	61
10-Mar	# Captured	40	73	61	38	43	41	48
	% Captured	75.5%	76.0%	74.4%	52.8%	65.2%	67.2%	78.7%
	Min	0:00:00	0:00:00	0:00:00	0:05:37	0:01:49	0:01:50	0:01:53
	Avg	0:00:22	0:01:23	0:02:19	0:10:35	0:05:57	0:02:31	0:02:25
	Max	0:01:57	0:04:10	0:05:12	0:18:05	0:18:21	0:04:00	0:03:49

NEXUS: Weekdays, Pilot Phase

		8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15
Mon	Total #	62	104	103	146	98	75	78
21-Mar	# Captured	35	64	54	91	59	45	42
	% Captured	56.5%	61.5%	52.4%	62.3%	60.2%	60.0%	53.8%
	Min	0:00:01	0:00:01	0:00:02	0:02:59	0:00:00	0:00:00	0:00:00
	Avg	0:00:22	0:00:51	0:04:08	0:07:12	0:00:59	0:00:31	0:00:27
	Max	0:01:30	0:03:12	0:11:15	0:11:18	0:05:14	0:01:51	0:01:59
Tue	Total #	68	116	126	106	72	92	68
22-Mar	# Captured	45	51	52	74	54	54	56
	% Captured	66.2%	44.0%	41.3%	69.8%	75.0%	58.7%	82.4%
	Min	0:00:00	0:00:00	0:00:13	0:00:00	0:00:00	0:00:00	0:00:00
	Avg	0:00:44	0:00:58	0:01:52	0:01:44	0:00:19	0:00:49	0:01:05
	Max	0:03:24	0:03:27	0:03:52	0:04:52	0:01:54	0:02:39	0:04:00
Wed	Total #	75	98	123	105	101	93	84
23-Mar	# Captured	45	75	77	53	39	54	48
	% Captured	60.0%	76.5%	62.6%	50.5%	38.6%	58.1%	57.1%
	Min	0:00:00	0:00:00	0:00:10	0:00:07	0:00:02	0:00:03	0:00:03
	Avg	0:01:15	0:01:33	0:05:01	0:02:30	0:01:07	0:00:39	0:00:39
	Max	0:03:31	0:03:29	0:09:01	0:06:39	0:02:49	0:02:11	0:03:47
Thur	Total #	77	87	129	105	93	94	80
24-Mar	# Captured	53	69	89	97	79	83	65
	% Captured	68.8%	79.3%	69.0%	92.4%	84.9%	88.3%	81.3%
	Min	0:00:01	0:00:00	0:00:13	0:00:00	0:00:03	0:00:00	0:00:04
	Avg	0:00:30	0:03:39	0:03:51	0:01:56	0:03:21	0:00:49	0:00:52
	Max	0:01:39	0:13:07	0:11:16	0:04:44	0:10:41	0:03:39	0:02:11

NEXUS: Weekdays, Pilot Phase

		8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15
Mon	Total #	53	119	118	118	93	84	73
28-Mar	# Captured	28	80	41	85	59	52	52
	% Captured	52.8%	67.2%	34.7%	72.0%	63.4%	61.9%	71.2%
	Min	0:01:22	0:01:26	0:01:36	0:01:24	0:00:21	0:01:22	0:01:21
	Avg	0:01:42	0:03:14	0:08:30	0:12:18	0:02:41	0:02:18	0:01:55
	Max	0:03:00	0:06:15	0:13:21	0:19:11	0:05:47	0:05:30	0:03:55
Tue	Total #	44	100	119	121	82	71	68
29-Mar	# Captured	37	80	71	79	62	50	52
	% Captured	84.1%	80.0%	59.7%	65.3%	75.6%	70.4%	76.5%
	Min	0:00:03	0:00:07	0:00:42	0:00:09	0:00:03	0:00:03	0:00:05
	Avg	0:00:22	0:01:49	0:05:21	0:03:07	0:01:15	0:01:12	0:00:49
	Max	0:01:47	0:05:35	0:09:15	0:11:46	0:05:05	0:03:36	0:02:49
Wed	Total #	54	88	94	88	96	56	80
30-Mar	# Captured	26	35	41	44	64	35	58
	% Captured	48.1%	39.8%	43.6%	50.0%	66.7%	62.5%	72.5%
	Min	0:00:00	0:00:11	0:00:16	0:00:06	0:00:00	0:00:00	0:00:02
	Avg	0:00:25	0:02:00	0:03:08	0:03:29	0:01:28	0:00:40	0:00:21
	Max	0:04:18	0:07:27	0:06:17	0:09:09	0:07:59	0:02:36	0:02:01
Thur	Total #	57	85	114	114	115	82	77
31-Mar	# Captured	32	41	47	54	36	58	46
	% Captured	56.1%	48.2%	41.2%	47.4%	31.3%	70.7%	59.7%
	Min	0:00:00	0:00:00	0:09:09	0:00:00	0:00:02	0:00:00	0:00:00
	Avg	0:00:29	0:02:02	0:12:33	0:04:37	0:01:32	0:00:42	0:00:42
	Max	0:02:03	0:07:59	0:15:19	0:16:12	0:05:06	0:03:16	0:03:42

NEXUS: Weekdays, Pilot Phase

		8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15
Mon	Total #	55	119	97	84	98	65	66
4-Apr	# Captured	39	102	72	61	71	34	38
	% Captured	70.9%	85.7%	74.2%	72.6%	72.4%	52.3%	57.6%
	Min	0:00:00	0:00:03	0:00:00	0:00:00	0:00:00	0:00:00	0:00:00
	Avg	0:00:20	0:03:19	0:00:40	0:01:16	0:01:40	0:00:06	0:00:28
	Max	0:01:28	0:07:25	0:03:05	0:05:09	0:05:11	0:00:37	0:02:08
Tue	Total #	49	100	102	78	65	84	68
5-Apr	# Captured	30	59	75	54	47	66	57
	% Captured	61.2%	59.0%	73.5%	69.2%	72.3%	78.6%	83.8%
	Min	0:00:00	0:00:01	0:00:00	0:00:01	0:00:00	0:00:00	0:00:00
	Avg	0:00:36	0:01:50	0:00:38	0:02:11	0:00:40	0:00:27	0:00:47
	Max	0:02:22	0:05:37	0:03:54	0:07:24	0:03:04	0:02:03	0:02:52
Wed	Total #	53	100	112	89	66	62	80
6-Apr	# Captured	38	80	67	33	43	26	41
	% Captured	71.7%	80.0%	59.8%	37.1%	65.2%	41.9%	51.3%
	Min	0:00:00	0:00:00	0:00:07	0:00:00	0:00:00	0:00:00	0:00:00
	Avg	0:00:27	0:00:52	0:03:28	0:01:26	0:00:38	0:00:26	0:00:35
	Max	0:02:21	0:03:12	0:10:03	0:05:55	0:02:57	0:02:41	0:02:04
Thur	Total #	83	96	139	130	92	98	85
7-Apr	# Captured	48	54	70	66	56	37	42
	% Captured	57.8%	56.3%	50.4%	50.8%	60.9%	37.8%	49.4%
	Min	0:00:00	0:03:31	0:06:19	0:00:00	0:00:00	0:00:00	0:00:00
	Avg	0:01:10	0:08:47	0:15:35	0:02:27	0:01:00	0:01:00	0:00:25
	Max	0:03:37	0:18:01	0:21:14	0:09:49	0:05:01	0:02:25	0:02:10