

I-405 Express Toll Lanes Performance Update



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Washington State Transportation Commission
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Agenda

- Master Plan
- I-405 Express Toll Lanes Implementation
- The First Three Months:
 - Toll Trips
 - Traffic
 - Toll Rates
 - Congestion contours
 - Local arterial traffic
 - Transit
 - Enforcement
 - Operational enhancements
 - Customer Service

I-405 Master Plan

Regional Consensus

- EIS Record of Decision, 2002

Roadways

- 2 new lanes in each direction
- Local arterial improvements

Transit & Transportation Choices

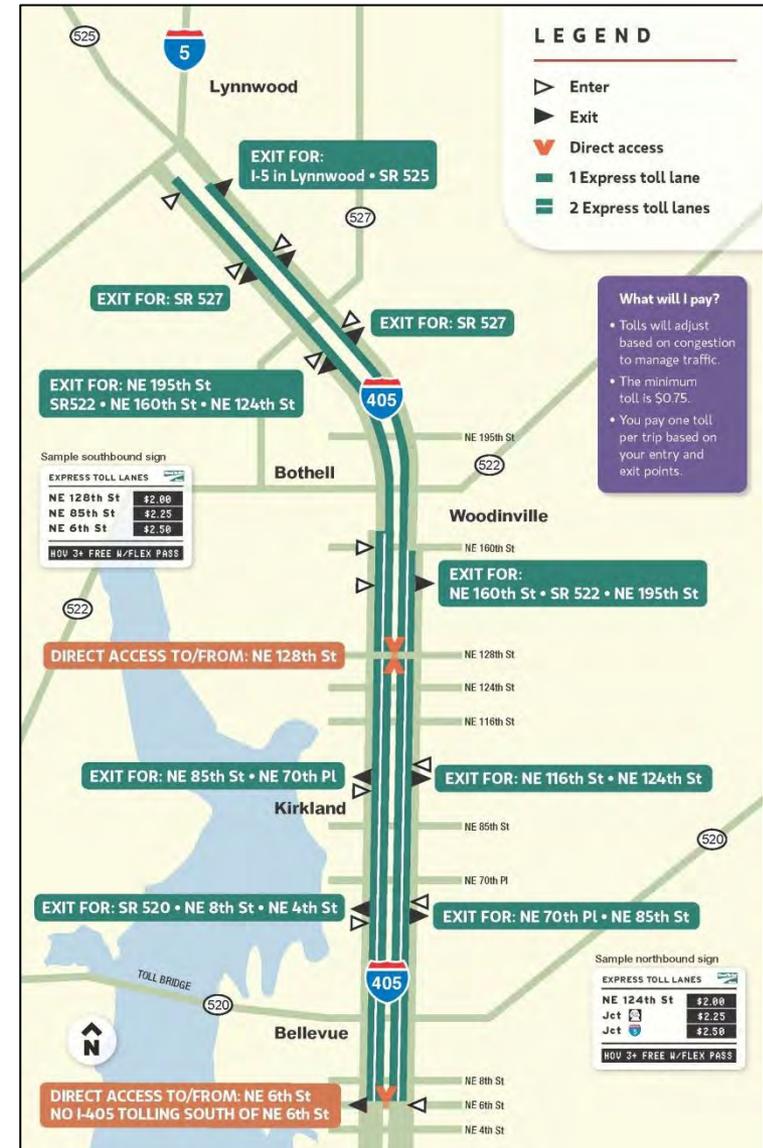
- Bus Rapid Transit system
- 9 new transit centers added
- 50% transit service increase
- HOV direct access ramps and flyer stops
- Potential managed lanes system
- 5000 new Park & Ride spaces
- 1700 new vanpools

Environmental Enhancements



I-405 Express Toll Lanes - Bellevue to Lynnwood

- **17 miles of express toll lanes**
 - 9 miles of a two lane system
 - 8 miles of a single lane system
- **The express toll lanes operate 24/7**
- **Toll Rates**
 - Minimum Toll Rate \$ 0.75
 - Maximum Toll Rate \$ 10.00
 - Pay By Mail Toll Increment \$ 2.00
- **Carpool Policy**
 - 3+ carpools exempt at all times
 - 2+ carpools exempt except 5-9 a.m. and 3-7 p.m. on weekdays
- **Exemptions**
 - Transit, vanpools, motorcycles and carpools travel free with a *Good To Go!* pass
 - Transit – Any *Good To Go!* pass will work
 - Vanpools – Any *Good To Go!* pass will work
 - Carpools – Need a Flex Pass set to HOV mode to use the lanes for free
 - Motorcycles – Need a motorcycle pass to use the lanes for free
 - In-service emergency vehicles, maintenance, enforcement, and incident management vehicles, including private tow-trucks, when directed by WSP



I-405 Express Toll Lanes

Opened September 27

Overview

- Legislature authorized WSDOT to toll I-405 from Bellevue to Lynnwood in 2011
- Dynamic pricing effectively manages volume and increases performance for all lanes in the corridor
- Market-based direct user fee
- Future plans to extend south and create a 40-mile express toll lanes system on I-405 and SR 167

| EXPRESS TOLL LANES | | Good To Go! |
|--|--------|-------------|
| JCT  | \$2.00 | |
| NE 124th St | \$2.15 | |
| NE 6th St | \$2.35 | |
| HOV 3+ FREE W/FLEX PASS | | |

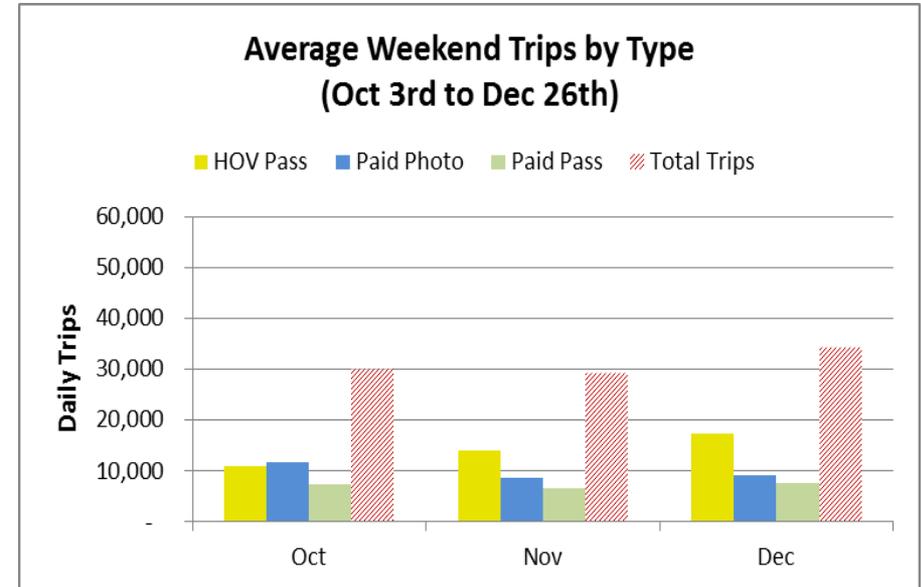
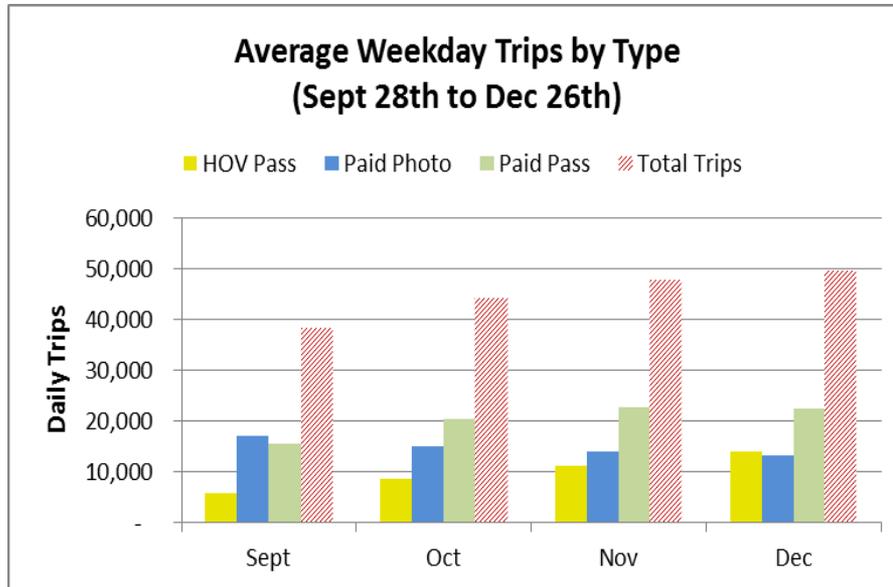


April 2015



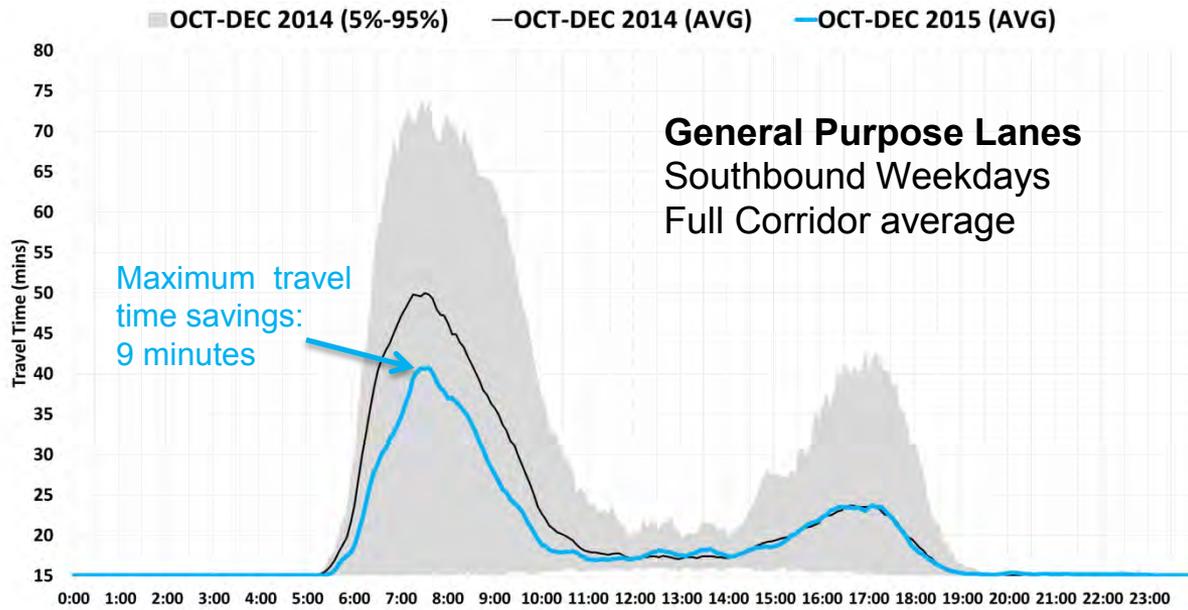
October 2015

The First Three Months— Express Toll Lane Trip Trends

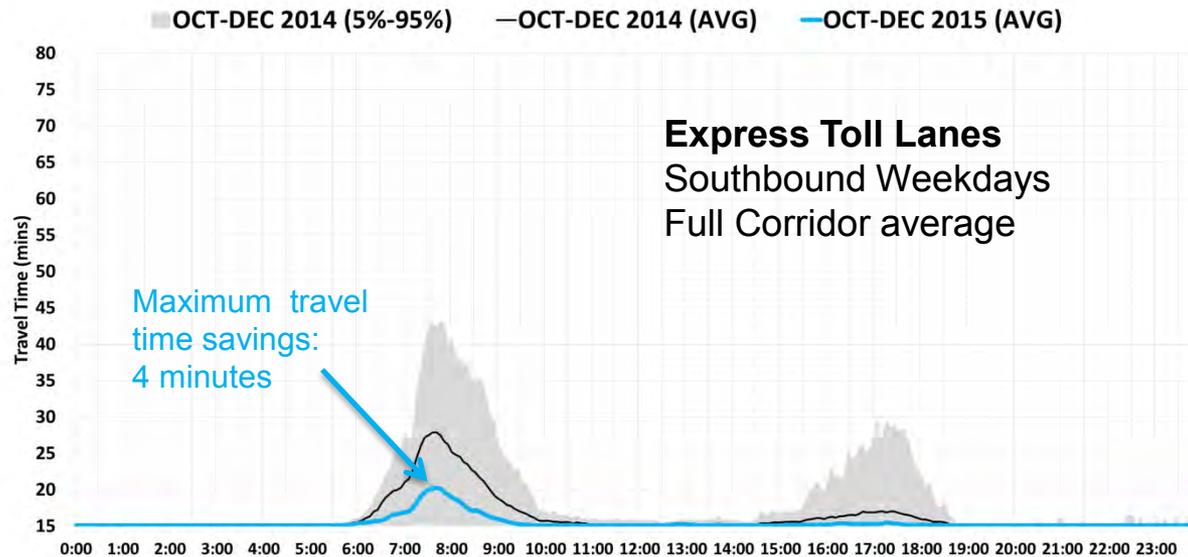


- On average during the first three months of operations HOV trips made up about 24% of weekday ETL trips, and about 45% of weekend ETL trips
- Month by month the proportion of photo based trips has reduced, while HOV trips have increased

The First Three Months— I-405 Corridor Travel Times: Weekdays Southbound

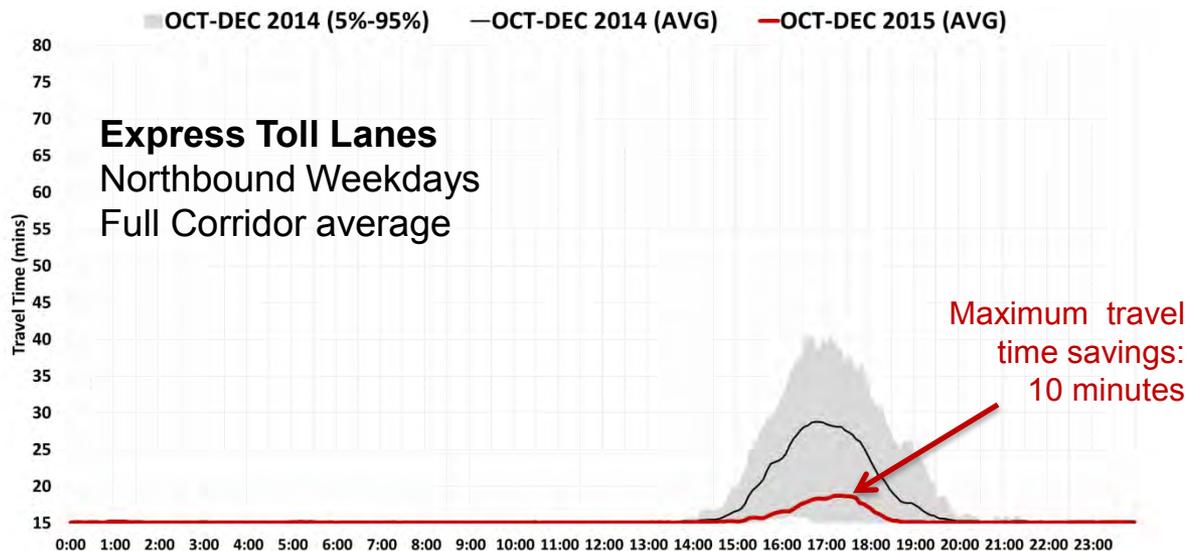
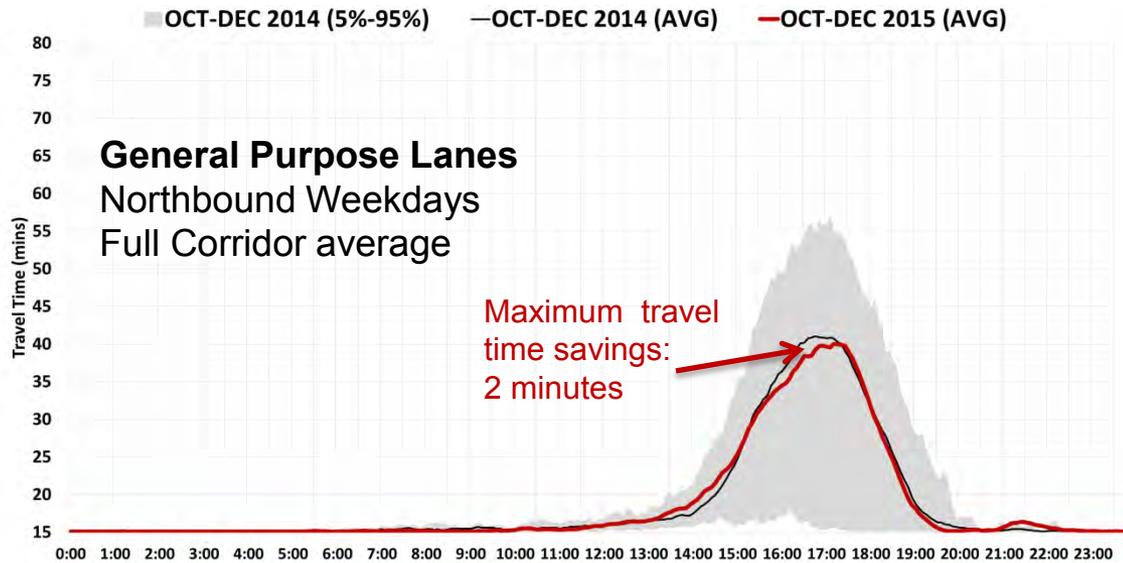


- During the weekdays, both the southbound general purpose and ETL lanes experience improved travel times during the AM peak period (5-9 AM).



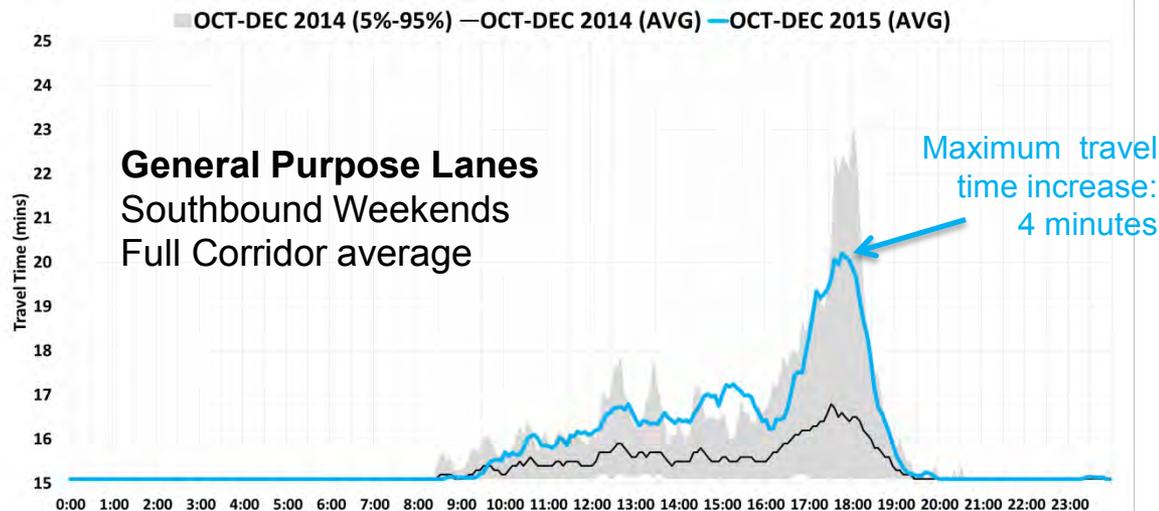
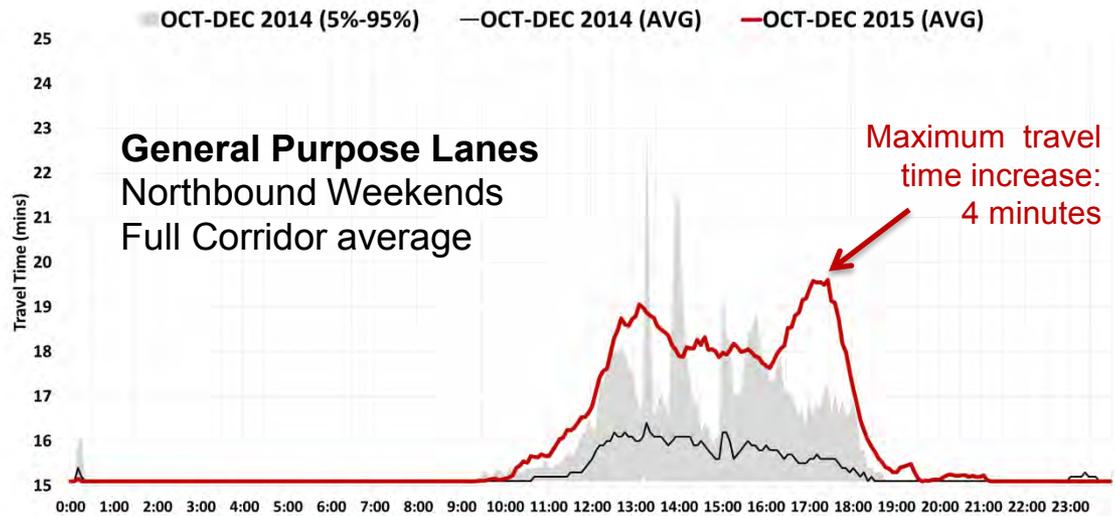
- The average AM peak period travel time savings between the southbound general purpose lanes and the ETL lanes was 12 minutes during Fall 2015, compared to 16 minutes during Fall 2014.

The First Three Months— I-405 Corridor Travel Times: Weekdays Northbound



- During the weekdays, the northbound general purpose lanes have not significantly changed travel time overall, however the travel time worsened in the single ETL segment and improved in the dual ETL segment (about a four minute difference for each section).
- The average PM peak period travel time savings between the northbound general purpose lanes and the ETL lanes was 16 minutes during Fall 2015, compared to 10 minutes during Fall 2014.

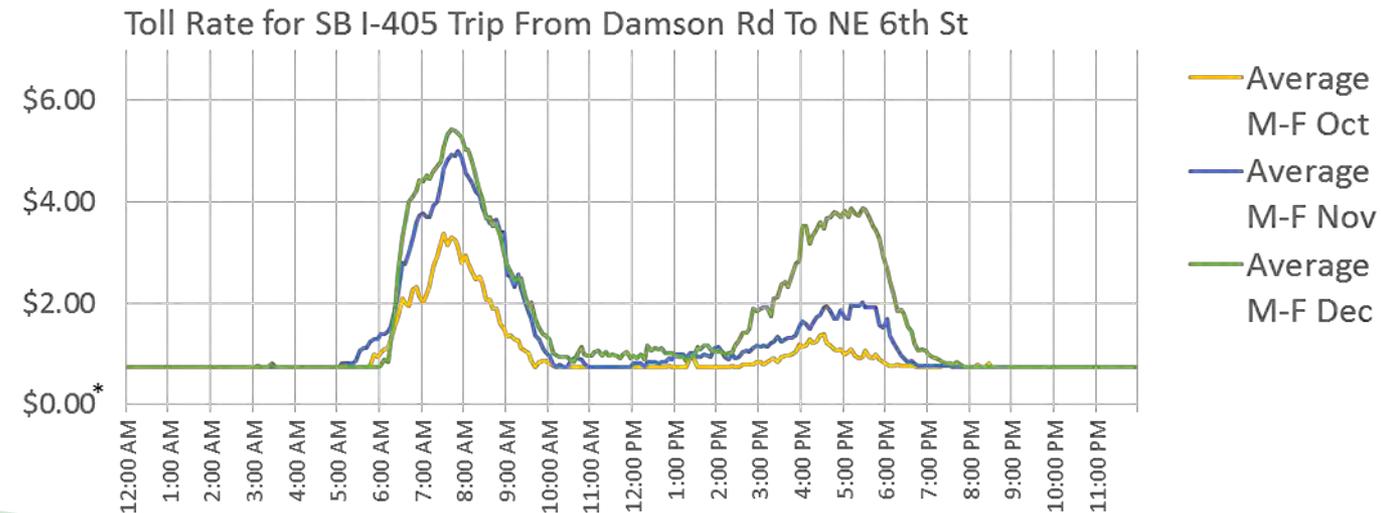
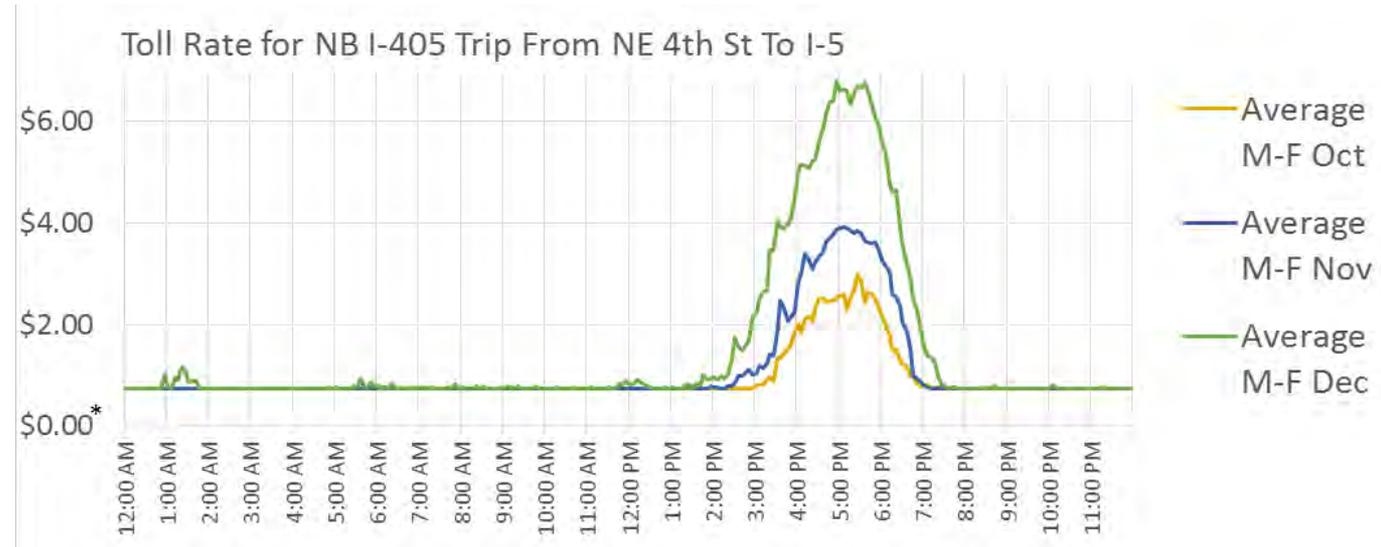
The First Three Months— I-405 Corridor Travel Times: Weekends



- Weekend average speeds have decreased for both the general purpose and ETL lanes compared to fall of 2014. This trend is persistent throughout the corridor.

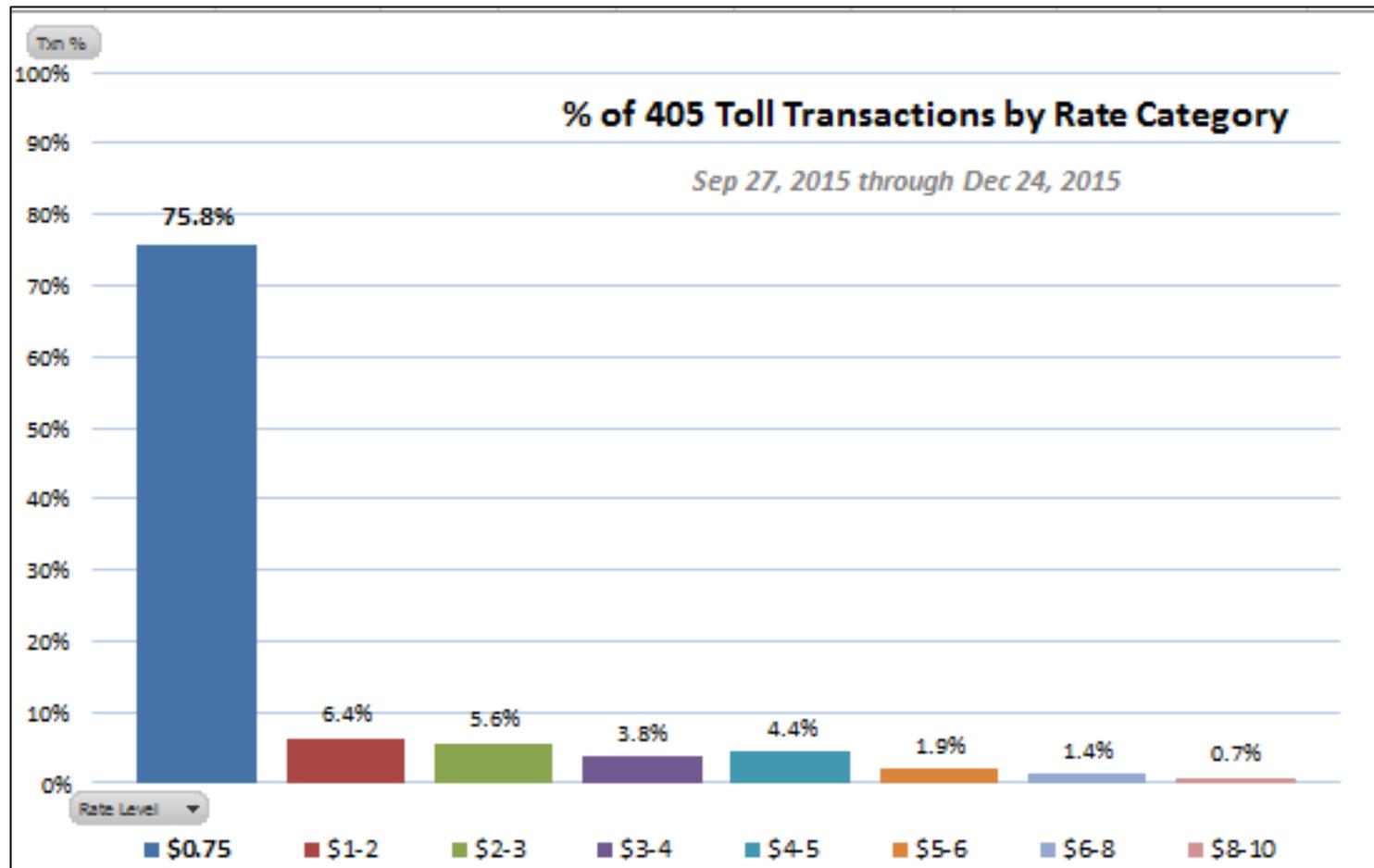
The First Three Months- Toll Rates

- Toll rates have reliably responded to congestion as expected.
- Volumes in the ETLs drive the toll rates. Volumes have increased and therefore rates have increased to manage traffic.



The First Three Months- Toll Rates

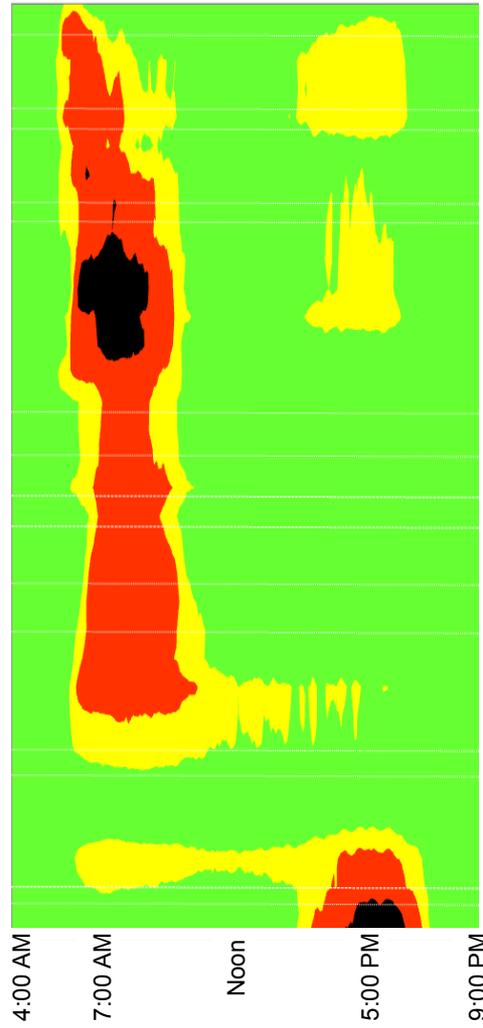
- Maximum toll rate of \$10 has been reached on 6 days
- 92% of tolls incurred are between \$0.75–\$4.00



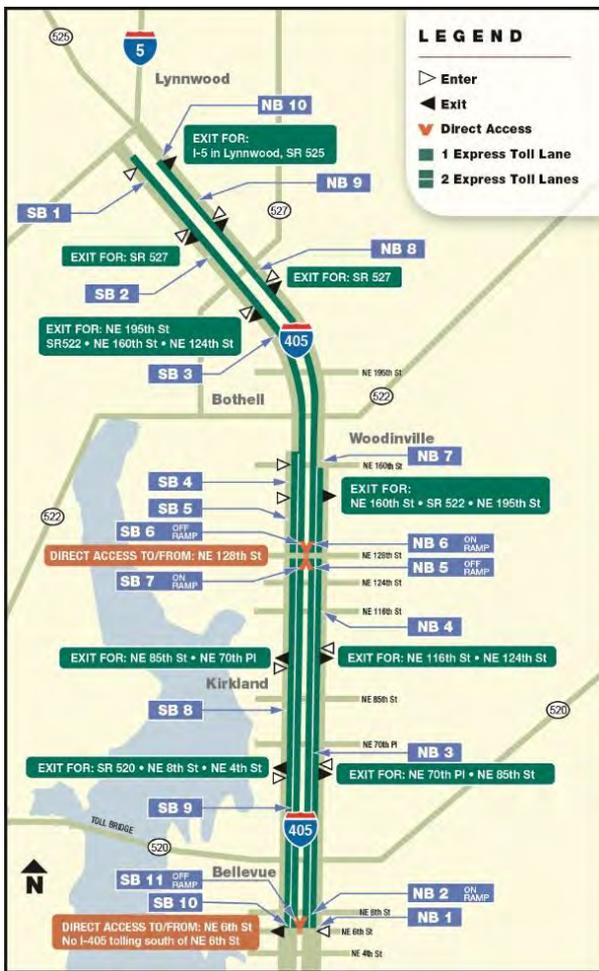
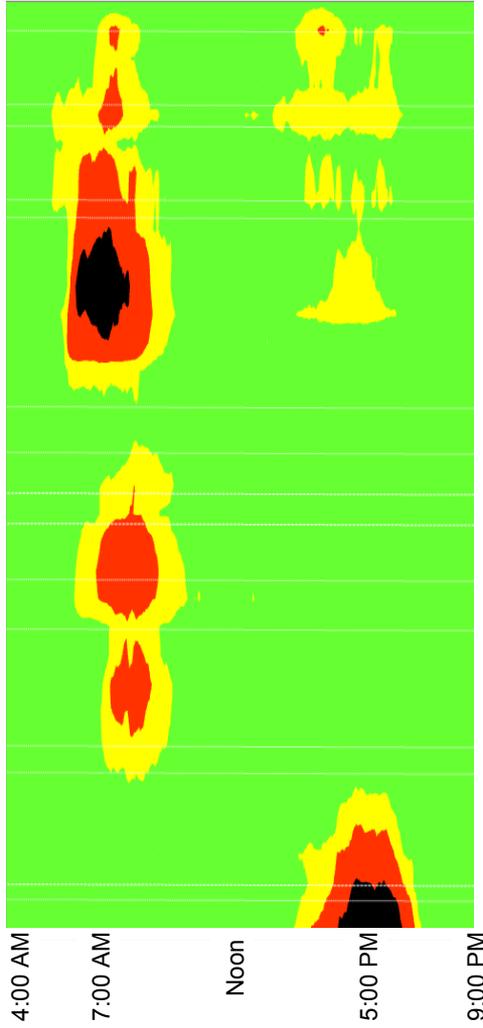
The First Three Months – Congestion Contours

I-405 Southbound general purpose lanes

2014 Baseline



2015 with ETL



Congestion Key

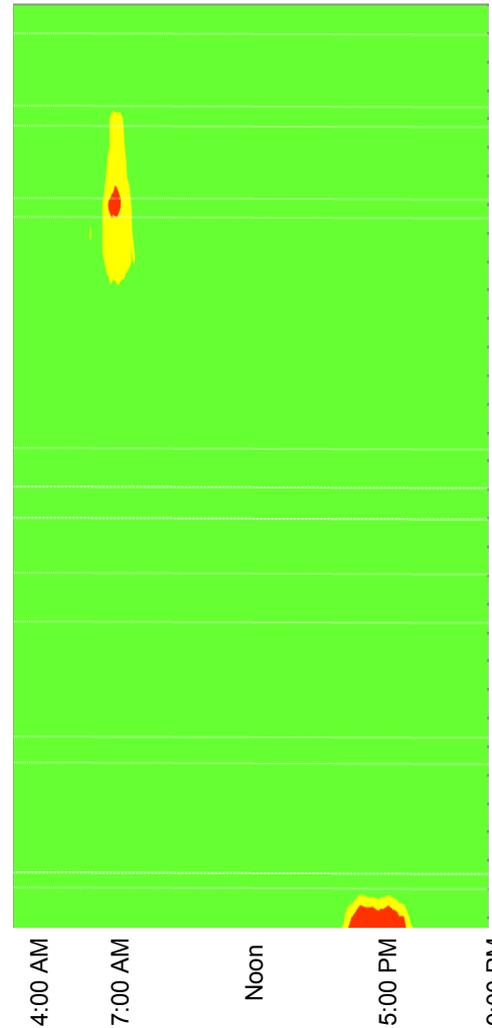
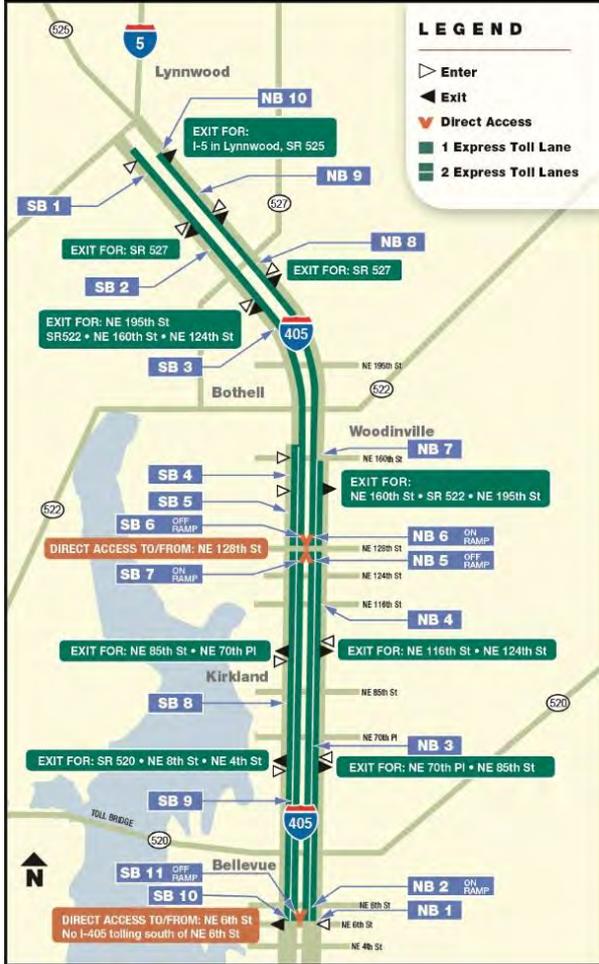
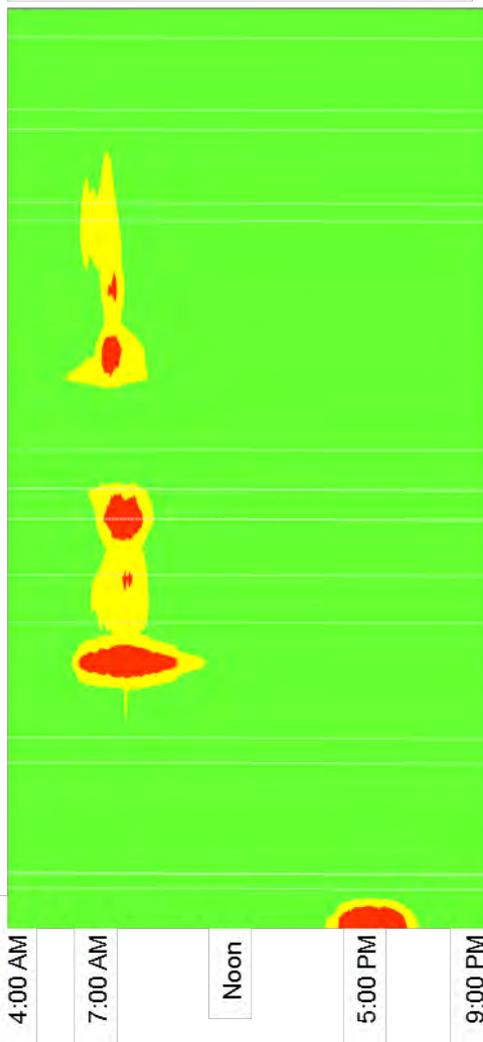
- Moderate
- Free flow
- Heavy
- Stop and go

The First Three Months – Congestion Contours

I-405 Southbound HOV/express toll lanes

2014 Baseline

2015 with ETL



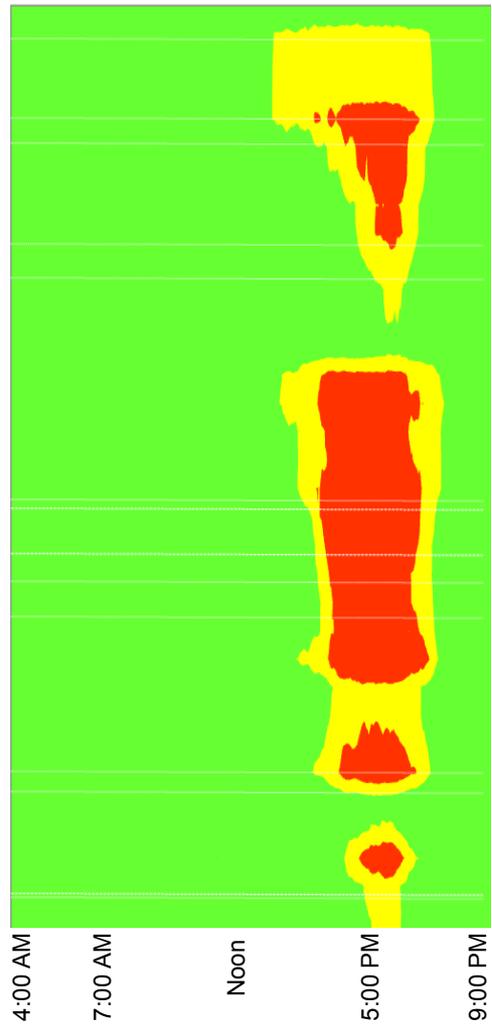
Congestion Key

- Moderate
- Free flow
- Heavy
- Stop and go

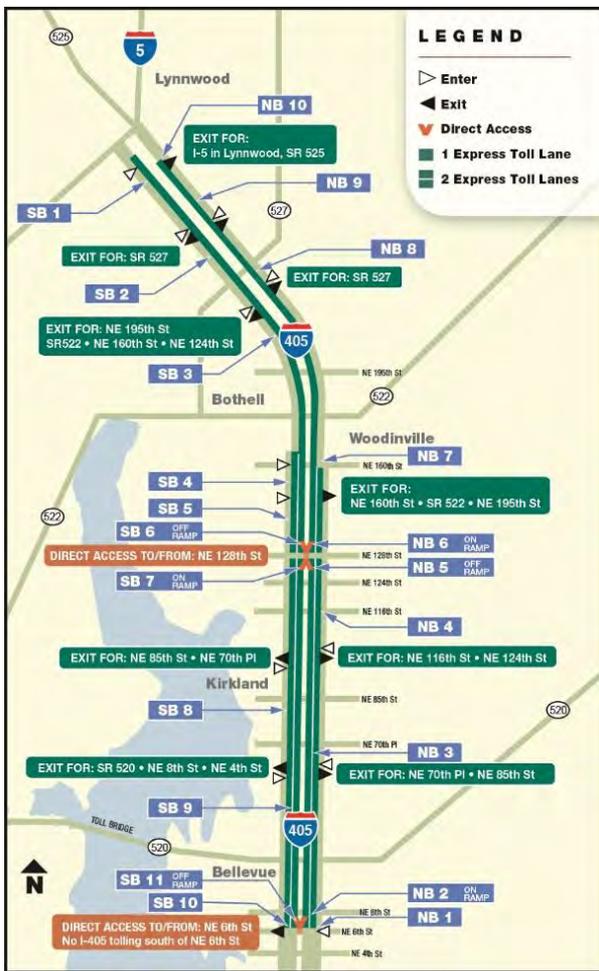
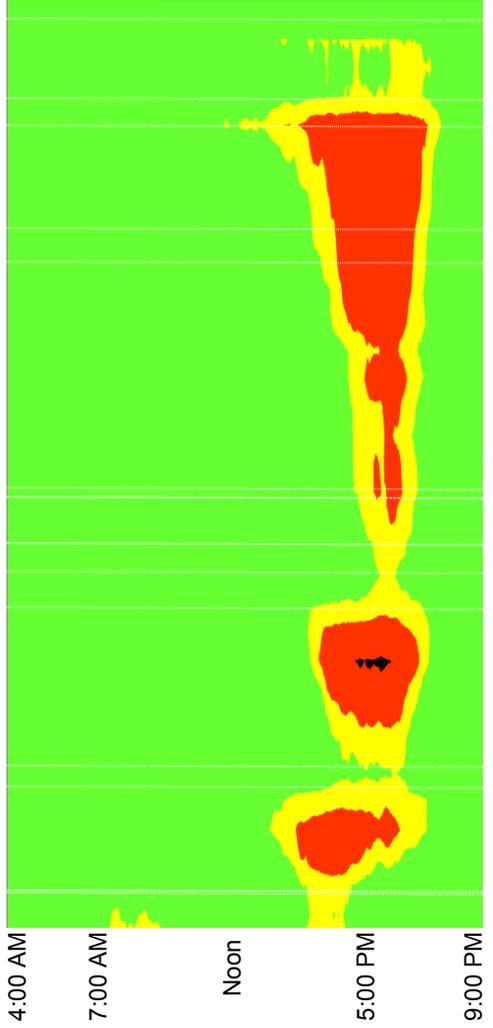
The First Three Weeks – Congestion Contours

I-405 Northbound general purpose lanes

2014 Baseline



2015 with ETL



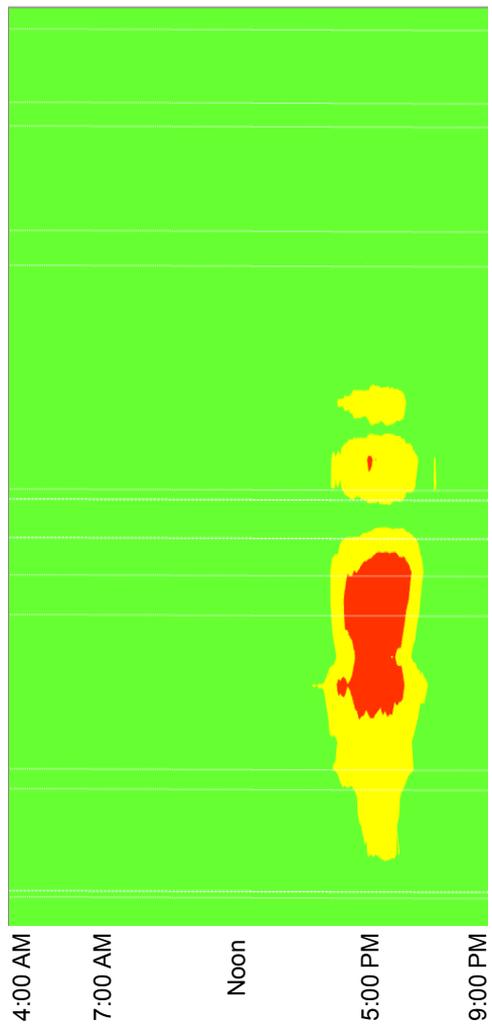
Congestion Key

- Yellow: Moderate
- Green: Free flow
- Red: Heavy
- Black: Stop and go

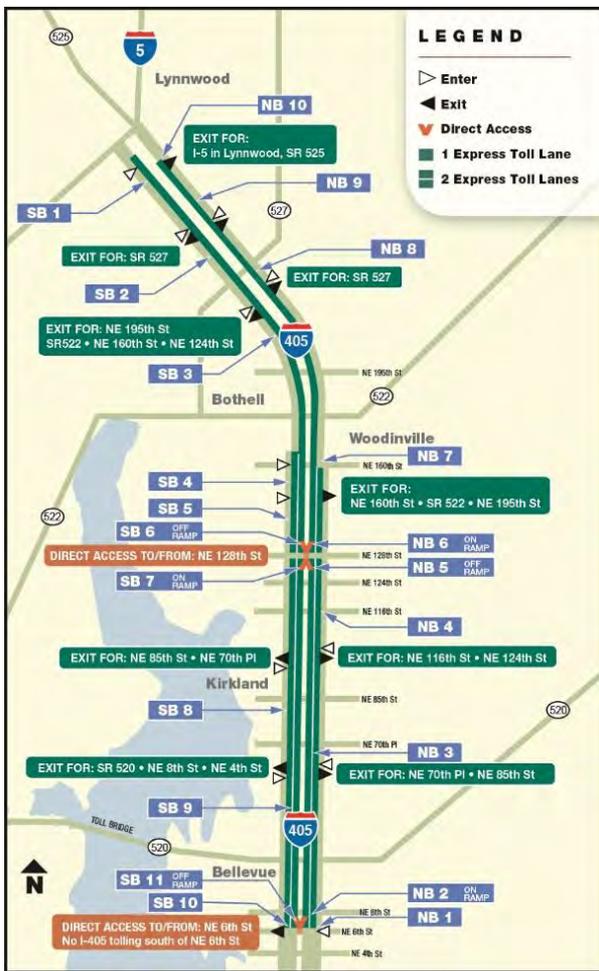
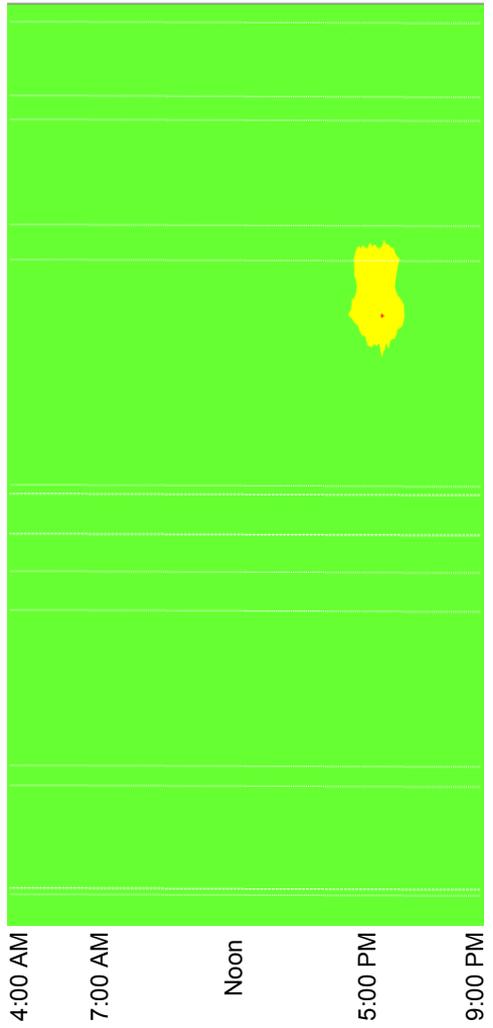
The First Three Months – Congestion Contours

I-405 Northbound HOV/express toll lanes

2014 Baseline



2015 with ETL



Congestion Key

- Moderate
- Free flow
- Heavy
- Stop and go

The First Three Months- Local Arterial Traffic

- Most agencies reported no noticeable local changes, except in the vicinity of the north end congestion which may have secondary impacts around Bothell and Woodinville.
- Arterial travel times and volumes were collected along representative locations that could be parallel routes for I-405 traffic. This data was collected during August 2015 and will be collected again in August 2016 for comparison.
- Interim volumes were collected in November 2015 and showed very similar trends compared to pre-tolling.
- Sample driver runs in November 2015 showed increased travel times by a few minutes on Bothell Way and SR 202.



The First Three Months-

What we're hearing from Community Transit

- The I-405 express toll lanes and transit shoulders provide a daily benefit to our routes and riders.
- We are seeing a travel time benefit and advantage by using the express toll lanes.
- Transit ridership has increased so more people are benefiting from a faster commute on our busses.
- This is a positive trend and we need to give it more time to realize the long lasting benefits.

The First Three Months- Enforcement

- The Washington State Patrol (WSP) continues to provide enforcement along the I-405 Express Toll Lanes.
 - Since toll commencement, troopers have made over 4800 traffic stops and issued more than 1500 citations.
 - They have also assisted in educating drivers who may not have known the proper way to use the facility by passing out nearly 1200 informational maps.

| Violation Type | Number of Citations (Sept 27-Dec 31, 2015) |
|-----------------------|---|
| Lane Violations | 1555 |
| HOV Violations | 354 |
| Direct Access | 301 |
| Avoiding Tolls | 107 |
| Over 10,000 lbs GVW | 99 |

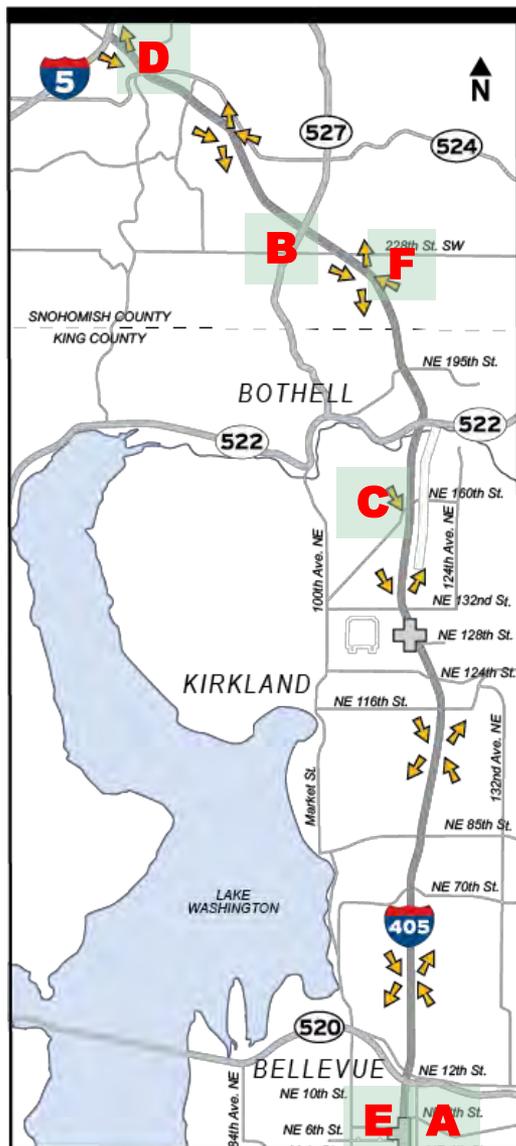
The First Three Months- Feedback on operations

| Feedback | WSP | Citizen /Media |
|--|-----|----------------|
| General lack of access (39) | | √ |
| No access between SR 527, NE 195 th and NE 160 th (47) | | √ |
| General access too short (12) | | √ |
| Need for clarity on HOV rules at NE 6 th | | √ |
| Buffer crossing and Safety | √ | √ |

And some positive comments:

- *The tolls have drastically reduced our commute times. We were considering selling our home in Kirkland and moving to Seattle, but with the tolls we are now staying in Kirkland. We love the 405 toll lanes.*
- *I like the new pay lanes. I've been happy to pay 75 cents to get from Bellevue to Bothell quicker. I don't drive that way often but when I do, I want to get where I'm going. I'm surprised more people don't take advantage of it.*
- *My husband carpools, they all split the fees. It's cheaper than sitting in traffic all morning and night, and he gets home at a decent time*
- *The new toll lanes have drastically reduced our commute time.*

Operational enhancements

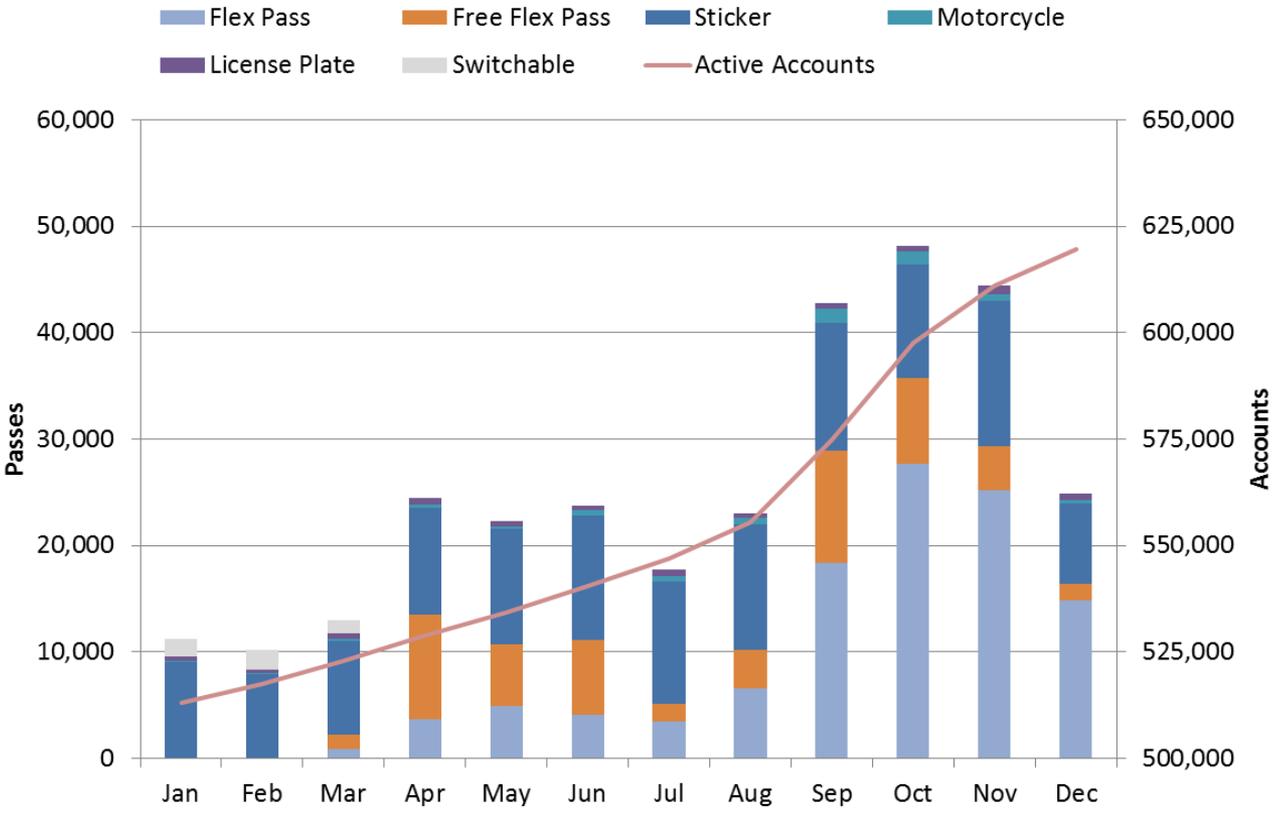


1. **Adjust Algorithm for the single express toll lane**— Adjustments and ongoing tuning started 11/17
2. **Striping/Access Changes** – Complete
 - A. NB NE 6th— Added advanced stencils to provide more advanced notice of the upcoming lanes and extended length of access to provide additional time to enter the express toll lane
 - B. SB SR 527— Extended the access to the north allowing drivers to enter the express toll lane earlier
 - C. SB NE 160th— Added pavement markings at ingress to address driver confusion with entrance to system
3. **Striping/Access Changes** – Weather dependent
 - D. NB I-5— Pull back the buffer to provide additional distance for express toll lane drivers to merge over to exit to I-5
 - E. SB at NE 6th— Add Exit Only stencils to left express toll lane to alert drivers of the need to merge to the right lane to continue south of I-405
 - F. NE 195th St – SR 527 access improvements – Weekend closure (temperature and precipitation dependent)
4. **Monitoring**
 - Weekend congestion
 - Northbound congestion at SR 520

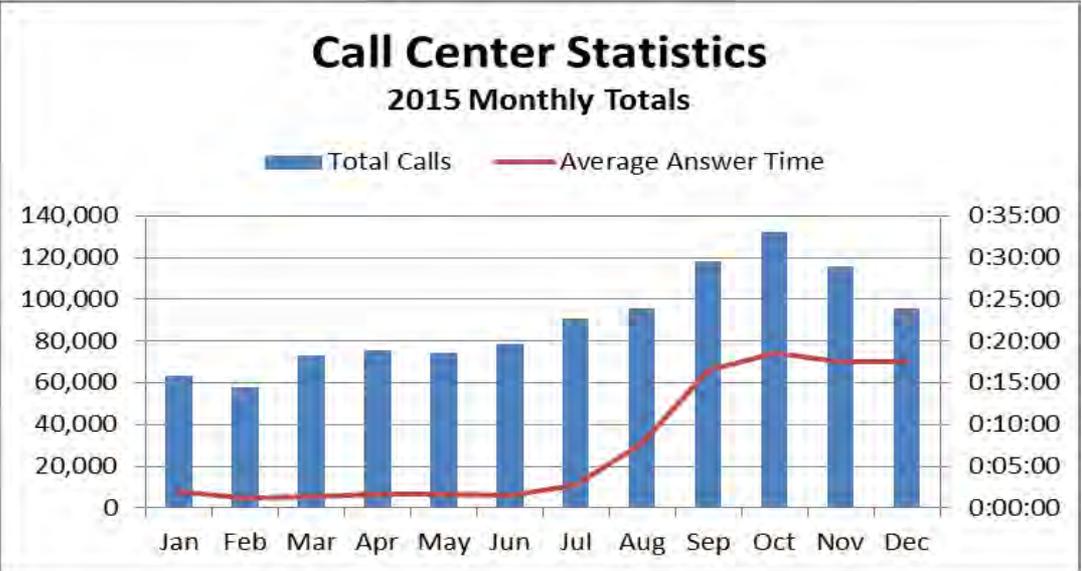
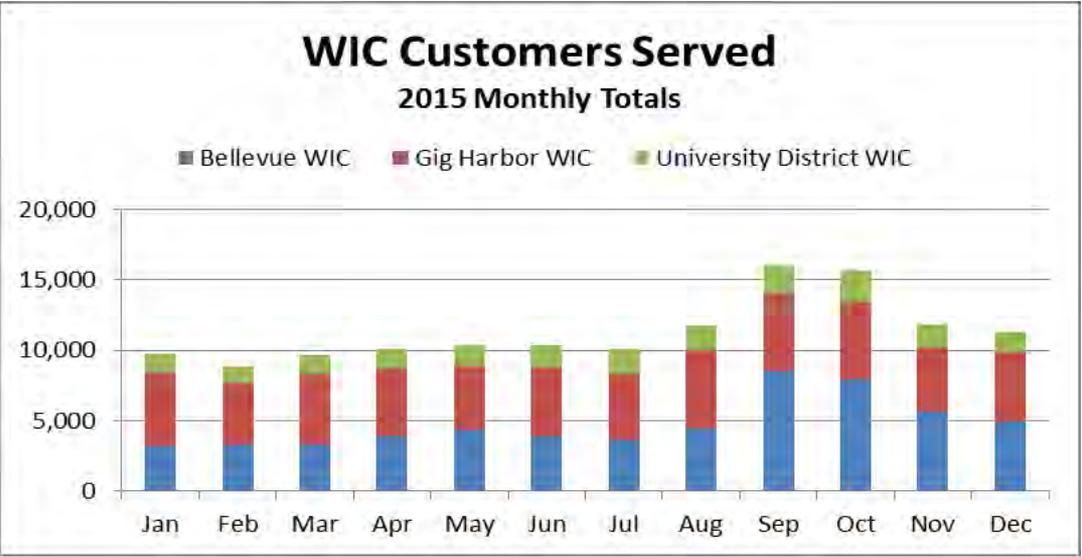
The First Three Months- Customer Service: New Accounts and Passes

- New account activity growth continues to taper off following the spike around toll commencement.
- Flex Passes have remained the most common type of pass sold since September

Active Accounts & Passes Sold
2015 Monthly Totals



The First Three Months- Customer Service: Walk In and Call Center Activity



- The Bellevue walk-in center has seen increased traffic since the ETLs became operational on I-405 but is coming down from its high immediately before and after toll commencement.

- Since the peak in October, the monthly total calls have dropped in consecutive months to levels similar to the summer.

Next Steps

- Release full 3 month report – January/February
- Release financial statement – February
- Continue to gather public and customer input through surveys – January/February
- Continue traffic and collision monitoring, coordination and data collection
- Continue operational enhancements – weather permitting

For more information

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