

Washington State Transportation Commission

I-405 express toll lanes

Patty Rubstello, Assistant Secretary of Tolling

May 17, 2016

Agenda

- I-405 Six Month Update
 - Key Takeaways
 - Performance update
 - Impact to local streets
 - Toll rates
 - *Good To Go!* customer survey results
 - Peak period sample commutes
 - Operational adjustments

Key takeaways – Early successes

First six months
(Sept. 27, 2015 - March 31, 2016)

EXPRESS TOLL LANES

7.5 MILLION
TOTAL TRIPS



5.1 MILLION
TOLLED TRIPS

2.4 MILLION
FREE HOV TRIPS

782,000
DIFFERENT VEHICLES
HAVE USED THE EXPRESS TOLL LANES

EQUIVALENT TO
1 IN 10 VEHICLES
IN
WASHINGTON STATE



10 MINUTES southbound | **13 MINUTES** northbound
TRAVEL TIME SAVINGS
in EXPRESS TOLL LANE
compared to the GP lanes during the same time frame Jan-March 2016



48,000
DAILY TRIPS
have a faster and
more reliable trip


TOLL PAYERS
34,000 vehicles
per day


CARPOOL
14,000 vehicles
per day

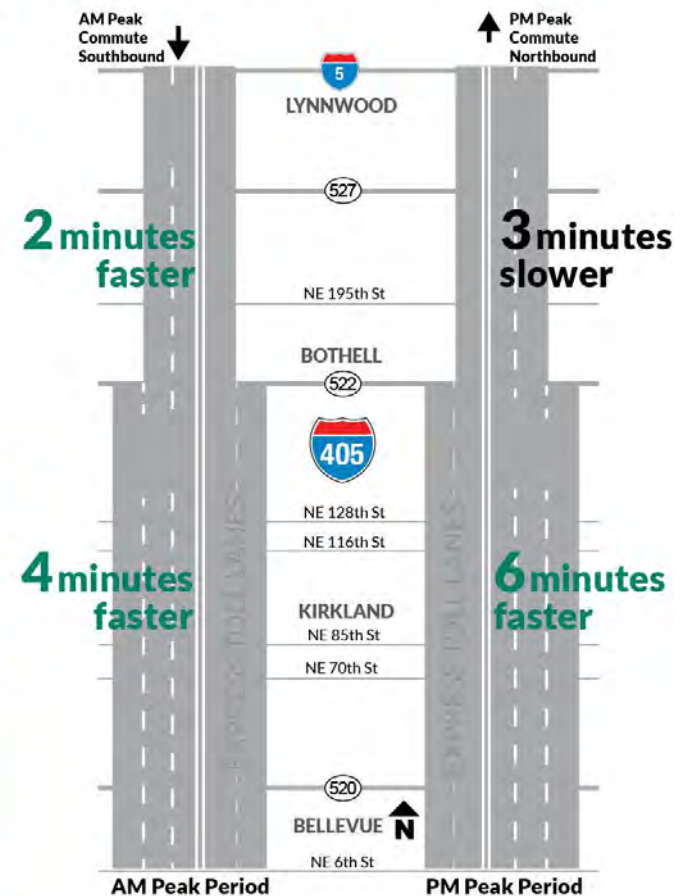

VANPOOL
350 vans
3,300 riders
per day


TRANSIT
7,800 riders
per day

Last three months
(Jan. 1 - March 31, 2016)

GENERAL PURPOSE LANES

How are the general purpose lanes working
compared to last year?



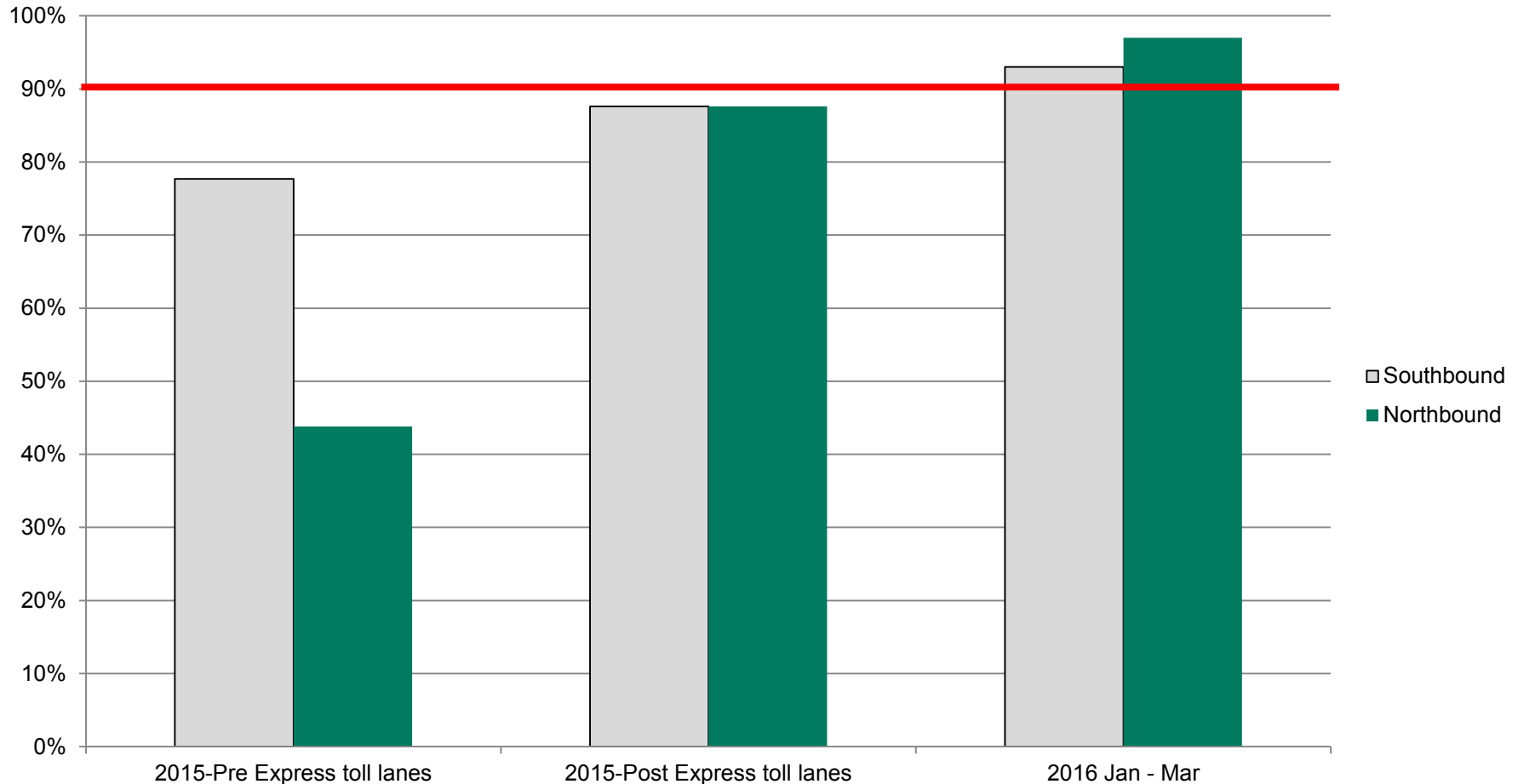
Key takeaways – Early challenges

- Capacity challenges between Bothell and Lynnwood in both directions - we are evaluating long-term projects to address the needed capacity
- Access challenges throughout the corridor in both directions - we've been making changes to improve access



Six month performance update – Speeds

I-405 HOV Performance
Percentage of Peak Period
When Speeds Are >45 MPH



Six month performance update - Speeds

Southbound morning peak period average speed (mph)

	Winter 2015	Winter 2016
General purpose lanes	28	34
Express toll lanes	50	56

Northbound evening peak period average speed (mph)

	Winter 2015	Winter 2016
General purpose lanes	28	32
Express toll lanes	43	57

Six month performance update - Volumes

Southbound I-405

SR 527



Peak Period	Peak Hour
+7 percent	+7 percent

SR 522



Peak Period	Peak Hour
+8 percent	+14 percent

NE 100th St

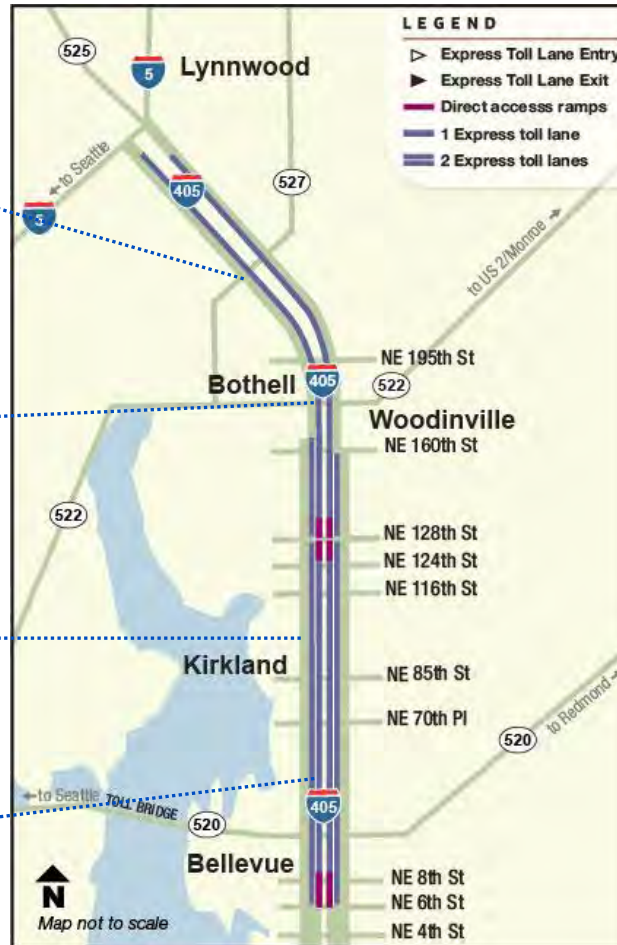


Peak Period	Peak Hour
+15 percent	+25 percent

NE 53rd St



Peak Period	Peak Hour
+15 percent	+22 percent



* **Note:** Added capacity on southbound I-405 was 7.5 lane miles for a 12% increase in lane miles.

Changes in volume include all lanes

Peak period: 5-9 a.m.

Peak hour: 7:15-8:15 a.m.

Six month performance update - Volumes

* **Note:** Added capacity on northbound I-405 was 3.5 lane miles for a 5% increase in lane miles.



Northbound I-405

SR 527

Peak Period	Peak Hour
0 percent	0 percent

SR 522

Peak Period	Peak Hour
+2 percent	+1 percent

NE 100th St

Peak Period	Peak Hour
+17 percent	+24 percent

NE 53rd St

Peak Period	Peak Hour
+12 percent	+22 percent

Changes in volume include all lanes

Peak period: 3-7 p.m.

Peak hour: 4:25-5:25 p.m.

I-405 operations – Local streets

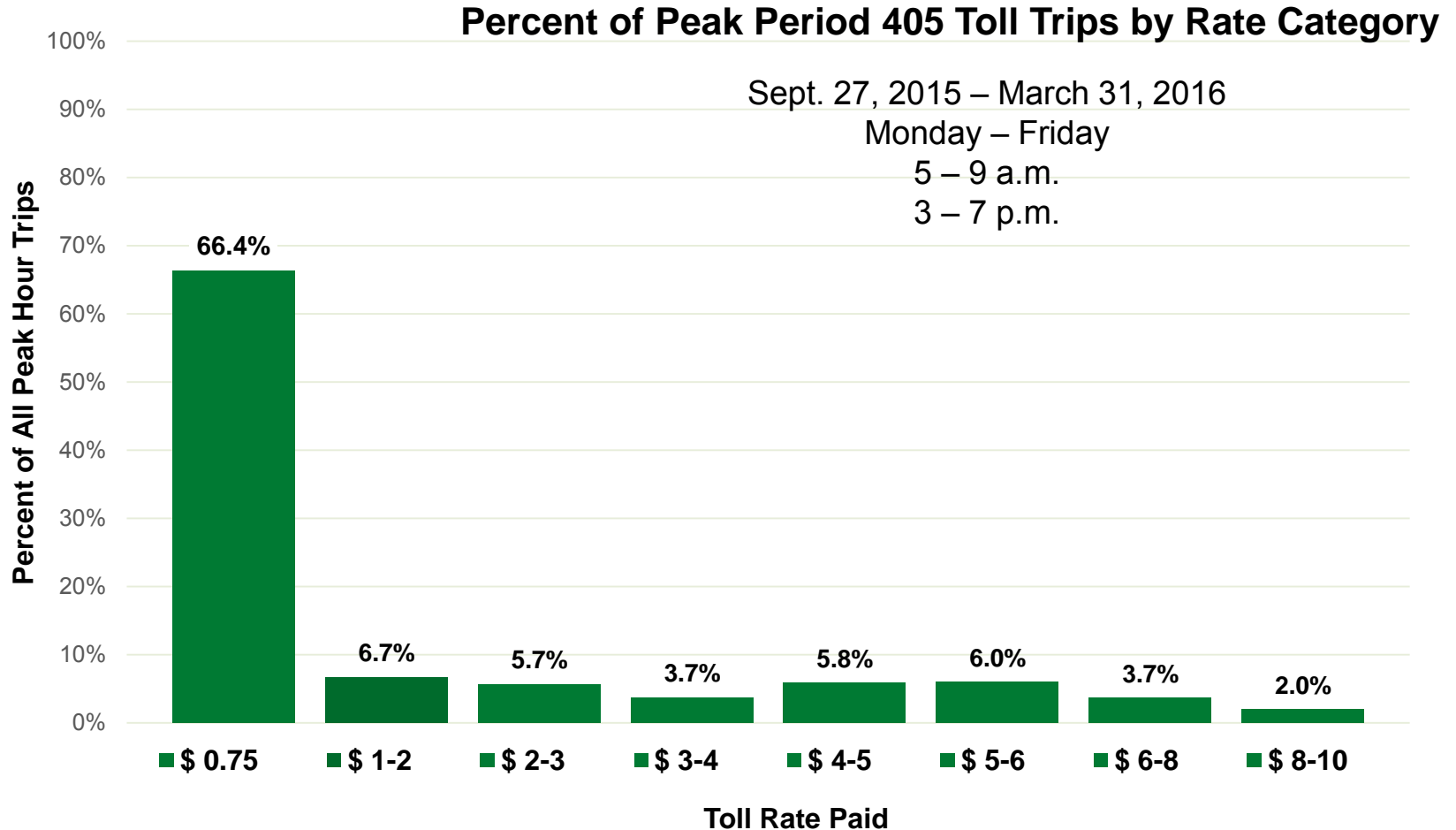
- Ongoing traffic monitoring

“In six out of the seven spots, **daily traffic volumes dropped significantly**, anywhere from 6 to 40 percent. The one street it did go up on was 195th by the high school.” – Woodinville Public Works Director Tom Hansen, March 21, 2016.

“The direct effects of I-405 express lane tolling on Kenmore have been **minimal, if any**...only expected fluctuations in volumes and travel times.” – Kenmore Traffic Engineer Brett Schock, April 28, 2016.



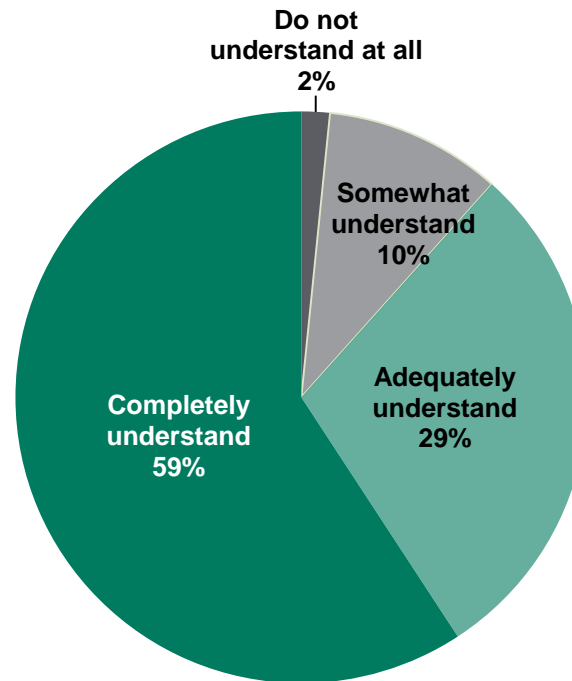
Six month performance update – Toll Rates



Six month performance update

Good To Go! Customer Survey

Overall understanding of how to use the express toll lanes

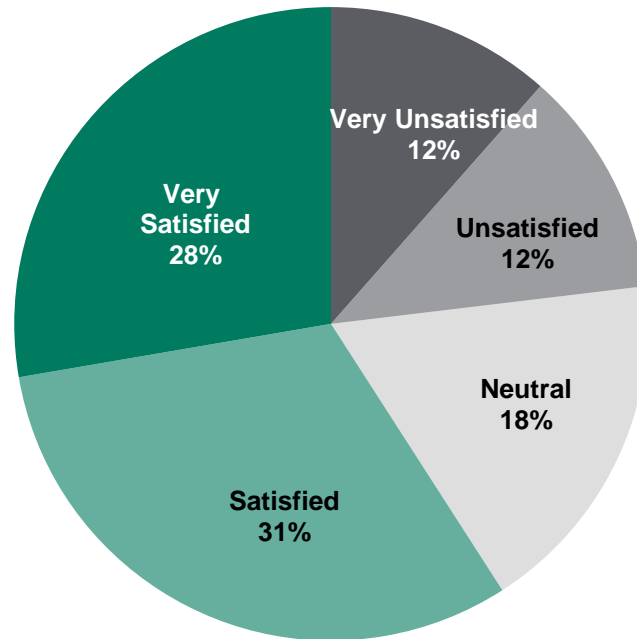


Source: WSDOT Good To Go! Customer Survey, April 2016, surveyed only customers who have used the Express Toll Lanes since opening.

Six month performance update

Good To Go! Customer Survey

The option to use the express toll lanes
when I need them

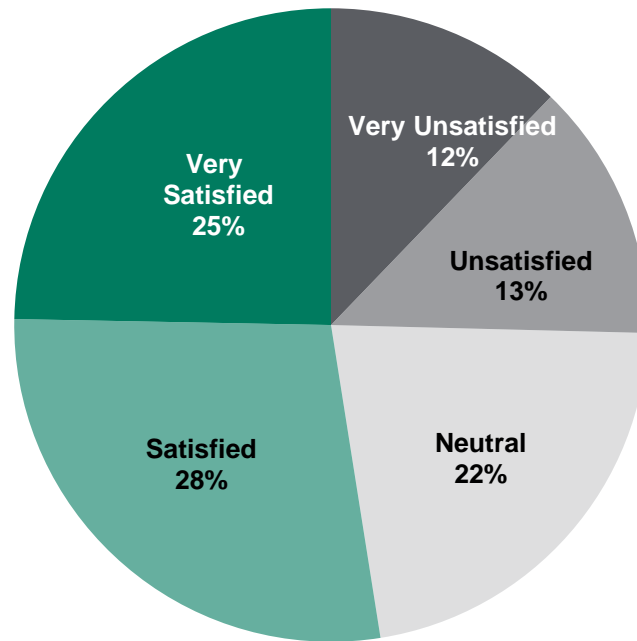


Source: WSDOT Good To Go! Customer Survey, April 2016, surveyed only customers who have used the Express Toll Lanes since opening.

Six month performance update

Good To Go! Customer Survey

The value of time saved relative to the tolls I paid



Source: WSDOT Good To Go! Customer Survey, April 2016, surveyed only customers who have used the Express Toll Lanes since opening.

How express toll lanes are measuring up

The Legislature directed WSDOT to monitor and report on performance metrics, six month observational updates are included below.

IMPROVE SPEED AND RELIABILITY

- ✓ Express toll lane speeds >45 mph 90 percent of the time
- ✓ Travel times improved in both general purpose and express toll lanes for full length trip more reliable



DEMONSTRATED ABILITY TO COVER OPERATING EXPENSES



- ✓ Express toll lanes on track to generate revenue to cover operating costs
- ✓ Express toll lane usage is well above projected use with 48,000+ daily trips

LOCAL STREETS BENEFIT

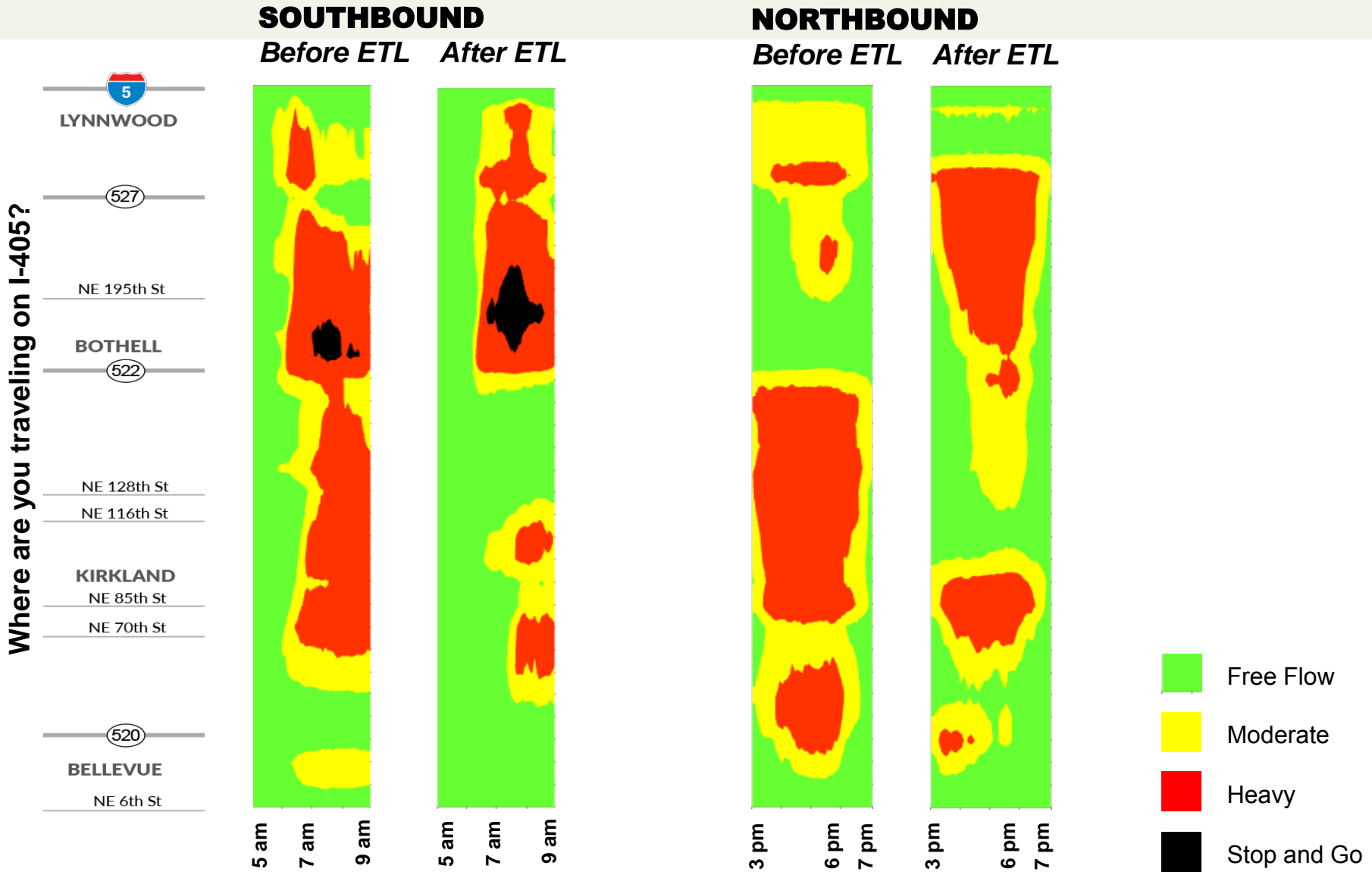
- ✓ Adjacent local streets and state highways travel times and volumes have not changed much since before tolling, monitoring is on-going

INCREASE TRANSIT AND VANPOOL RIDERSHIP

- ✓ Ridership has increased for King County Metro (+10 percent) and Community Transit (+3 percent)
- ✓ Vanpools ridership remains strong for both King County Metro and Community Transit with 350+ vans and 3,300+ riders per day



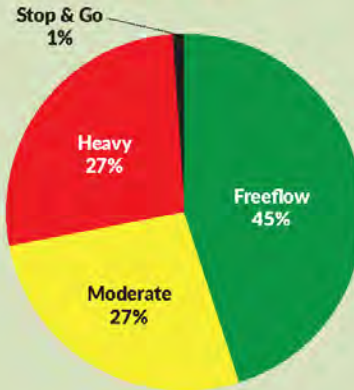
Peak Period Congestion in the General Purpose Lanes



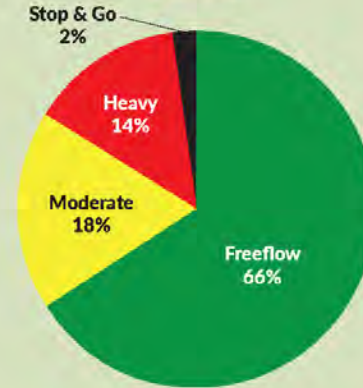
Changes in Corridor General Purpose Congestion January-March 2015 vs. January-March 2016 (Peak Periods)

Southbound

General Purpose
Before

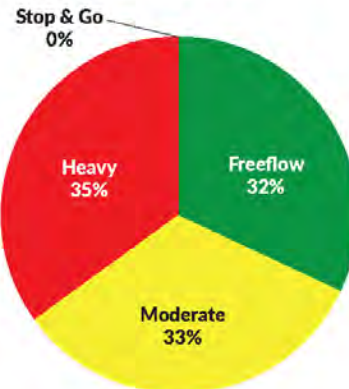


General Purpose
After

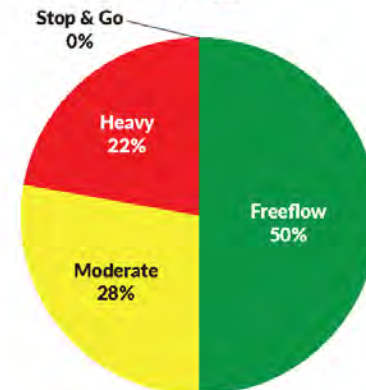


Northbound

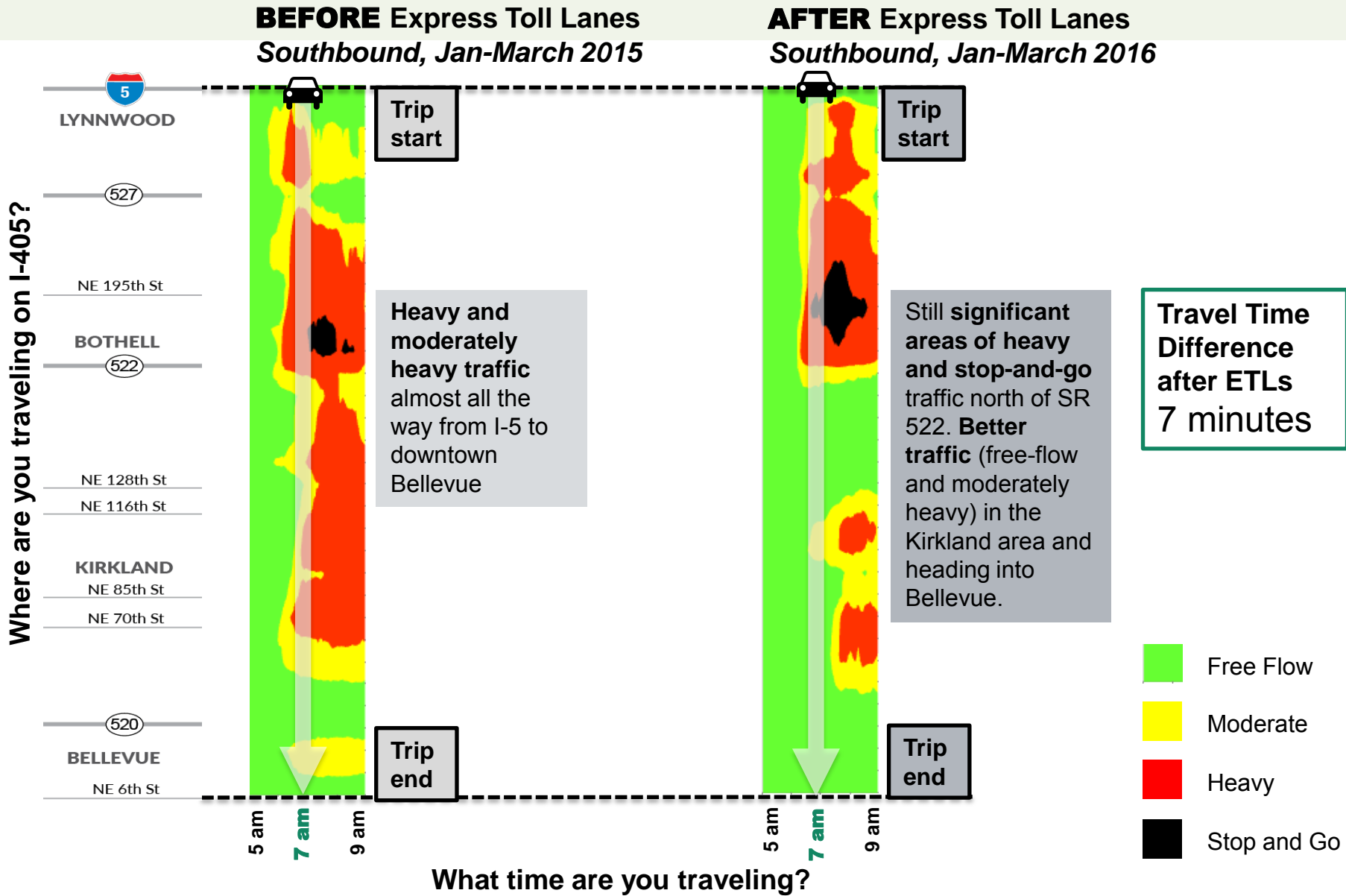
General Purpose
Before



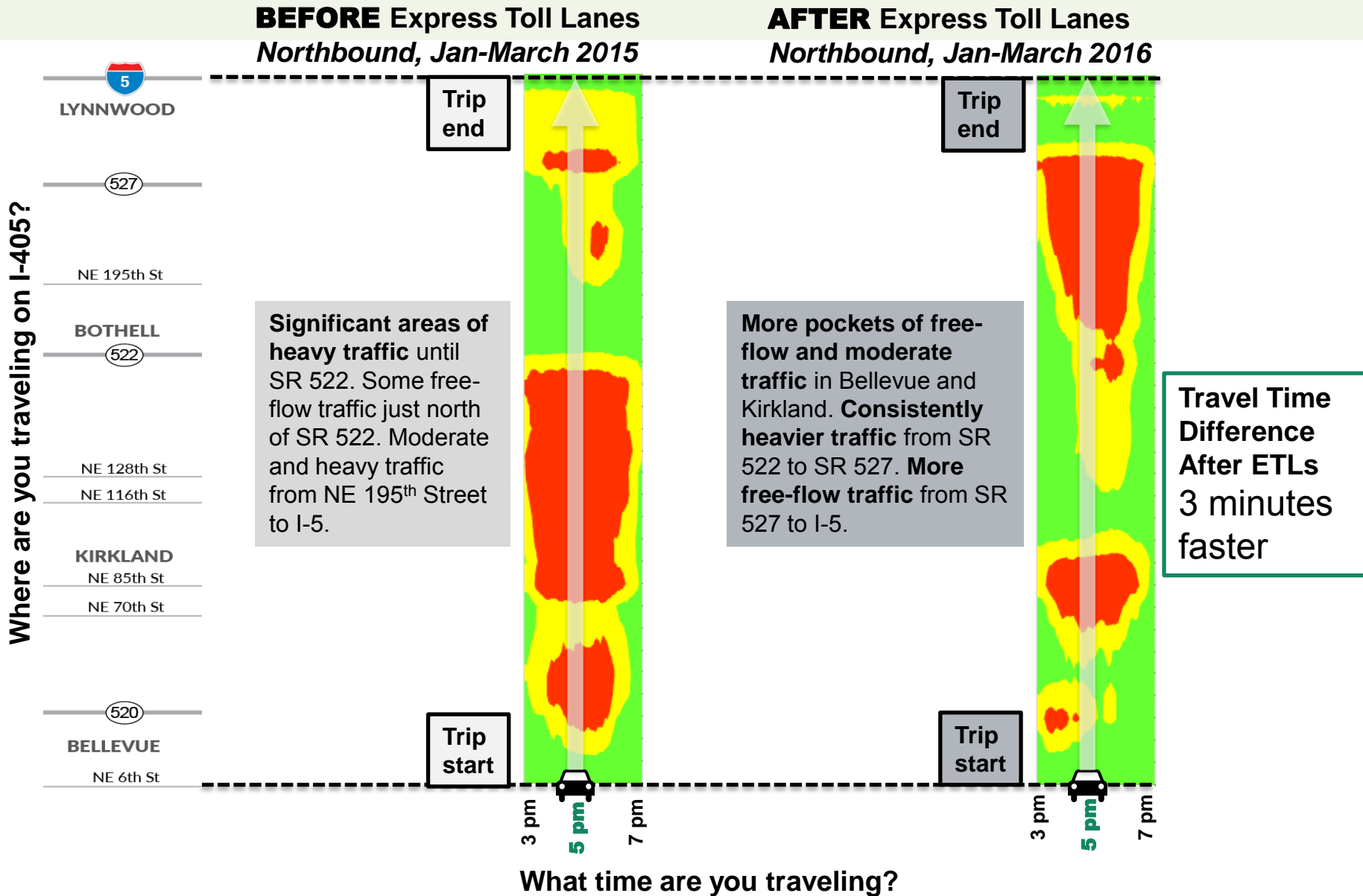
General Purpose
After



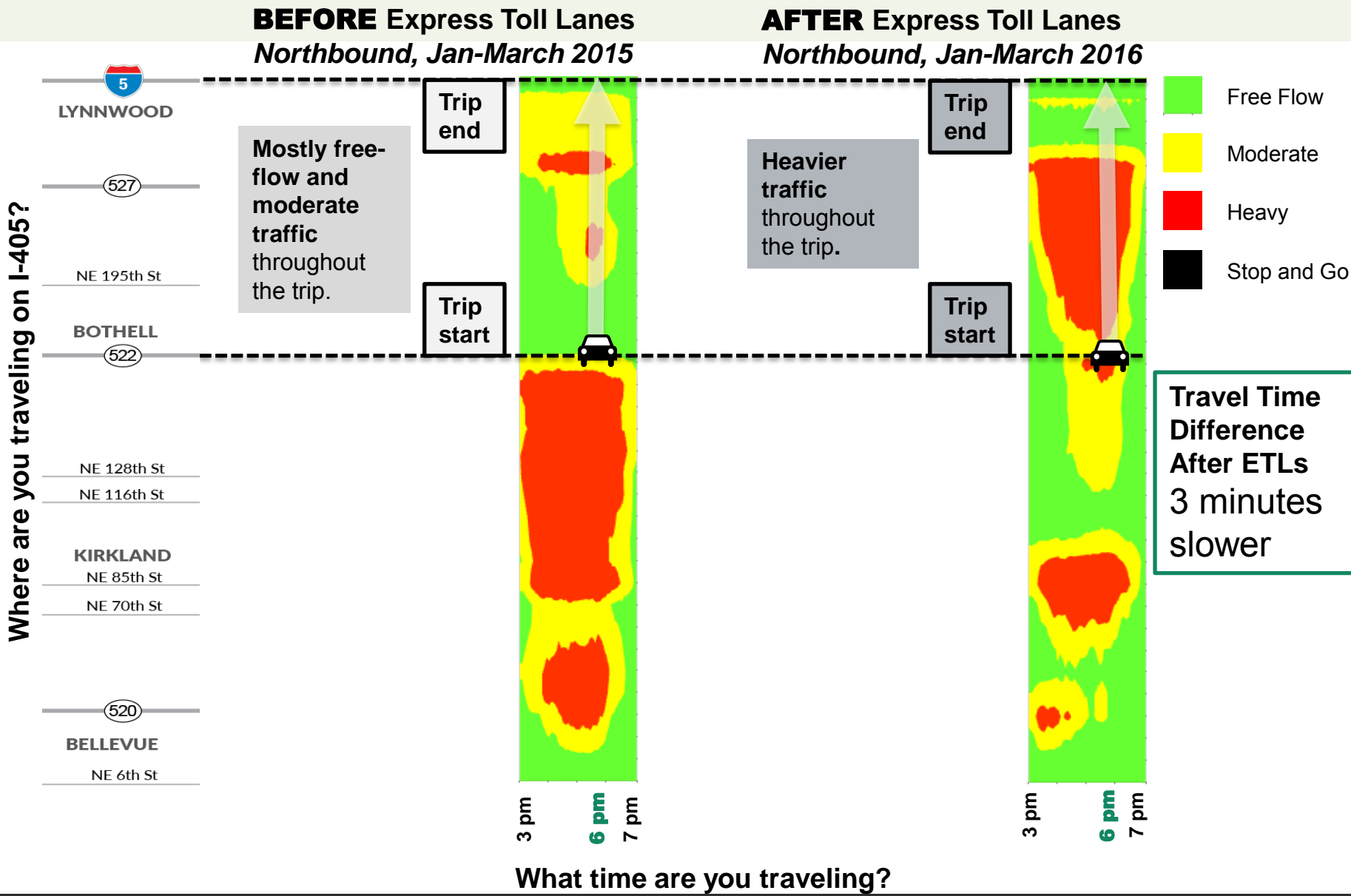
Sample Commute: Regular Lanes, Lynnwood to Bellevue, 7 a.m.



Sample Commute: Regular Lanes, Bellevue to Lynnwood, 5 p.m.



Sample Commute: Regular Lanes, Bothell to Lynnwood, 6 p.m.

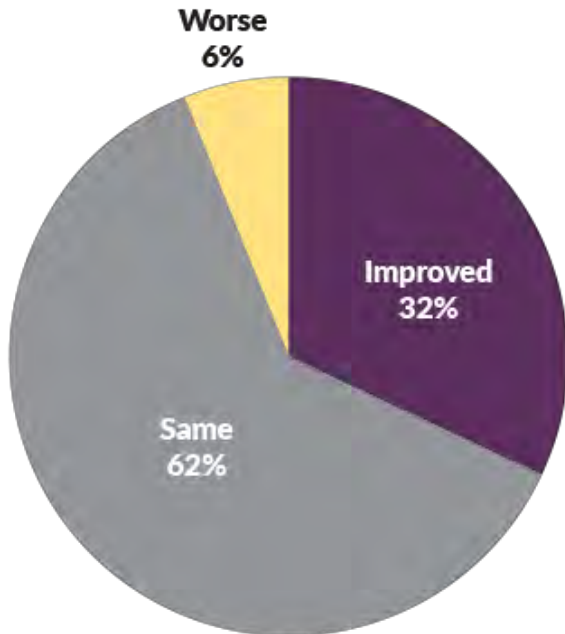


How did regular lane commutes change?

January-March 2015 vs. January-March 2016 (Peak Periods)

Southbound General Purpose Lane Trips Morning Peak Period

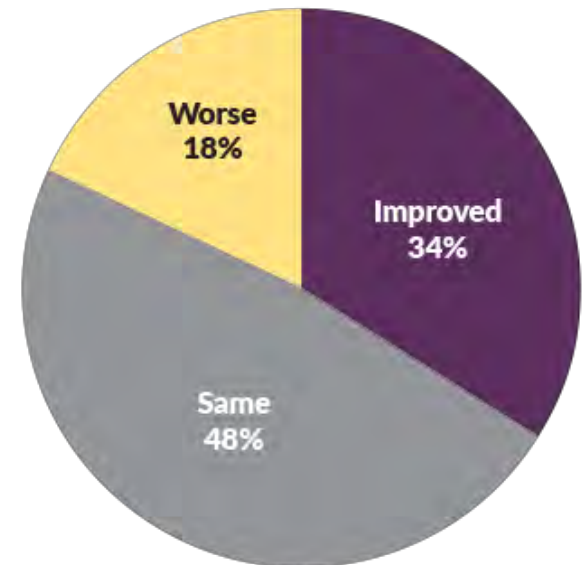
5 to 9 a.m.



Added 7.5 southbound lane miles for a 12% increase
(61 to 68.5 total miles)

Northbound General Purpose Lane Trips Afternoon Peak Period

3 to 7 p.m.



Added 3.5 northbound lane miles for a 5% increase
(65 to 68.5 total miles)

I-405 operations – Adjustments

- **Completed Adjustments**
 - Operational hours
 - Mon-Fri 5 a.m. to 7 p.m.
 - Toll rate algorithm adjustments
 - Striping and access adjustments at 10 locations
 - Additional pavement markings and signage at 3 locations



I-405 operations – Adjustments

Planned Adjustments

- 3** Southbound I-405 at SR 527: Lengthen access point to the north to allow drivers more time to merge.
- 11** Northbound I-405 near NE 85th Street: Adjust the access length to provide more open access to the express toll lane.



I-405 operations – Adjustments

Future Projects Under Evaluation

- 14** Northbound auxiliary lane between SR 520 and NE 70th Place
- 15** General purpose hard shoulder running on northbound I-405 from SR 527 to I-5
- 16** Address limited capacity in single express toll lane section (SR 522 to I-5)



For questions or further information

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