



## East Burnside Street Lane Reconfiguration

In October 2014, the Portland Bureau of Transportation (PBOT) reconfigured the lanes on East Burnside St, 15th to Laurelhurst Place. PBOT and community leaders worked together to design and implement this safety project with the following goals:

- Improve pedestrian safety and access
- Reduce number and severity of crashes
- Slow speeds
- Support the business district

The project includes the following components:

- Conversion of a westbound travel lane to a center turn lane
- Marked crosswalks with pedestrian islands and signage at 18th, 22nd, and 24th

These changes resulted in a decrease in crashes, particularly crashes involving people walking, and reduced speeds. Pre-project modeling predicted an increase in westbound morning commute times during the peak hour, which was realized after project implementation.

Goals	Project Outcomes
<b>WALKING:</b> Improve safety and access for people walking	Added three marked crosswalks and pedestrian islands. Reduced number of travel lanes people must walk across.
<b>CRASHES:</b> Reduce the number & severity of crashes	No reported crashes involving people walking, and no fatal or serious injury crashes. Slight overall crash reduction.
<b>SPEEDING:</b> Slow auto speeds (35 MPH posted speed)	ODOT approved 30 MPH posted speed, implemented 2015.

## Speed

The pre-project posted speed on East Burnside St was 35 MPH. The Oregon Department of Transportation approved a speed reduction to 30 MPH along the entire length of E Burnside from the eastern city limit to 14th Avenue, which was installed spring 2016.

Before- and after-project speed counts were collected along the corridor. The operating speed after project construction only decreased slightly, but still has high compliance with the posted speed. The number of vehicles traveling faster than 35 MPH has decreased significantly.

### Posted Speed

Pre-Project



Post-Project



### 85th Percentile Speed

*Speed at which 85% of people are driving at or below; considered the route's operating speed*

	<b>Before</b> (35 mph posted)	<b>After</b> (30 mph posted)	<b>Change</b>
<b>Westbound</b>	34 mph	32 mph	-5.8%
<b>Eastbound</b>	35 mph	35 mph	0%

### Speeders

*Percent of all people driving over 35 MPH*

	<b>Before</b> (35 mph posted)	<b>After</b> (30 mph posted)	<b>Change</b>
<b>Westbound</b>	10.8%	1%	-9.8%
<b>Eastbound</b>	18.4%	11%	-7.4%

Data details:

Baseline data was collected at 16th and 24th Avenues.

Post-project data is from 16th, 24th and 30th Avenues.

All data was collected at midday.

## Crashes

In the 10 years prior to project implementation there were 312 crashes on E Burnside from 15th to Laurelhurst Pl. Of those crashes, 10 people were seriously injured and one person was killed.

PBOT expects the lane reconfiguration will reduce all crashes by 15% since the cross-section remains unbalanced (two travel lanes eastbound and one westbound). The enhanced pedestrian crossings are expected to reduce crashes involving people walking by 46%.

One year post-project data show no fatal or serious injury crashes, and no reported pedestrian and bike crashes. Overall crashes are down slightly.

## Burnside Traffic Volumes and Alternate Routes

One concern voiced by neighbors during this process was that motor vehicle drivers on East Burnside would seek alternate routes on neighborhood streets to avoid possible congestion. Average weekday volumes have remained constant on East Burnside, while AM peak volumes westbound have decreased by about 14%.

NE Couch was identified as the likely alternate neighborhood route. Traffic volume and speed counts on NE Couch have varied after project implementation. On some days, NE Couch does experience diversion from East Burnside but peak hour volumes and daily volumes are still considered low for a residential street.

Number of Crashes			
<i>Number of motor vehicle, bicyclist, and pedestrian crashes</i>			
	10-Year Annual Average 1/1/04 - 12/31/13	1-Year Post-Project 1/1/15- 12/31/15	Change (%)
Fatal & serious injury crashes	1.1	0	100
Ped & bike	2.1	0	100
All severities, all modes	31.2	30	-3.8

East Burnside Traffic Volume			
<i>Number of motor vehicles on E Burnside St in project area</i>			
	Before 6/2013	After 10/2015	Change (%)
2-HR Peak (WB)	2154	1860	- 14
Westbound ADT	8300	8194	- 1.2
Total ADT	16,997	17,359	+ 2.1

NE Couch Traffic Volumes			
<i>Average of volumes and speeds taken near Floral</i>			
	Before	After	Change (%)
7-9 AM WB Volumes	23	50	+ 117
Daily ADT	429	391	- 8.9
Speeds	20.5	23.25	+ 13.4

## Travel Time

Bluetooth data shows that the time required to drive westbound during the morning commute between Chavez and 14th increased by more than one minute after the project was implemented. This increase matches what the City predicted with modeling prior to the project.

TriMet also collected travel time data along East Burnside from Chavez to the Burnside Bridge and reported no increase in travel time after the project was implemented. This may be due to the fact that the more stable travel times are realized west of 14th Avenue along the couplet due to people driving experiencing increased congestion east of the couplet.

Westbound Travel Time (average)			
	Before	After	Time Change
<b>Chavez to 28th</b>			
Average	2:07	2:59	+ 0:52
Light Volume Days	1:44	2:00	+ 0:16
Heavy Volume Days	2:34	4:55	+ 2:21
<b>Chavez to 14th</b>			
Average	4:00	5:21	+ 1:21
Light Volume Days	3:14	4:06	+ 0:52
Heavy Volume Days	6:00	8:00	+ 2:00

## Conclusion

The East Burnside Street Lane Reconfiguration, from 15th to Laurelhurst, was intended to:

- Improve pedestrian safety and access
- Reduce number and severity of crashes
- Slow speeds

In the year following the lane reconfiguration:

- Three enhanced pedestrian crossings, including marked crosswalks and pedestrian median islands, were installed on East Burnside at 18th, 22nd and 24th. Walking across East Burnside is easier as there is only one westbound travel lane to cross and a median island to pause at before crossing two eastbound travel lanes. Anecdotal evidence indicates that more people are walking across East Burnside at the marked crosswalks.
- No people were seriously injured or killed on this segment of East Burnside, and there were no reported pedestrian or bicyclist collisions.
- Compliance with the lowered speed limit is high, and traffic volumes have remained about the same.

Phase two of this East Burnside safety project is underway, with ADA compliant curb ramps, curb extensions, a wider pedestrian island at 24th Ave, a new marked crossing and pedestrian island at Floral, new paving from 20th to 32nd, and improved signal timing for the morning commute.

The City will continue to monitor this project and update this report as additional data is available.