

Neighborhood Traffic Mitigation Meeting #9

July 6, 2017

- 5:30 – Welcome
- 5:35 – East Link Project Coordination
- 5:40 – East Link Construction on Bellevue Way and 112th Ave SE
- 5:50 – Traffic Study Results
- 6:10 – Pilot Program
- 6:40 – Communication Plan
- 6:50 – Wrap-up



Intros

- **City of Bellevue**
 - *Marie Jensen, East Link Outreach*
 - *John Murphy, Neighborhood Traffic Safety Services (NTSS)*
 - *Karen Gonzalez, NTSS Manager*
 - *Tim Kariel, East Link Senior Project Manager*
 - *Darek Jarzynski, Senior Transportation Engineer*
 - *Darcy Akers, Transportation Engineer*
 - *Sgt. Dave Sanabria, Police*
- **Sound Transit**
 - *Jason Hampton, Community Outreach Specialist*
- **Committee members**



Committee context

- Tradeoffs with mitigation
- Fluid plan
- Monitor and respond
- Committee members are conduit to rest of community (and vice versa)
- Mitigation tied to key construction activities along Bellevue Way and 112th Ave SE
- Goal: discourage increase of commuter traffic related to construction



East Link Construction Coordination

- City Transportation Department and Sound Transit to discuss:
 - Construction activity along Bellevue Way and 112th Ave SE
 - How agencies are coordinating
- *Notes from this discussion will be reflected in meeting summary*



What's happened since P&R closure?

- Orange residential area signs installed with “Local Access Only” message installed at 7 locations
- Data monitoring at 11 locations
- Parking monitoring in Enatai and off Bellevue Way
- SE 4th St closed
- Bellevue Way weekend closures



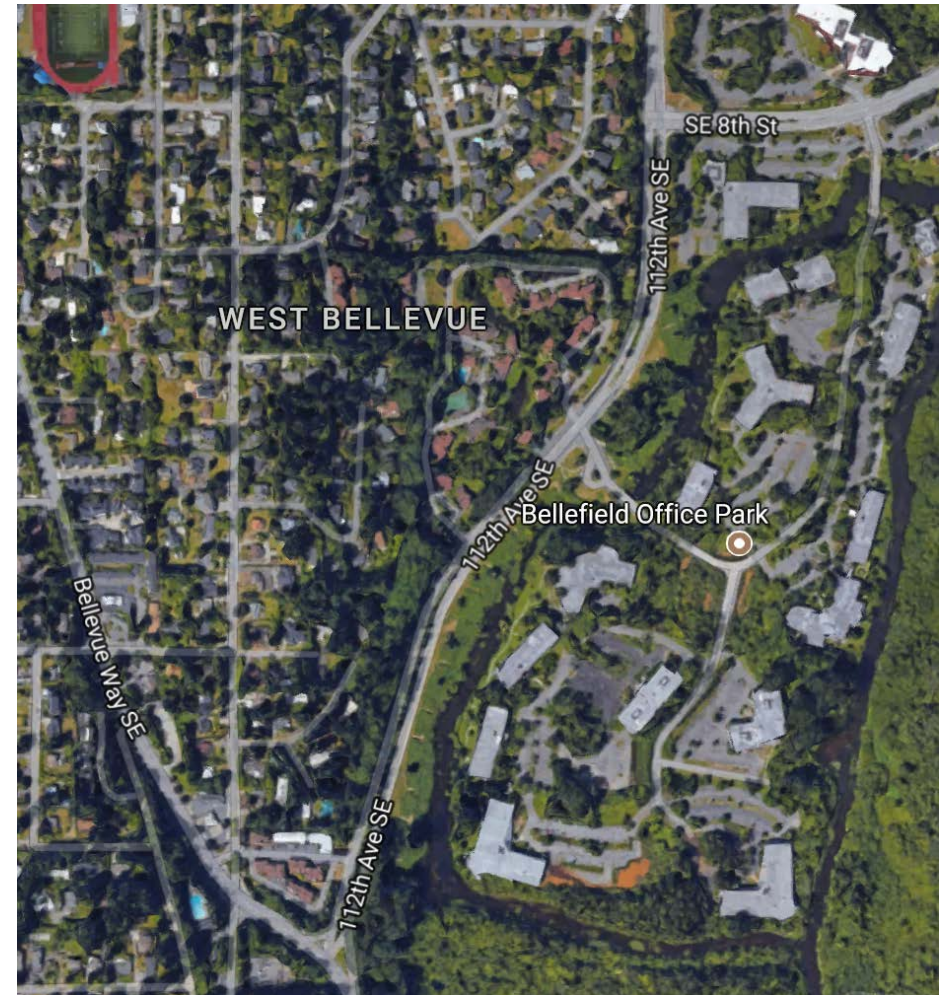
Monitor and Respond: What we know

- Since South Bellevue P&R closure and Bellevue Way closure, very limited community feedback to city staff about traffic concerns
- Traffic monitoring: volume increases at key locations
- Past City utilities work on 112th Ave SE caused traffic diversion on 108th Ave SE between Main and Bellevue Way
 - Similar lane configurations scheduled to begin soon for 4 months as part of East Link construction
 - This is the first of several closures (those dates are not yet known)



Upcoming work on 112th Ave SE

- Construction will reduce lanes from a total of four (two in each direction) to two (one lane in each direction) from Bellevue Way to SE 8th St
- Duration: 4 months
- Similar configuration to city Utilities work in 2015



Traffic Study

- Conducted May 22-June 18, 2017
- Speed and volume collected at 8 locations (4 in Bellecrest, 4 in Enatai)
- Volumes collected at (3) open entrances to Surrey Downs
- Used traffic consultant IDAX using tube technology
- Definitions:
 - **Pre-closure** = week 1 of study (before South Bellevue Park and Ride closed, before SE 4th St closed)
 - **Post-closure** = week 4 of study (after South Bellevue Park and Ride closed, and SE 4th St closed)
 - **Key direction of travel** = direction of travel where the Committee has been primarily concerned about increases occurring. This is the southbound direction for all locations except 112th Ave SE and 113th Ave SE (where it's the northbound direction).



Key Dates During Study

| | | Date | Day | East Link Key Dates | Other Key Dates | |
|--------|--------|--------|----------------------------|---------------------|---|------------------------------|
| May | Week 1 | 23 | Tu | | Study starts | |
| | | 24 | W | | | |
| | | 25 | Th | | Orange residential area signs installed | |
| | | 26 | F | | | |
| | | 27 | Sa | | Sounders 12:00 | |
| | | 28 | Su | | | |
| | | 29 | M | | <i>Memorial Day</i> | |
| | June | Week 2 | 30 | Tu | South Bellevue P&R Closed | |
| | | | 31 | W | | Mariners 7:07 |
| | | | 1 | Th | | Mariners 12:40 |
| | | | 2 | F | | Mariners 7:10 |
| | | | 3 | Sa | | Mariners 7:10 |
| | | | 4 | Su | | Mariners 1:10, Sounders 7:00 |
| | | | 5 | M | SE 4th St closed | |
| Week 3 | | 6 | Tu | | Mariners 7:10 | |
| | | 7 | W | | Mariners 7:10, BHS Choir Concert 7:00 | |
| | | 8 | Th | | Mariners 7:10, BHS Orchestra Concert 7:00 | |
| | 9 | F | | Mariners 7:10 | | |
| | 10 | Sa | 1 lane NB open on Bvue Way | Mariners 7:10 | | |
| | 11 | Su | 1 lane NB open on Bvue Way | Mariners 1:10 | | |
| Week 4 | 12 | M | | | | |
| | 13 | Tu | | | | |
| | 14 | W | | BHS Senior Finals | | |
| | 15 | Th | | BHS Senior Finals | | |
| | 16 | F | | | | |
| | 17 | Sa | 1 lane NB open on Bvue Way | | | |
| | 18 | Su | 1 lane NB open on Bvue Way | Study ends | | |



Traffic Study Locations

- A-110th Ave SE s/o of Main St
- B-SE 2nd St e/o 108th Ave SE
- C-SE 11th St e/o 108th Ave SE
- D-108th Ave SE n/o SE 2nd St
- E-108th Ave SE s/o SE 2nd St
- F-108th Ave SE n/o SE 14th St. (SB)
- G-108th Ave SE s/o SE 16th St (SB)
- H-104th Ave SE s/o SE 10th St (SB)
- I-108th Ave SE s/o SE 20th St(SB)
- J-112th Ave SE n/o SE 31st St (NB)
- K-113th Ave SE n/o SE 34th St (NB)



Traffic Study Findings (May 2017)

- Speeds decreased slightly across most sites, most directions
- Following SE 4th St closure, more motorists are using 108th Ave SE to access interior streets in Surrey Downs
- Where increases in volume occurred from 4-7 pm, the increases were:
 - North of Bellevue Way: southbound direction (toward Bellevue Way)
 - South of Bellevue Way: northbound direction on 112th, 113th (toward Bellevue Way)



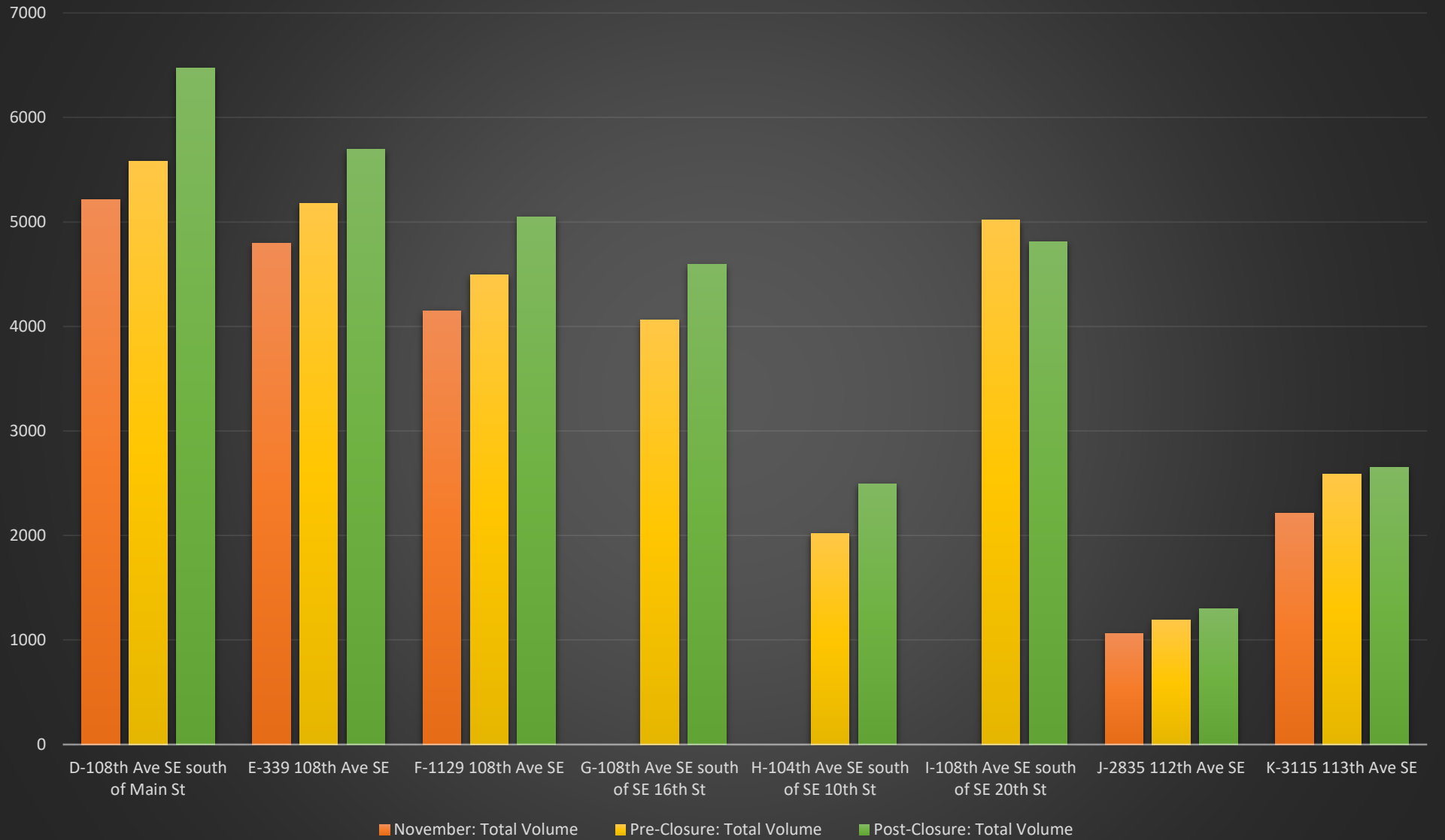
Speeds—for key direction of travel

| Location | Pre-closure | Post-closure | Change |
|--|-------------|--------------|--------|
| D-108th n/o SE 2nd St (SB) | 31 | 31 | ↔ |
| E-108th s/o SE 2nd St (SB) | 28 | 27 | ↓ |
| F-108th n/o SE 14th St. (SB) | 30 | 30 | ↔ |
| G-108th s/o SE 16th St (SB) | 31 | 30 | ↓ |
| H-104th s/o SE 10th St (SB) | 32 | 32 | ↔ |
| I-108 th s/o SE 20 th St(SB) | 30 | 30 | ↔ |
| J-112th Ave SE n/o SE 31st St (NB) | 33 | 32 | ↓ |
| K-113th Ave SE n/o SE 34th St (NB) | 38 | 37 | ↓ |

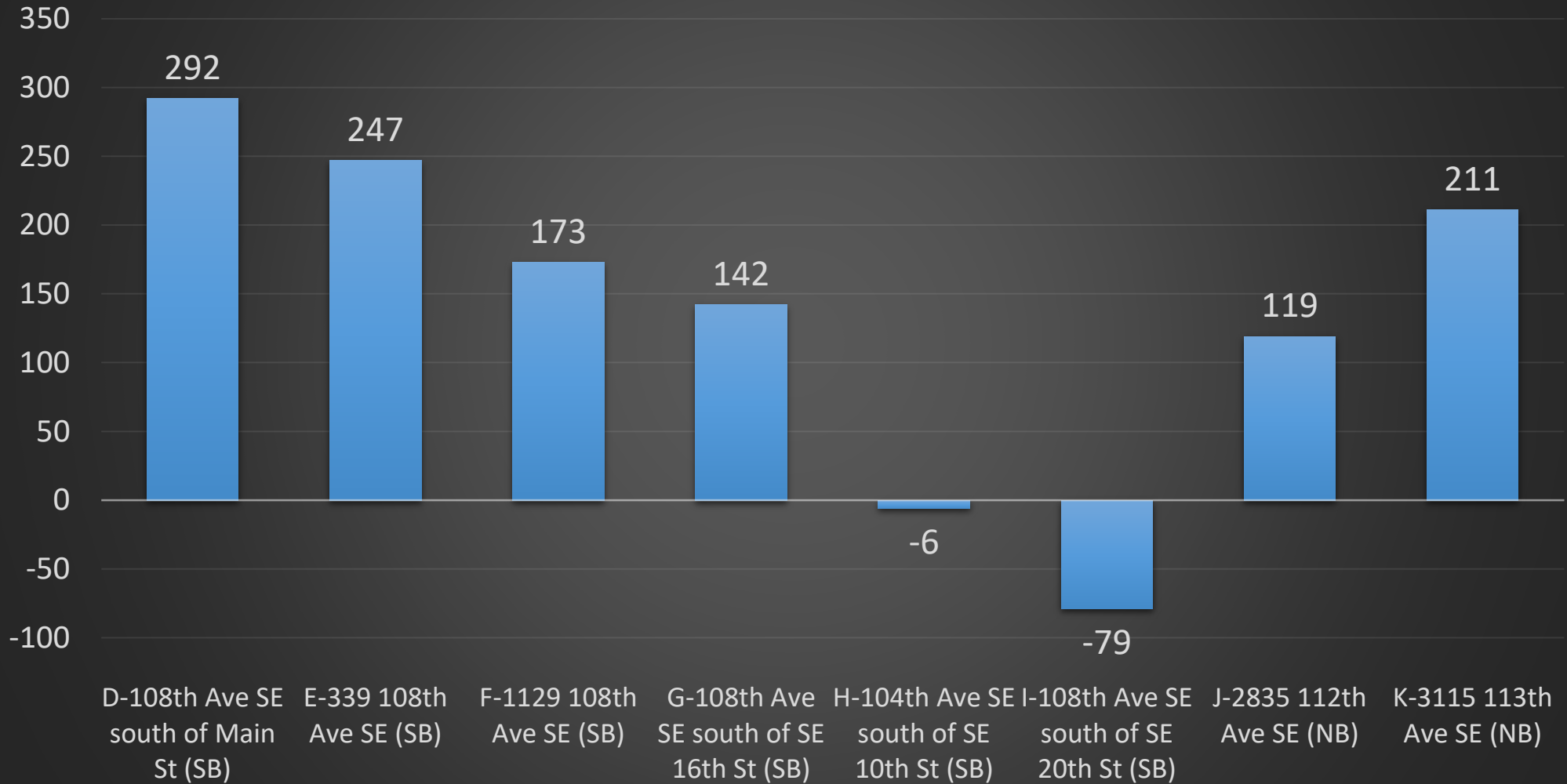
Speeds represent 85th percentile speed; the speed at which 85% of motorists are traveling or below; mid-week average



Average Daily Mid-Week Volume-both directions



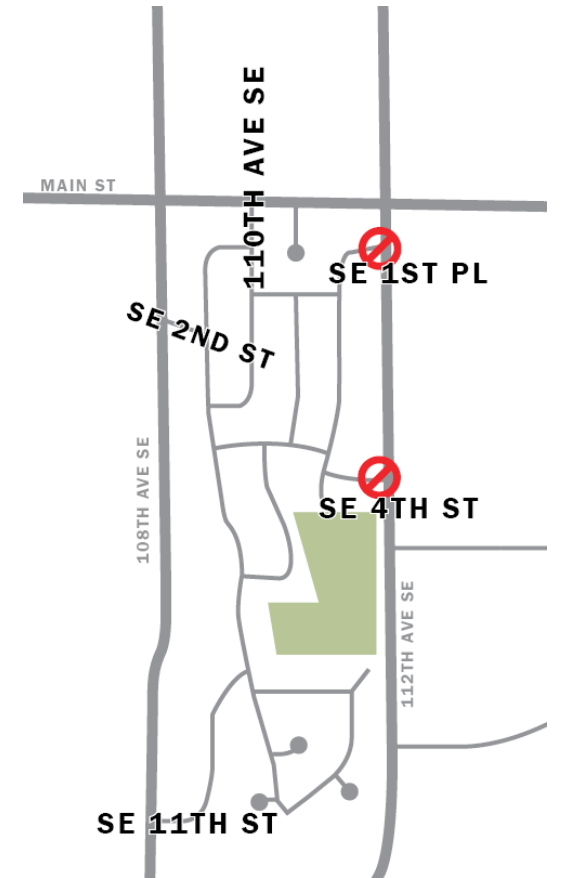
Change in Volume: Pre-Closure vs. Post Closure; average mid-week volumes during evening commute time (4-7 PM) for key direction of travel



Surrey Downs Volumes

| Location | Pre-closure volume in/out | Post-closures volume in/out |
|---|---------------------------|-----------------------------|
| Main St and 110 th Ave SE | 408 (15%) | 710 (32%) |
| SE 1 st Pl and 112 th Ave SE | 311 (12%) | --- |
| SE 4 th St and 112 th Ave SE | 719 (27%) | --- |
| SE 2 nd St and 108 th Ave SE | 724 (27%) | 970 (44%) |
| SE 11 th St and 108 th Ave SE | 502 (19%) | 518 (24%) |
| Total | 2,664 (100%) | 2,200 (100%) |

Percent refers to that entrances total share of daily volume in/out of Surrey Downs



Pilot Permanent Counters

Traditionally, speeds/volumes have been collected with tubes that are set for a specified duration (industry standard)



We tested two permanent count technologies on a pilot basis

- 108th Ave SE south of SE 11th St
- 113th Ave SE south of Bellevue Way



Pilot Permanent Counters

- Permanent counters would allow for continuous speed and volume monitoring during major construction events
- Ultimately, these counters did not produce accurate or consistent results
- We continue to explore accurate, permanent counters



Takeaways

- Volumes higher north of Bellevue Way
- Increases north of Bellevue Way partially related to SE 4th closure
- Total volumes pre-closure → post-closure: volumes relatively flat south of Bellevue Way (104th is outlier)
- Evening commute: Increases in many key directions with exception of 104th Ave SE s/o SE 10th and 108th Ave SE s/o SE 20th
- 108th south of Bellevue Way carried more traffic on weekends, likely serving residential traffic
- Volumes down in Surrey Downs
- Impact to come in form of lane reductions on 112th Ave SE



Addressing Commuter Traffic

- Commuter traffic is a concern all over the city
- Construction can heighten the concern
- Most effective way to address commuter traffic is to start with least restrictive tools
- Always tradeoffs
- Unless residents see the problem first hand, less likely to support these restrictions



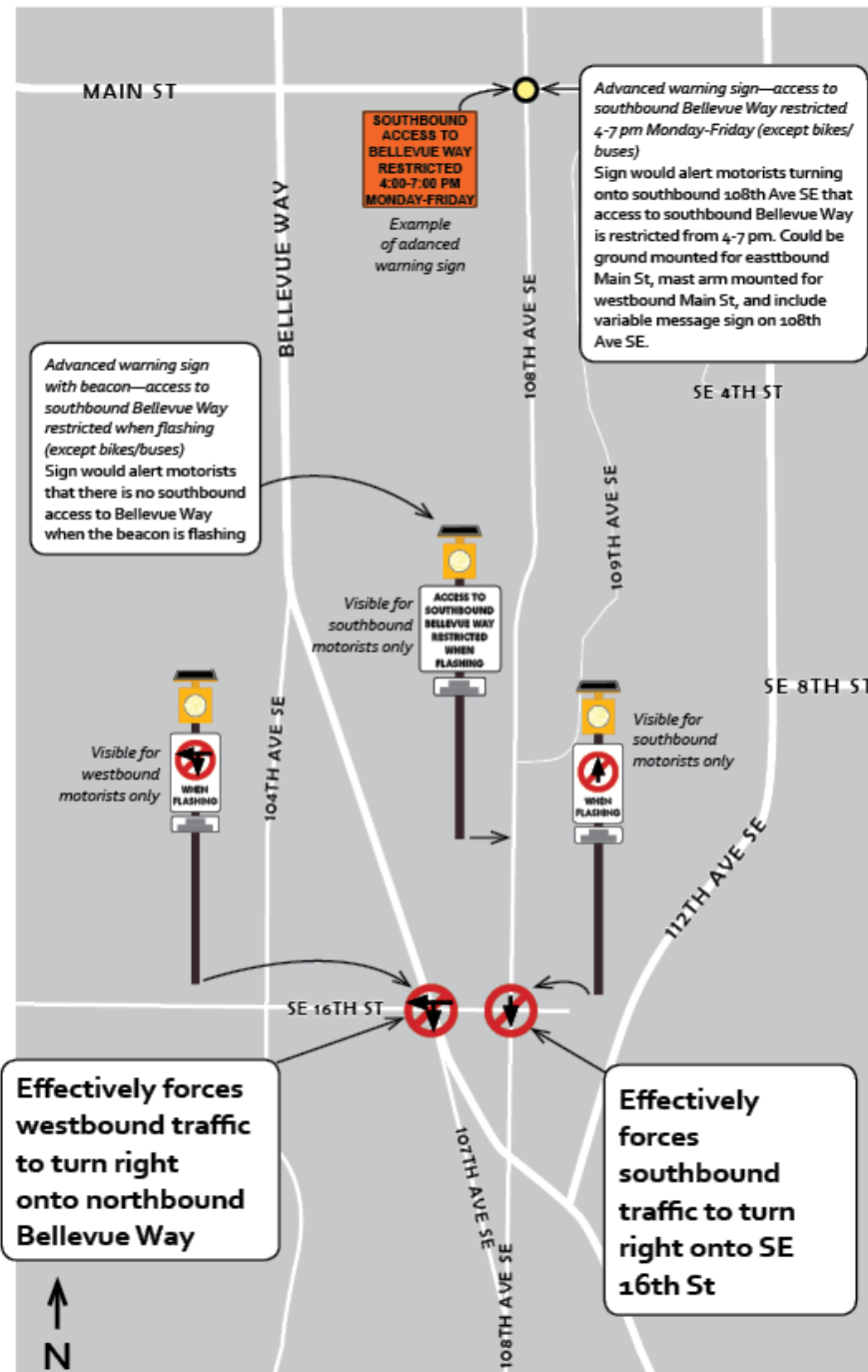
Pilot Turn Restrictions

- This pilot project (3-month) would help discourage commuter traffic from using neighborhood streets to access Bellevue Way by restricting movement during the PM peak (4-7 pm, Monday- Friday).
- Features of this pilot include:
 - No access to I08th Ave SE s/o SE I6th St from SB I08th Ave SE through the use of a flashing beacon
 - No access to SB Bellevue Way or WB SE I6th St from WB SE I6th St at Bellevue Way through use of a flashing beacon
 - Advanced warning of restrictions at Main St and I08th Ave SE through use of a sign
 - Advanced warning of restriction for southbound I08th Ave SE traffic approximately 300' north of SE I6th St through the use of a flashing beacon





Pilot Turn Restrictions



Getting to Enatai



Pilot Turn Restrictions

- Enforceable
- Turn restrictions at key locations in Bellecrest during evening commute
- Routing apps would reflect change
- Effective way to discourage commuter traffic through both Bellecrest and Enatai
- Provide an opportunity to collect data to determine impacts
- Allow for community feedback



Pilot Turn Restrictions

- Time sensitive to move forward now
 - 112th Ave SE lane closures forthcoming
 - One-lane each direction (similar to the Utilities project last year)
 - Expected increased traffic on 108th Ave SE between Main and Bellevue Way
- Project supported by Police for enforcement
- It's not our goal to shift traffic volumes from one neighborhood street to another neighborhood street
 - Likely won't create significant downstream impact—monitoring will show any impact
- Numerous access points remain for Enatai residents

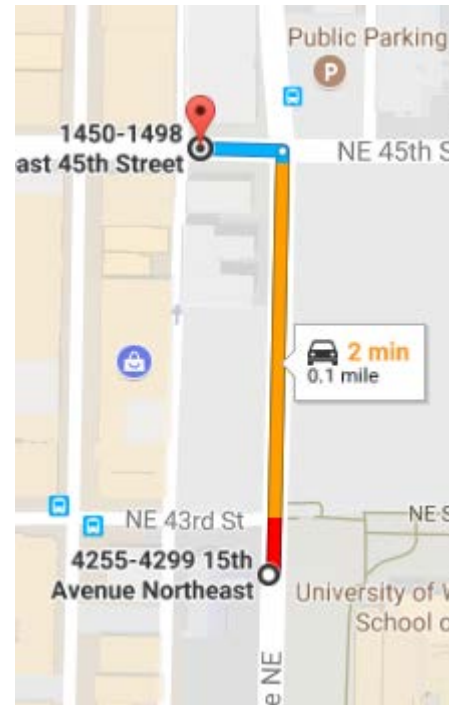


Routing Apps

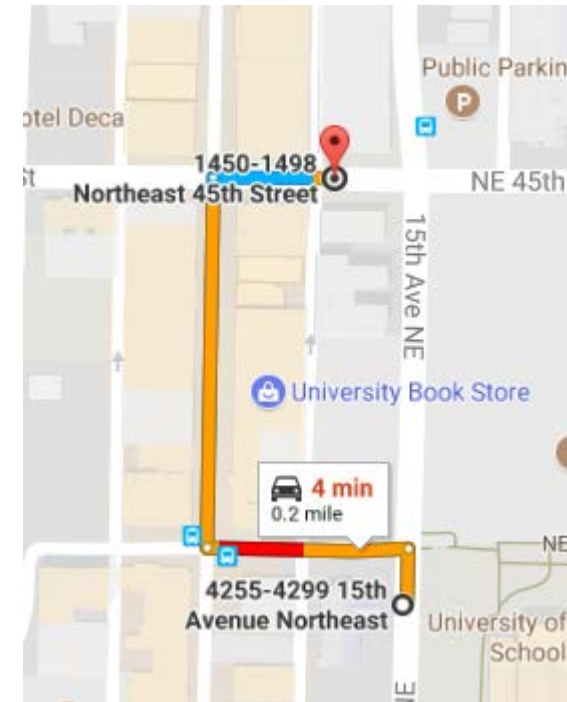
- Routing apps (e.g. Google Maps, Waze) do not route drivers through intersections with time-based turn restrictions



Example: no left turn from 3-7 PM at northbound 15th Ave NE to NE 45th St in Seattle



Leaving at 2:10 pm



Leaving at 3:10 pm



Timing

- Goal: get pilot in as close to start of 112th Ave SE as possible (date forthcoming)
 - Implementation is contingent upon sign order and crew availability
- Once pilot in place, will run for 3 months



Evaluating the Pilot

- Key metrics are:
 - Traffic monitoring
 - Measure effectiveness
 - Measure potential impact downstream
 - Community input (complaints, approvals)
- Open online survey for duration of pilot to allow for community feedback
- Staff field monitoring
- Meeting with NTMC approximately 3 weeks post lane reductions to get feedback/experiences
- Meeting with NTMC following pilot conclusion to review results of traffic monitoring and community feedback

