

2016 Annual Traffic Report

April 24, 2017

Presented by Kendra Dedinsky, City Traffic Engineer
& Captain Abigail Steele, Shoreline PD



Objectives of Annual Traffic Report

- Provide an overview of collision and traffic data collected in Shoreline.
- Improve traffic safety in the City of Shoreline by identifying collision trends and high accident locations – develop mitigation strategies.
- Use to prioritize improvement and enforcement resources and to identify TIP/CIP projects.



Traffic Volumes

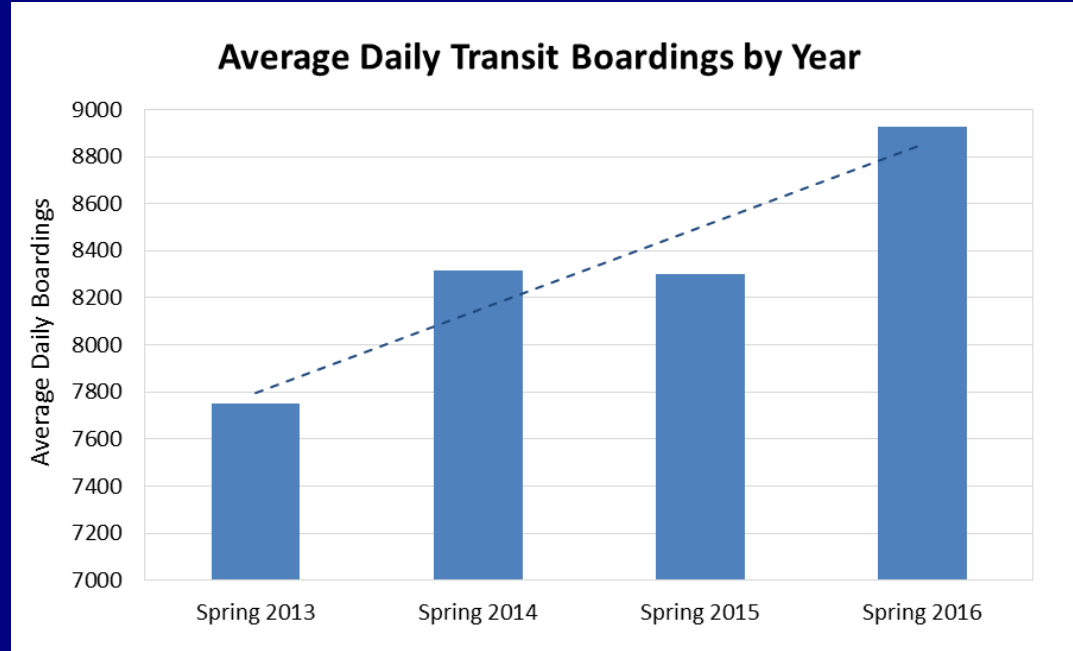
| | 2012 | 2013 | 2014 | 2015 | 2016 | 5 Year Average |
|-------------------------|--------|--------|-------|-------|--------|----------------|
| AM Peak Aggregate AAWDT | 7064 | 7444 | 6169 | 6399 | 6528 | 6721 |
| PM Peak Aggregate AAWDT | 9314 | 9521 | 7722 | 8033 | 8197 | 8857 |
| Daily Aggregate AAWDT | 108025 | 111441 | 96972 | 99719 | 101426 | 103517 |

- Average Weekday Daily Traffic volumes up by 1.71%.
- AM peak volumes up by 2.04% and the
- PM peak volumes up by 2.02%.

Transit

Transit ridership is up 7.5% from 2015

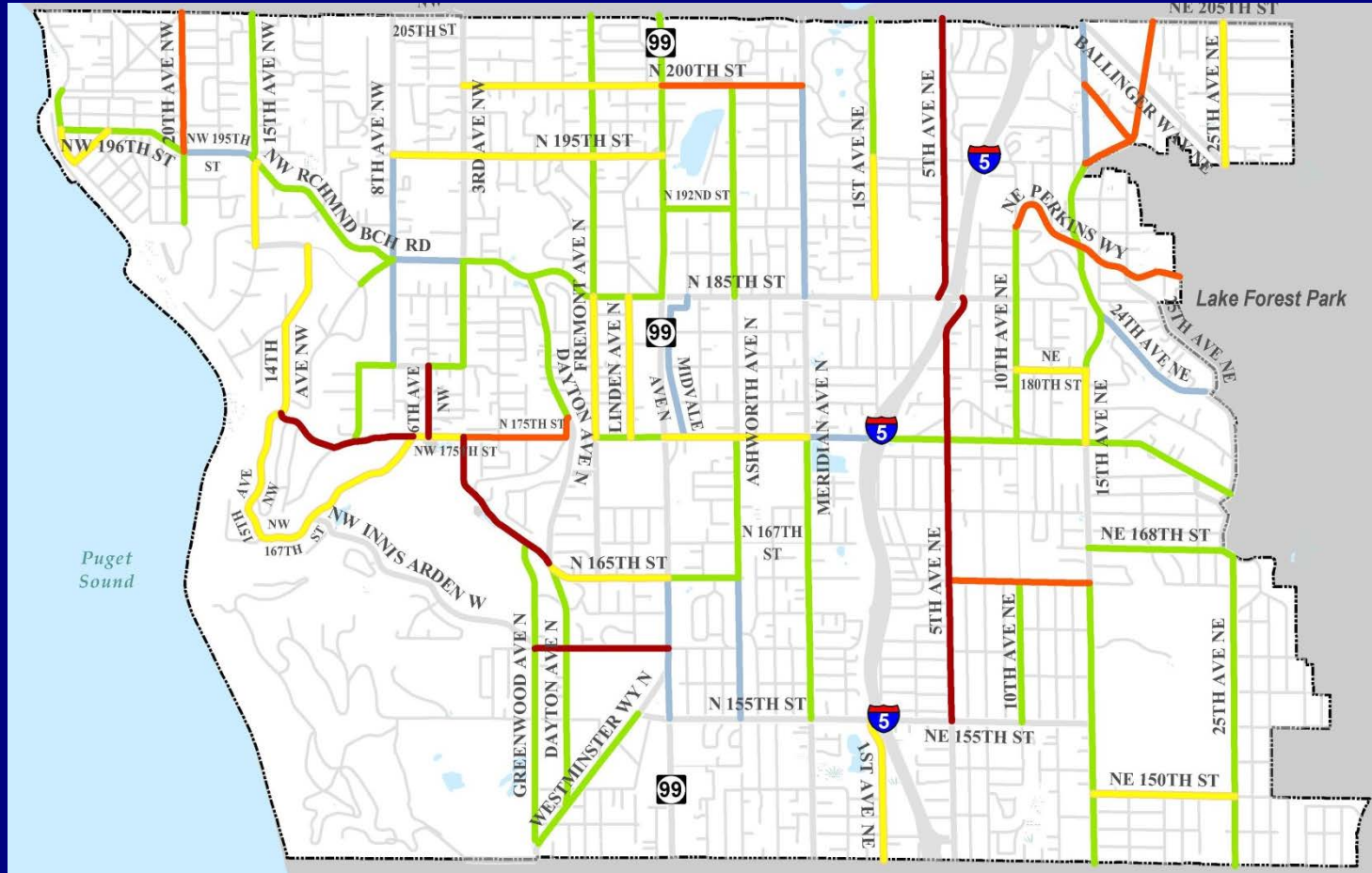
| | Daily Boardings in Shoreline | % Change |
|-------------|------------------------------|----------|
| Spring 2016 | 8925 | 7.5% |
| Spring 2015 | 8301 | -.2% |
| Spring 2014 | 8318 | 7.3% |
| Spring 2013 | 7750 | - |



Speed Differential Map

Differential

Speed (mph)

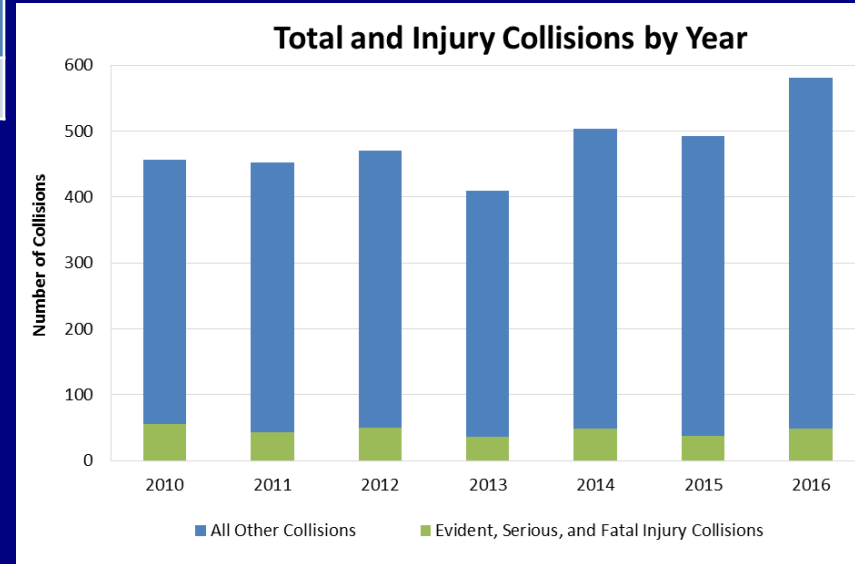


Shoreline Collision Statistics by Year

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-----------------|------------|------------|------------|------------|------------|------------|------------|
| Fatal | 2 | 1 | 1 | 1 | 1 | 1 | 0 |
| Evident Injury | 48 | 33 | 44 | 26 | 37 | 28 | 40 |
| Serious Injury | 6 | 9 | 5 | 9 | 11 | 8 | 9 |
| Possible Injury | 105 | 111 | 107 | 106 | 122 | 127 | 143 |
| No Injury | 285 | 290 | 305 | 263 | 318 | 320 | 376 |
| Unknown | 11 | 9 | 8 | 4 | 15 | 9 | 13 |
| Total | 457 | 453 | 470 | 409 | 504 | 493 | 581 |

- Collisions increased for 2016 - the overall collision trend is now increasing.
- Comparable to regional trends

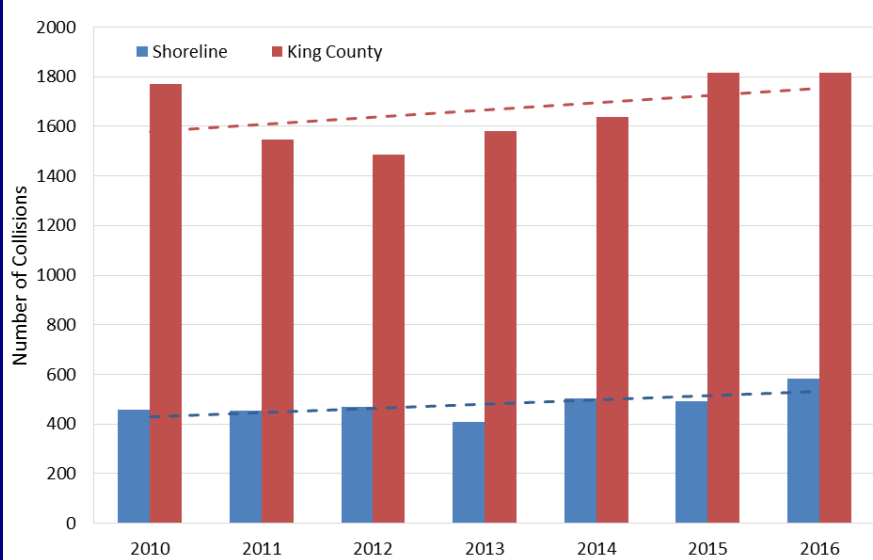
- The injury collision trend remains down.



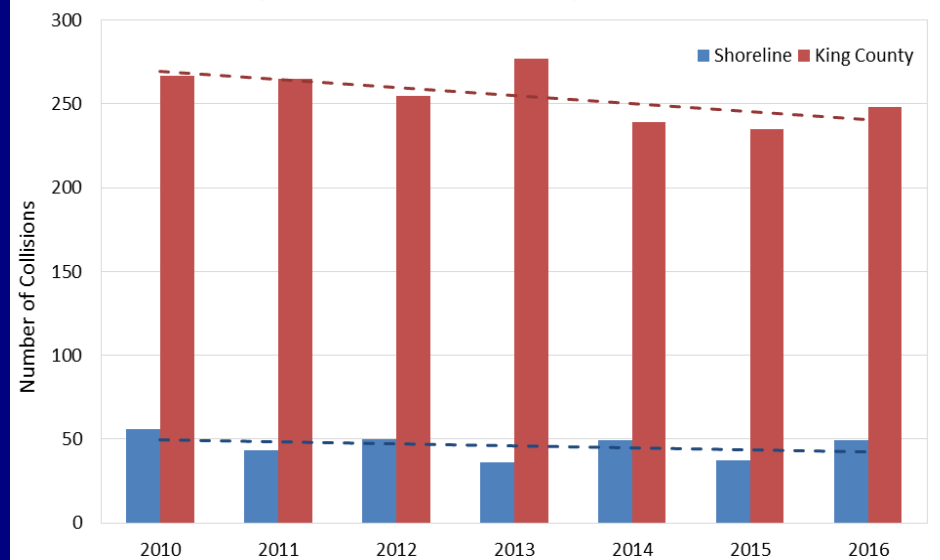
Regional Comparison

King County collision data shows a similar trend for both total and injury collisions.

King County & Shoreline Total Collisions by Year

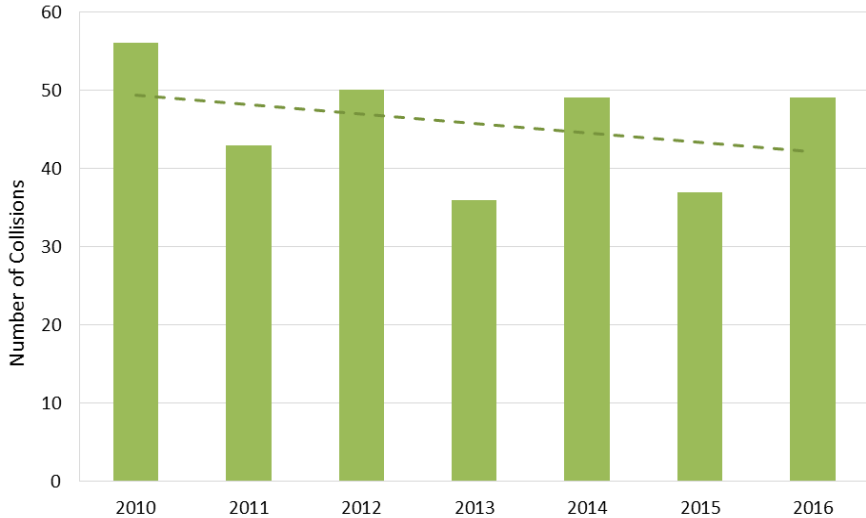


King County & Shoreline Injury Collisions



Injury Collisions

Injury Collisions by Year



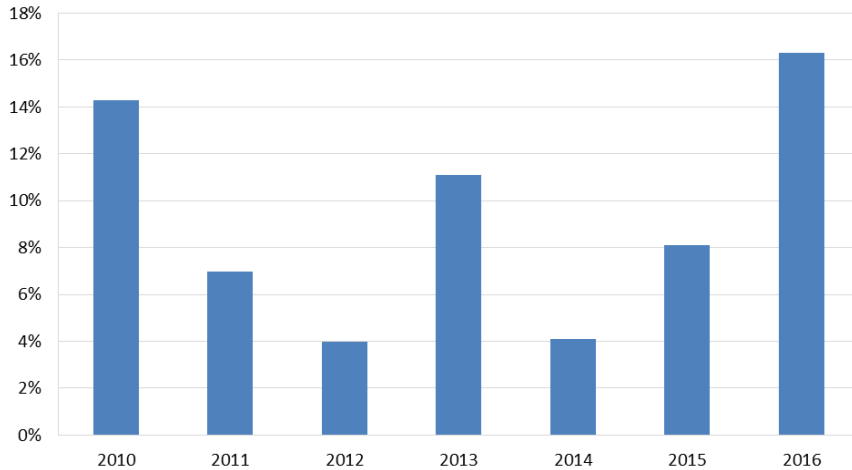
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| Total | 56 | 43 | 50 | 36 | 49 | 37 | 49 |

- Injury collisions up from 2015, overall trend is still down.
- Target Zero focuses on fatal and serious injury – Shoreline’s rates for these types of collisions are quite low.

| | Serious Injury Rate per 10,000 Population | Fatal Injury Rate per 10,000 Population |
|-------------|---|---|
| Statewide | 2.68 | .71 |
| King County | 2.62 | .42 |
| Shoreline | 1.64 | 0 |

Contributing Circumstances

Alcohol and/or Drug Impaired % of Injury Collisions



- Alcohol and/or drug impaired collisions accounted for a significant portion of injury collisions.
- The number of DUI's more than doubled the average of the last 3 years.

Driver distraction continues to be a significant factor



26%

Of crashes involve phone distraction, according to the National Safety Council.



3x

Increased crash risk when talking on a phone.



23x

Increased crash risk when entering information into a phone.

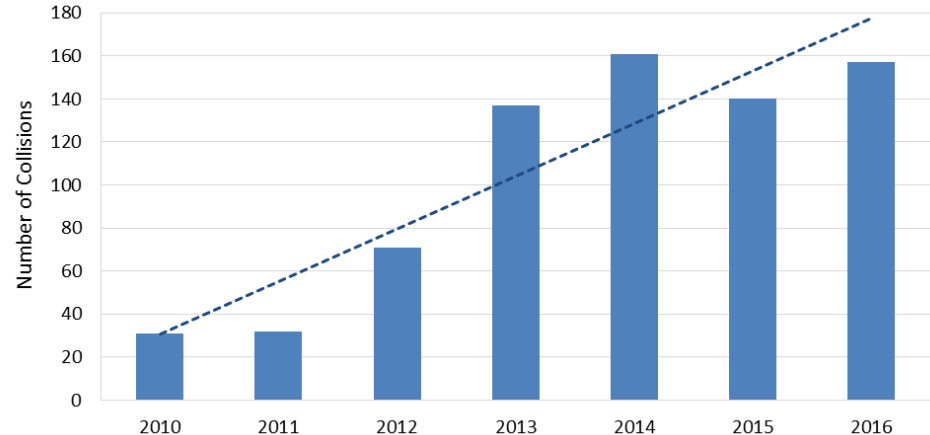


1/10

Washington drivers observed interacting with phones in a 2013 UW survey.

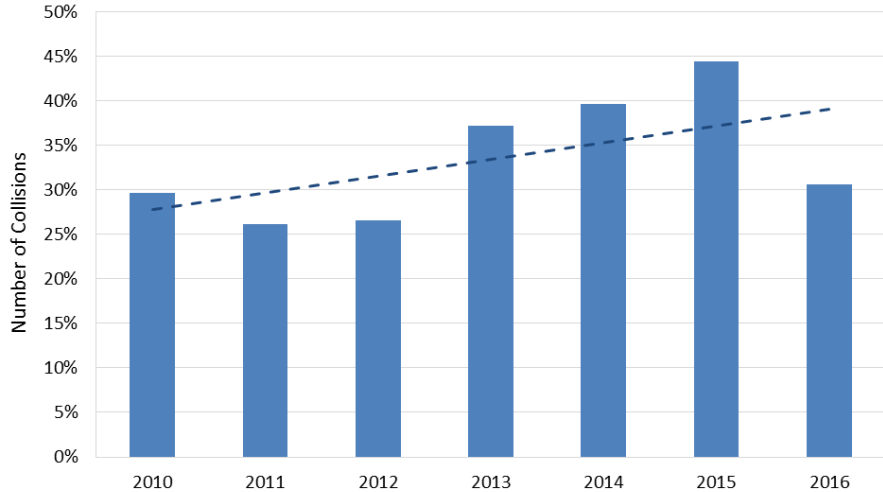
Contributing Circumstance

Driver Distraction or Inattention*



Non-motorized Collisions

Nonmotorized Injuries as % of Injury Collisions



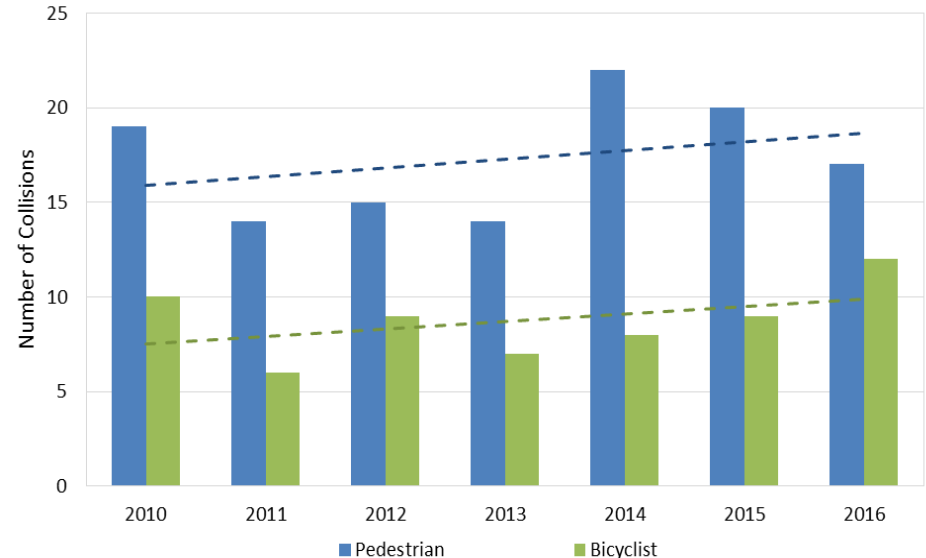
“Pedestrian deaths spiked in 2016, distraction cited”
<http://www.seattletimes.com/nation-world/distraction-cited-as-pedestrian-deaths-spiked-in-2016/>

← Percent of injury collisions that are bike & pedestrian related dropped for 2016, but trend is still upward

Pedestrian collisions fell slightly, but bike collisions → increased. Both still trending upward



Pedestrian and Bicyclist Collisions



Collision Reduction Strategies



Zero Fatal and Serious Injury collisions by the year 2030. Focuses on the Three E's as well as Policy and Emergency Response.

Engineering

- Traffic Control Devices
- Roadway Design and Maintenance
- CIP Projects

Enforcement

- Collision Investigation
- Targeted Enforcement

Education

- Community Meetings
- Radar Speed Signs
- Website
- Warnings

Shoreline Serious and Fatal Injury Collisions

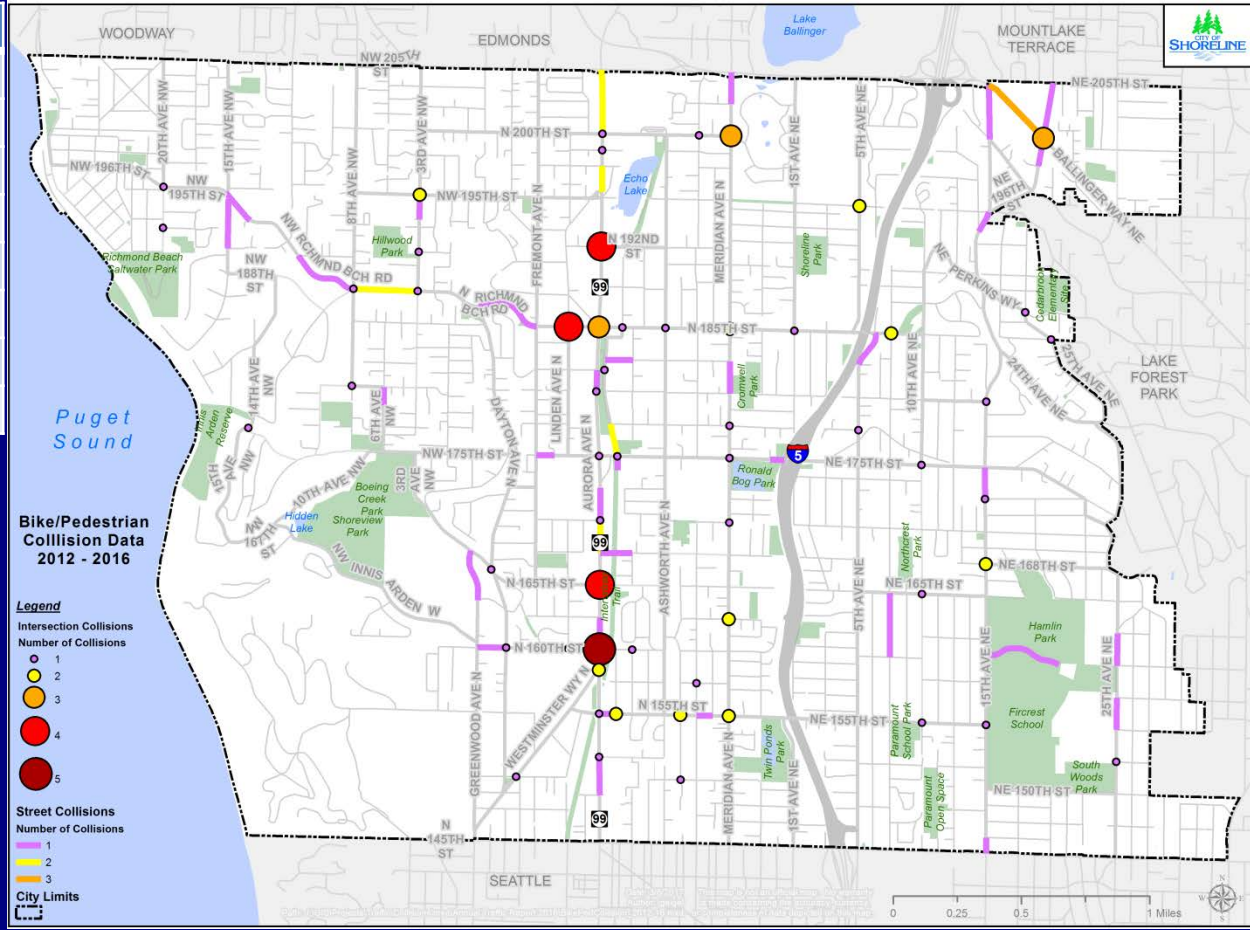
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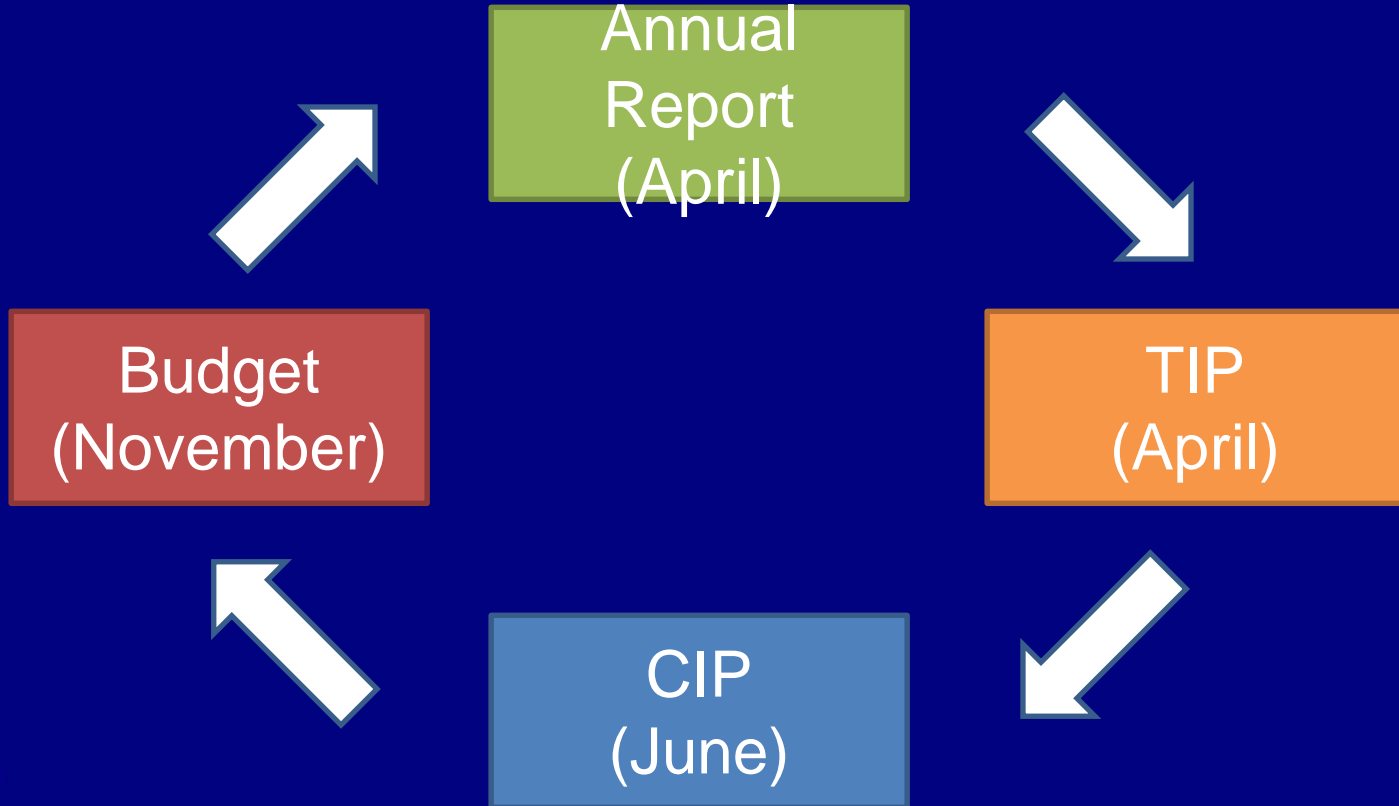
High Ped and Bike Collision Locations

| Pedestrian Collision Location | Collisions |
|-------------------------------|------------|
| Linden Ave N & N 185th St | 4 |
| Aurora Ave N & N 192nd St | 4 |
| Aurora Ave N & N 165th St | 4 |
| Aurora Ave N & N 160th St | 3 |
| Meridian Ave N & N 200th St | 3 |
| 19th Ave NE & Ballinger Way | 3 |
| Aurora Ave N & N 185th St | 3 |
| Ballinger Way - 15th to 19th | 3 |

| Bike Collision Location | Collisions |
|--------------------------------|------------|
| Aurora Ave N & N 160th | 2 |
| Aurora Ave N & Westminster | 2 |
| Meridian Ave N & N 185th St | 2 |
| Midvale Ave N - 175th to 185th | 2 |



Next Steps - Engineering



Reduction Strategies Implemented in 2016

Public Works -

- Aurora signal retiming completed.
- High visibility crosswalk flags installed for 43 crossings.
- Rapid Flashing Beacons installed at 175th and Wallingford and at 155th and Wallingford.
- Public outreach including neighborhood meetings and currents articles.
- Updated Traffic Services website for easier access to Neighborhood Traffic Safety Program (NTSP) and Driver Education tools.

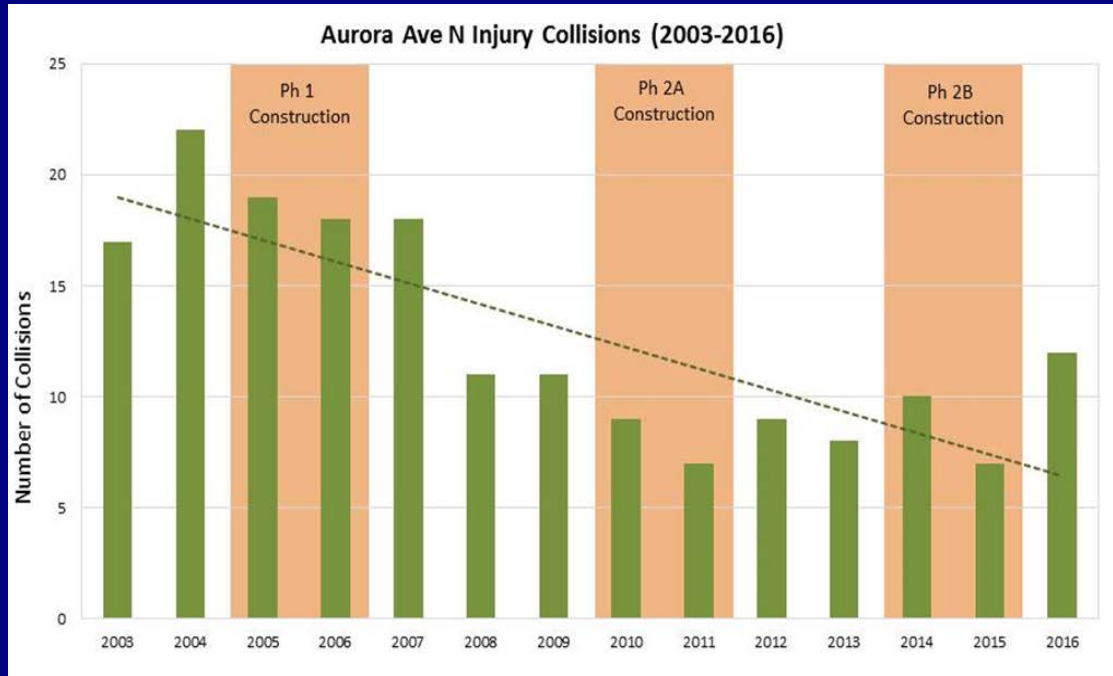


Results

- ✓ **Richmond Beach Rd & 3rd Ave NW Signal Phase Changes**
Rate of collision reduced by 42.5%.
- ✓ **Ashworth Ave N and N 192nd All Way Stop Control**
No collisions reported since installation of stop signs.
- ✓ **Meridian Ave N and N 200th Street Pedestrian Warning Sign Installation**
3 pedestrian collisions in a 3 year period. No collisions reported since sign installation.
- ✓ **5th Ave N and NE 175th Street Signal Phase Changes**
Collision rate reduced by half.



Aurora Ave N Project Benefits



- Injury collisions reduced by half!

3B Signal Retiming Benefits:

- Increased volume from 2014 while maintaining travel speed (increased efficiency)
- Transit Signal Priority implemented near the transit center, saving buses up to 57 seconds during the PM Peak

Police Enforcement Statistics

| Year | Citation | Arrest | Warning | Other | Total |
|------|-------------|--------|---------|-------|--------|
| 2016 | 2,157/3,520 | 625 | 3,969 | 1,575 | 8,589 |
| 2015 | 2,533/5,108 | 709 | 3,812 | 1,487 | 11,116 |
| 2014 | 1,874/3,659 | 675 | 2,897 | 1,459 | 8,690 |



Traffic Complaints

| YEAR | Citizen Complaints (to Shoreline PD) | Abandoned Vehicle / Impounds |
|------|---|---------------------------------|
| 2016 | 72 | 322 / 54 |
| 2015 | 197 | 172 / 41 |
| 2014 | 286 | 196 / 48 |

Reduction Strategies Implemented in 2016

Shoreline PD -

- Cell phone emphasis patrols conducted – 70 citations
- 58 Child Restraint Inspections conducted.
- Several DUI emphases; 35 arrests made as part of a large effort in October.
- Traffic safety checks at schools prior to school opening; increased presence for first 3 weeks of school.



Next Steps – Enforcement & Education

- Targeted enforcement of causal behaviors and locations of concern.
- Continue combination of balanced enforcement and education.
- Address community traffic concerns.
- Grant funded emphasis.
- Maintain frequency of traffic contacts.
- Continued data-led traffic enforcement via speed differential and collision information.



Questions?

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