



City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic:

Pedestrian & Bicycle Safety Update

Proposed Council Action/Motion: NA

For Council Meeting Agenda of: July 14, 2014

Departments: City Manager, Public Works,
Engineering & Environmental Services

Prepared by: Kris Overleese, Rob Karlinsey, Jennifer
Gordon, Leslie Harris, Cliff Sether

Initial & Date
Approved by Department Head: KMO 7/3/14
Approved by City Attorney: NA
Approved by Finance Director: [Signature]
Approved by City Manager: [Signature]

Exhibits/Attachments:

Attachment A: Simonds Road Draft Rechannelization

Attachment B: Community Education Plan

Attachment C: Arterial Speed Study Results memo

Expenditure Required N/A

Amount Budgeted \$215,000

Appropriation Required N/A

INFORMATION/BACKGROUND: The City is in the process of implementing many safety improvements and this report is an update of the following:

- Rectangular Rapid Flashing Beacon (RRFB) installation update
- Police Enforcement: Additional Patrol Officer (1-2 days/week)
- Rechannelization: 61st Avenue NE, Simonds Rd/NE 170th Street, 68th Avenue/Juanita
- Pedestrian & Bicycle Safety Committee
- Community Education
- Arterial Speed Studies
- Lighting evaluation
- Sidewalk Grants
- SR 522 West A Update

RRFB Installation: Installation is underway and the RRFB installation at several crosswalks is complete. RRFBs are a good addition to our safety toolbox, but they do not guarantee that drivers will yield. Pedestrians should continue to use extreme caution when crossing a street. It is anticipated that all eleven RRFBs will be installed by the end of July. RRFBs will no longer be installed at the 67th Avenue/Ne 181st intersection as there is now a four way stop. The 61st RRFB location will stay at NE 190th Street and not be moved north due to the planned loss of bus route 306.

Police Enforcement: In addition to ongoing citywide police enforcement activities, the City has utilized a motorcycle officer 1-2 days per week for targeted enforcement of crosswalks, bicycle and pedestrian activity, and

driver inattention. Police Chief Sether has provided the following statistics from the traffic motorcycle officer since April:

• Pedestrian violations	11
• Fail to Yield to Pedestrians	8
• Moving Violations	2
• Speeding	6
• Cell phone violations	8
• Avoidance of intersection	1
• Red light violations	1
• Stop sign violations	17
• No valid operator license	<u>1</u>
• Total	55

This additional patrol will continue for the next several months.

Rechannelizations: Rechannelization of 61st Avenue NE nears completion. As of the writing of this report, only bicycle symbols needed to be added. Approximately 900 linear feet of two lane “storage” was left on the north side of the signal at NE 181st for vehicles traveling southbound. As anticipated, the line of cars waiting to turn west onto SR 522 can extend past this 900 feet and makes the vehicles that want to turn onto SR 522 wait in line. Staff will monitor this situation to determine if this situation has increased traffic in adjacent neighborhoods. The draft Simonds/NE 170th Street rechannelization can be found in Attachment A. The recommended plan adds:

- Bicycle lanes from approximately 68th Avenue NE to 75th Avenue NE
- Bicycle lane uphill and sharrows downhill from 75th Avenue NE to 79th Pl NE to protect business parking on the north side, and
- Bicycle lanes on both sides from 79th Pl NE to just south of NE 157th Street.

Ad Hoc Pedestrian & Bicycle Safety Committee: The Committee has seven members that were appointed by Council: Mark Abersold, Victoria Chaussee, Bob Greene, Doug Levy, Katrina Rose, Andrea Laltoo, and David Maehren. The committee is to create a Pedestrian & Bicycle Strategy for City Council review in September. The Committee has met five times, sponsored and facilitated a Town Hall meeting and produced a citizen survey to gather community input to educate their work. The Committee has been focused on barriers and solutions to bicycle and pedestrian safety in the City. The committee has also discussed prioritization of their recommended solutions. Staff will draft the Strategy document in July and finalize the document with the Committee in August so the document can be brought to Council in September.

Community Education: The Community Education Plan (Attachment B) highlights various strategies and tactics to promote pedestrian and bicycle safety. On April 28, 2014, City Council adopted “Target Zero,” a resolution that sets a goal of zero pedestrian and bicycle fatalities by 2025 or sooner. This goal will guide our messaging throughout the development of content for brochures, presentations, articles, and other strategies and tactics outlined in the plan. Currently, the communications and outreach team is creating brochures for motorist, bicyclist, and pedestrian safety. The brochures are intended to be our main source of quick education, as we will distribute these at summer events such as the concerts, National Night Out, Play Day, and other avenues. This information will also serve as the main content generator for our website, presentations, and other communications materials.

In addition, the communications and outreach team is in the process of creating a safety pledge that encourages our target audiences to briefly write about how they will be a safer motorist, bicyclist and pedestrian; researching and reviewing reflective gear to potentially purchase; and compiling a list of potential events and outreach efforts for the remainder of the year. The City is also working in partnership with the Northshore Fire Department on

promoting and selling safety helmets at summer events and with the Northshore Utility District on adding an educational component to the distribution of their youth reflective vests at summer events.

Arterial Speed Studies: Our King County traffic engineer Keith Brown has gathered data and evaluated speed limits on the City's arterial streets with the goal of ensuring the speed limits are appropriate for existing street conditions. The following arterials were evaluated: 61st Avenue NE, 68th Avenue NE, 73rd Avenue NE, 80th Avenue NE (the City changed the speed limit on this arterial to 35 mph from 40 mph in 2013), NE 170th/Simonds Road and 68th Avenue NE/Juanita Avenue N.

Speed studies are quite uniform throughout the United States and detailed evaluation (refined evaluation) includes the following factors: street classification (arterial, collector, etc), actual vehicle speeds, number of commercial & non commercial driveways, driveways per mile, lane width, average shoulder width, pedestrian activity, vertical & horizontal alignment (hills & curves), parking activity, and accident rate. Engineering judgement is utilized in evaluation of the data to input into a formula and the recommended speed is produced. The 85th Percentile Speed is the speed at which 85% of the vehicles are driving at or below.

See Attachment C for a summary of the Traffic Engineer's recommendations.

Street	Existing Speed Limit (mph)	85 th Percentile Speed (mph)	Traffic Engineer's Recommended Speed (mph)
61 st Avenue NE (north of SR 522)	35	39.6	35
68 th Avenue NE (north of SR 522)	35	36.5	35
73 rd Avenue NE (north of SR 522)	35	39.4	35
80 th Avenue NE (north of SR 522)	35	42.3	35
NE 170 th /Simonds Road	35	40.2	35
68 th Avenue NE/Juanita Drive	35	40	25 mph from SR 522 to NE 170 th (else 35)

Note that in the fall of 2013 the City lowered the speed limit on 80th Avenue NE from 40 mph to 35 mph. Traffic data shows that the 85th Percentile speed change on 80th Avenue NE has lowered by approximately 1 mph which is low and is consistent with the premise that lowering speed limit alone does not lower vehicle speed.

The Staff recommendation is consistent with our traffic engineer's but for Juanita/Simonds Avenue. Staff recommends lowering the speed limit to 30 miles per hour with the re-channelization of the roadway late this summer. However, as noted with 80th Avenue NE, changing speed limits will require concentrated police enforcement to attain the desired outcome of lower speeds. Staff does not recommend a lower speed limit on Juanita Avenue N unless additional police patrol is approved.

Lighting Evaluation: Our Traffic Engineer is working on the street light at crosswalk evaluation. At the time of this report, the evaluation was not complete. It is estimated the evaluation will be complete by mid July.

Sidewalk/Safety Grants: The Citywide (Juanita) Safety Improvement Project nears completion. This project upgraded ADA ramps and completed a short segment of sidewalk, updated pedestrian push buttons, and added improvements to signal heads at the NE 170th & NE 153rd intersections. During construction, there was so much trouble with the vehicle detection loops that operations & engineering staff authorized the installation of cameras for detection (signal operation, not for red light or speed enforcement). Detection cameras are better for bicycle detection than in-pavement loops.

Similar to 2013, Staff continues to aggressively apply for sidewalk grants. Two Safe Routes to Schools applications were submitted in May for NE 155th Street between Moorlands and Inglemoor and also along 202nd

Street near Kenmore Junior High. Staff also applied for a Pedestrian & Bicycle grant for sidewalk on 68th Avenue NE along Rhododendron Park. We will find out about these grants in 2015.

A new funding opportunity, the Highway Safety Improvement Program (HSIP), provides resources for locations with severe accidents. Staff is planning to apply for sidewalk on 62nd Avenue NE (north of NE 181st Street) and also for a roundabout at 61st Avenue NE & NE 190th Street. Staff is in the process of evaluating whether a roundabout at this location is geometrically and traffic flow feasible. As part of the roundabout project, we would apply for funds to replace the Stream 0056 culvert under the roadway (if eligible).

Great sidewalk news – the City has been notified that we will receive \$91,000 in federal funds from the Transportation Alternatives Program (TAP) for the design of the NE 181st Sidewalk (south side - between 68th and 73rd Avenues NE). The City was on the contingency list and as we can immediately move forward with design now that the funds were awarded to Kenmore. Planning staff completed the Puget Sound Regional Council (PSRC) paperwork to get the project listed within their program and engineering staff is working to obligate the funds with the Washington State Department of Transportation (WSDOT). Design would begin later this year or early next year and Planning staff is currently requesting construction funding from the Community Development Block Grant (CDBG) program.

SR 522 West A (65th to 61st Avenues NE) Update: The design of this segment of SR 522 will be complete late summer and solid progress is being made on right of way acquisition. Staff anticipates construction advertisement this fall with construction starting early 2015. This project will add sidewalk on both sides of SR 522, improve lighting, reconstruct the SR 522/61st Avenue intersection with signal and pedestrian improvements, and improve bus stops. The project will also reconstruct the south leg of the SR 522/61st Avenue intersection (hill down to the trail) to add improved pedestrian facilities and pedestrian level lighting. The reconstruction of this south leg will slightly improve how it functions for vehicles, but it will still be far from ideal. Construction of West A will continue the City's legacy of SR 522 safety improvements for all transportation modes. It is estimated that accidents on the completed segments of the corridor have been reduced by approximately 40% and completion of West A will also significantly improve safety.

FISCAL CONSIDERATION:

The RRFBs, traffic engineering evaluations, 61st Avenue & Simonds Road rechannelizations, Ad Hoc Citizen Committee, and education efforts are being funded through previous Council authorization of \$215,000 on March 24, 2014. No additional funds are needed at this time.

COUNCIL GOAL/BUDGET OBJECTIVE BEING ADDRESSED:

Council Goal 1: To focus and emphasize multimodal transportation safety in the City of Kenmore with a specific focus on pedestrian, bicycle and other means of travel.



NE 170th St / Simonds Rd
Sheet 1

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May 12, 2014



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NE 170th St / Simonds Rd
Sheet 2

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NE 170th St / Simonds Rd
Sheet 3

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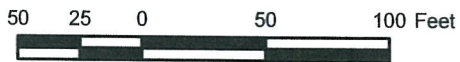
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NE 170th St / Simonds Rd
Sheet 4

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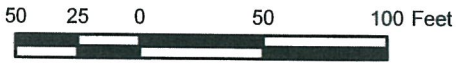
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NE 170th St / Simonds Rd
Sheet 5

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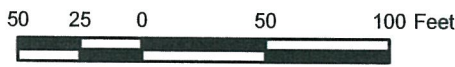


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NE 170th St / Simonds Rd
Sheet 6

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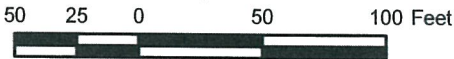
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NE 170th St / Simonds Rd
Sheet 7

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June 2, 2014



Community Education Plan: Pedestrian and Bicyclist Safety

2014 Community Education Plan Goal and Objectives

Goal:

- To increase awareness of pedestrian and bicycle safety to positively influence human behavior
- Target Zero: Achieve zero pedestrian and bicycle fatalities and serious injuries within our community by 2025.

Objectives:

- Create a sustainable community education program
- Recruit and train at least four (4) key volunteers for Pedestrian and Bicycle Safety Education Team
- Give at least four (4) presentations to community groups
- Participate in at least six (6) events
- Supply at least five (5) safety kits
- Receive at least one hundred (100) safety pledges
- Increase motorist yield rate (% TBD)
- Increase use of reflective gear (% TBD)
- Increase use of pedestrian crossing flags (% TBD)

Target Audiences

- Residents (seniors, adults, kids, families, students)
- Local business employees
- Bastyr University community
- Nonresidents
- Transit Users
- Motorists
- Bicyclists
- Pedestrians
- City employees and volunteers

Key Messages

- The City is taking a zero tolerance approach to enforcing pedestrian and bicycle safety laws for all road users – motorists, pedestrians, and bicyclists.
- It is important for all of us to be reminded of our individual responsibilities as a pedestrian, bicyclist, and motorist.
- (Additional key messages will be created during brochure content development)

Community Education Strategies and Tactics

1. **Target Zero:** Adopt Target Zero resolution as a goal and message to send to the community. Include Target Zero in our messaging.
2. **Brochure:** The brochure will serve as the main content generator. Develop a brochure that highlights ways to excel as a motorist, pedestrian and bicyclist. Display the brochure in the city hall lobby, hand out at events, link on website, include in pedestrian safety kits, and make available for other opportunities.
3. **Website:** Develop a single web page on the City's website for pedestrian and bicycle safety information. Main content will remain static but add items published by the City such as advertisements.
4. **Newsletter:** Highlight safety tips and laws in the City's printed newsletter.
5. **Advertising:** Publish advertisements in the Kenmore Reporter. Research other avenues such as online, high school newspaper, and buses.
6. **Presentation:** Create a canned presentation that could be presented to groups.
7. **Events:** The following is a breakdown of three types of events.
 - **Safety Fair:** The Northshore Fire Department hosts an annual open house and safety fair. The City can assist the fire department with securing safety related vendors to display information at a booth.
 - **City Events:** Have pedestrian and bicycle safety materials on display at City events. Or, have a custom booth specifically to promote pedestrian and bicycle safety.
 - **External Events:** The City will create a pedestrian safety kit that groups can use to promote pedestrian and bicycle safety. The kit may include a reflective bag, brochures, safety pledges, and a giveaway item.
8. **Pedestrian and Bicycle Safety Education Team:** This volunteer team would be trained by city staff to promote pedestrian and bicycle safety at events, community or business presentations, and special tasks.
9. **Safety Pledge:** Create a safety pledge form that encourages our target audiences to commit to being a safe pedestrian, bicyclist, and motorist. By signing the pledge, participants will receive a free reflective item. Request email address to allow for future follow-up communications.
10. **Schools:** Provide safety messages for school presentations and home room announcements. Utilize school PTA's to help.
11. **Social Media:** The City's Facebook page will be used to promote pedestrian and bicycle safety.

- 12. Reward Program for Children:** Recognize children under the age of 18 for wearing a safety helmet when riding their bicycle or skateboard or using a pedestrian crossing flag. Research potential rewards such as a McDonald's ice cream cone coupon.
- 13. Police Department:** The Kenmore Police Department organizes several activities with a focus on safety. These activities include 6th grade classroom visits, Junior High School Academy, bike rodeo, and National Night Out Against Crime.
- 14. Fire Department:** The Northshore Fire Department sells safety helmets for child bicycle helmets, toddler helmets and dual sport helmets at a subsidized rate. The City will promote the program via communication materials and website, and ask the fire department to sell safety helmets at city events.
- 15. Volunteers:** Utilize volunteers to execute tasks. A separate list of tasks will be created for this strategy. City staff will submit a volunteer request form to the City's Volunteer Coordinator for recruitment. See attached list for contact information.
 - Northshore School District PTA parents
 - Girl Scouts
 - Boy Scouts
 - Kenmore Business Alliance
 - Kenmore Senior Center
 - Northshore Rotary
 - Bastyr University
 - Neighborhood Associations
 - Other interested groups and individuals

Potential Additional Community Education Strategies and Tactics for 2015

- 1. Video:** Create a crosswalk safety video to include on the web page, play at events, share through Facebook, and other outlets. Ask high school students to help produce a video.
- 2. Safety Mascot:** Research the possibility of creating a safety mascot to be present at community events

Resources

The City has allocated resources from the street fund to support community education and the hiring of a graduate student intern during the calendar year 2014. The graduate student intern will assist with the Pedestrian & Bicycle Safety Citizen Ad Hoc Committee and implementation of the community education plan.

Memo

Date: 6/30/2014

To: Kris Overleese, Director, Engineering and Environmental Services, Kenmore

From: Keith Brown, King County Traffic Engineering

RE: Kenmore Arterial Speed Limit evaluation

Kris, Here is a summary of the findings for each of the arterials in Kenmore

80th Avenue NE: The 85th Percentile speed, the speed at which 85 percent of the cars are traveling or below, is 42.3 mph. This is a little higher than optimal, but the average speed is 36.2 mph. Taking into account the existing pedestrian and bicycle volumes and the available paved shoulders the existing speed limit is appropriate.

NE Simonds Rd: The 85th Percentile speed is 40.2 mph, with the proposed channelization revision narrowing the roadway and providing bike lanes for a significant portion of the roadway, the existing speed limit is appropriate.

61st Avenue NE: The 85th Percentile speed is 39.6 mph, the majority of the accidents on the roadway are associated with the signals at Bothell Way and NE 18st St. The existing speed limit is appropriate.

73rd Avenue NE: The 85th Percentile speed is 39.4 mph, the majority of the accidents are focused around the traffic signals at Bothell Way and NE 18st St. The existing speed limit is appropriate.

68th Avenue NE: The 85th Percentile speed is 36.5 mph which is excellent. However, the accident rate is a little high, with the majority of the accents occurring south of NE 185th St. This area is currently posted 25 mph. The speed limit increases to 35 mph at NE 185 St near the Northshore Utility District Offices. The Speed limit in the 35 mph section is appropriate.

Juanita Drive NE: The 85th Percentile speed is 40 mph. Again the majority of the accidents are concentrated in the small area between NE 170th St (Simonds Rd) and Bothell Way. It is my recommendation to reduce the speed limit in this congested area to 25 mph. For the remainder of the roadway, from NE 170th St south to the city limits, the speed limit is appropriate.