

### **Corridor Description**

The Lake City Way Traffic Safety Corridor is 3.67 miles in length extending from Interstate 5 to the Seattle city limits at NE 145<sup>th</sup> Street. Lake City Way is a principle arterial roadway and State Route (SR 522) that serves a diverse population of users including pedestrians, bicyclists, transit, and vehicular traffic in northeast Seattle. Within the project area, more than 30,000 vehicles use this roadway on an average weekday and several transit routes serve the corridor providing access to schools, employment centers, parks, and retail shopping.

Lake City Way functions as both a regional route and as "Main Street" for the residents of area. Neighborhoods along Lake City Way include Roosevelt, Ravenna, Maple Leaf, Wedgwood, Meadowbrook, Victory Heights, Cedar Park, Olympic Hills, and Little Brook. These neighborhoods feature an array of housing including areas of density and broad areas of single family residential. A wide range of destinations line the corridor with dynamic business districts in Lake City (125<sup>th</sup>) and Roosevelt (15<sup>th</sup> Ave NE).

### **Collisions**

During the five year period between January 2007 and December 2011, 717 crashes occurred on the Lake City Way corridor resulting in 21 deaths or serious injuries and more than 400 injuries. During that same time period, forty-eight pedestrians and 14 cyclists were involved in collisions on Lake City Way.

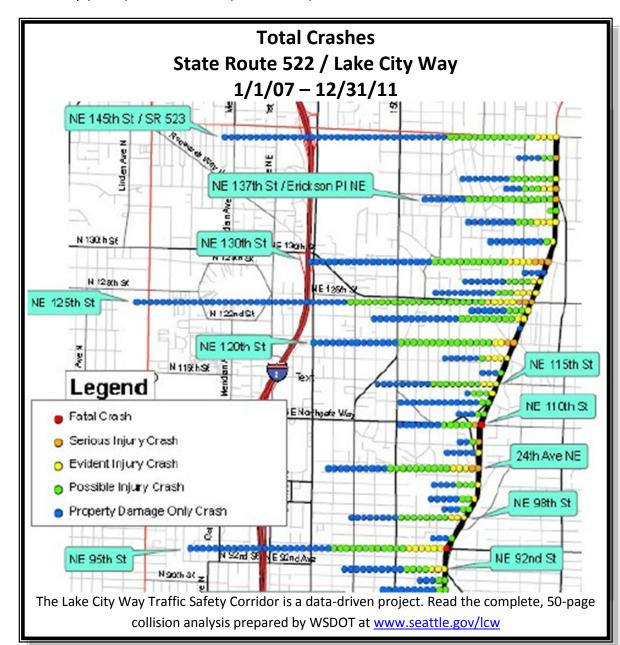
The top factors that contribute to collisions on Lake City Way are failing to yield (to vehicle, pedestrian, or cyclist), inattention/distraction, following too close, disregard signal, speeding, and improper turns. Failing to yield to another vehicle, pedestrian or bicyclist is the leading cause of serious and fatal collisions on the Lake City Way. Speeding is also a top contributing factor in serious collisions on the corridor.

Common crash types on Lake City Way include rear-end, angle, sideswipe, and hit pedestrian. Collisions occur more frequently in the afternoon hours. The complete WSDOT collision analysis for Lake City Way can be found on our website: www.seattle.gov/lcw

### **Project Goals**

The Seattle Department of Transportation (SDOT), the Washington State Department of Transportation (WSDOT), the Washington Traffic Safety Commission, Seattle Police and the Washington State Patrol have partnered with the community to reduce crashes on State Route 522. The Lake City Way Traffic Safety Corridor Project aims to improve safety for all through data-driven engineering, education, and enforcement efforts with an emphasis on near-term, low cost solutions. The main goals of this project are to:

- Reduce the number of serious injury and fatal collisions by 25 percent
- Reduce the number of hit pedestrian/cyclist collisions
- Reduce the total number of collisions
- Improve compliance with right-of-way laws
- Reduce speeding along the corridor



### **Planned Activities**

In January 2013, a task force consisting of local residents, business owners, and state and local government was formed to review data and observe traffic operations on the corridor. Their goal was to identify issues affecting safety on Lake City Way, develop solutions, and create an Action Plan to improve safety along the corridor. The full Action Plan is below; highlights include:

- Pedestrian safety improvements in several locations with significant engineering improvements for Lake City Way at 24<sup>th</sup> Avenue NE and Lake City Way at NE 110<sup>th</sup> Street
- Four new radar speed signs placed where speeding occurs most frequently
- Targeted enforcement patrols conducted by the Seattle Police Department and the Washington State Patrol
- Educational outreach intended to raise awareness about the issues affecting safety on the corridor and to promote safe driver, pedestrian and bicyclist behavior.

This project launched in March 2014 and is expected to continue for twenty-four months.

### **Funding**

Funding for this project comes from a number of different sources. For engineering improvements, the Washington State Department of Transportation (WSDOT) has provided \$400,000 in grant funds and the City of Seattle has contributed more than \$1.5 million from the Bridging the Gap Transportation Levy and the Seattle Department of Transportation's (SDOT) annual budget. The City is pursuing additional funds for engineering improvements identified by the Task Force that exceed the budget for this project.

Support for increased enforcement patrols and educational outreach comes from the Washington Traffic Safety Commission. Additional funding for educational efforts was provided by a WSDOT Pedestrian Safety Grant.

#### **Task Force**

Aaron Fishbone, City of Seattle
Angie Ward, Washington Traffic Safety Commission
Annie Phare, Public Health – Seattle & King County
Ashraf Amlani – University of Washington
Beth Pflug, Seattle Department of Neighborhoods
Bilkay Taner-Rose, Wedgwood Community Council
Betsy and Robin Lindley, Ravenna
Carla Sawyer, Washington Traffic Safety Commission
Chang, Dongho, Seattle Department of Transportation
Cheryl Klinker, Lake City Community Council
Chuck Dickey, Lake City
Daniel Wassell, Olympic Hills/North District Council
Danielle Hursh
David Morris, Victory Heights

Debi Besser, Washington Traffic Safety Commission
Rebecca Deehr, City of Seattle
Donna Hartmann-Miller, Maple Leaf Community Council
Gretchen Bear, Wedgwood Community Council
Kiersten Grove, Seattle Department of Transportation
Peter Hahn, Seattle Department of Transportation
Janet Arkills
Janine Blaeloch, Lake City Greenways
Jim Curtin, Seattle Department of Transportation
John Kurpierz
Katy Haima
Mark Kuehn, Seattle Police Department
Mary Monroe, Little Brook
Lisa Quinn, Feet First

Mark Bandy, Washington State Department of Transportation
Marty Curry, University of Washington
Matthew Enders, Washington State Department of Transportation
Mike Rupert, Washington State Patrol
Muriel Lawty, Little Brooke
Michael Nolan, Seattle Police Department
Per Johnson, Wedgwood Community Council
Philip Shack, Cedar Park
Renee Staton, Pinehurst
Sandy and Tim Motzer, Lake City
Scott Beasley, King County Metro
Victoria Moceri, North Cedar Park
Thomas Whittemore, Department of Neighborhoods
Woodrow Perkins, Liquor Control Board



The Lake City Way Task Force holds a crosswalk action to improve awareness of pedestrian right-of-way laws.

(November 2013)













	Engineering Engineering							
Project No.	Location	Safety Issue Identified	Proposed/Potential Actions	Desired Impact	Estimated Cost	Target Date	Organization	
		Crossing LCW is difficult for pedestrians and cyclists  More/enhanced crosswalks are needed - especially near parks and schools	Consider additional crossing locations and enhance existing crossings	Improve pedestrian and bicycle safety	TBD	Ongoing	SDOT	
		Longer pedestrian crossing times needed at signalized intersections - this is often a problem when catching the bus	Review signal timing on corridor with emphasis on ped crossing times	Improve pedestrian and bicycle safety	TBD	Early 2014	SDOT	
1	Pedestrian and Bicycle Safety	Gaps in sidewalk network limit mobility - NE 88th St to NE 95th St on the west side of LCW	Sidewalks likely to be built by private development	Provide pedestrian facilities	TBD	TBD	TBD	
		Sidewalk maintenance needed - overgrown vegetation blocks sidewalks and limits mobility - i.e. east side LCW between NE 86th St to NE 98th St	Clear vegetation annually in late spring	Provide unobstructed pedestrian facilities	TBD	Ongoing	SDOT	
		Lack of curb ramps limits pedestrian mobility at many locations including NE 135th St, NE 137th St/Erickson PI, NE 140th St, and NE 143rd St (see below for more curb ramp issues)	Upgrade or install curb ramps	Provide standard pedestrian facilities	TBD	Ongoing	SDOT	
	Signage	Parking at many intersections blocks visibility including NE 102nd St and NE 103rd St	Remove and replace existing regulatory and	Improve visibility and safety for all modes	\$30,000	March 2014		
2		Better U-Turn signage needed	warning signs. Add new signage where				SDOT	
		Visual clutter makes regulatory signs difficult to see including speed limit signs	appropriate. Remove redundant signage.	te. Remove redundant signage.				
	NE 00:1 0: /4 4:1 4 NE	Visibility concerns. Left turn from 80th to LCW difficult.		Reduce angle and failure to yield collisions	\$15,000	Spring/ Summer	WSDOT/SDOT	
3	NE 80th St/14th Ave NE	Drivers often disobey left turn restriction from LCW to 14th Ave NE. Causes congestions, frustration, risky behavior.	Evaluate location for signal and/or signage improvements including time-limited turn restrictions. Coordinate enforcement activity					
		Left turn from northbound LCW to northbound 15th Ave NE creates	at this location.			2014		
	15th Ave NE	significant congestion						
		Left turn from northbound LCW to northbound 20th Ave NE difficult	Evaluate for left turn signal	Reduce angle collisions	TBD	Early 2014	SDOT	
4	20th Ave NE	Signal visibility can be a problem northbound	Add pole mounted supplemental signal on the south/southeast corner (for northbound traffic)	Improve signal visibility and driver compliance	\$20,000	Summer/Fall 2014	WSDOT/ SDOT	
5	Ravenna/NE 92nd St	Add lane from Ravenna Ave NE to northbound LCW ambiguous	Consider reconfiguring and signalizing intersection (long term)	Reduce collisions and improve vehicular and pedestrian safety	TBD	TBD		
		Drivers leave Ravenna/enter LCW at high speeds	Improve signage on northbound approach to LCW on Ravenna.	Reduce speeds for vehicles entering LCW and improve pedestrian safety	\$1,500	Spring 2014	SDOT	

	Engineering						
Project No.	Location	Safety Issue Identified	Proposed/Potential Actions	Desired Impact	Estimated Cost	Target Date	Organization
6		High speeds approaching 95th. Location with most speed-related collisions on corridor.	Install radar speed signs for southbound and northbound traffic - coordinate enforcement efforts in this area	Deter speeding	\$35,000	Spring 2014	SDOT
	NE 95th St	Sidewalks needed on both sides of 95th approaching LCW	I and ramns on I ( W) and NF 95th Street	Improve conditions for all users	4	2015-2016 (seeking	
		Northeast corner may not be up to ADA standards	improve signal visibility and pavement	by improving roadway organization and visibility	\$900,000	grant	SDOT
		Better access to transit stop on northeast corner needed	conditions, install ped countdown signals	,		funding)	
7	NE 98th Street	Northbound-LCW has three travel lanes for a short section of road from Ravenna to 98th. Third lane ends at NE 98th Street.	Remove third lane	Install signage and channelization improvements	\$30,000	Spring 2014	WSDOT/ SDOT
	Fischer Place	Intersection geometry creates long crossing for peds and allows vehicles to turn off LCW at high speeds	Upgrade pedestrian infrastructure and change intersection geometry	Improve conditions for pedestrians. Reduce speeds on	TBD	TBD	SDOT
		Some sidewalk segments north of Fischer Place in poor condition		turn from LCW to Fischer Place.			
	24th Ave NE	Turning movements difficult due to roadway geometry - feels like a freeway ramp	investment including sidewalks, curb ramps, and channelization and signal changes	Reduce collisions involving left turning vehicles, reduce collisions involving pedestrians and bicyclists, improve access to transit and nearby schools.	\$650,000	Summer 2014	
8		Pedestrian facilities largely absent. No sidewalks, landings, or curb ramps at pedestrian signal push button location on west side of LCW.					SDOT
		Access to west side transit stop north of intersection is not ideal					ļ
		Confusion about ped signal. Can drivers turn left from northbound LCW to 24th Ave NE when ped signal is red?					
		Confusing intersection with transit slip lane/queue jump					
		No ped countdown signals & short crossing time for peds					
		One serious injury and one fatal speed-related collision	Construct new pedestrian facilities like				
9	NE 110th St	Curb ramp on northeast corner of intersection needs review, pedestrian facilities need repair (east side)	sidewalks and curb ramps on all corners of the intersection with pedestrian countdown	Reduce pedestrian collisions, reduce vehicular speeds,	\$390,000 20	Late 2014/Early	WSDOT/SDOT
		High school students cross here to access Metro Transit - heavy ped volumes in AM and PM	signals, new in-lane transit stop, and median island	improve access to transit		2015	
		Buses pull off LCW to pick up passengers (southbound), no clearly defined ped facilities					
	30th Ave NE/NE 123rd St	Potential neighborhood greenway crossing	Potential location for new crossing	Improve crossing for pedestrians and cyclists	TBD	TBD	SDOT

	Engineering Engine							
Project No.	Location	Safety Issue Identified	Proposed/Potential Actions	Desired Impact	Estimated Cost	Target Date	Organization	
10	30th Ave NE to NE 127th St	Pedestrian-vehicle collisions most common through Lake City Business District	Improve beacons and signage for existing mid-block crosswalks in the Lake City Business District. Add overhead signage for mid-block crossing south of 125 <sup>th</sup> . Remove existing flashing beacons and replace with more visible rectangular rapid flashing beacons.	Improve pedestrian safety	\$ 40,000	2014	SDOT	
		Northbound transit stop north of 125 <sup>th</sup> Street creates conflict at midblock crossing. Buses partially block crosswalk and reduces visibility for pedestrians and drivers.	Move bus zone to the south of 125 <sup>th</sup> St	Improve pedestrian safety	\$ 25,000	2014	SDOT	
	30 <sup>th</sup> Avenue NE	30 <sup>th</sup> Ave NE intersects Lake City Way at an unusual angle. Existing traffic signal controls north leg of intersection.	Evaluate signal operation to eliminate pedvehicle conflicts and add pedestrian crossing signage.	Improve pedestrian safety	TBD	2014	SDOT	
	NE 125th Street	Conflicts between pedestrians and left turning vehicles. During the green left turn arrow there is no pedestrian crossing and about 3 cars clear the intersection. The left turn light then turns to flashing yellow with no pedestrian crossing and about 3-5 cars make the left turn. When the left turn light goes red the pedestrian crossing light appears and frequently a couple of cars continue to make left turns as pedestrians enter the cross walk. Long wait for 'walk' signal and short crossing time.	Install 'Yield to Peds when Turning' signs	Improve pedestrian safety	\$ 5,000	2014	SDOT	
11			Evaluate signal timing; consider restricting right turns on red. Coordinate with 125th St Project. Long term: consider stamped or colored crosswalk treatment to designate intersection as a place of importance with heavy ped and bike activity.	Reduce conflicts between drivers and pedestrians	TBD	Early 2014	SDOT	
12	N 130th Street	Conflicts involving turning vehicles. Consider shift from permitted left turn operation to protected only. Visibility of opposing traffic can be difficult. Top location for pedestrian collisions.	Review signal timing and evaluate intersection for channelization, signage, and/or physical improvements	Improve pedestrian safety	\$ 30,000	Fall 2014	WSDOT/ SDOT	
		Southbound LCW curb lane is too wide - some drivers treat this as a third lane which compromises safety	and/or physical improvements					
13	NE 130th St to NE 145th St	High speeds on north end of corridor	Install radar speed signs	Deter speeding and reduce speed-related collisions	\$ 35,000	2014	SDOT	
14	NE 137th St/Erickson Pl NE	Review signal phasing and consider potential left turn improvements. Lighting for bus barn needs review	Review intersection configuration and operations.	Reduce angle collisions and improve visibility	TBD	TBD	SDOT	
		Long signal cycle - review split phase operation	WSDOT project to address this issue	Improve safety and traffic flow	TBD	TBD	WSDOT	
15	NE 145th St	Curb ramps difficult to access; obstruction force some people into street and crosswalk/ramp alignment is off	New curb ramps will be constructed on the SW and SE corners of this intersection. APS will be adjusted.	Improve pedestrian safety	\$ 200,000	2014	SDOT	

			Enforcement			
Project No.	Location - LCW at	Safety Issue Identified	Planned Actions	Desired Outcome	Target Date(s)	Organization (SPD, WSP, Liquor Control Board, SDOT, Other)
16	Multiple	Parking too close to intersections (NE 90th at LCW)	Coordinate with parking enforcement	Improve sight lines for all	Ongoing	Seattle Parking Enforcement
17	Multiple	Data indicates that failure to yield, distraction, following too close, disregarding signals, speeding, failure to yield to ped/cyclists, and under the influence of alcohol/drugs are top contributing factors in crashes on LCW	Conduct high visibility enforcement patrols targeting top issues on corridor for project launch. Coordinate with education team on messaging.	Increase awareness of top issues on corridor, deter poor behaviors, and increase law enforcement presence on LCW.	March 2014	SPD & WSP
		Speeding and cut-thru traffic on nearby non-arterial streets	patrols to address the top issues on LCW.  Enforce traffic laws on LCW proper and nearby arterial streets. Coordinate with education team on messaging. Law enforcement may deploy Target Zero Team patrols, WSP Aggressive Driving Apprehension Team, SPD Aggressive	Deter speeding and aggressive driving	Ongoing	SPD & WSP
18	Multiple	Following too close and aggressive driving are corridor-wide issue		Reduce collisions related to following too close and aggressive driving		SPD & WSP
		Distraction a corridor-wide issue		Reduce distracted driving		SPD & WSP
19	Multiple	Pedestrians crossing LCW outside of legal crosswalks  Failure to yield to pedestrians / cyclists a top contributing factor	Conduct ped safety emphasis patrols at key locations including 80th/15th Ave NE, 110th, 125th, 130th, 137th, and 145th.	n/15th Ave NE, crossing laws, and improve safety for		SPD & WSP
		in crashes on LCW				
20	Multiple	A-frame signs frequently encroach into pedestrian zone	Work with businesses to raise awareness about the issue. Work with SDOT Street Use to enforce encroachments	Improve compliance with right-of-way rules and improve pedestrian and bicycle safety	Ongoing	SDOT Street Use
21	N 80th St/14th Ave NW	Drivers often ignore peak hour turn restrictions to 14th Ave NE which creates congestion, aggravated drivers, risky driver behaviors	Consider SPD operation with spotters and officers on 14th Ave NE. Coordinate with education team to consider HVE operation. Coordinate with engineering team if changes are proposed to this intersection. Partner with Dry Cleaners to use reader board to report stats.	Reduce angle collisions	TBD	SPD

	Enforcement							
Project No.	Location - LCW at	Safety Issue Identified	Planned Actions	Desired Outcome	Target Date(s)	Organization (SPD, WSP, Liquor Control Board, SDOT, Other)		
22	Vicinity of NE 95th St	Speeding common on northbound and southbound approaches to 95th St - fairly significant hill northbound	Conduct speeding patrols in this area. Coordinate with engineering group/radar speed sign installation for additional enforcement activities.	Reduce speeding and speed-related collisions	Ongoing	SPD & WSP		
	NE 125th St & NE 130th St	Impaired pedestrians unpredictable - transient population - crime and public safety issues	Liquor Control Board outreach at nearby liquor stores, restaurants, and other points of purchase.	Reduce impairment-related collisions	Ongoing	Liquor Control Board		
23		Vehicles routinely park in pedestrian zone on the southeast corner of 125th and 30th Ave NE	Direct parking enforcement officers to area frequently	Improve pedestrian safety	Ongoing	Seattle Parking Enforcement		
24	NE 125th to NE 145th St	Speeding common along this segment of LCW. Long stretch with few traffic control devices.	Conduct speeding patrols in this area. Coordinate with engineering group/radar speed sign installation for additional enforcement activities.	Reduce speeding and speed-related collisions	Ongoing	SPD & WSP		
24		Impairment-related collisions occur most frequently on north end of corridor along with some crime and intoxicated pedestrian issues	Conduct DUI emphasis patrols in this area along with outreach at nearby liquor stores, restaurants, and other points of purchase.	Reduce impairment-related collisions	Ongoing	SPD, WSP, Liquor Control Board		

	Education							
Project No.	Corridor Safety Issue Identified	Planned Actions	Desired Impact	Target Date	Organization			
		Hold a project kickoff event to focus attention on the corridor and the work being done to improve safety and to highlight the risky behaviors that are leading to collisions	Create public awareness of the project and its goals	March 2014				
		Develop a project logo to use on project road signs and other informational materials	Create an easily recognizable symbol for project safety awareness	August 2013				
25	Many Lake City Way residents and drivers are not aware of the traffic safety issues along the corridor or the corridor safety project	Develop an information card to describe the project and the planned project activities. (First card focusing on pedestrian safety)	Disseminate project information to increase early public awareness	October 2013	Education Team			
		Other project awareness and information activities will be planned and coordinated with the enforcement and engineering teams as their plans are finalized. Earned media opportunities will be pursued for significant enforcement patrols and the roll out of select engineering improvements.	Raise awareness of safety issues on the corridor and of engineering and enforcement activities	Ongoing				
		Public actions and other events to raise project awareness of specific risky behaviors will be developed. For example, monthly pedestrian cross walk actions are planned at key pedestrian cross walks. (Timed as appropriate to pedestrian safety enforcement patrols)	Raise awareness of safety issues on the corridor and of engineering and enforcement activities	Ongoing				
	Drivers on the corridor are not always practicing safe driving behavior which leads to preventable collisions. The most common unsafe behaviors on Lake City Way include: failing to yield, inattention, and following too close.	Education campaigns emphasizing targeted safe driving behavior messages and related enforcement patrols will be developed	Increase awareness of safe driving behavior in accordance with the high visibility enforcement model with particular attention to those behaviors contributing most frequently to collisions along					
26		Safety messaging campaigns may include utilizing outdoor advertising media and blank walls to post safety banners, and PSAs on the local school radio station		Beginning Sept. 2013 and ongoing	Education Team			
		Other outreach message campaigns may involve local schools and locations (Dick's Drive In) where the 19-25 year old age group frequent.	the corridor.					

	Education						
Project No.	Corridor Safety Issue Identified	Planned Actions	Desired Impact	Target Date	Organization		
27	There are challenges delivering safety messages to drivers who not live in the Lake City vicinity but are using LCW as a route to work.	Targeted outreach campaigns will be developed to reach employees with safe driving messages through their employers.	Deliver targeted safety messages to non-Lake City residents who commute along LCW.	June 2014	Education Team		
28	Sixty-one percent of all collisions and 71% of all fatal and serious collisions are intersection related.	Targeted driver intersection safety messaging campaigns will be developed. This will include monthly cross walk actions at select intersections and outdoor advertising media. Possible locations:  125th 127th(near post office) 130th 137th 115th Reflective safety items may be distributed through schools and community events and commerce centers to improve pedestrian visibility.	Reduce intersection related collisions through improved driver behavior.	Beginning October 2013 and ongoing	Education Team		
29	Pedestrian safety funds are available for an early start of education and enforcement activities.	Planned pedestrian safety messaging activities will commence in September/October 2013. These messaging campaigns will be coordinated with pedestrian safety law enforcement patrols.	Focus awareness on pedestrian safety and driver behaviors that pose risks for pedestrians.	Sept. 2013	Education Team		