Evaluation of School Zone at Mark Morris High School

This evaluation of the school zone at Mark Morris High School is provided to assist the City Council to decide on the next steps after the traffic signal is completed at 15th Avenue and Mark Morris Court. The decision on what steps to take should be based on engineering judgment, state and federal guidelines, and community needs and expectations.

The primary factors to consider are as follows:

- What is the definition of a school zone?
- How does the definition apply specifically to the Mark Morris School Zone?
- How does the traffic signal impact the Mark Morris School Zone?
- What are the foreseeable implications?

What is the definition of a school zone?

School Zone-a designated roadway segment approaching, adjacent to, and beyond school buildings or grounds, or along which school related activities occur. Source Section 1A.13 of the Manual of Uniform Traffic Control Devices.

The definition of a school zone is intentionally vague to allow local jurisdictions authority to determine where to establish a school zone. Federal guidelines in the Manual of Uniform Traffic Control Devices (MUTCD) are intended to establish national uniformity on how a school zone is signed and what devices are used and are not intended to specify precisely what conditions permit or do not permit establishing a school zone.

The Washington Administrative Code (WAC) and Revised Code of Washington (RCW) include regulations that apply specific limits to school zones. Based on the RCW and WAC, a school zone may be established on any street adjacent to an actively used school or school playground. A school crossing may be established for a street crossing adjacent to a school and used by students to access the school. The WAC limits the length of the school zone to 300-feet on either side of the part of the school that is actively used by students, or 300-feet on either side of a school crossing.

How does the definition apply specifically to Mark Morris School Zone?

Applying the WAC it is reasonable to determine the crossing on 15th Avenue at Mark Morris Court is a school crossing because students actively use the crossing to access Mark Morris High School. Because there is a school crossing, 300-feet on either side of the crossing may be designated a school zone.

How does the traffic signal impact the Mark Morris School Zone?

In February 2014, Kittelson & Associates, Inc (KAI) completed a School Zone Safety Study (Study). The Study provided recommendations to bring Longview School Zones up to current standards and provided recommendations to improve visibility and uniformity as a means to improve safety. One of the recommendations in the Study addressed placing school zone signs at traffic signalized intersections. The Study recommended "…removing the existing School Crossing Assemblies at signalized intersection and not installing new assemblies at signalized intersections…" School Crossing Assemblies are used to

mark school crosswalks. Designating a school crosswalk allows creating a school zone the length of 300feet on either side of the crossing. With proper signing, a school speed zone of 20 mph can be created. KAI recommended against establishing a school zone solely for a school crossing at a signalized intersection.

Staff moved forward with the Study recommendations and removed the School Zone signing at the traffic signal on Nichols Blvd at the intersection with Washington Way and 26th Avenue near Saint Rose School. The signs were also removed because the active area of the Saint Rose is on 26th Avenue and 26th Avenue school zone was upgrade with additional flashing devices. Staff also removed school crossing signs on Olympia Way at 22nd Avenue near Northlake Elementary. Northlake remained a school zone because the school is directly adjacent to Olympia Way and the school zone extends 300-feet from the active school area is, which is a shorter distance than the full frontage of the school.

Mark Morris High School is not adjacent to 15th Avenue and is not directly visible from 15th Avenue. Many people mistakenly believe that Mark Morris is part of Lower Columbia College. 15th Avenue was signed as a school zone at Mark Morris Court because of the number of high school students that cross 15th Avenue. Once the crossing was designated a school crossing, then a School Speed Zone of 20 mph could be created 300-feet on either side of the marked crosswalk. Installing the traffic signal and following the KAI Study recommendation would remove the school crossing designation and the justification for the school zone.

What are the foreseeable implications?

If we follow the Study recommendations, the school zone should be removed after the traffic signal is completed, and the speed limit in the area would be 30 mph at all times.

Staff proposes the following options for Council consideration:

Option 1(Staff Recommendation) - Continue with the Study recommendation and remove all School Zone Signing and warning devices on 15th Avenue near Mark Morris Court when the traffic signal is fully operational. Removing the School Zone Signing will effectively return the entire section of 15th Avenue between Commerce Avenue and Ocean Beach Highway to a 30 mph speed limit at all times. Also remove photo enforcement equipment and signing when the traffic signal is operational.

Argument for Option1

Option 1 follows the recommendation of the Study to remove school zone signing at signalized crossings. It will return the speed on 15th Avenue to 30 mph at all times. If school zone speed limit of 20 mph during school hours remains, many motorists will disregard it once photo enforcement ceases as there is no active traffic speed enforcement to serve as a deterrent. This motorist behavior was evident prior to conducting photo enforcement at that location. Staff's opinion is that it is better to have a uniform speed then have a mix of drivers going 20 mph and others driving 30 mph and above.

Arguments against Option 1

There is an expressed concern that students will disregard the traffic signal either by choice or because they are distracted. There is real concern that distracted teen pedestrians and higher vehicle speeds increases the potential of a more severe injury or fatality.

<u>**Option 2**</u> – Leave the existing school zone signs and remove photo enforcement equipment when traffic signal is fully operational. This will keep the existing school zone in effect and posted speed will be 20 mph during the school hours.

Arguments for Option 2

Option 2 may maintain a safer environment for the students crossing 15th Avenue because some motorists will obey the school zone speed limit.

Arguments against Option 2

Once photo enforcement goes away, many motorists will disregard the 20 mph school zone speed limit because of a lack of a regular enforcement deterrent. This motorist behavior was evident prior to conducting photo enforcement at that location. The greater mix of vehicle speeds resulting from the mix of conscientious drivers and careless or inattentive drivers, increases the potential for certain types of crashes such as rear-end crashes. Additionally, impatient motorists will be focused on passing slower motorists and will be less observant of the traffic signal and pedestrians crossing at the signal.

<u>**Option 3**</u> – Leave the existing school zone in place and remove photo enforcement equipment at the end of 2016.

Arguments for and against Option 3 Arguments are the same as Option 2, only that the impacts are delayed till the end of 2016.

State and Federal Guidelines applicable to School Zones

Federal

Definitions from Section 1A.13 of the current MUTCD (2009 Edition) School-a public or private educational institution recognized by the State education authority for one or more grades K though 12 or as otherwise defined by the State.

School Zone-a designated roadway segment approaching, adjacent to, and beyond school buildings or grounds, or along which school related activities occur.

Guidance for School Crossing

MUTCD Section 7B.12 School Crossing Assembly Standard:

- 01 If used, the School Crossing assembly (see Figure 7B-1) shall be installed at the school crossing (see Figures 7B-4 and 7B-5), or as close to it as possible, and shall consist of a School (S1-1) sign supplemented with a diagonal downward pointing arrow (W16-7P) plaque to show the location of the crossing.
- 02 02 The School Crossing assembly shall not be used at crossings other than those adjacent to schools and those on established school pedestrian routes.
- 03 03 The School Crossing assembly shall not be installed on approaches controlled by a STOP or YIELD sign.



Figure 7B-5. Example of Signing for a School Zone with a School Speed Limit and a School Crossing

State Statues

RCW 46.61.440

Maximum speed limit when passing school or playground crosswalks—Penalty, disposition of proceeds.

(1) Subject to RCW **46.61.400**(1), and except in those instances where a lower maximum lawful speed is provided by this chapter or otherwise, it shall be unlawful for the operator of any vehicle to operate the same at a speed in excess of twenty miles per hour when operating any vehicle upon a highway either inside or outside an incorporated city or town when passing any marked school or playground crosswalk when such marked crosswalk is fully posted with standard school speed limit signs or standard playground speed limit signs. The speed zone at the crosswalk shall extend three hundred feet in either direction from the marked crosswalk.

(2) A county or incorporated city or town may create a school or playground speed zone on a highway bordering a marked school or playground, in which zone it is unlawful for a person to operate a vehicle at a speed in excess of twenty miles per hour. The school or playground speed zone may extend three hundred feet from the border of the school or playground property; however, the speed zone may only include area consistent with active school or playground use.

WAC 468-95-330

School speed limit assembly (S4-1, S4-2, S4-3, S4-4, S5-1).

Pursuant to RCW **46.61.440**, paragraph 07 in MUTCD Section 7B.15 is replaced with a Standard to read:

Applicable to state highways, county roads, or city streets, the reduced school or playground speed zone shall extend for 300 feet in either direction from the marked crosswalk when the marked crosswalk is fully posted with standard school speed limit signs or standard playground speed limit signs.

Applicable to county roads or city streets, the school or playground speed zone may extend up to 300 feet from the border of the school or playground property when fully posted with standard school speed limit signs or standard playground speed limit signs. However, the speed zone may only include the area consistent with active school or playground use.

No school or playground speed zone may extend less than 300 feet from a marked school or playground crosswalk, but may extend by traffic regulation beyond 300 feet based on a traffic and engineering investigation.

The speed limit signs shown in Figure 7B-5 shall be located per RCW 46.61.440.