



CITY OF KIRKLAND

Public Works Department

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MEMORANDUM

To: Transportation Commission

From: Iris Cabrera, Transportation Engineer
Joel Pfundt, Transportation Manager

Date: May 20, 2022

Subject: PROPOSED 84TH AVENUE NE SPEED LIMIT CHANGE

Staff Recommendation

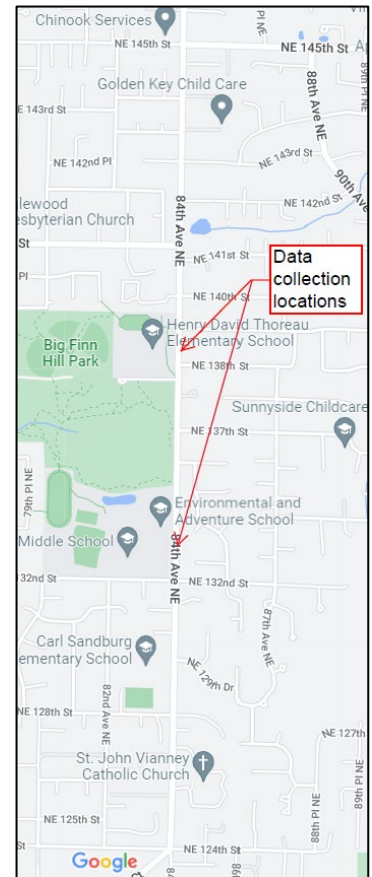
The Transportation Commission receive a presentation regarding Staff's recommendation to lower the speed limit on 84th Avenue NE between NE 124th Street and NE 145th Street from 35 MPH to 30 MPH.

Background

During staff's February 15, 2022 presentation to City Council regarding expansion of the School Zone Safety Camera Program to the 84th Avenue NE school zones on Finn Hill and the State Street/NE 68th Street school zone near Lakeview Elementary School, Council asked that staff evaluate the posted speed limit on 84th Avenue NE. Staff has moved forward with this review using the City's [Pre-approved Plans Policy R-17: Speed Limits](#). The implementation portion of Policy R-17 states that the findings from the evaluation will be reported to the Transportation Commission and then forward to City Council for a final decision.

Prevailing Conditions

The segment of 84th Avenue NE from NE 124th Street to NE 145th Street is approximately 1.5 miles long and is designated as a collector street (Figure 1). The posted speed limit is 35 MPH. The horizontal alignment is relatively straight with grades ranging from 4% at northern end of the corridor to slightly above 5% from NE 136th Street to NE 132nd Street. The street has two vehicle travel lanes and bike lanes on both sides. Sidewalks are present, either on both sides or one side of the street, from NE 124th Street to the northern limit of Finn Hill Middle School. An additional segment of sidewalk is located on the east side of the street beginning at NE 137th Court and ending at the northern most entrance to Henry David Thoreau Elementary. The lack of continuous sidewalks is



compensated by the presence of a paved shoulder on the west side of the street, separated from the bicycle lane by segments of raised curb. This serves as a walkway extending between the northern limit of Finn Hill Middle School and NE 145th Street.

Land uses within the vicinity of this segment of 84th Avenue NE consist of low density residential, a park, two elementary schools (Carl Sandburg and Henry David Thoreau) and one middle school (Finn Hill). Because of the presence of these schools, 84th Avenue NE is a designated school walk route. There are several marked uncontrolled crosswalks, two of which have RRFBs (Rapid Rectangular Flashing Beacons) and there are also three sets of school flashing beacons (three on each side of the streets).

During normal traffic conditions Average Annual Daily Traffic (AADT) ranges from 2,900 to 3,500 vehicles. These AADTs are typical for collector streets in Kirkland and have not changed significantly over the past 10 years.

In addition, available speed study results show that drivers are, on average, traveling lower than the posted speed limit of 35 MPH. The average speeds range from 31-33 MPH and the 85th percentile speed, which is the speed exceeded by just 15% of all drivers, ranges from 35 to 38 MPH.

Support

The proposed speed limit change on 84th Avenue NE is justified based upon the following:

- 1) The proposed speed limit change is consistent with Kirkland Public Works Roadway Pre-approved Plan Policy R-17 which provides guidance for the implementation of speed limit changes in Kirkland. Policy R-17 supports modification of existing speed limits on collectors and arterial streets in 5 mph increments based on the results of an engineering study. Policy R-17 also recognizes the impacts of traffic operation changes on posted speed limits (See more information in #3 below).
- 2) An engineering study typically includes an analysis of prevailing traffic conditions including operating speeds by direction of travel and time of day, average daily traffic volumes, safety and geometric characteristics, and existing land uses in the areas surrounding the street under consideration. To this effect, transportation engineering staff performed a review of geometric characteristics of 84th Avenue NE and existing land uses surrounding it, as well as a review of the speed and traffic volumes counts performed during normal traffic conditions (not impacted by the COVID-19 pandemic) to determine if the prevailing traffic conditions would support lowering the speed limit on 84th Avenue NE. The conclusion is they do and that this is consistent with City planning documents and Policy R-17. In addition, there are no plans to significantly alter the existing geometric or lane use conditions in the vicinity of the 84th Avenue NE corridor that would conflict with this conclusion.
- 3) Kirkland's City Council has approved the expansion of the school zone speed enforcement program to include two additional locations with the goal of being operational by the start of the 2022-2023 school year. One of these two locations is the combined school zones of Carl Sandburg Elementary, Finn Hill Middle School and Henry David Thoreau Elementary, which extend along 84th Avenue NE from NE 126th Place to NE 141st Place. Implementation of automated enforcement on school zones is a significant operational change that will result in higher compliance with the 20 MPH school zone speed limit, thereby improving safety.

Consequently, lowering the speed limit on 84th Avenue NE is necessary to facilitate driver's compliance with the 20 MPH school zone speed limit since transitioning down from 30 MPH to 20 MPH is easier than transitioning from 35 MPH to 20 MPH.

Conclusion/Recommendation

Upon a review of prevailing traffic conditions on 84th Avenue NE (based on available information) transportation staff is recommending that the 35 MPH speed limit be lowered to 30 MPH. This speed limit change is consistent with the Policy R-17, and it is expected to improve operation and safety conditions on 84th Avenue NE.

Staff has also contacted the City of Kenmore and they are supportive of also lowering the posted speed limit on their section of 84th Avenue NE, between NE 145th Street and Simonds Road NE from 35 MPH to 30 MPH. Kenmore may implement this change as soon as the week of June 13, 2022.

Once a final decision has been made to move forward with this recommendation, Public Works Transportation Division staff will immediately reach out to City Neighborhood Outreach staff to start to inform the community, as well as notify Police of the upcoming change.