



## King County

### Road Services Division

Department of Local Services

## Evaluation Summary

### Southeast Petrovitsky Road

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King County conducted a speed study to evaluate the existing 50 mph speed limit on Southeast Petrovitsky Road between Southeast 184<sup>th</sup> Street and Southeast Lake Youngs Road. The speed limit currently decreases from 50 mph to 40 mph at Southeast 184<sup>th</sup> Street where Northwood Middle School is located. The county has found that motorists are still adjusting their speed as they approach Ridgewood Elementary School, 1,400 feet to the west. At SE 184<sup>th</sup> Street, the land use surrounding Southeast Petrovitsky Road transitions from a rural, low density housing environment with paved shoulders to an urban, high density housing environment with sidewalks. The proposed speed limit change would create a 5 mph transition zone between Southeast Lake Youngs Road and Southeast 184<sup>th</sup> Street. The county anticipates this change will lead to lower vehicle speeds and improve safety within the two school zones.

Southeast Petrovitsky Road has three horizontal curves posted with 45 mph advisory speed signs. There are a total of 4 intersections and 33 driveways within this 1.4 mile stretch of roadway. Some driveways adjacent to or within these 45 mph curves have a limited sight distance for seeing approaching or stopped vehicles. Southeast Petrovitsky Road is a principal arterial carrying an average of 10,400 vehicles per day. It has two 11-foot lanes with 5- to 6-foot paved shoulders and left-turn lanes at Southeast 184<sup>th</sup> Street and Southeast 192<sup>nd</sup> Street.

The average speed on Southeast Petrovitsky Road is 46.8 mph and 85% of motorists drive at 51.6 mph or less. The majority of motorists drive close to the posted 50 mph speed limit. Speed data has shown speeds continue to be greater than 5 mph over the posted 40 mph speed limit west of Southeast 184<sup>th</sup> Street.

Collision rates and details support the need to adjust the speed limit. Between 2013 and 2017, a total of 46 collisions were reported to have occurred on this segment of Southeast Petrovitsky Road, amounting to 1.73 collisions per million vehicle miles (MVM) of travel. This collision rate is slightly higher than the King County average for similar roadways of 1.71 per MVM. Of these 46 collisions, 27 were speed-related. Nearly one-half of the speed-related collisions involved single-vehicle fixed object collisions and one-third involved rear-end collisions. There were zero fatality collisions, 8 injury collisions, and 19 property-damage-only collisions.



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On the basis of the engineering data obtained and applied to the speed limit evaluation criteria, a speed limit decrease from 50 to 45 mph is appropriate between Southeast 184<sup>th</sup> Street and Southeast Lake Youngs Road. The revision is in keeping with the existing curves, collision types, changing rural-to-urban environment, prevailing speeds approaching and within the Northwood Middle School and Ridgewood Elementary School zones, and would provide a safe and reasonable transition from 50 to 40 mph.