WHATCOM COUNTY PUBLIC WORKS DEPARTMENT

Jon Hutchings
Director



ENGINEERING SERVICES JAMES P. KARCHER, P.E.

County Engineer 5280 Northwest Drive Bellingham, WA 98226 Phone: (360) 778-6220 Fax: (360) 778-6221

Traffic Study for Alderson Road from mile post 0.55, Gemini St (private road) to mile post 0.89, Blaine Rd SR-548

September 17th, 2021

The primary purpose of this traffic study is to provide information to the Whatcom County Council in order for them to determine if the speed limit should be lowered to 25 MPH and the roadway segment should be added to the Birch Bay Golf Cart Zone.

Roadway Information

Alderson Rd is an Urban Minor Collector from mile post 0.04 (Birch Bay Drive) to mile post 0.89 (Blaine Rd SR-548) it functions to move traffic into and out of the Birch Bay area in as quick and safe a manner as possible. The roadway consists of two – 11 foot BST (chipseal) lanes and 4 foot ACP (asphalt) shoulders.

Traffic Count Information

Two traffic counts were performed from June 19th to 28th, 2021 and a third from June 7th to 17th, 2019 was reviewed. The traffic counts consist of volume (Average Daily Traffic – ADT), speed and truck volume percentage. The locations of the counts were at mile post 0.49, 0.06 miles west of Gemini St; at mile post 0.29, east of Leeside Dr; and at mile post 0.66, 0.23 miles west of Blaine Rd SR-548. The results are as follows:

Volume:

2021 Alderson Rd – W of Gemini St	2327 ADT
2021 Alderson Rd – W of Blaine Rd (SR-548)	2369 ADT
2019 Alderson Rd – E of Leeside Dr	1999 ADT

Speed:

The 85th percentile speed is the speed at which 85 percent of traffic is travelling at or below and is often use by traffic engineers, along with other factors, to set speed limits.

2021 Alderson Rd – W of Gemini St	85 th percentile 39.6 mph (Speed Limit 35 mph)
2021 Alderson Rd – W of Blaine Rd (SR-548)	85 th percentile 44.4 mph (Speed Limit 35 mph)
2019 Alderson Rd – E of Leeside Dr	85 th percentile 36.5 mph (Speed Limit 25 mph)

Percentage of Truck Traffic:

2021 Alderson Rd – W of Gemini St	6.9%
2021 Alderson Rd – W of Blaine Rd (SR-548)	7.3%
2019 Alderson Rd – E of Leeside Dr	6.1%

Collisions

A review of collisions received from the Washington State Patrol showed there have been 2 collisions on Alderson Rd from mile post 0.04 (Birch Bay Drive) to mile post 0.89 (Blaine Rd SR-548) from 01/01/2016 to 12/31/2020. Neither of the collisions involved a golf cart.

07/28/2016 MP 0.87, two vehicle non-injury collision: from opposite directions, both going straight, sideswipe. Contributing circumstances were listed as inattention and unknown driver distraction. Minivan crossed the centerline and collided with a dump truck, neither driver was cited.

03/04/2018 MP 0.36, single vehicle minor injury collision: vehicle overturned. Contributing circumstances were listed as none. Motorcycle rider thought another driver was going to pull out in front of him from Boundary Ln and lost control of his motorcycle while trying to swerve to avoid a collision. Driver had scrapes on his hands and knee from putting the motorcycle down and sliding. Driver was not cited.

Signs

The following speed limit signs are posted:

25 MPH for eastbound traffic just west of Leeside Dr at MP 0.163

25 MPH for westbound traffic just east of Parkland Dr at MP 0.455

35 MPH for eastbound traffic just east of Parkland Dr at MP 0.487

35 MPH Unless Posted Otherwise for westbound traffic just west of Blaine Rd SR-548 at MP 0.854

The following Golf Cart Zone signs are posted: Leaving Golf Cart Zone for eastbound traffic at MP 0.487 Entering Golf Cart Zone for westbound traffic at MP 0.488

Conclusion

Alderson Rd is functioning in a manner that we would expect for an urban minor collector with moderate traffic volumes. Speeds however are higher than what would be expected in both the 25 mph and 35 mph zones. This indicates that the change in speed limit needed to establish a golf cart zone may not have the desired effect of lowering vehicle speeds and could result in an increase in speed differential collisions. Gemini St, which is a private road, is the access to Bay Horizon Park, which may be a draw for visitors on golf carts; however there are only 6 properties located easterly of there and they are unlikely to be a source of, or attraction to, visitors. Additionally, the golf cart zone currently ends at a public road, Parkland Dr, and no portion of the current golf cart zone extends over private roads.