



LEWIS COUNTY PUBLIC WORKS ENGINEERING AND TRAFFIC INVESTIGATION REPORT

IN THE MATTER OF: Evaluation of the speed limit on Baker Road.

REASON FOR INVESTIGATION: Initiated by a petition received by Board of County Commissioners.

COUNTY ROAD: 71030 – Baker Road

TO: BOCC and file

FINDINGS:

- a.)

Current Speed Limit:	50 mph (unposted)
85% Prevailing Vehicle Speed:	32.9 mph
Average Daily Traffic:	22.3 ADT
Truck Percentage:	22.2% (all 2-axle 6-tire delivery trucks)

- b.) **Physical Features:** Baker Road is a through road to milepost 0.389 where it intersects with Smith Creek Road, beyond that there is a dead-end section ending at milepost 0.998. The roadway has a BST surface, and a pavement width of 20 feet. There is a 15 mph horizontal curve at the beginning of the road, but no other horizontal or vertical alignment considerations. The roadway surface itself is in satisfactory condition (surfaced in 2015).

- c.) **Accidents/Characteristics:** The accident history shows that there has never been a reported accident on Baker Road.

- d.) **Remarks/Recommendations:** Lewis County uses an engineering approach to setting speed limits, and the Operating Speed Method is a nationally accepted method within the traffic engineering community and Federal Highway Administration. Speed limit setting is primarily based on the 85th percentile speed, which is the speed at which 85 percent of free-flowing traffic is traveling at or below. Setting a speed limit based on the 85th percentile speed is based on safety, and research has shown that traveling at or around the 85th percentile speed yields the lowest crash risk for drivers. The 85th percentile speed method is also attractive because it reflects the collective judgment of the vast majority of drivers as to a reasonable speed for given traffic and roadway conditions.



This is aligned with the general sentiment that laws (i.e., speed limits) should not make people acting reasonably into law-breakers. Other factors considered include: roadway geometrics, traffic, infrastructure condition, features, accident history, and roadside development. Additionally the Manual of Uniform Traffic Devices, Section 2B.13(12) gives the following guidance: "When a speed limit is posted within a speed zone, it should be within 5 mph of the 85th percentile speed of free-flowing traffic". Based on accepted engineering practices and all roadway factors considered, the recommended speed limit for Baker Road and Smith Creek Road would be 35 mph

e.) **Attachments:** vicinity map

Recommended by:


Mike Kroll
Transportation Planner

6/23/22
Date

Approved by:


Tim Fife, P.E.
County Engineer

6-23-22
Date