



THE STATE  
of **ALASKA**  
GOVERNOR MIKE DUNLEAVY

**Department of Transportation and  
Public Facilities**

DESIGN & ENGINEERING SERVICES  
TRAFFIC, SAFETY, AND UTILITIES

PO Box 196900  
Anchorage, AK 99519-6900  
Phone Number: 907 269 0639  
Toll Free: 800 770 5263  
TDD: 907 269 0473  
TTY: 800 770 8973  
Fax Number: 907 269 0654  
Web Site: dot.state.ak.us

**RECEIVED**

**JAN 29 2019**

**Borough Clerk's Office  
Kenai Peninsula Borough**

January 15, 2019

Mr. Wayne H. Ogle, Assembly President  
Kenai Peninsula Borough  
144 N Binkley Street  
Soldotna, AK 99669

SUBJECT: Kenai Peninsula Borough Resolution 2018-021

Dear President Ogle,

We have evaluated to extend the Borough's request to consider extending the Sterling Highway 35 mph speed zone south of Cooper Creek to the Resurrection Pass trailhead (Mileposts 50.8 to 53.2). This would essentially connect to the seasonal one mile long 45 MPH zone at the Russian River, Sportsman's Landing.

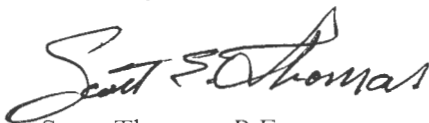
Updates to field data and local conditions have been extensively documented as required under AS 19.10.040 and AS 19.10.070 (see Table 1). Based on current field conditions, I respectfully cannot recommend a 35 MPH extension for the following reasons:

- Land use, parking, pedestrian activity are lower and more spread out in this segment (compared to the 35 MPH area to the north).
- Our past efforts to regulate 35 MPH have been ineffective. When using signing, stencils and wider striping we still find overall speeds and conflicts remain unchanged in treated areas. (See Figure 1 "Trends"). However, closer grouping of motorists at or near similar speeds has been slightly improved over time ("percent in pace"), except at Cooper Creek bridge.
- Road geometry and visibility allows higher speeds south of Cooper Creek. It is intuitive to drivers to drive for what this geometry allows.
- A 35 MPH extension is well below minimum speed limit policy. Most motorists reasonably choose to travel in a grouping at 50 MPH and higher as sampled on a "bell curve". This is called the "median of the pace" and is the minimum speed limit after adjusting for local conditions. (Figure 3 and DOTPF policy and procedure 05.05.020).
- Outcomes at 35 MPH are expected to lead to reduced safety. Our biggest concern is for more aggressive passing, greater speed differentials, and increased crashes. These same concerns raised by the Borough could get worse rather than better.

Our Department does share the Borough’s concern about safety. We have been trying more focused solutions to encourage slower driving, consistent speeds, and less crashes in Cooper Landing. Added warnings, larger signs, and more reflectors appear to have improved speed differentials between most drivers, but not reduced speeds. Increased warnings and flashers have reduced crashes at Gwin’s Curve (MP 52) by more than half. These focused warnings and guidance are achieving better motorist acceptance than speed limits alone. We think this is because they are visibly associated with the reason for the warning, as compared to blanket speed limits.

We note crash concentrations remain at the MP 52.5 curves and the narrowest curve location at Cooper Creek bridge (Figure 4). Our Department will consider warning sign revisions to alert motorists at or near these sites in the short term. In the long term, the project to build a new highway will remove higher speed traffic from the community. This will open up the existing road for increased local use and ideally improve this area as a travel destination for all users.

Sincerely,



Scott Thomas, P.E.  
 Central Region Traffic & Safety Engineer

Attachments:

	Speed Limit – Detailed Findings
	List of Recent DOTPF Actions towards Safety 2008-2018
Table 1	Speed Limit Evaluation MP 50.8-53.2, in accordance with AS 19.10.072
Figures 1-2	1983-2018 Cooper Landing Speed Trends over time – no overall change
Figure 3	2018 Cooper Landing Spot Speeds, post Construction – better grouping, but no overall change
Figure 4	2013-2016 Cooper Landing Recent Crashes – concentration areas remain

- cc: Senator Peter Micciche, Senate District O, North Kenai Peninsula  
 Representative Mike Chenault, House District 29, North Kenai Peninsula  
 Jeff Anderson, Field Supervisor, USFWS, Kenai District, 43655 Kalifornsky Beach Rd, Soldotna, AK 99669  
 Rachele Goniotakis, Supervisor, KPB School District Student Transportation, 148 N Binkley St, Soldotna, AK 99669  
 Captain Maurice Hughes, E Detachment, Alaska State Troopers, 46333 Kalifornsky Beach Road, Soldotna, AK 99669  
 Mayor Charlie Pierce, Kenai Peninsula Borough, 144 N Binkley St, Soldotna, AK 99669  
 Supervisor, Chugach National Forest, US Forest Service, 161 E 1<sup>st</sup> Ave, Door #8, Anchorage, AK 99501  
 Aves Thompson, Director, Alaska Trucking Association, 3443 Minnesota Dr, Anchorage, AK 99503

**Sterling Hwy MP 50.8 to MP 53.2**  
**Speed Limit - Detailed Findings**

New post-construction data has been gathered and studied in contrast to many decades of speed observations in the overall Cooper Landing area – Quartz Creek Road to Skilak Lake Road at Jim's Landing.

**Land Use.** Land use is spread out and rural in nature, with some focused areas of turning traffic at Gwin's Lodge/Kenai Cache, USFS Russian River Campground entrance, the Resurrection Trail parking pulloff, and a few small businesses – primarily at the Cooper Creek speed transition. Land use to the north in the 35 MPH segment is denser and concentrated along a more curving roadway in steeper terrain. This is not a neighborhood roadway with direct residential density or a prevalence of schools, houses, parks and crosswalks.

**Pedestrians.** On road pedestrian levels are lower and infrequent in this segment. Pedestrian connectivity and near or on-road use is observed to be higher a) in areas to the north nearer to Snug Harbor Road, and b) at parking areas leading to and from the Russian River Ferry access.

**Parking/Driveways.** While some parking is directly next to the road, these sites have good visibility and wide areas to park 8 feet or more off the roadway as encouraged under 13 AAC 02.340. Parking is seasonal and lower in use than most areas in Cooper Landing. Gwin's Lodge/Kenai Cache roll-on/roll-off parking is a concern – as parking vehicles block can often each other's view more than block the view of mainline motorists. New permits are not being issued for this type of busier parking access out of safety concerns. DOTPF has worked to remove roll-on/roll-off parking in pullouts and increased buffers from the roadway, primarily at busier areas to the south.

**Speed Limit Posting** The transition to 35 MPH at the north end is currently visible and is because the roadway geometry becomes more winding and limiting. To the south the road opens up and most vehicles travel at or near 50 MPH or higher. The 45 MPH zone near the Russian River Ferry is intentionally focused around areas of greater pedestrian traffic on the roadway or just off the traveled lane. The concept of focused signing and shorter zones is intended to better meet motorist expectations as demonstrated through increased compliance. The current Russian River Ferry zone is working as intended to the south. Combining it with the 35 MPH zone may reduce Russian River Ferry area compliance and reduce pedestrian safety in that area.

**Crashes** Since 2013, this shorter segment has less crashes than the area to the north and south. "Gwin's Curve" MP 52.5 is a concentrated crash area with injury crashes, but 2/3 less than before the warning signs, flashers and 35 MPH advisory speeds were installed. The Cooper Creek bridge transition to narrower, 35 MPH curves remains one of the more focused crash areas of concern.

**Trucks.** Truck crashes have been very few and minor since past safety projects. Trucks have been observed by DOTPF to be more compliant with the current speed limit than most motorists. 35 MPH speeds are essential to trucks staying on the road and in their lane north of Cooper Creek, while higher speeds for trucks to the south are adequate.

**Passing** DOTPF allows passing where visibility is adequate. However, observations of passing on double yellow and crash risks are expected to worsen with too low of a speed limit. Currently, head-on and sideswipe crashes in this segment are low.

### List of Recent DOTPF Actions Towards Safety

State and federal agencies are working together and do care about preventing crashes and making the Sterling Highway in Cooper Landing safer. This includes rebuilding parking and site circulation to public facilities, continuing use of focused traffic warnings, beacons, and enforcing short but credible seasonal speed limits in high pedestrian areas. The following is a list at more recent work focused on safety:

1. **2018 Relocated access and guide signs at Russian River Campground.** Access and onsite circulation was rebuilt in 2018 by the Forest Service. The access has improved driveway sight distance along the main highway due to routine clearing and rebuilt access with traffic reentering the highway south of the sharp curves. Guide signing in place is larger and the turning traffic area is visible. Signing is a balance without cluttering the area.
2. **2013-2014 Wider lane lines and speed stencils.** These features were built in 2014 to provide reminders to slow down. The goal is a “narrowing effect” on speed without narrowing the pavement. Passing zones were reevaluated for visibility. Some had to be removed. Without right of way for any shoulders or other effects, we chose to change striping. While recent national studies show this works, we are not finding significant overall slowing. We are finding more motorists traveling at the same or close to each other’s speeds than before. Consistency between all users is an improved result that lowers risk. [The pavement has not narrowed, but the visual look is narrower. New guardrail is vertical for performance, and this does narrow space for wider loads. For trucking and trailered vehicles - 35 MPH is essential on curved areas in order to stay in the lane. Faster speeds make lane compliance difficult north of Cooper Creek.
3. **Ongoing Clearing.** Our Maintenance Division has worked with local and federal governments to increase clearing and visibility along this corridor. This is evident as motorists can now see downstream of winding curves and anticipate oncoming traffic and conflicts with less risk of unexpected conditions.
4. **2011 Seasonal parking, speed limits at the Russian River Ferry.** Years of conflict at the ferry site has led federal and state agencies to coordinate since 2011. This includes removing narrow problematic parking, adding improved alternative parking, and establishing a seasonal speed zone focused around higher pedestrian volumes walking to and from the ferry entrance with little or no shoulders.

**2008 Large warnings and roadside reflectors.** Past safety work in 2007-2008 installed very large chevron signs, curve signs, and even beacons at Gwin’s Corner. Roadside reflectors and guardrail reflectors were added for night driving. The goal was clear and bright warnings on a winding alignment that is no longer like most of the main highway. These features appear to be working well at getting motorist’s attention and are being used at other critical sites in the Region.