



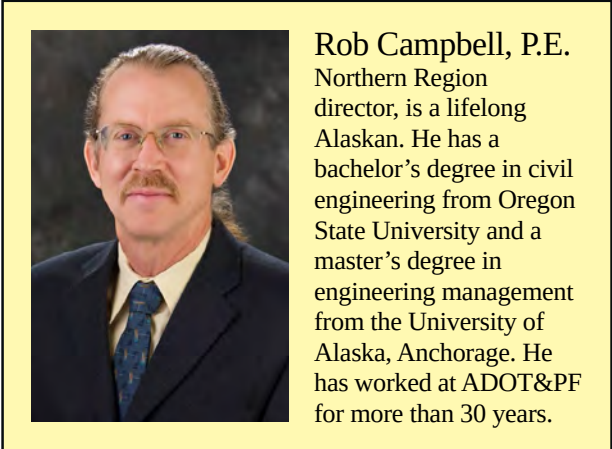
Director's Quarterly

Alaska Department of Transportation and Public Facilities

Winter Edition

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DIRECTOR'S MESSAGE



Rob Campbell, P.E. Northern Region director, is a lifelong Alaskan. He has a bachelor's degree in civil engineering from Oregon State University and a master's degree in engineering management from the University of Alaska, Anchorage. He has worked at ADOT&PF for more than 30 years.

Comments on the newsletter?
Email dotnrddirector@alaska.gov
or call (907) 451-2210

Greetings,

In this issue, we talk about the department's new regional boundaries. We are in the process of adjusting the regional boundaries for the first time in more than three decades.

Three things spurred this shift: trends in population growth, the priorities of the new highway bill and the opportunity to group the southern coastal communities in one region. Adjusting the regional lines will allow us to better balance the workload among regions.

While change can be uncomfortable, it gives us a chance to improve the use of our resources and

to manage communities with similar challenges in one region.

Although we have begun the boundary shift, the full transition will be taking place gradually during the coming months. We aim to have everything essentially complete within six months.

Beyond regional boundaries, in this issue we also discuss a couple topics we often receive questions about: speed limits and salt brine.

If you have ideas for future topics you'd like me to cover, please let me know at dotnrddirector@alaska.gov or call (907) 451-2210.

REGIONAL BOUNDARIES

After more than 35 years, the Alaska Department of Transportation and Public Facilities (ADOT&PF) is changing its regional boundaries.

The Southeast Region will see the biggest change as it expands to include the majority of the coastal communities along the gulf. The region will be renamed the "Southcoast Region."

The expanded region will include the Valdez Maintenance District, which was formerly part of Northern Region and includes the cities of Valdez and Cordova. It also will include several areas formerly in Central Region: the Aleutian Chain, the Alaska Peninsula including the Lake and Peninsula Borough, the Bristol Bay Borough and the Kodiak Island Borough.

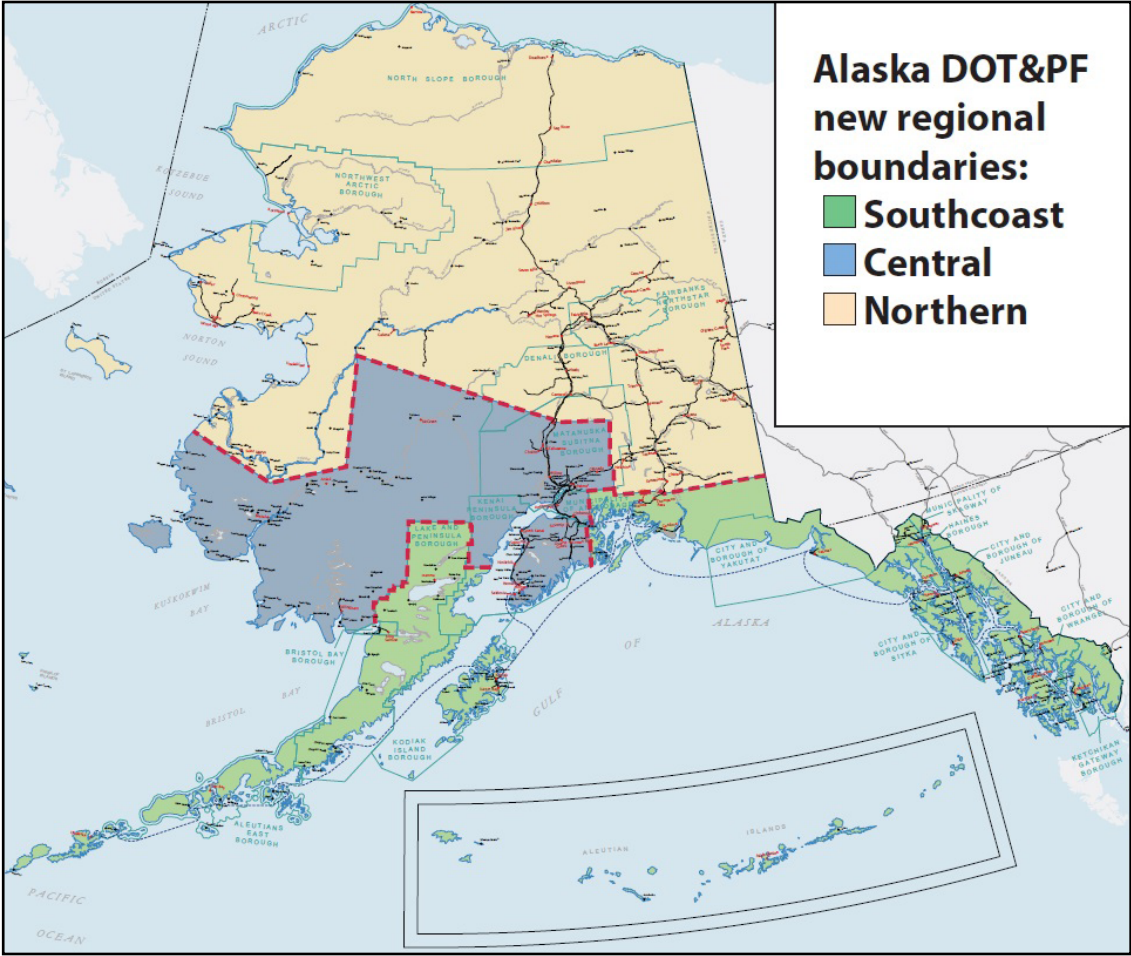
The three key factors leading to the regional boundary change are:

1. Population trends;
2. The recent highway bill (MAP-21); and
3. A desire to group the marine and coastal environment communities together.

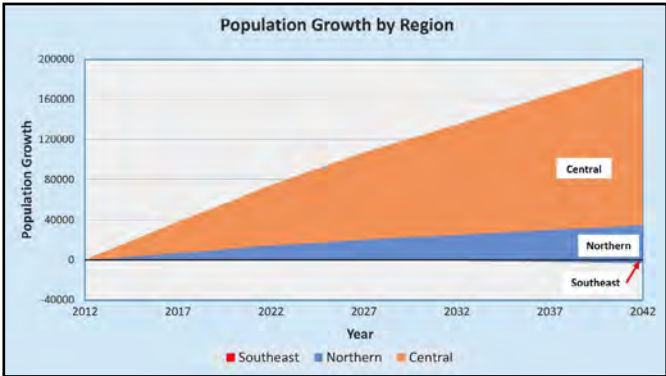
Estimates by the Alaska Department of Labor and Workforce Development show that Anchorage and the Mat-Su area will see 72 percent of Alaska's population growth in the next 30 years. This contrasts with a nominal expected growth in Southeast Region during that time, as illustrated in the graph in the lower right corner. Shifting communities away from the Central Region will help balance the workload between regions.

Also impacting the regions is MAP-21, which focuses on the National Highway System (NHS), highway safety and urban areas with a population greater than 200,000. Because Southeast has fewer NHS miles than the other regions, the highway bill results in a decreased workload under current boundaries.

The commonalities shared by southern coastal communities, which include Alaska Marine Highway service, harbors, ports and coastal climates, also contributed to this decision. Grouping them will allow Southcoast Region to focus on those distinct challenges presented to coastal areas.



Southeast Region director Al Clough will become director of the expanded region. He and his staff have been busy meeting with many of the communities within the new boundaries, and staff have been working to ensure a smooth transition between the regions and the communities.



IMPORTANT LINKS

How do I...

- Subscribe to receive news and updates via email?
- Find information about driving conditions and alerts?
- Find news and updates on the department's Facebook page?
- Find news and updates on the department's Twitter account?
- View videos and Public Service Announcements on the department's YouTube account?
- Access the Northern Region Blog?

<https://public.govdelivery.com/accounts/AKDOT/subscriber/new?http://511.alaska.gov>
<https://www.facebook.com/AlaskaDOTPF>
<https://twitter.com/AlaskaDOTPF>
<https://www.youtube.com/user/AlaskaDOTPF>
<http://dot.alaska.gov/nreg/blog/>

SPEED LIMITS

Residents and public officials often ask us how we determine speed limits on state roadways. Here’s a rundown of how those numbers are determined.

What are Alaska’s speed limits?

Speed limits are set to inform drivers of the maximum speed considered safe and reasonable under good conditions. They are also intended to lessen the difference in speeds between vehicles, thereby reducing the potential for conflicts.

- Regulation 13 AAC 02.275 sets the following maximum lawful speeds on Alaska roads.
- 15 miles per hour in an alley;
 - 20 miles per hour in a business district;
 - 25 miles per hour in a residential district; and
 - 55 miles per hour on any other roadway.

The regulation also states no one may drive at a speed greater than is reasonable and prudent considering traffic, roadway and weather conditions.

How are different speed limits determined?
The speed limits above are in effect except where speed limit orders establishing different limits have been completed and those limits have been posted. The Alaska Department of Transportation and Public Facilities (ADOT&PF) has an established policy and procedure for determining if a different speed limit is appropriate. A brief summary of the process is provided below.

Department Policy and Procedure 05.05.020, Establishment of Speed Limits and Zones

(<http://1.usa.gov/1twBx1m>), contains additional requirements not presented here, such as minimum length of speed zones, how and where to post speed limits and how to implement temporary speed zones for construction areas.

1. Department staff collects speed measurements of free-flowing traffic on the roadway. Only the first vehicle traveling in a group is counted as it is setting the speed of the vehicles following it.
2. The speed data is analyzed to determine the 5-mph increment closest to the speed at which 85 percent of the drivers during the study period were driving at or below. The 10 mph speed range that includes the largest number of vehicles, known as the pace, is also determined.
3. The speed limit is generally set at the 85 percent speed. If the 85 percent speed exceeds the maximum allowable speed established in the Policy and Procedure for the road type and location (varies from 55 mph to 75 mph), the maximum allowable speed is posted.
4. Where police enforce speed limits frequently, the speed limit may be set at the median (middle) of the pace range in residential areas or business districts or where crash experience indicates a need for a reduced limit.
5. If a change to the existing speed limit is recommended by ADOT&PF, the department will coordinate with law enforcement and consult with



local municipalities. Community councils and other community organizations may request in writing to participate in the process. If the department and local municipality, community council or community organization do not agree on changes to the existing speed limit, the department shall provide for a public hearing.

What is Alaska’s highest speed limit posted?

Currently, the highest posted speed limit in Alaska is 65 mph. This is allowable under the Policy and Procedure on routes designated as part of the National Highway System if they are outside urban districts or on controlled access highways inside urban districts. Changes to the Policy and Procedure in September 2013 allow controlled access facilities with no at-grade intersections and median or barrier separating opposing traffic lanes to be posted as high as 75 mph.

Regulation 13 AAC 02.280 allows the department to establish different speed limits where regulatory maximums do not fit specific road or traffic conditions.

SPEED FEEDBACK



In October, the department installed two speed feedback signs on Badger Road in the North Pole area. Installation of the signs came after concerns this summer about safety on Badger Road.

The signs were a quick response to address these concerns. The department’s long-term plans for the roadway include supporting the Badger Road Corridor Study being undertaken by the Fairbanks Metropolitan Area Transportation System.

These signs detect how fast a vehicle is traveling and display the vehicle’s speed.

These signs serve as another reminder for drivers to travel safely. We also ask drivers to consider road and weather conditions when traveling, as these speed limits are typically based on ideal conditions, which are rare during winter.

SALT BRINE

This fall, we received questions and concerns about our use of salt brine on Interior roads. Here’s a short Q&A on the anti-icing solution:

What is salt brine?
Salt brine is an anti-icing agent that helps stop snow and ice from sticking to roadways. The mixture is 23 percent sodium chloride, and the rest is water. Sodium chloride is considered by many transportation experts to be the safest and most cost-effective anti-icing product available.

When does the department use salt brine?
Salt brine is used in two ways:

- **Anti-icing:** If applied just before a winter storm, the enhanced salt brine will begin working as soon as the first snowflake falls and will delay the accumulation of snow and ice on pavement. It is important to note that 20F is the limiting temperature for almost all chemicals used for anti-icing on our nation’s highways. Anti-icing is not as effective with a pavement temperature below 20F.
- **Pre-wetting:** The department also sprays salt brine onto sand as the sand is applied to roadways. This allows the sand to penetrate ice on the road surface, allowing more sand to stick to the roadway.

Why does ADOT&PF focus on anti-icing?

- Anti-icing is a proactive approach to winter road maintenance.
- It reduces the amount of time required



- to restore the roads to a clear, dry condition.
- Snow and ice control cost savings result in benefits to the department and public.
- Improved winter roadway maintenance creates safer driving conditions for motorists.
- Anti-icing allows us to use less sand, which helps reduce the impact on roadside vegetation, aquifers and watercourses, and improve air quality as a result of reduced abrasive usage.
- Lower crash rates.

Are animals attracted to salt brine?
The department is not aware of any data showing that salt brine attracts wildlife. Maintenance engineers from other northern states with large animal populations agree there is nothing to indicate that salt brine attracts wildlife.

What about sand?
The department still uses sand, but only in the right conditions and only on hills, curves and intersections.

Is the brine corrosive?
ADOT&PF uses an enhanced salt brine that contains an organic anti-corrosive additive to lessen the impact of the salt on vehicles. This makes the solution one-third as corrosive as salt.

