MEMORANDUM

State of Alaska

Department of Transportation & Public Facilities
Program Development and Statewide Planning
Headquarters

TO: Ryan Anderson, P.E.
Commissioner

DATE: June 14, 2022

THRU: James Marks
Director

DS

FROM: Jill Melcher
Strategic Investment Chief

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SUBJECT: 2022-24 PHED Target Recommendations

The following Anchorage urbanized area Peak Hour Excessive Delay (PHED) performance target on the NHS are recommended. PHED is defined by FHWA as "**the extra amount of time spent in congested conditions defined by speed thresholds that are lower than a normal delay threshold." The PHED measures is reported as annual hours of peak hour excessive delay per capita (Ex. 2021- 9.5 hr).** A moderate, increasing target has been recommended by DOT&PF and the Anchorage Metropolitan Planning Organization staff.

Performance Measure	2 yr Target	4 yr Target
Annual Hrs of PHED per Capita	11 hrs	12 hrs

The targets satisfy the requirements for the Alaska Department of Transportation & Public Facilities under US 23 CFR 490.507 and US 23 CFR 490.607. See attached contributing factors.

Approved: _____ Date 6/14/2022

Ryan Anderson, P.E.
Commissioner, Alaska Department of Transportation and Public Facilities

Cc: John Binder III, Deputy Commissioner, DOT&PF
Rob Carpenter, Deputy Commissioner, DOT&PF
Wolfgang Junge, P.E., Regional Director, Central Region
Carolyn Morehouse P.E., Director, Statewide D&ES

Peak Hour Excessive Delay Measure

PHED is defined by FHWA as "the extra amount of time spent in congested conditions defined by speed thresholds that are lower than a normal delay threshold." Threshold for excessive delay is based on travel time at 20 MPH or 60% of posted speed limit, whichever is greater. The PHED measure is reported as annual hours of peak hour excessive delay per capita. Peak hours are defined as 6-10 a.m. and 4-8 p.m. weekdays. Total excessive delay metric is weighted by vehicle volume and occupancy.

June 1, 2022 Participants

DOT&PF:
- Adam Moser
- Carolyn Morehouse
- David Post
- James Starzec
- Jill Melcher
- Lisa Idell-Sassi
- Matthew Murphy
- Scott Thomas
- Sean Jordan
- Val Rader

AMATS/MOA:
- Aaron Jongenelen
- Jonathan Cecil

Goal

Establish reasonable 2 & 4 year PHED targets that are based on FHWA supplied travel time data (National Performance Management Data Set or NPMRDS), US Census data, Highway Performance Monitoring System data and the analysis of contributing factors and future projections of data.

Status of Data

Data for 2019 – 2021:

	2019	2020	2021
Annual Hrs of PHED per capita	8.8	7.9	9.5
Total Excessive Delay (hrs)	2,217,430	1,995,341	2,393,206

Summary of Target Setting Process

- Used Safety, Travel Time Reliability, Bridge and Pavement Performance Measure Target Setting process as a model.
- Calculated 2019-2021 PHED metric and conducted a stakeholder workshop to present findings and receive input.
- Defined external factors showing their current status and effects on the target.
- Conducted a second stakeholder workshop to discuss external factors and set a target.
- Set a moderate increasing target of 8% (rounded) for each target year, 2024 & 2026, based on 2022 traffic volumes in Anchorage area. Group unanimously agreed. Targets may be altered in 2024 depending on impacts of factors on the trend line.
- Submitted to Executive Team and Commissioner for review.

Reporting Timeline

- Baseline performance Period Report due October 1, 2022
- Mid Performance Period Report due October 1, 2024
- Full Report Baseline Report October 1, 2026
- Mid and Full Report repeated every 2 years

Consequences of not making significant progress

State must document actions it will take to achieve target if the actual performance level is not equal to or better than the established target (Significant Progress Determination US 23 CFR 490.109).

External Factors	Notes	Current Experience	Trend Line Pressure	Weight	PHED Forecast
Incidents/Crashes	55-60% of crashes occur in Anchorage. Crashes slightly decreasing.	Neutral	Neutral	Medium	
Winter Maintenance	Maintenance funding has decreased over the last 5 years. DOT&PF and MPO may struggle to achieve level of maintenance. Decreased winter maintenance funding also reflects recent warmer winters, not just funding ability.	Neutral	Increasing	Medium	
Pavement Condition	Pavement conditions on NHS in Anchorage are 30% good, 65% fair and less than 4% poor. Good pavement conditions have slightly increased since 2019. Funding is projected to remain.	Neutral	Neutral	Low	
Work Zone Impacts	Construction events remain steady each year which causes periods of traffic delays. DOT&PF is trying to schedule after peak hours to prevent congestion.	Neutral	Neutral	Medium	
Traveler Information	Users can access 511 Traveler Information and other sources (Google) before they travel, giving them a better sense of when and which routes to take. 511 provide traffic flows, incidents, roadwork and more.	Increasing	Decreasing	Medium	
Infrastructure Improvements	With the Infrastructure Investment and Jobs Act, more funding is available to maintain and improve infrastructure. Improvements in Anchorage include: Congestion Reduction improvements (intersection improvements); Transit Routes; Non-motorized facilities; and Alternative Routes. IIJA is not likely to take immediate affects however (5-10 years out).	Neutral	Decreasing	Medium	
Transportation Demand Management Policies	Anchorage MPO is implementing incentive programs to reduce SOV into more efficent modes of commuting, i.e., ridesharing, vanpooling, public transit, walking and cycling. AMATS is working on TSMO Plan and TDM Plan.	Neutral	Neutral	Medium	
Traffic Control Impacts	Signal control systems have an impact on traffic patterns, i.e., stop-n-go traffic. Anchorage MPO and DOT&PF work closely together on signalization to maintain traffic flows.	Increasing	Decreasing	Medium	
Land Use	MPO is looking into land use changes that could help reduce the need for vehicular trips.	Increasing	Decreasing	Low	
Teleworking	Teleworking is starting decrease. Unknown what the extent of this is yet.	Neutral	Neutral	Medium	
Traffic Volume Impacts	Traffic volumes have dropped by 8% below normal in 2022. Recovery from the pandemic (2021) has been slow but likely to increase again as we move back to normal in 2023-2026.	Decreasing	Increasing	High	
Current Experience	Current trend using most recent data or anecdotal evidence.				
Trend Line Pressure	Pressure from the factor that contributes to the trend line direction. Decreasing pressure results in a positive forecast, while increasing pressure results in a negative forecast.				
Weight	Weights indicate the impact that a factor may have on the forecast.				