## Air Quality Conformity Demonstration for Amendment #2 to the Anchorage 2023–2026 Transportation Improvement Program

#### **Final Draft**

Prepared By:

Municipality of Anchorage

Health Department

Environmental Health – Air Quality Program

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#### INTRODUCTION AND BACKGROUND

Anchorage Metropolitan Area Transportation Solutions (AMATS) is the federally recognized metropolitan planning organization (MPO) which is responsible for planning the transportation network within the Municipality of Anchorage. AMATS has prepared a draft second amendment to the Anchorage 2023–2026 Transportation Improvement Program (TIP) to accommodate necessary scope, funding level and schedule changes for several project in the current 2023-2026 TIP, beyond those included in Amendment #1 to that TIP. The 2023–2026 TIP includes transportation projects utilizing federal funds which are scheduled for full or partial implementation during calendar years 2023–2026.

The Alaska SIP (State Implementation Plan) contains limited maintenance plans for both carbon monoxide (CO) and PM<sub>10</sub><sup>i</sup> air pollutants within areas of the Municipality of Anchorage. EPA allows demonstration of conformity in such limited maintenance areas to be based on the probability of continued compliance with Limited Maintenance Plan (LMP) eligibility rules rather than modeling anticipated future network emissions to demonstrate expected compliance with a pre-established emission budget for the air pollutant of concern. Limited maintenance areas do not employ emissions budgets because the US Environmental Protection Agency established the LMP eligibility criteria such that it is highly improbable that a qualifying area would experience enough pollutant emissions growth over the twenty-year planning period sufficient to cause an exceedance of a federal air quality standard.

This document confirms the continued eligibility of Anchorage's Limited Maintenance Area status for CO and PM<sub>10</sub>, and affirms that Transportation Control Measures (TCMs) required by the Alaska SIP continue to be implemented.

The Maintenance Plan (LMP) option allows for the demonstration of probable future compliance with the NAAQS based on evaluation of current air monitoring data rather than comparing modeled air pollutant emissions against an established motor vehicle emissions budget. EPA guidance states that emissions budgets in areas meeting established LMP qualification criteria may be treated as essentially not constraining for the length of the maintenance period because it is unreasonable to expect that an area satisfying those criteria will experience sufficient growth in pollutant emissions during that period such that a violation of the NAAQS would result.

This document includes a review of the most current CO and PM<sub>10</sub> pollutant design values derived from air monitor data collected within the respective air pollutant maintenance area to confirm that Anchorage continues to maintain LMP eligibility criteria within its CO and PM<sub>10</sub> Maintenance Areas. This same form of air monitor data analysis was originally used to establish air quality conformity for the prior 2040 MTP. Part 1 of this report will describe the conformity analysis performed for the Anchorage CO Limited Maintenance Area. Part 2 will address conformity for the Eagle River PM<sub>10</sub> Limited Maintenance Area.

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<sup>&</sup>lt;sup>1</sup> PM<sub>10</sub> is particulate matter consisting of particles that are 10 microns or less in aerodynamic diameter. Such particles are isolated from air by passing a sampled airstream through a size-selective inlet, incorporating a cyclone, an impactor or similar cut point which removes larger than desired particles from the airstream.

Point MacKenzie

Eagle River PM<sub>10</sub>
Maintenance Area

Anchorage CO
Maintenance Area

Far North
Bicentennial
Park

Figure 1.1
Anchorage CO and Eagle River PM-10 Limited Maintenance Areas

#### **Interagency Consultation and Public Review**

On January 24, 2024, AMATS staff presented to the Transportation Conformity Interagency Consultation Team (TC-ICT) a draft of this air quality conformity demonstration for Amendment #2 to the Anchorage 2023-2026 TIP. The TC-ICT consists of representatives from the Anchorage Health Department, the Alaska Department of Environmental Conservation, the Alaska Department of Transportation and Public Facilities, the Federal Highway Administration, the Federal Transit Administration, and the US Environmental Protection Agency.

ICT members supported this demonstration based upon continued compliance with EPA's qualification criteria to use EPA's Limited Maintenance Plan option for the Anchorage CO Maintenance Area and for the Eagle River PM<sub>10</sub> Maintenance Area; an also demonstrated commitment to maintain CO and PM<sub>10</sub> control measures for the Anchorage and Eagle River maintenance areas as committed to in the Alaska State Implementation Plan. AMATS also affirms that the Anchorage 2023–2026 TIP, including Amendment #2, will remain fiscally constrained.

This conformity report was posted online for public review and comment from January 29<sup>th</sup> – March 15<sup>th</sup> 2024. AMATS received no comments respective to that posting. On April 18,2024 the AMATS Policy Committee approved submissions of this conformity demonstration to FHWA for their review for approval.

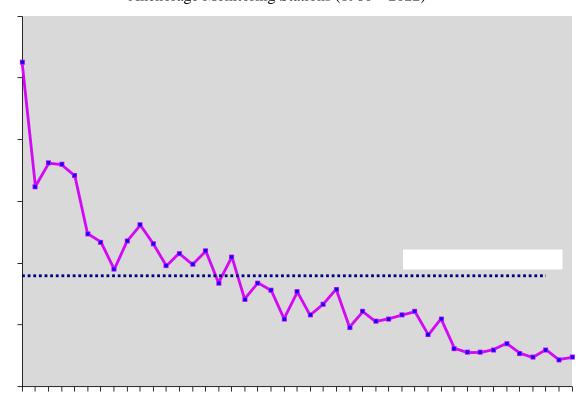
#### PART 1: CONFORMITY ANALYSIS FOR THE ANCHORAGE CO MAINTENANCE AREA

#### 1.1 Anchorage CO Attainment Status

Anchorage was first identified as experiencing high levels of ambient CO concentrations in the early 1970s. In the early 1980s as many as 50 violations of the national ambient air quality standard (NAAQS) were measured in a single year. However, in the past three decades there has been a steady decline in ambient CO due to improvements in motor vehicle emission control technology. Local control programs such as carpooling and vanpooling programs and public awareness programs that encourage motorists to reduce cold start CO emissions by using engine block heaters prior to starting have also contributed to emission reductions. CO concentrations have declined by over 70% since the 1980s and there have been no violations of the NAAQS since 1996. The trend in CO concentrations is shown in Figure 1.2.

Figure 1.2

Trend in Annual 2nd Maximum 8-hour CO Concentration at Anchorage Monitoring Stations (1980 – 2022)



In February 2004, on behalf of the Municipality of Anchorage, the State of Alaska requested that the EPA re-designate Anchorage from a nonattainment area for CO to an area that has attained the standard. This request was accompanied by a maintenance plan that showed Anchorage should continue to maintain compliance with the NAAQS. The EPA approved that plan in June 2004, and re-designated the nonattainment area as the Anchorage CO Maintenance Area, effective as of July 23, 2004 (69 FR 34935) signifying agreement that Anchorage has attained compliance with the CO NAAQS.

The CO Maintenance Plan has been amended several times since 2004. On May 2, 2014 the EPA approved the Anchorage Carbon Monoxide Limited Maintenance Plan which streamlines the air quality conformity demonstration process (79 FR 11707). Under the Limited Maintenance Plan (LMP) option, an emissions budget test is not required because maintenance of the eligibility criteria to qualify for the LMP assures a very low potential to exceed the NAAQS. However, the local metropolitan planning organization (i.e., AMATS) must still adhere to the administrative requirements for conformity rules concerning use of federal transportation funds. These include the requirements to complete interagency consultation in accordance with 40 CFR Part 93.112, and to fulfill the public consultation process in accordance with 23 CFR Part 450.316, which requires involvement of interested parties during the development of transportation plans and opportunity for the public to review and comment on a proposed plan. In addition, the MPO must adhere to the requirements for fiscal constraint of transportation plans consistent with 23 CFR 450.322(b)(11) and ensure that all transportation plans provide for continued implementation of transportation control measures as committed to in the SIP.

#### 1.2 Compliance with CO Limited Maintenance Area Eligibility Criteria

Under the LMP there is no requirement to project emissions over the maintenance period in order to demonstrate conformity with a motor vehicle emissions budget. EPA policy outlined in the Oct. 6, 1995 Memorandum by Joseph Paisie titled, Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas, states that if an area is at or below 85 percent of the NAAQS, continuation of transportation control measures already in the SIP should provide adequate assurance of maintenance over the applicable 10-year maintenance period. When EPA approves a limited maintenance plan, the agency is concluding that an emissions budget may be treated as essentially non-constraining for the length of the maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the CO NAAQS would result. In order to qualify for the CO LMP option, a non-attainment or maintenance area must have a design value that is equal to or less than 7.65 ppm (85 percent of the CO NAAQS exceedance level) based on 8 consecutive quarters of data. The design value for the area must continue to be at or below 7.65 ppm until the time of final EPA action on the plan. Effective May 2, 2014, the EPA approved an Alaska SIP revision which included a second 10-Year CO Limited Maintenance Plan (LMP) for Anchorage (79 FR 11707).

To meet the CO LMP eligibility criteria, the design value for the limited maintenance area must be 7.65 ppm or less. As of December 31, 2021, the Anchorage CO design value is 3.0 ppm CO; hence Anchorage remains compliant with EPA's CO limited maintenance plan eligibility criteria.

Table 1.1
Anchorage CO Design Values by Year

	Garden Site 20200018	Highest Annual 8-Hr 2 <sup>nd</sup> Max CO	Area CO DV
2015	2.8	2.8	3.1
2016	3.0	3.0	3.0
2017	3.5	3.5	3.5
2018	2.7	2.7	3.5
2019	2.4	2.4	2.7
2020	3.0	3.0	3.0
2021	2.2	2.2	3.0
2022	2.4	2.4	2.4

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ii A design value is the historical maximum concentration of an air pollutant for an area when determined in the same or commensurate manner as the NAAQS allowing for direct comparison. The 8-hour, CO design value is determined by examining the annual second maximum rolling, 8-hour concentration at each monitoring site over a two-year period. For each site, the higher of the two values is the design value for that site for that two-year period. The highest design value among the individual sites is the design value for the whole limited maintenance area.

Figure 1.3
Anchorage CO Monitoring Site Locations with Garden (active site) in Red.



#### 1.3 Additional Conformity Requirements for CO LMP

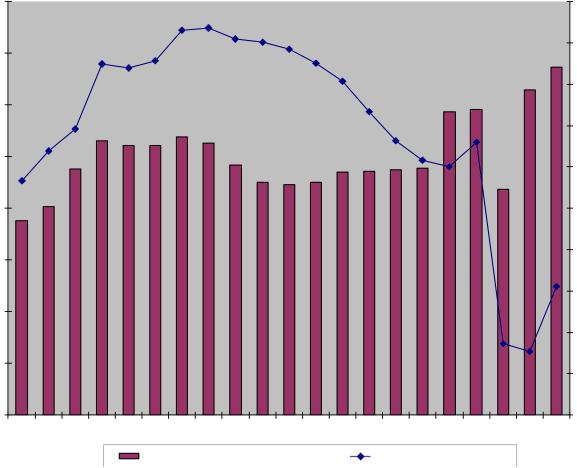
#### 1.3.1 Transit Service

Section 93.110 of the air quality conformity regulations states that the conformity determination for transportation plans must discuss how transit operating policies (including fares and service levels) and assumed transit ridership have changed since the previous transportation plan conformity determination was approved.

On January 1, 2014 Anchorage cash bus fares increased from \$1.75 to \$2.00 and 30-day passes increased from \$55 to \$60; however, at the same time fares for youth, senior and disabled riders dropped to half of the full-fare price. A prior increase in cash fares from \$1.50 to \$1.75 occurred in October 2005. In January 1, 2012, the cost of a monthly pass increased from \$50 to \$55; a day pass increased from \$4 to \$5; a monthly pass for senior/disabled increased from \$15 to \$19.25; and a senior/disabled daily pass increased from \$1.25 to \$1.50.

Figure 1.4 shows how transit service levels, expresses as total annual weekday timetable revenue hours, have varied between 2002 and 2018. On October 23, 2017, the Anchorage Public Transportation Department launched a city-wide revision of bus routes and schedules to provide more frequent and timely service and maximize transfer opportunities for bus riders. As a result, an additional 10% more service hours were provided and are reflected in 2018. Ridership continued to decline during the first full year of the new bus system, but the rate of decline (-1.4%) was significantly reduced from the prior nine years of annual decline (-3.2% annual average).

Figure 1.4
Trend in Transit Service and Ridership (2002-2022)



#### 1.3.2 Transportation Control Measures (TCMs)

In maintenance areas such as the Municipality of Anchorage, priority must be given to the implementation of TCMs included in the SIP. Transportation control measures are defined as any measure that is specifically identified and committed to in the applicable implementation plan or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions.

Ride-sharing and transit marketing are the only TCMs identified in the CO Maintenance Plan. They are funded in the current TIP. Although these measures are identified in the Plan, no CO reduction is claimed for them.

Similar to the trend in transit bus usage, the RideShare van-pool program has seen about 30% fewer participants in recent years when compared to the five years of peak participation, 2009 – 2014, which averaged about 1,000 participants per year (see Table 1.2).

It is difficult to distinguish the effect that transit and RideShare pricing and promotion have had on ridership because other factors, such as the price of gasoline, socio-economic influences, and changes in service also affect ridership.

Table 1.2 Vanpool Program Participation (2005-2018)

Year	Number of Vanpools	Number of Vanpoolers
2009	52	917
2010	54	923
2011	66	1152
2012	65	992
2013	65	972
2014	65	972
2015	65	842
2016	65	659
2017	60	664
2018	73	695

#### 1.4 Conclusion regarding Anchorage CO Conformity

This analysis demonstrates that Anchorage is well positioned to maintain the CO NAAQS. Anchorage Air Program staff have further determined that the 2023–2026 TIP is consistent with the Alaska State Implementation Plan in that no element of the Anchorage 2023–2026 TIP will undermine the objective to reduce ambient CO in Anchorage, nor will it interfere with timely implementation of any CO control measure identified in the Alaska SIP.

#### PART 2: CONFORMITY ANALYSIS FOR THE EAGLE RIVER PM-10 AREA

# 2.1 Eagle River PM<sub>10</sub> Attainment Status - Qualification as a Limited Maintenance Area for Conformity Purposes

Between 1985 and 1987 Eagle River frequently violated the NAAQS for  $PM_{10}$  (particulate matter air pollution with an aerodynamic diameter less than or equal to 10  $\mu$ m in size). The main source of this pollution was identified as unpaved roads in the area. As a consequence, in 1991 the EPA designated a nine square kilometer area in Eagle River as a moderate nonattainment area for  $PM_{10}$  and required the submission of an air quality attainment plan to bring the area into compliance with the  $PM_{10}$  NAAQS.

In 1991, the Municipality of Anchorage and the Alaska Department of Environmental Conservation prepared the *Eagle River PM*<sub>10</sub> *Control Plan*, which was submitted to the EPA as an amendment to the Alaska SIP to address the PM<sub>10</sub> problem in Eagle River. The plan outlined an ambitious road paving program to reduce emissions from this source. The EPA approved the plan as an amendment to the SIP in 1993 (58 FR 43084).

By 1993 most of the 22 miles of unpaved local roads in the  $9\,\mathrm{km^2}\,PM_{10}$  problem area were either surfaced with recycled asphalt or paved. By 2007 there were no unpaved local roads within the problem zone.

Eagle River Limited Maintenance Area Boundary with Parkgate Monitoring Site

Figure 2.1

The road paving and recycled asphalt surfacing program has dramatically reduced  $PM_{10}$  concentrations in Eagle River. The last violations of the  $PM_{10}$  NAAQS occurred in 1987.<sup>iii</sup>

In October 2010, the EPA made a determination that Eagle River had attained the  $PM_{10}$  NAAQS (75 FR 64162). However, before Eagle River could be officially re-designated as an attainment area, a maintenance plan had to be submitted to EPA to demonstrate that the air quality control measures in place in Eagle River are sufficient to ensure continued maintenance of the  $PM_{10}$  NAAQS.

The EPA offers a streamlined process of gaining re-designation to attainment to areas that can demonstrate they have a low risk of violating the  $PM_{10}$  NAAQS. This is known as the Limited Maintenance Plan (LMP) option. When EPA approves a limited maintenance plan, the agency is concluding that an emissions budget may be treated as essentially non constraining for the length of the maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the  $PM_{10}$  NAAQS would result.

Nonattainment areas that wish to qualify for this streamlined process must show that: (1) their average design value (DV) over the past five years is below  $98 \mu g/m^3$  and therefore have a low probability of violating the NAAQS, and (2) that PM<sub>10</sub> emissions anticipated from growth in motor vehicle travel in the area are unlikely to cause a future violation. Eagle River met both of these criteria. In September 2010, on behalf of the Municipality of Anchorage, the State submitted the *Eagle River PM*<sub>10</sub> *Limited Maintenance Plan* to EPA as a proposed amendment to the SIP.

EPA approved the Eagle River  $PM_{10}$  LMP, effective March 8, 2013 (78 FR 900). Areas that have been designated as "limited maintenance areas" or have had their LMPs approved for conformity purposes have a simplified conformity procedure. This simplified LMP procedure is used in this analysis.

#### 2.2 PM<sub>10</sub> LMP Conformity Criteria

Areas with approved LMPs are not required to perform an emission budget test so long as the area continues to meet EPA's LMP eligibility criteria. Areas with a  $PM_{10}$  LMP are required to annually recompute their 5-year average  $PM_{10}$  design value (DV) to determine whether it is below 98  $\mu$ g/m³ and therefore still meets that initial  $PM_{10}$  LMP eligibility criterion. Table 2.1 shows that the 5-year average DV in Eagle River continues to meet this requirement. The method used to compute these 5-year average DVs is explained in detail in the Appendix of this document.

Table 2.1
5-Year Average Eagle River PM<sub>10</sub> Design Values

5-Year Period	Average DV (µg/m³)
2005-2009	81
2010-2015	92
2018-2022	81
LMP Qualification Criteria	$\leq$ 98 $\mu$ g/m <sup>3</sup>

 $<sup>^{\</sup>text{iii}}$  PM $_{10}$  concentrations have exceeded the 150  $\mu$ g/m $^3$  NAAQS on a few occasions since 1987, but all of these "exceedances" have been attributed to natural events. These include glacial river dust transported by high winds from the Matanuska River and volcanic ash resulting from the eruption of the Mt. Spurr volcano in August 1992. EPA excludes these events when considering whether an area has met the NAAQS.

<sup>&</sup>lt;sup>iv</sup> PM<sub>10</sub> LMP guidance is outlined in a memorandum from Lydia Wegman, Director, Air Quality Standards and Strategies Division, EPA, August 9, 2001.

<sup>&</sup>lt;sup>v</sup> This requirement is found in the Wegman PM<sub>10</sub> LMP guidance. Although it is not a requirement of the transportation conformity rule, AMATS agreed to include the Eagle River PM<sub>10</sub> Limited Maintenance Area design value analysis in this conformity determination as an outcome of interagency consultation.

The following conformity requirements from §93.109 Table-1 still apply to maintenance areas which have LMPs that the EPA has approved for conformity purposes:

TABLE 1 – CONFORMITY CRITERIA from 40 CFR §93.109

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As per 40 CFR 93.113(b), the transportation plan must: (1) provide for timely implementation of the TCMs in the applicable SIP; and (2) nothing in the transportation plan should interfere with a TCM in the SIP. Both conditions have been met. The 2023-2026 TIP will provide for continued support and promotion of the transit bus and rideshare programs in Anchorage and Eagle River; and, there are no projects or constraints in the TIP that would interfere with the continued implementation of TCMs as identified in the Anchorage CO maintenance plan.

When the *Eagle River PM*<sub>10</sub> Control Plan was submitted to EPA in 1991, 6.6 miles of the 22 miles of unpaved road in the problem zone had already been paved or surfaced with recycled asphalt product (RAP). The plan assumed that an additional 8.6 miles of paving or recycled asphalt surfacing would be completed by 1993. This was accomplished in 1993 when over 15 miles of the 22 miles of unpaved roads in the problem zone had been paved or RAP-treated. By 2007, there were no unpaved roads in the problem zone.

The Eagle River  $PM_{10}$  Control Plan also called for changes in winter traction sanding practices to reduce  $PM_{10}$  emissions during the spring break-up period. These included reductions in the amount of sand applied and new specifications that limited the silt content in the sand to two percent (2%) or less. These measures were implemented in 1989 and have are still maintained. The fact that Eagle River has remained in compliance with the NAAQS since 1989 attests to the effectiveness of these implemented control strategies.

#### 2.3 Conclusions regarding Anchorage CO and Eagle River PM-10 Air Quality Conformity

This analysis demonstrates that the Municipality of Anchorage and the State of Alaska, working in cooperation, continue to successfully control PM<sub>10</sub> pollution in Eagle River and adhere to long-term PM<sub>10</sub> source reduction measures for the Eagle River Maintenance Area as prescribed in the Alaska State Implementation Plan. The amended Anchorage 2023-2026 TIP will also allow AMATS to comply with conformity rules established in 40 CFR 93 through adoption of a fiscally constrained transportation plan that applies the most current planning assumptions. AMATS confirms that no element of the Anchorage 2023-2026 TIP, including the proposed changes in Amendment #1, will jeopardize continue implementation of any provided PM<sub>10</sub> control strategies for the Eagle River PM<sub>10</sub> Maintenance Area nor will it undermine objectives or successful practices to manage PM<sub>10</sub> emissions in the area. Further, review of current PM<sub>10</sub> trends monitored within the Eagle River maintenance area demonstrates a high probability of continued compliance with the PM<sub>10</sub> NAAQS over the remaining ten years of the Eagle River PM<sub>10</sub> Maintenance Plan.

## **APPENDIX A**

Changes affected by Amendment #2 to the Anchorage 2023 – 2026

PROJECT LOCATION	FEDERAL FI	ISCAL PROC in Thousa	ands)	G YEAR (\$	4-year total	% of 4-year Non-NHS \$
Non-National Highway System (Table 2)	2023	2024	2025	2026		
Complete Streets Improvements not including Pavement Replacement Project Cost	\$9,579	\$8,924	\$17,876	\$26,381	\$62,760	47.2%
Motorized Pavement Replacement (Table 6) Project Cost	\$4,925	\$6,186	\$3,635	\$7,414	\$22,160	16.7%
Complete Streets Improvements and Roadway Pavement Replacement Total Project Cost	\$14,504	\$15,110	\$21,511	\$33,795	\$84,920	10.770
Active Transportation (Table 3)	Ψ11,001	Ψ10,110	Ψ21,011	φουγίσε	ψο 1,5 20	
Active Transportation Improvements not including Pavement Replacement Project Cost	\$2,179	\$152	\$5,474	\$8,369	\$16,174	12.2%
Active Transportation Pavement Replacement (Table 6) Project Cost	\$1,053	\$338	\$2,000	\$50	\$3,441	2.6%
Active Transportation Improvement and Pathway/Trails Pavement Replacement Total Project Cost	\$3,232	\$490	\$7,474	\$8,419	\$19,615	
Plans and Studies (Table 4) Project Cost	\$1,046	\$1,456	\$819	\$1,001	\$4,322	3.3%
Surface Transportation Block Grant (STBG) Funding for Congestion Mitigation & Air Quality (CMAQ) Eligible Projects (Table 5) AMATS	. , .	. , -		. ,	. ,	
Allocation (Non-CMAQ funding) Project Cost	\$5,806	\$16,565	\$4,825	\$6,546	\$33,742	25.4%
Other Federal/State/Local (Table 10) Project Cost	\$4,477	\$0	\$0	\$0	\$4,477	3.4%
Complete Streets, Active Transportation, & CMAQ (STBG) Allocation Total Project Cost	\$29,065	\$33,621	\$34,629	\$49,761	\$147,076	110.6%
AMATS STBG Total Revenue	\$29,065	\$33,621	\$34,629	\$49,761	\$147,076	
Complete Streets, Active Transportation, & CMAQ (STBG) Allocation Revenue	\$29,065	\$33,621	\$34,629	\$35,668	\$132,983	
AMATS Carry Forward (STBG) Revenue	\$0	\$0	\$0	\$14,093	\$14,093	
CMAQ Funded (Table 5) Required SIP TCM Project Cost	\$981	\$1,306	\$1,361	\$1,424	\$5,072	
CMAQ Funded (Table 5) Non-SIP Project Cost	\$1,001	\$956	\$962	\$962	\$3,881	
Subtotal for SIP and non-SIP CMAQ Funded Project Cost	\$1,982	\$2,262	\$2,323	\$2,386	\$8,953	
CMAQ (In addition to AMATS Allocation) Revenue	\$1,982	\$2,262	\$2,323	\$2,386	\$8,953	
AMATS Transportation Alternatives Program (TAP) Project Cost	\$2,147	\$1,398	\$6,300	\$2,112	\$11,957	
AMATS Transportation Alternatives Program (TAP) Total Revenue	\$2,147	\$2,241	\$6,300	\$2,112	\$12,800	
AMATS Transportation Alternatives Program (TAP) Revenue	\$2,147	\$2,241	\$2,050	\$2,112	\$8,550	
AMATS Carry Forward (TAP) Revenue	\$0	\$0	\$4,250	\$0	\$4,250	
Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) Project Cost	\$10,610	\$0	\$0	\$0	\$10,610	
Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) Revenue	\$10,610	\$0	\$0	\$0	\$10,610	
AMATS Carbon Reduction Program (CRP) Project Cost	\$3,370	\$3,615	\$6,373	\$8,426	\$21,784	
CRP Total Revenue	\$3,370	\$3,615	\$6,373	\$8,426	\$21,784	
AMATS Carbon Reduction Program (CRP) Revenue	\$3,370	\$3,615	\$3,724	\$3,835	\$14,544	
AMATS Carry Forward (CRP) Revenue	\$0	\$0	\$2,649	\$4,591	\$7,240	
AMATS Allocation, CMAQ, TAP, CRP, CRRSAA, Carry Forward, Total Project Federal Costs	\$47,174	\$40,896	\$49,625	\$62,685	\$200,380	
AMATS Allocation, CMAQ, TAP, CRP, Carry Forward Total Project Federal Costs Match	\$4,997	\$4,669	\$9,888	\$7,129	\$26,684	
AMATS Allocation, CMAQ, TAP, CRP, CRRSAA, and Carry Forward Total Project Costs (Federal + Match)	\$52,171	\$45,565	\$59,513	\$69,814	\$227,064	
AMATS Allocation, CMAQ, TAP, CRP, CRRSAA, and Carry Forward Total Revenue (Federal + Match)	\$52,171	\$46,408	\$59,513	\$69,814	\$227,907	
Other Funded Projects within the AMATS area outside the AMATS Allocation						
Highway Safety Improvement Program (Table 7)	\$465	\$8,448	\$37,006	\$10,270	\$56,189	

National Highway System (Table 8)	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000	
Transit Capital FTA Section 5307 to MOA (Table 9)	\$8,894	\$9,510	\$47,260	\$7,260	\$72,924	
Transit Capital FTA Section 5307 to ARRC (Table 9)	\$3,650	\$4,225	\$3,975	\$3,800	\$15,650	
Transit Capital FTA Section 5337 [State of Good Repair] to ARCC (Table 9)	\$12,850	\$6,500	\$1,000	\$1,200	\$21,550	
Other Federal Funded Projects within AMATS (Table 10)	\$8,122	\$4,042	\$78,089	\$2,534	\$92,787	
TOTAL PROGRAM ALLOCATION	\$102,785	\$95,006	\$235,582	\$104,323	\$537,696	1

Grandfathered Project	STIP Need ID	Responsible	TID Maga		PHASING PLAN	FUND CODE			Thousands)		Estimated	Est project	Est total
	Ticcu ID	Agency	TIP Need ID*					October 1	- September	r 30	funding needs after	cost 2023-	Est total project cost
		rigency					2023	2024	2025	2026	2026	\$4,549 \$4,549 \$4,549 \$5,000 \$5,458 \$5,458 \$542 \$6,000 \$8,649 \$14,093 \$2,258 \$25,000 \$5,231 \$519 \$5,750 \$10,380 \$1,030 \$11,410 \$2,138 \$212 \$2,350 \$2,502 \$248 \$2,750 \$910 \$90 \$1,000 \$22,160 \$6,631 \$2,156 \$30,947 \$573 \$1,890	project cost
				O'Malley Road Reconstruction [Seward Highway to Hillside Drive] - Reconstruct the roadway to improve safety and capacity at intersections and improve pedestrian facilities and 3 lane section east of Lake Otis Pkwy, and 5 lane section between Seward Hwy and Lake Otis Pkwy. Landscaping @ 5% of Construction \$ = to be determined. \$1.0M in Design and \$4.3M ROW funding for Phase I in 2015. \$500,000 ROW in 2016 for Phase II. \$12.2M in U/C funding for Phase I in	2023 - Utilities	STBG	\$4,549	\$0	\$0	\$0	\$0		\$4,549
Yes		DOT&PF	2159	2017 is A/C into 2016 for a total of \$26.7M. Phase I will receive additional funds of \$4.2M from FFY 2013 GO Bond or other non-AMATS sources of funding such as NHPP or statewide STP funds. Phase II is funded with the remainder of the FFY 2013 GO Bond supplemented by TIP funds.		State Match	\$452	\$0	\$0	\$0	\$0	·	\$452
					Total		\$5,000	\$0	\$0	\$0	\$0		\$5,000
Yes		DOT&PF	RDY00001	<b>Fireweed Lane Rehabilitation</b> [Spenard Road to Seward Highway] - This project would rehabilitate Fireweed Lane from Spenard Road to the Seward Highway and include a road diet, changing Fireweed from 4 lanes to a maximum of 3 lanes (2 with a center turn lane). This project would also include non-motorized improvements.	2023 - D 2025 - D 2026 - ROW	STBG State & MOA Match	\$2,502 \$248	\$0 \$0	\$227 \$23	\$2,729 \$271	\$40,027 \$3,973		\$45,485 \$4,515
1					Total		\$2,750	\$0	\$250	\$3,000	\$44,000	\$6,000	\$50,000
				Spenard Road Rehabilitation [Benson Blvd to Minnesota Dr] - Project will rehabilitate to improve traffic flow. This	2024 - ROW	STBG	\$0	\$4,549	\$0	\$4,101	\$0	<u> </u>	\$8,649
Yes		DOT&PF	RDY00003	project would also include non-motorized improvements.	2026 - U/C	Carry Forward (STBG)	\$0	\$0	\$0	\$14,093	\$0	\$14,093	\$14,093
1						MOA Match	\$0	\$452	\$0	\$1,806	\$0		\$2,258
					Total	CERT C	\$0	\$5,000	\$0	\$20,000	\$0		\$25,000
:7		DOTES DE	DD1/00005	Rabbit Creek Road Rehabilitation [Seward Highway to Goldenview Drive] - Project would rehabilitate Rabbit Creek	2025 - D	STBG	\$0	\$0	\$682	\$4,549	\$25,472		\$30,702
Yes		DOT&PF	RDY00005	Road from the Seward Highway to Goldenview Drive and will look at left turn accommodations where possible. Project will includes non-motorized improvements.	2026 - ROW	State Match	\$0	\$0	\$68	\$452	\$2,528		\$3,048
				*	<b>Total</b> 2023 - D	STBG	<b>\$0</b> \$100	<b>\$0</b> \$546	\$750	<b>\$5,000</b> \$0	<b>\$28,000</b>		\$33,750
Yes		DOT&PF	RDY00006	<b>East 4th Ave Signal and Lighting Upgrade</b> [Cordova St to Ingra St] - Reconstruct the traffic signal and street lighting system along 4th Ave between Cordova St and Ingra St. Sidewalk and curb ramps will also be replaced.	2023 - D 2024 - D/ROW 2025 - U/C		\$100	\$54	\$9,734 \$966	\$0	\$0		\$10,380 \$1,030
1					Total	-	\$110	\$600	\$10,700	\$0	\$0	¢11 /10	\$11,410
				Potter Drive Rehabilitation [Arctic Blvd to Dowling Road] - This project would rehabilitate Potter Drive from Arctic	2025 - D/ROW	STBG	\$0	\$728	\$1,410	\$0	\$6,413		\$8,551
Yes		DOT&PF		Boulevard to Dowling Road and include non-motorized improvements.	2023 B/ROW		'			Φ0		1 7	
CS		Dorair	KD 100007	F F	T-4-1	State Match	\$0 <b>\$0</b>	\$72 <b>\$800</b>	\$140	\$0	\$637 <b>\$7,050</b>	<del> </del>	\$849
	1			Mountain Air Drive [Rabbit Creek Road to Sandpiper Drive] - Extend Mountain Air Drive from Rabbit Creek Road to	<b>Total</b> 2023 - D	STBG	\$455	\$682	<b>\$1,550</b> \$1,365	<b>\$0</b> \$0	\$10,462		<b>\$9,400</b> \$12,963
Yes		DOT&PF	RDY00010	Sandpiper Drive. Recommend separated pathway. Purpose: Circulation, access, and safety.	2024 - D 2025 - ROW		\$45	\$68	\$1,303	\$0	\$1,038		\$1,287
1					Total		\$500	\$750	\$1,500	\$0	\$11,500	\$2.750	\$14,250
	<u> </u>	<del> </del>		Academy Drive/ Vanguard Drive Area Traffic Circulation Improvements [Brayton Drive to Abbott Road] - Project	2025 - D	STBG	\$0	\$0	\$1,500	\$0	\$16,102	•	\$14,250
Yes		DOT&PF	RDY00013	would improve and align Academy Drive and Vanguard Drive west of Abbott Road. Project would include non-motorized		MOA Match	\$0	\$0	\$90	\$0	\$1,598		\$1,689
CS		DOTATI	KD 100013	improvements and consider adjacent land use.	Total	WIOA Water	<b>\$0</b>	\$0		\$0 \$0			
				Motorized Pavement Replacement Program - This program will provide a single funding source for several pavement	<b>Total</b> 2023-2026	STBG	\$4,925	\$6,186	<b>\$1,000</b> \$3,635	\$0 \$7,414	<b>\$17,700</b> \$18,194		<b>\$18,700</b> \$40,354
				overlay and/or replacement projects. Improvements are also expected to include ADA and some existing curb and	Programming	CRRSAA	\$6,631	\$0	\$0	\$0	\$0		\$6,631
Yes		DOT&PF	RDY00012	sidewalk repair. May include those projects listed in Table 6 or other priorities.		State & MOA	\$445	\$614	\$361	\$736	\$1,806	\$2,156	\$3,962
1					Total	Match	¢12 001	¢	\$2.000	¢0 150	\$20,000	¢20 047	\$50.047
		<del> </del>		Safety Improvement Program (Traffic Count Support) 2023-2026 - Collect traffic data within the AMATS area	<b>Total</b> 2023-2026	STBG	<b>\$12,001</b> \$0	<b>\$6,800</b> \$573	<b>\$3,996</b>	<b>\$8,150</b> \$0	\$20,000		<b>\$50,947</b> \$2,866
				completed by the ADOT&PF Central Region Highway Data Section and MOA Traffic Department Data Section.	Programming	CRRSAA	\$1,890	\$0	\$0	\$0	\$0		\$1,890
No		DOT&PF	RDY00014			MOA Match	\$0	\$57	\$0	\$0	\$228	\$57	\$284
		1			Total	<u> </u>	\$1,890	\$630	\$0	\$0	\$2,520	\$2,520	\$5,040
				Spenard Road Rehabilitation [Minnesota Drive to Northwood Drive] - Project would rehabilitate Spenard Road from	2025 - D	STBG	\$0	\$0	\$1,637	\$0	\$14,737	\$1,637	\$16,375

Grandfathered	STIP	Responsible	TIP Need	PROJECT LOCATION	PROJECT PHASING PLAN	FUND CODE	FEDERA		PROGRAM Thousands)	MMING YEA	Estimated funding	Est project	Est total
Project	Need ID	Agency	ID*					October	1 - Septembe	er 30	needs after	cost 2023-	project cost
Ů							2023	2024	2025	2026	2026	2026	
No		DOT&PF	RDY00015	Winnesota Drive to Northwood Drive. Project would include non-motorized improvements and consider adjacent land use.		MOA Match	\$0	\$0	\$163	\$0	\$1,463	\$163	\$1,625
					Total		<b>\$0</b>	<b>\$0</b>	\$1,800	\$0	\$16,200	\$1,800	\$18,000
		DOTA DE	DD1/0004 (	<b>Chugach Way Rehabilitation</b> [Spenard Road to Arctic Blvd] - Project would rehabilitate Chugach Way from Spenard Road to Arctic Blvd and include non-motorized improvements. Project would use the Chugach Way Area Transportation	2024 - D 2026 - D/ROW	STBG	\$0	\$1,092	\$0	\$910	\$8,551	\$2,001	\$10,553
No		DOT&PF	RDY00016	Elements Study for design development.		MOA Match	\$0	\$108	\$0	\$90	\$849	\$199	\$1,047
					Total		\$0	\$1,200	\$0	\$1,000	\$9,400	\$2,200	\$11,600
				3rd Avenue Signals and Lighting Upgrade [E Street to Cordova Street] - The purpose of the project is to replace traffic	2023 - D	STBG	\$791	\$755	\$91	\$0	\$8,369	\$1,637	\$10,007
No		DOT&PF	RDY00018	signals and lighting systems to meet current electrical safety standards and design criteria; sidewalks and pavement will	2025 - D	MOA Match	\$79	\$75	\$9	\$0	\$831	\$163	\$993
				be replaced as necessary to facilities electrical work and meet ADA requirements.	Total		\$870	\$830	\$100	\$0	\$9,200	\$1,800	\$11,000
				32nd Ave Upgrade [Benson Blvd to Lois Drive] - Project would upgrade 32nd Ave from Benson Blvd to Lois Drive to	2023 - D	STBG	\$1,183	\$0	\$910	\$0	\$13,191	\$2,092	\$15,283
No		DOT&PF	RDY00019	current collector standards. This project would look at including lighting upgrades, addition of non-motorized facilities, and drainage upgrades were possible.	2025 - D	MOA Match	\$117	\$0	\$90	\$0	\$1,309	\$208	\$1,517
					Total		\$1,300	\$0	\$1,000	\$0	\$14,500	\$2,300	\$16,800
				<b>Dale Street and Folker Street Upgrade</b> [Tudor Road to 40th Ave] - Project would upgrade Dale Street and Folker from Tudor Road to 40th Ave to current local standards. This project will include non-motorized facilities on Dale Street from	2025 - D	STBG	\$0	\$0	\$910	\$0	\$11,280	\$910	\$12,190
No		DOT&PF	RDY00020	Tudor Road to 40th Ave to link up with the non-motorized facilities on Tudor Road and 40th Ave. This project would look at including lighting upgrades, non-motorized facilities, and drainage upgrades were possible.		MOA Match	\$0	\$0	\$90	\$0	\$1,120	\$90	\$1,210
					Total		\$0	\$0	\$1,000	\$0	\$12,400	\$1,000	\$13,400
				The contingency list of projects for each year will consist of the following year's projects.	STBG Totals		\$14,504	\$15,110	\$21,511	\$19,702	\$175,090	\$70,828	\$245,918
				The contingency list of projects for each year will consist of the following year's projects.	CRRSAA Totals		\$8,521	\$0	\$0	\$0	\$0	\$8,521	\$8,521
				The contingency list of projects for each year will consist of the following year's projects.	CRP Totals		\$0	\$0	\$0	\$0	\$0	\$0	\$0
				The contingency list of projects for each year will consist of the following year's projects.	STBG Carry Forward		\$0	\$0	\$0	\$14,093	\$0	\$14,093	\$14,093
				Approximate percentage (%) for roadways			33%	27%	52%	34%	4-year	36%	
				Approximate percentage (%) for pavement replacement projects			17%	18%	10%	21%	<i>average</i> 4-year	17%	
											average		<u> </u>

Grandfathered STIP Need Responsi Project ID Agenc				DDG HEGT			AL FISCA YEAR (\$ ir			Estimated	Est project	Est total	
	l -	TIP Need ID*	PROJECT LOCATION	PROJECT PHASING PLAN	FUND CODE		October 1 -	September	30	<ul><li>funding</li><li>needs after</li></ul>	cost 2023- 2026		
						2023	2024	2025	2026	2026			
	D 0 T 4 D T	T Doogod	Chugach Foothills Connector, Phase II - Project will construct a multi-use path on Tudor Road between Regal Mountain Drive and	2023 - U/C	STBG	\$227	\$0	\$0	\$0	\$0	\$227	\$227	
Yes	DOT&PF	TAP00001	Campbell Airstrip Road.		MOA Match	\$23	\$0	\$0	\$0	\$0	\$23	\$23	
				Total	GEED C	\$250	\$0	\$0	\$0	\$0	\$250	\$250	
			<b>Downtown Trail Connection -</b> Project will construct a connection between the Tony Knowles Coastal Trail to the Ship Creek Trail in	2024 - D	STBG	\$0	\$0	\$5,181	\$0		\$5,181	\$5,181	
			downtown Anchorage.	2025 - ROW/U/C	TAP	\$0	\$670	\$1,251	\$0		\$1,921	\$1,921	
Yes	DOT&PF	NMO00001			CRP	\$0	\$0	\$5,040	\$0		\$5,040	\$5,040	
					Carry Forward (TAP)	\$0	\$0	\$4,250	\$0	\$0	\$4,250	\$4,250	
					MOA Match	\$0	\$67	\$1,139	\$0		\$1,205	\$1,205	
				Total		\$0	\$737	\$16,860	\$0		\$17,597	\$17,597	
			Fish Creek Trail Connection [Northern Lights Blvd to the Tony Knowles Coastal Trail] - This project will construct a connection of the Fish		STBG	\$0	\$0	\$0	\$5,265	\$0	\$5,265	\$5,265	
			Creek Trail to the Tony Knowles Coastal Trail.	2026 - U/C	TAP	\$0	\$364	\$0	\$0	\$0	\$364	\$364	
Yes	DOT&PF	NMO00002			CRP	\$0	\$0	\$0	\$8,380		\$8,380	\$8,380	
					MOA Match	\$0	\$36	\$0	\$1,355		\$1,391	\$1,391	
				Total		\$0	\$400	\$0	\$15,000	,	\$15,400	\$15,400	
			Potter Marsh Improvements - This project would make improvements to the Potter Marsh southern parking facility.	2024 - C	STBG	\$0	\$92	\$0	\$0	\$0	\$92	\$92	
Yes	DOT&PF	NMO00006			State Match	\$0	\$8	\$0	\$0	\$0	\$8	\$8	
				Total		\$0	\$100	\$0	\$0	\$0	\$100	\$100	
			Active Transportation Pavement Replacement - This program will provide a single funding source for active transportation pavement	2023-2026 -	STBG	\$958	\$307	\$1,819	\$45	\$0	\$3,130	\$3,130	
Yes	DOT&PF	NMO00008	replacement projects. May include those projects listed in Table 6 or other priorities.	Programming	State and MOA Match	\$95	\$31	\$181	\$5		\$311	\$311	
				Total		\$1,053	\$338	\$2,000	\$50	\$0	\$3,441	\$3,441	
			Northern Lights Blvd Sidewalk Repairs - Project will rehabilitate the sidewalks along Northern Lights Blvd from Minnesota Drive to	2023 - ROW	STBG	\$1,183	\$0	\$0	\$2,800		\$3,983	\$3,983	
			Seward Highway. This project will make ADA improvements to sidewalks and bus stops, reconstruct portions of the sidewalks, relocate	2026 - U/C	SIBO	Ψ1,103	ΨΟ	ΨΟ	Ψ2,000	ΨΟ	ψ3,703	ψ3,703	
No	DOT&PF N	рот&рғ	NMO00009	utilities, widen the sidewalks where possible, and reconstruct/relocate/consolidate driveways.		TAP	\$0	\$0	\$0	\$1,567	\$0	\$1,567	\$1,567
						State Match	\$117	\$0	\$0	\$433	\$0	\$551	\$551
				Total		\$1,300	\$0	\$0	\$4,800	\$0	\$6,100	\$6,100	
			Glenn Highway Trail Connection - Project will construct an extension of the Glenn Highway Separated Pathway from Ski Road to Settlers	2026 - D	TAP	\$0	\$0	\$0	\$546	\$4,912	\$546	\$5,458	
No	DOT&PF	NMO00010	Drive (approximately 0.5 miles). This project may also include, as necessary: curb ramps, lighting, drainage improvements, vegetation		State Match	\$0	\$0	\$0	\$54	\$488	\$54	\$542	
			clearing, signing, striping, and utilities.	Total		\$0	\$0	\$0	\$600		\$600	\$6,000	
			Campbell Creek Trail Grade Separated Crossing at Lake Otis Parkway - Project would construct an elevated non-motorized crossing over		STBG	\$773	\$0	\$383	\$0		\$1,156	\$10,617	
			Lake Otis Blvd to connect the east and west portions of the Campbell Creek Trail.	2025 - D	TAP	\$409	\$0	\$800	\$0	\$0	\$1,209	\$1,209	
No	DOT&PF	NMO00011	Lake outs bive to connect the east and west portions of the eampoen creek fruit.	2023	MOA Match	\$117	\$0	\$117	\$0	\$939	\$235	\$1,209	
				Total	WOA Match	\$1,300	\$0 \$0	\$1,300	\$0 <b>\$0</b>		\$3,200	\$1,174 <b>\$19,000</b>	
			AMATC Non-Metarinal Cofety Compaign. Design will another a non-metarinal sofety compaign to help movide advection and sofety.	2023-2026 -	STBG	\$1 <b>,300</b> \$91	\$91	\$91	\$ <b>9</b> 1		\$3,200 \$364	\$728	
			<b>AMATS Non-Motorized Safety Campaign -</b> Project will produce a non-motorized safety campaign to help provide education and safety equipment. Campaign is based on analyses of data with a multi-media approach that could incorporate crash behavior patterns, MOA		In-Kind MOA Match	\$91	\$91	\$91	\$91		\$364	\$728	
No	DOT&PF	NMO00014		Programming	in-Kind MOA Match	29	29	29	29	<b>330</b>	\$30	\$12	
			generated heat maps, public polling and focus group (s) results.	Total		\$100	\$100	\$100	\$100	\$400	\$400	\$800	
			Fagle Diver Road Pathway [Fagle Diver Loop Road to Mile Hi Avanual Draiget will rehabilitate the evicting nothway along Fagle Diver	2024 - D	STBG	<b>\$100</b> <b>\$0</b>	\$100	\$100 \$0	\$217		\$217	\$3,310	
			<b>Eagle River Road Pathway</b> [Eagle River Loop Road to Mile Hi Avenue] - Project will rehabilitate the existing pathway along Eagle River Road from Eagle River Loop Road to where it ends just east of Hillcrest Lane and extend the pathway to Mile Hi Avenue.	2024 - D 2026 - D	TAP	\$0	\$364	\$0	\$217	\$3,093	\$364	\$3,310	
No	DOT&PF	NMO00015	Road from Lagic River Loop Road to where it chus just cast of rifficiest Lane and extend the pathway to while rif Avenue.	2020 <b>-</b> D	State Match	\$0	\$364	\$0	\$22	φσ	\$364 \$58	\$364	
				Total	State Iviatell	\$0	\$30 <b>\$400</b>	\$0 <b>\$0</b>	\$239	_	\$1,039	\$363 <b>\$4,839</b>	
			The contingency list of projects for each year will consist of the following year's projects	Total STBG Totals		\$3,23		Ψ		. /	. /	. ,	
			The contingency list of projects for each year will consist of the following year's projects.  The contingency list of projects for each year will consist of the following year's projects.	TAP Totals			_		_	_			
			The contingency list of projects for each year will consist of the following year's projects.  The contingency list of projects for each year will consist of the following year's projects.	CRP Totals		\$40							
			The contingency list of projects for each year will consist of the following year's projects.			Ψ	60 \$0 60 \$0	4-9	. /			0 \$13,420	
	1		The contingency list of projects for each year will consist of the following year's projects.	Carry Forward (TAP)		3	ου <b>\$</b> 0	\$4,250	\$	50  <i>\$0</i>	\$0	/J \$0	

AMATS Congestion Management Process (CMP) Update - Project will update the AMATS Congestion Management Process plan and conduct 2025 - Study

\$273

\$273

\$0

\$0

**STBG** 

\$0

\$273

No	A	MATS	PLN00023	an evluation of the effectivness of the CMP in the AMATS transportation planning process.		In-Kind MOA Match	\$0	\$27	\$0	\$0	\$0	\$27	\$27
					Total		<b>\$0</b>	\$300	<b>\$0</b>	<b>\$0</b>	\$0	\$300	\$300
				AMATS Freight Mobility Update - Update the AMATS Freight Mobility Study (FMS) to reflect the growth of freight distribution in the AMATS	2026 - Study	STBG	\$0	\$0	\$0	\$182	\$0	\$182	\$182
No		МАТС	PLN00024	Planning Area since 2017 as well as recommend the establishment of safe freight corridors, routes, access, and intermodal/distribution facilities.		In-Kind MOA	\$0	\$0	\$0	\$18	\$0	\$18	\$18
NO	A	MATS	PLN00024	Where applicable take into consideration the findings and recommendations of the Statewide Freight Mobility Study prepared for Alaska DOT&PF		Match							
				in 2021	Total		\$0	\$0	\$0	\$200		\$200	\$200
					STBG TOTALS		\$1,046	\$1,456	\$819	\$1,001		\$4,321	\$4,321
				The contingency list of projects for each year will consist of the following year's projects.	CRRSAA TOTALS		\$1,850	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	\$0	\$1,850	\$1,850
				The contingency list of projects for each year will consist of the following year s projects.	CRP TOTALS		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	\$0	\$0	<b>\$0</b>	<b>\$0</b>
					TAP TOTALS		\$409	\$0	\$0	\$0	\$0	\$409	\$409

Grandfathere	STIP Need	Responsible	TIP Need ID*	DDOIECT LOCATION	PROJECT PHASING	FUND CODE	FEDEI		L PROGRA n Thousands		Estimated funding Est project	Est total
d Project	ID	Agency	11P Need ID*	PROJECT LOCATION	PLAN	FUND CODE		October 1 -	September 3	30	needs after cost 2023 -	project cos
							2023	2024	2025	2026	2026	
				Statewide Improvement Program (SIP) Transportation Control Measures (TCM)								
				Anchorage Ridesharing/Transit Marketing 2023-2026 - This project funds the Municipal RideShare program which promotes, subsidizes,	2023-2026	CMAQ	\$708	\$1,033	\$1,088	\$1,151	\$3,639 \$3,981	\$7,619
				and contract manages an area-wide vanpool commuter service; and a comprehensive public transportation marketing effort.	Programming	STBG	\$656	\$0	\$368	\$214	\$0 \$1,237	\$1,237
						CRP	\$0	\$331	\$455	\$0	\$0 \$786	\$786
)		MOA	CMQ00009				ΨΟ			ΨΟ		
							\$135	\$135	\$190	\$135	\$361 \$596	\$957
						Match	h4 =00	44.500	40.400	<b>4.500</b>	44888 0 0	440.600
					Total		\$1,500	\$1,500	\$2,100	\$1,500	\$4,000 \$6,600	\$10,600
		3.50.4	G3 50 00010	Air Quality Public & Business Awareness Education Campaign 2023-2026 - The goal of this program is to further inform the public about	2023-2026	CMAQ	\$273	\$273	\$273	\$273	<i>\$1,092</i> \$1,092	\$2,183
0		MOA	CMQ00010	air quality issues and what steps people may take to reduce pollution.	Programming	State Match	\$27	\$27	\$27	\$27	\$108 \$108	\$217
					Total		\$300	\$300	\$300	\$300	\$1,200 \$1,200	\$2,400
				Project and Programs funded with CMAQ and AMATS STBG								
				Arterial Roadway Dust Control 2023-2026 - Magnesium chloride (MgCl2) dust palliative will be applied to approximately 70 miles of high	2023-2026	CMAQ	\$91	\$91	\$91	\$91	<i>\$364</i> \$364	\$728
0		MOA	CMQ00011	volume State and Municipal roadways prior to and after spring sweeping.	Programming	MOA Match	\$9	\$9	\$9	\$9	<i>\$36</i> \$36	\$72
					Total		\$100	\$100	\$100	\$100	\$400 \$400	\$800
				Traffic Control Signalization 2023-2026 - Program would provide proactive efficiencies with better/more updated signal timing plans to	2023-2026	STBG	\$146	\$364	\$364	\$364	\$1,456 \$1,238	\$2,694
					Programming	CRRSAA	\$239	\$0	\$0	\$0	\$0 \$239	\$239
0		MOA	CMQ00012	and low priority transit signal preemption.		CKKSAA	Ψ237	ΨΟ	ΨΟ	ΨΟ		Ψ237
						MOA Match	\$15	\$36	\$36	\$36	<i>\$144</i> \$123	\$267
					Total		\$400	\$400	\$400	\$400	<i>\$1,600</i> \$1,600	\$3,200
				Non-Motorized Facility Maintenance Equipment - This project will purchase maintenance equipment that will be used to plow and sweep	2023-2025	CMAQ	\$910	\$1,365	\$728	\$0	\$0 \$3,002	\$3,002
)		MOA	CMQ00013	non-motorized facilities during the winter and summers months within the AMATS area. \$500K in FY24 will be provided by Alaska	Purchase	MOA Match	\$90	\$135	\$72	\$0	<i>\$0</i> \$298	\$298
				DOT&PF outside the AMATS allocation.	Total		\$1,000	\$1,500	\$800	<b>\$0</b>	\$0 \$3,300	\$3,300
				Non-Motorized Facility Maintenance Equipment for Winter Greenbelt Trails - This project will purchase maintenance equipment that	2025-2026	CMAQ	\$0	\$0	\$0	\$599	<i>\$0</i> \$599	\$599
)		MOA	CMQ00014	will be used to groom greenbelt trails during the winter months within the AMATS area.	Purchase	MOA Match	\$0	\$0	\$0	\$59	<i>\$0</i> \$59	\$59
					Total		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	\$658	\$0 \$658	\$658
				Bus Stop & Facility Improvements - This project funds new and existing facilities and bus stop sites to meet both the federally mandated	2023-26 Design /	STBG	\$1,365	\$7,365	\$1,365	\$0	\$4,102 \$10,094	\$14,196
				Americans with Disabilities Act [ADA] requirements and the operational needs. Typical bus stop activities include design/engineering, bus	Engineering /							
				shelters, benches, trash receptacles, landscaping, grading, pacing, utility relocations, lighting, curb adjustments, drainage, constructing paths,	Implementation							
es		MOA	CMQ00005	and construction/reconstruction of turnouts. Typical facility activities include design/engineering, upgrades, rehabilitation, and		CRP	\$0	\$1,819	\$0	\$0	\$0 \$1,819	\$1,819
				construction/reconstruction not limited to safety, security, facility equipment, structures, underground storage tanks, parking lots, sidewalks,			"		φυ • • • • •	ψ0		
				and drainage. Table 5 funds supplement FTA funds in projects 4, 7, 10, and 11 on Table 9.		MOA Match	\$135	\$912	\$135	\$0	\$407 \$1,183	\$1,590
					Total		\$1,500	\$10,096	\$1,500	\$0	\$4,509 \$13,754	\$18,263
				Capital Vehicles - This project provides funding for the replacement and expansion of the Public Transportation Department fleet. The fleet	2023-2026	STBG	\$2,729	\$5,836	\$2,729	\$2,729	<i>\$5,458</i> \$14,023	\$19,481
		MOA	CM 000007	consists of MV-1, 22' and 40' buses that provide service to AnchorRIDES, and People Mover. Vehicles will be replaced based on the FTA	Purchase	MOA Match	\$271	\$579	\$271	\$271	<i>\$542</i> \$1,392	\$1,934
es		MOA	CMQ00007	defined useful life and the People Mover Transit Asset Management Plan. Table 5 funds supplement FTA funds in project 2, 6, and 10 on	Total		\$3,000	\$6,415	\$3,000	\$3,000	\$6,000 \$15,415	\$21,415
				Table 9.	Total		ψ5,000	ψυ,τιο	φ5,000	Ψ5,000	φιο,•ιο	Ψ21, Τ15
				Demo Operations / Expansion - This project will provide for operational assistance and/or operational service expansion for fixed route,	2023-2026	CMAQ	\$0	\$0	\$144	\$273	<i>\$0</i> \$417	\$417
		3.50.4	G3 # 0 0 0 0 0 0	demand response, and/or mictrotransit public transit service. Table 5 funds supplement FTA funds in project 3, 5, 8, 9, and 10 on Table 9.	Programming	CRP	\$0	\$509	\$0	\$0	<i>\$0</i> \$509	\$509
es		MOA	CMQ00008			MOA Match	\$0	\$51	\$14	\$27	<i>\$0</i> \$92	\$92
					Total		\$0	\$560	\$158	\$300	\$0 \$1,018	\$1,018
				Seniors and Youth Ride Free - Provide transit trips for people 18 and under and 60 and over.	2023 - 2026 -	CRP	\$0	\$910	\$833	\$0	\$0 \$1,743	\$1,743
		MOA Public		popularia de la companya de la compa	Implementation	STBG	\$910	\$0	\$0	\$0	<i>\$0</i> \$910	\$910
0		Transportation	CMQ00015			MOA Match	\$90	\$90	\$83	\$0	\$0 \$263	\$263
		Department			Total		\$1,000	\$1,000	\$916	\$0	\$0 \$3,934	\$3,934
				Microtransit - Establish a new on-demand Microtransit service in Anchorage, to be managed by the MOA Public Transportation Department.	2023-2026 -	CRP	\$68	\$45	\$45	\$45	\$0 \$205	\$205
		<b>MOA Public</b>		This project includes professional services, software, equipment and/or other Microtransit technology. The primary goals of the project are to	Implementation					1		
0	'	Transportation	CMQ00016	connect residents to jobs, activity centers, and existing fixed-route bus service in the region while providing a low-cost transportation	_	MOA Match	\$7	\$5	\$5	\$5	\$0 \$20	\$20
		Department		alternative to single-occupancy vehicles.	(F) 4 1		φ <b>π</b> .ε	φ <u>τ</u> ο	Φ.50	Φ.50	### ##################################	<b>4227</b>
					Total	amp c	\$75	\$50	\$50	\$50	\$0 \$225	\$225
		<b>MOA Public</b>		Muldoon Transit Hub Mixed Use Development - Develop a mixed-use transit oriented development to replace the existing collection of on-	2023 - Design	STBG	\$0	\$3,000	\$0	\$3,239	\$6,240	\$6,240
)	, ·	Transportation	CMQ00017	street bus stops at/near the intersection of Muldoon Road and Debarr Road. This project would include property acquisition or lease	2024 - U/C	Grant MOA Matak	\$450	\$0	\$0	\$0	\$0 \$450	\$450
		Department		negotiation, final design, and construction. FY23 is funded with grant funding outside the AMATS allocations.	2026 - U/C	MOA Match	\$50	\$298	φo	\$322	\$0 \$669	\$669
		•	I		Total		\$500	\$3,298	<b>\$0</b>	\$3,561	\$0 \$7,584	\$7,584

			Section Totals - STBG	\$5,806	\$16,565	\$4,825	\$6,546	\$11,016 \$33,742	\$44,757
		The contingency list of projects for each year will consist of the following year's projects.							
		The contingency list of projects for each year will consist of the following year's projects.	Section Totals - CRP	\$68	\$3,615	\$1,334	\$45	\$0 \$5,062	\$5,062
			Section Totals -					\$5,094	
		The contingency list of projects for each year will consist of the following year's projects.	CMAQ	\$1,982	\$2,262	\$2,323	\$2,386	\$9,453	\$14,548
		The contingency list of projects for each year will consist of the following year's projects.	CRRSAA Totals	\$239	\$0	\$0	\$0	\$0 \$239	\$239
					+	+			
1		Approximate percentage (%) for all AMATS STBG funding for Congestion Mitigation/A	ir Quality (CMAQ) projects	20%	49%	% 14	189	6 4-year Avg= 25.4	.%

**PC Final** 

04/18/24

	026 TIP, Pavement Replacement Projects
	Project Location
1	Airport Heights Road - Debarr Road to Glenn Hwy
2	Boundary Ave - Boniface Pkwy to Oklahoma
3	Brayton Drive - Dearmoun Road to - O'Malley Road
4	Elmore Rd - Huffman Rd to O'Malley Rd
5	Hiland Rd - MP 0 to MP 3.2
6	Post Rd - 3rd Ave to Reeve Blvd
7	Upper Huffman - Hillside Dr to Toilsome Hill Dr
8	Reeve Blvd - 5th Ave to Post Road
9	Upper DeArmoun Road - Hillside Drive to Canyon Road
10	Old Seward Highway Spur - Old Seward Highway to Potter Valley Road
11	Eagle River Loop Road - Old Glenn Highway to Eagle River Road
12	Hillside Drive - DeArmoun Road to Abbott Road
13	VFW Road - Eagle River Road to Eagle River Loop Road
14	88th Avenue - Lake Otis Parkway to Abbott Road
15	A. Street - 6th Ave to Ocean Dock Road On-Ramp
16	Gambell Street/Ingra Street - 6th Ave to 4th Ave
17	I Street/L Street - 15th to 3rd Ave
18	Muldoon Road - Glenn Highway to Provider Drive
19	36th Ave/Providence Drive - C Street to Elmore Road Old Seward Highway
20	76th Ave - King Street to Old Seward Highway
	Projects not in priority order
	Pavement Replacement Annual Totals shown in Table 2

**PC Final** 

04/18/24

	Project Location
1	Debarr Road - Boniface to Muldoon (southside sidewalk)
2	Airport Heights Road - Debarr Road to Glenn Hwy
3	Northern Lights Blvd - Lois Drive to Minnesota Drive (southside pathway)
4	Jewel Lake Pathway - Raspberry Road to International Airport Road
5	Minnesota Drive - Hillcrest Drive to W. Northern Lights Boulevard
6	Minnesota Drive - W. Northern Lights Boulevard to Tudor Road
7	Bragaw Street - Northern Lights Blvd to Mountain View Drive
8	Muldoon Road - E. 16th Ave to Boundary Ave
9	Tudor Road - Seward Highway to Muldoon Road
10	Tudor Road - Minnesota Drive to Seward Highway
11	Glenn Highway Pathway - Boniface to S. Peters Creek
12	Debarr Road - Airport Heights to Boniface Pkwy
13	International Airport Road - Northwood Drive to Homer Road
14	Patterson Street - Northern Lights Blvd to Sherwood including Spurs
15	Birch Knoll Bike Trail - Labar Road to E Klatt Road
16	Sitka Street Park Pathway - Orca Street to Lake Otis Parkway
	Projects not in priority order
	Pavement Replacement Annual Totals shown in Table 3

STIP	Responsible	TIP Need	PROJECT LOCATION	PROJECT	FUND	FEDE	RAL FISCA YEAR (\$ ir			Estimated funding needs	Est project cost 2023-	Est total
Need ID	Agency	ID*	TROJECT EOCATION	PHASING PLAN	CODE	2022	October 1 - 3		1	after 2026	2026	project cost
						2023	2024	2025	2026			
19217	DOT&PF	HSP0009	Gambell St Utility Pole Removal and Increased Lighting - Remove existing	2024 - ROW	UnCat 148	\$0	\$450	\$6,300	\$0	\$0	\$6,750	\$6,750
			utility/lighting poles and replace with new poles/lighting that have a break away base	2025 - U/C	State Match	\$0	\$50	\$700	\$0	\$0	\$750	\$750
			and are further from the travel lanes.	Total		\$0	\$500	\$7,000	\$0	\$0	\$7,500	\$7,500
19217	DOT&PF	HSP0010	Gambell and Ingra Streets - Overhead Signal Indication Upgrades - Install new	20245 - U/C	UnCat 148	\$0	\$0	\$7,493	\$0	\$0	\$7,493	\$7,493
			signal poles and mast arms to provide a minimum of one signal head over each through		State Match	\$0	\$0	\$833	\$0	\$0	\$833	\$833
			lane.	Total		<b>\$0</b>	\$0	\$8,325	\$0	\$0	\$8,325	\$8,325
19217	DOT&PF	HSP0014	5th Ave: Concrete St to Karluk St Pedestrian Improvements - Develop and	2025 - U/C	VRU	\$0	\$0	\$3,480	\$0	\$0	\$3,480	\$3,480
			construct a pedestrian safety intervention between Concrete Street and the couplet of 5th and 6th Avenues. The project scope also proposes to improve existing lighting levels to		State Match	\$0	\$0	\$387	\$0	\$0	\$387	\$387
			the extent practicable.	Total		\$0	\$0	\$3,867	\$0	\$0	\$3,867	\$3,867
19217	DOT&PF	HSP0019	Anchorage Flashing Yellow Arrow and Signal Head Display Improvements - This	2024 - D	UnCat 148	\$0	\$0	\$8,861	\$8,861	\$0	\$17,721	\$17,721
			project proposes to replace existing 5-section protected-permissive signal heads with 4-section FYA signals heads at 21 signalized intersections in Anchorage. The scope	2025 - ROW/U/C 2026 - U/C	S148	\$0	\$1,598	\$392	\$383	\$0	\$2,372	\$2,372
			includes increasing the number of through signal heads at select locations. This project	2020 0/6	State Match	\$0	\$178	\$1,028	\$1,027	\$0	\$2,233	\$2,233
			nominations aims to reduce left-turning, T-bone, and rear end crashes.	Total		\$0	\$1,776	\$10,280	\$10,270	\$0	\$22,326	\$22,326
19217	DOT&PF	HSP0020	Tudor Road: Baxter Road to Patterson Street Channelization - This project	2023 - D	UnCat 148	\$330	\$230	\$4,326	\$0	\$0	\$4,886	\$4,886
1/21/	Doram	1151 0020	proposes to install center median on Tudor Road between Baxter Road and Patterson	2024 - D/ROW	Cheat 140	Ψ330	Ψ230	φ4,320	١٩٥	ΨΟ	Ψ4,000	Ψ-1,000
			Street in Anchorage. This project nomination aims to reduce head-on and left-turning	2025 - U/C		<del> </del>		4.	1.	1.		
			angle crashes on this segment of Tudor Road.		State Match	\$37	\$26	\$481	\$0	\$0	\$543	\$543
				Total		\$367	\$255	\$4,807	\$0	\$0	\$5,429	\$5,429
19217	DOT&PF	HSP0021	Old Seward Highway: Industry Way/120th Ave Channelization - This project	2025 - U/C	UnCat 148	\$0	\$0	\$1,612	\$0	\$0	\$1,612	\$1,612
			proposes to install left-turn channelizing median on Old Seward Highway at Industry									
			Way and 120th Avenue. This project nomination proposes to reduce angle and access		State Match	\$0	\$0	\$179	\$0	\$0	\$179	\$179
			related crashes on this segment of Old Seward Highway.	Total		<b>\$0</b>	\$0	\$1,791	\$0	\$0	\$1,791	\$1,791
19217	DOT&PF	HSP0022	Ocean Dock Road RR Crossing Device Upgrades - This project proposes to upgrade	2023 - D	130	\$50	\$1,310	\$0	\$0	\$0	\$1,360	\$1,360
			existing at-grade crossing devices from passive to active on Ocean Dock Rd (Crossing	2024 - D/ROW	State Match	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			#868543R). This project will be constructed through utility agreement with Alaska Railroad Corporation.	Total		\$50	\$1,310	\$0	\$0	\$0	\$1,360	\$1,360
19217	DOT&PF	HSP0023	Anchorage Pedestrian Lighting Phase I - Increase lighting levels on three arterial	2024 - C	UnCat 148	\$0	\$247	\$0	\$0	\$0	\$247	\$247
-/ <b>-</b> 1		1101 0020	segments (Muldoon Dr, Tudor Rd, Seward Hwy) by adding pedestrian scale and street		State Match	\$0	\$247	\$0	\$0	\$0	\$27	\$27
			lighting.	Total	State Materia	\$0	\$274	\$0	\$0	\$0	\$274	\$274
19217	DOT&PF	HSP0024	68th Ave, Ocean View Dr, and 2nd St/FAA Rd RR Crossing Improvements	2024 - U	130	\$48	\$1,972	\$0	\$0	\$0	\$2,020	\$2,020
<b>-</b> ·			Nomination name was: Railroad Crossing Sight Distance Improvements and					ļ <sup>*</sup>	'	<i>'</i>		
			Signal Hut Upgrades - Install upgraded signal huts at railroad crossings in Central		State Match	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			Region to locations that do not block sight distance. This project is a continuation of RR Crossing work identified in 19CN02.	Total		\$48	\$1,972	\$0	\$0	\$0	\$2,020	\$2,020
19217	DOT&PF	HSP0025	CR Guardrail Inventory and Upgrade - Inventory and upgrade existing guardrail in	2024 - C	UnCat 148	\$0	\$882	\$0	\$0	\$0	\$882	\$882

<sup>\*</sup>Projects are not listed in priority order.

			Central Region to current standards on roads with posted speed limits of 50 miles per		State Match	\$0	\$98	\$0	\$0	\$0	\$98	\$98
			hour or greater.	Total		<b>\$0</b>	\$980	\$0	\$0	\$0	\$980	\$980
19217	DOT&PF	HSP0026	Anchorage Signalized Intersection Cameras - This project proposes to improve	2024 - D	UnCat	\$0	\$48	\$842	\$0	\$0	\$890	\$890
			enforcement capabilities of the Anchorage Police Department by installing traffic signal	2025 - C	148/VRU							
			cameras at signalized intersections in Anchorage where cameras do not currently exist.									
			Between 2017 and 2023, Anchorage experienced 13 fatal, 23 serious injury, 76 minor		State Match	\$0	\$5	\$94	\$0	\$0	\$99	\$99
			injury, 30 Possible Injury, and 20 property damage only hit-and-run crashes involved			1.		<u> </u>				1.
			pedestrians and bicyclists.	Total		\$0	\$53	\$936	\$0	\$0	\$989	\$989
19217	DOT&PF	HSP0027	Pease Avenue Railroad Crossing Surface and Signal Upgrades - This project	2024 - D/C	130	\$0	\$1,328	\$0	\$0	\$0	\$1,328	\$1,328
			proposes to reconstruct the grade crossing surface and replace functionally obsolete									
			signal equipment on Pease Ave (Crossing #868557Y). This crossing is permitted to the		State Match	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			Alaska District, US Army Corps of Engineers. This project will be constructed through									
			utility agreement with the Alaska Railroad Corporation.	Total		\$0	\$1,328	\$0	\$0	\$0	\$1,328	\$1,328
				Total		\$465	\$8,448	\$37,006	\$10,270	\$0	\$56,189	\$56,189

							AL FISCAL		IMING			
				DD O IE CE			YEAR (\$ in T	Thousands)		Estimated	Fat music at	
STIP	Responsible	TIP Need	PROJECT LOCATION	PROJECT PHASING	FUND CODE	October 1 - September 30				Estimated funding needs	Est project cost 2023-	Est total
Need ID	Agency	ID*	TROJECT LOCATION	PLAN	FUND CODE	2023	2024	2025		after 2026	2026	project cost
	DOT&PF		avement and Bridge Preservation - Crack sealing, surface treatment drainage, signage, guardrail, illumination, and other refurbishments prolong the life of road pavement and bridges and their safety related structures. Project includes NHS Lane Delineators, Destination & Aistance Signing, Pavement Markings and Signalization, Abandoned Vehicle Program, Road Surfacing and Transfer, Road Surface reatments, and improve curb ramps to meet ADA standards (in coordination with Need ID 30397). The scope does not include and scaping or other elements inconsistent with a pavement preservation focus. This is a DOT&PF central region wide program with approximately \$25M going to projects within the AMATS area on an annual basis with a majority going to the NHS.		STBG NHPP Bridge- HIP23 State Match	\$22,743	\$22,743 \$2,258		\$22,743 \$2,258		\$90,970 \$9,030	\$113,713 \$11,288
				Total			\$25,000		\$25,000			\$125,000
The continge	ne contingency list of projects for each year will consist of the following year's projects.					\$25,000	\$25,000	\$25,000	\$25,000	\$25,000		\$125,000

COLLEG				DDO HECE DIVINE		FEDERA		PROGRAN Thousands)	IMING YE	AR (\$ in	Estimated	Est week	T-44 4 3
STIP Need ID	Responsible Agency	TIP Need ID*	PROJECT LOCATION	PROJECT PHASING PLAN	FUND CODE		Octob	er 1 - Septem	ber 30		funding needs	Est project cost 2023-2026	Est total project cos
						Carryover	2023	2024	2025	2026	after 2026		
	MOA Public		Preventative Maintenance/Capital Maintenance - FTA [Federal Transit Administration] allows grantees to use capital funds for	2023-2026 -	5307	\$0	\$3,911	\$3,600	\$3,600	\$3,600	\$10,800	\$14,711	\$25,511
9458	Transportation	TRN00001	overhauls and preventative maintenance. FTA assistance for those items is based on a percentage of annual vehicle maintenance costs.	Implementation	MOA Match		\$978	\$900	\$900	\$900	\$2,700	\$3,678	\$6,378
				Total	5005	d) C	\$4,889	\$4,500	\$4,500	\$4,500	\$13,500	\$18,389	\$31,889
1462	MOA Public	TDN100002	Fleet Replacement/Expansion - This project funds the fleet expansion and replacement for the AnchorRIDES paratransit service, as well	2023-2026 -	5307	\$0	\$0	\$0 \$0	\$0	\$80	\$480	\$80	\$560
9462	Transportation	TRN00002	as the fixed route fleet.	Implementation <b>Total</b>	MOA Match		\$0 <b>\$0</b>	\$0	\$0 <b>\$0</b>	\$16 <b>\$100</b>	\$120 <b>\$600</b>	\$16 <b>\$96</b>	\$136 <b>\$696</b>
			ADA Complementary Paratransit Services - Costs associated with ADA paratransit programs are eligible for this funding. The project	2023-2026 -	5307	\$0	) \$0 ) \$0	\$0	\$0	\$225	\$960	\$225	\$1,185
	MOA Public		funds the ADA paratransit eligibility process with a transportation skills assessment and a travel training program for people who could	Implementation	3307	Ψ	<b>σ</b>	φο	ΨΟ	Ψ223	Ψ>00	Ψ223	φ1,103
9464	Transportation	TRN00003	benefit from individualized instruction regarding how to independently ride People Mover buses. May also be used to purchase	1	MOA Match		\$0	\$0	\$0	\$56	\$240	\$56	\$296
			AnchorRIDES trips.	Total			\$0	\$0	\$0	\$300		\$281	\$1,481
			Bus Stop Improvements/1% Section 5307 Transit Improvements - This project funds the upgrade of bus stop sites to meet both the	2023-2026 -	5307	\$0	\$320	\$0	\$225	\$0	\$60	\$545	\$605
9457	MOA Public	TRN00004	federally-mandated Americans with Disabilities Act [ADA] requirements and the operational needs. Typical improvements include bus	Implementation									
9 <b>4</b> 31	Transportation	1KN0004	shelters, benches, trash receptacles, landscaping, grading, paving, utility relocations, lighting, curb adjustments, drainage, constructing		MOA Match		\$80	\$0	\$56	\$0	\$15	\$136	\$151
			paths, and construction/reconstruction of turnouts. Table 10 FTA funds supplement CMAQ funds for the Bus Stop & Facility Improvements				\$400	\$0	\$300	<b>\$0</b>	<i>\$75</i>	\$681	<b>\$756</b>
			ITS/Automated Operating System/Management Information Systems - This projects funds information systems necessary for efficient	2023-2026 -	5307	\$0	\$136	\$38	\$38	\$38	\$0	\$249	\$249
			management of the public transportation system. Typical projects include: Geographical Information Systems [GIS] capabilities, upgrades	Purchase									
	MOA Public		to the automated maintenance system, refueling, and inventory system; a new computerized dispatch system; and upgrades to the scheduling/run-cutting process, customer information and telephone communications system, and desktop computers. This project also										
9463	Transportation	TRN00005	funds staff and capital resources to provide project oversight and capital for ITS for all modes of public transportation services. Provide day-										
	Transportation		to-day operational support to all ITS projects.										
					MOA Match		\$34	\$9	\$9	\$9	\$0	\$62	\$62
				Total			\$170	\$50	\$50	\$50	\$0	\$311	\$311
			Fleet Improvement/Support Equipment/Support Vehicle - This project funds improvements to existing transit and paratransit fleets.	2023-2026 -	5307	\$0	\$960	\$525	\$525	\$450	\$1,200	\$2,460	\$3,660
			Typical projects include fareboxes, ticket readers with issue attachments that issue passenger passes on the bus; security systems;	Purchase									
	MOA Dublio		transit/signal improvements for headway enhancements; mechanical equipment and other improvements for facilities; mobile display										
9459	MOA Public Transportation	TRN00006	terminals and vehicle communications, radios and locations systems. This project also funds the purchase of replacement vehicles and										
	Transportation		equipment to support the operation of the transit system. Typical purchases include pickup racks, maintenance trucks with special equipment, supervisor vehicles, shift change vehicles, forklifts, sweepers, and bus access snow removal equipment.										
			equipment, supervisor venicles, sint change venicles, forkints, sweepers, and bus access show removal equipment.		MOA Match		\$240	\$131	\$131	\$113	\$300	\$615	\$915
				Total			\$1,200	\$700	\$700	\$600		\$3,075	\$4,575
			Transit Centers/Support Facilities - This project supports an ongoing effort to provide major transit facilities in key areas of the city and	2023-2026 -	5307	\$0	\$960	\$563	\$563	\$563	\$1,800	\$2,648	\$4,448
			major destinations. The Anchorage Comprehensive Plan and 2040 Land Use Plan (LUP) identified neighborhood, town, regional	Implementation									
			commercial, and city centers that function as focal points for community activities with a mix of retail, residential, and public services and facilities. Anchorage Talks Transit coordinated with the LUP and implemented a frequent bus network along transit-supportive										
29264	MOA Public	TRN00007	development corridors. These corridors should provide pedestrian connections to surrounding neighborhoods and transit. Existing and										
204	Transportation	1100007	future facility improvements along these corridors and in areas like Midtown, Downtown, U-Med, Dimond Center, Debarr, and Muldoon,										
			are vital to the implementation of these community planning documents.										
					MOA Match		\$240	\$141	\$141	\$141	\$450	\$662	\$1,112
				Total			\$1,200	\$750	\$750	\$750		\$3,309	\$5,559
			Operating Assistance - Section 5307 operating assistance for fixed route, demand responsive, and/or Microtransit public transit service.	2023-2026 -	5307	\$0	\$0	\$225	\$0	\$0	\$2,400	\$225	\$2,625
	MOA Public	TRN00008		Implementation	MOA Match		\$0	\$56	\$0	\$0	\$600	\$56	\$656
	Transportation			/D - 4 - 1			Φ0	φ200	0.0	\$0	<b>#2 000</b>	Φ201	φ2.201
			subtotal FTA Section 530	Total			\$0 \$7,859	\$300 \$6,300	\$0 \$6,300	\$6,300	\$3,000 \$22,125	\$281 \$52,510	\$3,281 \$74,635
			Section 5310 Enhanced Mobility of Seniors & Individuals w/ Disabilities Projects may include purchasing buses and vans; wheelchair	/	5310		\$263	\$192	\$192	\$192	\$419	\$839	\$1,258
			lifts, ramps, and securement devices; transit-related information technology systems including scheduling/routing/one-call systems; mobility		3310		Ψ203	φ192	φ192	φ1 92	$\varphi_{IJ}$	Ψ037	φ1,236
			management programs; and acquisition of transportation services under a contract, lease, or other arrangement. Other activities may include										
9119	MOA Public Transportation	TRN00009	travel training; building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals or other accessible										
.7117		1 WINDOODA	features; improving signage or way-finding technology; providing same day service or door-to-door service; purchasing vehicles to support										
			new ride-sharing and/or vanpooling programs; and mobility management programs.					4 : -	14	4 :-		1010	<b>.</b>
					MOA Match		\$66	\$48	\$48	\$48		\$210	\$315
				Total			\$329	\$240	\$240	\$240		\$1,049	\$1,573
			subtotal FTA Section 5310	)	5220	+	\$329	\$240	\$240	\$240		\$1,049	\$1,573
7070	MOA Public	TED NICOCALO	Section 5339 Bus and Bus Facilities Program - This program includes capital projects to replace, rehabilitate and purchase buses, vans,		5339		\$565	\$576	\$576	\$576	\$1,291	\$2,293	\$3,584
7969	Transportation	TRN00010	and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities	Total	MOA Match	+	\$141	\$144	\$144	\$144	\$323	\$573	\$896
	<u> </u>		vehicles or facilities.				<b>\$706</b>	\$720	\$720	<b>\$720</b>	\$1,614	\$2,866	\$4,480

STIP Need ID Responsible Agency		TID Nood ID*	PROJECT LOCATION	PROJECT PHASING	FUND CODE	FEDERA	7	PROGRAM [housands] 1 - Septem		EAR (\$ in	Estimated funding needs	Est project cost	Est total
Need ID	Responsible Agency	TIF Need ID	PROJECT LOCATION	PLAN	FUND CODE	Carryover	2023	2024	2025	2026	after 2026	2023-2026	project cost
27969	MOA Public	TRN00011	Section 5339(b) Bus and Bus Facilities Competitive Program - This competitive program addresses significant repair and maintenance needs, improves the safety of transit systems, and deploys connective projects that include advanced technologies. Examples include projects to replace, rehabilitate and purchase buses, vans, and related equipment; to replace, rehabilitate, and construct bus-related facilities;		5339(b), BUILD Grant, TOD Pilot		\$0	\$1,800	\$32,000	\$0	\$1,291	\$33,800	\$35,091
	Transportation		including technological changes or innovations to modify vehicles and/or facilities.		Local Match		\$0	\$450	\$8,000	\$0	\$323	\$8,450	\$8,773
				Total			<b>\$0</b>	\$2,250	\$40,000	\$0	\$1,614	\$42,250	\$43,864
			subtotal FTA Section 5339				\$706	\$2,970	\$40,720	\$720	\$3,228	\$45,116	\$48,344
			subtotal FTA section 5307, 5310, 5339 Transit funding to the MOA				\$8,894	\$9,510	\$47,260	\$7,260	\$25,877	\$98,675	\$124,552
			Alaska Railroad - FTA Section 5307 (Rail Tier) Funds										
21314	Alaska Railroad	TRN00012	1% Transit Security on the Alaska Railroad Corporation projects	2023-2026 -	5307	\$0	\$20	\$20	\$40	\$0	\$91	\$80	\$171
	Corporation			Implementation	Local Match	\$0	\$5	\$5	\$10	\$0	\$9	\$20	\$29
				Total		\$0	\$25	\$25	\$50	\$0	\$100	\$100	\$200
19658	Alaska Railroad	TRN00013	Preventive Maintenance - This project partially funds statewide maintenance costs of passenger vehicle railcars and locomotives. Preventive	2023-2026 -	5307	\$2,800	\$2,800	\$2,800	\$3,000	\$3,000	\$13,191	\$11,600	\$24,791
	Corporation		maintenance is defined as all activities, supplies, materials, labor, services and associated costs required to preserve or extend the	Implementation		4-00	<b>47</b> 00	<b>4.7</b> 00	<b>47.</b>	<b>47.</b>			<b>A</b>
			functionality and serviceability of the asset.		Local Match	\$700	\$700	\$700	\$750	\$750	\$1,309	\$2,900	\$4,209
	1			Total		\$3,500	\$3,500	\$3,500	\$3,750	\$3,750	\$14,500	\$14,500	\$29,000
21314	Alaska Railroad	TRN00014	1% Associated Transit Enhancements - can include benches, landscaping, and other transit related amenities.	2023-2026 -	5307	\$0	\$20	\$20	\$40	\$0	\$91	\$80	\$171
	Corporation			Implementation	Local Match	\$0	\$5	\$5	\$10	\$0	\$9	\$20	\$29
				Total		\$0	\$25	\$25	\$50	\$0	\$100	\$100	\$200
19634	Alaska Railroad	TRN00015	Track Rehab - Rail and tie rehabilitation inside AMATS boundaries including shoulder widening, siding program, drainage, State of Good	2023-2026 -	5307	\$6,800	\$40	\$40	\$0	\$0	\$227	\$80	\$307
	Corporation		Repair and improvement projects related to track infrastructure.	Implementation	Local Match	\$1,700	\$10	\$10	\$0	\$0	\$23	\$20	\$43
				Total		\$8,500	\$50	\$50	\$0	\$0	\$250	\$100	\$350
31091	Alaska Railroad	TRN00016	Radio and Communication System - Replace, upgrade or improvements to radio and communication locations, equipment, systems or	2023-2026 -	5307	\$0	\$0	\$20	\$0	\$0	\$45	\$20	\$65
	Corporation		components.	Implementation	Local Match	\$0	\$0	\$5	\$0	\$0	\$5	\$5	\$10
				Total		<b>\$0</b>	<b>\$0</b>	\$25	<b>\$0</b>	<b>\$0</b>	\$50	\$25	\$75
19635	Alaska Railroad	TRN00017	Bridge Rehabilitation - Bridge engineering, preventive maintenance, rehabilitation, replacements, and other bridge improvements within	2023-2026 -	5307	\$200	\$40	\$40	\$0	\$0	\$227	\$80	\$307
	Corporation		AMATS boundaries.	Implementation	Local Match	\$50	\$10	\$10	\$0	\$0	\$23	\$20	\$43
				Total		\$250	\$50	\$50	<b>\$0</b>	<b>\$0</b>	\$250	\$100	\$350
33243	Alaska Railroad	TRN00018	Signal and Detector System - Replace, upgrade or improve in-track detector and at-grade signal systems equipment and communication	2023-2026 -	5307	\$280	\$0	\$20	\$20	\$0	\$45	\$40	\$85
	Corporation		components within AMATS boundaries.	Implementation	Local Match	\$70	\$0	\$5	\$5	\$0	\$5	\$10	\$15
				Total		\$350	<b>\$0</b>	\$25	\$25	<b>\$0</b>	\$50	\$50	\$100
33245	Alaska Railroad	TRN00019	Facility Rehab - Within AMATS boundaries replace, upgrade or improve ARRC buildings and related functional appurtenances.	2023-2026 -	5307	\$52	\$0	\$420	\$80	\$40	\$45	\$540	\$585
	Corporation			Implementation	Local Match	\$13	\$0	\$105	\$20	\$10	\$5	\$135	\$140
				Total		\$65	<b>\$0</b>	\$525	\$100	\$50	\$50	\$675	\$725
			subtotal FTA Section 5307 (Rail Tier) Transit funding to Railroad			\$12,665	\$3,650	\$4,225	\$3,975	\$3,800	\$15,350	\$15,650	\$31,000
٠ د	4 4 4 7 7	<b></b>	Alaska Railroad - FTA Section 5337 (State of Good Repair) Funds	2010 2022	5225	0.400	Φ.σ.ο.ο	φ.σ.c.c	Φ.5.50	d = 0.0		фо. 0000	<b></b>
19634		TRN00020	Track Rehab - Rail and tie rehabilitation inside AMATS boundaries including shoulder widening, siding program, drainage, State of Good	2019 - 2022 -	5337	\$400	\$600	\$560	\$560	\$600	\$2,638	\$2,320	\$4,958
	Corporation		Repair and improvement projects related to track infrastructure.	Implementation	Local Match	\$100	\$150	\$140	\$140	\$150	\$262	\$580	\$842
<b>.</b>	)			Total	5225	\$500	\$750	\$700	\$700	\$750	\$2,900	\$2,900	\$5,800
19658	Alaska Railroad	TRN00021	Preventive Maintenance - This project partially funds statewide maintenance costs of passenger vehicle railcars and locomotives. Preventive	2019 - 2022 -	5337	\$3,120	\$800	\$120	\$120	\$120	\$1,319	\$1,160	\$2,479
	Corporation		maintenance is defined as all activities, supplies, materials, labor, services and associated costs required to preserve or extend the	Implementation	Local Match	\$780	\$200	\$30	\$30	\$30	\$131	\$290	\$421
		<b></b>	functionality and serviceability of the asset.	Total	5225	\$3,900	\$1,000	\$150	\$150	\$150	\$1,450	\$1,450	\$2,900
19635	Alaska Railroad	TRN00022	Bridge Rehabilitation - Bridge engineering, preventive maintenance, rehabilitation, replacements, and other bridge improvements within	2020 - 2022 -	5337	\$288	\$8,800	\$4,000	\$40	\$200	\$5,131	\$13,040	\$18,171
	Corporation		AMATS boundaries.	Implementation	Local Match	\$72	\$2,200	\$1,000	\$10	\$50	\$509	\$3,260	\$3,769
_				Total	1	\$360	\$11,000	\$5,000	\$50	\$250	\$5,640	\$16,300	\$21,940
31091		TRN00023	Radio and Communication System - Replace, upgrade or improvements to radio and communication locations, equipment, systems or	2023-2026 -	5337	\$0	\$40	\$40	\$40	\$40	\$182	\$160	\$342
	Corporation		components.	Implementation	Local Match	\$0	\$10	\$10	\$10	\$10	\$18	\$40	\$58
				Total		\$0	\$50	\$50	\$50	\$50	\$200	\$200	\$400
33243	3 Alaska Railroad	TRN00024	Signal and Detector System - Replace, upgrade or improve in-track detector and at-grade signal systems equipment and communication	2023-2026 -	5337	\$0	\$20	\$40	\$20	\$0	\$91	\$80	\$171
	Corporation		components within AMATS boundaries.	Implementation	Local Match	\$0	\$5	\$10	\$5	\$0	\$9	\$20	\$29
				Total	1	\$0	\$25	\$50	\$25	\$0	\$100	\$100	\$200
33245		TRN00025	Facility Rehab - Within AMATS boundaries replace, upgrade or improve ARRC buildings and related functional appurtenances.	2023-2026 -	5337	\$0	\$20	\$440	\$20	\$0	\$91	\$480	\$571
	Corporation			Implementation	Local Match	\$0	\$5	\$110	\$5	\$0	<i>\$9</i>	\$120	\$129
		_		Total		\$0	\$25	\$550	\$25	\$0	\$100	\$600	\$700

STIP Need ID	Responsible Agency TIP Need ID*	PROJECT LOCATION  PROJECT LOCATION	PROJECT PHASING PLAN	FUND CODE	FEDERAI		PROGRAM housands) 1 - Septemb		R (\$ in	Estimated funding needs	Est project cost 2023-2026	Est total
Need ID					Carryover	2023	2024	2025	2026	after 2026	2023-2020	project cost
		subtotal FTA Section 5337 (SGR) funding to Railroad			\$4,760	\$12,850	\$6,500	\$1,000	\$1,200	\$10,390	\$21,550	\$31,940
		Alaska Railroad - FTA Section 5337 (SGR) Funds				\$0	\$0	\$0	\$0	\$0	\$0	\$0
		subtotal FTA Section 5337 funding to Railroad				\$12,850	\$800	\$1,000	\$1,200	\$17,400	\$15,850	\$33,250
		subtotal FTA Sections 5307 (Rail Tier) & 5337 Transit funding to ARRC				\$16,500	\$10,725	\$4,975	\$5,000	\$25,740	\$37,200	\$62,940
		Total Transit Program (FTA {5307+5310+5337})				\$25,394	\$20,235	\$52,235	\$12,260	\$51,617	\$135,875	\$187,492
		The Municipality of Anchorage's Transportation Improvement Program (TIP) process is used to satisfy the public participation process of the Program of Projects (POP) that is required in U.S.C. Section 5307. The POP as presented is the proposed Program of Projects										
		and will also be the final Program of Projects unless amended.										

STIP	Responsible	TIP Need ID*	PROJECT LOCATION	PROJECT	, FUND CODE			nousands)	MING YEAR	Estimated funding needs after	Est project cost 2023 -	Est total
Need ID	Agency			PHASING PLAN		2023	2024	2025	2026	needs after 2026	2026	project cost
			AK094 & AK105 - Construction & Road Improvements @ APU.	2023 - U/C	Earmark	\$2,685	\$0	\$0	\$0	\$0	\$2,685	\$2,685
19482	MOA	OFS00002			MOA Match	\$266	\$0	\$0	\$0	\$0	\$266	\$266
				Total		\$2,951	\$0	\$0	\$0	\$0	\$2,951	\$2,951
			Campbell Tract Facility Alternate Entrance Alignment - Relocate the CTF entrance road 260' to align with East	2023 - U/C	STBG	\$4,477	\$0	\$0	\$0	\$0	\$4,477	\$4,477
28471	DOT&PF	OFS00004	68th Avenue.		State Match	\$444	\$0	\$0	\$0	\$0	\$444	\$444
				Total		\$4,921	\$0	\$0	\$0	\$0	\$4,921	\$4,921
			Alaska Cargo and Cold Storage - The project is a secure, up to 715,000sf climate-controlled warehouse facility located at Ted Stevens Anchorage International Airport (ANC), Anchorage AK. Phase I, the current project, is estimated to be ~190,000sf of cargo warehouse, with the option to include aircraft parking. It will incorporate best-inclass energy efficiency through innovative design, engineering, and project delivery. In doing so, ACCS will create jobs and help transform ANC into a global logistics hub while enhancing Alaska's food security situation by improving its	2025 - C	BUILD Grant	\$0	\$0	\$14,240	\$0	\$0	\$14,240	\$14,240
	AEA	OFS00007	ability to handle perishable goods for Alaskans. ACCS will offer better and more efficient cargo transfer services to strengthen ANC's competitive position in the global supply chain, thereby serving as a cornerstone development that Alaska logistics providers and manufacturers can build around for decades to come. This facility will help transform ANC from a "gas-and-go" location to a global logistics hub. The facility site has already been leased by one of the		ACCS Partners	\$0	\$0	\$56,700	\$0	\$0	\$56,700	\$56,700
						\$0	\$0	\$3,560	\$0	\$0	\$1,414	\$1,414
			project partners.	Total		<b>\$0</b>	<b>\$0</b>	\$74,500	<b>\$0</b>	\$0	\$72,354	\$72,354
	D. 4 of Alaska	OECOGOO	Port of Alaska SMART Grid - This planning project will establish a baseline inventory of the existing meter infrastructure and related behind-the-meter loads at Port of Alaska (PoA), and consolidate all necessary information for the development of a smart grid and a successful future energy management system deployment. Planners need to understand the current state of infrastructure and how PoA tenants use and interact with that infrastructure to specify,	2023 - Planning	State or other Federal Funding	\$0	\$1,766	\$1,767	\$1,767	\$0	\$5,300	\$5,300
	Port of Alaska	OF 500008	design, and procure the technology solutions needed to maximize benefits for PoA users, and enable the seamless integration of additional technology as PoA advances its decarbonization objectives.		Match	\$0	\$766	\$767	\$767	\$0	\$2,300	\$2,300
				Total		<b>\$0</b>	\$2,532	\$2,534	\$2,534	\$0	\$7,600	\$7,600
			Port of Alaska Solar Design and Engineering - Engineering, design, and permitting documents for a proposed 2.5-3-	2023 - D	State	\$250	\$0	\$0	\$0	\$0	\$250	\$250
	Port of Alaska	OFS00009	megawatt ground-mounted solar array located in the furthest east Buffer Zone of the Port of Anchorage. Includes site		State Match	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			surveying, solar PV design, and geotechnical, structural, civil, and electrical engineering.	Total		\$250	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	\$0	\$250	\$250
			<b>International Airport Charging Stations -</b> This project involves the installation of electric vehicle (EV) charging stations at the cell phone parking lots of the Ted Stevens Anchorage International Airport. Work includes the design,	2024 - C 2025 - C	CMAQ Flex	\$0	\$910	\$455	\$0	\$0	\$1,365	\$1,365
34196	DOT&PF	OFS00010	procurement, and installation of the charging stations, as well as the necessary electrical infrastructure to support their		State Match	\$0	\$90	\$45	\$0	\$0	\$135	\$135
			operation.	Total		\$0	\$1,000	\$500	\$0	\$0	\$1,500	\$1,500
			National Electric Vehicle Infrastructure Program - For the planning and strategic deployment of electric vehicle	2024 - C	NEVI	\$0	\$600	\$600	\$0	\$0	\$1,200	\$1,200
33865	DOT&PF	OFS00011	(EV) charging infrastructure and to establish an interconnected network as per the National Electric Vehicle	2025 - C	Third Party Match	\$0	\$150	\$150	\$0	\$0	\$300	\$300
			Infrastructure Program.	Total		\$0	\$750	\$750	\$0	\$0	\$1,500	\$1,500
	•			Other F	funding Sources Total	\$8,122			9 \$2,534	\$	. /	
					AMATS STBG Total							
					AMATS CRP Total	1 \$0	0 \$0	9 \$0	0 \$0	\$	9 \$0	

### **APPENDIX B**

Computation of PM<sub>10</sub> Design Value Concentration for Eagle River

#### Computation of PM<sub>10</sub> Design Value Concentrations for Eagle River

Computational methods for determining the 24-hour design value (DV) are outlined in the  $PM_{10}$  SIP Development Guideline (EPA-450/2-86-001, June 1987). The empirical frequency distribution approach (see Section 6.3.3 of the guideline) was used to determine the site-specific  $PM_{10}$  concentration that would be expected to be exceeded at a frequency of once every 365 days.

The empirical frequency distribution method was used to compute the Eagle River  $PM_{10}$  DV for the most recent five-year period, 2017-2021, in accordance with EPA's Wegman memo guidance to determine qualification for the  $PM_{10}$  limited maintenance plan option (Lydia Wegman, Director EPA-AQSSD, Aug 9, 2001). During this period, the number of valid 24-hour average  $PM_{10}$  measurements (n) was 1801. These concentrations were arranged in order of magnitude and were assigned rank where the highest concentration was rank = 1, and lowest was rank = 1801. An abbreviated version of this table is shown below. During this period, the lowest  $PM_{10}$  concentration measured was 0  $\mu$ g/m3 (rank = 1801) and the highest was 168  $\mu$ g/m3 (rank = 1).

	,	Гable 1	
			P = i / n
			Proportion of
			observations with
	PM-10	i	equal or higher
Date	(µg/m3)	rank	concentration
4/3/2019	168	1	0.0005
4/23/2021	125	2	0.0011
4/3/2019	105	3	0.0016
4/1/2019	79	4	0.0022
4/4/2022	77	5	0.0027
3/25/2019	73	6	0.0027
8/29/2019	70	7	0.0038
4/2/2019	69	8	0.0044
3/26/2019	68	9	0.0049
4/4/2019	67	10	0.0055
12/30/2019	0	1797	0.9978
12/31/2019	0	1798	0.9983
2/8/2020	0	1799	0.9989
2/18/2020	0	1800	0.9995
2/19/2020	0	1801	1

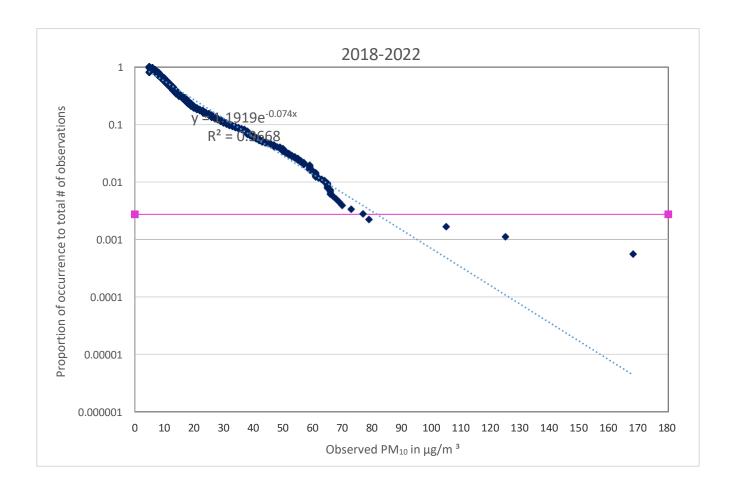
The Eagle River  $PM_{10}$  Design Value for comparison to the  $PM_{10}$  LMP eligibility criteria was determined from the empirical frequency plot of 24-hour  $PM_{10}$  data and was calculated as the concentration that corresponds to P = 1/365. This resulting concentration represents the highest expected concentration during a one-year or 365-day period. The design value concentration can be computed directly from the equation of the best-fit line as follows:

The best-fit, natural logarithm plot is  $y = 1.192 e^{-0.0745}$ 

For expected concentration (x) at a given probability of once per year:

$$y = 1/365 = 0.00274 = 1.192 e^{-0.0745x}$$

Solving for X yields  $X = 81.6 \mu g/m^3$ 



Inputting the value of 0.00274 (equivalent to 1/365) into the best-fit line equation and solving for the corresponding concentration, yields a  $PM_{10}$  concentration of 81.6  $\mu g/m^3$ .

Per EPA data handling rules for  $PM_{10}$  data, decimal values are truncated. Hence, the Eagle River  $PM_{10}$  DV for 2018-2022 is properly truncated to 81  $\mu$ g/m3.

This design value is compliant with EPA's primary,  $PM_{10}$  LMP Qualification Criteria:  $\leq 98 \mu g/m^3$ .