

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION ALASKA DIVISION 709 W. 9TH STREET, ROOM 851 P.O. BOX 21648 JUNEAU, ALASKA 99802-1648

FEDERAL TRANSIT ADMINISTRATION 915 SECOND AVENUE, SUITE 3142 SEATTLE, WASHINGTON 98174

June 30, 2022

Mr. Ryan Anderson Commissioner Alaska Department of Transportation and Public Facilities P.O. Box 112500 Juneau, AK 99811-1125

Dear Mr. Anderson:

Your transmittal on June 20, 2022, requested approval to incorporate Amendment 3 of the 2019 - 2022 Anchorage Metropolitan Area Transportation Solutions (AMATS) Transportation Improvement Program (TIP) into the 2020-2023 Statewide Transportation Improvement Program (STIP). Interagency consultation has determined that changes to the TIP meet all requirements of the US Code Title 23, Section 134 and a determination has been approved and transmitted in a separate letter.

The STIP remains fiscally constrained. Incorporation of AMATS TIP Amendment 3 into the 2020-2023 STIP is approved.

If you have any questions concerning our joint action of this STIP amendment, please contact Kathryn Wenger, FHWA Community Planner (907) 586-7428, or Ned Conroy, FTA Community Planner at (206) 220-4318.

Sincerely,

GERALD L VARNEY

Digitally signed by GERALD L VARNEY Date: 2022.07.06

Sandra Garcia-Aline Division Administrator Federal Highway Administration GEHRKE/

LINDA M Digitally signed by LINDA M GEHRKE Date: 2022.06.30 10:39:30 -07'00'

Linda M. Gehrke Regional Administrator Federal Transit Administration Cc:

Courtney Kreis, DOT&PF, STIP Planner III
Maren Brantner, DOT&PF, STIP Manager
Adam Moser, DOT&PF, Programming Manager and MPO Coordinator
James Marks, DOT&PF, Director, Division Program Development
Todd Vanhove, DOT&PF Central Region Planning Chief
James Starzec, DOT&PF AMATS Coordinator
Aaron Jongenelen, AMATS Coordinator
Ned Conroy, Community Planner, FTA
Kathryn Wenger, Community Planner, FHWA



Department of Transportation and Public Facilities

OFFICE OF THE COMMISSIONER Ryan Anderson, Commissioner

> PO Box 112500 Juneau, Alaska 99811-2500 Main: 907.465.3900 dot.alaska.gov

June 20, 2022

Sandra Garcia-Aline, Division Administrator Federal Highway Administration Alaska Division P.O. Box 21648 Juneau, AK 99802-1648

Linda Gehrke, Regional Administrator Federal Transit Administration, Region 10 915 2nd Avenue, Suite 3142 Seattle, WA 98174-1002

Dear Ms. Garcia-Aline and Ms. Gehrke:

The Anchorage Metropolitan Area Transportation Solutions (AMATS) Policy Committee approved Amendment #3 to the AMATS 2019-2022 Transportation Improvement (TIP) on June 1, 2022.

In accordance with the agreement between AMATS and Alaska Department of Transportation & Public Facilities (DOT&PF), the AMATS metropolitan planning organization (MPO) coordinator and AMATS Policy Committee has determined Amendment #3 to the AMATS 2019-2022 Transportation Improvement Plans (TIP) has met all the requirements of US Code Title 23, Section 134 and is fiscally constrained by the allocations made in the 2020-2023 Statewide Transportation Improvement Program (STIP). An air quality conformity determination is included per 40 CFR 93.104(c).

Your approval of Administrative Amendment #3 to the AMATS 2019-2022 TIP is recommended and required as the statutory designee for all state transportation planning matters.

Sincerely,

Ryan Anderson, P.E.

Commissioner

Enclosures (5)

cc: Ned Conroy, Community Planner, FTA

Aaron Jongenelen, Acting AMATS Coordinator, MOA James Marks, Division Operations Manager, DOT&PF Adam Moser, Acting Division Operations Manager, DOT&PF James Starzec, AMATS Area Transportation Planner, DOT&PF

Todd VanHove, Planning Chief, Anchorage Field Office, DOT&PF

Kathryn Wenger, Statewide Programs Team Leader, FHWA

MEMORANDUM

STATE OF ALASKA

Department of Transportation and Public Facilities Central Region

TO: James Marks

Statewide Planning Chief Program Development **DATE:** June 1, 2022

FAX: 907-269-0521

PHONE: 907-269-0507

FROM: James Starzec SUBJECT: AMATS 2019-2022 TIP

AMATS Transportation Planner, DOT&PF

SUBJECT: AMATS 2019-2022 TIF Amendment #3

The Anchorage Metropolitan Area Transportation Solutions (AMATS) Policy Committee (PC) approved Amendment #3 to the AMATS FFY 2019-2022 Transportation Improvement Program (TIP) on May 26th, 2022. Attached as separate documents are the FFY 2019-2022 TIP tables with Amendment #3 adjustments highlighted, the Air Quality Conformity report, and the accompanying PC memo.

We find this Amendment to be in conformance with 23 USC 134 and all applicable federal requirements for Metropolitan Planning Organizations and is financially constrained. A new conformity determination per 23 CFR 450.104 was completed and approved by the AMATS PC on May 26th, 2022.

There was reasonable opportunity for public comment on this TIP Amendment as required by 23 CFR 450.316(a) and consistent with the AMATS Public Participation Plan.

AMATS requests that appropriate action be taken to incorporate the 2019-2022 TIP Amendment #3 into the STIP.

Attachments (2)

cc: Maren Brantner, STIP Manager, Program Development, DOT&PF

Adam Moser, Transportation Planner 2, DOT&PF

Todd VanHove, Chief of Planning, Anchorage Field Office, DOT&PF Jennifer Coisman, Project Control Chief, Central Region, DOT&PF

Aaron Jongenelen, AMATS Coordinator, MOA



METROPOLITAN PLANNING ORGANIZATION MEMORANDUM

ITEM: 5C

DATE: 26 May 2022

TO: AMATS Policy Committee

FROM: Aaron Jongenelen, AMATS Coordinator

SUBJECT: AMATS TIP Amendment #3

BACKGROUND:

An amendment to the AMATS 2019-2022 Transportation Improvement Program (TIP) is needed to update Table 2 Roadway, Table 3 Non-motorized, Table 4 Plans and Studies, Table 5 Congestion Mitigation Air Quality, Table 6 Transportation Alternative Program, Table 10 Transit, and Table 11 Other Federal, State, and Local Funded Projects within the AMATS Area. Below are the specific table changes in red. Changes being made in response to the comments received during the public comment period are highlighted in yellow.

Table 2 - Roadway

• Update Table 2 to add \$2.0M for design funding in FY2022 for project RDY00003 Spenard Road Rehabilitation, move \$2.0M in design funding in FY2022 for project RDY00004 Dr. Martin Luther King Jr Avenue Extension to beyond FY2022, move \$1.25M in design funding in FY2022 Potter Drive Rehabilitation for project RDY00007 to beyond FY2022, move \$4.125M in design funding in FY2022 for project RDY00008 Transportation Demand Management Projects to beyond FY2022, move \$1M in design funding for RDY00001 Fireweed Lane Rehabilitation to beyond FY2022, move \$324K in ROW funding for RDY00006 East 4th Ave Signal and Lighting Upgrade to beyond FY2022, move \$543K in funding to FY2022 to project RDY00012 Pavement Replacement Program, and move \$2M for design in FY2022 to project RDY00013 Academy Drive/Vanguard Drive Area Traffic Circulation Improvements.

FFY 2019-22 TIP (Admin Modification 6)		_	
Project	2022	Beyond 2022	
Fireweed Lane Rehabilitation	\$1,000	\$47,000	
Spenard Road Rehabilitation	\$0	\$55,500	
Dr. Martin Luther King Jr Avenue Extension	\$2,000	\$9,270	
East 4 th Ave Signal and Lighting Upgrade	\$324	\$4,950	
Potter Drive Rehabilitation	\$1,250	\$5,500	
Transportation Demand Management Projects	\$4,125	\$0	
Pavement Replacement Program	\$5,127	\$20,000	
Academy Drive/Vanguard Drive Area Traffic Circulation Improvements	\$0	\$18,735	
Total	\$13,826	\$160,955	
Draft FFY 2019-22 TIP (Amendment 3)		_	
Project	2022	Beyond 2022	
Fireweed Lane Rehabilitation	\$0	\$48, <mark>000</mark>	

Spenard Road Rehabilitation	\$2,000	\$55,500
East 4 th Ave Signal and Lighting Upgrade	<mark>\$0</mark>	\$5,27 <mark>4</mark>
Dr. Martin Luther King Jr Avenue Extension	\$0	\$11,270
Potter Drive Rehabilitation	\$0	\$6,750
Transportation Demand Management Projects	\$0	\$4,125
Pavement Replacement Program	\$5,67 <mark>0</mark>	\$20,000
Academy Drive/Vanguard Drive Area Traffic Circulation Improvements	\$2,000	\$18,735
Total	\$9,670	\$169,654

Table 3 – Non-motorized

• Update Table 3 to add \$80K construction funding for project NMO00006 Potter Marsh Improvements in FY2022 and reduce funding for project NMO00008 by \$297K in FY2022.

FFY 2019-22 TIP (Admin Modification 6)	
Project	2022
Potter Marsh Improvements	\$510
Anchorage Areawide Pathway and Trails Pavement Replacement	\$830
Total	\$1,340
Draft FFY 2019-22 TIP (Amendment 3)	
Project	2022
Potter Marsh Improvements	<mark>\$590</mark>
Anchorage Areawide Pathway and Trails Pavement Replacement	\$533
Total	\$1,123

Table 4 – Plans and Studies

 Update Table 4 to add \$150K CRRSA funding for project PLN00006 92nd Ave Extension Reconnaissance Study in FY2022. This funding is outside the AMATS allocation and will not impact fiscal constraint.

FFY 2019-22 TIP (Admin Modification 6)	
Project	2022
92 nd Ave Extension Reconnaissance Study	\$250
Total	\$250
Draft FFY 2019-22 TIP (Amendment 3)	
Project	2022
92 nd Ave Extension Reconnaissance Study	\$400
Total	\$400

Table 5 – Congestion Mitigation Air Quality

 Update Table 5 to add \$1.495M to project #CMQ00005 in FY2022, add \$3.879M to project CMQ00007 Capital Vehicles in FY2022, and zero out funding in FY2022 for project CMAQ00003 Arterial Roadway Dust Control.

FFY 2019-22 TIP (Admin Modification 6)	
Project	2022
Arterial Roadway Dust Control	\$200
Bus Stop Facility Improvements	\$1,379
Capital Vehicles	\$11,331
Total	\$12,910
Draft FFY 2019-22 TIP (Amendment 3)	
Project	2022
Arterial Roadway Dust Control	<mark>\$0</mark>
Bus Stop Facility Improvements	\$2,874
Capital Vehicles	\$15,210
Total	\$16,705

Table 6 – Transportation Alternative Program (TAP)

Add \$1,344M in construction funding to project TAP00001 Chugach Foothills Connector, Phase II
and adjust funding sources. \$1,010M will be paid for with STBG funding and \$344K will be
CRRSA funding.

FFY 2019-22 TIP (Admin Modification 6)	
Project	2022
Chugach Foothills Connector, Phase II	\$0
Total	\$0
Draft FFY 2019-22 TIP (Amendment 3)	
Project	2022
Chugach Foothills Connector, Phase II	\$1,344
Total	\$1,344

Table 10 - Transit

Update Table 10 to update Beyond 2022 funding for project #19658 Preventative Maintenance (5307) to reflect the correct amount, add \$4.785M to project #19634 Track Rehabilitation (5307) in FY2020, add \$700K to project #31091 Radio and Communication System (5307) in FY2020, add \$1.475M to project #19635 Bridge Rehabilitation in FY2020, add \$3.0M to project #19635 Bridge Rehabilitation in Beyond 2022, add \$285K to project #33245 Facility Rehabilitation (5307) in FY2020, add \$300K to project #19634 Track Rehabilitation (5337) in Beyond 2022, and add projects numbers to Signal and Detector System (5307) and Facility Rehabilitation (5307). Make changes to projects TRN00001-TRN00010 as requested by the Public Transportation Department.

FFY 2019-22 TIP (Admin Modification 6)			
Project	2020	2022	Beyond 2022
Preventative Maintenance/Capital Maintenance		\$4,500	\$13,500
		\$200	\$600
Fleet Replacement/Expansion		\$400	
ADA Complementary Paratransit Services	+	\$400	\$1,200
Bus Stop Improvements/1% Section 5307		\$25	\$75
Transit Improvements	+		
ITS/Automated Operating		\$50	\$0
System/Management Information Systems	+		
Fleet Improvement/Support Equipment/Support Vehicle		\$500	\$1,500
	+	Ć7F0	¢2.2F0
Transit Centers/Support Facilities	+	\$750	\$2,250
Operating Assistance	1	\$300	\$3,000
Section 5310 Enhanced Mobility of Seniors & Individuals w/Disabilities		\$240	\$927
	+	6720	¢1.C14
Section 5339 Bus and Bus Facilities Program	¢2.500	\$720	\$1,614
Preventative Maintenance (5307)	\$3,500		\$87,500
Track Rehabilitation (5307)	\$2,215		\$1,500
Radio Communication System (5307)	\$50		\$100
Bridge Rehabilitation (5307)	\$250		\$100
Facility Rehabilitation (5307)	\$65		\$0
Track Rehabilitation (5337)	\$0		\$1,200
Total	\$6,080	\$7,685	\$115,066
Draft FFY 2019-22 TIP (Amendment 3)			
Project	2020	2022	Beyond 2022
Preventative Maintenance/Capital Maintenance		<mark>\$938</mark>	\$13,500
Fleet Replacement/Expansion		<mark>\$0</mark>	\$600
ADA Complementary Paratransit Services		\$0	\$1,200
Bus Stop Improvements/1% Section 5307 Transit Improvements		\$2,157	\$75
ITS/Automated Operating System/Management Information Systems		\$1,250	\$0
Fleet Improvement/Support Equipment/Support Vehicle		\$1,250	\$1,500
Transit Centers/Support Facilities		\$2,157	\$2,250
Operating Assistance		<mark>\$0</mark>	\$3,000
Section 5310 Enhanced Mobility of Seniors & Individuals w/Disabilities		<mark>\$341</mark>	\$927
Section 5339 Bus and Bus Facilities Program		<mark>\$687</mark>	\$1,614
Preventative Maintenance (5307)	\$3,500		\$17,500
Track Rehabilitation (5307)	\$7,000		\$1,500

Bridge Rehabilitation (5307)	\$1,725		\$3,000
Facility Rehabilitation (5307)	\$350		\$0
Track Rehabilitation (5337)	\$0		\$1,500
Total	\$13,325	\$8,780	\$23,600

Table 11 – Other

Add in the following project: Alaska Cargo and Cold Storage - The project is a secure, up to 715,000sf climate-controlled warehouse facility located at Ted Stevens 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-in-class 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 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 project partners.

ACTION REQUESTED

AMATS staff and the Technical Advisory Committee recommends to the Policy Committee approval of 2019-2022 TIP Amendment #3 with the changes listed above.

Attachments:

2019-22 AMATS TIP Amendment #3 (Tables)

PROJECT LOCATION		FISCAL PR in Tho	4-year total	% of 4-year		
		October 1 -	·	Non-NHS \$		
Non-National Highway System (Table 2)	2019	2020	2021	2022		
Roadway Improvements without Pavement Replacement Projects	\$9,515	\$21,616	\$13,870	\$6,130	\$51,131	42.3%
Pavement Replacement Projects (Table 7)	\$4,050	\$2,985	\$8,874	\$5,670	\$21,579	17.9%
	\$13,565	\$24,601	\$22,744	\$11,800	\$72,710	
Non-motorized (Table 3)	\$600	\$1,723	\$3,982	\$1,123	\$7,428	6.1%
Plans and Studies (Table 4)	\$6,050	\$800	\$1,000	\$250	\$8,100	
Congestion Mitigation & Air Quality (Table 5)	\$8,574	\$2,970	\$2,970	\$16,513	\$31,027	25.7%
Non-National Highway System Subtotal for Non-NHS roads, non-motorized & CMAQ projects	\$29,360	\$30,094	\$30,696	\$30,696	\$120,846	100.0%
STIP Non-National Highway System Allocation from ADOT&PF's CTP programs [as of 3/14]	\$29,360	\$30,094	\$30,696	\$30,696	\$120,846	
AMATS CMAQ program set aside [as of 3/14]	\$2,255	\$2,311	\$2,358	\$2,358	\$9,281	
STIP Non-NHS Allocation for all projects (including CTP and CMAQ allocation)	\$31,615	\$32,405	\$33,054	\$33,054	\$130,127	
Other Funded Projects within the Municipality of Anchorage						
Highway Safety Improvement Program (Table 8)	\$12,431	\$22,854	\$16,584	\$13,779	\$65,648	
National Highway System (Table 9)	\$26,000	\$45,000	\$25,000	\$25,000	\$115,500	
Transit Capital FTA Section 5307 to MOA (Table 10)	\$6,734	\$7,060	\$6,959	\$11,030	\$31,783	
Transit Capital FTA Section 5307 to ARRC (Table 10)	\$3,890	\$13,915	\$3,500	\$3,510	\$24,815	
Transit Capital FTA Section 5337 [State of Good Repair] to ARCC (Table 10)	\$600	\$1,700	\$4,400	\$4,580	\$11,280	
TOTAL PROGRAM ALLOCATION = (Non-NHS + NHS + HSIP Set Aside +AMATS Pave./Bridge Refurbish.+ all FTA 5307, 5337, and 5309)	\$79,015	\$120,623	\$87,139	\$88,595	\$375,372	
Other Federal Funded Projects within AMATS (Table 11)	\$71,504	\$111,280	\$77,238	\$863,000	\$1,123,022	
TOTAL FEDERAL FUNDING For Transportation Improvements within AMATS & the MOA	\$150,519	\$231,903	\$164,377	\$951,595	\$1,498,394	

Notice to MOA Project Managers / Project Sponsors! If your project includes ITS elements and uses funds from the federal highway trust fund, prior to acquisition, construction, or implementation, you must demonstrate compliance with federal Systems Engineering Analysis requirements. Complete the ADOT&PF Systems Engineering Analysis Checklist, link below, and submit to FHWA through ADOT&PF Central Region Planning.

Table 2. Roadway AMATS FFY 2019-2022 TIP Amendment #3

C	TIP Need ID*		PROJECT PHASING PLAN			PROGRAM Thousands)	IMING	Estimated	Est project	Est total project cost
Grandfathered Project				(October 1 - S	eptember 30		funding needs	cost 2019-	
.,				2019	2020	2021	2022	after 2022	2022	1 • 3 • • • • • • • • • • • • • • • • • • •
G	2159	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 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.		\$3,500	\$19,496	\$9,745	\$0	\$0	\$32,741	\$32,741
G	29252	Glenn Highway Integrated Corridor Management Study [ICM] - Project will produce a final Concept of Operations for a comprehensive ICM approach to the Glenn Highway operations, to address traffic congestion, including congestion caused by crashes.	2019 - Study	\$400	\$0	\$0	\$0	\$0	\$400	\$400
G	2174	Abbott Road Rehabilitation [Lake Otis Parkway to Birch Road] - project will increase from 2 to 4 lanes and improve intersections and pedestrian facilities. Project recommended to be developed as a 3R per ADOT's Pre-Construction Manual. \$1.5M in ROW funding is A/C from 2015 into 2014. \$7.7M in U/C funding is A/C from 2017 into 2016.	2019 - U/C	\$500	\$0	\$0	\$0	\$0	\$0	\$0
	RDY00001	Fireweed Lane Rehabilitation [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 3 lanes (2 with a center turn lane). This project would also include non-motorized improvements.	2019 - D 2022 - D	\$1,000	\$0	\$0	\$0	\$48,000	\$1,000	\$49,000
	RDY00003	Spenard Road Rehab [Benson Blvd to Minnesota Dr] - Project will rehabilitate to improve traffic flow. This project would also include non-motorized improvements.	2019 - D 2021 - D 2022 - D	\$1,500	\$0	\$1,500	\$2,000	\$55,500	\$5,000	\$60,500
	RDY00004	Dr. Martin Luther King Jr Avenue Extension - Extend Dr. Martin Luther King Jr Avenue from Elmore Road to Piper Drive. The new roadway would include non-motorized improvements.	2019 - D 2022 - D	\$1,500	\$0	\$0	\$0	\$11,270	\$1,500	\$12,770
	RDY00005	Rabbit Creek Road Reconstruction [Seward Highway to Goldenview Drive] - Project would reconstruction Rabbit Creek Road from the Seward Highway to Goldenview Drive with a center turn lane and includes non-motorized improvements.	2022 - D	\$0	\$0	\$0	\$1,500	\$10,300	\$1,500	\$11,800
	RDY00006	East 4th Ave Signal and Lighting Upgrade [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.	2019 - D 2022 - ROW	\$500	\$0	\$0	\$0	\$5,274	\$500	\$5,774
	RDY00007	Potter Drive Rehabilitation [Arctic Blvd to Dowling Road] - This project would rehabilitate Potter Drive from Arctic Boulevard to Dowling Road and include non-motorized improvements.	2020 - D 2022 - D	\$0	\$500	\$0	\$0	\$5,500	\$500	\$6,000
	RDY00008	Transportation Demand Management Projects - Funding for implementation of project #PLN0008 the Transportation Demand Management study of the University Medical District.	2022 – Implementation	\$0	\$0	\$0	\$0	\$4,124	\$0	\$4,124
	RDY00009	Seward Highway to Glenn Highway Connection PEL Design - Implement the projects identified as part of the PEL done for the Seward Highway to Glenn Highway Connection.		\$0	\$0	\$0	\$0	\$1,000	\$0	\$1,000
	RDY00010	Mountain Air Drive [Rabbit Creek Road to Sandpiper Drive] - Extend Mountain Air Drive from Rabbit Creek Road to Sandpiper Drive. Recommend separated pathway. Purpose: Circulation, access, and safety.	2020 - D	\$0	\$1,000	\$0	\$0	\$13,500	\$1,000	\$14,500

		PROJECT LOCATION	PROJECT			PROGRAM				
Grandfathered			PHASING PLAN			Thousands)		Estimated	Est project	Est total
Project	TIP Need ID*				october 1 - S	September 30	1	funding needs		project cost
Troject				2019	2020	2021	2022	after 2022	2022	project cost
		Safety Improvement Program (Traffic Count Support) 2019-2022 - Collect traffic data within the AMATS area	2019-22	\$615	\$620	\$625	\$630	\$0	\$2,490	\$2,490
	RDY00011	completed by the ADOT&PF Central Region Highway Data Section and MOA Traffic Department Data Section.	Programming							
		Pavement Replacement Program - This program will provide a single funding source for several pavement overlay	2019-22	\$4,050	\$2,985	\$8,874	\$5,670	\$20,000	\$21,579	\$41,579
	RDY00012	and/or replacement projects. Improvements are also expected to include ADA and some existing curb and sidewalk	Programming							
		repair. May include those projects listed in Table 7 or other priorities.								
		Academy Drive/ Vanguard Drive Area Traffic Circulation Improvements [Brayton Drive to Abbott Road] -	2021 - D	\$0	\$0	\$2,000	\$2,000	\$18,735	\$4,000	\$22,735
	RDY00013	Project would improve and align Academy Drive and Vanguard Drive west of Abbot Road. Project would include	2022 - D							
		non-motorized improvements and consider adjacent land use.								
		The contingency list of projects for each year will consist of the following year's projects.	ANNUAL	\$13,565	\$24,601	\$22,744	\$11,800	\$193,203	\$72,210	\$265,413
			TOTALS							
		STIP ALLOCATIONS FOR ALL TYPES OF NON-NHS PROJECTS = CTP.		\$29,360	\$30,094	\$30,696	\$30,696	\$24,955	\$120,846	
		Approximate percentage (%) for roadways		32%	72%	45%	20%	4-year	42%	
								average		
		Approximate percentage (%) for pavement replacement projects		14%	10%	29%	18%	4-year average	18%	

Tabl 3. Non-motorized AMATS FFY 2019-2022 TIP Amendment #3

Grandfathered	TIP Need	d	PROJECT	FED	DERAL FISCAL PRO	OGRAMMING YI	s)	Estimated funding	Est project	Est total	
Project	ID*	PROJECT LOCATION	PHASING PLAN	Carryover	2019	2020	2021	2022	needs after 2022	cost 2019- 2022	project cost
G	29257	Dimond Center Pedestrian and Transit Improvements - Multiphase effort focusing on pedestrian, bicycle, transit and travel way improvements. Primary improvements includes sidewalk connectivity, bicycle infrastructure, pedestrian and bicycle signals/signage, traffic calming techniques, lighting and other safety related infrastructure to ensure compliance with ADA.		\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G	26628	Bicycle Plan Project Implementation - Project would sign, stripe, and mark bike lanes or shoulders on existing roadways within the AMATS boundary area to create a safe, connected network of bicycle facilities as identified in the Anchorage Bicycle plan. Project consists of nominated projects Core Bicycle Network Phase I-III.		\$0	\$0	\$200	\$0	\$0	\$0	\$200	\$200
G	26629	Pedestrian Plan Project Implementation - Project would improve pedestrian safety and construct missing links as identified in 2007 Anchorage Pedestrian Plan. FFY16 funded with non-AMATS sources.		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	NMO00001	Downtown Trail Connection - Project will construct a connection between the Tony Knowles Coastal Trail to the Ship Creek Trail in downtown Anchorage.	2019 - D 2021 - D	\$0	\$300	\$0	\$1,600	\$0	\$7,695	\$1,900	\$9,595
	NMO00002	Fish Creek Trail Connection [Northern Lights Blvd to the Tony Knowles Coastal Trail] - This project will construct a connection of the Fish Creek Trail to the Tony Knowles Coastal Trail. FY22 funding is using TAP funding.	2020 - D 2022 - D	\$0	\$0	\$500	\$0	\$1,010	\$7,100	\$1,510	\$8,610
	NMO00006	Potter Marsh Improvements - This project would make improvements to the Potter Marsh southern parking facility.	2020 - D 2022 - U/C	\$0	\$0	\$113	\$0	\$590	\$0	\$703	\$703
	NMO00008	Anchorage Areawide Pathway and Trails Pavement Replacement - This program will provide a single funding source for several pathway/trail pavement replacement projects. May include those projects listed in Table 7 or other priorities.	2019-22 - D/U/C	\$0	\$300	\$910	\$2,382	\$533	\$10,000	\$4,125	\$14,125
		The contingency list of projects for each year will consist of the following year's projects.	Section Totals	\$2,000	\$600	\$1,723	\$3,982	\$1,123	\$24,795	\$8,438	\$33,233
		STIP ALLOCATIONS FOR ALL TYPES OF NON-N			\$29,360	\$30,094	\$30,696		4 year total=	\$120,846	
		Approximate percentage (%) for all	Non-Motorized projects		2%	6%	13%	4%	4-year Avg=	6.1%	

Table 4. Plans and Studies AMATS FFY 2019-2022 TIP Amendment #3

Grandfathered			PROJECT	FEDERAL	FISCAL PROGRAM! October 1 - See		ousands)	Estimated funding	Est project cost	Est total
Project	TIP Need ID*	PROJECT LOCATION	PHASING PLAN	2019	2020	2021	2022	needs after 2022	2019-2022	project cost
		Plans and Studies								
G	PLN00001	AMATS MTP - Funding for the Municipality of Anchorage AMATS Metropolitan Transportation Plan. FY2022 funding is coming from CRRSA funding outside the AMATS allocation.	2020 - Plan	\$0	\$800	\$200	\$100	\$800	\$1,100	\$1,900
	PLN00002	TSMO Strategic Implementation Plan - This study will develop the AMATS Transportation Systems Management & Operations (TSMO) strategic plan, and will provide overall direction, goals, and strategic outcomes for the program. The project will translate AMATS strategic elements (including 2040 MTP Implementation Plan, ITS Implementation Plan, CMP Implementation Plan, and Transportation Demand Management Plan) into a combined Five-Year TSMO implementation plan document that will provide overall direction and strategic outcomes, with specific projects with related cost estimates, services and activities.	2020 - Study	\$0	\$0	\$500	\$0	\$0	\$500	\$500
	PLN00003	Seward Highway to Glenn Highway Connection Planning and Environmental Linkages (PEL) Study [20th Ave to Glenn Hwy/Airport Heights Intersection] - The intent of this PEL is to define a vision for the future of this connection, identify environmental and resource concerns and opportunities in the study area, and use the information to develop reasonable alternatives through consultation with the affected agencies and the public.	2019 - Study	\$5,000	\$0	\$0	\$0	\$0	\$5,000	\$5,000
	PLN00004	2040 Secondary Street Deficiency Analysis and Prioritization - This project will conduct an area-specific review of existing collector and local street networks that connect or run parallel to major arterials in the Anchorage Bowl. This review will identify deficiencies and needed additional local and collector street connections, intersection and access improvements, right-of-way widths, and pedestrian connections.	2019 - Study	\$0	\$0	\$150	\$0	\$0	\$150	\$150
	PLN00005	Chugach Way Area Transportation Element Study - This project would provide recommendations on the transportation elements developed as part of the Chugach Way Small Area Plan.	2019 - Study	\$150	\$0	\$0	\$0	\$0	\$150	\$150
	PLN00006	92nd Ave Extension Reconnaissance Study - This project will look at the challenges with extending 92nd Ave from Old Seward Highway to C Street and offer recommendations based on safety, congestion, non-motorized improvements, and freight mobility. FY2022 \$150,000 funding is coming from CRRSA funidng outside of the AMATS allocation.	2021 - Study	\$0	\$0	\$0	\$400	\$0	\$400	\$400
	PLN00007	Port of Alaska Multimodal Improvements Study - This project will study and make recommendations on how to improve the Ocean Dock Road connection to the Port of Alaska.	2019 - Study	\$400	\$0	\$150	\$0	\$0	\$550	\$550
	PLN00008	University Medical District Transportation Demand Management (TDM) Study - Project will complete a TDM study, evaluating transportation demand throughout the entire University Medical District and make recommendations for funding future project.	2019 - Study	\$500	\$0	\$0	\$0	\$0	\$500	\$500
	PLN00009		2021 - Study	\$0	\$0	\$0	\$250	\$0	\$250	\$250
		The contingency list of projects for each year will consist of the following year's projects.	ANNUAL TOTALS	\$6,050	\$800	\$1,000	\$250		1-7	\$8,900
		STIP ALLOCATIONS FOR ALL TYPES OF NON-	NHS PROJECTS = CTP	\$29,360	\$30,094	\$30,696	\$30,696	4 year total=	\$120,846	

Notice to MOA Project Managers/Project Sponsors! If your project includes ITS elements and uses funds from the federal highway trust fund, prior to acquisition, construction, or implementation, you must demonstrate compliance with federal Systems Engineering Analysis Checklist and submit to FHWA through ADOT&PF Central Region Planning.

					FEDERAL I	FISCAL PROGRAMM	IING YEAR (\$in Th	ousands)	Estimated	Est project	
Grandfathered	TIP Need ID*	PROJECT LOCATION	PROJECT PHASING			October 1 - Sep	tember 30		funding	cost 2019 -	Est total
Project	TIF Need ID*	PROJECT LOCATION	PLAN	Carryover	2019	2020	2021	2022	needs after 2022	2022	project cost
		SIP-Mandated Projects and Programs									
		Anchorage Ridesharing/Transit Marketing 2019-2022 - This project funds the Municipal Share-A-Ride program which promotes, subsidizes,	2019-2022		\$900	\$900	\$900	\$900	\$0	\$3,600	\$3,60
	CMQ00001	and contract manages an area-wide vanpool commuter service; and a comprehensive public transportation marketing effort.	Programming		*****	*****	****	,,,,,		,,,,,,	***
		Air Quality Public & Business Awareness Education Campaign 2019-2022 - The goal of this program is to further inform the public about	2019-2022		\$300	\$300	\$300	\$300	\$0	\$1,200	\$1,20
	CMQ00002	air quality issues and what steps people may take to reduce pollution.	Programming		,	****	****			, , , , ,	,
			Section Totals		\$1,200	\$1,200	\$1,200	\$1,200	\$0	\$4,800	\$4,80
		STIP Non-National Highway System Allocation from ADOT&PF's C	CMAQ program [as of 3/14	1	\$1,200	\$1,200	\$1,200	\$1,200	\$0	\$4,800	
		Programs									
	CMO00003	Arterial Roadway Dust Control 2019-2022 - Magnesium chloride (MgCl2) dust palliative will be applied to approximately 70 miles of high	2019-2022		\$200	\$200	\$200	\$0	\$0	\$600	\$60
	CMQ00003	volume State and Municipal roadways prior to and after spring sweeping. FFY16 funded with non-AMATS sources.	Implementation								
		Traffic Control Signalization 2019-2022 - Program would provide proactive efficiencies with better/more updated signal timing plans to	2019-2022		\$350	\$350	\$350	\$400	\$0	\$1,450	\$1,45
	CMQ00004	address intersection congestion and improve air quality. Funding supports development of Traffic Management Center and emergency vehicle	Programming								
		and low priority transit signal preemption.									
		Bus Stop & Facility Improvements - This projects funds the upgrade and expansion of facility and bus stop sites to meet both the federally	2019-2022		\$3,458	\$1,265	\$1,321	\$2,874	\$4,509	\$8,918	\$13,42
		mandated Americans with Disabilities Act [ADA] requirements and the operational needs. Typical bus stop improvements include bus shelters,	Implementation								
		benches, trash receptacles, landscaping, grading, pacing, utility relocations, lighting, curb adjustments, drainage, constructing paths, and									
	CMO00005	construction/reconstruction of turnouts. Typical facility improvements include upgrades, rehabilitation, and construction/reconstruction not									
	01.1200000	limited to safety, security, facility equipment, structures, underground storage tanks, parking lots, sidewalks, and drainage. Table 5 of CMAQ									
		funds supplement FTA funds in project 4, 8, and 11 on Table 10. FFY19-2021 AMATS funding is supplemented with CMAQ funding outside									
		the AMATS allocation. FFY19 funding is additionally supplemented with \$172,000 in FTA funding outside the AMATS allocation.									
	CMO00006	Multimodal Trip Planner and Smartphone Application - project will provide for operation of multimodal trip planner and smartphone app to	2019-2022		\$70	\$0	\$0	\$0	\$0	\$70	\$7
	CMQ00000	provide carpool, vanpool, and bicycle commuter matching, transit and shuttle schedules, and multimodal directions.	Implementation								
		Capital Vehicles - This project provides funding for replacement and expansion of the Public Transportation Department. The fleet consists of	2019-2022 - Purchase	\$418	\$3,703	\$0	\$2,210	\$14,408	\$6,000	\$20,321	\$26,32
		13-passenger vans, MV-1, 22' and 40' buses that provide service to RideShare, AnchorRIDES, and People Mover. Vehicles will be replaced									
	CMO00007	based on the FTA defined useful life and the People Mover Fleet Management Plan. Table 5 of CMAQ funds supplement FTA funds in project									
		2, 6, and 10 on Table 10. FFY19-2021 AMATS funding is supplemented with CMAQ funding outside the AMATS allocation. \$1.75M in									
		2019 funding should be prioritized toward electric fleet vehicles if at all possible. FFY19 funding is additionally supplemented with \$245,000 in									
		FTA funding outside the AMATS allocation. Demo Operations / Expansion - This project will provide for operational assistance and/or operational service expansion for fixed route,	2019-2022	\$ 2,210	#2.210	62.210	60	60	do.	£4.420	64.40
	CMO00008	demand response, and/or mictrotransit public transit service. Table 5 of CMAQ funds supplement FTA funds in project 3, 5, 9, and 10 on Table		\$ 2,210	\$2,210	\$2,210	\$0	\$0	\$0	\$4,420	\$4,42
	CMQ0000	10. FFY19-2021 AMATS funding is supplemented with CMAQ funding outside of AMATS allocation.	Frogramming								
		10.11 11/2/221 AMATTO landing is supplemented with CMAY landing dustice of AMATTO anceuton.	Section Totals		\$8,574	\$2,970	\$2,970	\$16,513	\$9,151	\$35,779	\$44,93
		The contingency list of projects for each year will consist of the following year's projects.		3	\$8,574	\$2,970	\$2,970	\$16,513	\$9.151	\$35,779	\$44.93
		STIP ALLOCATIONS FOR ALL TYPES OF N		,	\$29,360	\$30,094	\$30,696	\$30,696	4 year total=	\$120,846	ΨΤΤΙΣ
		Approximate percentage (%) for all Congestion Mitigation/	Air Quality (CMAQ) project	s	29%	10%	10%	54%	4-year Avg=	25.7%	

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Grandfathered	TIP Need ID*	PROJECT LOCATION		FEDERAL	FISCAL PROGRAM	,	Estimated funding needs	Est project cost 2019-	
Project	THE THEOR ID	TROUBET ECONTION	PHASING PLAN	2019	2020	2021	2022	after 2022	2022
G	TAP00001	Chugach Foothills Connector, Phase II - Project will construct a multi-use path on Tudor Road between Regal Mountain Drive and Campbell Airstrip Road. FY22 funding is paid for with \$1.010M in STBG funding and \$334K in CRRSA funding.	2019 - D 2020 - D 2021 - C	\$200	\$483	\$4,325	\$1,344	\$0	\$6,352
G	TAP00002	AMATS Mountain View Drive Pathway Reconstruction - Project will reconstruct a multi-use pathway connecting Peterkin Avenue with Mountain View Drive between Bliss Street and North Bunn Street.	2019 - U/C	\$750	\$810	\$0	\$0	\$0	\$1,560
G	TAP00003	Anchorage Arewide Trails Rehabilitation - Project will rehabilitate the Fish Creek trail from Kiwanis Fish Creek Park to Barbara Street.	2019 - U/C	\$0	\$0	\$0	\$0	\$0	\$0
			Section Totals	\$950	\$1,293	\$4,325	\$1,344	\$0	\$7,912

	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	Fireweed Ln - Spenard Road to Arctic Blvd
6	Hiland Rd - MP 0 to MP 3.2
7	Post Rd - 3rd Ave to Reeve Blvd
8	Rabbit Creek Rd - Old Seward Hwy to Hillside Dr
9	Upper Huffman - Hillside Dr to Toilsome Hill Dr
10	Reeve Blvd - 5th Ave to Post Road
11	DeArmoun Road - Hillside Drive to Canyon Road
12	Old Seward Highway Spur - Old Seward Highway to Potter Valley Road
13	Muldoon Road - Golden Bear Drive to JBER Gate
14	Muldoon Road - Debarr Road to Boundary Avenue
15	Eagle River Loop Road - Old Glenn Highway to Eagle River Road
16	Hillside Drive - DeArmoun Road to Abbott Road
17	VFW Road - Eagle River Road to Eagle River Loop Road
18	88th Avenue - Lake Otis Parkway to Abbott Road
	*Projects not in priority order
	Pavement Replacement Annual Totals shown in Table 2

2019 -	2022 TIP, Pathway and Trail Pavement Replacement Projects
	Project Location
1	20th Ave Sidewalk - Bragaw Street to Tikishla Park
2	Debarr Road - Boniface to Muldoon (southside sidewalk)
3	Airport Heights Road - Debarr Road to Glenn Hwy
4	Northern Lights Blvd - Lois Drive to Minnesota Drive (southside pathway)
5	Jewel Lake Pathway - Raspberry Road to International Airport Road
6	A Street - East 36th Avenue to West Fireweed Lane
7	Northern Lights Boulevard - Seward Highway to Minnesota Drive
8	Minnesota Drive - Hillcrest Drive to W. Northern Lights Boulevard
9	Minnesota Drive - Hillcrest Drive to Spenard Road
10	Post Road - East 3rd Avenue to Viking Drive
	*Projects not in priority order
	Pavement Replacement Annual Totals shown in Table 3

STIP	TIP Need		PROJECT	FEDERAL FISCA	AL PROGRAMMI October 1 - Septe		Thousands)	Estimated	Est project	Est total
Need ID	ID*	PROJECT LOCATION	PHASING PLAN	2019	2020	2021	2022	funding needs after 2022	cost 2019- 2022	project cost
19217	HSP0001	HSIP: Jewel Lake Rd Widening, 88th Ave to Strawberry	2019 - U/C	\$2,193	\$0	\$0	\$0	\$0	\$2,193	\$2,193
19217	HSP0002	CR Traffic Safety Corridor Left Turn Lanes	2019 - D/C	\$2,478	\$0	\$0	\$0	\$0	\$2,478	\$2,478
19217	HSP0003	HSIP: Anchorage Pedestrian Lighting	2019 -D 2021 - U/C	\$725	\$0	\$3,390	\$0	\$0	\$4,115	\$4,115
19217	HSP0004	HSIP: C St: Tudor and Dimond Intersections	2019/2020 - D 2019 - R 2021 - U/C	\$900	\$400	\$9,681	\$0	\$0	\$10,981	\$10,981
19217	HSP0005	HSIP: Minnesota Dr Weaving Lane - Int'l Airport to Raspberry	2019 - U/C	\$2,423	\$0	\$0	\$0	\$0	\$2,423	\$2,423
19217	HSP0006	HSIP: Minnesota Dr Guide Sign Upgrades	2017 - D/U 2019 - C	\$334	\$0	\$0	\$0	\$0	\$334	\$334
19217	HSP0007	HSIP: Seward Hwy Rockfall Mitigation	2019 - D 2020 - C	\$600	\$19,182	\$0	\$0	\$0	\$19,782	\$19,782
19217	HSP0008	HSIP: Arctic Blvd Railroad Signal Relocation	2019 - U	\$590	\$0	\$0	\$0	\$0	\$590	\$590
19217	HSP0009	HSIP: Gambell St. Utility Pole Removal and Increased Lighting	2019/2020 - D 2022 - R	\$553	\$1,000	\$0	\$1,250	\$7,000	\$2,803	\$9,803
19217	HSP0010	HSIP: Gambell and Ingra Streets - Overhead Signal Indication Upgrades	2019/2020 - D 2022 - U/C	\$500	\$732	\$0	\$8,325	\$0	\$9,557	\$9,557
19217	HSP0011	HSIP: Portage Glacier Rd & Potter RR Crossing Improvements	2019 - D/U	\$985	\$0	\$0	\$0	\$0	\$985	\$985
19217	HSP0012	HSIP: HFST Removal in Selected Locations	2019 - D 2020 - C	\$150	\$756	\$0	\$0	\$0	\$906	\$906
19217	HSP0013	HSIP: A St. Midtown Couplet Over Signal Indication U/G	2020 - D 2021 -U/C	\$0	\$784	\$1,992	\$0	\$0	\$2,776	\$2,776
19217	HSP0014	HSIP: 5th Ave: Concrete St to Karluk St Pedestrian Improvements	2021 - D 2022 - U/C	\$0	\$0	\$805	\$3,867	\$0	\$4,672	\$4,672
19217	HSP0015	C St. and 16th Ave Overhead Flashing Beacon	2022 - D	\$0	\$0	\$0	\$110	\$394	\$110	\$504
19217	HSP0016	Old Seward Hwy and Industry Way Intersection Improvements	2022 - D	\$0	\$0	\$0	\$227	\$2,738	\$227	\$2,965
19217		O'Malley Bridge Trainsman Handrail and Fence Upgrades	2021 - D/C	\$0	\$0	\$358	\$0	\$0	\$358	\$358
19217	HSP0018	HSIP: O'Malley Bridge Trainsman Handrail and Fence Upgrades	2021 - D/U	\$0	\$0	\$358	\$0	\$0	\$358	\$358
			Tota	1 \$12,431	\$22,854	\$16,584	\$13,779	\$10,132	\$65,648	\$75,780

STIP	TIP Need	DDO MCCT LOCATION	PROJECT -	FEDERAL FI	SCAL PROGRAMM October 1 - Sept		ousands)	Estimated funding	Est project	Est total
Need ID	ID*	PROJECT LOCATION	PHASING PLAN	2018	2019	2020	2021	needs after 2021	cost 2018- 2021	project cost
27470	NHS0001	Anchorage Glenn Highway Muldoon Road Interchange Reconstruction - Reconstruct interchange at Muldoon and Glenn Highway.	2018 - C	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29730	NHS0002	Seward Highway Dowling Road Interchange Rehabilitation - Project will improve the Dowling Road roundabouts, the associated highway ramps, and make other improvements as needed to enhance safety and increase traffic flow.	2018 - D	\$1,000	\$0	\$0	\$0	\$14,000	\$1,000	\$15,000
29731	NHS0003	Seward Highway O'Malley Road to Dimond Boulevard Reconstruction - This project funds the design and ROW purchase for the final segments of this project reconstructing the Seward Highway from Dimond Boulevard to O'Malley Road and includes an underpass to connect 92nd Avenue (west of the Seward Highway) with Academy Drive (east of the Seward Highway), and construction is funded under Need ID 30691.	2019 - D/ROW	\$0	\$20,000	\$0	\$0	\$0	\$20,000	\$20,000
30691	NHS0004	Seward Highway O'Malley Road to Dimond Boulevard Reconstruction Phase II - This is the second phase of the Seward Highway project, and will reconstructs the Seward Highway from Dimond Boulevard to O'Malley Road. Project includes an underpass to connect 92nd Avenue (west of the Seward Highway) with Academy Drive (east of the Seward Highway). The design and first construction phase are under Need ID 29731.		\$0	\$0	\$0	\$0	\$76,500	\$0	\$76,500
18924	NHS0005	Pavement and Bridge Rehabilitation - Crack sealing, surface treatment drainage, signage, guardrail, illumination, and other refurbishments to prolong the life of road pavement and bridges and their safety related structures. Project includes NHS Lane Delineators, Destination & Distance Signing, Pavement Markings and Signalization, Abandoned Vehicle Program, Road Surfacing and Transfer, Road Surface Treatments, and improve curb ramps to meet ADA standards (in coordination with Need ID 30397). The scope does not include landscaping 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.		\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000	\$125,000
The continger	ncy list of projec	ts for each year will consist of the following year's projects.		\$26,000	\$45,000	\$25,000	\$25,000	\$115,500	\$121,000	\$236,500

Table 10. Transit AMATS FFY 2019-2022 TIP Amendment #3

				F	EDERAL FISCAL PRO	OGRAMMING YE	AR (\$in Thousands)		To d' and 1		
STIP	TIP Need ID*	PROJECT LOCATION	PROJECT PHASING	;	Octo	ber 1 - September 30			Estimated funding needs	Est project	Est total
Need ID	TH Accurd	TROJECT ECCATION	PLAN	Carryover	2019	2020	2021	2022	after 2022	cost 2019-2022	project cost
19458	TRN00001	Preventative Maintenance/Capital Maintenance - FTA [Federal Transit Administration] allows grantees to use capital funds for overhauls	2019 - 2022 -	\$0	\$3,986	\$3,986	\$4,189	\$938	\$13,500	\$13,099	\$26,599
		and preventative maintenance. FTA assistance for those items is based on a percentage of annual vehicle maintenance costs.	Implementation		****	#242			4.00	# 600	21.200
19462	TRN00002	Fleet Replacement/Expansion - This project funds the fleet expansion and replacement for the AnchorRIDES paratransit service, as well as the fixed route fleet.	2019 - 2022 - Implementation	\$0	\$375	\$313	\$0	\$0	\$600	\$688	\$1,288
		ADA Complementary Paratransit Services - Costs associated with ADA paratransit programs are eligible for this funding. The project funds	2019 - 2022 -	\$0	\$0	\$0	\$0	\$0	\$1,200	\$0	\$1,200
19464	TRN00003	the ADA paratransit eligibility process with a transportation skills assessment and a travel training program for people who could benefit from									
19404	1 KN00003	individualized instruction regarding how to independently ride People Moved buses. May also be used to purchase AnchorRIDES trips.									
		Bus Stop Improvements/1% Section 5307 Transit Improvements - This project funds the upgrade of bus stop sites to meet both the	2019 - 2022 -	\$0	\$0	\$549	\$0	\$2,157	\$75	\$2,706	\$2,781
		federally-mandated Americans with Disabilities Act [ADA] requirements and the operational needs. Typical improvements include bus	Implementation								
19457		shelters, benches, trash receptacles, landscaping, grading, paving, utility relocations, lighting, curb adjustments, drainage, constructing paths,									
		and construction/reconstruction of turnouts. Table 10 FTA funds supplement CMAQ funds for the Bus Stop & Facility Improvements project									
		in Table 5. ITS/Automated Operating System/Management Information Systems - This projects funds information systems necessary for efficient	2019 - 2022 -	\$0	\$0	\$0	\$0	\$1,250	\$0	\$1,250	\$1,250
		management of the public transportation system. Typical projects include: Geographical Information Systems [GIS] capabilities, upgrades to	Purchase	\$0	\$0	\$0	\$0	\$1,230	φυ	\$1,230	\$1,230
		the automated maintenance system, refueling, and inventory system; a new computerized dispatch system; and upgrades to the scheduling/run-	i urchase								
		cutting process, customer information and telephone communications system, and desktop computers. This project also funds staff and capital									
19463	TRADOUS	resources to provide project oversight and capital for ITS for all modes of public transportation services. Provide day to day operational									
		support to all ITS projects.									
		support of all 115 projects.									
		Fleet Improvement/Support Equipment/Support Vehicle - This project funds improvements to existing transit and paratransit fleets. Typical	2010 2022	\$0	\$718	\$430	\$0	\$1,250	\$1,500	\$2.398	\$3.898
			Purchase	30	\$/10	\$430	\$0	\$1,230	\$1,500	\$2,396	\$3,090
		for headway enhancements; mechanical equipment and other improvements for facilities; mobile display terminals' and vehicle	i urchase								
		communications, radios and locations systems. This project also funds the purchase of replacement vehicles and equipment to support									
19459	TRN00006	operation of the transit system. Typical purchases include pickup racks, maintenance trucks with special equipment, supervisor vehicles, shift									
		change vehicles, fork lifts, sweepers, and bus access snow removal equipment.									
		Similar Controls, 1911 mile, 211 Copens, and the access one in torne on equipments									
		Transit Centers/Support Facilities - This project supports an on-going effort to provide major transit facilities key areas of the city and major	2019 - 2022 -	\$0	\$709	\$775	\$1,817	\$2,157	\$2,250	\$5,458	\$7,708
		destinations. The Anchorage Comprehensive Plan and 2040 Land Use Plan (LUP) identified neighborhood, town, regional commercial, and	Implementation								
		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 development corridors. These									
29264	TRN00007	corridors should provide pedestrian connections to surrounding neighborhoods and transit. Existing and future facility improvements along									
		these corridors and in areas like Midtown, Downtown, U-Med, Dimond Center and Muldoon, are vital to the implementation of these									
		community planning documents.									
		Operating Assistance - Section 5307 operating assistance for fixed route, demand responsive, and/or Microtransit public transit service.	2019 - 2022 -	\$0	\$0	\$0	\$0	\$0	\$3,000	\$0	\$3,000
	TRN00008	Services and the services are services and the services and the services and the services are services and the services and the services and the services are services and the services and the services are services and the services and the services are services are services are services and the services are services	Implementation		**	* -	* 1				
		subtotal FTA Section 5307 & 5340		\$0	\$5,788	\$6,053	\$6,006	\$7,752	\$22,125	\$25,599	\$47,724

Table 10. Transit AMATS FFY 2019-2022 TIP Amendment #3

				F	EDERAL FISCAL PRO		AR (\$in Thousands)		Estimated		
STIP Need ID	TIP Need ID*	PROJECT LOCATION	PROJECT PHASING PLAN	Carryover	2019	2020	2021	2022	funding needs after 2022	ds cost 2019-2022 24 \$1,028 24 \$1,028 24 \$2,906 27 \$31,783 26 \$240 20 \$13,950 20 \$7,200	Est total project cost
19119	TRN00009	Section 5310 Enhanced Mobility of Seniors & Individuals w/ Disabilities Projects may include purchasing buses and vans; wheelchair lifts, ramps, and securement devices; transit-related information technology systems including scheduling/routing/one-call systems; mobility management programs; and acquisition of transportation services under a contract, lease, or other arrangement. Other activities may include travel training; volunteer driver programs; building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals or other accessible features; improving signage or way-finding technology; providing same day service or door-to-door service; purchasing vehicles to support new accessible taxi, ride-sharing and/or vanpooling programs; and mobility management programs.		\$0	\$219	\$231	\$237	\$341	\$624	Est project cost 2019-2022 \$624 \$1,028 \$624 \$1,028 \$6,614 \$2,906 \$6,614 \$2,250 \$7,500 \$13,950 \$410 \$240 \$7,500 \$7,200 \$100 \$760 \$3,000 \$1,725	\$1,652
27969	TRN00010	Section 5339 Bus and Bus Facilities Program - This program includes capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities.		\$1,380	\$727	\$776	\$716	\$687	\$1,614	Est project cost 2019-2022 cost 2019	\$4,520
	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; including technological changes or innovations to modify vehicles and/or facilities.		\$5,313	\$0	\$0	\$0	\$2,250	\$1,614	\$2,250	\$3,864
		subtotal FTA section 5307, 5310, 5316, 5317, 5340 Transit funding to the MOA		\$6,693	\$6,734	\$7,060	\$6,959	\$11,030	\$25,977	\$31,783	\$57,760
		Alaska Railroad - FTA Section 5307 (Rail Tier) Funds									
21314	10	1% Transit Security on the Alaska Railroad Corporation projects	2019 - 2022 - Implementation	\$0	\$120	\$120	\$0	\$0	\$450	\$240	\$690
19658	11	Preventive Maintenance - This project partially funds statewide maintenance costs of passenger vehicle railcars and locomotives. Preventive maintenance is defined as all activities, supplies, materials, labor, services and associated costs required to preserve or extend the functionality and serviceability of the asset.	2019 - 2022 - Implementation	\$0	\$3,450	\$3,500	\$3,500	\$3,500	\$17,500	\$13,950	\$31,450
21314	12	1% Associated Transit Enhancements - can include benches, landscaping, and other transit related amenities.	2019 - 2022 - Implementation	\$0	\$120	\$120	\$0	\$0	\$410	\$240	\$650
19634	13	Track Rehab - Rail and tie rehabilitation inside AMATS boundaries including shoulder widening, siding program, drainage, State of Good Repair and improvement projects related to track infrastructure.	2019 - 2022 - Implementation	\$0	\$200	\$7,000	\$0	\$0	\$1,500	\$7,200	\$8,700
31091	14	Radio and Communication System - Replace, upgrade or improvements to radio and communication locations, equipment, systems or components.	2019 - 2022 - Implementation	\$0	\$0	\$750	\$0	\$10	\$100	\$760	\$860
19635	15	Bridge Rehabilitation - Bridge engineering, preventive maintenance, rehabilitation, replacements, and other bridge improvements within AMATS boundaries.	2020 - 2022 - Implementation	\$0	\$0	\$1,725	\$0	\$0	\$3,000	\$1,725	\$4,725
33243	16	Signal and Detector System - Replace, upgrade or improve in-track detector and at-grade signal systems equipment and communication components within AMATS boundaries.	2021 - 2022 - Implementation	\$0	\$0	\$350	\$0	\$0	\$0	\$350	\$350
33245	17	Facility Rehab - Within AMATS boundaries replace, upgrade or improve ARRC buildings and related functional appurtenances.	2022 - 2022 - Implementation	\$0	\$0	\$350	\$0	\$0	\$0	\$350	\$350
		subtotal FTA Section 5307 (Rail Tier) Transit funding to Railroad		\$0	\$3,890	\$13,915	\$3,500	\$3,510	\$22,960	\$24,815	\$47,775
		Alaska Railroad - FTA Section 5337 (State of Good Repair) Funds									
19634	14	Track Rehab - Rail and tie rehabilitation inside AMATS boundaries including shoulder widening, siding program, drainage, State of Good Repair and improvement projects related to track infrastructure.	2019 - 2022 - Implementation	\$0	\$100	\$0	\$500	\$320	\$1,500	\$920	\$2,420
19658	15	Preventive Maintenance - This project partially funds statewide maintenance costs of passenger vehicle railcars and locomotives. Preventive maintenance is defined as all activities, supplies, materials, labor, services and associated costs required to preserve or extend the functionality and serviceability of the asset.	2019 - 2022 -	\$0	\$500	\$1,700	\$3,900	\$3,900	\$9,500	\$10,000	\$19,500
19635	16	Bridge Rehabilitation - Bridge engineering, preventive maintenance, rehabilitation, replacements, and other bridge improvements within AMATS boundaries.	2020 - 2022 - Implementation	\$0	\$0	\$0	\$0	\$360	\$5,640	\$360	\$6,000
		subtotal FTA Section 5337 (SGR) funding to Railroad		\$0	\$600	\$1,700	\$4,400	\$4,580	\$16,640	\$11,280	\$27,920

STIP			PROJECT PHASING	F	EDERAL FISCAL PRO	DGRAMMING YE.	,,		Estimated	Est project	Est total
Need ID	TIP Need ID*	PROJECT LOCATION	PLAN	Carryover	2019	2020	2021	2022	funding needs after 2022	cost 2019-2022	project cost
		Alaska Railroad - FTA Section 5337 (SGR) Funds		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		subtotal FTA Section 5337 funding to Railroad		\$0	\$600	\$800	\$4,400	\$4,580	\$17,400	\$10,380	\$27,780
		subtotal FTA Sections 5307 (Rail Tier) & 5337 Transit funding to ARRC		\$0	\$4,490	\$15,615	\$7,900	\$8,090	\$39,600	\$36,095	\$75,695
		Total Transit Program (FTA {5307+5337})		\$6,693	\$11,224	\$22,675	\$14,859	\$19,120	\$65,577	\$67,878	\$133,455
		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.									

						FEDERAL	FISCAL PROGRAMM	IING YEAR (\$in Thou	sands)			_	
STIP	TIP Need ID*	DDO FECT LOCATION	PROJECT	Funding			October 1 - Sep	tember 30			Estimated	Est project	Est total
Need ID	TIP Need ID*	PROJECT LOCATION	PHASING PLAN	Source	Carryover	2018	2019	2020	2021	2022	funding needs after 2021	cost 2018 - 2021	project cost
	OFS00001	Anchorage Port Modernization Project (APMP). Deducted from the 2019 number is \$20M received from the state.	2018-2021 Programming	State GF GO Bond	\$108	\$70,000	\$53,000	\$74,000	\$863,000	\$0	\$0	\$1,060,108	\$1,060,108
19482	OFS00002	AK094 & AK105 - Construction & Road Improvements @ APU.	2018 - D 2019 - ROW/U 2020 - C	Earmark	\$0	\$1,004	\$1,030	\$3,238	\$0	\$0	\$0	\$5,272	\$5,272
26849	OFS00003	People Mover Transportation, Community, and System Preservation Program Winter City Pedestrian Safety & Bus Stop Improvements- project will improve safety, accessibility, and maintenance of existing pedestrian facilities and bus stops during winter months. [Federal share only]		FHWA Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28471	OFS00004	Campbell Tract Facility Alternate Entrance Alignment - Relocate the CTF entrance road 260' to align with East 68th Avenue.	2018/19 - D 2019 - C	FLAP	\$0	\$500	\$3,000	\$0	\$0	\$0	\$0	\$3,500	\$3,500
33008	OFS00005	Buses and Bus Facilities Infrastructure Investment Project - Replace and upgrade the information technology system for the Public Transportation Department. This project will improve the reliability of the bus system and help the city meet growing demand for transit.		FTA Grant 5339b	\$0	\$0	\$4,250	\$0	\$0		\$0	\$4,250	\$4,250
	OFS00006	Glenn Highway/Hiland Road to Artillery Road Reconstruction - Add a 3rd lane to both northbound and southbound Glenn Highway. Improvements at Hiland Road and Artillery Road Interchanges on the Glenn Highway. Replace Eagle River bridges with capacity for pathway and future HOV lanes. First construction phase will be northbound improvements. FFY 2013 GO Bond funding = \$35M.	2019 - C	State Fund	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	\$50,000
	OFS00007	Alaska Cargo and Cold Storage - The project is a secure, up to 715,000sf climate-controlled warehouse facility located at Ted Stevens 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-in-class 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 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 project partners.		BUILD Grant	\$0	\$0	\$0	\$0	\$0	\$3,200 \$10,200	\$10,200 \$56,700	\$3,200 \$10,200	
				ACCS Partners	\$0	4.0	4 0	**	\$ 0		1 1	, ,, ,,	, ,
			Total		\$0 \$108	\$0 \$71,504	\$0 \$111,280	\$0 \$77,238	\$863,000	\$13,400 \$0	\$66,900 \$0	\$13,400 \$1,123,022	\$80,300 \$1,123,022

AIR QUALITY CONFORMITY DETERMINATION FOR THE THIRD AMENDMENT TO THE ANCHORAGE 2019-2022 TRANSPORTATION IMPROVEMENT PLAN

Prepared By:

Municipality of Anchorage

Health Department

Environmental Health Services – Air Quality Program

May 12, 2022

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 proposed Amendment #3 to the 2019-2022 Transportation Improvement Plan (TIP) to modify the fiscal programming schedule for three roadway projects, one transportation demand management study, two transit improvement projects, and six projects for maintenance and upgrade of existing Alaska Railroad rail infrastructure, communication system and signaling improvements, and preventative maintenance of passenger railcars and locomotives. Amongst all the project modifications proposed in Amendment #3, only the planned postponement of *Dr. Martin Luther King Jr Avenue Extension* (*RDY00004*) does not qualify as a project exempt from the requirement to demonstrate conformity per the exempt project types listed in 40 CFR §93.126, Table 2.

Federal transportation conformity rules were created pursuant to the 1970 Clean Air Act and its 1990 amendments to reasonably assure that federally-funded transportation plans, programs, and projects are consistent with State Implementation Plans to achieve and maintain National Ambient Air Quality Standards (NAAQS) in metropolitan areas within each state. The Alaska State Implementation Plan (SIP) contains limited maintenance plans (LMPs) for both carbon monoxide (CO) and PM10¹ within the Municipality of Anchorage. The US Environmental Protection Agency's (EPA) Limited Maintenance Plan (LMP) option allows for the demonstration of probable future compliance with the NAAQS based on analysis of current air monitoring data rather than a comparison of modeled air pollutant emissions against an established motor vehicle emissions budget. 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 so much growth during that period such that a violation of the NAAQS would result.

This document includes a review of the most current CO and PM10 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 PM10 Maintenance Areas. This same form of air monitor data analysis was originally used to establish air quality conformity for the 2019-2022 TIP.

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 PM10 Limited Maintenance Area.

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ⁱ PM₁₀ is airborne particulate matter consisting of particles that are 10 microns or less in aerodynamic diameter. Prolonged inhalation of excessive concentrations of such particles can have health impacts on susceptible individuals including infants, children, and the elderly.

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



Interagency Consultation

AMATS staff presented to the Interagency Consultation Team (ICT) a draft air quality conformity report for the Anchorage 2019-2022 TIP on July 30, 2018. The 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, and the US Environmental Protection Agency. The conformity report for the Anchorage 2019-2022 TIP was posted for 30-day public comment during October-November 2018. The 2019-2022 TIP and accompanying conformity determination were submitted to the FHWA/FTA Alaska Administrator in December 2018 and received administration approval for inclusion into the Alaska 2018-2021 State Implementation Plan on February 26, 2019.

On February 9, 2022 AMATS staff consulted with the ICT to review draft Amendment #3 to the Anchorage 2019-2022 TIP, and this conformity document. Interagency Consultation Team members agreed that this air quality conformity document adequately demonstrated that the Anchorage 2019-2022 TIP, including proposed Amendment #3, continues to comply with federal air quality conformity rules. Beginning on April 1, 2022, AMATS released for 30-day public review, Amendment #3 and this corresponding conformity analysis. AMATS received twenty-one comments pertaining to agency-requested TIP funding schedule adjustments, and one suggestion for an additional transit-stop. No comments reflected or conflicted with the draft air quality conformity determination, which is presented here in its final form.

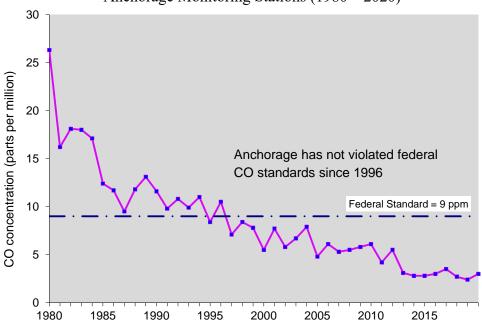
PART 1: CONFORMITY ANALYSIS FOR THE ANCHORAGE CO MAINTENANCE AREA

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 – 2020)



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

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ⁱⁱ The Anchorage CO Maintenance Plan is included as part of the Alaska Air Quality Control Plan or SIP. Thus, an amendment of the CO Maintenance Plan requires an amendment of the larger SIP document. All SIP amendments are subject to approval by the EPA.

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).

Table 1-1 shows annual second maximum 8-hr CO concentrations for all active monitoring sites, and resultant CO Design values for the Anchorage CO Maintenance Area. To meet the CO LMP eligibility criteria, the design value for the limited maintenance area must be 7.65 ppm or less. The Garden site in the Airport Heights neighborhood of Anchorage is the only CO site operating since 2015; all others have been discontinued.

Table 1.1 Anchorage CO Design Values by Year

	Garden 20200018	Turnagain 20200048	DHHS 20200052	Highest Annual 8-Hr 2 nd Max	Area CO DV
2011	3.6	6.1	2.8	6.1	6.1
2012	4.3	5.5	2.8	5.5	6.1
2013	3.1	4.0		4.0	5.5
2014	3.1	3.1		3.1	4.0
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

-

iii 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 limited maintenance area as a whole.

As of December 31, 2020, the Anchorage CO design value is 3.0 ppm CO, which is well below the CO LMP eligibility criteria of 7.65. Hence Anchorage remains compliant with EPA's CO limited maintenance plan eligibility criteria.

DHHS (8th / L Street) Anchorage Strate Garden

Turnagain

Ted Stevens
Anchorage Infl
Airport

Ricard

Park

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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 prior 9 years of annual decline (-3.2% annual average).

15,000 140,000 14,297 14,355 14,100 14,027 13,848 14,000 130,000 13,498 13,511 13,401 13,079 13,000 118.634 120,000 12,334 11,921 113,845 112,540 12,000 113,078 11,632 112,165 1<u>12,</u>119 11,169 108,333 110,000 007 107.536 107,052 107,157 107,470 104,962 104,587 104,998 11,000 691 100,283 100,000 10,000 97,675 Total Weekay Timetable Revenue Hours 9,000 90,000 8,000 80,000 7,000 70.000 6,000 60.000 5.000 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Figure 1.4
Trend in Transit Service and Ridership (2002-2018)

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.

→ Average Weekday Ridership

■Total Weekday Timetable Revenue Hours

Ride-sharing and transit marketing are the only TCMs identified in the CO Maintenance Plan. They are funded in the current Transportation Improvement Program. 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 1000 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 has further determined that the 2019–2022 TIP including Amendment #3 is consistent with the Alaska State Implementation Plan in that no element of the Anchorage 2019–2022 TIP or its amendments 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 PM₁₀ 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 μ 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*₁₀ *Control Plan*, which was submitted to the EPA as amendment to the Alaska SIP to address the PM_{10} 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 km² PM₁₀ 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 PM₁₀ concentrations in Eagle River. The last violations of the PM₁₀ NAAQS occurred in 1987. iv

In October 2010, the EPA made a determination that Eagle River had attained the PM₁₀ 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 PM₁₀ 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 μ g/m³ and therefore have a low probability of violating the NAAQS, and (2) that PM₁₀ 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*₁₀ *Limited Maintenance Plan* to EPA as a proposed amendment to the SIP.

EPA approved the Eagle River PM₁₀ LMP, effective March 8, 2013 (<u>78 FR 900</u>). 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 PM₁₀ LMP Conformity Criteria

Areas with approved LMPs or areas that have had them approved for conformity determinations are not required to perform an emission budget test as long as the area continues to meet the LMP criteria. Areas with an LMP are required to annually re-compute their 5-year average DV to determine whether it is below $98 \,\mu\text{g/m}^3$ and therefore still meets this LMP 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 PM₁₀ Design Values

5-Year Period	Average DV (µg/m³)
2005-2009	81
2010-2015	92
2016-2020	82
LMP Qualification Criteria	\leq 98 μ g/m ³

 $^{^{}iv}$ PM $_{10}$ concentrations have exceeded the 150 μ 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.

^v PM₁₀ LMP guidance is outlined in a memorandum from Lydia Wegman, Director, Air Quality Standards and Strategies Division, EPA, August 9, 2001.

vi This requirement is found in the Wegman PM₁₀ LMP guidance. Although it is not a requirement of the transportation conformity rule, AMATS agreed to include the Eagle River PM₁₀ 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 are still applicable to maintenance areas that have had their LMPs approved by the EPA for conformity purposes:

TABLE 1 – CONFORMITY CRITERIA from 40 CFR §93.109

All Actions at all times:		
δ 93.110	Latest planning assumptions	
δ 93.111	Latest emissions model	
δ 93.112	Consultation	
Transportation Plan:		
§ 93.113(b)	TCMs	
§ 93.118 or § 93.119	Emissions budget and/or Interim emissions	
TIP:		
§ 93.113(c)	TCMs	
§ 93.118 or § 93.119	Emissions budget and/or Interim emissions	
Project (From a Conforming Plan and TIP):		
§ 93.114	Currently conforming plan and TIP	
§ 93.115	Project from a conforming plan and TIP	
§ 93.116	CO, PM10, and PM2.5 hot-spots.	
§ 93.117	PM10 and PM2.5 control measures	
Project (Not From a Conforming Plan and TIP):		
§ 93.113(d)	TCMs	
§ 93.114	Currently conforming plan and TIP	
§ 93.116	CO, PM10, and PM2.5 hot-spots.	
§ 93.117	PM10 and PM2.5 control measures	
§ 93.118 and/or§ 93.119	Emissions budget and/or Interim emissions	

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 these conditions have been met. The TIP as amended by proposed Amendment #3 will not impact continued support and promotion of the transit bus and rideshare programs in Anchorage and Eagle River; hence, there are no projects or constraints in the TIP or its proposed amendments or would interfere with the continued implementation of TCMs as identified in the Anchorage CO maintenance plan.

When the *Eagle River PM*₁₀ 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; by 1993 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 2% or less. These measures were implemented in 1989 and still maintained. The fact that Eagle River has been in compliance with the NAAQS since 1989 attests to the effectiveness of the implemented control strategies.

2.3 Conclusion regarding Eagle River PM-10 and Conformity

This analysis demonstrates a high probability of continued compliance with the PM_{10} NAAQS within the Eagle River PM10 Maintenance Area. Staff further concludes the TIP with its amendments, including the proposed Amendment #3, adheres to the requirements for fiscal constraint, for the timely implementation of all transportation control measure (TCMs) identified in the Alaska SIP for each maintenance area, and that the planning process for implementing the 2019–2022 TIP, including proposed Amendment #3 will remain compliant with the transportation conformity rules outlined in 40 CFR §93.109, Table 1.

APPENDIX

Computation of PM_{10} Design Value Concentration for Eagle River

Computation of PM₁₀ 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, 2016-2020, 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 1820. These concentrations were arranged in order of magnitude and were assigned rank where the highest concentration was rank = 1, and lowest was rank = 1820. An abbreviated version of this table is shown below. During this period, the lowest PM_{10} concentration measured was 0 μ g/m3 (rank = 1820) and the highest was 168 μ g/m3 (rank = 1).

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			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
3/24/2016	110	2	0.0011
3/1/2016	105	3	0.0016
4/3/2019	105	4	0.0022
2/6/2015	90	5	0.0027
3/2/2016	86	6	0.0033
1/4/2016	82	7	0.0038
3/3/2016	82	8	0.0044
4/1/2019	79	9	0.0049
3/11/2016	77	10	0.0055
12/30/2019	0	1816	0.9978
12/31/2019	0	1817	0.9984
2/8/2020	0	1818	0.9989
2/18/2020	0	1819	0.9995
2/19/2020	0	1820	1

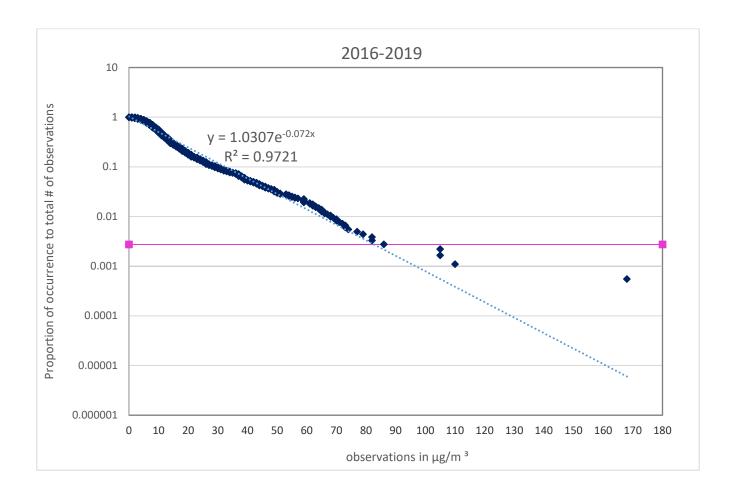
The Eagle River PM_{10} Design Value for comparison to the PM_{10} LMP eligibility criteria was determined from the empirical frequency plot of 24-hour PM_{10} data, and was calculated as the concentration that corresponds to P = 1/365. This resulting concentration represents the highest expected concentration 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 $y = 1.03037 e^{-0.07176x}$

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

$$y = 1/365 = 0.00274 = 1.03037 e^{-0.07176x}$$

Solving for X yields $X = 82.7 \mu g/m^3$



Inputting the value of 0.00274 (equivalent to 1/365) into the best-fit line equation and solving for the corresponding concentration, yields a PM₁₀ concentration of 82.7 μ g/m³.

Per EPA data handling rules for PM_{10} data, decimal values are truncated. Hence, the Eagle River PM_{10} DV for 2015-2019 is properly truncated to 82 $\mu g/m3$.

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