

Contents

	Page
1 A New Transportation Plan	1
Why develop a new plan?	1
What area does the LRTP focus on?.....	2
Why is this LRTP important?.....	3
Meeting Requirements for Transportation Planning.....	4
Regulatory Commitments	4
First Steps for a New Future	6
2 Community Involvement	7
TransVision	7
TransVision Shaped the LRTP	7
TransVision Components.....	8
Summary	10
3 Goals and Objectives.....	11
Introduction	11
Goals Guiding LRTP Development	14
Goal 1: Safety and Health.....	14
Goal 2: Build, Operate, and Maintain Quality, Affordable, and Attractive Improvements.....	15
Goal 3: Economic Vitality	16
Goal 4: Optimize Community Connectivity	17
Goal 5: Improve Mobility and Access in Anchorage and the Region	17
Goal 6: Transportation Choices	18
Goal 7: Preserve and Enhance the Natural and Developed Environment	19

	Page
4 Travel in Anchorage Today	21
Introduction.....	21
Who Travels in Anchorage.....	21
Why People Travel	21
How People Travel.....	22
When People Travel	22
What Determines Household Travel	23
Where Do People Travel.....	25
Summary.....	28
5 Status of the System Today	29
Introduction.....	29
Roads	29
Public Transportation	36
Pedestrian Facilities.....	38
Bicycle System.....	40
Freight Distribution.....	41
Regional Connections	45
Congestion Management.....	46
6 Population and Employment Growth	51
Introduction.....	51
Information Sources	51
Forecast Findings.....	51
Distributing Anchorage Bowl Growth	53
Summary.....	58
7 Meeting Future Transportation Needs.....	59
Introduction.....	59
Methods to Analyze and Evaluate Transportation Systems	59
Formulating Possible Future Transportation Alternatives.....	60
Analyzing Candidate Scenarios.....	60
Evaluating and Comparing Alternatives	60

	Page
Roads.....	61
Public Transportation	79
Pedestrian and Bicycle System	91
Freight Distribution.....	94
Regional Connections	99
Congestion Management.....	101
8 Plan Recommendations	109
Introduction	109
A Call to Action–Managing Systems More Effectively	110
LRTP Elements and Projects	112
Transportation and Anchorage 2020	128
9 Funding.....	141
Introduction	141
Earmarks and Other Federal Funding.....	144
Railroad Grade Separation Funds.....	144
Summary of LRTP Costs and Application of Revenues	144
Roadway Operations and Maintenance.....	146
Conclusion.....	148
10 Implementation Plan.....	149
Introduction	149
Anchorage 2020, Land Use, and Title 21	149
Financial Issues	150
Public Involvement	150
Roads.....	150
Transit – Public Transportation.....	151
Pedestrian and Bicycle System	152
Freight Distribution.....	153
Regional Connections	154
Congestion Management.....	154
Coordination of Local Plans.....	155

	Page
Maintenance and Operation.....	155
Air Quality.....	156
Process-From the LRTP to Project Implementation.....	156
11 Air Quality and the Transportation Plan.....	159
Background.....	159
Impact of the 2025 LRTP on Air Pollutant Emissions.....	161

Appendices

A	Abbreviations and Glossary
B	Environmental Justice Evaluation
C	Street Typology Additions to Functional Classifications
D	AMATS Checklists for Project Agency Sponsors

Tables

4-1	Household and Travel Statistics for Comparative Metropolitan Areas.....	23
4-2	Household Income, Trips, and Transit Use.....	24
4-3	Average Travel Time by Trip Purpose.....	28
5-1	Road Classifications and Their Characteristics.....	30
5-2	Crashes Reported at Selected Intersections, 1998–2003.....	36
5-3	Average Weekday Truck Counts at Spot Locations, 2002–2004.....	41
5-4	Ride Sharing in the Anchorage Area, 2000–2003.....	47
5-5	Existing Congestion Management Strategies.....	48
6-1	Projections for 2025 Regional Growth.....	52
6-2	Projected Household Growth by Planning Area, 2002–2025.....	57
7-1	Performance of Existing, No-Build, and Planned Project Scenarios.....	68
7-2	Performance Comparison for 2002 and 2025 Project Scenarios.....	73
7-3	Performance Comparison for 2002 and 2025 Project Scenarios and the Preferred Network.....	77
7-4	People Mover Service and Ridership, 1992–2004.....	80
7-5	Population and Employment with 1/4-Mile Access to Transit Routes, 2002, 2013, and 2025.....	80
7-6	Existing and Estimated Riders for 2002 Bus Routes and Service.....	80
7-7	Expected Results for People Mover Route Restructuring, 2003–2007.....	82
7-8	Mode Share and Purposes of Weekday Trips by Transit, 2002 and 2025.....	87

	Page
7-9 Economic Considerations for Transit Scenarios, 2002 and 2025.....	88
7-10 Priority List of Alaska Railroad Capital Projects for 2004 to 2010.....	96
7-11 Estimated Operating Outcomes for Commuter Rail.....	101
7-12 New Congestion Management Strategies Recommended, 1994.....	103
8-1 Recommended Road Improvement Projects.....	129
8-2 Recommended Pedestrian and Trail Projects – Improvements Associated with Recommended Road Projects.....	138
9-1 Recommended Plan Cost.....	141
9-2 Projected Plan Revenue Sources.....	142
9-3 Comparison of Costs and Revenues Available to Implement National Highway System LRTP Projects.....	142
9-4 Comparison of Costs and Revenues Available to Implement Non-National Highway System LRTP Projects.....	142
9-5 Transit Operation and Capital Funding.....	143
9-6 LRTP Cost and Revenue Allocation Summary, 2005–2025.....	146
9-7 Annual Highway Operation and Maintenance Funding.....	147
9-8 Annual Trail Maintenance.....	147
9-9 Alaska Railroad Corporation Capital and Operation Funding.....	147
11-1 Maximum 24-Hour Average PM-10 Concentrations by Year, 1996–2005.....	160

Figures

1-1 AMATS Boundaries.....	2
3-1 Land Use Policies from Anchorage 2020.....	13
4-1 Who Travels in Anchorage.....	21
4-2 Why People Travel.....	21
4-3 Home and Non-home Trips by Purpose.....	22
4-4 How People Travel.....	22
4-5 When People Travel.....	22
4-6 Household Trips per Day.....	23
4-7 Household Trips by Household Size.....	23
4-8 Household Trips by Workers in Household.....	24
4-9 Anchorage Residential Land Use, 1998.....	25

	Page
4-10	Anchorage Total Employment, 2002 26
4-11	Anchorage Retail and Related Employment, 2002 26
4-12	Traveler Residence Locations for All Home-Based Trips 27
4-13	Non-home Termini Locations of All Home-Based Trips 27
5-1	National Highway System 31
5-2	Road Ownership 32
5-3	Average Daily Traffic, 2002 32
5-4	Freeway Level of Service, 2002 33
5-5	Intersection Level of Service, Morning Peak Period, 2002 34
5-6	Intersection Level of Service, Afternoon Peak Period, 2002 34
5-7	Automobile Travel by Time of Day, 2003 35
5-8	People Mover Passenger Boardings and Service Hour Trends 37
5-9	Transfers to Reach Transit Destinations 37
5-10	Transit Trip by Purpose, 2002 37
5-11	Walking Trips by Purpose, 2002 38
5-12	Pedestrian Sidewalks, Paths, and Trails, 2002 39
5-13	Bike Trips by Purpose, 2002 40
5-14	Freight Generators and Attractors 42
5-15	Port of Anchorage Tonnage Trends, 1993-2002 43
5-16	Ted Stevens Anchorage International Airport Passenger and Cargo Trends, 1993-2002 43
5-17	Ted Stevens Anchorage International Airport Passengers, 2002 44
5-18	Alaska Railroad Freight Trends, 1998-2003 44
5-19	Regional Transportation Hubs and Corridors 45
5-20	Vehicle Ownership and Use, 1980-2004 46
5-21	Persons per Vehicle Entering Employment Sites During Morning Commute, 1992-2002 46
5-22	Vehicle Miles of Travel Saved by Transit, Carpool, and Vanpool, 1988-2002 49
6-1	Regional Population Growth 53
6-2	Projected Commuters from Chugiak- Eagle River and the Mat-Su Valley to Anchorage Employment 53
6-3	Anchorage 2002 and 2025 Employment by Industry Sectors 54
6-4	2002 Household Density 55

	Page
6-5 Anchorage Bowl Planning Areas.....	56
6-6 Household Growth by Traffic Analysis Zone, 2002–2025	56
6-7 Employment Growth, 2002–2025.....	58
7-1 Weekday Trips, 2002 and 2025.....	59
7-2 LRTP Goals and Objectives	61
7-3 Sample of the Evaluation Measures Matrix	62
7-4 Missing Links in the Anchorage Road Network	63
7-5 MOA OS&HP Functional Street Classifications of Anchorage Roads.....	64
7-6 Existing and Committed Road Network Projects.....	65
7-7 2023 LRTP Projects.....	65
7-8 Total Daily Performance of “No-Build” 2002 Road Network in 2025	67
7-9 Total Daily Performance of Existing Plus Committed Projects in 2025.....	67
7-10 Total Daily Performance of 2023 LRTP Projects in 2025.....	69
7-11 Total Daily Performance of Ingra-Gambell Streets Couplet and Seward Highway Corridor in 2025	69
7-12 Hourly Traffic Flow for International Airport Road.....	71
7-13 Additional Candidate Projects	72
7-14 Total Daily Performance of Additional Projects in 2025.....	74
7-15 Total Daily Performance of Additional Projects with Boniface International Airport Road Expressway in 2025	74
7-16 Recommended Road Projects.....	76
7-17 Total Daily Performance of Recommended Road Projects	76
7-18 2025 Average Daily Traffic for Highways, Arterials, and Collectors	78
7-19 People Mover Bus System, 2002.....	79
7-20 People Mover Route Restructuring Bus System.....	81
7-21 Estimated 2013 and 2025 Weekday Riders for Route Restructuring with Weekday Service at 30-Minute Frequencies	83
7-22 Estimated 2013 and 2025 Weekday Riders for Route Restructuring with Weekday Service at 15-Minute Frequencies	83
7-23 Accessibility Findings for North-South and East-West Primary Corridors.....	84
7-24 Advanced Technology Transit System Scenario.....	85

	Page
7-25 Comparison of Advanced Technology BRT and Other Route Restructuring and Service Enhancement Scenarios.....	86
7-26 2025 Transit Availability for Trips in 2025.....	89
7-27 Alaska Population Projection, Age 65 and Older, 2000–2029	90
7-28 AnchorRIDES Trends, 1995–2002	90
7-29 Pedestrian and Bicycle Crash Data, 2003–2004	93
7-30 Recommended Pedestrian and Bicycle System.....	94
7-31 2025 Truck Origin (Productions) by Traffic Analysis Zones.....	98
7-32 Road Projects That Enhance Freight Distribution	98
7-33 Managing Demand and Available Capacity on the Glenn Highway, 2025 Morning Peak Hour.....	100
7-34 Historical Gap Between Capacity Needs and Actual Projects for U.S. Cities, 1982–2001	102
7-35 1992-2002 Annual Peak Hours of Traveler Delay	102
7-36 Peak-Period Traffic Strains Road Capacities	108
8-1 Recommended Road Projects	113
8-2 Vehicles Removed Through Improved Connections	114
8-3 Benefits of the Connecting Corridor.....	116
8-4 Easing the Glenn Highway Commute	118
8-5 Recommended Transit Routes and New Service Areas	120
8-6 Recommended Pedestrian and Bicycle System.....	123
9-1 LRTP Revenue by Source.....	148
10-1 Project Decision-Making Process	157
10-2 Typical Schedule for a Federal-Aid Highway Requiring an Environmental Impact Statement.....	158
11-1 Source of CO Emissions in a Typical Anchorage Residential Area	159
11-2 Anchorage CO Trend.....	160
11-3 Projected CO Emissions from Anchorage Transportation Network	161
11-4 Projected PM-2.5 Emissions from Anchorage Transportation Network.....	162