

Contents

Glossary vii

Chapter 1: Context and Issues 1

 Introduction..... 1

 Planning Process and Context..... 3

 Plan Elements: Required and Desired..... 6

Chapter 2: Existing Conditions..... 11

 Land Use and Socioeconomic Characteristics of the Community 11

 Transportation System..... 16

Chapter 3: Community Participation..... 41

 Introduction..... 41

 Newsletter..... 41

 Transportation Related Surveys..... 41

 T2030 Website 45

 Stakeholder Interviews..... 46

 Public Meetings 46

 What Did the Public and Stakeholders Say? 47

 Public Comments Regarding Draft T2030 Long Range Transportation Plan 50

Chapter 4: Transportation Goals and Objectives..... 51

 Goal I: Support the Economic Vitality of the Region..... 53

 Goal II: Maintain, Expand and Enhance the Existing Street Network 54

 Goal III: Develop and Adopt Acceptable Levels of Service (LOS)
 Standards for City and County Roads..... 55

 Goal IV: Protect the Environment and Promote Energy Conservation 58

 Goal V: Emphasize Transportation System Safety.....59

 Goal VI: Increase Transportation System Security.....60





Goal VII: Coordinate Land Use and Transportation 60

Goal VIII: Preserve Existing Transportation Facilities and Promote Efficient System Management and Operations 62

Goal IX: Pedestrian and Bicycle Transportation System 63

Goal X: Public Transportation System 66

Chapter 5: Land Use and Transportation 69

 Relationship Between Land Use and Transportation Planning 69

 Future Land Use 70

 Travel Demand Model 71

Chapter 6: Roadway System Plan 75

 Future Roadway Deficiencies Analysis 75

 Analysis of Roadway Alternatives 79

 Recommended Roadway System Plan 83

 System Performance 89

 Environmental Mitigation Activities 91

 Recommended Roadway System Plan 93

 Planning for the Future: Major Thoroughfares Plan 102

Chapter 7: Transit System Plan 111

 Current and Future Conditions: Access to Transit 112

 Recommended Transit System Plan 113

Chapter 8: Bicycle System Plan 121

 History 122

 Bicycle Facility Needs 123

 Recommended Bicycle System Plan 125

Chapter 9: Pedestrian Plan 133

 Pedestrian Levels of Service 134

Pedestrian Districts and Areas 141

Recommended Pedestrian System Plan 143

Coordination of Pedestrian Planning In Lawrence 146

Chapter 10: Operation and Management Strategies..... 147

 Introduction..... 147

 Intelligent Transportation System (ITS) 147

 Congestion Management..... 149

Chapter 11: Intermodal, Freight, and Other Transportation 161

 Intermodal Facilities 161

 Freight Movement..... 162

 People Movement 164

 Recommended Actions..... 166

Chapter 12: Safety Plan..... 169

 Introduction..... 169

 Safety Analysis 170

 Recommended Actions..... 178

Chapter 13: Security Plan..... 179

 Introduction..... 179

 Potential Roles for the Lawrence/Douglas County MPO..... 179

 Recommended Actions..... 181

Chapter 14: Financial Plan..... 183

 Revenue Estimation Methodology 184

 Anticipated Revenues..... 192

 Costs of the Region’s Transportation Needs 196

 Illustrative Projects 203

 Recommended Financial Plan 204





Chapter 15: Impacts of the Plan207
 Environmental Review 207
 Title VI, Environmental Justice, and Socioeconomic Characteristics 208
 Floodplains and Wetlands..... 217
 Historic Environs Analysis 218
 Energy Conservation..... 219
 Transportation Planning and Livable Communities 220

Chapter 16: Implementation of the Transportation Plan223

Technical Appendix (Separate Document)

- Applicable Elements of the Long-Range Transportation Plan – technical memorandum
- Public Involvement Procedures
- Public Meeting Summaries
- Lawrence Travel Demand Model Assumptions
- Roadway Alternatives Evaluation and Prioritization Spreadsheets
- MPO Functional Classification Maps (T2025 Figures 29 and 30)

Figures

Figure 1.1 – Study Area and Related Planning Boundaries 5
 Figure 2.1 – Existing Land Uses (map) 14
 Figure 2.2 – Existing Land Uses (chart) 14
 Figure 2.3 – Historical Growth Trends 15
 Figure 2.4 – Lawrence Gateways..... 17
 Figure 2.5 – Lawrence Thoroughfares Map 20
 Figure 2.6 – 2005 Roadway Congestion..... 22
 Figure 2.7 – Commuting Patterns 23
 Figure 2.8 – 2002-2006 Total Accidents..... 24
 Figure 2.9 – Lawrence Transit Bus Routes 26
 Figure 2.10 – Lawrence Transit System Ridership..... 27

Figure 2.11 – Existing Bicycle Facilities 28

Figure 2.12 – Truck Routes 33

Figure 2.13 – Lawrence Municipal Airport Layout Plan 39

Figure 5.1 – T2030 Travel Demand Model Scenario 71

Figure 6.1 – Regional Travel Demand Model Process 77

Figure 6.2 – 2005 Roadway Level of Service 78

Figure 6.3 – Future Roadway Level of Service 78

Figure 6.4 – Roadway Capacity Scenarios 80

Figure 6.5 – Recommended T2030 Roadway System Plan 87

Figure 6.6 – Predicted Level of Service T2030 Roadway System Plan 90

Figure 6.7 – Cross Section of K-10 (SLT) with Mitigation 91

Figure 6.8 – Environmental Mitigation Activities K-10(SLT) 92

Figure 6.9 – Proposed Thoroughfares Map 104

Figure 6.10 – 2030 Major Thoroughfares Map 105

Figure 6.11 – Roadway Functional Classification 106

Figure 7.1 – Lawrence Transit System Bus Routes 111

Figure 8.1 – T2030 Bicycle System Plan 131

Figure 9.1 – Sidewalk Condition Map 133

Figure 9.2 – Pedestrian Priorities 134

Figure 9.3 – Pedestrian Priority Districts in Lawrence 141

Figure 10.1 – Congestion Management Process 151

Figure 12.1 – Traffic Accident Locations 170

Figure 15.1 – Minority Concentrations 211

Figure 15.2 – Low-Income Concentrations 212

Figure 15.3 – T2030 New and Widened Roadways 214

Figure 15.4 – T2030 Bicycle Improvements & Pedestrian Districts 215

Figure 15.5 – T2030 Lawrence Transit System 216

Figure 15.6 – Floodplains and Wetlands 217

Figure 15.7 – Historic Environs Analysis 218





Tables

Table 2.1 – 2002-2006 Motor Vehicle Accidents	24
Table 4.1 – Comparison of T2030 Goals and the SAFETEA-LU Planning Factors.....	67
Table 5.1 – Current and Forecasted Socioeconomic Data	72
Table 6.1 – Committed Projects.....	76
Table 6.2 – Percent Lane-miles by Level of Service	78
Table 6.3 – Recommended T2030 Roadway System Plan	88
Table 6.4 – Performance Characteristics for Roadway Scenarios.....	89
Table 6.5 – Urban Street Guidelines	108
Table 6.6 – Rural Roadway Guidelines	109
Table 9.1 – Level of Service Standards in Pedestrian Use Areas.....	143
Table 10.1 – Operation & Management Strategies - What’s Right for Lawrence?	157
Table 12.1 – Traffic Accident Numbers and Severity 2002-2006	171
Table 12.2 – General Locations of Motor Vehicle Accidents 2002-2006.....	172
Table 12.3 – Motor Vehicle Accidents Collision Types 2002-2006.....	173
Table 12.4 – Motor Vehicle Accidents Contributing Circumstances 2002-2006	175
Table 14.1 – Projected Revenues for T2030.....	192
Table 14.2 – Recommended T2030 Roadway System Plan	197
Table 14.3 – Recommended T2030 Bridge Improvements.....	198
Table 14.4 – Recommended T2030 Road Maintenance.....	198
Table 14.5 – Recommended T2030 Transit System Plan.....	199
Table 14.6 – Recommended T2030 Bicycle & Pedestrian System Plan	200
Table 14.7 – Illustrative Projects.....	203
Table 15.1 – Socioeconomic Characteristics	210
Table 15.2 – T2030 Environmental Justice Analysis.....	213
Table 16.1 – Actions and Policies for Implementing T2030	225