



Longmont Roadway Plan



Longmont Roadway Plan

Prepared for:

City of Longmont

Public Works and Natural Resources Department

385 Kimbark Street

Longmont, CO 80501

Prepared by:

Muller Engineering Company

777 South Wadsworth Boulevard

Suite 4-100

Lakewood, Colorado 80226

In association with:

Felsburg, Holt and Ullevig

6300 S. Syracuse Way, Suite 600

Centennial, CO 80111

Final Report

August 22, 2014

TABLE OF CONTENTS

1	INTRODUCTION.....	1-1
1.1	PURPOSE AND BACKGROUND	1-1
1.2	PROJECT SCOPE	1-1
1.3	COORDINATION WITH TRANSPORTATION ADVISORY BOARD AND CITY COUNCIL.....	1-1
2	TRAVEL DEMAND MODELING.....	2-1
2.1	DAILY VOLUME FORECASTS.....	2-1
2.2	MODEL VALIDATION.....	2-1
2.3	LAND USE REVISIONS.....	2-1
2.4	NETWORK REVISIONS.....	2-2
2.5	DAILY TRAFFIC FORECASTS.....	2-3
3	EVALUATION OF PROJECTS.....	3-1
3.1	EVALUATION CRITERIA.....	3-1
3.2	EVALUATION OF CORRIDOR PROJECTS	3-1
3.3	EVALUATION OF INTERSECTION PROJECTS	3-2
4	CONCEPT DESIGNS AND COST ESTIMATES.....	4-1
4.1	CONCEPT DESIGNS	4-1
4.2	COST ESTIMATES	4-1
5	CONCLUSIONS AND RECOMMENDATIONS	5-1

APPENDICES

- APPENDIX A – 2010 AND 2035 LAND USE DATA
- APPENDIX B – INTERSECTION CONCEPT LAYOUTS
- APPENDIX C – INTERSECTION CONSTRUCTION COST ESTIMATES
- APPENDIX D – CORRIDOR CONSTRUCTION COST ESTIMATES
- APPENDIX E – HOVER STREET / SH 119 (DIAGONAL HIGHWAY) ALTERNATIVE CONCEPT DESIGN
- APPENDIX F – POLICY T-2.2 (ROADWAY SYSTEM) FROM LONGMONT COMPREHENSIVE PLAN
- APPENDIX G – PACE STREET CONNECTION ALTERNATIVES

LIST OF FIGURES

Figure 2-1: 2010 Average Daily Traffic Volumes	2-4
Figure 2-2: 2035 Base Plan Average Daily Traffic Volumes	2-5
Figure 2-3: 2035 Base Plan Volume to Capacity (v/c) Ratio.....	2-6
Figure 2-4: 2035 Preferred Alternative Average Daily Traffic Volume	2-8
Figure 2-5: 2035 Preferred Alternative Volume to Capacity (v/c) Ratio.....	2-9
Figure 3-1: Corridor Evaluation.....	3-4
Figure 3-2: Proposed Corridor Projects	3-5
Figure 3-3: Intersection Evaluation	3-6
Figure 3-4: Proposed Intersection Projects	3-7

LIST OF TABLES

Table 2-1: Longmont and Surrounding Communities' Land Use	2-2
Table 2-2: Committed Construction Projects.....	2-2
Table 2-3: 2035 Preferred Alternative Improvement Projects	2-3
Table 3-1: Recommended First Priority Corridor Projects.....	3-2
Table 3-2: Recommended First Priority Intersection Projects.....	3-3

1 INTRODUCTION

1.1 PURPOSE AND BACKGROUND

The primary purpose of the Longmont Roadway Plan was to perform a technical analysis of the City's street system and to identify future roadway needs and improvements. Additionally, the Roadway Plan provides data and information for future updates to the Longmont Area Comprehensive Plan (LACP) and the Multi-Modal Transportation Plan (MMTP), but it is not intended to provide formal updates to these plans. The LACP is a balanced guide for development and growth and recognizes the MMTP as a support document with transportation related goals, policies and strategies. Longmont's initial MMTP was adopted by City Council on July 26, 2005.

Results of the Roadway Plan will also be used to identify candidate projects and estimated costs to help secure funding from various sources including but not limited to:

- Capital Improvement Program (CIP)
- Federal and state funding opportunities
- Street fund sales tax extension
- Future financial evaluation of Transportation Community Investment Fee (TCIF)

1.2 PROJECT SCOPE

The following primary work tasks for this study included:

- Update the Longmont / Denver Regional Council of Governments (DRCOG) travel demand model, including land use and roadway network data
- Perform alternative model runs to develop 2035 traffic projections and evaluate potential improvements
- Recommend appropriate number of lanes on arterial and collector roadways, and identify missing roadway links
- Recommend potential improvements at arterial intersections, including conceptual drawings
- Develop planning-level cost estimates for recommended corridor and intersection improvements

1.3 COORDINATION WITH TRANSPORTATION ADVISORY BOARD AND CITY COUNCIL

During the course of the project, several meetings were held with the Transportation Advisory Board (TAB) and City Council to provide updates and gather input from board members and elected officials. Three meetings were held with TAB during the early, middle, and final stages of the project. The TAB forwarded their recommendations to City Council and those recommendations were approved at the April 29, 2014 City Council Study Session.