

S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

The *Fort Collins Transportation Master Plan 2004* serves a variety of purposes. It is a vision document that defines the long-term transportation system that Fort Collins needs in the future. The plan also provides policy direction for how decisions regarding the implementation of the transportation system should occur. It is also a framework document that serves as a comprehensive reference guide regarding transportation issues in Fort Collins. Additionally, the plan provides priorities for implementing projects to meet short-term deficiencies while working towards the ultimate transportation system the City is trying to achieve. Finally, the plan identifies transportation issues that need to be resolved as part of the next plan update or under specific department work plans.

As in the 1997 plan, the *Fort Collins Transportation Master Plan 2004* reaffirms the City's commitment to providing a multi-modal transportation system. As the City continues to grow and mature, it has witnessed continued increase in vehicle trips, impacting the existing street network and causing severe congestion on many of the City's streets. Fort Collins remains committed to providing a more balanced transportation system, providing citizens with transportation choices to continue maintaining its high quality of life. This plan also provides updates to the various modal plans that have been developed and also serves as a means to more clearly define other transportation ideas like the concept of Enhanced Travel Corridors.

The plan provides the goals, principles, and policies that will be used to shape the transportation system today and into the future. The plan provides a look at existing conditions, changes since 1997, and what the future may look like based on current practices. This plan also provides recommendations for future work items that the City may want to pursue to enhance transportation planning and implementation efforts.

This plan discusses issues facing the City in terms of limited funding, increased population growth, and policies that may need to be addressed to ensure the success of the transportation system. The plan incorporated the most recent demographic data and used the City's comprehensive transportation demand model to test and evaluate alternatives. New methodologies were created to develop prioritized capital improvement project needs by mode. Existing and future financial issues were evaluated to provide a picture of how things look today and how things may look if the City is unsuccessful in developing other funding means.

S.2 PUBLIC AND AGENCY INVOLVEMENT

An important aspect of the TMP was an extensive public and agency outreach process that included open house public meetings, one-on-one stakeholder meetings, the formation of a Citizen Advisory Committee (CAC), small group meetings, and regular meetings with City boards and commissions. Public forums including open houses and workshops were conducted throughout the process to ensure all issues from the public were heard.

In addition to the meetings, individual outreach meetings were held with a variety of stakeholders throughout the study. These meetings were held to develop a clearer understanding of the

specific issues various interest groups had and to keep them informed about the progress of the study. These meetings included several discussions and presentations with the Fort Collins Chamber of Commerce Legislative Committee, the Fort Collins Kiwanis, and Citizen Planners.

In terms of agency coordination, numerous City departments and staff contributed significantly to the development of this plan. Also, the City's Transportation Board worked as an ad-hoc citizens committee and discussed issues related to the project on a monthly basis as part of their regular meetings.

S.3 GOALS, PRINCIPLES, AND POLICIES

In 1997, *City Plan* and the *Transportation Master Plan* (TMP) developed a vision, goals, principles, and policies for how transportation and land use planning should occur in the City of Fort Collins. As part of developing these plans, the vision, goals, principles and policies were revisited to see if they were still consistent and represent the future of the City. This process started by defining characteristics for Fort Collins that define what the City should look like now and in the future. These characteristics served as the basis for refining the vision, goals, principles, and policies. Revisions to these items then helped shape the direction for changes in other policy related issues.

In addition to the revisions to the goals, principles, and policies, several issues exist that the City will need to address in the future. These relate to how the City wants to deal with issues related to Adequate Public Facilities, continued growth in vehicle miles traveled (VMT), maximum street and intersection geometry, constrained street corridors, law enforcement, and development of a transportation system performance measurement system. These issues are discussed in general terms as part of this plan, recognizing that the City will need to consider these items on more detail as implementation items resulting from this plan.

S.4 TRAVEL DEMAND MODEL

In order to develop an understanding of future needs for the transportation system in Fort Collins, the City's comprehensive TransCAD transportation demand model was used. This model uses land use, population, and employment data about Fort Collins and the region to estimate trips, travel patterns, mode choices, and traffic volumes. This information is in turn used to estimate street congestion, transit ridership, vehicle miles traveled (VMT), air quality impacts, and other measures of transportation system performance. The most current version of the Environmental Protection Agency's (EPA) air quality model (MOBILE6) was used in cooperation with the model to evaluate air quality results for the various scenarios. To properly consider travel between Fort Collins and nearby communities, the travel model covers an area including Fort Collins, Loveland, Greeley, and smaller cities in the North Front Range region.

Considerable effort has been taken to ensure that the model conforms to industry standards and uses methodology that is considered "Best Practice." During the federal funding application process for the Mason Transportation Corridor, the Fort Collins model was scrutinized and accepted by some of the country's top modeling experts. Separately, efforts were undertaken to ensure consistency with a similar model used by the North Front Range Metropolitan Planning

Organization (NFRMPO). This stringent quality control process has ensured that the model is a reliable, defensible tool.

The model served as a valuable tool to support the variety of analyses that were conducted including:

- Testing the potential for modifying the Growth Management Area (GMA) boundary
- Evaluating the effects of building out of congestion
- Evaluating the benefits of modifications to the Master Street Plan (MSP)
- Testing the benefits of regional and interregional transit connections
- Evaluating the performance of the fiscally constrained capital improvement plan (CIP)

The model is a tool that was not available when the 1997 plan was developed. It provided strong technical data to support the decision-making process.

S.5 MASTER STREET PLAN

The Master Street Plan (MSP) is a map-based representation of the City of Fort Collins' long-range vision of its major street network. First implemented and adopted in 1981, the MSP is intended to reflect the functional class (the category of street, e.g. arterial, collector, etc.) of the ultimate street network in the City of Fort Collins. The MSP also helps to guide the development of the future street system for the City and its GMA. The MSP provides a reference for planning and layout of existing and future development's key transportation and circulation connections.

Several amendments to the MSP are being proposed as part of this plan. Some of these proposed changes reflect road network changes that have come about as part of plans approved since 1997's original *City Plan* and TMP. Some changes reflect "clean up" items that address slight mapping errors or reflect changes in thought as to the feasibility of construction of particular facility types. In response to concerns voiced recently by the Transportation Advisory Board and members of City Council, the MSP map will suggest changing the way it portrays regional roadways outside of the GMA boundary to more clearly reflect that the City of Fort Collins is financially responsible only for those streets inside the GMA boundary. Finally, some of the recommended changes to the MSP are a result of new travel forecast model analysis as part of this update to the plan. Proposed changes to the MSP include:

- Correct mapping error on I-25 Frontage Road west of I-25 from Mulberry to Prospect.
- Change the way in which regional roadways outside of the Fort Collins GMA are represented on the MSP.
- Change Laporte Avenue, Wood Street to Taft Hill Road, from a four-lane arterial to a collector street.
- Change Country Club Road, State Highway 1 to Larimer County Road 11, from a minor arterial to a collector street.

- Change McClelland Drive, Drake Road to Horsetooth Road, from a minor arterial to a collector street.
- Convert the Mason and Howes Street one-way couplet back to two-way, minor arterial streets.
- Change Carpenter Road (LCR-32), I-25 to College Avenue (US 285), from a four-lane arterial to a six-lane arterial street.
- Amend MSP to reflect road network recommendations from adopted local and regional plans. These improvements include:
 - Add a new collector street, from LCR-52 to Mulberry Road, to serve anticipated development east of I-25
 - Extend Carriage Parkway as a collector street south to Prospect Road
 - Upgrade Mulberry, Prospect, and Harmony Roads, from I-25 to LCR-5, from minor arterial to four-lane arterial designation
 - Upgrade LCR-5, from Mulberry Road to LCR-30, from a collector street to a four-lane arterial designation. Those portions of the LCR-5 Corridor outside of the Fort Collins GMA will be represented in a different line-style and are shown for regional context and consistency only.

S.6 ENHANCED TRAVEL CORRIDORS

Enhanced Travel Corridors (ETCs) were previously discussed and defined in *City Plan* as uniquely designed corridors that are planned to incorporate high frequency transit, bicycling, and walking as part of the corridor. As such they were meant to provide connections between major activity centers like downtown, CSU, shopping destinations on College Avenue and Harmony. In some corridors, ETCs may need to be incorporated with the street alignment depending upon right-of-way opportunities and constraints.

Four ETCs have been defined as part of the *City Plan* Update and the *Fort Collins Transportation Master Plan 2004*. These corridors include the Mason Transportation Corridor (MTC), Harmony Road Corridor, North College/Conifer Street Corridor, and Timberline Road/Power Trail Corridor. The Timberline Road/Power Trail is a new ETC that was identified during the analysis completed for this plan. These four ETCs complete a loop through Fort Collins connecting activity centers in and around Downtown, CSU, College Avenue, Harmony Road and the Mountain Vista subarea.

S.7 ENVIRONMENTAL CONSIDERATIONS

The City of Fort Collins continues in its goal to be a steward to the environment. Both at the government and community level, there is a great sensitivity to the footprint that Fort Collins puts on its local environment. An overall goal is to maintain or improve environmental conditions, while having an efficient multi-modal transportation system. Achieving this goal will require a commitment to mitigate the adverse environmental impacts of transportation projects, development and use interdisciplinary teams from diverse City departments and

advisory boards in transportation planning and project design, and consideration of environmental relationships throughout the transportation planning process.

Another idea that is at the forefront of consideration for environmental resources is context-sensitive design/solutions. Agencies like the Federal Highway Administration (FHWA) and the State Departments of Transportation are developing policies and procedures for integrating the local surroundings into the design of transportation projects. The City should continue its policy to first avoid, then minimize, then if necessary, mitigate any environmental impacts related to transportation projects as one aspect of providing context sensitive solutions. Other considerations include the community setting or character and a focus on public involvement in the planning process in developing a solution that fits its surroundings.

S.8 MOBILITY AND ACCESS

One of the focus areas for the *Fort Collins Transportation Master Plan 2004* is to illustrate how all travel modes work together to form a seamless transportation system. As part of the plan development, specific planning documents for each travel mode including transit, bicycle, pedestrian, rail, and other transportation related facilities such as parking and the City's Advanced Traffic Management System (ATMS) were reviewed and updated. This City's Smart Trips Transportation Demand Management program was also reviewed for consistency with other transportation efforts. These plan updates formed the basis for recommended policy changes to the goals, principles and policies with regard to specific modes and the development of a list of system deficiencies.

S.9 IMPLEMENTATION

A significant part of the TMP included the development and prioritization of capital improvements for the various transportation modes, financial analyses, and the development of a fiscally constrained capital improvement plan (CIP).

A list of transportation system deficiencies including street, bicycle, pedestrian, transit, rail crossing, parking, and signal system facilities was developed to show improvements necessary to achieve the vision set forth in the MSP, the Transfort Strategic Plan, and other projects listed in the City's unfunded capital improvement plan (CIP). This list was also input into the City's Geographical Information System (GIS) database to provide a visual representation of the overall needs. Capital cost estimates were updated for each list by mode (operations and maintenance costs were not included). A system was also developed to cross-reference projects between modes to ensure that project costs were not double-counted.

In order to prioritize this needs list, a ranking methodology was developed for each mode that used existing data sources including recent trend data, accident history, existing traffic conditions, and the ability of the improvement project to provide needed linkages to the rest of the transportation system. These criteria were used to evaluate the conditions of the current facilities. Projects were then prioritized by mode based on the ranking criteria. The intent of the prioritization process was to develop an objective system that uses available data to compose a prioritized list of projects that represents immediate versus future needs. The goal was also to

provide a system that leaves some flexibility for some subjectivity, while eliminating the potential for the process to become a more political activity.

As a part of the CIP development process, a financial analysis was completed to forecast funding levels through the year 2025 based on existing and anticipated revenue streams for capital projects. Using this financial analysis, projects were then matched to available funding sources to develop the fiscally constrained CIP list.

The results of the financial analysis clearly identify that the City needs to find a dedicated funding source for transportation capital. There are currently approximately \$1.1 billion in necessary transportation capital improvements to build what is included in the Master Street Plan and long-term transit plan.

S.10 FUTURE ACTION ITEMS

Several action items were identified during the development of the TMP. These items include collaboration type efforts between City departments, actions that Council may need to resolve, and new work elements that the City should consider as future work activities. These action items include:

- Review of Adequate Public Facilities Issues
- Review use of Vehicle Miles Traveled (VMT) as a *City Plan* trigger
- Establish maximum street and intersection geometrics
- Develop design guidelines for constrained areas
- Communicate standard protocol for assessing whether roundabouts should be considered as viable solution at a specific intersection
- Develop a transportation performance measurement system
- Develop a design manual for integrating land use, urban and design
- Re-evaluate Street Oversizing Program to fund grade-separated crossings
- Develop Corridor Master Plans for all remaining Enhanced Travel Corridors
- Update the Bicycle Plan and Pedestrian Plan
- Create a framework to develop interdisciplinary teams to review projects
- Review current design processes for consistency with Context Sensitive Solution principles
- Evaluate potential funding sources for transportation capital
- Refine prioritization process for developing capital improvement plans

These action items reflect that ideas and concepts that were developed throughout the development of the TMP. Ideas for action items came from a variety of sources including City Council, Transportation Board, Transportation Services Area management and staff, Air Quality Advisory Board, Natural Resource Advisory Board, and others. City staff should develop a priority list for these action items and begin including them in current and future work elements.

Table of Contents

S.0 Executive Summary 1

S.1 Introduction..... 1

S.2 Public and Agency Involvement..... 1

S.3 Goals, Principles, and Policies..... 2

S.4 Travel Demand Model 2

S.5 Master Street Plan 3

S.6 Enhanced Travel Corridors 4

S.7 Environmental considerations..... 4

S.8 Mobility and Access 5

S.9 implementation 5

S.10 Future Action Items 6