



Community & Strategic Planning

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Planning Commission Staff Report

October 22, 2012

Agenda #: Regular Agenda - #1

Title: Update of 2030 Transportation Plan to 2035 Transportation Plan

Applicant: City of Loveland
Public Works Department

Location: City of Loveland Growth Management Area (GMA)

Presenters: *David Klockeman, PE, City Engineer*
Bill Fox of Fox Tuttle

Staff Planner: Karl Barton, AICP

Staff Recommendation

Subject to additional evidence presented at the public hearing, City staff recommends the following motion:

Recommended Motion:

Provide input and direction for continuation of process for updating the 2030 Transportation Plan to 2035. The 2035 Transportation Plan update will be brought back to the Planning Commission for a recommendation to City Council for approval.

Summary of Analysis

The primary purpose of the Transportation Plan is to provide a thorough yet easily understandable document that guides transportation decision making toward a future desirable to the community of Loveland. The 2030 Transportation Plan was completed in 2007. An update of this plan was needed to address the changes the community has experienced in recent years. The 2035 Transportation Plan is an update of the 2030 Transportation Plan's look at all modes of transportation—bike, pedestrian, transit, and automobile – and is an update to the long-term plan for improving Loveland's transportation systems. The plan includes updated recommendations, policies, and strategies to ensure that a high quality of life is preserved over the next 23 years.

The 2035 Transportation Plan is not a detail-oriented document. It is intended to establish transportation policies and to identify future improvement projects without determining the actual design. The plan lists the policies and goals City staff and elected officials will use for transportation decision-making over the next 23 years.

There is an important link between land use and transportation that warrants Planning Commission review of the document at this study session.

As part of the approval process, the 2035 Transportation Plan will be presented to the Planning Commission for review and recommendation because it is a functional component to the 2005 Comprehensive Master Plan.

I. SUMMARY

The primary purpose of the Transportation Plan is to provide a thorough yet easily understandable document that guides transportation decision making toward a future desirable to the community of Loveland. The 2030 Transportation Plan was completed in 2007. An update of this plan was needed to address the changes the community has experienced in recent years. The 2035 Transportation Plan is an update of the 2030 Transportation Plan's look at all modes of transportation—bike, pedestrian, transit, and automobile – and is an update to the long-term plan for improving Loveland's transportation systems. The plan includes updated recommendations, policies, and strategies to ensure that a high quality of life is preserved over the next 23 years.

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II. ATTACHMENTS

1. PowerPoint Presentation
2. 2035 Transportation Plan Draft
3. Recommended 2035 Capital Improvements Map

III. BACKGROUND

The 2005 Comprehensive Plan recognizes the importance of planning for the transportation system. It includes *Guiding Principle 10B: Plan a safe and efficient, coordinated, and convenient multi-modal transportation system that serves the current needs of the community and establishes the foundation for a transportation system that is sustainable for future generations.*

There is an obvious link between the transportation network and land use. The Comprehensive Plan recognizes this by referencing transportation related issues in many of the Land Use Goals and Objectives, which are used to evaluate development decisions. For example, Residential Land Use Goal and Objective RES1:1.A states, "A consistent & balanced relationship between the Land Use pattern & capacity of streets, utilities, and community services should be met so that those systems are not overburdened."

Because of this link, Planning Commission Review of the update is very important

In the 2011 Implementation Plan, the Transportation Advisory Board includes Objective 10B.1.IP1: Review and amend the current transportation system plan within the community as well as it relates to the North Front Range by reviewing the anticipated growth patterns within the community in order to design and construct infrastructure improvements that address the long-term needs concerning growth, land use, and sustainability, within the 2012 calendar year. This update to the Transportation Plan accomplishes this objective.

IV. 2035 TRANSPORTATION PLAN HIGHLIGHTS

The following is a synopsis of the proposed plan components that will comprise the 2035 Transportation Plan.

Why Update the Transportation Master Plan?

While there are many benefits associated with Loveland's population growth and development, the transportation system is constantly looked at relative to not growing fast enough to accommodate the new demand. Each year, new streets are constructed and widened, but the overall street network requirements change over time as travel patterns change as well as the location of new residential, commercial and industrial facilities. Although the majority of this fits well into an overall system, specific details of the needs evolve over time. As a result, Loveland will continue to need to provide new transportation facilities and make difficult decisions about where, when, and how to accommodate traffic. The 2035 Transportation Plan updates the results of the 2030 Transportation Plan by looking at past, current and projected trends in order to provide direction and guidance for Loveland's transportation future.

Transportation Plan goals (numbered for reference, not priority)

1. Plan a safe, efficient, continuous, coordinated and convenient **multi-modal transportation system** that serves the needs of the community now and establishes the foundation for a transportation system that is sustainable for future generations.
2. Recognize the important **relationship between land use and transportation** and develop appropriate policies that promote a long-term sustainable transportation system.
3. Develop transportation plans and policies that recognize the importance and **value of the physical environment**.
4. Develop transportation plans that sustain the **economic vitality** of the community consistent with the Loveland Comprehensive Master Plan.
5. Develop street access policies that balance the needs of **property access** with safety, community mobility, and street capacity.
6. Develop **long-term travel demand management** policies that will allow the street system to maintain acceptable service levels far into the future.
7. Investigate all reasonable **funding strategies** and develop a plan and an implementation strategy that recognizes current funding realities and limitations.
8. Recommend a process for future **review and amendment** of this document, including the possible creation of a Transportation Policy Advisory Committee. (Completed with 2030 Transportation Plan)

Item 1. Review, Analyze and Update Data

As the 2035 Transportation Plan is an update to the 2030 Transportation Plan, a significant amount of the data had already been gathered. Therefore, the majority of the effort was to review the existing data, working closely with the City's Community and Strategic Planning Division (Karl Barton in particular) as well as coordinate with the North Front Range MPO for the regional impact on Loveland.

The update of the Model included:

- Looking at local and regional land use information
- Creating data for the Traffic Analysis Zones (TAZ's)
 - Region divided into logical sections in order to input land use information
 - Land Uses identified
 - Residential
 - Retail/Commercial
 - Office
 - Industrial
 - Current information (where are we at today)
 - Build-Out Information (If entire City is built-out according to the current Land Use Plan, what would Loveland look like)
 - Projections made for 2035 (What will City look like in 2035)
 - Trends Likely Development is plan basis as determined for 2030 Transportation Plan
- Transportation Network information entered
 - Street Classifications
 - Arterials
 - Major and Minor
 - Collectors
 - Major and Minor
 - Number of lanes for each roadway section
- Model is calibrated using existing road system and land use information
 - Results are compared to existing traffic counts until good match is realized
- Anticipated future road network is entered (what do we think we will need in the year 2030)
- 2035 Land Use information is entered for each TAZ
- Model is run
 - Gravity Model - Residences produce trips and Commercial/Retail, Office, and Industrial uses attract Trips
 - Iterative Model – Runs through processes until all of the trips are accounted for
- Model is revised after review in order to adjust network
- Model is re-run
- Results are reviewed
- Recommendations are developed

Level of Service

In 1965, the Transportation Research Board released the Highway Capacity Manual with the objective of defining a uniform measurement for determining how well a transportation system operates. The product of this work effort was the development of a grading system from A to F, where A is defined as excellent levels of service and F is failure. Although there have been a number of updates to the Highway Capacity Manual since its first release in 1965, the measurement of level of service is typically defined by travel time and delay. This travel time and delay is calculated for intersections through delay equations which examine factors such as peak hour intersection turn volumes, lane configurations and signal timing. Levels of service for arterials are typically based on a volume/capacity ratio where the existing or projected volume of a roadway is divided by the roadway's capacity. Whereas the methodology for determining level of service is relatively consistent between various communities and states, the threshold of what is determined as acceptable varies.

The City of Loveland has established high standards for its street network. In 1996, the City Council adopted a LOS C standard for arterial streets, LOS B for collectors, and LOS A for local streets.

After review of the various impacts related to Level of Service (LOS), it has been concluded to follow current City policies relative. That is:

- Continue LOS standards for City Streets
- Change to LOS D for US Highways (US 34 and US 287)
 - Recognizes that these regional highways double as commercial corridors through Loveland and tend to attract higher levels of traffic
 - Motorists expect to encounter slower traffic with a bit more congestion due to the mix of use and high level of local access
 - Recognizes that, regardless of traffic volume, routes are limited and City policy puts upper limit of 6 lanes (3 lanes in each direction) on roadways
 - Consistent with CDOT standards
 - Consistent with other entities standards along these regional corridors
 - Should not result in motorists diverting to other roadways in attempt to bypass congestion
- Hold integrity for link volumes (focus on street capacity for sections between intersections) with street widening phased as necessary
- Control Access (limit accesses to allow for through movement as much as possible)
- Improve intersections as necessary (phase in control such as stop signs, additional stops signs, traffic signals or roundabouts, and auxiliary lanes)

Project Cost Estimates

As part of the development of the 2035 Transportation Plan, detailed cost estimates were all recalculated for the variety of potential street improvements across the City. This full update was the direction given by City Council as part of the approval for the 2030 Transportation Plan, and included all roadway sections, intersections and traffic signal cost estimates.

Historic Funding Sources

The historic funding sources for Transportation Projects come from the following four areas:

- Capital Expansion Fees (Impact Fees)
 - Cost of Trips anticipated due to new growth
- Street Equivalent
 - Collector
- Other
 - Funds from Outside Sources (CDOT, Federal Government)
- General Fund
 - City's Share for existing traffic, Street Equivalent for land already developed, and Pass Through or External to External Traffic (E-E)

Most projects have a combination of funding from two or more of the above list. The percentage from each fund depends on the specific project make-up.

With the adoption of the Master Financing Agreement for Centerra, an additional funding source was created in 2004, and included in the 2030 and 2035 Transportation Plans:

- Centerra Metro District

Item 2. So, what do we build and how much will it cost?

See Attachment 3 for Recommended 2035 Capital Improvements.

DRAFT CIP SUMMARY BY FUNDING SOURCE		
	2035 Plan	2030 Plan
City Share	\$33,934,009	\$47,272,272
CEF Share	\$129,226,011	\$123,038,745
Street Equivalent	\$44,009,280	\$27,959,800
CDOT Share	\$37,784,700	\$51,305,150
Subtotal	\$244,954,000	\$249,575,967
Centerra - Local	\$117,144,630*	\$100,853,500
Centerra - Regional	\$101,500,000*	\$100,000,000
Subtotal	\$218,644,630*	\$200,853,500
TOTAL	\$463,598,630*	\$450,429,467

* Remaining costs adjusted to 2012 dollars

Item 3. Community Outreach and City Council, Board and Commission Involvement

Representatives from the Transportation Advisory Board have been intimately involved in the update of the data and assumptions related to the 2035 Transportation Plan. Going forward, the

Transportation Advisory Board as well as the Planning Commission and Construction Advisory Board will be involved. The 2035 Transportation Plan has been presented to City Council at a Study Session and is intended to be presented once again at a Council Study Session in November. After visiting the other Boards and Commissions, the 2030 Transportation Plan is anticipated to culminate with the proposed adoption by City Council in December 18th.

In addition, public outreach through an open house and a Planning Commission Presentation will be completed in November.

Item 4: Action Plan Forward

- Today - October 22nd – Planning Commission Study Session
- October 24th – Construction Advisory Board Study Session
- November 5th – TAB – Report on other meetings
- Additional Plan Revisions by Staff
- November 26th – Planning Commission Public Hearing and Recommendation to Council
- November 27th – Council Study Session
- December 3rd – TAB – Final Document / Recommendation to Council
- December 18th - Council Public Hearing and Adoption

V. FINDINGS, CONCLUSIONS, AND RECOMMENDATION

Findings and Conclusions

Staff believes the 2035 Transportation Plan is an update to the 2030 Transportation, that the process being undertaken is appropriate, and that upon integration of the input from City Council, various Boards and Commissions, and citizens, should be adopted later this year in order that it continue to be a strong tool in the guidance for the transportation infrastructure of Loveland.

Recommendation

Staff recommends that the Planning Commission provide input in order that the process of completing the 2035 Transportation Plan may continue.