

CHAPTER 4

VISION, GOALS, OBJECTIVES, AND EVALUATION CRITERIA

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Introduction

A major objective of the Connections 2040 transportation planning process was to include meaningful public input in the Plan development phase and a transparent evaluation process for prioritizing projects and developing a fiscally constrained Long Range Transportation Plan.

It is also important to note that the preparation of the Corridor MPO Long Range Transportation Plan requires a local application of the SAFETEA-LU planning factors. As will be discussed, it is mandatory that these planning factors be incorporated into the planning process for development of a preferred, fiscally constrained long range transportation plan.

This chapter begins with an overall Vision Statement for Connections 2040. This is followed by the requirements of SAFETEA-LU and the eight planning factors. The Connections 2040 goals, developed from the SAFETEA-LU planning factors and the public and policy makers weighting for each goal, are then presented. Measureable objectives are also presented for each goal. The final step of the evaluation process is prioritizing projects based on evaluation criteria and selecting a fiscally constrained plan.

Vision Statement

The Corridor MPO region, state, and nation are at a pivotal point in transition. As a nation, we are recovering from a national recession with a new president and an administration emphasizing opportunity, livability, and climate change. The state is seeing very low population growth and an aging population with changing transportation needs. Locally, the Corridor MPO region is recovering from a devastating flood and trying to define itself.

To address these major changes, Connections 2040 has defined a vision for the long range transportation plan. The vision anticipates:

- Smarter transportation through land use and transportation planning.
- Becoming a place of attraction for regional growth and economic vitality.
- Efficient mobility to minimize transportation and infrastructure cost.
- Creating a better place to live that is compatible with our environment.

This vision statement is as follows:

VISION: Create a pre-eminent integrated land use and multi-modal transportation system that meets sustainable regional growth expectations, supports economic vitality and quality of life, efficiently moves people and goods while sustaining and improving the regions' livability and environment in the Corridor MPO Region.

Federal Planning Requirements

Several laws, regulations, statutes, codes and other documents at the federal level affect the development of the Corridor MPO's Long Range Transportation Plan by specifying requirements to be considered in the planning process or to be contained in the Plan. These include SAFETEA-LU, existing and proposed metropolitan planning regulations, management and monitoring system regulations, Executive Order 12898 on Environmental Justice, the Americans with Disabilities Act, and a variety of others.

SAFETEA-LU replaces the Transportation Equity Act for the 21st Century (TEA-21) and provides the primary authoritative direction on the development of the Long Range Transportation Plan. On August 10, 2005, Congress enacted SAFETEA-LU as Public Law 109-59. SAFETEA-LU authorizes the federal surface transportation programs for highway and transit systems for the 5-year period from 2005 to 2009. SAFETEA-LU continues and enhances the federal programs and priorities established in the previous Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and TEA-21.

Among the many environmental, funding, infrastructure, modal, safety, and other transportation-related provisions of the legislation, the process for developing transportation plans shall provide for consideration of all modes and shall be continuing, cooperative, and comprehensive to the degree appropriate.

The eight SAFETEA-LU Planning Factors that must be addressed in the transportation plan include:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the safety of the transportation system for motorized and non-motorized users.
3. Increase the security of the transportation system for motorized and non-motorized users.
4. Increase the accessibility and mobility of people and for freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.

Goals

The goals for Connections 2040 are primarily based on the SAFETEA-LU planning factors. In total, there are eight goals. These eight goals were presented to the public, where they provided input regarding their relative weighting.

1. Maintain our Existing Transportation System
2. Maximize Efficiency of Existing Transportation System
3. Minimize Cost of Transportation
4. Offer Travel Choices
5. Provide Safe and Secure Transportation
6. Support Economic Vitality
7. Minimize Travel Time
8. Protect The Environment and Conserve Resources

The close relationships between the Connections 2040 goals and the SAFETEA-LU planning factors are presented in Figure 4-1. It should also be noted that at the bottom of the figure, there are some additional planning objectives that have been identified in the proposed Federal Transportation Bill. Although this Bill has not been passed, the Secretary of Transportation, Ray LaHood, has been pressing federal and state Departments of Transportation to include these alternative transportation, livability, and environmental goals in the transportation process. For that reason, they have been included to illustrate that they have been addressed in the planning and evaluation of projects throughout the development of the Connections 2040 plan.

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Figure 4-1: Relationship between Connections 2040 Goals with SAFETEA-LU Planning Factors and Draft Transportation Bill

		Connections 2040 LRTP Goals							
		Maintain our existing transportation system	Maximize efficiency of existing transportation system	Minimize cost of transportation	Offer travel choices	Provide safe and secure transportation	Support economic vitality	Minimize travel time	Protect the environment and conserve resources
SAFETEA-LU Planning Factors	1	Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;					●		
	2	Increase the safety of the transportation system for motorized and non-motorized users;				●			
	3	Increase the security of the transportation system for motorized and non-motorized users;				●			
	4	Increase the accessibility and mobility of people and for freight;				●			
	5	Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;		●					●
	6	Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;				●			
	7	Promote efficient system management and operation; and		●					
	8	Emphasize the preservation of the existing transportation system.	●						
Proposed Transportation Bill	A	Address the mobility and access needs of people and goods.				●			
	B	Improve the condition, performance and connectivity of the intermodal transportation system.	●	●		●	●		
	C	Provide transportation choices for commuters and travelers.			●	●			
	D	Promote environmental sustainability, public health and the livability of communities.					●		●
	E	Incorporate land use patterns that support improved mobility and reduce dependency on single-occupant vehicles.					●		●
	F	Limit impacts on farmland, natural resources and air quality.							●
	G	Demonstrate a reduction in green house gases.						●	●
	H	Increase water and energy conservation and efficiency.							●
	I	Provide for an increase in livable communities.		●	●	●		●	

Objectives and Evaluation Criteria

Goals are often lofty and sometimes open to interpretation. As part of the presentation to the public, the goal definitions were enhanced by including some examples with meaningful objectives in order for the public to have a uniform base to better understand the goal and to weigh in on which goals were most important to them. In general, these objectives were correlated to some type of measurement that the public would understand, such as a quantitative performance measure or a qualitative definition.

The project goals were also used to evaluate projects submitted by various MPO jurisdictions to be included in the LRTP. This process, which will be explained in greater detail in Chapter 10, consisted of a simple low (1), medium, (2) and high (3) rating of each goal for each candidate project. Those ratings, plus the overall goal weight, were used to determine the project prioritization.

The following section, therefore, repeats each project goal and presents the weight of the goal (out of 100) as provided by the public and public officials. For each goal, objectives are described followed by an explanation of related evaluation criteria and how they were applied to rate projects in the analysis.

Goal: Maintain Our Existing Transportation System (Weight 18)

Objectives

As the region's transportation system ages, increased funding is required to maintain this system. These maintenance funds are often competitive with funding of new infrastructure. Reduced maintenance funding today results in even higher maintenance needs for the future. Constructing new roads increases future maintenance costs as these new facilities age.

- **Maintain Existing Roads and Bridges to Fair or Better Condition:** With an ever increasing need to maintain an aging infrastructure system, this objective simply states that the existing roads and bridges shall be maintained at a minimum of fair condition and preferably a better condition.
- **Maintain Surface Condition of Existing Sidewalks and Bicycle Paths/ Trails:** The maintenance of the existing transportation system is not just for roadways, but includes alternative transportation mode infrastructure.



Evaluation Criteria

This particular goal is related directly to whether a candidate project is for maintenance of the existing transportation system. This could be anything from a street overlay to complete reconstruction of a roadway or bridge replacement. Candidate projects, which are specifically for maintenance of the existing transportation system, have the highest rating. Projects which include refurbishing the existing facility, plus additional improvements such as additional travel lanes would receive a medium rating. Projects which add capacity and do not address existing maintenance would receive a low rating.

- **Low (1):** The project is not proposed to provide maintenance of existing system.
- **Medium (2):** The project proposes some maintenance or rehabilitation of the existing system as part of a larger project, such as street widening or intersection modification.
- **High (3):** The proposed project's primary or complete purpose is to maintain or rehabilitate an existing facility

Goal: Maximize Efficiency of the Existing Transportation System (Weight 15)

Objectives

Because of limited funds, maximizing the efficiency of the existing transportation system is critically important in addressing existing and future development.

- **Maximize Roadway Efficiency through Improved Signal Timing and Fixing Bottlenecks:** A major objective of SAFETEA-LU is being a good steward of the limited transportation budget. Therefore, if the project cost is minor compared to the travel time and safety benefits, the project will rank high. This could include ITS type improvements, flaring out an intersection to widen the bottle neck, or even provide a lower cost new facility which opens up alternative routes.
- **Maximize Transit, Bicycle and Pedestrian Accessibility:** Accessibility to transit, bicycle, and pedestrian mobility is a function of the following questions: 1) does the proposed project provide missing access to these modes from local residential and business use areas, and 2) does the improvement help complete a system of use for traveling from one area to another?



Evaluation Criteria

As specified in the objective descriptions, a candidate project will score high if there is a big return for a minimum investment in addressing traffic congestion or travel time, or by providing a system of connections. This goal will favor low cost projects and not high cost projects, even though these high cost projects may also address travel time, congestion and multimodal system continuity.

- **Low (1):** The project does not provide operational improvements or decreased travel times, nor provide increased accessibility to transit, bicycle and pedestrian facilities.
- **Medium (2):** The project provides moderate operational improvements which will result in decreased travel times and/or provides increased accessibility to transit, bicycle and pedestrian facilities.
- **High (3):** The project provides significant operational improvements which will result in reduced travel times and/or provides major improvements to accessibility to transit, bicycle and pedestrian facilities.

Goal: Minimize Cost of Transportation (Weight 9)

Objectives

Cost includes transportation travel costs and the cost of personal time. It also includes the cost of the transportation infrastructure.

- **Reduce Travel Costs:** Outside of housing costs, transportation costs rank second in household expenditures. The objective of this goal is to provide reduced travel costs to residents and businesses.
- **Reduce Travel Times:** Personal travel time has a cost. A candidate project which reduces the travel time through reduced congestion, increased frequency of transit, or more efficient bicycle and pedestrian connections would potentially reduce travel time.
- **Capital Construction Costs:** Transportation resources are very limited. Projects which have a high capital construction costs decrease remaining funding for other projects. Conversely low cost improvements leave available funds for other improvements.
- **Cost Benefits:** Provide decreased travel time and reduced delay for expenditure.



Evaluation Criteria

Travel cost savings can result from alternative mode improvements which provide a lower cost transportation solution to the automobile or reduced travel times which reduce the personal cost of travel time. Projects with high capital construction costs will be ranked low whereas a low cost improvement will be ranked high.

- **Low (1):** This project has little or no reduction in travel time nor does it provide opportunities for travel via alternative modes.
- **Medium (2):** This project has moderate reductions in travel time or provides some new opportunities for travel via alternative modes.
- **High (3):** This project provides significant reductions in travel time or provides significant opportunities for travel via alternative modes.

Goal: Offer Travel Choices (Weight 12)

Objectives

Historically, the investment of transportation dollars has been to roadways and the automobile, yet there are segments of the population that cannot drive, including youth, some seniors, and those with disabilities. Providing travel choices to these groups is important to Connections 2040. Providing alternative travel options, including transit, bicycle, and pedestrian is also important to people that do drive in order to minimize personal household costs, provide healthy ways to travel, or to minimize impacts to the environment.

- **Provide Travel Choice including Transit, Bicycle Trails and Paths, and Sidewalks:** A major objective of SAFETEA-LU, as well as previous federal transportation bills, has been to promote transportation alternatives to the automobile including transit, bicycle, and pedestrian. Improvements that are directly proposed to increase travel choice will receive the highest score.

It should be noted that all roadway projects should consider Complete Streets. Therefore, if the project is designed primarily to be a roadway project, such as to widen a road from two to four lanes or flare out an intersection with additional left and right turn lanes, and the project is proposed to be a Complete Street, this project would only rank a medium score as the alternative mode component is secondary to the vehicle component.



- **Provide a Transportation Network which Supports Land Use Planning:** Another component of offering travel choice is the context of the existing land use or proposed land use. A primary objective of the Connections 2040 plan has been to integrate land use and transportation and the public has been very supportive of focusing on compact infill development. Therefore, if the proposed improvement is located in areas targeted for future compact infill development, the project will be given a higher score. Projects in low density areas, where there is not a likelihood of high alternative mode travel, will receive a lower score.

Evaluation Criteria

The project evaluation is made on: 1) does the project promote alternative mode travel and 2) is the improvement targeted for existing higher density areas or areas targeted for compact infill mixed-use development?

- **Low (1):** The proposed improvement does not support compact mixed-use development nor provide for travel choice including transit, bicycle, or pedestrian mobility.
- **Medium (2):** The proposed improvement supports compact mixed-use development or provides travel choice including transit, bicycle, or pedestrian mobility.
- **High (3):** The proposed improvement is integrated with adjacent mixed-use compact development or provides multiple travel choices including transit, bicycle, or pedestrian mobility.

Goal: Provide Safe and Secure Transportation (Weight 11)

Objectives

All transportation improvements should be designed to be safe and secure. Targeting known safety concerns and improving accessibility for first responders supports regional safety and security.

- **Promote Improvements which Reduce Accidents:** The objective for designing and constructing all projects is that they be safe and secure. However, in review of the regions' accident history, there are few areas which have a high accident rating when compared to state and national standards. Improvements which can directly respond to high accident records or known design problems will score favorably for this category.



- **Facilitate Rapid Movement of First Responders:** Ultimately, the regional transportation system must be able to function adequately in case of an emergency. The flood of 2008 is an example where parts of the transportation system were flooded and getting to/from some parts of the region were difficult, if not impossible. Therefore, projects that provide alternative means of ingress and egress to existing facilities and are safe and secure will receive a higher score.

Evaluation Criteria

Projects which either address a known accident or design problem or provide improved access to first responders will receive a higher score.

- **Low (1):** The proposed improvement does not mitigate known safety problem areas or significantly improve travel time for first responders.
- **Medium (2):** The proposed improvement addresses known safety areas or locations with high accident rates or provides some separation of automobile travel with alternative modes.
- **High (3):** The proposed improvement directly addresses known safety areas or locations with high accident rates or provides separation of automobile travel with alternative modes.

Goal: Support Economic Vitality (Weight 17)

Objectives

Economic vitality is one of the SAFETEA-LU planning factors and the top ranked goal by the public and those that attended the Public Official’s Workshop. Creating a community that has strong economic vitality is complex and requires a broad-range of favorable conditions, including community leadership, low cost of doing business, reduced municipal and state debt, high quality school system, increasing resident education and income level, choice of housing types, and amenities, to name a few.

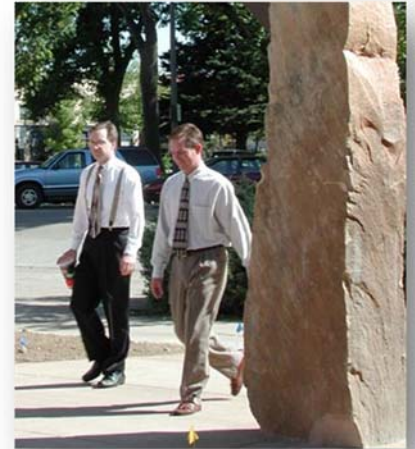
A good transportation system which serves existing and future development, provides multi-modal transportation choice, and is integrated with land use can help contribute to these favorable conditions. The following objectives capture these favorable conditions for promoting economic vitality.



- **Provide Accessibility to Existing and Future Development Areas:** Providing a good transportation system to travel from home to work or shopping and a transportation system that provides good access to business are important for economic vitality. This transportation system can be responsive to land use growth patterns or provide a structural infrastructure element to promote target development areas, which are integrated with the land use system.

Historically, transportation plans have typically responded to land use growth. As presented in Chapter 2, **the transportation planning for the Corridor MPO region has largely been extending roadways outward to serve a dispersed land use pattern.** This has an economic cost to the region in providing and maintaining infrastructure to a lower density area. It also promotes further outward expansion. The alternative is to tailor transportation improvements to development areas the region desires to promote.

- **Plan for a Transportation System that is Affordable and Sustainable:** As communities throughout the United States have found, transportation infrastructure ages and requires maintenance. The more roadway lane miles, the more the maintenance will cost. These same communities have found that they cannot always build themselves out of congestion. Even if sufficient funds were available to build an expanding roadway network in outlying areas, this development contributes traffic on existing roadways in urban areas, resulting in the need to widen older roads with associated impacts on established businesses and neighborhoods.
- **Attract New Business by Retaining and Attracting Young Professionals by Providing Regional Amenities including Transportation Choices:** Other jurisdictions around the world are increasing economic vitality, providing amenities to retain and attract young professionals between 25 and 50 that have higher education and income levels. It is this group that becomes the entrepreneurs to add new jobs: they are the ones that are buying homes and making purchases. Competing with all other communities to retain and attract this demographic group requires providing amenities in the region. In review of various lists of communities ranked high in economic vitality, many cite their parks, open spaces, and trails system. These facilities allow their families to recreate and enjoy transportation choice.
- **Reduce Infrastructure Costs:** Transportation funding is very limited and being a good steward of these funds will provide opportunities for future generations. If the region spends limited funds on a few major transportation projects, then future funding will be severely limited for



other transportation projects. Increasing infrastructure also increases maintenance cost for future generations.

Evaluation Criteria

The evaluation criteria focus on targeting transportation improvements which support compact infill development areas for increased economic vitality, choice of transportation modes and bicycle and pedestrian amenities.

- **Low (1):** The proposed project does not provide alternative mode access to targeted compact development areas, nor provide new amenities such as sidewalks and trails for attracting and retaining higher salaried younger professionals or the infrastructure cost is high, limiting potential expenditures of funds for other improvements.
- **Medium (2):** The proposed project provides some alternative mode access to targeted compact development areas, or provides some new amenities such as sidewalks and trails for attracting and retaining higher salaried younger professionals or the infrastructure cost is moderately high, limiting potential expenditures of funds for other improvements.
- **High (3):** The proposed project provides alternative mode access which targets compact development areas, or provides new amenities such as sidewalks and trails for attracting and retaining higher salaried younger professionals or the infrastructure cost is low, allowing limited funds be used for other improvements.

Goal: Minimize Travel Time (Weight 4)

Objectives

Minimizing travel time has historically been a key measurement for developing transportation plans. Typically, this has been through identifying roads with congestion and proposing additional capacity improvements or proposing new roadways. Other methods include smarter transportation systems through ITS, such as sophisticated coordinated signal systems, more frequent and direct transit service, and direct and continuous bicycle and pedestrian infrastructure.

- **Minimize Road Congestion:** Road congestion results in slower travel times. Strategic capacity improvements or new facilities that provide relief to existing congestion corridors help relieve congestion.



- **Minimize Travel Time:** Capacity improvements, ITS, increased and more direct transit and bicycle and pedestrian connections to shift automobile traffic to other modes reduce travel times.
- **Improve Transit, Bicycle and Pedestrian Accessibility:** Transportation choice through more accessible transit, bicycle, and pedestrian accessibility both minimizes travel time for these modes, but can also result in more non-automobile trips and reduced congestion on existing or planned roads.

Evaluation Criteria

Increased travel time through reductions in congestion, improved travel flow, increased frequency, and more direct transit and alternative bicycle and pedestrian accessibility.

- **Low (1):** The proposed project does not address congestion nor minimize travel time, nor improve accessibility to transit, bicycle, and pedestrian.
- **Medium (2):** The proposed project provides for some reduction in congestion, or minimizes travel time, or improves some accessibility to transit, bicycle, and pedestrian.
- **High (3):** The proposed project directly improves congestion and minimizes travel time, or significantly increases accessibility to transit, bicycle, and pedestrian.

Goal: Protect the Environment and Conserve Resources (Weight 14)

Objectives

The Clean Air Act, SAFETEA-LU, and other federal and state laws have put increased emphasis on protection of the environment and resource conservation over the years. There is also a growing consciousness that smart land use and transportation planning can address these issues.

- **Reduce Fuel Consumption:** Fuel consumption is directly related to vehicle miles of travel and the operational traffic flow of those trips. Vehicles which can travel from origin to destination along roadways with a managed signal system and minimal traffic congestion can help reduce fuel consumption. Shifts from automobile travel to alternative modes can also help reduce fuel consumption.



- **Minimize Air Pollution:** There have been significant reductions in air pollution associated with cleaner engines and better fuel mixes, however, 30% of all emissions in Linn County remain associated with the automobile. Increased vehicle miles of travel and travel time are the two major contributors to vehicle emissions.
- **Climate Change/Greenhouse Gases - Minimize vehicle miles of travel:** There has been a growing debate nationally and internationally regarding climate change and what may contribute to this change. Much of this discussion has been associated with greenhouse gases and specifically, carbon dioxide. Carbon dioxide is directly correlated with vehicle miles of travel.
- **Minimize Impacts on the Natural Environment:** Land development patterns are directly associated with impacts to the natural environment, including increased storm water runoff and increased urban temperatures. The lower the density and spread of development, the higher the runoff and temperature. Transportation improvements which support urban expansion will impact the environment at a higher degree than those transportation improvements which support compact infill development.
- **Reduce Impacts on Neighborhoods, Cultural, and Historic Resources:** Existing neighborhoods in older areas of the region are often impacted from outlying newer developments as residents must travel through these older neighborhoods to get to their destinations. Transportation improvements can also impact cultural and historic resources.



Evaluation Criteria

Protecting the environment and conserving resources is directly related to land use and transportation patterns. Although the Corridor MPO has no authority on local jurisdictional land use plans, the Corridor MPO does have authority on selecting transportation improvements. The selection of transportation improvements can also help support a regionally desired compact infill development pattern that improves the integration of land use and transportation, minimizes vehicle miles of travel, and provides alternative transportation modes.

- **Low (1):** The proposed project promotes suburban expansion with increased vehicle miles of travel.
- **Medium (2):** The proposed project does not promote suburban expansion and have some benefit for alternative transportation modes.
- **High (3):** The proposed project supports compact development, reduced vehicle miles of travel or provides new opportunities for use of alternative transportation modes.