

# CHAPTER 1

## INTRODUCTION

---

Connections 2040 is the Long Range Transportation Plan (LRTP) for the Cedar Rapids region. It will guide how the region grows and invest transportation dollars over the next 30 years. Historically, the LRTP has been based on the development of the best possible transportation plan to support member jurisdictions' land use plans. ***This Plan is different.*** There is a growing movement throughout the region, state, and nation that we need to be smart in how we grow and deploy our limited resources. To this end, the Plan addresses growth and land use patterns, environmental sustainability, regional competitiveness, and concepts such as complete streets. The combination of all these inputs has led to the development of a smarter long-range transportation plan to support a changing region and world.

### Project Background

The transportation planning process includes making informed predictions about future transportation needs, investigating and assessing alternative actions for meeting those needs, and making recommendations about which course of action to pursue. The information generated by this process is used by decision-makers to select transportation policies and programs from the range of alternatives.

The LRTP is the federally-required long-range (20+ year) strategy and capital improvement program developed to guide the effective investment of public funds in multi-modal transportation facilities for the region administered by a Metropolitan Planning Organization (MPO). The Plan must be updated every five years. The Plan provides the context from which the region's Transportation Improvement Program (TIP), a short-range capital improvement program from implementing highway, transit, and bikeway projects, is drawn.

Connections 2040 is consistent with the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). In August, 2005, passage of SAFETEA-LU established new and revised requirements for statewide and metropolitan transportation plans and programs, as well as the underlying planning processes. Compliance with SAFETEA-LU's new and revised planning provisions has been required for new plans since July 1, 2007. These provisions are set forth in SAFETEA-LU, and described more fully in the joint regulation issued by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA).

### CHAPTER CONTENTS

- Project Background
- Corridor MPO Jurisdictions
- Transportation Planning History
- Why We Are Doing the Plan?
- What Is Required in the Plan?
- A Smarter Plan
- Other Studies

Connections 2040 is the shortened name for the Corridor Metropolitan Planning Organization's (MPO) 2040 Long Range Transportation Plan (LRTP).

It should also be noted that a new federal transportation bill will be passed in the near future and will replace SAFETEA-LU. This new bill will likely expand in areas such as livability, sustainability, green house gases, and improvements tied to performance standards.

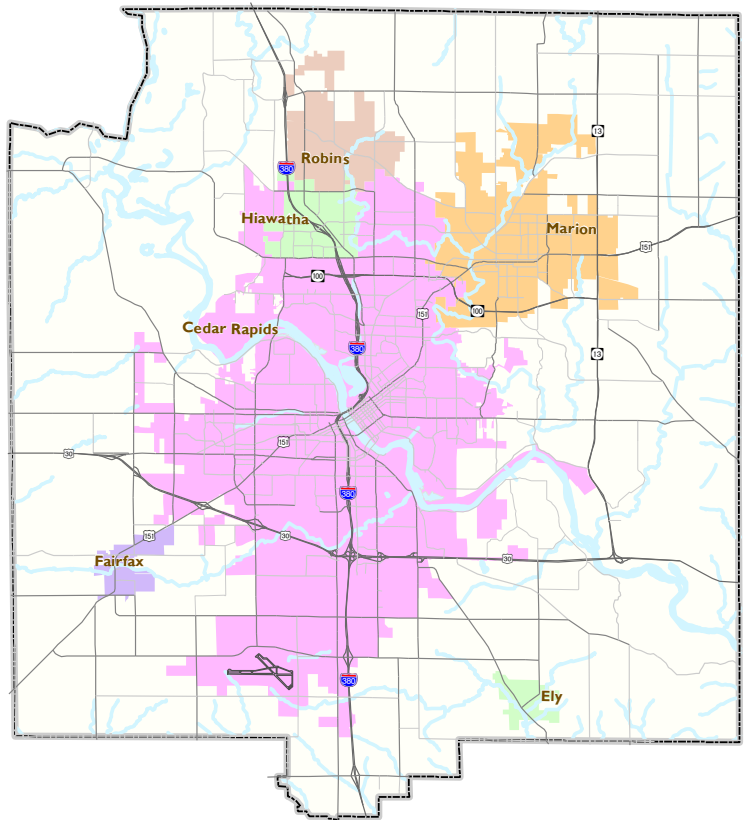
MPOs are entities designated by federal law with the lead responsibility for developing the area's transportation plans and coordinating the transportation planning process. All urban areas with a population over 50,000 that receive and spend federal money on transportation improvements are required to have an MPO. Since the 1962 Federal-aid Highway Act, federal authorizing legislation for expenditure of surface transportation funds has required metropolitan area transportation plans and programs to be developed through a continuing, cooperative, and comprehensive (3-C) planning process.

## Corridor MPO Jurisdictions

The MPO for the Cedar Rapids Metro Area is Corridor MPO. The Corridor MPO includes Cedar Rapids, Ely, Hiawatha, Fairfax, Marion, Robins, and portions of unincorporated Linn County. The Corridor MPO Policy Board is ultimately charged with approving the Connections 2040 Plan. Representation within Corridor MPO is based on population for the participating cities and county, and includes at least one elected official from each governing body. Each member jurisdiction contributes a share of Corridor MPO's budget.

Over 40 years of planning cooperation and coordination are a foundation for the Corridor MPO. Prior to the formal organization of the Corridor MPO, Linn County and Cedar Rapids were jointly involved in comprehensive planning - using the city-county Planning Director to coordinate planning activities. In 1962, Cedar Rapids, Linn County, and Marion officials met informally as a group called "Metro" to discuss joint problems. In late 1964, following enabling legislation passed by the 60th Session of the Iowa General Assembly, the Linn County Regional Planning Commission (LCRPC) was formed, comprised of representatives from Linn County, Cedar Rapids, Marion, Hiawatha, and Robins. The Linn County Regional Planning Commission changed its name to the Corridor Metropolitan Planning Organization in 2007.

Figure 1-1: Cedar Rapids Area Corridor MPO



In 2002, the Corridor MPO expanded its planning area to reflect the growth experienced in the metropolitan area, and invitations to join the Corridor MPO were extended to several new jurisdictions within the new planning boundary. The cities of Fairfax, Ely, and Shueyville elected to become full voting members of the Corridor MPO. In 2010, the City of Shueyville withdrew from the Corridor MPO.

Since its inception, the major activity of Corridor MPO has been the preparation of regional plans to help guide orderly growth and development within the area. Such plans address issues that include land use; open space and outdoor recreation; transportation; air quality; water and sewer systems; solid waste management; and housing and community development. The Corridor MPO has also conducted joint zoning ordinance studies to encourage modern, uniform public regulations of private land development within the county. In recent years, preparation of the TIP, the annual prioritization and programming of Surface Transportation Program and Transportation Enhancements Program projects in the metropolitan area, has become a major activity of Corridor MPO.

## Transportation Planning History

Local transportation planning dates back to 1908 when the Cedar Rapids *Plan for Civic Improvement and Beautification* was completed. The first multi-jurisdictional plan was the *Arterial Street and Highway Plan for the Cedar Rapids/Marion Urban Area* completed in 1960 with a forecast year of 1980. Transportation planning has continued regularly since then, aided by the Federal Highway Act of 1962, which mandated transportation planning requirements as part of the federal funding process and set aside a portion of those funds specifically for planning purposes, and by subsequent federal acts.

Under the direction of the Corridor MPO, a number of major street plans for the metro area were prepared and adopted. Those plans were referred to by their "horizon" years (the last year of the planning period), and included the 1990, 1995, 2005, 2020, 2030, and 2040 Plans. In addition, the MPO has overseen studies for specific projects such as bridge, intersection, bypass, and road extension projects. This Plan spans the years 2010 through 2040 and will replace the existing 2040 Transportation Plan.

The metro area has a significant history of rail and bicycle planning. Trail planning dates back to the 1976 *Preliminary Bikeways Plan* and extend into the 1980s when area cities began to implement on-street bike lanes and off-street trails. In 1993, the metro area Hawkeye Bicycle Club worked with the MPO to develop the *MATS (Metro Area Trails System) Plan*, which has since been refined and is incorporated into this plan.

Starting with the 1908 Cedar Rapids plan, various rail plans have been developed, including the *Comprehensive Railroad Study for Linn County, Iowa* (1980) and the *East Central Iowa Commuter Rail Feasibility Study* (1996). In 2004, an MPO study group met with local rail companies and industry leaders to examine rail improvement strategies.

Corridor MPO has been involved with various aspects of transit planning, including marketing, surveying, developing service standards, and conducting feasibility studies. Most recently, the MPO funded and managed a transit study to analyze the fixed-route transit system. The *Cedar Rapids Fixed-Route Transit Analysis*, completed in 2009, evaluated the current transit system, identified system needs, and recommended preferred routes to improve the fixed-route transit system.

## Why Are We Doing the Plan?

Significant changes in the population, lifestyle, and societal norms will occur over the life of this plan, including a dramatic increase in the segment of the population over age 65. Recovering from a major recession, global trade, e-commerce, outsourcing of jobs overseas, and continued growth in service sector jobs will impact employment patterns, while developers' continuing search for incentives, cheap lands and minimal regulations will reinforce an established pattern of outlying jobs and housing leading to longer commutes and loss of farmland. Freight transportation has undergone major shifts over the past several decades, and will likely continue to be a difficult mode to forecast and plan for. New technologies will impact all of the aforementioned issues, in some ways easing and in some ways contributing to congestion and increasing costs. The threat of terrorism is also a factor in its unpredictability and potential impacts, as well as acts of nature such as the 2008 flood. All of these factors vividly point out the need for more and better research and regularly updated transportation plans.

Connections 2040 recognizes that growth and change will continue in the region over the next several decades, and all local jurisdictions can make positive contributions toward preparing for that change. Transportation infrastructure and services can help shape land use development to avoid increased traffic congestion, reduced mobility, and a deteriorating quality of life. The Plan defines the policies, programs, and projects to be implemented over the next thirty years to build an effective and efficient transportation system. However, Connections 2040 does more – it promotes smart growth through the integration of land use and transportation facilities in our communities.

Long range transportation planning is widely acknowledged to be a critical element for smarter transportation and a better community. The transportation connection to smart growth has been suggested to include:

- Establishing land use strategies to increase housing densities, introduce mixed-use development, and make walking, bicycling, and transit more viable.
- Managing, operating, and maintaining existing highway, transit, and other transportation modes; improving performance for each mode; and improving economic vitality for the region.
- Providing choice in housing and transportation so that they merge as seamlessly as possible into the community.

## What Is Required in the Plan?

Requirements for transportation planning within metropolitan areas are contained within three major pieces of federal legislation: SAFETEA-LU (the current federal transportation legislation), the Clean Air Act of 1990, and the Civil Rights Act of 1964. Connections 2040 replaces the existing 2040 Transportation Plan and incorporates SAFETEA-LU requirements.

Among the many environmental, funding, infrastructure, modal, safety, and other transportation-related provisions of the legislation, SAFETEA-LU specifies that MPOs develop transportation plans in cooperation with the State and public transit operators that “provide for the development and integrated management and operation of transportation systems and facilities...that will function as an intermodal transportation system for the metropolitan area...”

SAFETEA-LU identifies several categories of projects that are to be included for implementation over the life of a transportation plan. They are:

- **Roadway, transit, intermodal, bicycle, and pedestrian facilities;**
- **Transportation and transit enhancement activities;**
- **Strategies for managing the transportation system; and**
- **Capital investments and other measures to preserve the existing transportation system.**

A description of all proposed improvements in sufficient detail to develop cost estimates should accompany the project listings.

SAFETEA-LU specifies that available revenues for implementation of transportation improvements over the life of the *Long Range Transportation Plan* must be developed through a cooperative effort between the MPO, State, and transit operators. The cost estimates for the projects, strategies, and other transportation improvements contained in the Plan must be constrained to the forecasts of available revenues.

### FEDERAL REQUIREMENTS FOR TRANSPORTATION PLANS

**SAFETEA-LU**, signed into law by President Bush August 10, 2005, includes requirements to efficiently use and preserve the existing transportation infrastructure, as well as acknowledge the synergistic relationship between all modes of transportation. It also mandates the inclusion of private citizens and stakeholders in the planning process, the consideration of how transportation impacts the environment. Another key mandate is that the long-range transportation plan must be financially constrained, meaning the transportation projects and strategies identified can be paid for with funds that reasonably expected to be available.

**The Clean Air Act Amendments (CAAA)** of 1990 require that transportation planning help and not hinder the region in meeting federal air quality standards. Receipt of federal funding is contingent upon a region’s ability to meet air quality standards. The CAAA specifically encourages regions to reduce auto emissions and trips made by single-occupant vehicles; it promotes the use of alternative transportation modes, including transit and bicycles, as a viable part of the transportation system.

**Title VI of the 1964 Civil Rights Act (42 U.S.C. 2000d-1)** states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” Presidential Executive Order 12898 reinforces the U. S. Department of Transportation (DOT) to direct its funding based on the following principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

When this requirement was enacted with ISTEA in 1991, many communities around the country readily embraced the financial constraint philosophy. In this manner, transportation plans transformed from a wish list of projects that could not be implemented to meaningful plans with specific, identifiable transportation improvements.

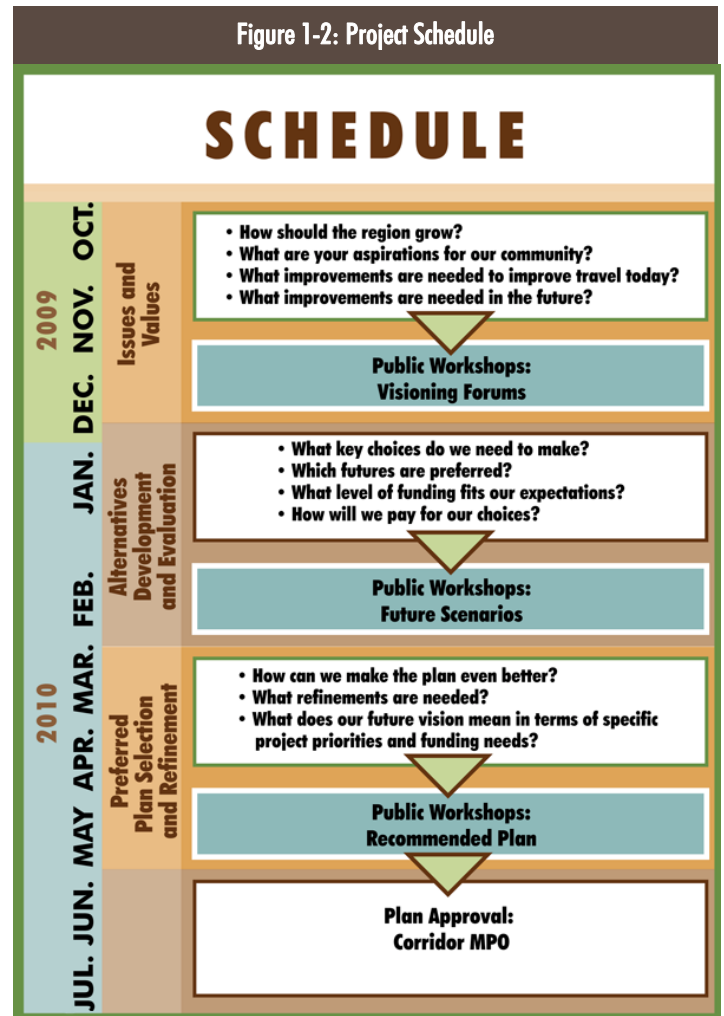
To make Connections 2040 consistent with SAFETEA-LU, it includes:

- A vision that meets community goals.
- A multi-modal approach that includes not only highway projects, but provides for other modes such as public transportation, walking, and bicycling.
- A minimum 20-year planning horizon.
- A financial plan that balances revenues and costs to demonstrate that the Plan is financially responsible and constrained.
- A public involvement process that meets federal guidelines and is sensitive especially to those groups traditionally left out of the planning process.

The planning process for the development of Connections 2040 consisted of four phases.

1. The first phase, Issues and Values, assessed historic growth and development and included an analysis of the region’s transportation system. Issues included growth, travel patterns, automobile congestion, transit needs, and bicycling.
2. The second phase of the Plan process developed and tested land use and transportation alternatives to determine how well they meet regional goals.
3. Based on technical analyses and public comments, the third phase developed a preferred alternative and determined methods to implement the Plan in terms of project priorities and costs.
4. In the fourth phase, the final plan was submitted to the MPO Policy Board for review and approval.

Each of the first three phases of the planning process included a public meeting and website postings. A summary of the timing, format, and key questions addressed at each public meeting is included in Chapter 3.



## A Smarter Plan

The foundation of Connections 2040 lies in better connecting our road network, transit, bicycle facilities, and sidewalks to our homes, schools, work, shopping, and other activities. In this era of budget and infrastructure deficits, the ultimate success of this Plan will be measured by how well we implement smart growth as our communities are developed and redeveloped over time. **To this end**, Connections 2040 helps strengthen the land use – transportation connection and offers transportation improvements to support smarter, more sustainable land use.

Historically, transportation plans have been based on providing new roads to support proposed expanding development areas. With an expanded roadway network, land development proposals followed these new facilities. The idea of “build it and they will come” held true. For decades, cities throughout the United States have been following this approach of building themselves out of congestion. Many of these same cities are realizing that this approach is not sustainable. As roads are getting older, much if not all of the available transportation budget is spent to maintain the existing facilities.

As baby boomers enter their retirement years, there is a major change in demographics with an older population. Empty nesters are moving out of their single-family homes and looking for new housing types where they have local amenities, and can lock up their unit and go. On average, a person lives 10 years after they stop driving. Providing a transportation system to support this aging population is important to retain those that have lived their lives in the region.

**It is also recognized that the region’s economic vitality is dependent upon the region’s competitiveness with other cities and towns throughout the United States and world.** The specific target market for being competitive is retaining 20 to 50 year olds with a higher education and higher salary. **Cities and regions that are attracting this age group are those that offer amenities and choices, including parks and trails, a variety of housing choices for this age cohort, and opportunities to live and work within the same area.**

Connections 2040 is developed around two main components: **land use and multimodal transportation system solutions**. Each component has a unique, yet interdependent role in improving mobility and travel in the region through the year 2040. Land use determines where our homes, schools, work, shopping, and other activities are located and can profoundly affect the way in which we move around the region and within our communities. A multimodal transportation system solution provides needed regional transportation improvements, viable travel choices, and connections to our daily activities.

**Smart growth** is an urban planning and transportation theory that concentrates growth in the center of a city to avoid urban sprawl; and advocates compact, transit-oriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices.

Smart growth values long-range, regional considerations of sustainability over a short-term focus. Its goals are to achieve a unique sense of community and place; expand the range of transportation, employment, and housing choices; equitably distribute the costs and benefits of development; preserve and enhance natural and cultural resources; and promote public health.

**Connections 2040 is forward-looking in its transportation vision.** It focuses on providing real-time, competitive travel choices. This includes making it more convenient, fast, and safe to ride transit, or bike or to walk to work or school. In our fast-paced world, saving time is a very real and powerful incentive for encouraging these more sustainable travel choices. Part of this vision is the implementation of “Complete Streets,” which are streets designed to serve all travel modes: bicycle, walking, transit, and the automobile.

## Other Studies

There are many planning efforts currently underway in the Cedar Rapids Metro Area, and it is easy to get confused about what is going on with these different efforts. The following summarizes some of the other planning efforts underway.

- **Corridor MPO Fixed-Route Analysis of Cedar Rapids Transit System:** This project involved reviewing current transit service in the Corridor MPO planning area and evaluated transit routing options. Issues addressed included fixed-bus routes, schedules, stop placements, number of buses, and hours of operations. The outcome of the study recommended short-term transit improvements. Completed November 2009.
- **Corridor MPO Strategic Communications Plan:** This Plan improved the MPO’s communications about its work and role in planning the region’s future. It also enhanced how the MPO engages the community and regional stakeholders. Public involvement for Connections 2040 was coordinated with this effort. Completed March 2009.
- **Tower Terrace Road Corridor Management Plan:** This Plan identified an east-west alignment which connects I-380 with Highway 13 along a Tower Terrace Road/35th Avenue/Radio Road alignment.
- **River Corridor Re-Development Plan:** This is a multi-task project that included a River Front Master Plan, 10 neighborhood plans, and urban design principles.
- **Iowa Statewide Urban Designs and Specifications (SUDAS):** This design manual prepared by IDOT addresses a number of urban design elements, including roadway design, recreation trails and sidewalks, parking lots, and signalization. This effort was coordinated with the Connections 2040 Roadway Typology work effort.
- **I-380 Urban Corridor Study:** This study will establish conceptual horizontal and vertical geometrics for proposed mainline, interchanges, side-road, and frontage road alignments for the I-380 corridor improvements.

## CHAPTER 1 INTRODUCTION

---

- ***IMAGINE8 All Trails Lead to Marion:*** A citizens committee will help raise funds, build awareness, and advises the Parks Department and Linn County Trails Association in the design and routing of a trail and green space along the central corridor of Marion. This initiative will also work toward connecting and expanding existing trails to adjacent trail networks and communities as well as improve existing trails.