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INTRODUCTION

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Preparing for the future of the regional transportation system is a task that never ends, in today's world of rapidly advancing transportation technologies, aging infrastructure, and constrained resources. Here, in this five-year update to Mobilizing Tomorrow, we lay out a regional vision for how Greater Des Moines continues to prepare for and adapt to future transportation needs and demands.

As with the previous long-range transportation plan of the same name, this iteration of Mobilizing Tomorrow strives to maintain an efficient transportation system, support a strong regional economy, and enhance our quality of life. This plan attempts to address these issues in the face of considerable change. Notably, the region is expected to add more than 115,700 new housing units by 2050. Such an influx of people has many implications for the region's future, not only in the community's demographics, but also in changing preferences for how they travel throughout the region. Accordingly, the Mobilizing Tomorrow update reemphasizes the priority of maintaining the infrastructure we already have – and getting more use out of it, by offering more choice of travel modes.

The Mobilizing Tomorrow update builds on the previous plan's success, but holds onto the forward-looking title to reflect the ongoing evolution of the future of transportation.

The Des Moines Area Metropolitan Planning Organization

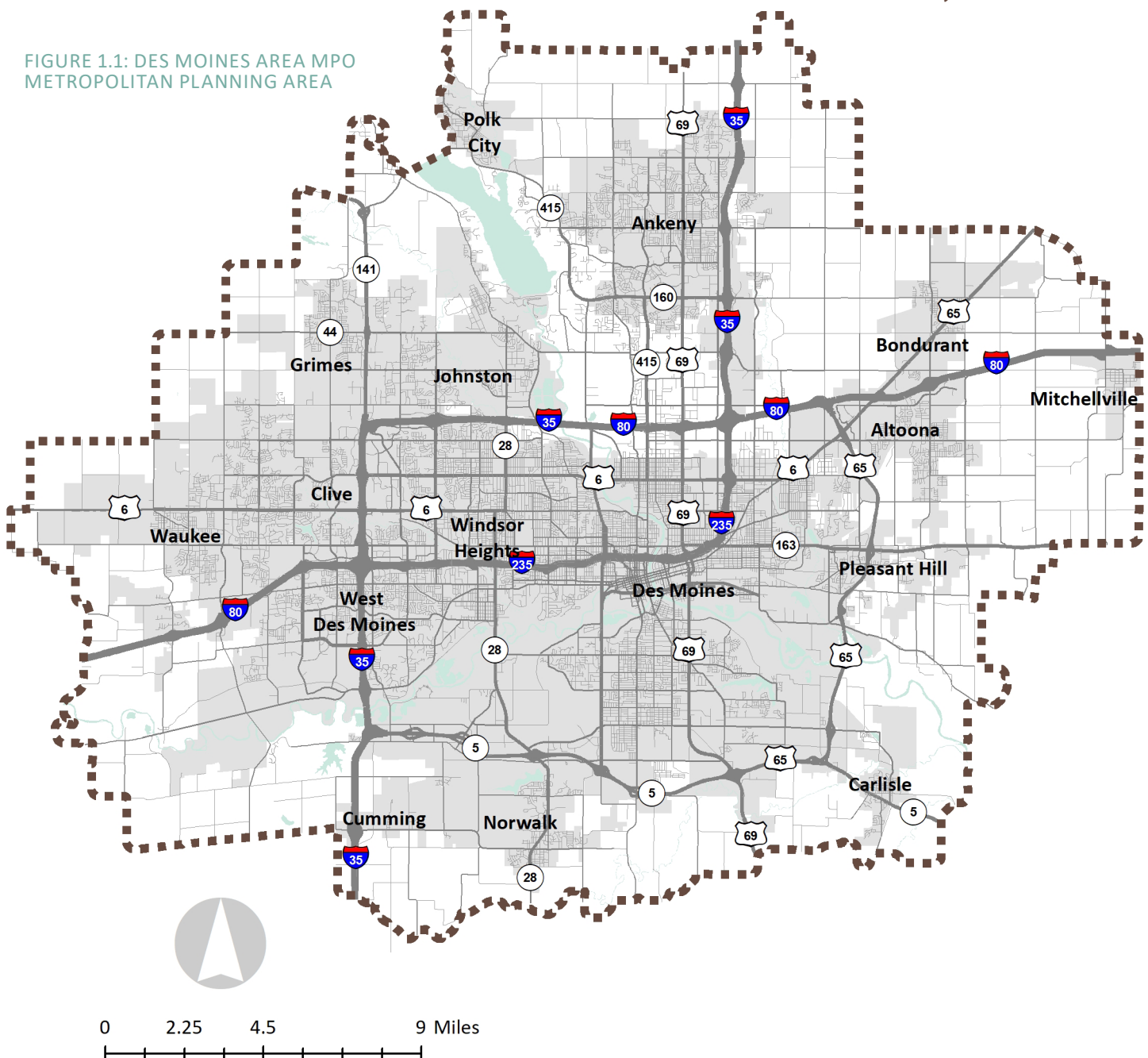
Federal legislation requires every urbanized area over 50,000 people to have a Metropolitan Planning Organization (MPO). MPOs ensure a continuing, cooperative, and comprehensive planning process. This legislation also requires that all surface modes of transportation be considered during the planning process. The Des Moines Area MPO fulfills this role for approximately 20 jurisdictions in central Iowa.

Full voting membership is open to any city or county government that is located wholly or partially in the designated Metropolitan Planning Area (MPA), has a population of at least 3,000 people, and signs onto the MPO's cooperative agreement.

Currently, 16 cities, three counties, and one transit agency are voting members of the MPO:

- Altoona
- Ankeny
- Bondurant
- Carlisle
- Clive
- DART
- Des Moines
- Grimes
- Johnston
- Mitchellville
- Norwalk
- Pleasant Hill
- Polk City
- Urbandale
- Waukee
- West Des Moines
- Windsor Heights
- Dallas County
- Polk County
- Warren County

FIGURE 1.1: DES MOINES AREA MPO
METROPOLITAN PLANNING AREA



The Des Moines Area Regional Transit Authority (DART) also is a voting member of the MPO.

The MPO includes four associate cities (Cumming, Elkhart, Indianola, and Van Meter) and one associate county (Madison). Associate members actively participate in the transportation planning process but do not have a vote at the MPO Policy Committee level. Associate membership is available to all governments within the MPO that do not meet the population threshold for full membership. It also is available to those governments located beyond the MPA limits but within the eight county central Iowa region.

Finally, the MPO also includes several advisory members, including the Des Moines International Airport, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Iowa Department of Transportation (DOT), and the Heart of Iowa Regional Transit Agency (HIRTA).

Our Transportation History

Greater Des Moines has joined together for decades to use resources effectively and to position the region to thrive economically, environmentally, and socially. Our leaders have long recognized the importance of working at the regional level, especially when it comes to transportation.

In 1964, the Des Moines Urbanized Area Transportation Study was initiated through a cooperative agreement between local officials and the Iowa Highway Commission. In 1965, the Central Iowa Regional Planning Commission (CIRPC) formed in response to a need for an area-wide transportation planning organization.

In 1972, CIRPC and seven local governments entered into a cooperative agreement for continuing transportation planning. The following year, in 1973, CIRPC restructured as the Central Iowa Regional Association of Local Governments (CIRALG). By 1979, CIRALG's membership included eight central Iowa counties and about eighty cities.

In 1983, the Des Moines Area Transportation Planning Committee (DMATPC), formerly part of CIRALG, was designated as the MPO for central Iowa. The DMATPC contracted with the City of Des Moines for staff support.

A decade later, in 1993, the DMATPC restructured once again as the Des Moines Area MPO, hiring its own staff.

In July 2018, the MPO celebrated the 35th anniversary of regional transportation planning in Greater Des Moines.

The Long-Range Transportation Plan

One requirement of the MPO is to develop a long-range transportation plan (LRTP) that outlines a regional vision and strategy to address a region's long-term transportation needs. The MPO must update this plan at least once every five years.

This iteration of the MPO's plan has been dubbed *Mobilizing Tomorrow*, recognizing the tie to and working to bring life to *The Tomorrow Plan*, which is discussed later in this chapter.

Mobilizing Tomorrow looks out to the year 2050, falling in line with the time horizon laid out in *The Tomorrow Plan* and meeting the federal requirement of an LRTP looking out a minimum of 20 years. The plan is fiscally constrained and will be updated in another five years to reflect completed projects as well as any changes in priorities and/or funding. Any project that seeks to receive funding from the MPO must be included in the LRTP.

Previous Plans

Mobilizing Tomorrow continues the strong tradition of regional transportation planning in Greater Des Moines. The first plan, the 1990 Des Moines Urbanized Area Transportation Plan, was completed in May 1974.

Nearly a decade later, in 1983, the Year 2000 Street and Highway Plan was adopted to determine the major street and highway improvements needed in Greater Des Moines by the year 2000.

In October 1994, the region approved the Horizon Year 2020 Transportation Development Report. Much more robust than previous efforts, the 2020 plan looked at an integrated intermodal transportation system.

The Horizon Year 2025 Long-Range Transportation Plan, completed in 1999, built on the 2020 plan. The plan's primary goal was to "promote both the development and the preservation of a multimodal, intermodal

transportation network that facilitates the safe and efficient travel of people, as well as goods, both within and outside the designated boundaries of the Des Moines Area MPO.”

In September 2004, the MPO approved the Year 2030 Long-Range Transportation Plan, which recognized the need for a flexible plan able to adapt to regional needs over time.

The Horizon Year 2035 Metropolitan Transportation Plan was adopted in September 2009. Designed as a guide for the transportation system decision making process, the 2035 plan is replaced by Mobilizing Tomorrow.

The first iteration of Mobilizing Tomorrow was adopted in November 2014. Mobilizing Tomorrow capitalized off the completion of The Tomorrow Plan developing a strategy for the region’s transportation system through 2050. This plan update builds off the principles set in Mobilizing Tomorrow.

Related Planning Efforts

The Tomorrow Plan

In October 2010, the US Department of Housing and Urban Development (HUD) awarded a consortium led by the MPO a \$2 million grant through its Sustainable Communities Regional Planning Grant program. A once-in-a-generation investment in planning, the program aimed to promote regionalism and to break down silos that have traditionally existed between disparate entities. The grant program centers on six livability principles:

1. Provide more transportation choices.
2. Promote equitable, affordable housing.
3. Enhance economic competitiveness.
4. Support existing communities.
5. Coordinate policies and leverage investment.
6. Value communities and neighborhoods.

Since being awarded the grant, the MPO has cultivated relationships with dozens of community partners in addition to thousands of Greater Des Moines residents. The development of The Tomorrow Plan represented

the most robust public engagement strategy in the region’s history, making approximately 27,000 contacts. The insights gleaned from these relationships formed the plan, truly making it the community’s plan and positioning the region to effectively and swiftly implement the plan. This input resulted in four overarching goals:

1. Create a resilient regional economy.
2. Improve the region’s environmental health and access to the outdoors.
3. Further the health and well-being of all residents in the region.
4. Increase regional cooperation and efficiency at all levels.

In addition to each of these goals, the plan includes five initiatives. The initiatives are crosscutting, collaborative ideas for implementing the plan’s top priorities. They include:

1. Nodes & Corridors: Encourage development in areas of maximum impact and connect these areas to one another with multimodal corridors.
2. Greenways: Build a fully connected system of natural resource areas by selectively expanding the existing network of parks, conservation areas, open space, and trails.
3. Resilient Neighborhoods: Support the continued presence of strong, unique neighborhoods that provide a range of housing and transportation choices.
4. Regional Cooperation: Engage in regional cooperation to support stormwater management and infrastructure.
5. Everyday Stewards: Encourage residents to take an active role in bringing The Tomorrow Plan to life by implementing more sustainable everyday practices.

The MPO approved The Tomorrow Plan in November 2013. Mobilizing Tomorrow builds upon The Tomorrow Plan’s goals and initiatives to provide a more specific blueprint for the transportation investments that communities must make to achieve the region’s vision for a more sustainable future.

Capital Crossroads

The Greater Des Moines Partnership and the Community Foundation of Greater Des Moines spearheaded Capital Crossroads, a nine-month visioning process for central Iowa that culminated in 2012. The Capital Crossroads visioning process sets a road map to guide the area's path to short- and long-term economic growth. This initiative formed the foundation for the visioning phase of The Tomorrow Plan and, thus, Mobilizing Tomorrow.

Capital Crossroads is a broad look at the goals for the region's next five years, while The Tomorrow Plan takes a deeper look at a number of issues out to the year 2050. Moreover, Capital Crossroads focuses on a larger geographic region that includes all areas located within a 50-mile radius of the Iowa State Capitol, while The Tomorrow Plan focuses on the MPO's planning area. These two initiatives have been coordinated since the summer of 2010, when both were merely ideas. Since then, the Partnership, the Community Foundation, and the MPO have worked closely to align the two endeavors. In 2017, Capital Crossroads 2.0 was launched.

DART Forward 2035 Plan

As it has with Capital Crossroads, the MPO has closely coordinated with DART on its DART Forward 2035 Transit Services Plan since its beginning. The DART Forward 2035 Plan will guide the growth of the transit system in Greater Des Moines over the next 25 years. The DART Forward 2035 Plan contributes transit analysis and planning to The Tomorrow Plan and to Mobilizing Tomorrow.

Connect: The Central Iowa Bicycle & Pedestrian Transportation Plan

The MPO's Central Iowa Bicycle and Pedestrian Roundtable developed Connect: The Central Iowa Bicycle and Pedestrian Transportation Plan as an update to a 1981 bicycle plan for the Des Moines metropolitan area. Connect is an action plan to guide central Iowa's planning development process to improve accessibility and mobility by foot or by bicycle. The plan aims to help guide central Iowa toward transportation alternatives that are bicycle and pedestrian friendly and away from dependence on automobiles.

The Central Iowa Bicycle and Pedestrian Transportation

Plan addresses and targets levels of bicycle and pedestrian use and recommends projects, programs, and policies to improve safety, convenience, education, enforcement, engineering, encouragement, and frequency of walking and bicycling throughout the region.

Transportation Asset Management Plan

The Iowa Department of Transportation developed its Transportation Asset Management Plan (TAMP) to set a strategic approach to managing transportation infrastructure. The plan is based on the following principles:

- Asset management is policy driven;
- Asset management is performance based;
- Asset management involves making trade-offs;
- Asset management relies on quality information; and,
- Asset management requires transparency and accountability.

The ultimate goal of Iowa's TAMP is to minimize the long-term costs of the state's transportation infrastructure.

Strategic Highway Safety Plan

The Strategic Highway Safety Plan (SHSP) outlines the Iowa Department of Transportation's strategies for addressing safety issues on the highway system. The SHSP focuses on addressing safety with the Five E's – education, emergency medical services, enforcement, engineering, and everyone. The SHSP strives to implement a Zero Fatalities strategy.

Iowa State Freight Plan

The Iowa State Freight Plan outlines the Iowa Department of Transportation's plans for incorporating freight considerations into its transportation planning. The plan outlines the current conditions of Iowa's freight transportation system and the role that freight plays in Iowa's economy. The plan identifies strategies to address freight transportation performance issues across the Iowa and describes how the strategies align with national goals for freight transportation.

Transit Asset Management Plan

DART's Transit Asset Management Plan was adopted in October 2018 and includes an inventory of assets, assessment of conditions, and a prioritization of investments.

Transit Safety Plan

DART's is in the process of developing a transit safety plan. The plan will be effective as of July 2020 and will outline DART's strategies for improving the safety of their operations.

Performance Based Plan Integration

The related planning efforts section outlined plans that the MPO staff reference when developing the update to Mobilizing Tomorrow. These documents will also be integrated into the MPO's ongoing planning processes. Where appropriate, staff will review and incorporate aspects of these plans into the development of the Transportation Improvement Program, Unified Planning Work Program and Budget, and annual Surface Transportation Block Grant award process.

Mobilizing Tomorrow Structure

Chapter 2: Goals, Measures, and Targets

This chapter outlines the goals, measures, and targets that the MPO will use to evaluate the implementation of Mobilizing Tomorrow. The plan includes four goal areas and number of measures and targets under each goal that the MPO will use to understand how the plan is performing. The plan included both short-term (5-year) and long term (30-year) targets. The MPO will track performance and provide updates on a quarterly basis.

Chapter 3: Investment Strategies

This chapter identifies the investment categories, planning time periods, funding reasonably anticipated through Horizon Year 2050 of Mobilizing Tomorrow, and capacity projects broken out by time period. The investment strategy focuses 70 percent of projected federal funding on non-capacity projects including

bridge reconstruction, major roadway reconstruction, intelligent transportation systems, transit, and bicycle and pedestrian investments. This chapter also outlines regional freight rail, aviation, and public transportation investments.

Chapter 4: Policies and Best Practices

This chapter identifies policies and best practices that the region and communities can adopt to improve the transportation system. While the MPO recognizes these policies and practices may work differently in different communities, MPO members are encouraged to consider them and adopt them in full or part, which may streamline and thus decrease the cost of development, expand transportation choices, and mitigate environmental issues.

Appendix A: Technical Resources

This appendix includes more specific information about many of the policies discussed in Chapter 4. While Chapter 4 was written for policy makers and members of the public, Chapter 5 is written for planners, engineers, and other design professionals. Note that the information included in this section is for information purposes only. The MPO or its member governments would need to adopt the policies, guidelines, or standards included in this section for them to become mandatory.

Appendix B: State of the Transportation System

This appendix documents existing conditions of the transportation network, with a profile of each major mode – roadway, bicycle, transit, aviation, and rail. The existing condition of the transportation system was used to help develop the goals, measures, and targets this plan will use to guide the region toward the desired future condition.

Appendix C: Growth Scenario and Demographics

This appendix summarizes current socioeconomic conditions in the Greater Des Moines area and provides a forecast of future socioeconomic conditions, also known as a growth scenario.

Appendix D: Fiscal Analysis Methodology

This appendix provides supplemental information about the MPO's methodology and assumptions used to estimate project costs and to develop funding revenue projections.

Appendix E: Performance Measures and System Performance Report

This appendix provides supplemental information about the MPO's methodology and assumptions used to establish performance measures. This section also includes a system performance report which outlines how the MPO is meeting their selected performance measures.

Appendix F: Project Selection Criteria

This appendix summarizes the process used to solicit, evaluate, and select capital projects for inclusion in Mobilizing Tomorrow.

Appendix G: Environmental Analysis

This appendix provides an overview of the environmental review conducted for projects in the plan. The assessment takes into consideration the social, the natural, and the human environments, assists in streamlining the federal project review process, and identifies potential environmental mitigation strategies. The purpose of this environmental review is to conduct an early, cursory analysis of the Mobilizing Tomorrow's planned transportation capital improvements and how they impact the natural, human, and social environment.

Appendix H: Public Engagement Process

This appendix summarizes efforts undertaken by the MPO to gather public comment on Mobilizing Tomorrow as well as the feedback that was received. The MPO solicited comments at three intervals of the planning process. Public comment collected during development of the National Household Travel Survey was also considered.

Appendix I: Congestion Management Process

The Congestion Management Process (CMP) is federally required and provides the MPO and its members with a process that provides for the effective integrated management and operation of

the multimodal transportation system. This strategy is based on a cooperatively developed and implemented metropolitan-wide strategy for new and existing transportation facilities. Currently, congestion is not a major issue for the MPO. The objective of this document is to stay ahead of any potential problems with the network so that the system continues to operate effectively.

Appendix J: Travel Demand Model Validation and Analysis

Travel demand models (TDM) simulate current travel conditions and forecast future travel patterns and conditions based on planned system improvements and socio-economic changes. The MPO utilizes a TDM in assessing the performance of transportation system improvements and identifying impacts within the Metropolitan Planning Area (MPA) such as traffic volumes, traffic delay, transit ridership, and emissions. This appendix documents the MPO's Travel Demand Model.

Appendix K: Transportation Improvement Program Projects

This appendix outlines all the federally funded projects that are included in FFY 2020-2024 Transportation Improvement Program (TIP) that was approved by the Iowa Department of Transportation in June 2019.

Appendix L: Amendments and Revisions

This appendix outlines the process and procedures for amending and revision the plan. It also provides an overview of amendments and revisions made to the plan since its formal adoption.

Appendix M: Acronyms

This appendix provides a listing of acronyms that are used throughout the plan.