



Chapter 1: Plan Development

A regional transportation plan relies on a vision for the future that will guide decision-making. The vision is supported by specific transportation-related goals and objectives. With these guiding principles in place, the study team follows a balanced approach, relying on both data and local insight, to predict future transportation needs and identify solutions. This chapter discusses the plan’s development, from the formulation of vision, goals, and objectives to the study team’s methodology and analytical approach.

Vision, Goals, and Objectives

Vision, goals, and objectives are instrumental in the metropolitan transportation planning process: not only do they provide initial direction, but they serve as a barometer for project development and subsequent recommendations. The Metro Mobility 2040 study team referred to the vision, goals, and objectives throughout the development of the plan, including during the public outreach phases and project prioritization process. The Metro Mobility 2040 Steering Committee was primarily responsible for developing the plan’s vision, goals, and objectives.

Vision – *To provide a safe, efficient, and sustainable multi-modal transportation system that supports economic growth, enhances quality of life, and preserves the region’s natural and cultural resources*

Goals and Objectives



❖ Goal 1: Mobility and Accessibility

Promote an efficient, interconnected and accessible transportation network

- Identify and recommend alternative traffic control and system optimization measures.

Metro Mobility Goals:

1. Mobility & Accessibility 
2. Economic Vitality 
3. Safety & Security 
4. Environmental Protection & Cultural Preservation 
5. Integration of Land Use & Transportation 
6. System Preservation & Efficiency 

- Provide efficient regional routes and internal connectivity for freight goods movement.
- Develop strategies to manage travel demand.
- Reduce peak-period congestion by promoting flexible working hours and innovative workforce policies for regional employers.
- Increase transit accessibility and availability to transit-dependent users and persons with special needs.
- Improve pedestrian mobility and expand the bicycle lane network.



❖ **Goal 2: Economic Vitality**

Promote economic development through targeted transportation investments

- Improve access to key economic nodes and areas of planned development.
- Support transportation investments and policies that work to create jobs and improve access to people, places, and goods.
- Encourage the concentration of employment and activity sites within established transit corridors to maximize transportation efficiency.
- Focus transportation system improvements to support and promote tourism.
- Utilize local, regional, and state energy sources within the transportation system.



❖ **Goal 3: Safety and Security**

Improve travel safety and security in the Greater Kanawha Valley

- Reduce the number of injuries, fatalities, and hazardous spills.
- Mitigate potential conflicts and delays at rail crossing sites.
- Reduce the number of high incident-accident locations.
- Facilitate coordination for emergency preparedness.



❖ **Goal 4: Environmental Protection and Cultural Preservation**

Preserve and sustain the natural and built environments

- Encourage use of alternative transportation modes and/or energy sources that reduce air pollution, fuel consumption, and other environmental impacts.
- Minimize development impacts in areas of cultural and historical significance.
- Reduce development impacts on environmentally sensitive areas.

- Develop strategies to decrease single occupancy vehicle (SOV) trips and vehicle miles traveled (VMT).



❖ **Goal 5: Integration of Land Use and Transportation**

Improve the integration of land use and transportation

- Enhance communication and coordination between various transportation planning and land use planning agencies.
- Increase coordination between roadway design and land use development to improve transportation system performance.
- Focus future growth in areas of reduced transportation demand.



❖ **Goal 6: System Preservation and Efficiency**

Support and strengthen the current transportation network

- Reduce the number of operational conflicts between various transportation modes.
- Develop strategies and implement measures to extend the functional life of transportation facilities.
- Increase the use of innovative transportation technology to enhance the efficiency of the existing transportation system.

MPO Planning Requirements

As a central element of daily life which affects everyone, transportation represents a critical component of a region's social and physical environment. A region's metropolitan transportation plan (MTP) is its comprehensive guide to developing a regional transportation system that not only accommodates its current mobility needs but also anticipates where future needs may arise. In response to federal mandates and the desires of local residents, Metro Mobility 2040 addresses multiple modes and facets of transportation including automobile, bicycle, pedestrian, transit, freight, and overall system safety.

Federal legislation and state and local agency direction are primarily responsible for shaping the regional long range transportation planning process. The 2040 RIC MTP is governed by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was signed into law on August 10, 2005.

SAFETEA-LU builds upon earlier legislation by addressing the challenges the modern transportation system faces — safety, security, traffic congestion, intermodal connectivity, freight movement, and

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environmental protection. To further guide the planning process, SAFETEA-LU established eight planning factors that agencies must consider when developing their plans. The Metro Mobility 2040 goals, established by the Steering Committee, closely resemble the eight SAFETEA-LU Planning Factors (Table 3).

TABLE 3: CORRELATION BETWEEN SAFETEA-LU PLANNING FACTORS AND METRO MOBILITY 2040 GOALS

SAFETEA-LU Planning Factors	Corresponding Metro Mobility Goals
Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.	Economic Vitality
Increase the safety of the transportation system for motorized and nonmotorized users.	Safety and Security
Increase the security of the transportation system for motorized and nonmotorized users.	Safety and Security
Increase the accessibility and mobility of people and freight.	Mobility and Accessibility
Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.	Environmental Protection and Cultural Preservation
Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.	Integration of Land Use and Transportation
Promote efficient system management and operation.	System Preservation and Efficiency
Emphasize the preservation of the existing transportation system.	System Preservation and Efficiency

While this Update must comply with SAFETEA-LU, it should be noted that the 2012 passage of the Moving Ahead for Progress in the 21st Century Act (MAP-21) will likely provide direction for future regional plans and updates. Chapter 10 (Plan Performance) provides additional information on MAP-21’s policies and implications.

The federal government also requires metropolitan transportation plans to be updated every four years (five years if there are no air quality issues) to reflect the region’s changing needs and priorities. Since launching the metropolitan planning process in 1970, the federal government has required a cooperative, continuous, and comprehensive planning framework for making transportation investment decisions in metropolitan areas. Metro Mobility 2040 builds upon the previous plan update, which was adopted in 2009.

The newest Federal transportation law is Moving Ahead For the 21st Century, or MAP-21. While this law was passed in 2012, it does not yet govern MPO plans. The regulations developed for MAP-21 will likely affect the next regional long range plan.

Metro Mobility 2040 represents the culmination of a multi-level partnership between local, state, and federal policy-makers and the citizens, business owners, and stakeholders who are most impacted by transportation decisions. In doing so, Metro Mobility 2040:

- Builds upon the region’s existing metropolitan transportation plan;
- Helps identify key regional transportation investments based on community needs;
- Refines the prioritization for funding of projects; and
- Enhances multi-modal transportation policies, projects, and initiatives.

Public Involvement

Key stakeholders and general public input were instrumental to the development of Metro Mobility 2040, from the development of goals and objectives to the formulation of recommendations.

A Steering Committee, composed of professionals knowledgeable about the region’s transportation networks, was formed during the project’s early stages to help guide the Update process. The Steering Committee met nine times throughout the project, helping to synthesize goals and objectives, identify potential growth areas, highlight transportation-related deficiencies, and develop recommendations.



Steering Committee Meeting, Fall 2012.

Key stakeholders also provided feedback throughout the process. The stakeholder meetings focused on goals and objectives for the plan, as well as updates on planning and land use activity, economic development efforts, transportation needs, safety concerns, and broad transportation issues such as:

- Goods movement;
- Safety;
- Intelligent Transportation Systems (ITS);
- Aging populations;
- Transit-dependent populations;
- Economic development-education linkages;
- Recreation/tourism;
- Policy/financial perspectives;
- General livability; and
- Environmental enhancement.

Stakeholders included public agency staff in the fields of planning, transportation, and economic development; technology experts; major employers; hospitals; and community groups. Outreach activities addressed the needs of low-income, minority, and transit-dependent populations in the region, including a presentation at the Shawnee Community Center in Institute.

Finally, the general public provided feedback at various stages of Metro Mobility 2040. In April 2012, the study team hosted public meetings in each county to stimulate interest in the project and gain valuable insight on transportation-related deficiencies and opportunities. The study team advertised the meetings in the *Charleston Gazette*, distributed flyers, and notified the public through online channels (Figure 3).

An interactive website supplemented the meetings and offered alternative opportunities for user-friendly public involvement. The interactive website operated during two phases of the project. The first

FIGURE 3: FLYER FOR THE APRIL 2012 PUBLIC MEETINGS



phase allowed users to rank priorities, rate performance, identify locations of concern, and submit input related to transportation in the region (Figure 4). While active, this site was also available at the Charleston Town Center (via an iPad kiosk) on a Saturday and at a City of Charleston public meeting on the City’s Master Plan update. Nearly 300 people provided input through phase one of the interactive website. The second phase (Figure 5) allowed users to review the proposed transportation projects and “invest” in their own ideal mix of projects using a hypothetical pre-set budget. The second phase included 200 site visits and extensive feedback on project selection. Approximately 75.0% of all users remained “under-budget,” ultimately showing the public’s understanding of the fiscally constrained environment of transportation project funding.



An iPad kiosk station was set up at the Charleston Town Center, giving shoppers and employees a chance to submit input related to transportation in the region.

FIGURE 4: INTERACTIVE WEBSITE, PHASE I. SOURCE: METROQUEST

Kanawha-Putnam Regional Transportation Plan

Progress: ? Compare Yourself

1 Our Challenge

CHALLENGE

Help us shape the future of transportation in the Kanawha-Putnam Region

Slide 1 of 2

Did you know? Over 92% of all regional commuting trips in the two county area are made by **automobile**.

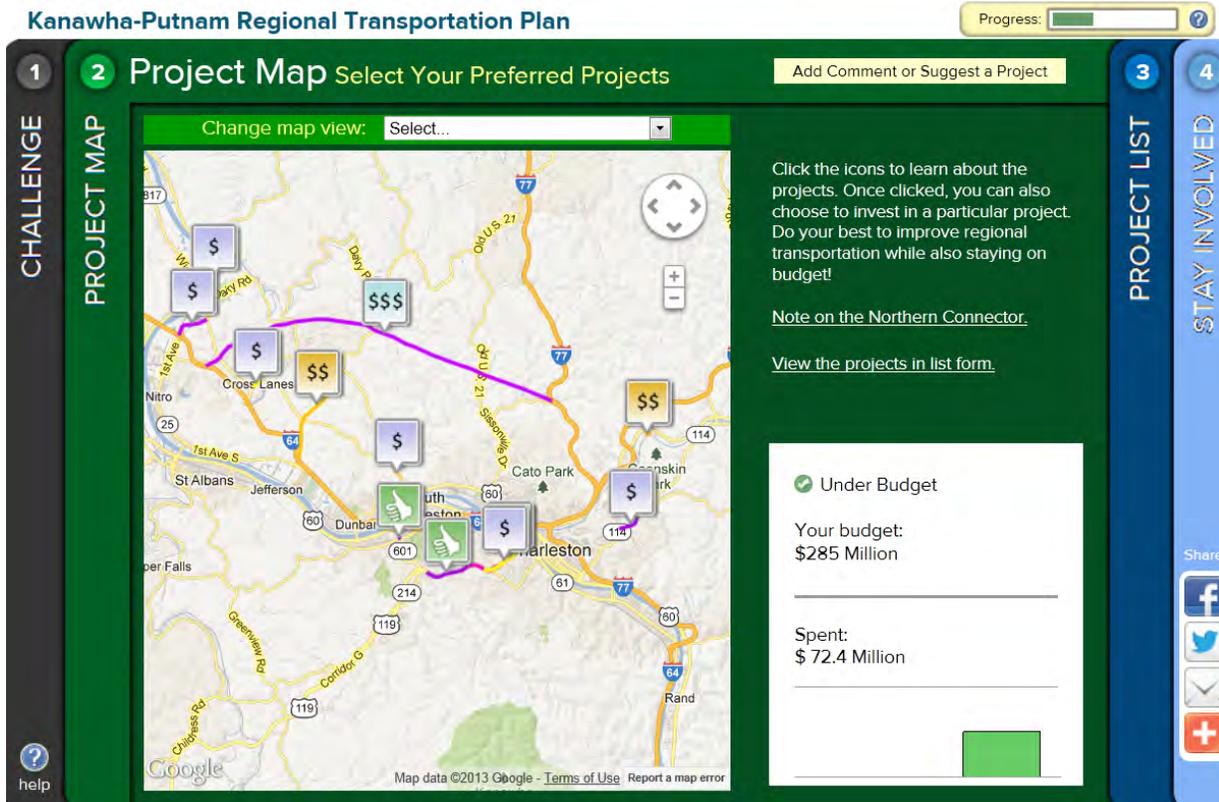
2 SET PRIORITIES

3 RATE US

4 INTERACTIVE MAP

5 STAY INVOLVED

FIGURE 5: INTERACTIVE WEBSITE, PHASE II. SOURCE: METROQUEST



After distributing the draft plan to the Steering Committee, key stakeholders, and members of the public, the study team hosted a final round of public meetings. The meetings, held in Winfield and South Charleston on July 29, 2013 included displays and allowed attendees to submit comments verbally and through comment forms. The public review period for the document extended from July 11, 2013 to August 10, 2013.

Review of Previous Plans and Studies

The Metro Mobility 2040 study team reviewed various prior plans and studies (Table 4). These documents provide local, regional and statewide insight into goals, programs, policies, and recommended projects, some of which are discussed throughout Metro Mobility 2040. The previous plans and studies are multi-modal in nature and reflect highway recommendations, bicycle and pedestrian connectivity, safety and security planning, freight facilities, and transit needs.

TABLE 4: PRIOR PLANS AND STUDIES – USED IN DATA COLLECTION AND ANALYSIS FOR METRO MOBILITY 2040

Study Name	Issuing Agency/Organization	Study Date
Statewide Bicycle Route Connectivity Plan	WVDOT	Ongoing
State of West Virginia Rail Plan	WVDOT	Ongoing
Imagine Charleston	City of Charleston	Ongoing
Teays Valley Subarea Transportation Study	RIC	1-Oct-12
St. Albans Railroad Crossing Study	RIC	1-Jan-12
Jefferson Road Design Study	WVDOT	15-Dec-11
South Charleston Bike/Ped Study	City of South Charleston	31-Aug-11
Coordinated Public Transit-Human Services Transportation Plan Update	WV Division of Public Transit and RIC	29-Aug-11
West Virginia Public Port Authority Statewide Strategic Port Master Plan	WV Public Port Authority	5-Aug-11
Park & Ride Study	WVDOT, FHWA	25-Mar-11
Greening Slack Plaza	EPA, DOT	1-Jan-11
West Virginia Multi-modal Statewide Transportation Plan	WV DOT	1-Jun-10
Kanawha County - Charleston Evacuation Plan	Kanawha County	1-Jan-10
2040 Kanawha-Putnam Long Range Transportation Plan	RIC	10-Dec-09
West Virginia State High-Speed and Intercity Passenger Rail Plan	WVDOT	1-Dec-09
Kanawha-Putnam Emergency Plan (Hazmat)	Kanawha-Putnam Emerg. Planning Committee	25-Mar-09
Oakwood Road Study	WVDOT	1-Feb-09
Kanawha-Putnam Bike/Ped Plan	RIC	1-Jan-09
Comprehensive Economic Development Study	RIC	1-Dec-08
US 60 Upgrade Study	WVDOT	1-Oct-08
Economic and Market Analysis for an Inland Intermodal Port	West Virginia Public Port Authority	1-Sep-07
Charleston Riverfront Master Plan	City of Charleston	1-Jan-06
St. Albans Bridge/Underpass Study	RIC	1-May-03
Corridor Review - WV 25 and WV 62 - Poca to North Charleston	RIC	1-Jan-03
Corridor Review - US Route 119 - Charleston-Clendenin	RIC	30-Nov-01
KVRTA Market Planning Study	RIC, KVRTA	1-Nov-01

Other Data Sources

West Virginia Department of Transportation

The West Virginia Department of Transportation (WVDOT) was instrumental in guiding Metro Mobility 2040. In particular, WVDOT provided critical insight into past, present, and proposed projects in the Kanawha-Putnam region. As a supplement to the Metro Mobility 2040 project prioritization process (which ultimately helped determine the selection of projects for the fiscally constrained plan), the WVDOT conducted a robust environmental analysis for each project. The environmental analysis, detailed in Appendix D, identifies the

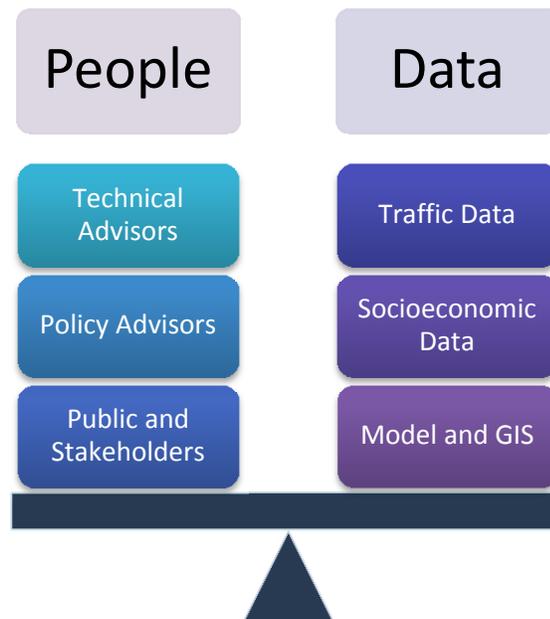
geographic relationship between proposed projects and key environmental features. The study team recommends that the analysis be consulted when advancing with any of the Metro Mobility 2040 projects, in order to support establishing the appropriate scope and identify stakeholders for each project.

Geographic Information Systems (GIS)

The study team relied heavily on GIS data, both for analytical and presentation purposes. The West Virginia GIS Technical Center, the WVDOT, and the RIC provided the bulk of the GIS data for Metro Mobility 2040. The study team used GIS data to evaluate existing conditions, display anticipated future conditions, and prioritize projects.

Analytical Approach

The study team relied on a balance of people and data in determining current and future needs. Data, while suitable for analyzing historical trends and generating quantitative observations, cannot completely account for new land use policies, shifting economic development strategies, and changing demographics. Stakeholder engagement and public input are critical in obtaining qualitative information and helping to refine future forecasts. Chapters 3 and 4 discuss how the study team used quantitative and qualitative sources to identify current issues and project future needs.



The Analytical Approach uses a balance of input from local experts, data and models.