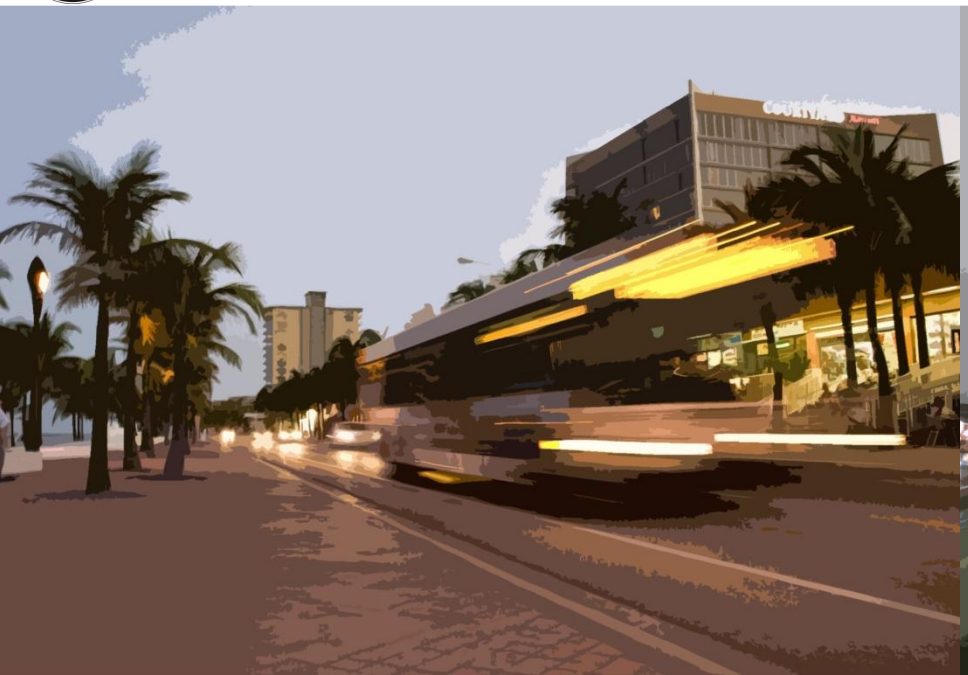
Office of Policy Planning

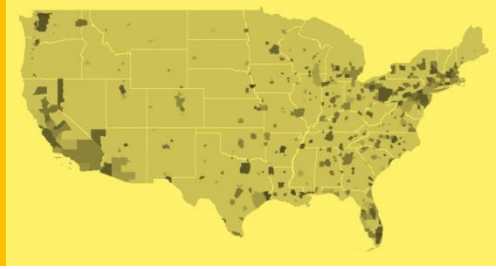
LRTP Citizen-Friendly Best Practices



Project Goal

To conduct a national scan of MPOs to identify "best practice" examples of citizen-friendly LRTPs

Key Principles



LRTPs should be …

- **Developed with a clear vision**
- **Easy to Access via MPO Website**
- **Easy to Read/Understandable by the General Public**
- **Of a Reasonable Page-Length**
- **Sub-Divided into Meaningful Sections**
- **Free of Excess Information (Appendices)**
- **Inclusive of Graphical Methods for Presenting Content**

Methodology

- Developed Database of MPOs (Population & Location)
- Reviewed LRTPs from Major Metropolitan Areas and Developed Key Observations
- Developed Criteria to Review LRTPs
- Coordinated with FHWA and MPOAC
- Conducted In-Depth Evaluation of Select LRTPs

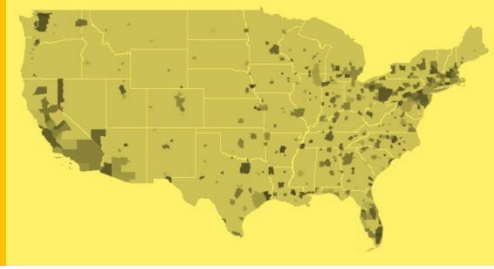
MPOs

- National Database of MPOs (384)
- Divided MPOs into Three (3) Size Categories
  - Large > 1,000,000 people (50 MPOs)
  - Medium < 1,000,000 > 200,000 (149)
  - Small < 200,000 (185)

Criteria

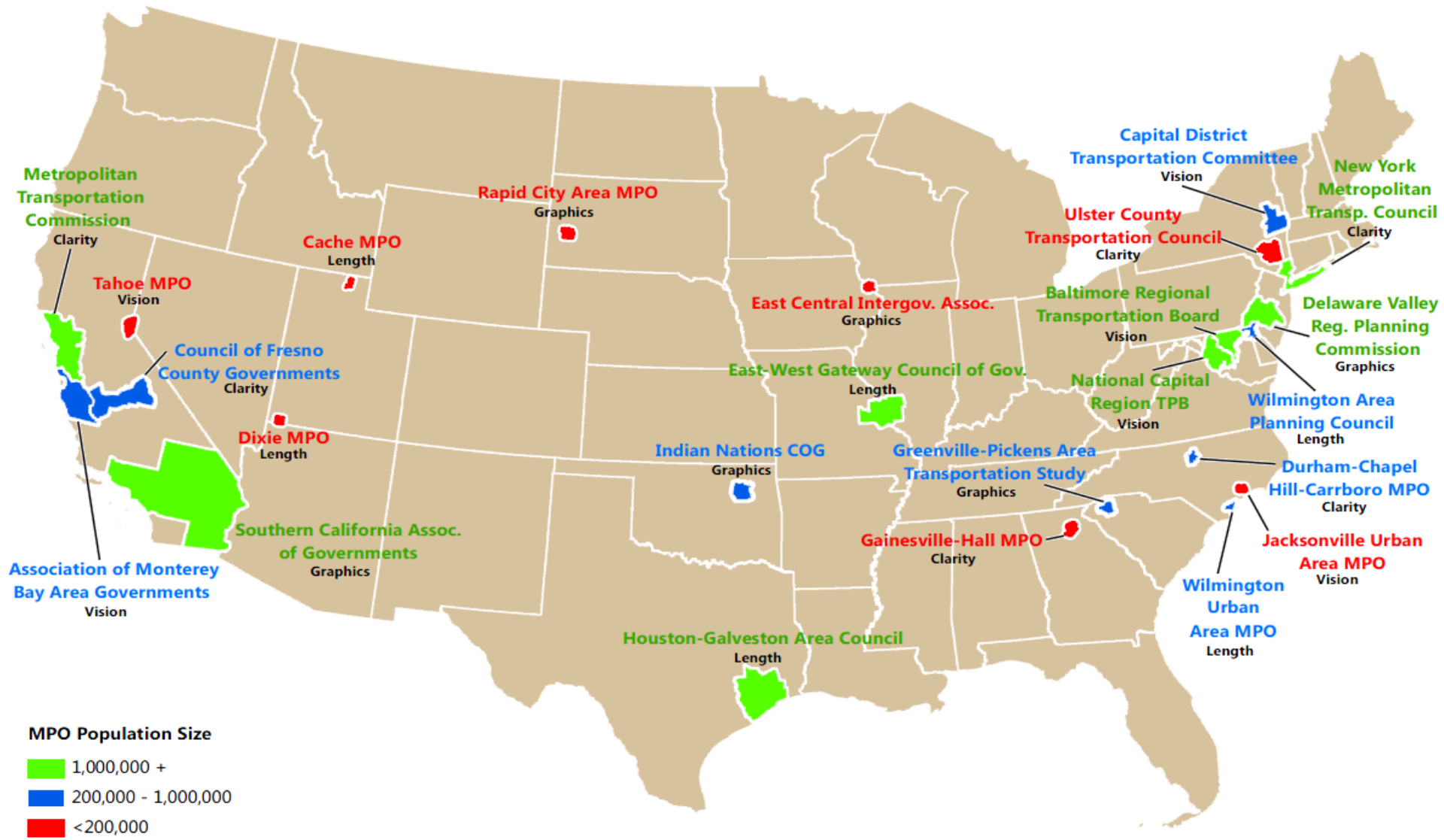
- Developed Criteria to Assess LRTPs
  - Length
  - Clarity
  - Graphics
  - Vision
- Assessed on a Scale of 1 to 5

LRTP Review



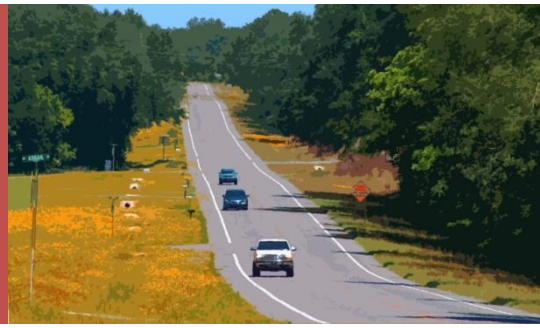
- Initiated Cursory Review of 137 LRTPs
  - MPOs Randomly Selected
  - Located LRTPs on agency websites
  - Reviewed LRTP Contents & Executive Summaries
  - Briefly Reviewed Each LRTP Chapter
  - Skimmed for Graphics/Noteworthy Features
  - Assigned Values (Scale 1 to 5) for Each Criteria
- Selected LRTPs for Review
- Conducted In-Depth Review of 24 LRTPs

MPOs Selected for LRTP Best Practice Review

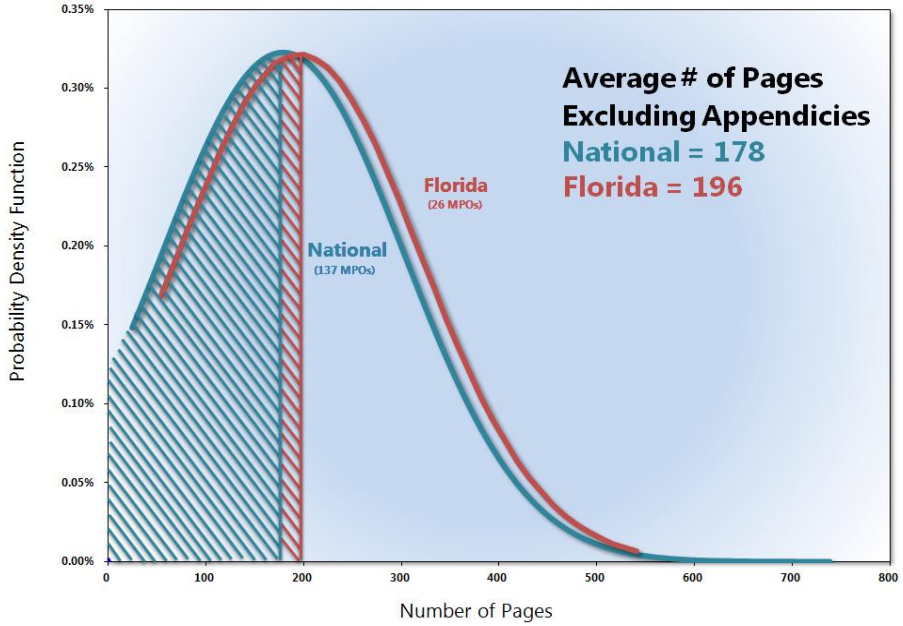


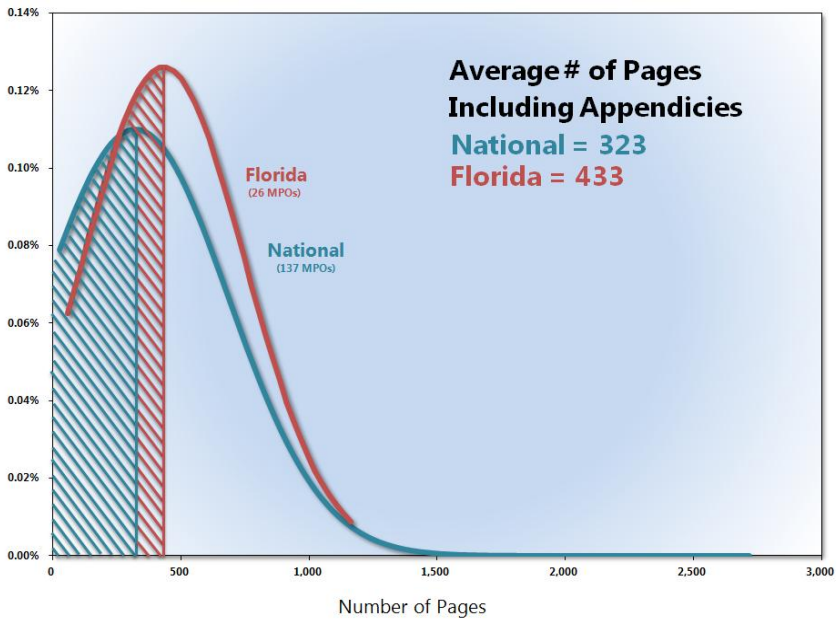
LRTPs were assessed based on four planning elements: Length, Vision, Graphics, and Clarity.
Three LRTPs were selected from each Population Category as best practices examples of each of these elements as designated in this illustration.

Length

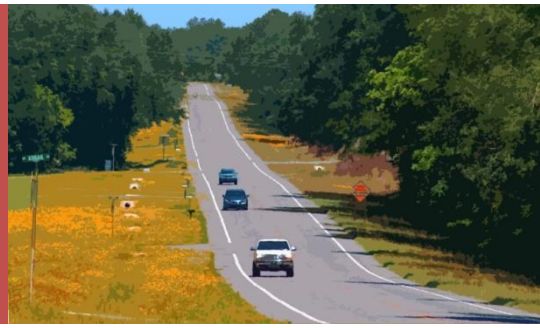


- **Page Length Review of 137 Out-of-State LRTPs vs. Florida's 25 LRTPs**



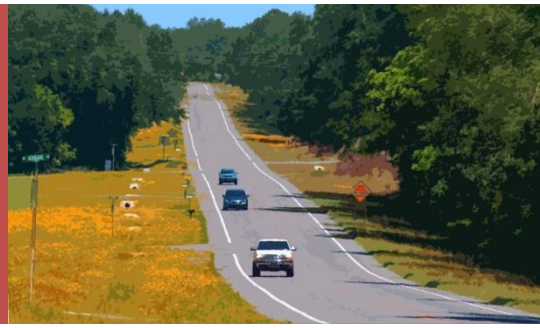


Length

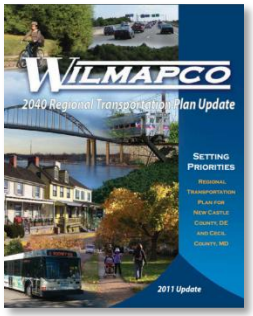


- **Qualitative Sub Criteria**
  - **Inclusion of Essential Topics**
  - **Efficiency in Documentation**
  - **Use of Appendices**

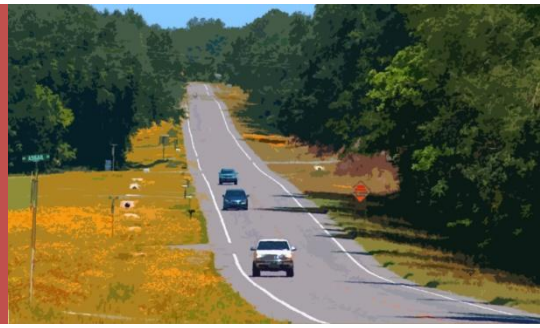
Length



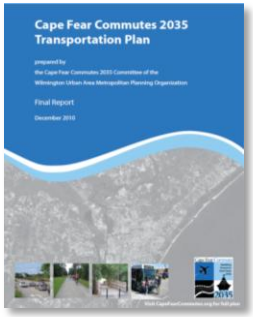
- East-West Gateway Council of Governments | St. Louis, MI
  - 35 Pages - Unified Appendix Report
- Houston-Galveston Area Council | Houston, TX
  - 66 Pages - Simplicity in Presentation
- Wilmington Area Planning Council | Wilmington, DE
  - 29 Pages - Concise Language

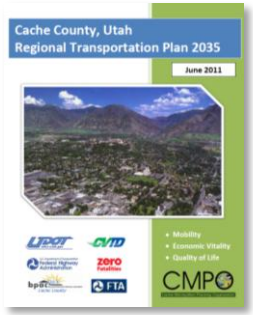


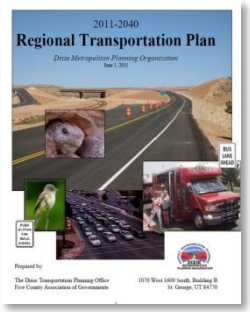
Length



- **Wilmington Urban Area MPO | Wilmington, NC**
  - **27 Pages - Structure & Appendices**
- **Cache MPO | Logan, UT**
  - **47 Pages - Compactness**
- **Dixie MPO | St. George, UT**
  - **40 Pages - Straightforward Information**







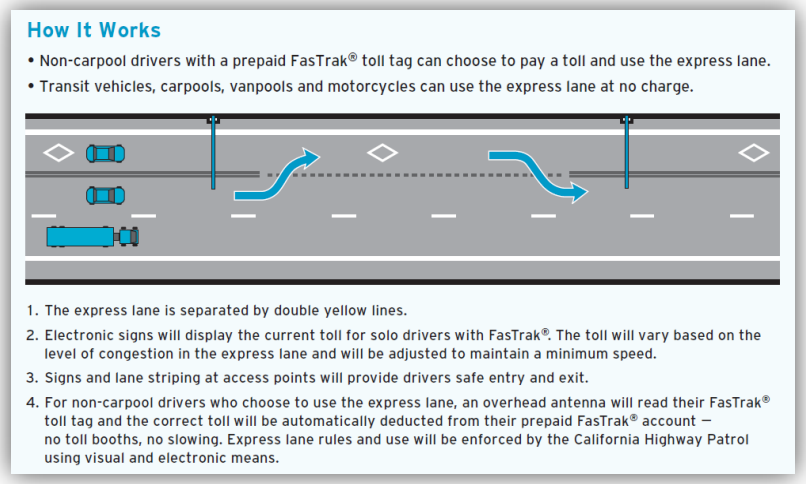
Clarity

- **Qualitative Sub Criteria**
  - **Nature of Language**
  - **Succession of Topics**
  - **Communication of Plan Elements**

Clarity

- **New York Metropolitan Transportation Council | New York City, NY**
  - **Articulation of the Process**
  - **Explanation of "Who," "What," "Where," "Why," and "How"**

- **Metropolitan Transportation Commission | Oakland, CA**
  - **Educational Language**
  - **Graphics, Text Boxes, Verbiage Explain Policies**



Clarity

- **Council of Fresno Governments | Fresno, CA**
  - **Chronological Succession of Topics**
    - **1: San Joaquin Valley Regional Transportation Overview**
    - **2: Regional Setting, State, & Federal Issues**
    - **3: Policy Element**
    - **4: Needs Assessment & Action Element**
    - **5: Climate Change Element**
    - **6: Financial Element**
    - **7: Public Participation**
- **Durham-Chapel Hill-Carrboro MPO | Durham, NC**
  - **Communication of Ideas**

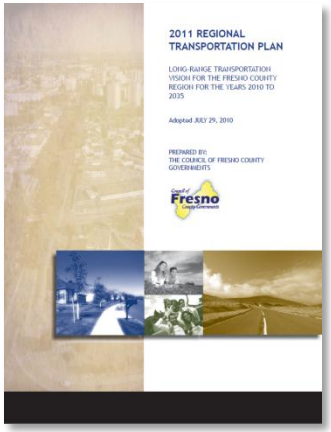
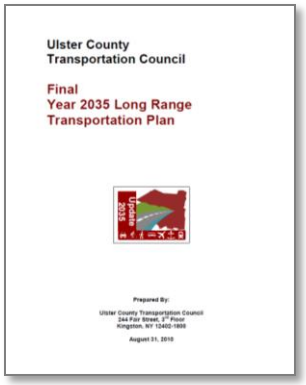
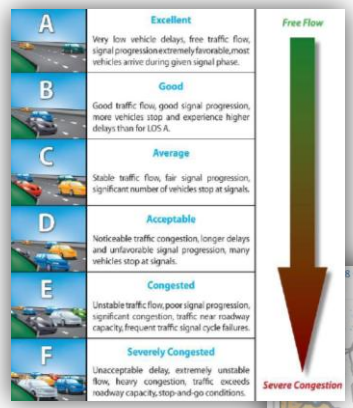


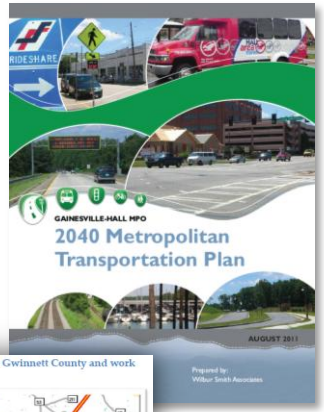
Figure 2.1

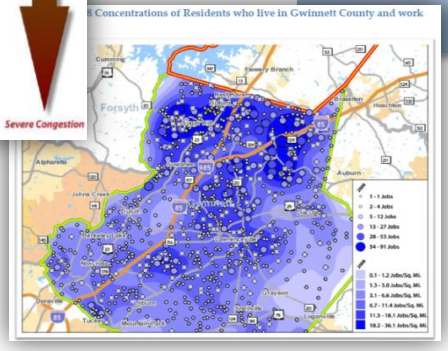
Clarity

- Ulster County Transportation Council | Kingston, NY
  - Explanatory Text
  - Background on Every Issue
- Gainesville-Hall MPO | Gainesville, GA
  - Identification of Data Sources and Calculation of Impacts
  - Justification of Plan









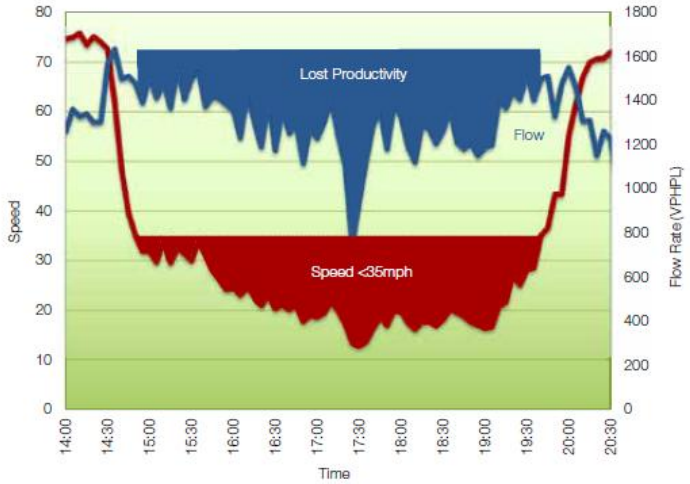
Graphics

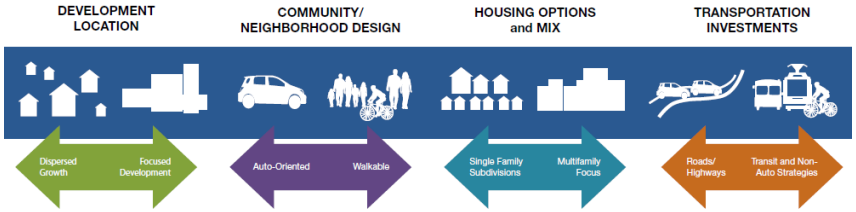
- **Qualitative Sub Criteria**
  - **Appearance of General Layout**
  - **Enhancement of Content**
  - **Effectiveness of Images and Illustrations**

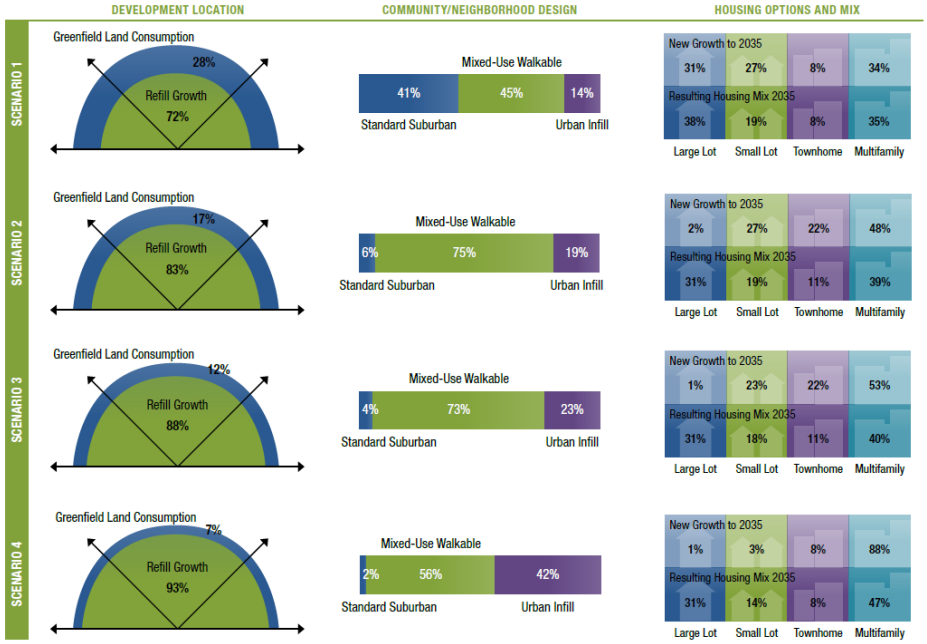
Graphics

- **Southern California Association of Governments | Los Angeles, CA**
  - **Story-Telling Graphics**

Innovative graphics enhance text and provide visualization method that aid comprehension.



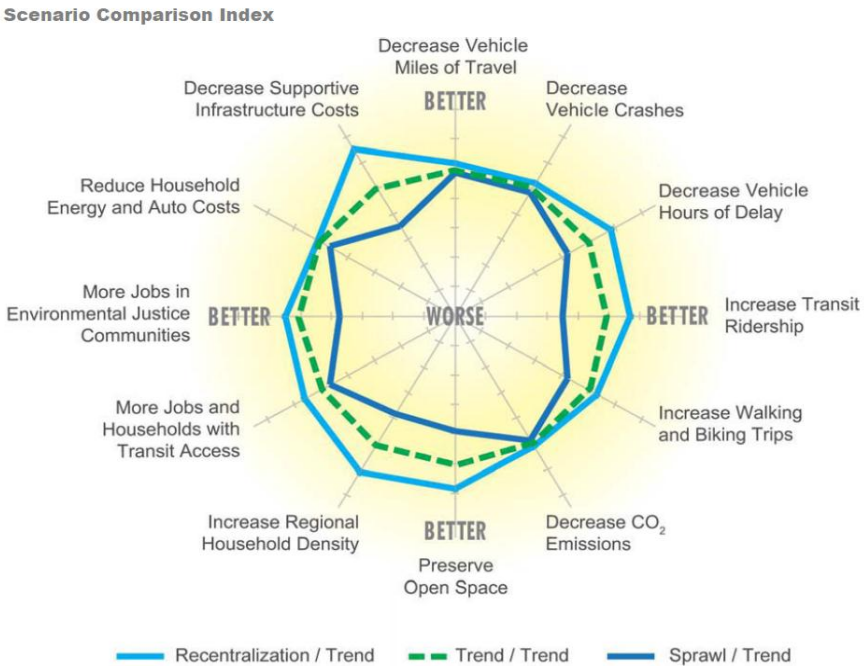




Graphics

- **Delaware Valley Regional Planning Commission | Philadelphia, PA**
  - **Innovative Illustrations**

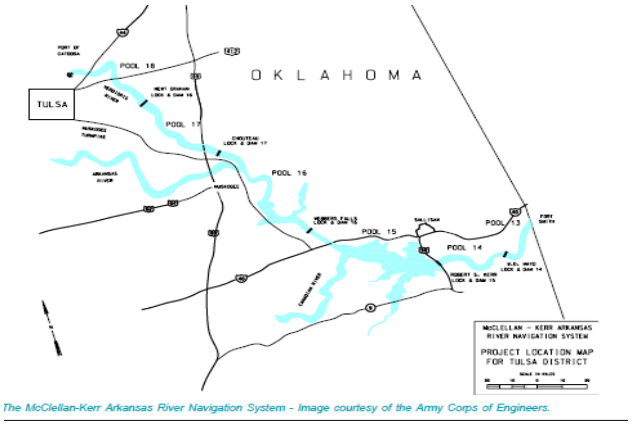
Use of graphics like a radar chart to create a scenario planning index and before and after images to illustrate the pros and cons of alternatives.



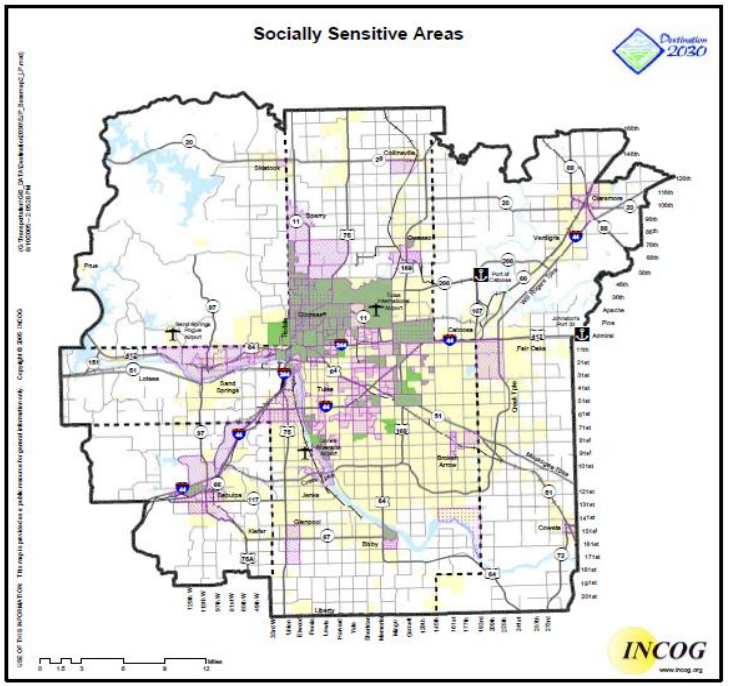
Graphics

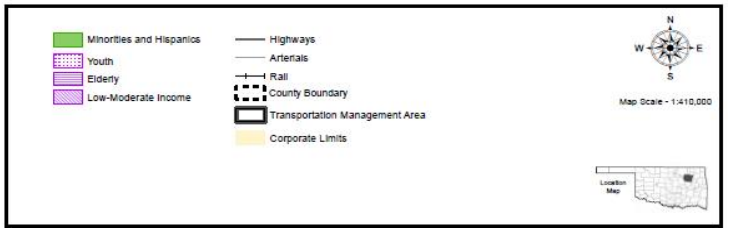
- **Indian Nationals Council of Governments | Tulsa, OK**
  - **Use of Mapping (27 Maps)**

Incorporation of maps into the document body to provide spatial reference and effectively illustrate elements of the plan as they pertain to the regional transportation system.



The McClellan-Kerr Arkansas River Navigation System - Image courtesy of the Army Corps of Engineers.

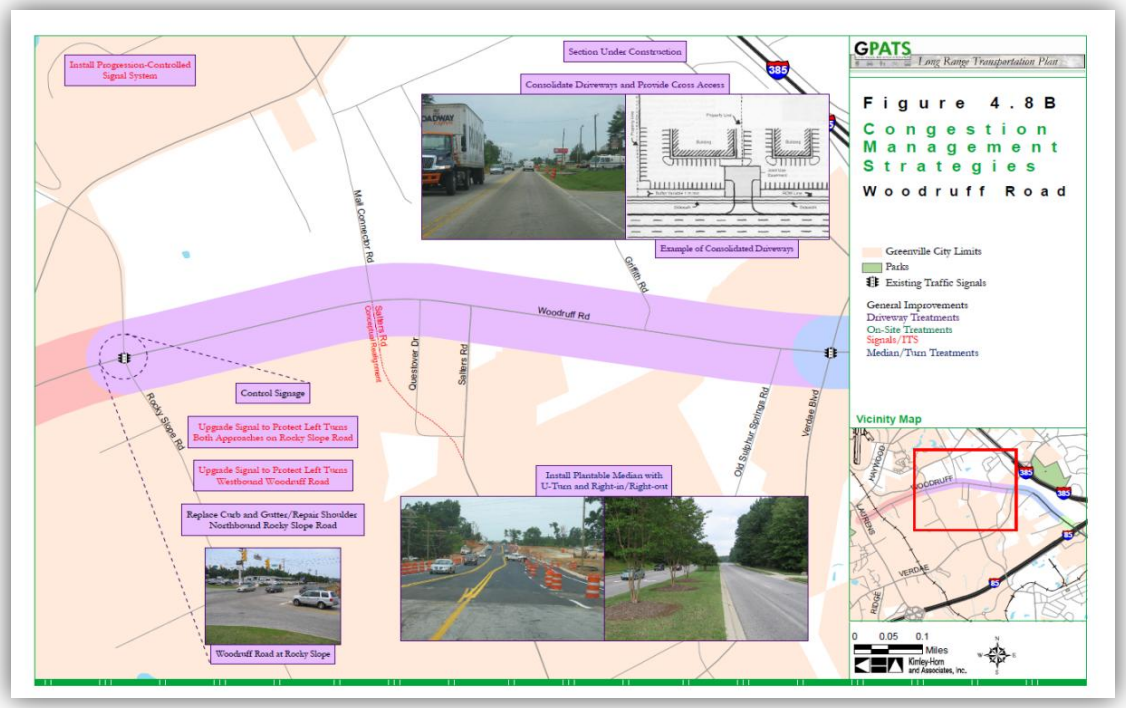




Graphics

- **Greenville-Pickens Area Transportation Study | Greenville, SC**
  - **Local Imagery**

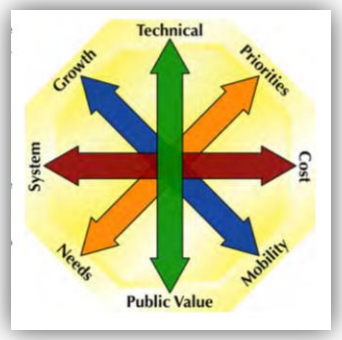


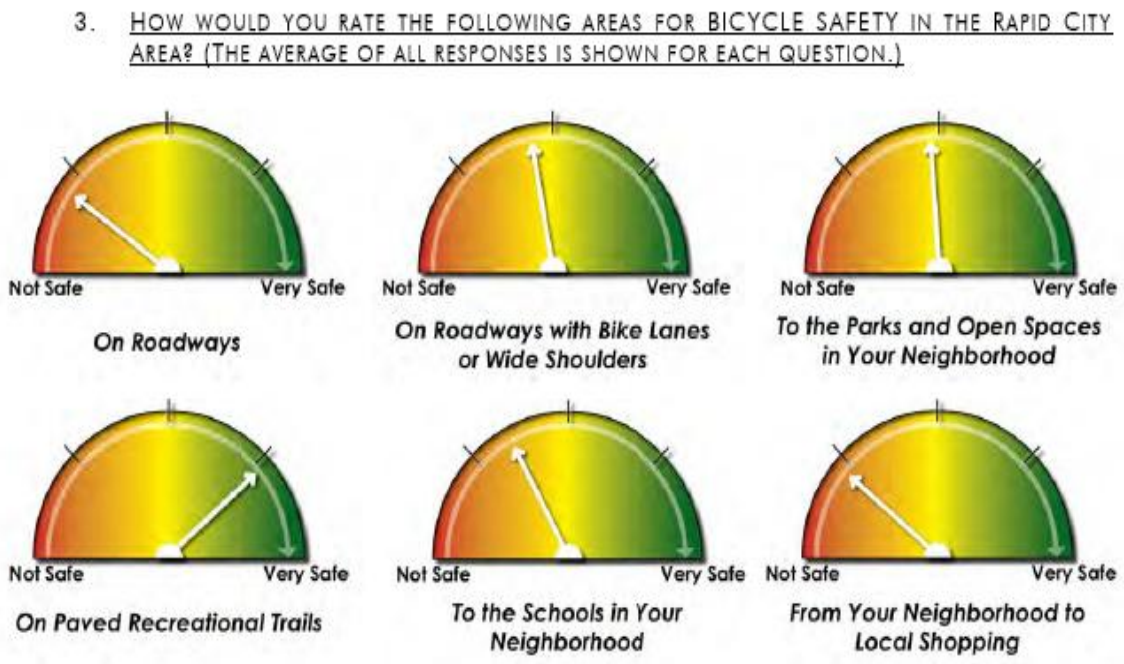
Local theme that stresses the significance of the regional plan and incorporates a variety of pictures that make the document both familiar and visually appealing.

Graphics

- **Rapid City Area MPO | Rapid City, SD**
  - **Data and Conceptual Presentation**



Presentation of survey results is indicative of the significance of public input on plan development and provides a framework for the plan based on regional needs.



Graphics

- **East Central Intergov. Association | Dubuque, IA**
  - **Plan Visualization**

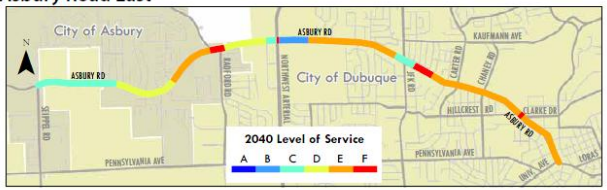
Individual corridor maps/tables allow for comparison across corridors and understanding of system needs on both a regional and corridor scale.

US Highway 20

Reconstruction								
Project #	Road	From	To	Length in Miles	Number of Lanes	Cost per mile	Total Cost	Description of work
1	US 20	Peosta Interchange	IA 32 NW Arterial	7.6	4		$72,000,000	Thunder Hills Rd interchange, relocation of westbound lanes in North Cascade Rd and Swiss Valley Rd Area, interchange at Swiss Valley Rd, Seipple Rd interchange, upgrage Old Hwy Rd and IA 32/NW Arterial intersection
2	US 20	IA 23 NW Arterial	Devon Dr	2	4		$ 60,000,000	Full access controled
							$ 180,000,000	signalized arterial
3	US 20 Julian Dubuque Bridge Replacement			1			$ 194,400,000	
	Total						$506,400,000	

Total Cost $506,400,000

Asbury Road East



Project Elements

Numbers on map correspond with item numbers in the accompanying table

Vision

- **Qualitative Sub Criteria**
  - **Presentation of the Vision**
  - **Implications on the Planning Process**
  - **Inclusion of Regionally Significant Issues**

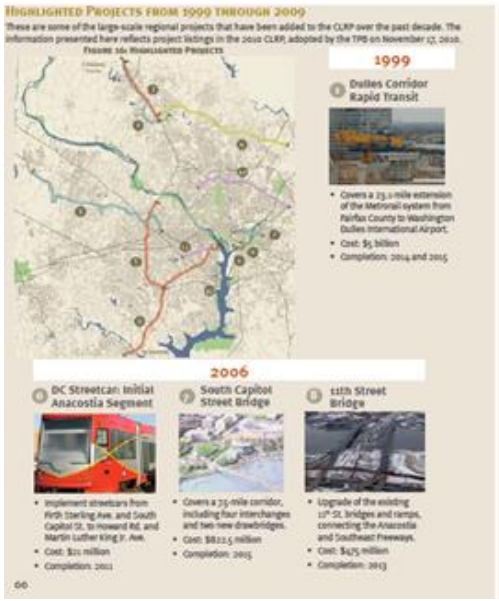
Vision

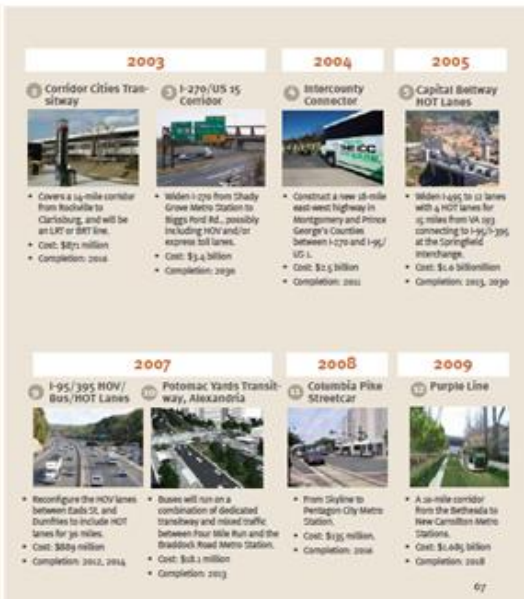
- **National Capital Region Transportation Planning Board | Washington, DC**
  - **Illustrating the Vision**

Upfront presentation of vision goals and use of a project timeline to illustrate historical realization of the vision.

THE VISION GOALS

1. The Washington metropolitan region's transportation system will provide **reasonable access at reasonable cost** to everyone in the region.
2. The Washington metropolitan region will develop, implement, and maintain an interconnected transportation system that enhances quality of life and promotes a strong and growing economy throughout the entire region, including a **healthy regional core and dynamic regional activity centers** with a mix of jobs, housing and services in a walkable environment.
3. The Washington metropolitan region's transportation system will give priority to **management, performance, maintenance, and safety of all modes and facilities.**
4. The Washington metropolitan region will use the **best available technology** to maximize system effectiveness.
5. The Washington metropolitan region will plan and develop a transportation system that enhances and protects the region's **natural environmental quality, cultural and historic resources, and communities.**
6. The Washington metropolitan region will achieve better inter-jurisdictional **coordination of transportation and land use planning.**
7. The Washington metropolitan region will achieve an **enhanced funding mechanism(s)** for regional and local transportation system priorities that cannot be implemented with current and forecasted federal, state, and local funding.
8. The Washington metropolitan region will support options for **international and inter-regional travel and commerce.**





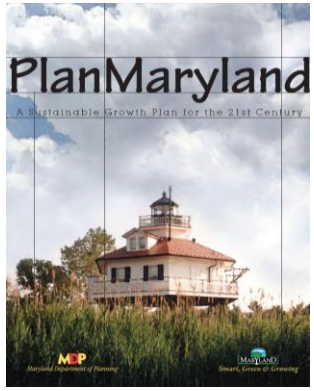
Vision

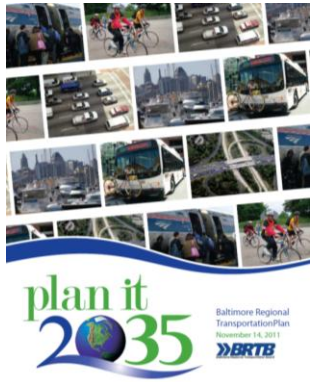
- **Baltimore Regional Transportation Board | Baltimore, MD**
  - **Building the Vision**

Extensive explanation of regional vision development and how the long-range planning effort was built upon the vision to develop transportation system improvements directly related to each of the twelve regional visioning elements.

12 PLANNING VISIONS:

1. *Quality of Life and Sustainability:*
   A high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment.
2. *Public Participation:*
   Citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals.
3. *Growth Areas:*
   Growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers.
4. *Community Design:*
   Compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources.
5. *Infrastructure:*
   Growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner.
6. *Transportation:*
   A well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers.
7. *Housing:*
   A range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes.
8. *Economic Development:*
   Economic development and natural resource-based businesses that promote employment opportunities for all income levels within the capacity of the state's natural resources, public services, and public facilities are encouraged.
9. *Environmental Protection:*
   Land and water resources, including the Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources.
10. *Resource Conservation:*
    Waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved.
11. *Stewardship:*
    Government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection.
12. *Implementation:*
    Strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, state, and interstate levels to achieve these Visions.

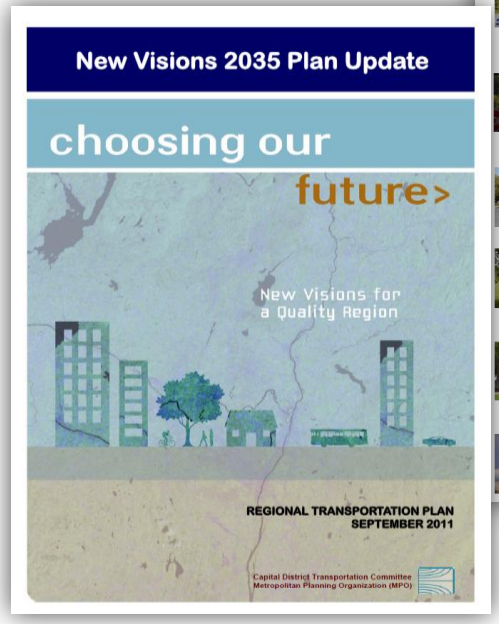




Vision

- Capital District Transportation Committee | Albany, NY
  - Regionally Focusing the Vision

Integration of 'Issues that Affect Everyone' as a focal point for the plan- By identifying omnipresent issues, the plan creates universal programs for regional integration.




New Visions Addresses Issues That Affect Everyone

Transportation Safety
New Visions offers an integrated approach to reduce risk and enable safe access for everyone using the transportation system — especially bicyclists, pedestrians, children, and the elderly.

Transit Service
New Visions incorporates CDTA's Transit Development Plan, which will improve and grow a variety of transit services for the Capital District, increasing mobility and supporting economic development and smart regional growth. One example is CDTC's investment in the BusPlus system on the Route 5 corridor.

Highways and Bridges
New Visions makes a strong commitment to keeping the region's highway and bridge system in good condition, providing $3.4 billion for highway rehabilitation, reconstruction, and design and $1.8 billion in bridge maintenance, repair, and replacement by 2030.

Traffic Congestion
New Visions explores ways to manage congestion, by using incident and traffic information technology to ease daily commutes. The Plan also encourages support for more transit, pedestrian, and bicycle travel, which reduces vehicle traffic.

Arterial Management
New Visions endorses corridor transportation plans that call for a well-designed network of connected streets featuring pedestrian & bicycle treatments and transit access.

Bicycle and Pedestrian Transportation
New Visions encourages development that incorporates bicycle and pedestrian accommodations into highway construction as well as city, village, and town plans and provides for recreational opportunities through creation of bike/hike trails.

Environmental Quality
New Visions supports energy conservation and air quality in the region by advocating sustainable development patterns and site design, urban reinvestment, and community -based land use planning, along with transit, bicycle, & pedestrian investments & strong participation in the Clean Cities program.

Freight Movement
New Visions advocates congestion management and infrastructure investments that will support the movement of goods throughout the Capital District.

Economic Development
New Visions articulates regional economic development needs and the transportation investment needed to support sustainable regional economic growth. All indications are that the region's quality assets are becoming apparent to decision makers outside the region. Affordable and diverse housing locations, good schools, colleges and universities, ease of mobility, modern air and rail transportation facilities, cultural and recreational opportunities and a clean environment appear to be significant criteria in location decisions of advanced technology firms and support Tech Valley and the region's economic development and business climate. CDTC will work with the Governor's Capital Region Economic Development Council to encourage regional efforts to build a strong, sustainable economy.

Local Communities
New Visions acknowledges the importance of land use & development. CDTC sponsors the Linkage Planning Program, which provides funding for cities, towns, & villages to prepare & implement community-based transportation & land use plans consistent with New Visions principles.

Public Participation
New Visions seeks public participation in the planning process. Collaborating in the development of the 2030 Plan were the Quality Region Task Force, five working groups, the Bicycle and Pedestrian Task Force, the Goods Movement Task Force, and the Finance Task Force as well as public involvement in over 70 Linkage Studies at the local level. CDTC continues to reach out for public involvement at the community and regional levels.

Security
New Visions follows the lead of NYSDOT and CDTA with security-related issues in transportation planning. CDTC provides a forum for operational discussions related to the safety and security of the Capital District transportation system.

Big Ticket Initiatives
The New Visions 2035 Plan reaffirms support for consideration of potential "big ticket" initiatives. These initiatives would be supported by higher growth scenarios, yet they could be pursued with trend growth as well. Funding is not identified, yet the plan puts forward the vision of bold investments that could be feasible if the public supports the vision and funding can be found.

Vision

- **Assoc. of Monterey Bay Area Governments | Marina, CA**
  - **Measuring the Vision**

Presentation of model and statistical metrics related to the vision's elements expresses project planning using a common sense approach.

Region wide Transportation Performance Measures

In preparing this 2010 Monterey Bay MTP, AMBAG staff also prepared some regional traffic comparisons of present conditions and those expected in 2035 based on model forecast volumes and trip modes.

Table 19. SAFETEA-LU Goals & Monterey Bay Area Measures & Metrics

Goal	Measure	Metric
A. Economic Vitality	Productivity lost in congestion	Daily vehicle hours of delay
B. Access/Mobility Goods & People	Trips taken within the region	Total daily person trips
C. Consistency with plans	Various	Jobs/Housing balance, acres of land urbanized, size of commute shed
D. Enhance Modal Connectivity	Use of alternative modes	Modal split tables
E. Efficient Systems Management	System improving with rising demand	Average travel speeds
F. Preserve Existing System	Utilization of ITS, state of good repair	N/A
G. Increase Safety	Accident Rate	CHP statistics*
H. Increase Security	Crime and terrorism incidents	CHP statistics*

*California Highway Patrol does not produce accident, crime or terrorism forecasts through 2035. Instead, these indicators must be measured periodically through the comprehensive, continuing and coordinated planning process built into the ongoing update process of the MTP and related documents.

The Monterey Bay Area Transportation Vision for 2035

Increased Regional Mobility in 2035

The 2010 MTP addresses a transportation plan to 2035. Within this 25 year period, the projects and programmatic changes listed in the following pages will increase the overall mobility, safety, and security of people and goods within the region.

In 2035, the region's population will be both greater and older than it is today. Our challenge is to improve mobility for that changing population over the next 25 years.

Geography

The Monterey Bay metropolitan region consists of the Pajaro and Salinas River Valleys and adjacent coastal lowland and mountains surrounding and extending southerly from the Monterey Bay on the Central California coast. The total land area of the three-county (Monterey, San Benito and Santa Cruz) region is 5,157 square miles, or approximately 3.3 million acres.

The region's spectacular coastal sea bluffs, dunes, and river valleys, encircled by the Santa Cruz, Gabilan and Santa Lucia mountain ranges, with the Diablo range to the east, look out over the Monterey Bay. Most of the region is mountainous, with elevations reaching 5,862 ft. above sea level at Junipero Serra Peak in the Los Padres National Forest.

The region is among the world's most renowned for scenic beauty. Additionally, the Monterey Bay has been designated a national marine sanctuary while the Pajaro and Salinas River valleys contain a large share of the most fertile and productive agricultural soils in the nation.

Shared Regional Goals

The 2010 MTP seeks to achieve a coordinated and balanced regional transportation system, which includes mass transportation, highway, railroad, bicycle, pedestrian, goods movement, and aviation facilities and services.

In addition to a balanced and coordinated system, the regional goals seek to:

- Support Economic Vitality of the Monterey Bay Area, by enabling global competitiveness, productivity and efficiency
- Increase the Accessibility and Mobility of People and Goods
- Protect 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
- Enhance the Modal Integration and Connectivity of the Transportation System for People and Goods
- Promote Efficient System Management and Operation
- Preserve the Existing System
- Increase the Safety of the Transportation System for Motorized and Non-motorized Users, and
- Increase the Security of the Transportation System for Motorized and Non-motorized Users

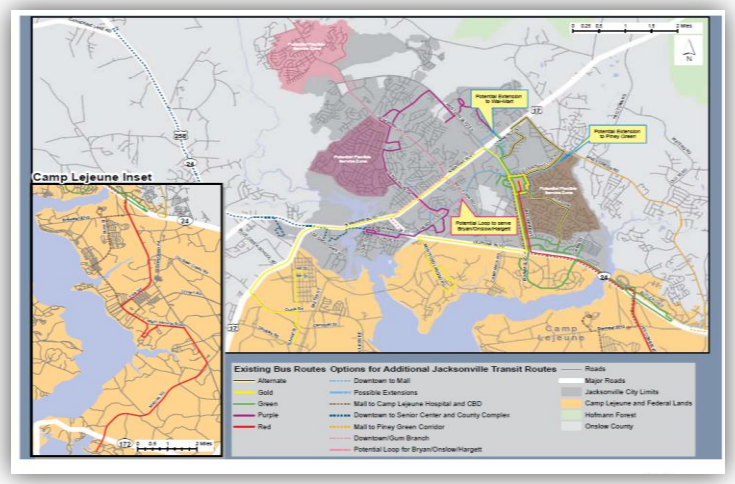
Figure 1. The Monterey Bay Area

11

Vision

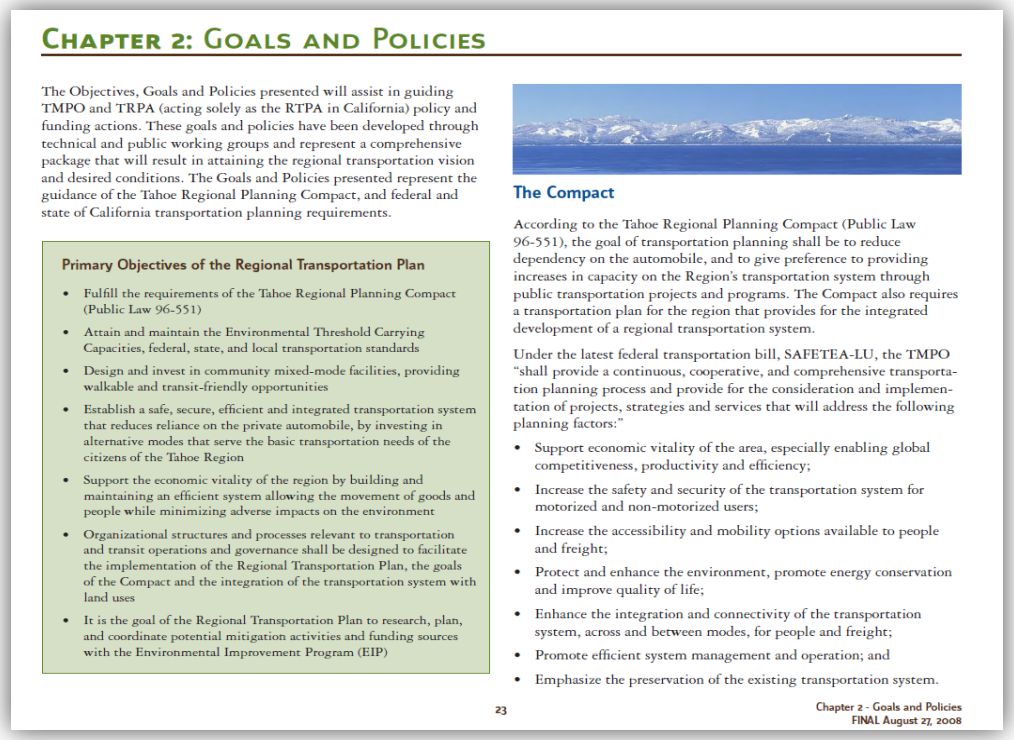
- **Jacksonville Urban Area MPO | Jacksonville, NC**
  - **Framing the Plan with the Vision**

Introduction of visioning concepts related, explanation of their significance and implications on the plans, and reference to where further articulated in the document.



Vision

- **Tahoe MPO | Stateline, CA/NV**
  - **Implementing Goals and Policies for the Vision**



Chapter 2: Goals and Policies

The Objectives, Goals and Policies presented will assist in guiding TMPO and TRPA (acting solely as the RTPA in California) policy and funding actions. These goals and policies have been developed through technical and public working groups and represent a comprehensive package that will result in attaining the regional transportation vision and desired conditions. The Goals and Policies presented represent the guidance of the Tahoe Regional Planning Compact, and federal and state of California transportation planning requirements.

Primary Objectives of the Regional Transportation Plan

- Fulfill the requirements of the Tahoe Regional Planning Compact (Public Law 96-551)
- Attain and maintain the Environmental Threshold Carrying Capacities, federal, state, and local transportation standards
- Design and invest in community mixed-mode facilities, providing walkable and transit-friendly opportunities
- Establish a safe, secure, efficient and integrated transportation system that reduces reliance on the private automobile, by investing in alternative modes that serve the basic transportation needs of the citizens of the Tahoe Region
- Support the economic vitality of the region by building and maintaining an efficient system allowing the movement of goods and people while minimizing adverse impacts on the environment
- Organizational structures and processes relevant to transportation and transit operations and governance shall be designed to facilitate the implementation of the Regional Transportation Plan, the goals of the Compact and the integration of the transportation system with land uses
- It is the goal of the Regional Transportation Plan to research, plan, and coordinate potential mitigation activities and funding sources with the Environmental Improvement Program (EIP)

The Compact

According to the Tahoe Regional Planning Compact (Public Law 96-551), the goal of transportation planning shall be to reduce dependency on the automobile, and to give preference to providing increases in capacity on the Region's transportation system through public transportation projects and programs. The Compact also requires a transportation plan for the region that provides for the integrated development of a regional transportation system.

Under the latest federal transportation bill, SAFETEA-LU, the TMPO "shall provide a continuous, cooperative, and comprehensive transportation planning process and provide for the consideration and implementation of projects, strategies and services that will address the following planning factors:"

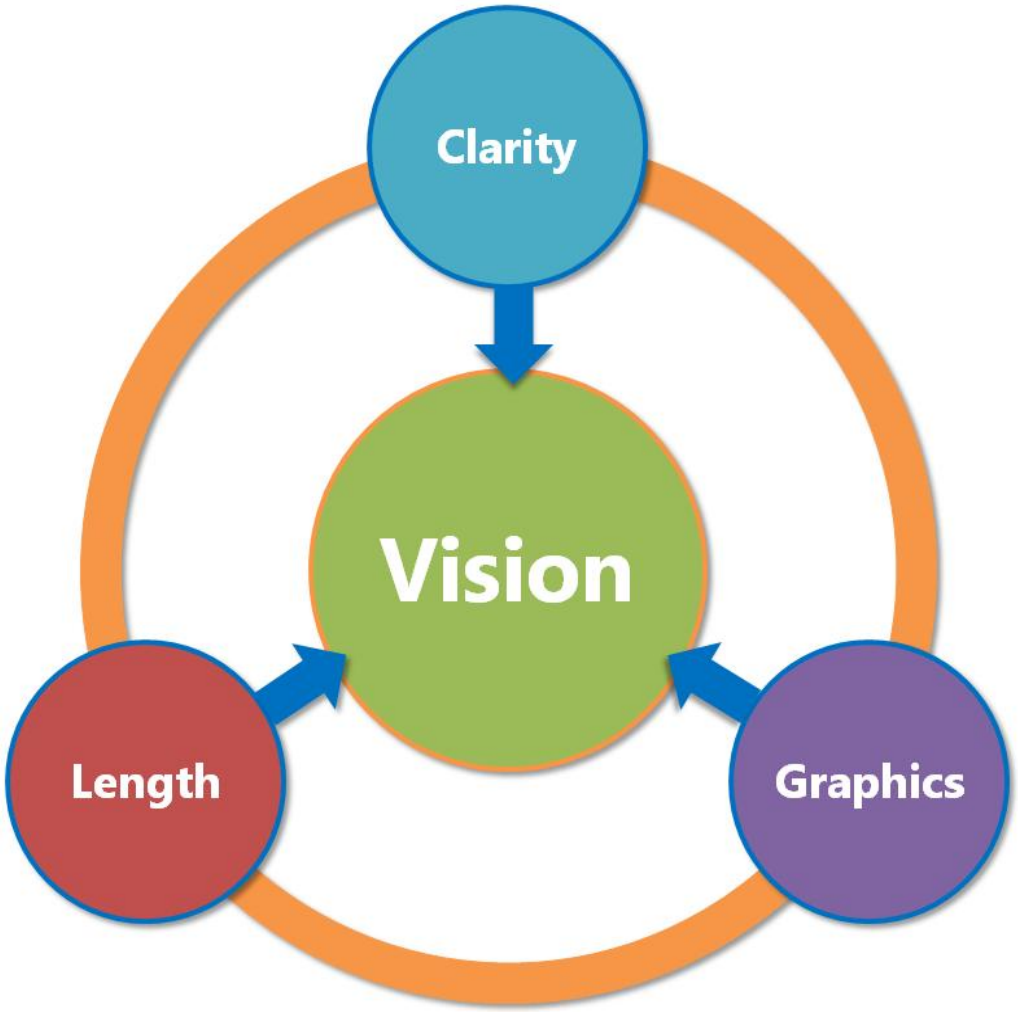
- Support economic vitality of the area, especially enabling global competitiveness, productivity and efficiency;
- Increase the safety and security of the transportation system for motorized and non-motorized users;
- Increase the accessibility and mobility options available to people and freight;
- Protect and enhance the environment, promote energy conservation and improve quality of life;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and
- Emphasize the preservation of the existing transportation system.

The LRTP creates a vision and outlines objectives and goals that quantify/qualify elements of the vision. Measurement of these goals and objectives is then used to develop policies to accomplish the regional vision.

Findings

Criteria	Agency	Distinguishing Factor	Pages
Length	East-West Gateway Council of Government	Unified Appendix Report	35
	Houston-Galveston Area Council	Simplicity in Presentation	66
	Wilmington Area Planning Council	Concise Language	29
	Wilmington Urban Area MPO	Structure and Appendices	27
	Cache MPO	Compactness	47
	Dixie MPO	Straightforward Information	40
Clarity	New York Metropolitan Transportation Council	Articulation of Process	232
	Metropolitan Transportation Commission	Educational Language	100
	Council of Fresno County Governments	Chronological Succession of Topics	419
	Durham-Chapel Hill-Carrboro MPO	Communication of Ideas	105
	Ulster County Transportation Council	Explanatory Text	196
	Gainesville-Hall MPO	Justification of Plan	203
Graphics	Southern California Association of Governments	Story-Telling Graphics	217
	Delaware Valley Regional Planning Commission	Innovative Illustrations	145
	Indian Nations COG	Use of Mapping	162
	Greenville-Pickens Area Transportation Study	Local Imagery	190
	Rapid City Area MPO	Data and Conceptual Presentation	193
	East Central Intergovernmental Association	Plan Visualization	184
Vision	National Capital Region Transportation Planning Board	Illustrating the Vision	88
	Baltimore Regional Transportation Board	Building the Vision	217
	Capital District Transportation Committee	Regionally Focusing the Vision	24
	Association of Monterey Bay Area Governments	Measuring the Vision	145
	Jacksonville Urban Area MPO	Framing the Plan with the Vision	93
	Tahoe MPO	Implementing Goals and Policies for the Vision	142

Implications



The importance of balance between clarity, length, and graphics to create a succinct, understandable, and attractive document that can relay the MPOs vision in a user-friendly manner

Implications

Articulation of Process
Informative Language
Communication of Ideas
Chronological Order of Topics
Explanatory Text
Justification of Plan

Unified Appendix Report
Simplicity in Presentation
Concise Language
Structure & Appendices
Compactness
Straightforward Information

Story-Telling Graphics
Innovative Illustrations
Local Imagery
Use of Mapping
Data & Conceptual Presentation
Plan Visualization

VISION

Illustrate
Build
Focus on Region
Measure
Frame the Plan
Implement Goals & Policies

VISION

Performance Measures Workshop

MPO Perspective on Performance Measures

TCC & CIR | September 25, 2013

Presenters / Facilitators

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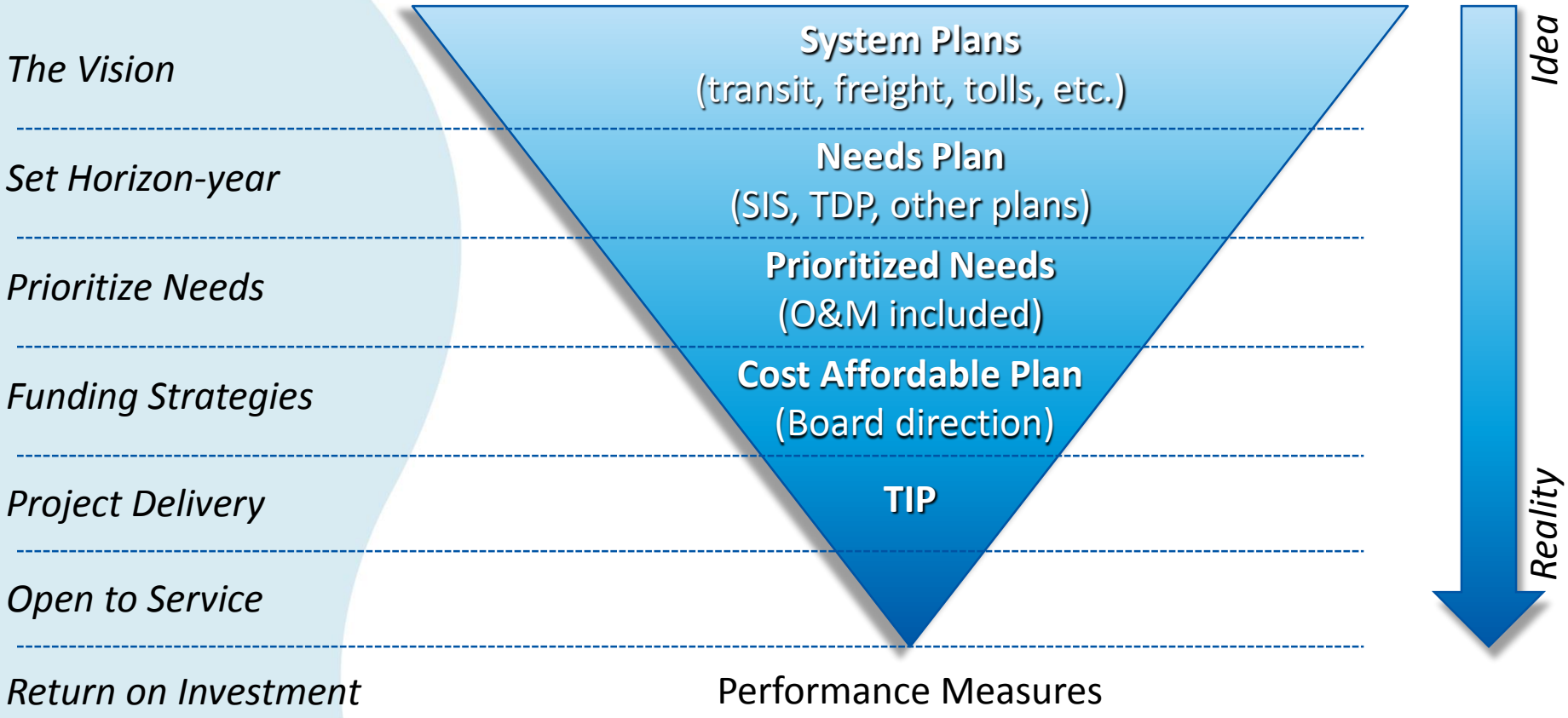
Today's Agenda

- How it all fits together
- Role of performance measures
- Selecting performance criteria
- Example measures
- Overview of *Commitment 2040* 'development' measures
- Open discussion

Source: https://www.fhwa.dot.gov/tpm/about/


The Vision
Set Horizon-year
Prioritize Needs
Funding Strategies
Project Delivery
Open to Service
Return on Investment
System Plans
(transit, freight, tolls, etc.)
Needs Plan
(SIS, TDP, other plans)
Prioritized Needs
(O&M included)
Cost Affordable Plan
(Board direction)
TIP
Performance Measures
Idea
Reality

Role of Performance Measures

3 Functions

- Plan development
- Plan implementation
- Monitoring/accountability

4 Applications

- Resource allocation
- Program structure
- Project selection
- Policy refinement

Selecting Performance Criteria

- Strategic alignment
- Causality
- Data availability / resource implications
- Decision-making value
- Communication value

Example Measure: Plan Development

The Goal

- **Move people**
- Create jobs
- Strengthen communities

The Objective

- **Maintain infrastructure**
- Achieve LOS standards
- Improve accessibility
- Shorten delivery
- Maximize ridership

The Measures

- **% of existing O&M costs met**
- **% of new O&M costs met**

Example Measure: Plan Implementation

The Goal

- **Move people**
- Create jobs
- Strengthen communities

The Objective

- **Accelerate project delivery**

The Measures

- **Leveraged local dollars in TIP (local investment multiplier)**
- **% of TIP spent on rights-of-way**

Example Measure: Plan Monitoring

The Goal

- **Move people**
- Create jobs
- Strengthen communities

The Objective

- **Maintain or reduce the cost of travel**

The Measures

- **Vehicle hours of delay per…**
- **% of lane miles at target LOS**

Goal: Move People

- Maintain infrastructure
  - % of existing O&M costs met
  - % of new O&M costs met
- Achieve LOS standards
  - % of facilities meeting standards, by mode
- Improve accessibility
  - # of jobs w/in 30 min
  - # of facilities w/consistent policies
- Shorten project delivery
  - % projects needing new ROW
- Maximize transit ridership
  - Mode share

Goal: Create Jobs

- Reduce avg. travel time
  - Selected avg. travel times
  - Build alternative modes
- Promote new development
  - % of newly developing areas with “good” transportation access/mobility
- Minimize cost of travel
  - Travel cost index
- Maximize private investment
  - Annual project development spending
  - Public involvement levels

Goal: Strengthen Communities

- Equitable cost/benefit distribution
  - # of transportation alternatives in all 5 planning areas
  - % of pop. with "good" access in targeted areas
- Improve safety
  - # of fatalities/serious injuries
  - # of crashes
- Promote development/infill
  - Value of P3 in targeted areas
  - % of pop. w/ premium transit access
- Aesthetic project design
  - $s spent on CSS
- Non-motorized options
  - Sidewalk to roadway ratio
  - Bicycle to roadway ratio
  - Miles of bike/ped network gaps
- Environmental stewardship
  - BTUs/person mile travelled
  - Tons of greenhouse gases from mobile sources

Open Discussion

Transportation Outlook 2040

Performance Measures

Progress Report Summary • June 2013

The Mid-America Regional Council (MARC) long-range transportation plan, *Transportation Outlook 2040*, includes a set of goals that serve as the plan's foundation. *Transportation Outlook 2040* provides a socially, environmentally and economically sustainable vision for the Kansas City region. It outlines $18 billion in transportation investments to support and guide implementation of the plan over time.

MARC has designed a set of goals to evaluate the plan's progress. This performance measures report summarizes some indicators that help MARC and its planning partners better understand and evaluate how well the region is achieving the plan goals.

This year's summary presents new categories, more reliable data sources and the inclusion of an expanded region under some categories.

The full report is available online at www.marc.org/2040.

Key:

- Blue arrow, plan goal (increase/decrease in measure).
- Green arrow/green box — trending in-line with plan.
- Red arrow/red box — trending opposite of plan.
- Gray line, gray box — no change in information or no significant change toward plan goals.

Accessibility

Factor	Measure	Data	Goal	Actual	Trend
Transit service	Total revenue service hours	2010: 904,850 hrs. 2011: 924,475 hrs.	↑	↑	+6.14%
	Average transit boardings per revenue service hour	2010: 17.38 boardings 2011: 17.48 boarding	↑	↑	+0.61%
	Source: National Transit Database (NTD) — Annual Transit Profiles.				
	Note: System-wide transit ridership has grown by over 20% since 2004.				
Bicycle-pedestrian accessibility	Number of obligated TIP projects with bicycle and pedestrian elements	2011: 65 projects 2012: 115 projects	↑	↑	+76.92%
	Source: Mid-America Regional Council (MARC) Transportation Improvement Program (TIP), Annual list of obligated projects				
	Note: The number of obligated TIP projects containing bicycle/pedestrian elements has dramatically increased along with the amount of federal funding obligated for bicycle/pedestrian projects.				
Environmental justice	Percent of total federal funds invested in environmental justice tracts	2010–2014 TIP: 41.82% 2012–2016 TIP: 49.42%	↑	↑	+7.60%
	Source: Mid-America Regional Council (MARC) Transportation Improvement Program (TIP), Annual list of obligated projects				
	Note: The most recent 2012-2016 TIP saw an increased percentage of funding in Environmental Justices census tracts. These areas account for 28 percent of the region's population.				

Economic Vitality

Factor	Measure	Data	Goal	Actual	Trend
Freight movement	Tonnage of goods moved*	2007: 62,247,040 tons 2010: 59,833,028 tons	↑	↓	-3.88%
	Source: Mid-America Regional Council, Import/export report Freight Analysis Framework (FAF3) * No change from the 2012 summary.				
	Note: The tonnage of goods moved throughout the Kansas City MSA decreased during the great recession. The updated Import/Export Analysis will be available in Fall 2013				
Activity centers	Number of annual TIP projects within activity centers	2011: 12 projects 2012: 21 projects	↑	↑	+75.00%
	Source: Mid-America Regional Council, TIP database				
	Note: The number of annual TIP projects in activity centers increased significantly in 2012.				
Transportation costs	Annual cost of congestion per commuter	2010: $434 2011: $584*	↓	↑	+25.86
	Source: Texas Transportation Institute (TTI), Urban mobility reports * TTI used alternative calculation method for the 2012 report.				
	Note: According to the Tom Tom Congestion Index, Kansas City area ranks 59th out of 59 major cities analyzed in North America (continent) with a congestion level of 10 percent.				

Climate change / energy use

Factor	Measure	Data	Goal	Actual	Trend
Vehicle miles traveled (VMT)	Vehicle miles traveled per capita (MARC counties)	2010: 24.7 miles 2011: 24.6 miles	↓	↓	-0.81%
	Source: Kansas Department of Transportation (KDOT), Roadway database; Missouri Department of Transportation (MoDOT), Roadway database; American Community Survey (ACS), One year estimates				
	Note: Total regional Daily VMT increased by 1.8 percent from 46,813,223 to 47,649,645 over this same period.				
Vehicle occupancy	Average number of vehicle occupants	2010: 1.04 occupants 2012: 1.05 occupants	↑	–	+0.77%
	Source: ACS, One-year estimates				
	Note: There has been no significant change in vehicle occupancy rates since data has been available starting in 2006.				

Environment

Factor	Measure	Data	Goal	Actual	Trend
MetroGreen® network	Completed Metro Green® network miles	2010: 230 miles 2011: 242 miles	↑	↑	+5.22%
	Source: Mid-America Regional Council Environmental Services, MetroGreen® database				
	Note: The network has continued to expand and currently is estimated at 21.2 percent complete to its planned vision of a 1,144-mile system.				
Carbon dioxide	Pounds of system-wide CO_2 emitted during congestion only (millions)	2010: n/a 2011: 256 pounds	↓	–	–
	Pounds (millions) per auto commuter (CO_2 produced during congestion only)	2010: n/a 2011: 235 pounds	↓	–	–
	Source: TTI, Urban Mobility Reports				
	Note: This is the first year the Urban Mobility report includes a measure for air quality. Kansas City is well below the national average for system-wide CO_2 emissions and is ranked 38 out of the 101 urban areas studied. Kansas City ranks 70th out of 101 urban areas for pounds of CO_2 per auto commuter during congestion.				

Place Making

Factor	Measure	Data	Goal	Actual	Trend
Multimodal options	Percent of work trips using alternative modes (transit, bicycling, walking, etc.)	2010: 15.83% 2011: 16.99%	↑	↑	+1.16%
	Percentage of people driving alone to work	2010: 84.17% 2011: 83.01%	↓	↓	-1.16%
	Source: ACS, one-year estimates				
	Note: 2011 registered a notable increase in multimodal usage; rates remain consistent with historic trends.				

Public health

Factor	Measure	Data	Goal	Actual	Trend
Ozone pollution	Three-year average of ground-level ozone readings (parts per billion)	2009–11: 75 ppb 2010–12: 80 ppb	↓	↑	+6.67%
	Number of annual ozone pollution violations	2011: 9 violations 2012: 23 violations	↓	↑	+155.56%
	Source: MARC Air Quality reports, ozone season summaries				
	Note: Seasonal weather patterns significantly contribute to Ozone formation. 2012 was an extremely hot summer and coupled with a lower standard (75 ppb) resulted in the highest number of violations since our data was collected starting in 1993.				
Physical health	Percent of adults obese in Kansas City Region	2009: 26.9% 2010: 29.5%	↓	↑	+2.60%
	Percent of adults physically inactive in Kansas City Region**	2009: 22.7% 2010: 23.0%	↓	↑	+0.30%
	Source: Centers for Disease Control and Prevention (CDC), Selected Metropolitan/Micropolitan Area Risk Trends (SMART): Behavioral Risk Factor Surveillance System (BRFSS), city and county data ** No change in data from the 2012 report.				
	Note: Transportation is only one factor related to obesity and physical activity, however, this undesired trend reinforces the need to be proactive in planning for improved health outcomes.				

Safety and security

Factor	Measure	Data	Goal	Actual	Trend
Crash fatalities	Number of annual crash fatalities*	2010: 182 2011: 152	↓	↓	-16.48%
	Number of annual crash fatalities per 100,000,000 Vehicle miles traveled	2010: 1.09 2011: 0.96	↓	↓	-11.93%
	* Goal to cut number in half by 2040.				
Disabling injuries	Number of annual disabling injuries	2010: 1,384 2011: 1,380	↓	—	no significant change
	Number of annual disabling injuries per 100,000,000 vehicle miles traveled	2009: 8.30 2010: 8.12	↓	↓	-2.17%
	Source: Kansas Department of Transportation, traffic databases; Missouri Department of Transportation, traffic databases.				
	Note: The fatalities and disabling injuring for all four measures have decreased from 2010–2011, continuing a noticeable positive trend.				

System conditions

Factor	Measure	Data	Goal	Actual	Trend
Bridge conditions	Percent of structurally deficient bridges*	2010: 10.43% 2011: 9.30%	↓	↓	-1.13%
	Percent of functionally obsolete bridges*	2010: 14.95% 2011: 14.90%	↓	↓	-0.05%
	Source: Kansas Department of Transportation and Missouri Department of Transportation. *Miami County added to the MARC region in 2012.				
Pavement condition	Percent of Kansas roads in MARC region classified as "poor" condition	2011: 0.2% 2012: 0.6%	↓	↑	+0.40%
	Percent of Missouri roads in MARC region classified as "not good" condition	2010: 17.9% 2012: 15.4%	↓	↓	-2.50%
	Source: Kansas Department of Transportation, pavement condition. Missouri Department of Transportation, pavement condition.				
	Note: KDOT and MoDOT have two different ratings systems for their pavement conditions. Each state's roads must be examined separately.				

System performance

Factor	Measure	Data	Goal	Actual	Trend
Travel speeds	Average travel speed (MPH) on highways	2006: 57.42 mph 2010: 55.58 mph	↑	↓	-3.20%
	Source: Mid-America Regional Council, Travel Time Study Reports				
	Note: 2011 travel time data was collected utilizing a new regional dataset; this represents an updated methodology and format when compared to prior year's data.				
Congestion	Percent of urban roadways congested	2010: 23% 2011: 23%	↓	–	–
	Source: Texas Transportation Institute, Urban mobility reports				
	Note: Kansas City's congested network (23 percent of total) is approximately half the size of similar large urban areas with one to three million people, averaging approximately 46 percent congestion.				
Travel time	Annual hours of delay per auto commuter	2010: 27 hours 2011: 27 hours*	↓	–	–
	Source: Texas Transportation Institute (TTI), Urban mobility reports * New information source used for 2011 data.				
	Note: When compared to other urban areas of similar size, the Kansas City region experiences 37 percent less annual delay per auto commuter (27 hours of annual delay compared to 37 hours in peer regions).				

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