Visualization for Transportation Planning
Federal Transit Administration
Federal Highway Administration

Effie Stallsmith
FTA Office of Planning & Environment
Visualization for Transportation Planning

To strengthen public participation in the planning and project delivery process and specifically to aid the public in understanding proposed plans, SAFETEA-LU calls for States and MPOs to use visualization techniques. Through visual imagery, the complex character of proposed transportation plans, policies and programs can be portrayed at appropriate scales -- state, region, local area, project architecture, etc. and from different points of view.
Visualization for Transportation Planning

"The effective presentation of projects’ impacts to the public has become an increasingly essential part of the planning and design of transportation systems.”

Examples of visualization techniques include sketches, drawings, artist renderings, physical models and maps, simulated photos, videos, computer modeled images, interactive GIS systems, GIS based scenario planning tools, photo manipulation and computer simulation.

FHWA Visualization website
SAFETEA-LU

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users P. L. 109-59
SAFETEA-LU

Changes §5303 Metropolitan transportation planning under the development of transportation plan, “Each Metropolitan Planning Organization shall provide citizens...reasonable opportunity to comment...”

- §5303(g)(3)(i)(5)(C) Methods “...Metropolitan Planning Organizations shall to the maximum extent practicable”

  • §5303(g)(3)(i)(5)(C)(ii) “employ visualization techniques to describe plans”
SAFETEA-LU

- Changes to §5304 (f)(3) Long-Range Statewide Transportation Plan, Participation by Interested Parties
  - § 5304(f)(3)(B) Methods “... the State shall, to the maximum extent practicable”
  - §5304(f)(3)(B)(ii) “employ visualization techniques to describe plans”
‘Employ visualization techniques to describe…’
## Transportation Improvement Program (TIP)

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Building Livable Communities with Transit

Washington State DOT

[Map of Washington state with various project markers and a list of WSDOT projects]

- Ferry System - Anacortes Multimodal Terminal
- Ferry System - Edmonds Multimodal Terminal
- Ferry System - Mukilteo Multimodal Terminal
- I-182 - Queen Anne / Thayer I5 Improvements
- I-205 - Mill Plain Exit - 128th Connector
- I-205 - Mill Plain Interchange to NE 26th Street
Building Livable Communities with Transit

Rail - PCC Cheney-Coulee City-Pullman Acquisition and Upgrades

Project Status
September 2006

WSDOT and Wslco continue negotiations for acquisition of the CW Line of the Palouse River and Coulee City Railroad (PCC).

Read the latest market analysis of the CW Line: CW Line Market Assessment (pdf file, 1014 kb).

Overview
WSDOT purchased the first phase of the PCC right of way November 1, 2004.

In March 2006, the state legislature combined the "Palouse River and Coulee City Rehabilitation" and the "Palouse River and Coulee City Railroad Acquisition" projects into the PCC Cheney-Coulee City-Pullman Acquisition and Upgrades project.

Why is WSDOT purchasing and rehabilitating the Palouse River and Coulee City Railroad? Currently the PCC suffers from decades of deferred maintenance.
Building Livable Communities with Transit

Atlanta Regional Commission

Mobility 2030 Regional Transportation Plan (RTP)

Welcome to ARC's Transportation Planning interactive mapping Web site, here you can see what projects are planned for your area of the region. Then, with the click of a button, you can find out more about these projects. For instructions on how to use this system and find transportation projects, click here. You may also click the "Help" button for more information.

ARC would like feedback on this new transportation mapping and search feature. Simply click the link below to let us know what you like and don't like. Also, use this link to voice your opinion about a specific transportation plan.
Clicking on the link for that project produces a PDF version of a Atlanta’s Plans Project Fact Sheet.
Transportation Plan

EXECUTIVE SUMMARY

DESTINATION 2030 is the 2004 Regional Transportation Plan (RTP) for the six county region in Southern California including Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial — home to 17 million people. The Regional Transportation Plan (RTP) is the culmination of a three-year effort with a focus on improving the balance between land use and the current as well as future transportation systems. The Southern California Association of Governments (SCAG) is required to develop, maintain, and update the RTP every three years.

DESTINATION 2030 is a multi-modal Plan representing our vision for a better transportation system, integrated with the next crucial growth pattern for the Region since the Plan’s adoption of 2000. The Plan provides the policy basis and program framework for long-term investment in our existing regional transportation system in a coordinated, cooperative and comprehensive manner. Regional transportation investments in the RTP began their return (real or financial) transportation funds must be consistent with the RTP and must be included in the Regional Transportation Investment Program (RTIP) over many years.

1. GOALS AND INTRODUCTION

Building Livable Communities with Transit

The Regional Transportation Plan, Amended April 2004, is the defining vision for transportation systems and services in the nine-county Tri-County Metropolitan Area. This plan amendment was approved in April 2004 by the Metropolitan Transportation Commission (MTC), serving as the Metropolitan Transportation Planning Organization (MPO) for the CAPS Metropolitan Area. The Metropolitan Transportation Plan guides the implementation of long-term transportation improvements, policies, and programs in the CAPS Metropolitan Area through the year 2020. The Regional Transportation Plan, adopted in January 2000, the 2001 Plan Update, and the 2004 Plan Update form the basis for most of the recommendations in the Amendment. These updated recommendations reflect the ongoing planning and project development efforts to implement the plans, programs, and policies of Mobility 2030 and the SCAG Memorandum, including:

- Incorporating the latest information available from ongoing major investment studies and environmental impact studies in their respective corridors. These studies are all in various stages of planning and a pedestrian for each corridor is included in this plan, pending final environmental study approval and final design effort.
- Documenting ongoing efforts to incorporate quality-of-life issues and the relationship between community development and transportation services and infrastructure through sustainable development initiatives.
- Revising the CAPS Metropolitan Area’s reclassification as a nonattainment area under the new federal air quality standards. The CAPS is a designated nonattainment area under the old federal air quality standards. The CAPS area is a designated nonattainment area for the presence of ozone under the older and the new air quality standards. Specific projects, programs, and policies are recommended to help the region meet both standards as quickly as possible.

A New Destination

Since the adoption of the 2000 RTP in April 2000, there have been several key developments in the Region that must be included in the revised RTP plans, as they are positive and some are not. Of the positive side, significant improvements to the RTP that have come to fruition, including passage of Proposition CC, (tax measure) and the resulting development of the new Regional Transportation Investment Program. The new Regional Transportation Investment Program is expected to stimulate economic development, encourage competition, and increase the diversity of regional transportation investments. The new Regional Transportation Investment Program is expected to be more effective, the Plan is a step toward meeting the needs of the Southern California region.

In the process of evaluating the 2001 RTP, SCAG found that by changing the distribution of growth within the Region for future years, costs were shared more evenly on the performance of the transportation system. In fact, by reducing auto use and environmental emissions by 1 million, along with a stabilization of jobs in Los Angeles County, the Regional Transportation Investment Program (RTIP) could allow slower growth to result in improved performance at lower cost.

SCAG's 2004 Regional Transportation Plan (RTP) is consistent with the current 2001 Regional Transportation Plan (RTP) and the new Regional Transportation Investment Program (RTIP) over many years.
Metro 2030 - Central Arkansas Area Transportation Study

METRO 2030 Executive Summary and the METRO 2030 Technical Report are now available

Also available - METRO 2030 Video presentation
Building Livable Communities with Transit

Metro 2030 - Central Arkansas Area Transportation Study

Metro 2030 Technical Report

Table 11-2: Metro 2030 Recommendations

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<td>Local connections will include app-based shared rides, shuttles, and other services.</td>
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<td>2. Develop a financial plan to fully integrate transportation with education and other community needs.</td>
<td>Financial strategies will be developed to support the implementation of the recommendations.</td>
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<td>3. Add pedestrian/bike facilities to existing corridors and connect streets to improve access to transit.</td>
<td>Pedestrian and bike facilities will be added to existing corridors.</td>
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<td>4. Develop a comprehensive public safety program targeting school-aged children.</td>
<td>The program will include increased public safety measures at schools and other community centers.</td>
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Note: Pedestrian Transportation Plan Recommendations

1. Enhance local connections to connect schools, businesses, and elements of civic centers. Local connections will include app-based shared rides, shuttles, and other services.
2. Develop a financial plan to fully integrate transportation with education and other community needs. Financial strategies will be developed to support the implementation of the recommendations.
3. Add pedestrian/bike facilities to existing corridors and connect streets to improve access to transit. Pedestrian and bike facilities will be added to existing corridors.
4. Develop a comprehensive public safety program targeting school-aged children. The program will include increased public safety measures at schools and other community centers.
Markham Street, Little Rock

Before
Markham Street, Little Rock

Artist edition
Building Livable Communities with Transit

Markham Street, Little Rock

TODAY
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Building Livable Communities with Transit

Washington State DOT

Real-Time Road & Weather Traveler Information

Back to CoTRIP.org home
Straightline Chart
Building Livable Communities with Transit

Oregon DOT Digital Video Log

Highway: 062 Columbia River  Year: 2006  Direction: Increasing MP.

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Building Livable Communities with Transit

GIS Based Decision Support Tools

NatureServe

Florida’s Efficient Transportation Decision Making
Building Livable Communities with Transit

Tools for Scenario Planning and Decision Making
North Front Range & Colorado DOT’s STEP UP
Linking Planning and Environment
Earth Imagery

- NASA World Wind
- Google Earth
- Google Maps
- Virtual Earth
- Others
Building Livable Communities with Transit

GoogleEarth  Portland Bike Maps
San Antonio MPO has developed a new website and MySpace.com.

About Mobility 2035:

Welcome to the Mobility 2035 MySpace site established by the San Antonio-Bexar County Metropolitan Planning Organization (MPO) to provide information on the update process for the Metropolitan Transportation Plan (MTP).

By the year 2035, there will be over 600,000 more people in Bexar County. As our area grows and new jobs are created, our transportation needs increase as well. For this reason, the MPO is updating the MTP out to the year 2035. The MTP is a 25-year, long-range plan. It is used as a guide to plan for future transportation needs in the MPO study area, which includes Bexar County and parts of Comal and Guadalupe Counties, and is updated every five (5) years. The MTP also lists the expenditure of federal, state, and local funds that become available for these projects.

To help with the update process, the MPO is holding four identical visioning workshops to learn how you envision the community growing and to identify new ways to get from Point A to Point B in response to changes in growth patterns.

Additional information can be found at www.mtp2035.org.
Building Livable Communities with Transit
Check out - FHWA’s Visualization In Planning with input from FTA
http://www.fhwa.dot.gov/planning/vip/index.htm