CAMBRIDGE SYSTEMATICS

State-of-the-Practice Alternative Land Use and Transportation Scenario Development

A Review of Eight Metropolitan Planning Organization Case Studies

initial draft

report

prepared for

Oregon Department of Transportation

prepared by

Cambridge Systematics, Inc.

in association with

HDR, Inc.

October 13, 2009

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Executive Summary

This report presents a review of eight case studies of state-of-the-practice transportation and land use scenario development in metropolitan planning organizations (MPOs) across the United States. The purpose is to provide insight to the Oregon Department of Transportation's Oregon State House Bill 2186 MPO Greenhouse Gas Emissions Task Force on how scenario development planning is conducted for MPOs of various sizes and characteristics and how these planning techniques may be applicable and useful for Oregon MPOs.

An initial short list of 26 candidate case studies was identified from numerous initiatives and projects across the country. These case studies were further screened through consideration of several descriptive criteria, including:

- A focus on smaller and medium-sized MPOs to assist efforts and serve as a state-of-the-practice review to help guide the small- to medium-sized Oregon MPOs. The Sacramento Blueprint and Puget Sound Vision initiatives were reviewed to provide peer review for Portland Metro.
- A focus on case studies that had readily available information and that had already been reviewed so that we could quickly consolidate lessons learned and provide them to ODOT in a short timeframe.
- A focus on case studies that applied visioning exercises with multiple scenarios, and whose products fed into a Regional Transportation Plan (RTP) or long-range planning process. For those that did not directly feed into a RTP, the case studies did provide guidance that could eventually be implemented through a long-range transportation planning process.

This screening process led to the selection of the following eight case studies that provide state-of-the-practice examples of efforts recently completed or ongoing in this arena, including the following:

1. Sacramento (CA) Regional Blueprint;
2. San Joaquin Valley (CA) Blueprint;
3. Puget Sound (WA) Vision 2040;
4. Gainesville (FL) 2020 LRTP Update;
5. Albany (NY) New Visions and Linkage Program;
6. Charlottesville (VA) Eastern Planning Initiative;
7. Envision Missoula (MT); and
8. PlanCheyenne (WY).

A review of these case studies provides several insights for Oregon MPOs:

- The Sacramento Regional Blueprint, San Joaquin Blueprint, and Puget Sound Vision 2040 provide the state-of-the-art in scenario planning tools that take into account subregional or jurisdictional data that feeds into a larger regional planning process. Even without the ability to legally affect land use, these planning processes provide a strong public outreach component and tools which help translate local actions into regional policy, which eventually became integrated in the RTPs for each region. Portland Metro, Salem-Keizer Area Transportation Study (SKATS) and Rogue Valley MPOs could learn from elements of these three cutting-edge scenario planning models and approaches.
- Gainesville 2020 allowed the Gainesville MTPO to provide an authoritative voice to land use decision-making, even without legal authority. Like most of the MPOs in Oregon, except for Portland, it is limited in how its implementation can affect land use for the jurisdictions it oversees. However, because the Gainesville MTPO consists of all members of the City of Gainesville Commission and the Alachua County Board of County Commissioners, it does have a strong leadership role in both transportation and land use decision making. Without legal authority, the MTPO moved forward with a new growth allocation that emerged from the process because, as the only governmental body with a regional perspective, it was "arguably in the best position to discuss and promote policies relating to the integration of land use and transportation on a broad, regional scale." Oregon MPOs without legal land use authority can learn lessons on how to leverage Commissioners with political will to encourage the land use and transportation connection.
- The Albany New Visions and Linkage program ties together a broad regional discourse on integrating transportation and land use. Although Albany's Capital District Transportation Committee covers a larger area than SKATS in Oregon, the city of Albany is comparable to the city of Salem – both being capital cities of progressive states. However, the preferred alternative selected within the Salem Futures process was never implemented. Instead a different version of the scenario, most similar to the base case scenario, was adopted in the City of Salem Comprehensive Plan update in 2009. Albany can provide lessons learned to Oregon MPOs such as SKATS on how to link the LRTP to an implementation process. Albany's New Vision 2030 was coupled with the Linkage Program as well as the TIP update, ensuring that investments in infrastructure and transportation had to relate to the preferred alternative scenario of reducing the growth of vehicular travel in the Capital Region. Submissions were screened based on how well they incorporate strategies that are consistent with the adopted New Visions principles, as well as other initiatives, such as the New York State Quality Communities Initiative and the national Smart Growth movement.

- The EPI provides a model process for examining two polar land use and transportation scenarios; one with a dispersed development pattern and one with more concentrated growth. Medium-sized MPOs in Oregon such as Central Lane MPO, Rogue Valley MPO and SKATS all have to deal with future growth scenarios that grapple with the issues of sprawl versus density. The community elements employed in EPI provided community types that the public could relate to; the community types were visualized and described to the public in an easy-to-understand manner. In addition, EPI tied the scenarios to clear cut infrastructure cost implications, which the public could evaluate with their own value judgments.
- Envision Missoula provides an example on how to leverage limited funding to optimize public outreach efforts to develop a robust preferred alternative scenario that the community supports. Smaller MPOs in Oregon such as Bend and Corvallis could take lessons from Envision Missoula on the importance of public outreach, and how limited funds and a small number of scenarios do not hinder the value of a land use and transportation alternative scenario development process.
- PlanCheyenne is an excellent example of how to leverage an alternative scenario development effort to meet various interdisciplinary goals including land use, transportation, economic development, as well as to parks and recreation. Smaller sized Oregon MPOs such as Bend MPO and Corvallis MPO that have limited resources in funding and staff could find similar ways to develop comprehensive planning efforts that meet a wide range of planning needs. The extensive public outreach component leveraged the local newspapers, which is an outreach venue more suitable for smaller MPOs that look to engage a breadth of interest in the local community.

1.0 Matrix of Case Studies

The eight case studies reviewed in this report represent a range of transportation and land use scenario planning conducted for varying geographic scales and differing levels of effort. The matrix in Table 1.1 has been designed allow the reader to quickly scan the eight case studies and when appropriate, dig deeper into the land use and transportation scenario planning alternatives described in the following pages. The matrix of characteristics includes three categories of information:

1. MPO and Scenario Development Characteristics
2. Socioeconomic Characteristics
3. Travel and Transit Characteristics

MPO and Scenario Development Characteristics

The following data help to provide a snapshot of the MPO as well as the scenario planning efforts spearheading the land use and transportation development process,

- **MPO:** The name of the MPO that lead the scenario planning effort;
- **Year of Implementation:** The year in which the scenario development was implanted in the MPOs planning process;
- **Legal Land Use Authority:** Whether the MPO has the ability to enforce land use decision-making; and
- **Number of Scenarios:** The number of scenarios or alternatives evaluated through the visioning process.

Socioeconomic Characteristics

The following socioeconomic data are derived from the U.S. Census through the 2000 Decennial Census. Most data refers to the MPO area, but when appropriate, it is clearly stated when the data refer to the MSA or County-level.

- **Population;**
- **Land Area, square miles;**
- **Density, persons per square mile;**
- **Median Household Income;**
- **Persons Under 18 Years;** and
- **Persons 65 Years and Over.**

Travel and Transit Characteristics

The following data travel data are derived from the U.S. Census through the American Community Survey.

- **Mean Travel Time to Work in Min (2000).**

The following data are derived from the National Transit Database developed by the Federal Transit Administration. The following information refers to transit travel characteristics from the transit district within the MPO.

- **Available Public Transit;**
- **Annual Passenger Miles (2007);** and
- **Average Weekday Unlinked Trips (2007).**

Table 1.1 Matrix of MPO Case Studies undertaking State-of-the-Practice Land Use and Transportation Alternative Scenario Development

	Sacramento (CA) Regional Blueprint	San Joaquin Valley (CA) Blueprint	Puget Sound (WA) Vision 2040	Gainesville (FL) 2020 LRTP Update	Albany (NY) New Visions and Linkage	Charlottesville (VA) EPI	Envision Missoula (MT)	PlanCheyenne (WY)
MPO	SACOG	SJCOG	PSRC	GMTPO	CDTC	TJPDC	MOPG	CMPO
Population (2000)	1,936,006	563,598	3,275,855	159,508	794,293	81,449	57,053	68,202
Land Area, sq. miles (2000)	6,500	1,399	6,300	77.47	2,195.36	37.47	23.9	33.86
Density, persons per sq. mile (2000)	352.7	402.9	520	2,059	362	2,174	2397	2,014
Median Household Income (1999)	$30,460 to $57,535	$41,282	$53,157	$31,426	$45,001	$44,356	$30,366	$39,607
Persons Under 18 Years (2000)	27.3	31.00%	27.40%	18.20%	19.80%	19.10%	19.70%	25.40%
Persons 65 Years and Over (2000)	11.3	10.60%	10.18%	8.80%	13.90%	11.20%	10.40%	12%
Mean Travel Time to Work in Min (2000)	21.9 to 30.2	29.2	26.5	21.1	22.5	22.8	14.3	16.3
Available Public Transit	Bus, Light Rail, DRV*	Bus, DRV	Bus, Commuter Rail, DRV, Trolleybus, Vanpools	Bus, DRV	Bus, DRV	Bus, DRV	Bus, DRV	Bus, DRV
Annual Passenger Miles (2007)	135,981,055	564,404	224,448,455	30,398,891	47,852,366	6,946,727	2,950,679	892,685
Average Weekday Unlinked Trips (2007)	111,517	14,170	551,941	34,243	44,479	5,838	2,833	875
Year of Implementation	2008	Still Pending	2008	2000	2000	2004	2008	2006
Legal Land Use Authority	No	No	No	No	No	No	Yes	No
Number of Scenarios	4 + PA**	3 + PA	4 + PA	5	4	2	2	3

*DRV = Demand Response Vehicles.

**PA = Preferred Alternative.

2.0 Case Study 1: Sacramento (California) Regional Blueprint

The Sacramento Council of Governments (SACOG) Board of Directors adopted the Preferred Blueprint Scenario in December 2004, a vision for growth that promotes compact, mixed-use development and more transit choices as an alternative to low density development. The Blueprint is part of SACOG's Metropolitan Transportation Plan (MTP2035) for 2035, the long-range transportation plan for the six-county region and serves as a framework to guide local government in growth and transportation planning through 2050.

2.1 AGENCY CHARACTERISTICS

SACOG is an association of Sacramento region governments formed from the six area counties: El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba, and 22 member cities. SACOG's directors are chosen from the elected boards of its member governments. It has a staff of about 50.

SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues. In addition to preparing the region's long-range transportation plan (MTP2035), SACOG approves the distribution of affordable housing in the region; and assists in planning for transit, bicycle networks, clean air, and airport land uses. Socioeconomic and land use characteristics of the region include:

- **Population (2000):** 1,936,006 in the six-county region;
- **Land area (2000):** 6,500 square miles (1100 of which are developed);
- **Density (2000):** 352.7 persons per sq miles in Sacramento-Yolo CMSA;
- **Median household income (1999):** $30,460 (Yuba County) to $57,535 (Placer County);
- **Persons under 18 years old (2000):** 27.3 percent;
- **Persons 65 years old and over (2000):** 11.3 percent; and
- **Mean travel time to work in minutes (2000):** 21.9 minutes (Yolo County) to 30.2 minutes (El Dorado County).

The Sacramento Regional Transit District (SRTD) operates buses and light-rail service, as well as demand response vehicles with the following transit travel characteristics:

- **Annual passenger miles (2007):** 135,981,055; and
- **Average weekday unlinked trips (2007):** 111,517.

2.2 SYNOPSIS OF LAND-USE TRANSPORTATION SCENARIO PLANNING

Primary Reason(s) for the Project

The Sacramento Regional Blueprint was driven by concern about using recent or current trends to support dispersed future growth patterns, housing, transportation, air quality, and insufficient land to accommodate expected growth by 2050.

SACOG, which is responsible for preparing the MTP2035, recognized the need to link their transportation planning with land use. Creating a vision for future land use in the region would allow SACOG to create and fund a transportation plan that would serve the long-range transportation needs of the region. The development of the Blueprint Project was designed under the acknowledgment that SACOG did not have land use authority over local jurisdictions. Therefore, working with local jurisdictions throughout the process would be vital to obtaining their buy-in and support of the Preferred Scenario that would be the end product of the visioning process.

Year Implemented

The Preferred Alternative was adopted in 2004, while the latest MTP2035 was implemented in 2008.

Funding and Costs

Although the budget for the Blueprint project was initially a half a million dollars, the costs have climbed into the low millions. It is worth noting that the total cost included the development or modification of each of the three tools (including the adaptation of I-PLACE3s so that it could be run over the Internet), in addition to the planning and conducting of the workshops. The California Department of Transportation (Caltrans) does provide state Blueprint grants, but SACOG also contributed significant funding to execute this process.

2.3 LEGAL AUTHORITY AND LRTP LINKAGE

SACOG has no authority to develop a regional land use plan that is binding on the actions of the local governments. It is certainly possible; however, that SACOG will initiate an implementation strategy that could include recommended maps and policies to serve as guides for local and regional decision-making.

How Did This Planning Process Relate to the RTP Process in Context of Long-Range Planning?

The MTP2035 was prepared to address the transportation needs for the six-county Sacramento region through 2035. The plan proactively links transportation with land use and air quality planning. The plan invests $42 billion, giving individuals more multimodal transportation options for how to get around, with investments targeted for people to walk, bike or use transit. The MTP2035 addresses the transportation needs for the six-county Sacramento region through 2035 and is the next step in the Blueprint Process.

2.4 POLICY FRAMEWORK/ENVIRONMENT

Range of Land Use Alternatives Analyzed and Implemented

The starting point for the Blueprint process was a "Base Case Study," which was a projection of how the area would grow if current local government land use plans and zoning guidelines are followed through to 2050. The next phase of the project was to use a land use projection visualization tool, I-PLACE3S, to develop different growth scenarios that could happen if changes are made to the existing land use plans and zoning ordinances. The different scenarios developed were then compared to one another based on how well they met established regional smart growth principles. Individual communities evaluated the different growth

scenarios through public workshops. Following the visioning process at the community level, regional workshops were held that ultimately led to the creation of the Preferred Blueprint Scenario for the Sacramento Region.

The Blueprint project produced scenarios at three different levels. The first scenario-building exercise was at the neighborhood level, where citizen participants were shown a base case of the selected neighborhood, then asked to develop a series of "smart growth" alternative scenarios, one per table of participants. These were fed into the PLACE3S modeling program during this scenario planning process, with the land use and transportation results displayed in real time.

The neighborhood scenarios provided the basis for a series of countywide scenarios that tested a range of development assumptions. Four scenarios were crafted for each county – a trend scenario plus three alternates that tested a variety of combinations of growth amount, location, mix, housing type, density, and infill/redevelopment.

From these countywide scenarios, a series of four regionwide scenarios were developed and studied. A fifth, preferred, scenario was developed and adopted at the end of the process. These scenarios included:

1. **Scenario A** assumes development trends from the late 1990s continued;
2. **Scenario B** assumes higher housing densities than Scenario A, but still with significant growth at the urban fringe;
3. **Scenario C** also assumes higher housing densities, but with more growth occurring in the inner ring suburbs;
4. **Scenario D** assumes the highest housing densities among the scenarios, and focused growth in the central parts of the region through infill and redevelopment; and
5. The **Preferred Blueprint Scenario** assumes compact, mixed-use development, high density housing choices, high levels of infill/ redevelopment, and job-housing balance in subareas.

Transportation system improvements for each scenario were crafted to reflect the scenario's land use pattern.

Public Outreach Component

From the very beginning of the planning process, SACOG's focus of the MTP2035 was to use broad public outreach combined with extensive input from elected officials, community groups, and citizen planners at every phase in the process. Over two years, nearly 8,000 people provided input to the plan through community workshops, presentations, a televised forum, public opinion research, and direct input.

At the neighborhood workshops, the PLACE3S modeling system allowed participants to view the results immediately. The results of the countywide

scenarios analysis were presented at countywide citizen workshops where participants were asked to make adjustments to the scenarios and to indicate their preference among the four scenarios presented. A similar process occurred with the crafting of the regionwide scenarios. The scenarios, and the analyses of their impacts, provided the basis for a sweeping public involvement campaign, resulting in the adoption of the Preferred Blueprint Scenario in December 2004.

Summary of Project Objectives Being Met (Has the Planning Process Changed Overall in the MPO, and If So, How?)

The Sacramento Regional Blueprint has been touted as a success story. Each time SACOG adopts its MTP, it must first adopt a 25- to 30-year growth forecast and land use allocation for the region. The Blueprint process, the map, and the growth principles, clearly guides this process.

To help create the 2035 land use map and allocation for the next comprehensive MTP update, SACOG asked each local government to develop an individualized strategy for determining how – or if – it would pursue actions, over time, that help to achieve the planning principles in the Blueprint Scenario as planning and growth decisions are made. Each jurisdiction was asked to pass a resolution in support of a growth allocation and accompanying 2035 map for their jurisdiction that reflect their jurisdiction's needs and interests.

2.5 APPLICABILITY TO OREGON MPOS

This is a particularly successful case study of how a publicly determined Blueprint scenario can guide development at the jurisdictional level (regional as well as countywide). Although this level of comprehensiveness and complexity would be difficult to achieve by small and medium-sized MPOs in Oregon, the tools and public outreach methods could be replicated and applied. The I-PLACE3s software can be used free of charge by each jurisdiction, although there are costs associated with the use of the servers that host and run the database, the cost of hosting public outreach events, and the staff and support expenses. A large, multilevel out reach program similar in size to the Blueprint project could cost in the neighborhood of $100,000 to host and run, once the IPLACE3s database (or similar tools) are built and operating. Mid-size public outreach programs could cost half this price, while a small outreach venture could run for as little as $25,000.[1]

[1] http://www.fhwa.dot.gov/Planning/landuse/sacramentocs.htm.

3.0 Case Study 2: San Joaquin (California) Valley Blueprint

There are few national examples where MPOs are collaborating on a mega-regional scale to develop a set of common transportation performance measures through transportation and land use scenario planning. The California San Joaquin Valley has recently conducted a full-scale scenario planning effort, with contributions from eight different MPOs. San Joaquin Council of Government (SJCOG) is one of those MPOs that have participated in the San Joaquin Valley Blueprint planning process. Currently, this process has yet to begin its full implementation phase, so although the outcomes are still largely unknown, the region has achieved a mega-regional partnership by adopting a common set of goals and performance measures.

3.1 AGENCY CHARACTERISTICS

The San Joaquin Council of Governments (SJCOG) is a Joint Powers Authority comprised of the County of San Joaquin and the Cities of Stockton, Lodi, Manteca, Tracy, Ripon, Escalon and Lathrop. SJCOG serves as the regional transportation planning agency and a technical and informational resource for these jurisdictions.

While regional transportation planning is its primary role, SJCOG also assesses population statistics, airport land use, habitat and open space planning, and other regional issues. SJCOG also fosters intergovernmental coordination, within San Joaquin County and with neighboring jurisdictions, the state, and various federal agencies. The population and land use characteristics of this region include:

- **Population (2000):** 563,598 in San Joaquin County;
- **Land area (2000):** 1399 square miles;
- **Density (2000):** 402.9 persons per sq mile in San Joaquin County;
- **Median household income (1999):** $41,282;
- **Persons under 18 years old (2000):** 31.0 percent;
- **Persons 65 years old and over (2000):** 10.6 percent; and
- **Mean travel time to work in minutes (2005):** 29.2.

The San Joaquin Regional Transit District (SJRTD) operates buses and demand response vehicles in the region with the following transit travel characteristics.[2]

- **Annual passenger miles (2007):** 564,404; and
- **Average weekday unlinked trips (2007):** 14,170.

3.2 SYNOPSIS OF LAND-USE TRANSPORTATION SCENARIO PLANNING

Primary Reason(s) for the Project

The San Joaquin Valley region faces a number of transportation and land use challenges over the next 20 years. The Valley's two major highway corridors, State Route 99 (SR-99) and Interstate Highway 5 (I-5), have been subject to increasingly heavy congestion, which has increased commute travel times, delayed goods movement, and contributed to deteriorating air quality. Prevailing land use trends have contributed to the problem regionally. In addition, dwindling water supply, loss of agricultural land and open spaces, and concerns about jobs and affordable housing have contributed to the perception of a declining quality of life in the Valley.

The successful development of this mega-regional planning partnership hinges on the following key factors:

- A state-mandated partnership (California Partnership);

[2] Does not include the service from City of Tracy.

- A region wide planning process developed at the local level (Blueprint); and
- An active participation of all governments in the region to facilitate the public implementation of the programs as well as to carry out the vision.

The unique nature of these partnerships, the project funding sources, the coordinated planning components accompanied by a high level of public and stakeholder participation, and the data sharing and coordinated use of performance measures, are all key reasons for the success of this planning process.

Year Implemented

The Preferred Alternative was adopted in 2009. Full implementation has not yet begun.

Funding and Costs

The San Joaquin Valley Blueprint Planning Process is a joint effort of the Council of Fresno Governments, the Kern Council of Governments, the Kings County Association of Governments, Madera County Transportation Commission, the Merced County Association of Governments, San Joaquin Council of Governments, Stanislaus Council of Governments, the Tulare County Association of Governments and the Great Valley Center. The San Joaquin Valley Blueprint received California State Blueprint grants in Fiscal Year 2008 and 2009 amounting to $1.35 million. It also obtained a $4 million grant from the State Business Transportation and Housing Agency, and an additional $500,000 in matching funds from the San Joaquin Valley Air Pollution Control District. SJCOG was one of eight MPOs that shared equally the total funding for the San Joaquin Valley Blueprint process.

3.3 LEGAL AUTHORITY AND LRTP LINKAGE

While SJCOG manages the primary vehicle for Blueprint planning consensus building, it has few implementation tools at its disposal for convincing individual jurisdictions to sacrifice local objectives for the good of the region. As long as MPOs and COGs cannot mandate land use changes to achieve Blueprint goals, the potential for local governments to impede the Blueprint vision remains an all too real possibility. Within the San Joaquin Valley, skepticism remains that conflicts between local and regional decision-making may ultimately obstruct full regional consensus.

How Did This Planning Process Relate to the RTP Process in Context of Long-Range Planning?

Although it is too early to tell in the planning process how the implementation will occur, the goals for this Blueprint Process to develop the local government

commitment and to incorporate the results of the regional blueprint into the RTP, local general plans, and other planning efforts are still moving forward.

3.4 POLICY FRAMEWORK/ENVIRONMENT

Range of Land Use Alternatives Analyzed and Implemented

The San Joaquin County Blueprint Planning Process is part of the larger San Joaquin Valley Blueprint. It is a joint effort of the Councils of Government representing the eight valley counties of San Joaquin, Stanislaus, Merced, Madera, Tulare, Fresno, Kings, and Kern.

Local visioning exercises undertaken at the county COG level produced eight countywide visions of future growth. These scenarios were combined into three general 2050 regional preferred growth scenarios under the guidance of the University of California, Davis, including:

1. **Scenario A: "Base Case."** An effort to portray a continuation of development land use patterns from the recent past into the future. Each county defined its own starting point and current development trends. Limited protections for agriculture and environmental space were implemented county by county. Average dwelling units per acre for new residential development were defined to be equivalent to 4.3 units per acre.
2. **Scenario B: "Locally Combined."** An assembly of scenarios created by each county COG to represent a desired new direction for the future. Target densities were used and a greater emphasis was placed on protection of agricultural land and environmental resources. Average dwelling units per acre for new residential development were defined to be equivalent to 6.8 units per acre.
3. **Scenario C: "Valley Wide Hybrid."** A unified projection of the San Joaquin Valley in 2050 was prepared to account for the counties choosing a more compact growth form emphasizing safe, walkable, bikeable communities that offer increased transit options and protect open spaces for both agricultural and environmental purposes. A priority was placed on growth within existing urban areas. Average dwelling units per acre for new residential development were developed to be equivalent to 10.0 units per acre.

The scenarios were presented to the Blueprint Regional Advisory Committee (BRAC) in a planning meeting in November 2008. The BRAC chose to recommend Scenario C at the Blueprint Summit by a vote of 25 to 2. The San Joaquin Regional Policy Council, a regional body made up of elected officials from each county, recommended a fourth scenario, Scenario B+, in December of 2008.

4. **Scenario B+:** Reflects land use assumptions of Scenario B, but provides more transportation infrastructure that crosses county boundaries. Average

dwelling units per acre for new residential development would be projected to remain at 6.8 units per acre.

Public Outreach Component

An initial SJV Regional Blueprint Summit was held on June 28, 2006 in Fresno to publicly launch the Blueprint effort, educate stakeholders on the Blueprint process, and inform the public how they could become engaged in the Blueprint effort and share their ideas about the future of the region. Over 700 stakeholders attended this kickoff summit.

Regional COGs were responsible for creating and adopting their own subregional growth visions with technical assistance from the Great Valley Center, a non-profit organization that supported the Blueprint process though information, map data, and technical resources. The eight COGs conducted hundreds of meetings and outreach events in addition to public media campaigns through radio, television, newspapers, and web media.

The BRAC was tasked with regularly communicating with member COGs to ensure their interests were reflected in regional agreements, communicating with interest groups on contentious regional issues, advocating the implementation of SJV Blueprint products to local jurisdictions, and promoting the Blueprint strategies at the state and Federal level. The BRAC also constructed draft cumulative Blueprint visions from the eight local visions submitted by the COGs. In anticipation of the 2009 Blueprint Summit, BRAC conducted a media campaign targeting all five major newspapers in the valley, including conducting arranging editorial board interviews.

The SJV Blueprint web site was also central to the outreach campaign. The web site provided information on Blueprint planning in general and notified the public of important updates during various steps of the process. For instance, when BRAC recommended a final set of future preferred growth scenarios, BRAC used their web site to post the scenarios along with accompanying maps and figures, and allowed community members to provide feedback and review prior to the 2009 Blueprint Summit.

The Final Blueprint Summit, held on January 26, 2009 in Fresno, was organized to adopt the final preferred growth scenario, and was attended by more than 650 stakeholders. The Summit employed an interactive handheld voting system, which garnered instant response from the attendees on a number of issues. The voting system was used to gauge feedback on a lengthy land use assessment survey in which photos of several different development patterns were shown to attendees and ranked according to preference. It was also used to select the preferred growth scenario.

Summary of Project Objectives Being Met (Has the Planning Process Changed Overall in the MPO, and If So, How?)

The SJV Blueprint process was successful in effectively leveraging several existing regional partnerships to further Blueprint objectives on a large, multi-regional scale. The SJV process has also been successful in developing a "bottom-up" structure that keeps ultimate decision-making power and implementation strategies within the jurisdiction of local communities, while ensuring that each member has an opportunity to actively engage in the development of the valley-wide Blueprint.

Wide acceptance among stakeholders does not necessarily translate into action however. Participants at the 2009 Blueprint Summit shocked many observers by adopting the most ambitious growth scenario; however, decision-makers later chose a more modest scenario to send to local governments for approval.

3.5 APPLICABILITY TO OREGON MPOS

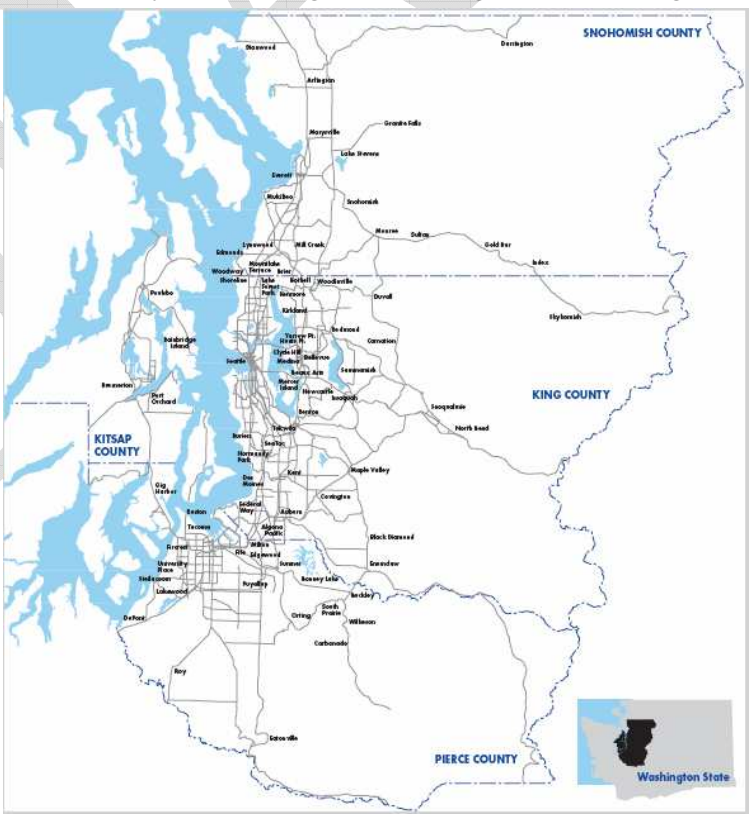
The San Joaquin Valley Blueprint process is an excellent example of adapting a Blueprint process to a mega-regional rural area. The focus on public participation and outreach at the jurisdictional level can be a model on how small- to medium-sized Oregon MPOs can feed into a larger planning process. Rogue Valley's Bear Creek Valley RPS process has conducted a similar coordination of implementable strategies between jurisdictions and the regional governments and could continue to model its process to the ever-evolving SJV process.

4.0 Case Study 3: Puget Sound Regional Council (Washington) Vision 2040

The Puget Sound Regional Council (PSRC) has incorporated land use scenario planning into its planning process for a number of years. Vision 2020, the previous regional growth strategy, and Destination 2030, the LRTP for the region, also had both incorporated scenario planning into their process. This case study will focus on Vision 2040, the recently adopted regional growth strategy, and Transportation 2040, the soon to be adopted LRTP, both of which are again incorporating scenario planning.

4.1 AGENCY CHARACTERISTICS

The PSRC is an association of cities, towns, counties, ports, and state agencies that serves as a forum for developing policies and making decisions about regional growth management, environmental, economic, and transportation issues in the four-county central Puget Sound region of Washington State.



The PSRC is designated under Federal law as an MPO and under state law as the Regional Transportation Planning Organization (RTPO) for King, Kitsap, Pierce, and Snohomish Counties. The PSRC's members include 71 of the region's 82 cities and towns. The following statistics provide some demographic data about the region covered by PSRC.

- **Population (2000):** 3,275,855;
- **Land area (2000):** 6,300 square miles;
- **Density (2000):** 520 persons per square mile;
- **Average annual wage (1999):** $53,157 (King County only);
- **Persons 19 years old and under (2000):** 27.4 percent;
- **Persons 65 years old and over (2000):** 10.18 percent; and
- **Mean travel time to work in minutes (2000):** 26.5 minutes (King County only).

The Central Puget Sound Regional Transit Authority (Sound Transit) operates buses and commuter rail with the following transit travel statistics[3]:

- **Average passenger miles (2007):** 224,448,455; and
- **Average weekday unlinked trips (2007):** 551,941.

The King County Department of Transportation (King County Metro) also provides transit services with a large bus fleet and demand response vehicles, as well as trolleybuses and vanpools. King County Metro's transit travel characteristics include:

- **Average passenger miles (2007):** 572,387,794; and
- **Average weekday unlinked trips (2007):** 379,340.

4.2 SYNOPSIS OF LAND-USE TRANSPORTATION SCENARIO PLANNING

Primary Reason(s) for the Project

The PSRC works with local government, business, and citizens to build a common vision for the region's future, which is expressed through three connected plans:

- Vision 2040, the region's growth strategy;

[3] Pierce County and Snohomish County also have separate bus and vanpool fleets not included in this calculation.

- Transportation 2040, the region's comprehensive long-range transportation plan (currently under development); and
- Regional Economic Strategy, the economic development component of Vision 2040 developed by Prosperity Partnership.

Vision 2040 provides regional policy direction whereas Transportation 2040 and the Regional Economic Strategy are the detailed functional implementation plans for the agency and the region. Together, these plans and strategies provide the mechanism for PSRC to coordinate its approach to land use, transportation, and economic planning.

Year Implemented

Transportation 2040 is scheduled to be adopted in 2010; about three years after the process began. PSRC adopted Vision 2040 in April 2008, after a three-year process to create the plan.

Funding and Costs

Using the Vision 2040 process as a guide, the total estimated cost for preparing Transportation 2040 is $3 million. Approximately two-thirds of this cost is for PSRC staff time, while the remaining one-third is for direct costs (consultants and publication materials). An additional cost for Transportation 2040 includes a formal, comprehensive environmental review process required under the State Environmental Policy Act (SEPA), which other MPOs may not have to incur. The funding for Transportation 2040 is solely from PSRC general funds, which come from Federal and state sources.

4.3 LEGAL AUTHORITY AND LRTP LINKAGE

PSRC was created in 1991 under authority embodied in Federal and state laws for transportation, air quality, and growth management. Vision 2040 and Transportation 2040 meet the requirements of the Washington Growth Management Act. PSRC does not have legal land use authority to directly implement its strategies.

How Did This Planning Process Relate to the RTP Process in Context of Long-Range Planning?

The Regional Growth Strategy within Vision 2040 serves as the land use basis for developing and analysis of the land use alternatives tested in Transportation 2040. The Regional Growth Strategy is applied to assess how the region can distribute forecast growth and describes a preferred land use pattern of urbanization to minimize environmental impacts, support economic prosperity, promote adequate and affordable housing, improve mobility, and make efficient use of existing infrastructure. This process feeds into Transportation 2040, which is the detailed functional implementation plan for transportation for the region.

4.4 POLICY FRAMEWORK/ENVIRONMENT

Range of Land Use Alternatives Analyzed and Implemented

To form the Regional Growth Strategy within Vision 2040 a number of alternatives were examined. Vision 2040 adopted a preferred growth alternative listed at the end, which is a hybrid of the other alternatives listed below.

1. **Growth Targets Extended Alternative.** This alternative continues and emphasizes the population and employment growth patterns anticipated in currently adopted plans. Under this alternative, cities and counties would continue to encourage growth to focus in urban centers in the region, as well as in unincorporated urban growth areas and rural areas.
2. **Metropolitan Cities Alternative**. This alternative represents the most densely focused regional growth pattern among the alternatives. The largest shares of the region's future growth would occur in the region's five major cities: Seattle, Bellevue, Everett, Bremerton, and Tacoma. Growth would also be focused in the region's core suburban cities.
3. **Larger Cities Alternative**. This alternative assumes suburban cities in the region would accommodate the bulk of future population and employment growth. Suburban cities with designated regional growth centers and other larger suburban cities could be the primary locations for new development.
4. **Smaller Cities Alternative**. This alternative has the most dispersed regional growth pattern. It would disperse growth within the region's urban growth area, with smaller and freestanding suburban cities and the unincorporated urban growth areas receiving a sizable amount of population and employment growth.
5. **Preferred Growth Alternative (adopted in Vision 2040).** The Preferred Growth Alternative is a hybrid of the alternatives identified above, and accommodates future growth in a compact regional pattern. The largest share of growth is distributed to metropolitan and core cities – places with designated regional growth centers that are already connected by major transportation corridors and high capacity transit.

Public Outreach Component

Transportation 2040 relies on continuous public involvement in plan development and environmental review. Public outreach included a variety of methods, such as a public opinion survey, workshops, open houses, presentations to a diverse set of stakeholders, and more. One of the key purposes of the scoping process was to focus the plan update and environmental review on the most compelling transportation issues facing the region. PSRC set up various methods for the public to comment via e-mail, fax, mail, or online at the PSRC web site. Comments could also be submitted during a scheduled presentation or at an open house.

Destination 2030, the previous LRTP, also conducted a range of public outreach. These outreach efforts occurred during the 2007 Amendment to Destination 2030, the 2007 review of the draft Vision 2040 plan and Draft Supplemental EIS, and the official Destination 2030 Plan Update scoping process. These efforts yielded some 1,400 total comments, which are summarized in the scoping report. The scoping report includes background information about the Destination 2030 Plan Update and scoping process, a summary and analysis of comments, and the agency and public outreach effort undertaken for scoping. This has been the model for the public outreach for Transportation 2040.

Summary of Project Objectives Being Met (Has the Planning Process Changed Overall in the MPO, and If So, How?)

The integrated evaluation framework for Vision 2040 and Transportation 2040 ensures that land use alternatives are consistent and meet regional goals, comparisons of land use alternatives are tested using consistent evaluation criteria, and an environmental review (DEIS released in May 2009) is conducted to support the land use alternatives tested. Therefore, the basic project objectives are expected to be met upon adoption of Transportation 2040, but it has not changed the overall planning process used by PSRC from the last round of plans, such as Vision 2020 and Destination 2030.

4.5 APPLICABILITY TO OREGON MPOS

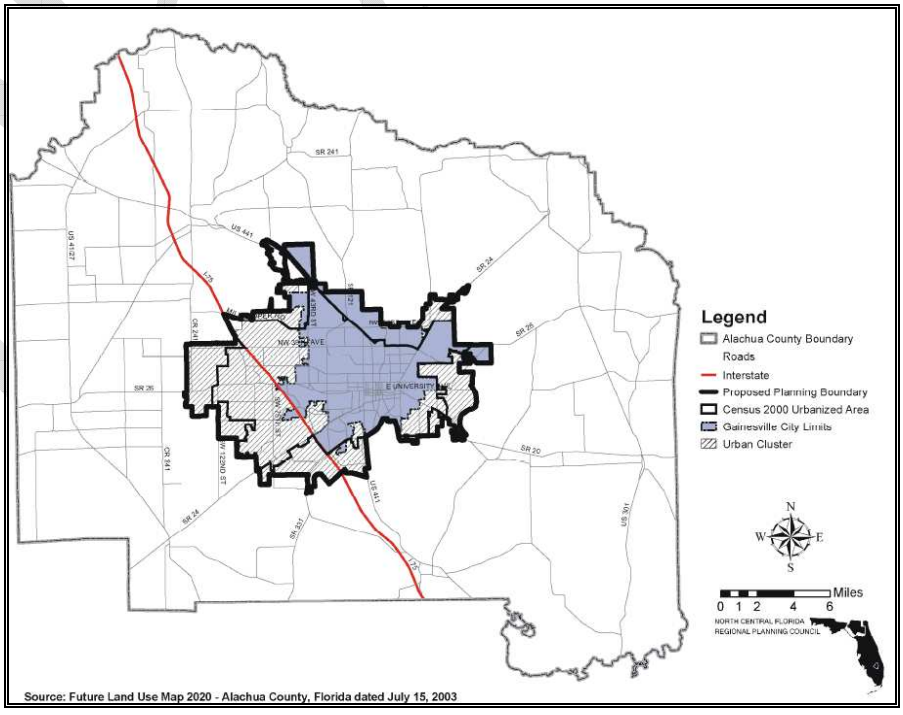
As one of the most advanced regions examining the issues of transportation, land use, and climate change issues, the PSRC region and Seattle is a Pacific Northwest city facing some of the similar issues to Portland and other cities in Oregon. PSRC has been successfully employing techniques to link transportation and land use for many years, starting with Vision 2020, and then further with Vision 2030 and now Vision 2040. Most currently, the integrated framework for Vision 2040 and Transportation 2040 provides a more explicit relationship between the scenario planning process and the LRTP that is pursued two years later. This integrated timeframe, scope and environmental process is a very systematic way to approach land use and transportation scenario planning for larger regions.

5.0 Case Study 4: Gainesville (Florida) MTPO 2020 LRTP

In 2000, the Gainesville Metropolitan Transportation Planning Organization (MTPO) adopted a 2020 LRTP, which is also referred to as the Livable Community Reinvestment Plan. During the development of this plan, Gainesville used a scenario planning approach. As a result, this Plan takes the best elements of the Compact, Radial, and Town/Village Center alternatives and integrates them into a land use/transportation needs plan for the Gainesville area.

5.1 AGENCY CHARACTERISTICS

The MTPO for Gainesville Urbanized Area is composed of twelve voting members including the Mayor of the City of Gainesville, the six City of Gainesville Commissioners, and the five Alachua County Commissioners, and nonvoting representatives of the University of Florida, the Florida Department of Transportation, and a rural advisor selected by the Alachua County League of Cities. The MTPO is responsible for the continuing, comprehensive, and cooperative urban transportation planning program for the Gainesville Metropolitan Area. The figure below shows the MTPO transportation planning boundaries.



The Gainesville Urbanized Area is located in the center of Alachua County, Florida; and incorporates the City of Gainesville, as well as the surrounding urbanized and transitioning areas. The following geographic and demographic data are representative of the Gainesville MSA:

- **Population (2000):** 159,508;
- **Acreage (2000):** 77.47 square miles;
- **Density (2000):** 2,059 persons per square mile;
- **Median household income (1999):** $31,426;
- **Persons under 18 years old, percent (2000):** 18.2 percent;
- **Persons 65 years old and over, percent (2000):** 8.8 percent; and
- **Mean travel time to work in minutes (2000):** 21.1.

The following transit statistics are representative of the Gainesville Regional Transit System, which include a fleet of buses and demand response vehicles:

- **Annual passenger miles (2007):** 30,398,891; and
- **Average weekday unlinked trips (2007):** 34,243.

5.2 SYNOPSIS OF LAND-USE TRANSPORTATION SCENARIO PLANNING

Primary Reason(s) for the Project

Every five years, the State of Florida requires all Florida MPOs, and in this case, the Gainesville MTPO, to update their LRTPs. Starting with the preparation of 2020 LRTP, the process was also motivated by concerns over expected high growth rates (47 percent increase in population) during the planning horizon. This led the agency to address a series of specific challenges in the 2020 planning horizon including lack of street connectivity, uncomfortable streets for walking and bicycling, suburban sprawl development patterns and unbalanced growth, impacts to existing neighborhoods and changes in town character, preservation of natural resources and habitat, limited travel options, inadequate bus service coverage, and traffic congestion/safety on major roadways.

Year Implemented

The Gainesville MTPO 2020 LRTP was adopted in 2000.

Funding and Costs

The Gainesville MPTO is funded by Federal funding for highway, transit, and bicycle and pedestrian planning, which is provided by the FHWA and Federal Transit Administration. The Florida Department of Transportation matches

these Federal funds with both cash and in-kind services. The Alachua County Board of County Commissioners and the Gainesville City Commission provide a local cash match. The Gainesville MTPO 2020 LRTP was funded using these same sources. The cost of the Gainesville 2020 LRTP update was approximately $250,000, which included the scenario planning exercise.

5.3 LEGAL AUTHORITY AND LRTP LINKAGE

The agency has direct authority only over transportation decisions, not land use policy. However, as the MPO, the agency has institutional and persuasive roles to play in how land use policy for the region is set with the MTPO consisting of all members of the City of Gainesville Commission and the Alachua County Board of County Commissioners.

At the conclusion of a scenario planning process, the MPO moved forward with a new growth allocation that emerged from the process despite not having land use authority. The MTPO moved forward with this strategy because, as the only governmental body with a regional perspective, it was "arguably in the best position to discuss and promote policies relating to the integration of land use and transportation on a broad, regional scale."[4]

How Did This Planning Process Relate to the RTP Process in Context of Long-Range Planning?

This was a part of the 2020 LRTP process, which was adopted in December 2000.

5.4 POLICY FRAMEWORK/ENVIRONMENT

Range of Land Use Alternatives Analyzed and Implemented

To evaluate how the city and county's growth will impact environmentally sensitive areas in Gainesville, the MTPO's scenario planning model included a number of direct and indirect environmental indicators, including vehicle emissions and the amount of new land consumed or affected by development. Assessing how each of the scenarios compared in their associated impact on the environment enabled the general public and stakeholders to make more informed decisions about which scenario to choose as the region's preferred growth alternative. The MTPO used this preferred scenario as the basis for its regional LRTP. Parts of this plan were then integrated in city and county plans.

[4] Gainesville MTPO 2020 Transportation Plan: The Livable Community Reinvestment Plan.

This process was applied to test one base case and four alternative land use scenarios during its development process. Listed below is a brief description of the different scenarios tested in this process:

1. **Base Case** includes existing and committed transportation network and the trend land use allocation.
2. **Westward Growth** is a trend scenario, assuming continuation of current development trends and expansion of the associated roadway network.
3. **Compact** promotes infill and redevelopment in the urban core "as a way to provide the land use density, diversity (mix) and design to reduce the number and length of automobile trips."
4. **Village/Town Centers** directs development to multiple centers of moderate density and mixed uses, with transportation improvements emphasizing internal accessibility and multimodal connections between centers.
5. **Radial Development** promotes higher intensity development along primary corridors of a proposed expanded transit network. Areas between corridors would be preserved for lower density residential development or open space.

Public Outreach Component

A series of workshops were held early in the planning process, at which the evaluation measures used for the study were established. After the analysis of the scenarios, MTPO held another series of workshops and public forums to present and discuss the results. The top funding priority in the adopted plan included the projects identified through an intensive community planning charrette held in 1997.

Summary of Project Objectives Being Met (Has the Planning Process Changed Overall in the MPO, and If So, How?)

The plan suggested the creation of a Livable Community Reinvestment Plan Implementation Committee "to review and comment on transportation issues and land use plans, amendments or policies relative to their consistency with the MTPO 2020 Plan."

5.5 APPLICABILITY TO OREGON MPOS

Gainesville 2020 allowed the Gainesville MTPO to provide an authoritative voice to land use decision-making, even without legal authority. Like most of the MPOs in Oregon, except for Portland, it is limited in how its implementation can affect land use for the jurisdictions it oversees. However, because the Gainesville MTPO consists of all members of the City of Gainesville Commission and the Alachua County Board of County Commissioners, it does have a strong leadership role in both transportation and land use decision making. Without legal authority, the MTPO moved forward with a new growth allocation that

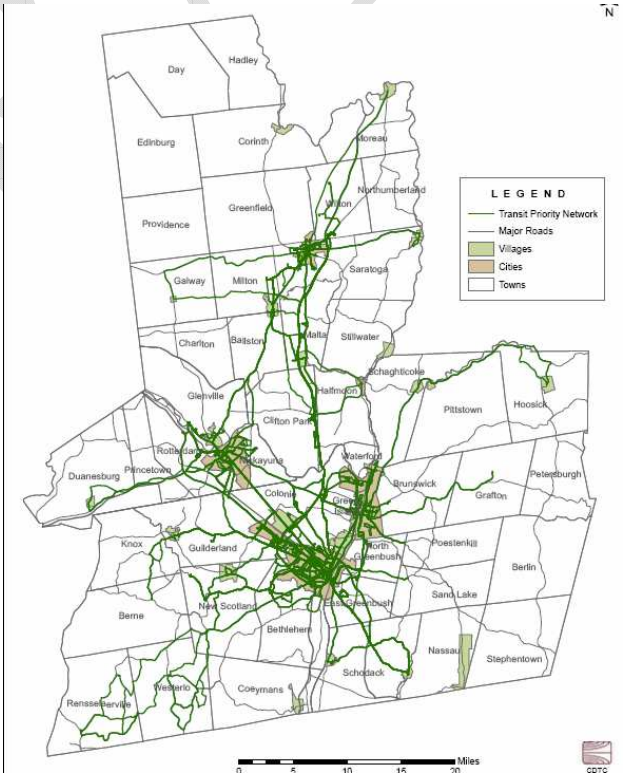
emerged from the process because, as the only governmental body with a regional perspective, it was "arguably in the best position to discuss and promote policies relating to the integration of land use and transportation on a broad, regional scale." Oregon MPOs without legal land use authority can learn lessons on how to leverage Commissioners with political will to encourage the land use and transportation connection.

6.0 Case Study 5: Albany (New York) New Visions and Linkage Program

For the past decade, the Capital District Transportation Committee (CDTC) has made great strides in leveraging the LRTP process to address regional issues in a visioning exercise that builds off the region's "Quality Communities" movement. The genesis of the initial 1997 New Visions stemmed from CDTC's motivation to begin a broad regional discourse on emerging issues, particularly those related to integrating transportation and land use. The scenario planning presented herein is part of New Visions, which is the region's LRTP.

6.1 AGENCY CHARACTERISTICS

The CDTC is the designated MPO for the Albany-Schenectady-Troy metropolitan area. The CDTC has a well-developed, long-term working relationship with the Capital District Regional Planning Council (CDRPC), which is a regional planning and resource center working on land use, economic, water quality, and other planning issues.



The geographic extent for both CDTC and CDRPC includes the counties of Albany, Rensselaer, Saratoga, and Schenectady and 78 municipalities within those counties. Socioeconomic and land use characteristics of the region include:

- **Population (2000):** 794,293;
- **Land area (2000):** 2,195.357 square miles;
- **Density (2000):** 362 persons per square mile;
- **Median household income (1999):** $45,001;
- **Persons 19 years old and under (2000):** 19.8 percent;
- **Persons 65 years old and over (2000):** 13.9 percent; and
- **Mean travel time to work in minutes (2000):** 22.5 minutes.

The Capital District Transportation Agency provides bus and demand responsive transit service for the same four-county area with the following transit travel characteristics.

Annual passenger miles (2007): 47,852,366; and

Average weekday unlinked trips (2006): 44,479.

6.2 SYNOPSIS OF LAND-USE TRANSPORTATION SCENARIO PLANNING

Primary Reason(s) for the Project

The initial 1997 New Visions stemmed from CDTC's motivation to begin a broad regional discourse on emerging issues, particularly those related to integrating transportation and land use. In the early 1990s regional planning was focused on issues of environmental concern or economic development, but little on transportation and land use development at a regional scale. CDTC has articulated their mission to extend beyond transportation planning and programming, and rather, "to proactively shape a comprehensive vision for the region's future growth." The combined effort was simply called "New Visions for a Quality Region" and has continued for the past decade.[5]

The Community and Transportation Linkage Planning Program (referred to as the Linkage Program) were developed by CDTC to support local land use and transportation planning initiatives. The Program is designed to fulfill the adopted principles and strategies in the New Visions 2030 regional

[5] Cambridge Systematics, Inc., SHRP C08, Case Study: "New Visions: 2015-2030."

transportation plan and assists local communities by making funds available for local planning activities.[6]

Year Implemented

The initial New Visions 2015 took place from 1993 to 1997. Beginning as early as 2002, the CDTC began planning for a significant update to the New Visions for the year 2030. This most recent round of the update process occurred from 2002 through 2007 and continued to build upon the public support, partner buy-in, and overarching outcomes of the original plan.[5] The Linkage Program was implemented in 2000, and has funded 61 studies since then.

Funding and Costs

CDTC staff estimated that the New Visions process from 2004 through 2007 cost over $400,000 including CDTC staff support of task forces and working groups, as well as related research and technical activities. An additional $300,000 annually was expended through the Linkages program, which supported New Visions public outreach goals during local strategic planning efforts.[5] Roughly $4.0 million in Federal, state, and local funds have been committed to the Linkage Program since its inception in 2000.[7]

The CDTC primarily utilizes FHWA metropolitan planning (PL) funds for the New Visions planning process.[5] The Linkage Program, which requires a local match of 25 percent, is primarily financed through CDTC's PL allocation as an MPO with additional funding from Congestion Mitigation/Air Quality and Surface Transportation Program funds.[7]

6.3 Legal Authority and LRTP Linkage

CDTC has articulated their mission to extend beyond transportation planning and programming, and rather, "to proactively shape a comprehensive vision for the region's future growth." The CDTC made a conscious decision to leverage the LRTP process and address regional issues in a visioning exercise (New Visions) that would build off the region's quality communities movement.[5]

The CDTC ensures that projects that receive Federal funding are part of a "continuing, comprehensive, and cooperative planning process," which it does through inclusion in the LRTP and Transportation Improvement Program (TIP).

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[6] The Community and Transportation Linkage Planning Program, Brochure, January 2009, http://www.cdtcmpo.org/linkage/brochure10-11.pdf.

[7] Capital District Transportation Committee (CDTC) Community and Transportation Linkage Planning Program (albanynycs.pdf on network drive).

How Did This Planning Process Relate to the RTP Process in Context of Long-Range Planning?

The Linkage Program is a key implementation activity of New Visions 2030, the CDTC's LRTP, which is predicated on reducing the growth of vehicular travel in the Capital Region. Submissions are screened based on how well they incorporate strategies that are consistent with the adopted New Visions principles, as well as other initiatives, such as the New York State Quality Communities Initiative and the national Smart Growth movement.

6.4 POLICY FRAMEWORK/ENVIRONMENT

Range of Land Use Alternatives Analyzed and Implemented[5]

One of the working groups formed for the New Visions 2030 update was tasked with developing future alternative scenarios for land use patterns in the region. This research was a joint effort between the CDRPC which provided population forecasts, the CDTC, which evaluated impacts on transportation system and quality of life performance measures, and the Center for Economic Growth (CEG) which completed a fiscal impact analysis for each scenario. In 2005, a white paper was released, "Effects of Alternative Development Scenarios in the Capital District," which presented the results of this technical analysis.

Agency research staff and working group members defined the parameters of each scenario. A qualitative assessment by working group members were also made of some outcome measures for each scenario to assess issues such as quality of life. The four scenarios developed examined different population distribution and density patterns over 20 years, including the following:

1. **Status Quo Trend**. This baseline forecast assumed 9-percent growth in population, 15-percent growth in households by 2030, with current development patterns continuing. This was the official RTP forecast, and can be considered the most likely based on past trends.
2. **Concentrated Growth**. This scenario assumed the baseline growth rate, but with more concentrated development patterns resulting from urban reinvestment and suburban planning.
3. **Trend Hyper-Growth**. This scenario assumed "hyper-growth" of 29 percent population growth and 35 percent household growth by 2030, with trend patterns of dispersed development.
4. **Concentrated Hyper-Growth**. This scenario assumed hyper-growth occurring in a concentrated densely developed pattern resulting from more urban reinvestment and suburban planning.

Public Outreach Component

The New Visions process did not include a large-scale, targeted public outreach campaign to solicit open participation of stakeholders and the broader public in the formation of the Plan's significant elements. Formation of the Plan's underlying principles in 1997 and additions in 2007 were undertaken by stakeholder Task Forces, drafted by CDTC staff, and ultimately approved by the CDTC's Policy Board.

However, the public was engaged for validation of the vision, which has occurred through ongoing public outreach opportunities, such as presentations during Linkage studies, and public comment solicited on LRTP drafts and working documents. To solicit public comment during review periods for the 2030 update, CDTC staff utilized e-mail mailing lists of interested parties, sent informative postcards, created a glossy brochure summarizing the 2030 process, and bound all materials into one document that was placed in local libraries. Cooperation with, and support of, groups such as ARISE has provided access for CDTC to minority and low income communities and better enabled concerns to be heard and reframed within the regional Plan.

The CTDC employed hypothetical workbook scenarios that told different residents' stories of using future transportation systems or living under potentially alternative future land use patterns during the 1997 New Visions process. They also developed alterative scenario development maps (shown below) showing the population density under the four scenarios described above.

Summary of Project Objectives Being Met (Has the Planning Process Changed Overall in the MPO, and If So, How?)

The primary visioning outcomes of the New Visions 2030 process are the 4 themes, 31 principles, 13 strategies, and 47 actions governing regional planning and transportation investment in the region. According to CDTC staff, these principles, which reflect broad consensus for the need to plan proactively for a quality region, are increasingly being reflected in local development regulations and local transportation plans of municipalities. The CDTC also actively works to coordinate New Visions with community and economic development plans, transit plans, and traffic demand management programs across the region.

Through the Linkages program, a host of local transportation planning studies has been conducted with the financial support of CDTC, which generally reflect the New Visions principles. In addition, the Plan's principles are generally integrated into transportation planning processes within general or corridor plans, resulting in approved projects that conform to the vision within the 2030 Plan.

In addition, CDTC's Transportation Improvement Plan (TIP) project development process requires explicit prioritization of available funds according to the budget distribution established within New Visions. To implement this

policy, CDTC uses categorical budgets in the New Visions plan directly in the TIP update process. Early during a TIP update, CDTC compares the overall New Visions budget emphasis by category to the budget emphasis represented by existing commitments on the TIP.

6.5 APPLICABILITY TO OREGON MPOS

Although the CDTC covers a larger area than the Salem-Keizer Area Transportation Study Policy Committee (SKATS) in Oregon, the city of Albany is comparable to the city of Salem – both being capital cities of progressive large states. However, the preferred alternative selected within the Salem Futures process was never implemented. Instead a different version of the scenario, most similar to the base case scenario, was adopted in the City of Salem Comprehensive Plan update in 2009. Albany can provide lessons learned to Oregon MPOs such as SKATS on how to link the LRTP to an implementation process. Albany's New Vision 2030 was coupled with the Linkage Program as well as the TIP update, ensuring that investments in infrastructure and transportation had to relate to the preferred alternative scenario of reducing the growth of vehicular travel in the Capital Region. Submissions were screened based on how well they incorporate strategies that are consistent with the adopted New Visions principles, as well as other initiatives, such as the New York State Quality Communities Initiative and the national Smart Growth movement.

7.0 Case Study 6: Charlottesville (Virginia) Eastern Planning Initiative

The Thomas Jefferson Planning District Commission (TJPDC), the MPO for the Charlottesville Metropolitan Area, started a planning process referred to as the Eastern Planning Initiative (EPI) to address the concerns about the rapid growth of the region. The EPI team established a working relationship with area residents to address how to build livable communities for this region. It was funded to study transportation and land use alternatives in the eastern area of the planning district. This EPI process included the creation of three land use scenarios and the comparison of the potential impacts on transportation, land consumption, and other factors.

7.1 AGENCY CHARACTERISTICS

The TJPDC is a planning district composed of six local governing boards including: City of Charlottesville, Albemarle County, Fluvanna County, Greene County, and Nelson County. The TJPDC is directed by a twelve-member board, consisting of two representatives appointed by each local governing board, more than half of whom are local elected officials.

The Charlottesville region, including the City of Charlottesville and its surrounding rural area (located in Albemarle County), is growing rapidly. The EPI is a planning effort to address how to build livable communities for this region. It was funded to study transportation and land use alternatives in the eastern area of the planning district. Geographic and demographic characteristics for the Charlottesville, Virginia region include:

- **Population (2000):** 81,449;
- **Area (2000):** 37.47 square mile;
- **Density (2000):** 2,174 persons per square mile;
- **Median household income (1999):** $44,356;
- **Persons under 18 years old, percent (2000):** 19.1 percent;
- **Persons 65 years old and over, percent (2000):** 11.2 percent; and
- **Mean travel time to work in minutes (2000):** 22.8 minutes.

The following transit statistics are representative of the Charlottesville Transit Service which provides transit services for the region and includes a small fleet of buses and demand response vehicles:

- **Annual passenger miles (2007):** 6,946,727; and
- **Average weekday unlinked trips (2007):** 5,838.

7.2 SYNOPSIS OF LAND-USE TRANSPORTATION SCENARIO PLANNING

Primary Reason(s) for the Project

The City of Charlottesville and the surrounding five-county region are growing rapidly. This growth, however, is creating development patterns and congestion that many believe are diminishing the area's unique qualities. In response to these concerns, the TJPDC led a regional visioning process that resulted in the 1998 "Sustainability Accords and a Vision of Sustainability." The accords called for a new direction in regional land use development patterns and practices. To implement these accords, the Commission undertook an innovative public process and modeling approach, Eastern Planning Initiative that resulted in a transportation and land use vision for the Charlottesville metropolitan region.

Year Implemented

The EPI was launched in 2000. In Virginia, LRTPs must be updated every five years, and the most recent LRTP (United Jefferson Area Mobility Plan – UnJAM 2025) developed fro the region was adopted in May 2004.

Funding and Costs

The TJPDC was awarded a Fiscal Year 1999 FHWA Transportation and Community and System Preservation Pilot Program (TCSP) grant of $518,000 to undertake the EPI.

7.3 LEGAL AUTHORITY AND LRTP LINKAGES

Implementation of the EPI recommendations will largely rely on the initiative of local jurisdictions to revise comprehensive plans and capital improvement programs. Regional highway and transit investment decisions by the MPO and state DOT will also play a significant role. The EPI is funded to study the faster-growing, or Eastern, portions of the five-county region. Although not part of the original study, Nelson County has recently adopted a new Comprehensive Plan based on the EPI principles. From comprehensive plans, which are advisory in nature, regulations, such as those defined in the EPI, could be established to achieve the goals of a community.

How Did This Planning Process Relate to the RTP Process in Context of Long-Range Planning?

Although the EPI process did not directly feed into the LRTP implementation efforts in UnJAM 2025, it was fully cited in the land use and transportation section of the document. In addition, the scenarios developed in the EPI were used in the UnJAM public outreach process to communicate alternative futures scenarios being tested and evaluated in the LRTP.

7.4 POLICY FRAMEWORK/ENVIRONMENT

Range of Land Use Alternatives Analyzed and Implemented

The EPI project team, through working with the residents, created three scenarios that compared impacts on transportation, land consumption, and other factors from the 1998 Sustainability Accords. The reaction from the public at the workshops was clear: residents rejected a dispersed, low-density pattern, and preferred clustered enhanced communities along major corridors and key crossroads. Scenarios evaluated included:

1. **The Dispersed Scenario** showed what could happen by the year 2050 if recent development trends continue. Suburban communities would continue to spread north along U.S. 29 and east along U.S. 250. A large network of wider roads and bypasses costing about $1 billion would be needed to support this growth, and transit services to support this growth would not be feasible outside the core city.
2. **The Town Centers and Urban Core scenarios**, by contrast, featured urban and enhanced suburban community elements as the building blocks for

development. Growth would be concentrated in and around Charlottesville, with varying options for growth at major crossroads (Town Centers) or around existing villages and towns (Urban CoreL and CoreM).

The transportation system for the alternative scenarios considered the preparation and analysis of a pedestrian-friendly street network in the development areas and allowed for extensive expansion of the transit system, including rail or bus rapid transit if the community wishes. Large freeways around the city would not be necessary (to either build or expand). The freeway and arterial street system would cost about $500 million, half as much as the network required by the Dispersed Scenario. While each scenario was designed to accommodate the same anticipated growth of people and jobs, the Town Centers and Urban Core alternative scenario would consume much less land and reduce overall roadway congestion significantly.

Public Outreach Component

The EPI Advisory Committee, with a total of 35 members made up of elected officials, residents, and leaders from business, development, environmental and community groups, met eleven times and hosted four public workshops during the two-year study. The focused on three key questions

1. How will we live? ;
2. Where will we live? ; and
3. How will we get there?

During the first and second EPI workshop, participants reviewed existing community elements and offered suggestions on how to improve livability. Also in the second workshop, participants were asked to allocate future development within the region using the "community elements" which described the physical characteristics of 17 existing community types throughout the region. This workshop resulted in a general consensus that growth should be concentrated in the region's core and/or nodes of development, primarily utilizing urban and "enhanced suburban" elements. Based on the workshop results, the EPI constructed three land use scenarios: a "nodal" and two "core" scenarios – for comparison with a "dispersed" or trend scenarios defined above. These scenarios were presented to the public at the third EPI workshop for feedback, and participants were asked to suggest and agree upon transportation and land use goals.

Summary of Project Objectives Being Met (Has the Planning Process Changed Overall in the MPO, and If So, How?)

The EPI initiative had two primary objectives:

1. To develop a set of modeling tools capable of concurrently evaluating transportation and land use options; and

2. To develop a 50-year transportation and land use vision for the five-county region surrounding Charlottesville.

The EPI team concluded that changing where and how the region grows– by building around historic town centers in walkable, village-scaled development patterns – could save $500 million in transportation system investments over 50 years.

7.5 APPLICABILITY TO OREGON MPOS

The EPI provides a model process for examining two polar land use and transportation scenarios; one with a dispersed development pattern and one with more concentrated growth. Medium-sized MPOs in Oregon such as Central Lane MPO, Rogue Valley MPO, and SKATS all have to deal with future growth scenarios that grapple with the issues of sprawl versus density. The community elements employed in EPI provided community types that the public could relate to; the community types were visualized and described to the public in an easy-to-understand manner. In addition, EPI tied the scenarios to clear cut infrastructure cost implications, which the public could evaluate with their own value judgments.

8.0 Case Study 7: Envision Missoula (Montana)

Envision Missoula is the first attempt by the Missoula City-County Office of Planning and Grants (MOPG), the MPO for the region, to combine the transportation plan with a land use vision through extensive public involvement processes. Because of the nature of MOPG's project selection process designed for Envision Missoula, programmed projects for the Missoula area over the five to twenty year period are intended to link directly to the outcomes of the vision. The complex prioritization process developed, which explicitly links public input to the project selection process, has made this link more direct in Missoula.

8.1 AGENCY CHARACTERISTICS

MOPG, whose jurisdiction covers the city and county of Missoula, was formed pursuant to an interlocal agreement executed by the two governing bodies of Missoula City and Missoula County in 1996 and modified in 2005.

The purpose of the Envision Missoula and its supporting interlocal agreement is to enhance the ability of the City of Missoula and Missoula County to plan for future development of the region. This was intended to provide a countywide pattern of community-building, land use, and conservation that reflects the environmental, economic, aesthetic, and social values of city and county residents is achieved. The socioeconomic and demographic characteristics of this region include:

- **Population (2000):** 57,053 in the City of Missoula, 100,000 in the County;
- **Land area (2000):** 23.9 square miles (city boundaries);
- **Density (2000):** 2397 persons per sq mile;
- **Median household income (1999):** $30,366;
- **Persons under 18 years old (2000):** 19.7 percent;
- **Persons 65 years old and over (2000):** 10.4 percent; and
- **Mean travel time to work in minutes (2000):** 14.3 minutes.

The following transit statistic characteristics were collected for the Missoula Urban Transportation District includes a small fleet of buses and demand response vehicles:

- **Annual passenger miles (2007):** 2,950,679; and
- **Average weekday unlinked trips (2007):** 2,833.

8.2 SYNOPSIS OF LAND-USE TRANSPORTATION SCENARIO PLANNING

Primary Reason(s) for the Project

Envision Missoula was largely concerned with land use and future development patterns, and how transportation investments interacted or supported those patterns. Missoula County initially released an RFP for a consultant to update and develop the LRTP. As the selection committee narrowed the list of the top teams, one approach gathered more support than others, even though its public participation approach exceeded the original scope. The LRTP update process was considered successful in terms of its ability to generate public enthusiasm and to increase public participation in the planning process beyond levels previously seen in the region.

Year Implemented

Envision Missoula was implemented in 2008.

Funding and Costs

The total expense of the LRTP update was estimated at $400,000, with the Envision Missoula public participation component costing approximately $45,000. Missoula County applied for Federal PL planning and other Federal fund sources, passed through by the Montana Department of Transportation (MDT), to cover the majority of this cost.

8.3 LEGAL AUTHORITY AND LRTP LINKAGE

MOPG develops the county growth policy, the urban comprehensive plan, as well as the LRTP. It has authority over both land use and transportation planning due to the interlocal agreement enacted by the city and the county. The Current Planning Section is responsible for the administration and enforcement of City and County zoning, subdivision, floodplain, shoreline, and other land-use regulations. The Transportation Plannig Section is responsible for preparation of the LRTP.

How Did This Planning Process Relate to the RTP Process in Context of Long-Range Planning?

The visioning process was a component of the region's LRTP update and relied on ongoing planning efforts within Missoula County, including the Urban Fringe Development Area Study. Because Missoula's visioning exercise occurred as part of the broader LRTP update process, the vision outcomes were linked to components of the LRTP, including goal statements, adopted plan scenario, and the project selection process. Therefore, the projects selected within the LRTP are intended to reflect the vision and will eventually work through the process towards implementation. The land use components of the visioning process may be considered by local agencies as input to local government zoning and development regulations; however, there is no planned implementation process for the development preferences established in the vision.

8.4 POLICY FRAMEWORK/ENVIRONMENT

Range of Land Use Alternatives Analyzed and Implemented

The scenario modeling work was relatively limited in scale in that only two alternatives were assessed and presented, and was based on available data from the County and other partners. Each scenario presented a set of policies reflective of the different choices the region faced (i.e., whether to grow out, in, or up). The region's trend, or "Business as Usual" scenario, was developed through a charrette process, involving a limited number of select stakeholders. In addition, two scenarios were developed based on the results of earlier open visioning workshops. These included:

1. **Vision Scenario 1: Suburban Satellites.** This scenario integrated additional multimodal transit facilities into Missoula's existing urban pattern with an emphasis on creating efficient transition points between various modes. Committed roadway and capacity improvements are assumed in the scenario, but the overall purpose was to explore concentrated land and infrastructure development along higher density corridors, with a general orientation towards transit.
2. **Vision Scenario 2: Focus Inward.** This scenario included fewer centers of development and emphasized increases in residential density and access in order to manage future travel demand. This scenario considered less roadway expansion and concentrated most new infrastructure investment into the smallest geographic areas of the City of Missoula. Committed transit and roadway expansion improvements were assumed in this scenario, but the purpose was to highlight managing travel demand by concentrating activity in a walkable and transit-friendly downtown area.

The final scenarios and transportation modeling analyses were presented to the public at a regional Transportation *Planning Summit*. These provided the public with a forum to further comment and indicate other preferences and priorities for transportation investments to be included in the 2008 LRTP Update.

Public Outreach Component

Public involvement for the 2008 LRTP relied on a series of strategies to encourage a broad-based and unique participatory process. These strategies included:

- Direct stakeholder outreach;
- Interactive workshops and a regional forum;
- Opinion polling;
- Public comment period; and
- Inter-agency consultation.

MOPG staff noted that public participation in the Envision Missoula process far exceeded input received on previous LRTPs or for other regional transportation plans and credited the unique long-term, public-input driven visioning approach. The first round of public involvement was comprised of a series of three visioning workshops. These workshops emphasized interactive, participant-driven visioning exercises which proved an effective means of increasing attendance, engaging residents, and deriving preferences. A final regional *Transportation Planning Summit* was also held to provide an overview of the scenario planning efforts. The Summit also provided an interactive component that enabled participants to use electronic "key-pad" polling to actively state preferences for a future growth scenario. Participation numbered 270 involved in workshop series and 260 participants in the *Transportation Planning Summit*.

Summary of Project Objectives Being Met (Has the Planning Process Changed Overall in the MPO, and If So, How?)

Because of the nature of the LRTP's project selection process, programmed projects for the Missoula area over the five to twenty year planning horizon were intended to link directly to the outcomes of the vision. The complex prioritization process developed, which explicitly links public input to the project selection process, has made this link more direct in Missoula. Programmed projects are dependent on funding availability and other variables to be completed, but the selection within the 2008 LRTP Update is intended to represent incremental progress towards the region's vision. In this way, the projects selected during this round and future updates of the Plan should remain consistent with the principles and investment priorities established using Envision Missoula in 2008.

8.5 APPLICABILITY TO OREGON MPOS

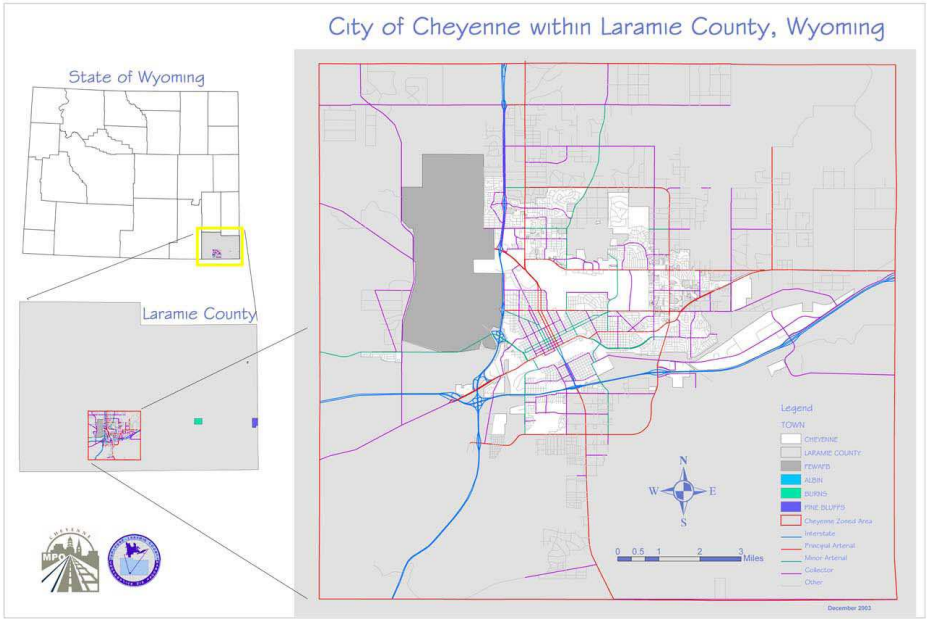
Envision Missoula provides an example on how to leverage limited funding to optimize public outreach efforts to develop a robust preferred alternative land use scenario supported by the community. Although the scenario modeling work was conducted in a limited scale with only two alternatives assessed and presented, and with only available data from the County and other partners, MOPG was able to conduct a multi-tiered stakeholder engagement process which included interactive workshops, a regional form, opinion polling, public comments, and interagency consultations. It was this emphasis on public outreach that provided for an LRTP which reflected the desires of the community. Smaller MPOs in Oregon such as Bend and Corvallis could take lessons from Envision Missoula on the importance of public outreach, and how limited funds and a small number of scenarios do not hinder the value of a land use and transportation alternative scenario development process.

9.0 Case Study 8: PlanCheyenne (Wyoming)

Through extensive community and stakeholder partner outreach (including all city departments, the county, the U.S. Air Force, local businesses, and even the local community college), the Cheyenne MPO has created not only a master plan but an integrated, cutting edge scenario-based land use planning system. The City of Cheyenne (located in Laramie County), together with Laramie County, and the Cheyenne MPO took the initiative to develop PlanCheyenne that integrated land use, transportation, and parks and recreation plan. This plan was adopted in 2006 as the official comprehensive development plan for the region. The transportation master plan of PlanCheyenne is the current LRTP for the Cheyenne MPO.

9.1 AGENCY CHARACTERISTICS

Formerly known as the Cheyenne Area Transportation Planning Process (ChATPP), the Cheyenne MPO was designated for transportation planning purposes by the governor of Wyoming in 1981. The Cheyenne MPO is responsible for developing transportation policies and coordinating the various Federal, state, and local agencies involved in long-range transportation planning and project development. The geographic area of the MPO is known as the Metropolitan Planning Boundary.



The City of Cheyenne is located in Southeastern Wyoming within Laramie County. It was estimated that over the next 20 years, Cheyenne could grow to a population of anywhere from 103,500 to more than 135,000 residents depending on rate of growth. Increasingly Cheyenne is viewed as being part of the Front Range economy and growth trends (the Front Range stretches from Colorado Springs and Denver, Colorado, to Cheyenne).

The following geographic and demographic data represent for the Cheyenne MSA:

- **Population (2000):** 68,202;
- **Area (2000):** 33.86 square miles;
- **Density (2000):** 2,014 persons per square mile;
- **Median household income (1999):** $39,607;
- **Persons under 18 years old, percent (2000):** 25.4 percent;
- **Persons 65 years old and over, percent (2000):** 12 percent; and
- **Mean travel time to work in minutes (2000):** 16.3 minutes.

The following transit travel characteristics are representative of the City of Cheyenne Transit Program:

- **Annual passenger miles (2007):** 892,685; and
- **Average weekday unlinked trips (2007):** 875.

9.2 SYNOPSIS OF LAND-USE TRANSPORTATION SCENARIO PLANNING

Primary Reason(s) for the Project

PlanCheyenne is the result of a coordinated effort between the City of Cheyenne, Laramie County, and the Cheyenne MPO to address future growth in the area while completing several plans at once (Land Use Plan, Transportation Plan, and Parks and Recreation Plan). The PlanCheyenne is intended to integrate land use, transportation, and parks and recreation and open space planning efforts. It is the official comprehensive development plan for the City of Cheyenne and Laramie County, Wyoming.

Year Implemented

PlanCheyenne was adopted in 2006.

Funding and Costs

A total of $335,000 of funding came from the MPO, City, County, and Parks and Recreation were used to support the preparation of PlanCheyenne.

9.3 LEGAL AUTHORITY AND LRTP LINKAGE

PlanCheyenne was adopted in 2006 as the official comprehensive development plan and provides a long-range vision and sets out a policy to guide future growth and development for the Cheyenne region. The Transportation Master Plan component of PlanCheyenne is the current LRTP for Cheyenne MPO.

Cheyenne MPO is responsible for developing transportation policies and coordinating the various Federal, state, and local agencies involved in LRTP and project development. Although the MPO's primary focus has been on transportation, its mission is not confined to just highways and pavement. The MPO is involved with all aspects of growth, development, and quality-of life improvements for the Cheyenne Area.

Cheyenne MPO does have the authority to propose changes in policy although it does not have legal land use authority. The City of Cheyenne is currently reviewing, revising, and updating its development regulations to more consistently and comprehensively implement the policies of PlanCheyenne.

How Did This Planning Process Relate to the RTP Process in Context of Long-Range Planning?

The Transportation Master Plan component of the PlanCheyenne is the LRTP for the urbanized region that includes the City of Cheyenne as well as parts of Laramie County.

9.4 POLICY FRAMEWORK/ENVIRONMENT

Range of Land Use Alternatives Analyzed and Implemented

The PlanCheyenne includes three primary plans: Community Plan (land use Plan), Parks and Recreation Master Plan, and Transportation Master Plan (or LRTP). The Community Plan is the core element, supported by the Transportation Master Plan and Parks & Recreation Master Plan. The integration of land use and transportation are reflected in both Community Plan and Transportation Master Plan. Listed below are two examples of how transportation and land use are integrated in PlanCheyenne:

1. **Integrated Planning Example: I-25.** Early transportation modeling showed that future roadways adjacent to I-25 south of the city would face severe congestion in the near future. The planning team adjusted the Future Land Use Plan to include more mixed uses along the Interstate and to shift some of the nonresidential uses to the east side to address and mitigate these congestion issues.
2. **Mixed-Use Corridors Emphasis.** The PlanCheyenne Community and Transportation Plans promoted the development of mixed-use and activity centers along a network of principal arterials in the community. The intent of

this process, over time, considered the evolution of development along these corridors to become compact enough to support greater transit use. Commercial activity centers would be designed to promote walking and would be connected to neighborhoods with local streets, sidewalks, and trails.

Overall, these concepts (among other examples) were linked to the LRTP process with the following three land use scenarios:

1. **Low Growth 2030:** Represents a 1.25-percent growth rate, and is the fiscally constrained plan;
2. **High Growth 2030:** Represents a two-percent growth rate, and is a "vision plan"; and
3. **Buildout Beyond 2030:** Depicts a full buildout of the planning area, and preserves future right-of-way corridors.

Public Outreach Component

Public involvement was emphasized throughout the process of PlanCheyenne. Approaches to encourage public involvement included, but were not limited to, the following:

- Greater Cheyenne Chamber of Commerce supported a public process to create a master vision for the Cheyenne area. To develop *PlanCheynne*, the Cheyenne community and plan advisory committees participated in a two-part charrette process in December 2004 and January 2005.
- A newspaper insert highlighted the initial results of the first, solicited comments, and advertised the second.
- Steering Committee and Technical Advisory Committee members participated in afternoon sessions followed by public sessions in the evening.
- All participants answered questions and discussed what they liked and what they might want to improve.
- Ongoing Technical and Steering Committee meetings were held every few months.
- In July 2005 the *Wyoming Tribune-Eagle* newspaper printed information about the process and policy choices, and solicited comments from readers. This paper also advertised upcoming meeting sand events.

Summary of Project Objectives Being Met (Has the Planning Process Changed Overall in the MPO, and If So, How?)

PlanCheyenne is a comprehensive plan that has provided guidance on how Cheyenne should move forward in the land use, transportation, and open space planning realms. During 2007, this plan helped to shape development projects, and resulted in the adoption of the Large Commercial Design Standards.

In 2008, further implementation of ideas from PlanCheyenne included the update of the community's zoning and development codes. The approach envisioned has helped to streamline the city's approval processes and clarify existing regulations with the addition of graphics and illustrations. Future steps for Cheyenne MPO includes processes to encourage mixed-use development through incentives, bonuses, and regulations to PlanCheyenne's vision a reality.

9.5 APPLICABILITY TO OREGON MPOS

PlanCheyenne is an excellent example of how to leverage an alternative scenario development effort to meet various interdisciplinary goals including land use, transportation, economic development, as well as to parks and recreation. Smaller sized Oregon MPOs such as Bend MPO and Corvallis MPO that have limited resources in funding and staff could find similar ways to develop comprehensive planning efforts that meet a wide range of planning needs. The extensive public outreach component leveraged the local newspapers, which is an outreach venue more suitable for smaller MPOs that look to engage a breadth of interest in the local community.