

GOING BEYOND TRANSPORTATION

The previous chapters offer actions that metropolitan planning organizations (MPOs) can take to push innovations within traditional areas of responsibility: long-range planning, community engagement, data development and monitoring and supporting local partners in their transportation work. This chapter looks beyond these historic roles to explore ways MPOs can engage on emerging issues of regional importance. In many instances, regional planning agencies or councils of governments may already be involved in disaster planning, storm water management, climate change and workforce development. However, for most MPOs these are topics seen as less directly related to their federally required transportation responsibilities.

As noted in **Focus Area 1** of this guidebook, though, the eight federally required planning factors create a framework for MPOs to lead, or at the very least, engage in regional discussions about these topics — each of which is impacted by transportation. At the same time, investments and policies created by localities or other regional agencies in these areas can have a profound impact on transportation. The nation recently has witnessed devastation to roads, bridges and transit systems from natural disasters and the fallout of failure to have sufficient transportation options to evacuate the poor and carless in New Orleans during Hurricane Katrina. In a state like California, climate change legislation has transformed the long-range planning process and a new cap-and-trade regime for emissions will bring billions of new dollars to invest in transportation. On another front, a number of regions are establishing workforce development programs not only to provide transportation to jobs, but also to build career ladders linking low-skill workers to job training for transit and highway construction or manufacturing.

Each region can point to its own examples of where these connections matter in ways both profound and personal. Proactively strengthening the linkages between transportation and broader economic and environmental systems can be transformative for a region. It can also create significant cost and system efficiencies for transportation. New areas of opportunity bring the potential for new financial resources, new partnerships and increased public awareness, among them:

- **Plan for disasters and prepare to respond**
- **Align regional infrastructure systems, projects and policies with environmental goals**
- **Adapt to climate change and extreme weather events**
- **Act as a partner on workforce development**

PLAN FOR DISASTERS AND PREPARE TO RESPOND

In the face of natural or man-made disasters, transportation networks are particularly vulnerable, even as they play a critical role during times of response and recovery. As such, innovative MPOs recognize that long-range transportation plans must consider both ways to become more resilient from disasters and to be more effective in helping to respond and rebuild afterwards. This is work that requires strong local, state and even federal partnerships.

The opportunity

The past decade appears to have seen an increase in the frequency and ferocity of natural disasters or other threats to our cities. Each year, the news brings us stories of devastation wrought by hurricanes or flooding – two types of disasters that are particularly hard on transportation systems. Transportation is also a vulnerable target for terrorist attacks. MPOs can do little to influence the weather or political extremists, but there is much they can do to plan for transportation investments that are better able to withstand disasters or unexpected events and that can serve as lifelines for moving people and supplies during times of crisis. Deciding where to locate and how to design development and infrastructure are key decisions where MPOs can have a positive impact.

In most regions, local police, fire and other public safety and first responders play a lead role in disaster planning. The Federal Emergency Management Agency works closely with state and local agencies to help prepare comprehensive disaster plans.¹ To ensure coordination and communication among the many different operating agencies in a region, MPOs should be sure to have a seat at the table during disaster planning.

MPOs' involvement in security and disaster planning varies with their structure and roles. Those with broader mandates such as water infrastructure, tolling facilities or providing transit service play a critical role in operations strategies. The federal planning factors give all MPOs a responsibility to ensure that security and emergency management are considered in developing plans and prioritizing projects and in retrofitting or replacing critical infrastructure to withstand future events while meeting the current needs of motorized and non-motorized users.

Given the technical strengths of many MPOs, they are well-suited to participate in or lead on the following kinds of disaster planning activities:

1. Conducting vulnerability analyses on regional transportation facilities and services;
2. Analyzing the transportation network for redundancies in moving large numbers of people including at times when vehicle flows are reversed or removed through street closures;
3. Crafting strategies for dealing with choke points on bridges or tollbooths;
4. Determining how the public will get information during these times; and
5. Analyzing the network to see if there are gaps in emergency routes.²

¹ www.fema.gov/plan/

² Michael D. Mayer. "The Role of Metropolitan Planning Organizations (MPO) in Planning for Security Incidents and Transportation Systems Response." www.planning.dot.gov/documents/securitypaper.htm

MPOs can champion improved coordination on disaster and security planning by acting as a regional convener of the many different transportation providers and local governments. The MPO can be a forum where operations plans are discussed and coordinated with other plans in the region.¹ MPOs, through their transit representatives, can ensure that transit needs are a viable element of disaster and security planning. Regions need to consider the role of transit in moving people during times of crisis, as well as ways to protect transit assets during inclement weather, as witnessed during Hurricane Sandy. The US Department of Transportation (USDOT) has developed a number of resources to help state DOTs, transit agencies and MPOs better plan and respond to disaster.² The Association of Metropolitan Planning Organizations (AMPO) has also developed best practices on the range of roles for MPOs in disaster planning.³

Putting it into practice

Taking a role in homeland security and disaster preparedness. In the San Diego metropolitan area, security is a major issue due to proximity to the US-Mexico border, a significant US military presence and the potential for major earthquakes. As the MPO for the region, the **San Diego Association of Governments (SANDAG)** works with state and local partners to consider the needs of first responders and their ability to access and manage transportation systems during times of crisis. Beginning in 2007, the RTP and subsequent updates include a focus on ensuring that transit emergency operations, communications and coordination improvements are sufficiently prioritized in regional policies and investments.⁴ The **Ohio, Kentucky, Indiana (OKI) Regional Council of Governments** serving the Cincinnati metropolitan area also takes emergency preparedness seriously. It established a Regional Homeland Security Coordinating Committee to analyze the region's emergency response systems and develop recommendations for the MPO and COG.⁵ The OKI 2004 RTP introduced two specific security objectives. First, it established security requirements in transit and non-motorized modes for projects included in the TIP. Second, it mandates the protection of key infrastructure by implementing measures proposed by the Department of Homeland Security (DHS).⁶

Serving as coordinator and clearinghouse in a smaller region. The **Fargo-Moorhead Metropolitan Council of Governments (FM Metro COG)** is a small bi-state MPO serving 160,000 residents in and around Fargo, ND and Moorhead, MN. Responding to local officials who felt that emergency response and planning were important MPO activities, FM Metro COG undertook an analysis of the current needs and challenges facing the region. A set of recommendations on appropriate future roles for the MPO was developed for the Policy Board. As a result of that work, FM Metro COG now serves as the forum for regional assessment between state and local transportation departments, transit agencies and emergency response representatives. The MPO, in coordination with various agencies, has created and maintains a database to help inform regional decision-making and emergency response.⁷

1 Michael D. Mayer. "The Role of Metropolitan Planning Organizations (MPO) in Planning for Security Incidents and Transportation Systems Response." www.planning.dot.gov/documents/securitypaper.htm

2 www.planning.dot.gov/documents/ConsideringSecurityAndEM.pdf

3 www.ampo.org/assets/library/172_securitywkshpjan08final.pdf

4 www.sandag.org/index.asp?classid=13&fuseaction=home.classhome

5 www.planning.dot.gov/Documents/SEPOKIRegional.pdf

6 Mark Lofgren. (July 2008). "Integrating Security into Small MPO Planning Activities: Case Study Analysis for NRMPOs." www.mountain-plains.org/pubs/pdf/MPC08-199.pdf

7 Excalibur Associates, Inc. (May 2012). "Considering Safety and Emergency Management in the Planning of Transportation Projects." Washington DC: FHWA HEP-12-040: <http://planning.dot.gov/documents/ConsideringSecurityAndEM.pdf>

ALIGN REGIONAL INFRASTRUCTURE SYSTEMS, PROJECTS AND POLICIES WITH ENVIRONMENTAL GOALS

Historically, MPOs and transportation agencies have focused almost exclusively on man-made solutions to move people and goods. Negative environmental impacts caused by transportation received growing attention starting in the 1970s and continued through the Clean Air Act of the 1990s. More recently though, innovative MPOs are finding that designing and planning with natural ecological systems can be a benefit to transportation, while reducing the need to mitigate against negative effects on air, water, farmland and open spaces.

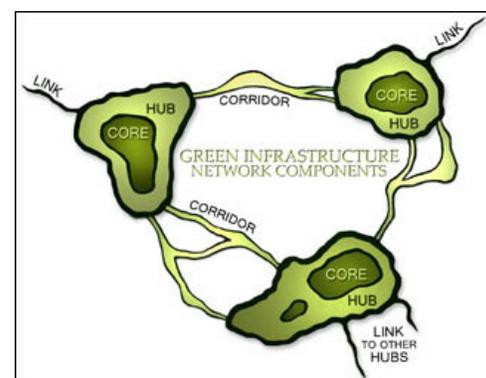
> The opportunity

Green infrastructure refers to the network of natural lands, productive farmland and other open spaces that are strategically planned and managed to conserve their ecological functions. Using natural systems to clean and move water and conserve plants, animals and soils can save money while creating more beautiful and healthy places. Green Infrastructure can be developed and maintained on a variety of scales, but regional work on green infrastructure is particularly influential because natural ecosystems pay no attention to jurisdictional borders.

Metropolitan areas often have separate agencies for land, air and water, with separate plans and projects for each. MPOs can help to coordinate these efforts, bringing together regional transportation planning with planning for open space, trails, forestry, fish, water management and wastewater treatment.

MPOs should integrate green infrastructure planning into their long- and short-range planning by identifying key features of the region's green infrastructure and choosing conservation areas and tools for evaluating a potential transportation project's impact on the region's green infrastructure.¹ MPOs can directly advance green infrastructure through the adoption of sustainable design and construction practices for transportation projects.

Groups like the National Association of Regional Councils (NARC) and the American Society of Landscape Architects^{2,3} have developed a number of great resources on green infrastructure for MPOs and other governmental partners.



Regional Green Infrastructure Network developed by the Land of Sky Regional Council. Source: www.linkinglands.org.

1 "The Role of Regional Councils in Green Infrastructure" and "Green Infrastructure Legislative Brief." National Association of Regional Councils (NARC). <http://narc.org/issueareas/environment/talking-points/green-infrastructure-legislative-brief/>

2 <http://narc.org/issueareas/environment/areas-of-interest/green-infrastructure-and-landcare/>

3 www.asla.org/greeninfrastructure.aspx

Putting it into practice

MPOs can facilitate new partnerships and understanding among agencies and organizations working on issues such as conservation, restoration, development, public works, arts and culture and farming. Many MPOs also have the technical capabilities to develop detailed environmental data and mapping, which can serve as the basis for creating community- and government-driven projects to protect natural lands in the face of impending development and growth trends.¹

Teaming up to map green infrastructure assets. In Virginia, the **Richmond Regional Planning District Commission (RRPDC)** and the **Crater Planning District Commission (CPDC)** have partnered to develop a regional green infrastructure map that identifies assets and opportunities to connect and expand them. This endeavor is part of a multi-year grant project focused on sustainable communities and funded by the Virginia Coastal Zone Management Program.² This assessment is now being used to identify and redevelop vacant parcels in Richmond.

In western North Carolina (Asheville), the **Land of Sky Regional Council** has made green infrastructure a priority in response to issues with water quality and sedimentation and the loss of forested lands — both of which had been impacting the region's economy and quality of life. Their effort “linking land and communities” involved extensive public outreach and data analysis to identify where the most valuable natural resources are located and how these resources are reflected in community values. More than 45 datasets were combined to identify important “landscape hubs” and “connecting corridors” across the five-county region. As a result, the MPO has developed a series of maps, tools and other online resources to help better inform land-use and transportation decisions.

Coordinating to manage stormwater runoff. In response to major flooding, erosion and runoff from recent severe storms in the Northeast, the **Rockingham Planning Commission (RPC)** worked with other regional partners in New Hampshire to launch a Green Infrastructure for Coastal Watershed Communities Initiative. The RPC region consists of 26 communities within Rockingham County. The Commission is the designated MPO for transportation planning in the RPC service area, but another commission has responsibility for reviewing and commenting on projects receiving federal money in the region.³ The RPC uses its MPO role to provide technical assistance to local communities on a number of issues related to transportation. For example, the Green Infrastructure Project provides resources and support for communities to improve stormwater management. Six pilots were recently announced for work in New Hampshire towns, including workshops and staff training to develop better regulations and build stormwater treatment systems.⁴

The **Innovation in Action** section of this chapter includes a case study of the comprehensive planning, mapping and implementation work being led by the **Wasatch Front Regional Council (WFRC)** in Salt Lake City, UT on green infrastructure.

1 <http://narc.org/issueareas/environment/areas-of-interest/green-infrastructure-and-landcare/the-role-of-regional-councils-in-green-infrastructure/>

2 www.richmondregional.org/planning/Green_Infrastructure/green_infrastructure.htm

3 www.rpc-nh.org/mission.htm

4 <http://southeastwatershedalliance.org/green-infrastructure/>

ADAPT TO CLIMATE CHANGE AND SEVERE WEATHER EVENTS

Transportation is especially vulnerable to climate change and the expected increase in extreme weather events, rising sea levels and temperature swings. Innovative MPOs are taking steps to address climate change through adaptation and mitigation efforts focused on improved coordination of transportation, land-use and environmental investments and policies.

The opportunity

With the increasing frequency of severe weather incidents and rising sea water levels affecting many coastal communities, policy officials and transportation professionals are giving greater attention to the effects of climate change. In Florida, California, Oregon and Washington, MPOs are responding to state laws enacted to address climate change. Even in states where climate change is a politically charged issue, preserving infrastructure in the face of natural disasters is not only acceptable, but also necessary.

Some regions are working to mitigate the impact of climate change by reducing greenhouse gas (GHG) emissions from transportation, one of the largest contributing sectors. Mitigation strategies tend to be long-term focused and more challenging to measure. Increasing transit usage or using green infrastructure strategies, for instance, are two types of transportation-related mitigation strategies. While MPOs can measure the localized transportation and environmental benefits, assessing the broader impact on global climate is beyond the ability of most MPOs.

Adaptation planning focuses on reducing the vulnerability of transportation systems to extreme weather events and sea-level rise. The devastating impacts of recent hurricanes and super-storms provide frightening lessons on the financial and human cost of a failure to adapt to such threats.

An assessment of risk and vulnerability is an important first step in adaptation planning.¹ MPOs are well-situated to take part in or lead these efforts. Not all MPOs have the technical expertise to generate specific data regarding climate change forecasting, so they should rely on information endorsed by outside agencies such as the National Oceanic and Atmospheric Administration, Federal Highway Administration, the state DOT or state climatologist or other sources.

Adaptation objectives can be developed as part of the Long-Range Transportation Plan (LRTP) or as part of a separate document. There is some synergy with disaster and security planning mentioned earlier in this section. Climate planning elements for the LRTP may include emergency evacuation and engineering and design standards to prevent flooding or washouts of transportation facilities. Stronger integration of transportation, land-use and development planning can help residents drive less and thereby limit GHG emissions.

1 Kate Mance. (August 2012.) "Climate Change Adaption Strategies for Metropolitan Planning Organizations." http://hysmpos.org/wordpress/wp-content/uploads/2012/06/CCWG_Climate-Change-Adaptation_Web.pdf

➤ Putting it into practice

There are a number of direct and indirect ways that MPOs are addressing climate change planning. **The Atlanta Regional Commission (ARC)**, for example, does not expressly plan for climate adaptation but has integrated elements of it into long-range transportation planning and other initiatives. ARC uses its ability to prioritize allocation of federal transportation funds and the offer of free technical assistance as incentives for member governments to work toward adopted goals. For example, ARC created a Certified Green Communities (CGC) program designed to reduce the region's environmental impact, through which ARC provides free technical assistance to Certified Green Communities to develop tailored actions on conservation, energy efficiency and emissions reduction.¹

In places like Broward County, Florida, the effects of climate change are becoming visible and necessitating action and new partnerships to maintain infrastructure in low-lying areas.² In 2009, the **Broward MPO** and three other MPOs (Miami-Dade, Palm Beach and Monroe) representing approximately 30 percent of the state's population, formed the South Florida Regional Climate Change Compact.³ The Compact has improved coordination among these counties and generated new performance metrics that are being incorporated into local and regional transportation plans. For example, the Broward 2035 LRTP and its update called "Commitment 2040" gives increased priority for transportation strategies that reduce emissions and improve energy efficiencies, such as public transit, new vehicle technologies and biofuels and better integration with land use and development.⁴



Sea level rise has overwhelmed drainage ditches, flooding local roads. Source: [Broward County MPO](#)

The **Innovation in Action** section of this chapter includes a case study of the **Sacramento Area Council of Governments (SACOG)** and its Climate Plan, which includes a strong emphasis on addressing land-use decisions that influence GHG emissions.

ACT AS A PARTNER ON WORKFORCE DEVELOPMENT

While most MPOs consider workforce development to be beyond their jurisdiction, some have discovered that they have a role in giving the region a competitive edge by ensuring workers have access to jobs and training opportunities through a variety of affordable and accessible transportation options. The transportation sector itself is a conduit to apprenticeships and career ladders that provide well-paying jobs in the construction, engineering, shipping, manufacturing and service sectors.

1 www.atlantaregional.com/environment/green-communities

2 www.browardmpo.org/userfiles/files/Broward%20County%20Energy%20and%20Sustainability%20Program%20Presentation%20May%202011.pdf

3 www.browardmpo.org/planning/adapting-to-climate-change

4 www.browardmpo.org/planning/long-range-transportation-plan

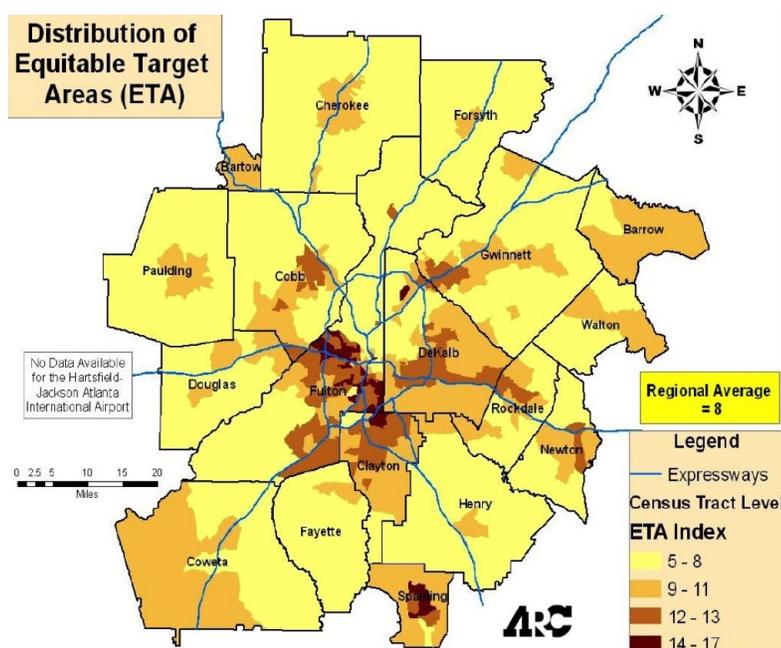
> The opportunity

As regional economies work to find their footing after the Great Recession, a few larger MPOs with regional planning responsibility are leading discussions around workforce development and economic resiliency. They and others are developing and reporting on economic metrics and regional disparities, an activity available to any MPO, regardless of structure or authority. This can include mapping areas of concentrated poverty and “transit deserts” with high concentrations of jobs or car-less residents but poor transit service, as well as tracking accessibility to jobs by automobile, bicycle, walking and transit, or the number, types and average wage rates of jobs created by the planning, building and operating of transportation projects.

> Putting it into practice

Among those emerging as leaders on workforce development is the **Puget Sound Regional Council (PSRC)**, which has responsibility for both transportation planning and economic development. That makes the agency well suited to foster strong links among plans, programs and investments that advance regional economic resiliency. PSRC established a multi-sector Prosperity Partnership, co-chaired by public and private sector leaders, to develop its regional economic strategy. The Strategy is focused on workforce development in core industry clusters, several of which are directly tied to transportation such as aeronautics and logistics.¹ PSRC’s process for selecting projects for the Transportation Improvement Program (TIP) prioritizes those that support the Transportation 2040 vision and one of the 10 key industry clusters identified in the regional economic strategy.²

Another regional agency leading on workforce development issues is the **Atlanta Regional Commission (ARC)**. ARC serves as the administrator for the Atlanta Regional Workforce Board through its Workforce Solutions Division, which helps dislocated workers and the unemployed who are seeking jobs.³ This gives the agency a unique position to provide training and connect potential employers to qualified applicants. In that work, transportation represents both a challenge and an opportunity. It is a challenge for those who lack a car to jobs that are inaccessible without one. But transportation also represents a pathway to meaningful work, such as being trained as a tractor-trailer driver, or participating in the Mentoring A Girl In Construction program.⁴



Source: [ARC](#).

1 www.psrc.org/assets/8558/RegionalEconomicStrategy.pdf

2 www.psrc.org/transportation/t2040/

3 www.atlantaregional.com/workforce-solutions/overview

4 www.atlantaregional.com/workforce-solutions/training-and-education-services/success-stories

ARC also has a strong focus on connecting those needing jobs, education and training through improved transportation access. The agency has established a Social Equity Advisory Committee and its LRTP includes an emphasis on improving transportation opportunities for low-income neighborhoods. The ARC has identified Equitable Target Areas with significant disadvantaged or senior populations, which receive extra consideration when allocating Surface Transportation Program, Congestion Mitigation and Air Quality and Livable Communities funds.¹ (See graphic on previous page.)

A case study of the **Chicago Metropolitan Agency for Planning (CMAP)** is provided in the **Innovation in Action** section as an example of an MPO addressing workforce development and regional economic resiliency outside of its strictly defined transportation role.

Resources

- National Association of Regional Councils. “A Survey of Regional Planning for Climate Adaptation.” http://narc.org/wp-content/uploads/NOAA_White_Paper_102912.pdf
- Water Infrastructure Capacity Building Team. (June 2012.) “Promoting Green Infrastructure: Strategies, Case Studies and Resources.” https://drcog.org/documents/promoting_green_infrastructure_-_strategies_case_studies_and_resources_2012.pdf
- Conservation Fund, Green Infrastructure Resources. www.conservationfund.org/our-conservation-strategy/focus-areas/green-infrastructure/
- AMPO Climate Change and Energy Planning Webinar Series. www.ampo.org/resources-publications/climate-change/
- ICF International. (December 2013.) “Assessment of the Body of Knowledge on Incorporating Climate Change Adaptation Measures into Transportation Projects.” Federal Highway Administration, FHWA-HEP-14-016. www.fhwa.dot.gov/environment/climate_change/adaptation/publications_and_tools/transportation_projects/

¹ www.atlantaregional.com/transportation/community-engagement/social-equity-advisory-committee

INNOVATION IN ACTION - CASE STUDIES (FOCUS AREA 7)

ALIGN REGIONAL INFRASTRUCTURE SYSTEMS, PROJECTS AND POLICIES WITH ENVIRONMENTAL GOALS

Wasatch Front Regional Council –WFRC (Salt Lake City, UT)

Building on its high quality of life and stunning natural beauty, the Salt Lake City-West Valley and Ogden-Layton metropolitan areas are experiencing significant population and economic growth. The Wasatch Front Regional Council (WFRC) was established under Utah law to help coordinate planning for the region.

WFRC is a national leader on many transportation and regional planning issues. As shown in the box on the following page, it is involved both through its MPO and Regional Council roles in issues beyond transportation, while also providing regional policy direction and technical support to local communities. As was discussed in Focus Area 1, WFRC was an early pioneer of scenario planning and community engagement.

Since 2008, WFRC has worked to develop and implement the groundbreaking (Re)Connect: The Wasatch Front Green Infrastructure Plan. Rick LeBrasseur, executive director of the Center for Green Infrastructure Design, that helped develop the plan, said the (Re)Connect plan was unique for its regional perspective. “We are building off of current plans and resources, which typically only look at one particular asset – say wildlife or water quality – and combining them into an overall analysis, plan and strategy.”¹

After a 2008 forum co-sponsored by The Conservation Fund, a national non-profit, WFRC spent two years identifying existing green infrastructure in the region and its economic advantages and developing multi-jurisdictional approaches to planning and strategies for implementation. The process involved dozens of stakeholders representing state and local governmental agencies, the US Forest Service and the Center for Green Infrastructure Design.²

The (Re)Connect plan is intended to inform land development and acquisition decisions, funding allocations including the TIP and local and regional planning processes. Green infrastructure principles and sustainable planning are to be incorporated into transportation projects and plans. The plan identifies tangible steps such as improving data collection, updating ordinances and codes and prioritizing lands or parcels in regional grant programs that strengthen the existing green infrastructure network.



Photo source: [WFRC](#)

¹ http://wfr.org/new_wfrc/Green_Infrastructure/%28Re%29Connect%20The%20Wasatch%20Front%20Green%20Infrastructure%20Plan.pdf

² *Ibid.*

Asset Network Maps were created through extensive data analysis and GIS tools that identify and illustrate existing high-quality green infrastructure lands. The Asset Network Maps include community and cultural assets such as schools, libraries, transit hubs and historic districts; working land assets such as farmland, ranches and grazing lands; ecological assets such as wildlife habitat and riparian areas; hydrological assets including rivers, streams and lakes; and recreational assets such as trails and parklands. Each is accompanied by green infrastructure criteria related to cores, hubs and corridors.¹ Among other uses, the maps are intended as a tool to interpret how an individual transportation project may interact with the functionality of these other asset networks.

In addition to preparing the TIP and the LRTP, WFRC also:

1. Provides a forum for discussion and cooperation among elected representatives of local jurisdictions concerning region-wide problems, primarily transportation and growth planning and to provide professional services for these areas of concern.
2. Assists with the coordination of local programs, plans and projects with federal and state programs and provides a mechanism to more firmly represent the official and unified thinking of these local jurisdictions to both state and federal agencies.
3. Provides a more effective organizational structure for local governments to coordinate local transportation plans and programs that overlap county boundaries or are regional in nature.
4. Promotes regionally adopted growth principles among the member municipalities and counties to guide development. They represent strategies for cost effective, environmentally responsible development. Both the RTP and TIP are designed to implement the Wasatch Choice for 2040 Vision which is, in turn, based on the growth principles.
5. Sponsors and/or participates in other studies to establish transportation needs and solutions such as the State Street Livability Study, the North Legacy Corridor Study and many others.
6. Manages the Community Development Block Grant (CDBG) program for cities with populations less than 50,000 for Davis, Weber, Morgan and Tooele Counties.
7. Prepared the last two Natural Hazard Pre-Disaster Mitigation Plans for the Wasatch Front Region. The Plans are the standard set by the Federal Emergency Management Agency for area cities and counties to prepare for natural disasters by implementing mitigation measures that will lessen the impacts of such events.

– Wasatch Front Regional Council

¹ www.wfrc.org/new_wfrc/index.php/wfrc-programs/green-infrastructure

Wasatch Front Regional Council (WFRC)

Type	Association of Governments
Composition	The Council consists of 19 elected officials representing local governments from Salt Lake, Davis, Weber, Morgan, Tooele, and Box Elder counties. The council also includes seven members representing the Utah State Senate, the Utah House of Representatives, the Utah League of Cities and Towns, the Utah Association of Counties, the Utah Department of Transportation, the Utah Transit Authority and Envision Utah.
Voting	Each voting member has one vote.
MPOs within MSA	1 MPO that covers two MSAs
Annual budget and staffing size	\$5.0 million; 25 staff
Responsibilities beyond transportation	Air quality, community development block grants, economic development, growth planning, green infrastructure
Independent revenue authority	None

References: www.wfrc.org/new_wfrc/index.php/committees/wasatch-front-regional-council
<http://wfrc.org/committee/Bylaws%20-%20Wasatch%20Front%20Regional%20Council%20-%20Amended%20and%20Restated%201%2023%2014%20FINAL%20w%20Signature.pdf>
http://wfrc.org/new_wfrc/index.php/wfrc-programs/unified-planning-work-program

ADAPTING TO CLIMATE CHANGE AND EXTREME WEATHER EVENTS

Sacramento Area Council of Governments – SACOG (Sacramento, CA)

In 2002, the Sacramento Area Council of Governments (SACOG) began its groundbreaking Blueprint Project, a regional visioning process to study the connections among transportation, land use and air quality. The SACOG Board of Directors adopted the Preferred Blueprint Scenario in 2004 – a bold vision for regional growth that promotes compact, mixed-use development and more transit and active transportation choices.¹

¹ www.sacregionblueprint.org/

SACOG has used the Blueprint as the foundation for strategies to reduce GHG emissions. A key driver for this has been the state's 2008 Sustainable Communities and Climate Protection Act (SB 375). The law requires regions to align transportation, housing and other land uses to achieve GHG emissions reduction targets established by the California Air Resources Board (CARB). SB 375 requires each region to develop a Sustainable Communities Strategy (SCS) to reduce per capita GHG emissions from passenger vehicles. The Sustainable Communities Strategy element of SB 375 is intended to encourage an integrated approach to land-use and transportation planning that not only reduces vehicle travel, but also accommodates an adequate supply of housing, reduces impacts on valuable habitat and productive farmland, increases resource use efficiency and promotes a prosperous regional economy.

During development and implementation of its Sustainable Communities Strategy, SACOG participated in several climate change and adaptation working groups between member agencies, local air districts and the CARB. SACOG also collaborated with local planning and public works departments as well as local transit agencies. To ensure an open and inclusive planning process SACOG used a range of engagement methods.¹

In developing the MTP/SCS, SACOG created three scenarios that varied in land-use patterns and transportation investments while using the same overall growth projections and transportation budget. After measuring the performance differences and engaging participants in a discussion of trade-offs among the three scenarios, SACOG created a preferred scenario. The MTP/SCS was broadly supported because of its ability to demonstrate how the plan would meet ambitious GHG emissions reduction goals, while also offering more transportation and housing options. The plan also makes the most of transportation funds, despite funding cuts and regulatory restrictions that became apparent during a major, sustained national recession.

In addition, SACOG initiated several companion efforts to help shape the MTP/SCS and influence ongoing planning efforts. These include:

- Rural Urban Connections Strategy (RUCS), which as the rural component of SACOG's regional Blueprint, is focused on using smart growth principles to achieve economic and environmental sustainability goals with a focus on the regional food system, rural and urban infrastructure linkages and natural resource conservation. RUCS addresses climate change issues in the production, processing and distribution of the over 120 crops grown in the region. SACOG is currently working in conjunction with the University of California, Davis to further refine its inventory of agricultural-related GHG emissions. The RUCS project has been working towards using the agency's suite of technical tools to help forecast the long-range impacts of changes in the region's agricultural system, including cropping patterns, processing raw crops into various foods and delivering goods to markets.²
- Greenhouse Regional Inventory Protocol (GRIP) is an international inventory of the region's GHG emissions and a supplemental scenario-building tool to test different emissions scenarios. GRIP is currently being used to inventory GHG emissions in five continents, and the Sacramento region was selected to be a case study for implementing the GRIP tool in American cities. GRIP's scenario-building tool has been key for involving a range of political, industry and NGO stakeholders in GHG emissions and energy forecasting efforts. Beginning in 2009, SACOG began conducting workshops where participants could create their own



Source: SACOG

1 www.sacog.org/2035/

2 www.sacog.org/rucs/

scenarios about changes in energy supply/demands, agriculture, waste and industrial processes. GRIP's ability to immediately report back results helps a wide audience understand the need and urgency to change the region's travel behaviors, energy supply and land-use patterns to help curb climate change.¹

- Plug-in Electric Vehicle (PEV) Project is a multi-year program with funding from federal, state and local utility sources. The project begins to plan for the infrastructure needed to support PEVs in the region that can serve as a long-term GHG emissions reduction strategy. Early actions have included developing a set of model policies and strategies to address the unique PEV challenges of the region.² Early work on the PEV project informed the MTP/SCS. Since that time, the region has developed a PEV Readiness and Implementation plan for the region that is anticipated to be incorporated into the next update of the region's MTP/SCS.

Together, these efforts illustrate how SACOG is working to address climate change through a number of different MPO and regional planning agency tools: policies, principles and performance measures within its LRTP; metrics and climate impacts in connection to other agency priority initiatives; and new pilot programs and technologies designed to reduce GHG emissions.

Sacramento Area Council of Governments (SACOG)	
Type	Association of local governments
Composition	SACOG is governed by a 32-member Board of Directors with 31 voting members. The one non-voting member is the Caltrans District 3 Director. The 31 voting members are appointed by member jurisdictions from their city councils or county board of supervisors and serve one-year terms.
Voting	Certain members carry more than one vote. Each director appointed by a city or county is given one vote except for the director, save for the Sacramento appointees. A total of three votes are given to a director in Sacramento County and a total of two votes are given to a director in the City of Sacramento.
MPOs within MSA	1 MSA within 2 MPOs
Annual budget and staffing size	\$50.3 million; 52 full-time staff
Responsibilities beyond transportation	Comprehensive land-use planning, scenario planning, air quality, water quality, climate change
Independent revenue authority	None
State enabling legislation	The Sustainable Communities and Climate Protection Act, SB 375, mandates that each of California's MPOs prepare an SCS as a central part of its RTP. The SCS has land use, housing and transportation strategies that once implemented would allow the region to meet its GHG emission reduction targets. Once the RTP/SCS is adopted by the MPO, it guides the transportation policies and investments in the region.
References: www.sacog.org/about/committees/ www.sacog.org/owp/budget/FY%2012-13%20Budget.pdf www.sacog.org/about/jpa.pdf	

1 www.sacog.org/about/committees/lunr/grip.pdf

2 www.energy.ca.gov/releases/2012_releases/2012-02-08_sacramento_electric_vehicles_nr.html

ACTING AS A PARTNER ON WORKFORCE DEVELOPMENT

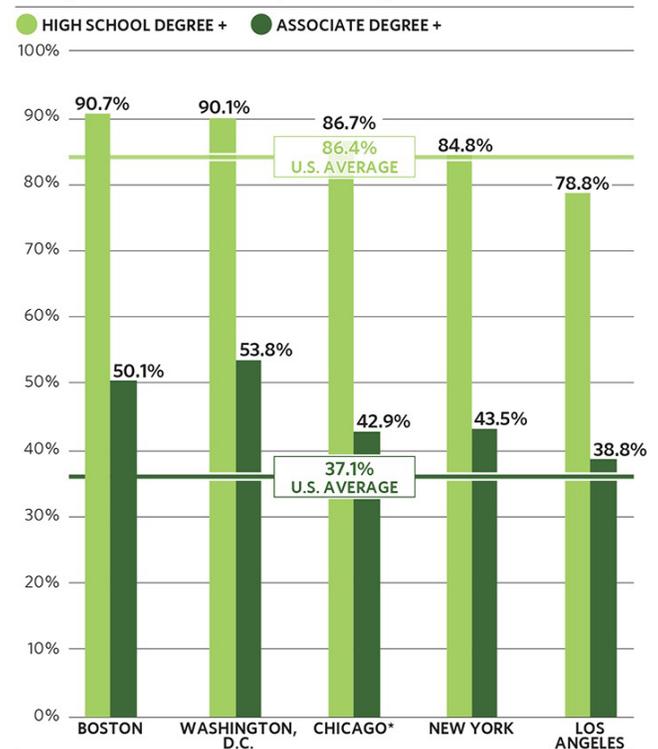
Chicago Metropolitan Agency for Planning - CMAP (Chicago, IL)

The greater Chicago metropolitan area has long held an important place in America's economy and urban development. Located at a freight crossroads and home to major national and regional employers, the sprawling region consists of seven counties and is home to more than 8.6 million people. The Chicago Metropolitan Agency for Planning (CMAP) was created in 2005, after restructuring of different regional planning agencies. It is the official regional planning organization working to help the region's 284 communities address transportation, housing, economic development, open space, the environment and other quality of life issues. Through a 2007 memorandum of understanding with the MPO Policy Committee (which existed prior to CMAP) it now serves as the designated MPO. CMAP is the decision-making body for all regional transportation plans and programs for this area, while the MPO Policy Committee plans, develops and maintains the regional transportation system.

CMAP developed a nationally recognized comprehensive regional plan, [GO TO 2040](#), to serve as a roadmap for coordinating strategies that cut across transportation, economic development, environmental and quality of life issues.¹ The plan was developed with unprecedented public involvement. Performance dashboards now help track progress towards important regional goals. While CMAP has direct control of transportation planning, it relies on partners to implement workforce development, food access and economic innovation.

GO TO 2040 lays out the argument for why workforce development issues and better worker training and educational attainment are critical to the region's long-term economic resiliency. The plan links traditional transportation performances measures, such as congestion, to workforce development and job opportunity needs. Explains the plan, "Congestion is expensive for residents, businesses and governments. By limiting our ability to get around, it restricts people's choices of where to live and work. It limits businesses' access to skilled labor and reduces the reliability of truck and train shipments..."² The plan prioritizes investments in transit and other mobility options and argues for prioritizing transportation projects based on their ability to stimulate the region's economy and reduce congestion.

Population age 25+ with a high school degree or higher in select metropolitan regions, 2012



Note: Data for metropolitan Chicago includes only the seven counties of northeastern Illinois; all other regions reflect U.S. Census Bureau metropolitan statistical areas.
Source: Chicago Metropolitan Agency for Planning analysis of U.S. Census Bureau data.

Source: [CMAP](#)

1 www.cmap.illinois.gov/about/2040

2 www.cmap.illinois.gov/documents/10180/17842/GO-TO-2040-short-plan_10-7-2010_FINAL.pdf/2840498d-96fa-43fa-9784-9c8f364b4547

CMAP has focused strongly on developing new metrics and performance dashboards to track implementation of the plan. It has developed a regional economic indicators website that allows for comparison of performance by Chicagoland and its regional peers.¹

The website was developed through public and philanthropic funding to be a resource to the broader regional economic players. CMAP cannot by itself control how the region performs, but it has stepped up to the plate to provide a forum to discuss and data to inform the actions of elected officials, economic development professionals, planners and others working to ensure Chicagoland's competitiveness in the global economy. Key indicators track the region's economic performance and recovery, including factors on workforce development such as educational attainment, workforce participation, skills gaps and numbers of STEM occupations.

“The quality of our region’s labor force is crucial for sustaining economic prosperity. Increasingly, job growth relies on the availability of well-educated, skilled workers for knowledge-based industries. We can gain a significant advantage by ensuring that businesses and residents here have the skills necessary to compete with other global economic centers.”

- GO TO 2040

Chicago Metropolitan Agency for Planning (CMAP)	
Type	The MPO is housed within CMAP and staffed by CMAP.
Composition	The 21-member Policy Committee is the decisionmaking body for the MPO, which consists of members from the Council of Mayors, Will County, Regional Transportation Authority (RTA), Kane County, Chicago Department of Transportation, Illinois Department of Transportation, Commuter Rail Division of the RTA, Federal Transit Administration (FTA), Illinois State Toll Highway Authority, Cook County, Chicago Transit Authority, Lake County, Federal Highway Administration (FHWA), DuPage County, Suburban Bus Division of the RTA, McHenry County, Private Providers, Railroad Companies (Class I), Kendall County and CMAP. The FHWA and FTA participate in an advisory, non-voting capacity.
Voting	Each member has one vote, except for the CMAP board member who has two votes. The chairman shall vote in the interest of IDOT. A quorum is 10 votes, but 13 votes are required to change by-laws or add new members.
MPOs within MSA	2 MPOs within MSA
Annual budget and staffing size	\$16.6 million; 100.5 full-time equivalent staff
Responsibilities beyond transportation	Land use and zoning, long-range planning, economic development strategies, natural resources planning, health impact assessments, sustainability planning, economic analyses, housing strategies, water resource planning
Independent revenue authority	None
<p><i>References:</i> www.cmap.illinois.gov/about/ www.cmap.illinois.gov/documents/10180/289351/FY2015Budget-WorkPlan06-04-2014.pdf www.cmap.illinois.gov/documents/10180/25124/final+bylaws0313082.pdf/d93641c1-c723-4887-bf93-8838d6158ce6</p>	

1 www.cmap.illinois.gov/economy/regional-economic-indicators