

1. Introduction

Transportation Planning in Centre County

Federal law and regulations require that local and state officials work cooperatively to maintain a continuous and comprehensive long-range transportation planning process. In urbanized areas (defined as having at least 50,000 residents) such as Centre County, this federal mandate is carried out by an entity known as a "metropolitan planning organization" (MPO). Long-range transportation plans must be updated at least every five years.

In Centre County, transportation planning is coordinated by the Centre County MPO (CCMPO). The CCMPO works closely with the Pennsylvania Department of Transportation (PennDOT), the Centre Area Transportation Authority (CATA), the Federal Highway Administration (FHWA), and the county's 35 municipalities to identify and prioritize transportation improvement projects for inclusion in the long-range transportation plan.

The CCMPO succeeded the Centre Region MPO in 2004, when the MPO's transportation planning responsibilities were expanded from a State-College-area focus to serve the whole county. Prior to 1982, State-College-area transportation planning was conducted by the Centre Region Area Transportation Study (CRATS). More information on the CCMPO and its responsibilities is provided below.

Who is the Centre County MPO?

The policy-making body of the CCMPO is the Coordinating Committee, which is ultimately responsible for the transportation planning activities mandated by federal laws and regulations. The Coordinating Committee includes 19 voting members from county and local government, public agencies, and PennDOT. A Technical Committee comprising members from the same organizations represented on the Coordinating Committee provides advisory comments and recommendations to the Coordinating Committee. A list of current CCMPO Technical and Coordinating Committee representatives is included as Appendix A.

Voting members include:

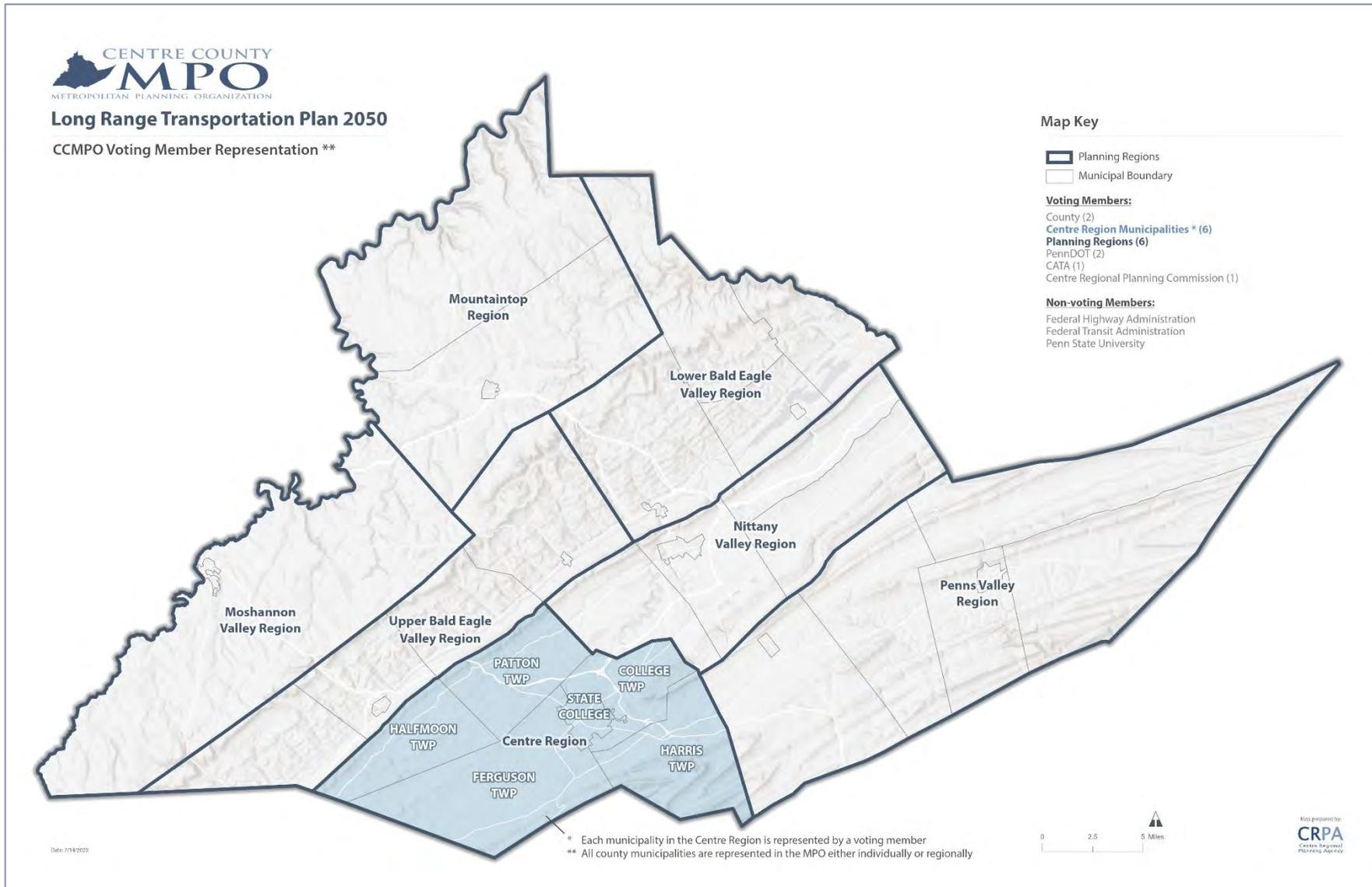
- Centre County (2 members)
- Benner Township
- College Township
- Ferguson Township
- Halfmoon Township
- Harris Township
- Patton Township
- State College Borough
- Centre Regional Planning Commission
- PennDOT Central Office (Harrisburg)
- PennDOT District 2-0 Office (Clearfield)
- Lower Bald Eagle Valley Planning Region
- Moshannon Valley Planning Region
- Mountaintop Planning Region
- Nittany Valley Planning Region
- Penns Valley Planning Region
- Upper Bald Eagle Valley Planning Region
- Centre Area Transportation Authority

Non-voting members include:

- The Pennsylvania State University
- Federal Highway Administration
- Federal Transit Administration

As noted above, some voting members of the CCMPO represent multi-municipal Planning Regions. The seven Centre County Planning Regions are illustrated in Figure 1.

Figure 1: CCMPO Voting Member Representation



CCMPO Responsibilities and the Planning Process

Federal transportation authorization legislation, such as the current Fixing America’s Surface Transportation Act (FAST Act) enacted in 2015, and its predecessor legislations including the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), outline the primary roles and responsibilities of MPOs. These include developing a Long-Range Transportation Plan (LRTP), developing a short-range (four-year) Transportation Improvement Program, MPO planning activities, and public participation.

One of the CCMPO’s primary responsibilities is to prioritize the use of federal funds for highway and transit projects in Centre County. This begins with developing the long-range transportation plan, which includes a list of projects to be undertaken within a 30-year planning horizon. Of those, the projects that are expected to begin within the next 12 years are known as the Twelve-Year Program (TYP). That list is further prioritized by identifying funded projects expected to begin within the next four years, known as the Transportation Improvement Program (TIP). The TIPs and TYPs of all Pennsylvania’s metropolitan planning organizations and rural planning organizations are rolled up into statewide programs: the Statewide Transportation Improvement Program (STIP) and the statewide Twelve-Year Transportation Program, which are formally adopted by the State Transportation Commission.

LRTPs, TYPs, and TIPs are fiscally constrained, meaning the total estimated cost of all the projects listed must not exceed projected funding (LRTPs also often include a list of illustrative projects that are not yet funded). TYPs and TIPs are updated every two years, to adjust for changes in funding and confirm project prioritization.

This process underscores the importance of the LRTP—in order to be considered for the short-range TIP, projects must be included on the MPO’s adopted LRTP. Development and adoption of the Centre County LRTP is a primary responsibility of the CCMPO.

Public Involvement

To facilitate citizen involvement in the planning process used to develop its LRTPs and TIPs, the CCMPO adopted a Public Participation Plan in November 2015. The CCMPO is committed to a proactive public involvement process and supports early and continuing public involvement in the development of transportation plans and programs. Planning and prioritization includes projects listed in the previous LRTP as well as new projects.

The efforts outlined in the Public Participation Plan focus on identifying and engaging populations that have traditionally been underserved by existing transportation systems, including minority populations, low-income populations, non-English speakers and those with limited English proficiency, older persons, and persons with disabilities.

To enhance opportunities for public involvement, the CCMPO coordinates its public involvement activities with those of PennDOT, CATA, the Centre County municipalities, other public agencies, and transportation stakeholders.

Federal Planning Factors

The Fast Act requires the metropolitan transportation planning process to be “continuous, cooperative, and comprehensive,” and to provide for consideration and implementation of projects, strategies, and services that will address the following factors:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase accessibility and mobility of people and freight;
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation;
8. Emphasize the preservation of the existing transportation system;
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
10. Enhance travel and tourism.

The legislation further directs that the degree of consideration and analysis of the factors should be based on the scale and complexity of many issues, including transportation system development, land use, employment, economic development, the human and natural environment, and housing and community development.

The rest of this section highlights requirements that warrant additional emphasis in the LRTP.

Air Quality

The Clean Air Act Amendments (CAAA) of 1990 also specify planning activities for MPOs, particularly for areas exhibiting air quality that is not in attainment with federal standards. Centre County currently meets all applicable air quality standards. In the early 2000s, Centre County's monitors measured concentrations higher than the ozone emission standards set by the U.S. Environmental Protection Agency (EPA) at that time (i.e., the 1997 ozone National Ambient Air Quality Standards, or NAAQS). In 2007, Centre County was re-designated as a "Maintenance" area under that standard. Based on EPA's November 2018 Transportation Conformity Guidance, the CCMPO must continue to determine that its LRTP and TIP conform with the 1997 NAAQS, and must monitor activities to ensure that ozone remains at acceptable levels. The county remains in attainment of all other EPA ozone and fine particulate standards implemented over the last decade.

Environmental Justice

Environmental Justice (EJ) means ensuring that low-income and minority neighborhoods (EJ populations) do not bear a disproportionate amount of the burdens of transportation infrastructure, and conversely, that they receive a fair share of the benefits of transportation investment. Best practices for an EJ evaluation of LRTP projects are continuously evolving; there is no one-size-fits-all approach for MPOs to follow. Much of this has to do with the fact that the data that is available for minority and low-income populations is limited. This plan uses the U.S. Census Bureau's American Community Survey data, as is typical for LRTPs, as well as guidance from the South Central Pennsylvania Environmental Justice Unified Process and Methodology Guide (April 2019). The guidance document was jointly developed by the FHWA PA Division, FTA Region III, PennDOT Central Office, PennDOT Engineering District 8-0, and six MPOs within District 8-0. The guide provides several strategies to accomplish the core elements of an EJ analysis acceptable to FHWA and FTA.

The guide identifies specific core activities that MPOs in Pennsylvania should complete as part of an EJ analysis, while recognizing that individual EJ analyses are unique. The guide is a starting point, and provides an incremental approach to follow, with consideration of an individual MPO's transportation system, demographics, and staff capacity. The CCMPO staff determined that the Core Analysis level of evaluation was appropriate for the Centre County LRTP. This includes the following elements:

- Identification of EJ populations
- Assessment of conditions and identification of needs
- Evaluation of burdens and benefits
- Identification and addressing of disproportionate and adverse impacts, which will inform future planning efforts

The EJ Analysis is provided in Appendix B.

Resiliency

Being resilient means being able to respond effectively and recover rapidly from disruptions. The CCMPO staff believes that the resiliency of the transportation system should be strengthened by addressing potential hazards—anticipating, preparing for, and adapting to changing conditions.

MPOs are advised to consult with agencies and officials responsible for natural disaster risk reduction when developing an LRTP and TIP. Flooding, extreme heat, and severe storm events endanger the long-term investments that federal, state, and local governments have made in transportation infrastructure. Another recommendation is to assess capital investment and other strategies to reduce the vulnerability of the existing transportation infrastructure to natural disasters.

Transportation agencies across the U.S. are assessing ways to protect, preserve, and improve their assets in the face of increasing climate change and extreme weather events.

Following passage of the FAST Act, FHWA and FTA updated the metropolitan and statewide transportation planning regulations to reflect these new requirements. Federal transportation planning guidance notes that:

The transportation planning process provides a key opportunity for transportation agencies to proactively identify projects and strategies to address the vulnerabilities identified through the assessments and to promote resilience at the systems level, thereby meeting the FAST Act resiliency requirements...¹

This is a “heavy lift” and the CCMPO will be asking its FHWA and PennDOT partners for guidance in this effort, as well as consulting with agencies and officials responsible for natural disaster risk reduction. The CCMPO will review the updated Centre County Hazard Mitigation Plan and the Climate Action and Adaptation Plans being prepared for Bellefonte Borough and the Centre Region area of Centre County for actions related to transportation infrastructure and operations. Once the review is complete the MPO will be in a better position to address natural disaster risk.

¹ U.S. Department of Transportation, Federal Highway Administration, “[Resilience and Transportation Planning Fact Sheet](#),” FHWA-HEP-17-028 (January 2017).

Long-Range Transportation Plan 2050 Approach

In accordance with federal planning regulations, each MPO is responsible for developing a long-range transportation plan (LRTP) that complies with the following requirements:

- Encompasses all modes of transportation;
- Considers Federal Planning Factors;
- Includes long-range and short-range strategies/actions;
- Incorporates the MPO's goals and objectives into the proposed transportation system;
- Evaluates the system based on established performance measures;
- Considers a planning horizon of at least 20 years;
- Is fiscally constrained; and
- Includes public participation.

Centre County's previous LRTP, the Long-Range Transportation Plan 2044 (adopted in 2015 and updated in 2018), was a project-focused plan, tied to projected fiscal constraints. It began by identifying goals and establishing project ranking criteria. The LRTP documented current and projected future transportation demand and identified long-term investments that would address current and future needs.

Although the resulting plan was very successful in achieving the goals set by the CCMPO, the process had limitations. It was agreed that future plans should be based on more robust outreach and data collection.

How is this plan different?

In an effort to address the identified limitations from the previous LRTP, the CCMPO staff facilitated a data collection and outreach effort at the inception of the LRTP 2050 development process. It involved soliciting input at the local municipal and stakeholder levels. The CCMPO staff members and committee members, as well as PennDOT officials, facilitated workshops engaging all 35 municipalities and seven regional planning commissions, as well as other stakeholder groups (see sidebar) and the Centre County Commissioners. In total there were 48 participating stakeholder groups. The CCMPO thanks all participants for their time and attention to these workshop meetings.

The workshops identified numerous issues and needs pertaining to administration, operations, maintenance practices, traffic enforcement, pavement conditions, stormwater and drainage, congestion, capacity, gaps and capacity issues, bicycle and pedestrian facilities, buggy traffic, transit, and land use. Other issues not directly tied to long-range transportation planning were also raised, including code enforcement, blighted properties, utility upgrades, resource sharing, grant options, recreational needs, and administrative assistance. These issues bridge multiple professional disciplines and connect a variety of technical assistance and resources needs.

Stakeholder Groups Participating in Planning Workshops

- Centre County Board of Commissioners (CCBC)
- Centre County Planning Commission (CCPC)
- Centre County Office of Transportation (CCOT)
- Centre Area Transportation Authority (CATA)
- Chamber of Business and Industry of Centre County (CBICC)
- Happy Valley Adventure Bureau
- PSU Campus Planning
- Centre Regional Planning Commission (CRPC)
- Centre Region COG Transportation and Land Use (TLU) Committee
- Centre Region Bicycle Advisory Committee (CRBAC)
- Nittany Valley Joint Planning Commission (NVJPC)
- Penns Valley Regional Planning Commission (PVRPC)
- Upper Bald Eagle/Halfmoon COG

The workshops also identified the need for additional data collection and analysis on specific issues. The MPO hired Gannett Fleming, Inc., and Whitman, Requardt & Associates, LLP, to assist with the needed data collection and technical analysis. The resulting analysis provided quantitative information for consideration by the CCMPO subcommittee in developing LRTP strategies, actions, and projects to address identified issues.

The additional data collection and analysis is reflected throughout this LRTP, which identifies implementation steps through 2050 as part of an ongoing planning process. While the focus of the plan is transportation, topics beyond the scope of a typical LRTP are included to reflect workshop input and to document the broad challenges to operating, maintaining, and supporting the county's transportation system. The resulting short-term action plan will require partnerships with each municipality and stakeholders to achieve the outlined goals and objectives, with an entity designated as project champion responsible for initiating, developing, funding (including grant-writing), monitoring, and managing each project through completion.

Also new for this plan is the emphasis on performance measures, as mandated by federal legislation. The MPO has agreed to support the state targets established by PennDOT. Consultants Gannett Fleming and Whitman Requardt provided guidance on how to best apply performance measures when evaluating new candidate projects for the LRTP 2050.

Funding continues to be an issue demanding attention. Funding is actually declining at the same time that MPOs are being held more and more accountable for the condition of transportation infrastructure through performance measure requirements, and are obligated to undertake a data-driven review of potential projects.

Key Tenets of LRTP 2050

Although the federal regulations and rulemaking provide the framework for preparing LRTPs, states and MPOs have flexibility in determining their approach to developing a plan, and its final form. The LRTP 2050 represents the most recent refinement of the long-range transportation planning approach that the CCMPO initiated with the preparation of LRTP 2040 in 2010 and continued in subsequent LRTPs.

The CCMPO has emphasized the development of goals and objectives, and the use of an in-depth project solicitation, evaluation, and prioritization process to prepare LRTPs that include detailed project lists. The development of these core elements of the CCMPO's LRTPs has included the direct involvement of Technical and Coordinating Committee members in setting priorities for goals and objectives, establishing relative weights for factors used to evaluate projects, and approving policy changes to the technical ranking of projects in order to most effectively utilize scarce funding. Additional support has been provided by the LRTP sub-committee to be a sounding board for ideas and review prior to submitting to the Technical and Coordinating Committees.

Five Core Questions

LRTP 2050 represents the next step in the evolution of long-range transportation planning in Centre County. It includes refinements to the areas emphasized in prior LRTPs, and also includes new elements. One of the important additions introduced as part of LRTP 2044 was "five core questions" that the CCMPO aims to answer when making program and policy decisions.

These five questions were used as the framework for developing the implementation strategies and performance measures that were first included in LRTP 2044.

1. Is the Centre County transportation system getting safer?
2. Is the Centre County transportation system in a state of good repair?
3. Does the Centre County transportation system have adequate capacity?
4. Does the Centre County transportation system have an adequate mix of modes?
5. Does Centre County's transportation system support existing and future community and economic development needs?

Looking Ahead

The LRTP is one product of a continuing, cooperative, and comprehensive planning process—the same process that produces the TIP and the TYP.

The LRTP 2050 will be updated to a 2055 planning horizon in a few years. During that time, federal requirements and state guidance are likely to continue to evolve.

Through all the potential changes, the CCMPO will continue to refine the core elements of the plan in an effort to reflect current conditions and address future needs in order to help all stakeholders provide a safe, multimodal transportation system that is maintained in a state of good repair.