

120 Planning and Programming

120.1 General

Long-range planning is the first step in project development and serves to establish long-range goals, objectives, and system needs at the statewide, regional, or metropolitan planning area level. The statewide long-range plan must cover a period of at least 20 years and be updated every four years. The plan is developed with Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Organizations (RTPOs) around the state, and includes a State Freight Plan that focuses on the needs of the freight users in New Mexico. The MPOs develop Metropolitan Transportation Plans (MTPs), while the RTPOs develop Regional Transportation Plans (RTPs) in coordination with the New Mexico Department of Transportation (NMDOT).

New Mexico's long-range plan informs near-term planning by identifying transportation needs for a four- to six-year period. These needs are identified, prioritized, and funded through a collaborative process involving the state, local jurisdictions, tribal entities, and implementing agencies. The NMDOT programs projects in the Statewide Transportation Improvement Program (STIP) for a six-year period, although funds are allocated only for the first four years. MPOs program projects in Transportation Improvement Programs (TIPs), which use the same "four years plus two" structure of the STIP, and feed directly into the STIP. RTPOs program projects in Regional Transportation Improvement Programs (RTIPs).

Projects included in the long-range plans, STIPs, and TIPs are based on transportation needs determined by other NMDOT plans and studies, such as the Transportation Asset Management Plan, Bicycle/Pedestrian/Equestrian Plan, Strategic Highway Safety Plan, State Rail Plan, and others. Projects are also identified through various monitoring programs designed to identify deficiencies in the transportation system (e.g., bridge, pavement, safety, and traffic monitoring systems).

120.2 References

The following references provide additional details concerning transportation planning.

- [Fixing America's Surface Transportation Act](#) (FAST), or current authorization bill.
- [23 Code of Federal Regulations \(CFR\) Part 450](#), Planning Assistance and Standards.
- [49 CFR Part 613](#), Planning Assistance and Standards.

120.2.1 Specific NMDOT Planning Resources

NMDOT has developed the following resources that explain the transportation planning process in New Mexico. This chapter provides a general overview of the NMDOT planning process, but the documents identified below provide specific details.

- [New Mexico 2040 Plan](#) - This is the current version of NMDOT's long-range multi-modal transportation plan. NMDOT developed this plan (adopted in September 2015) in cooperation with the seven RTPOs and five MPOs in New Mexico. The plan, required by federal transportation law, extends out at least 20 years and is updated every four years. The plan sets the long-term goals and direction for the NMDOT, helping to shape policy decisions. The plan covers all areas of the state, is multi-modal in scope, and provides for the development, implementation, and integrated management and operation of transportation systems and facilities that function as an intermodal transportation system.

- NMDOT [Planning Procedures Manual](#) - This manual clarifies the roles and responsibilities of the NMDOT Statewide Planning Bureau, MPOs, and RTPOs in carrying out the federally mandated statewide transportation planning program.
- NMDOT [Location Study Procedures](#), current edition - This guidebook has been prepared to assist transportation engineers, planners, and other practitioners in conducting alignment and corridor studies for NMDOT projects. It guides the process for establishing the project purpose and need, developing and evaluating alternatives, and conducting public outreach throughout the project development process. While the guidebook provides the information needed to cover the most complex transportation projects, it emphasizes the processes appropriate for the most common project scopes. The guidebook is also intended to establish consistency in how location studies are prepared, reviewed, and processed by the NMDOT.
- NMDOT [Statewide Transportation Improvement Program \(STIP\) Procedures](#) - This document outlines procedures, policies, and timelines for the STIP and MPO TIPs. The document provides information on project inclusion, amendment requirements, administration modification requirements, public comment periods, and fiscal constraint.
- [IDD-2013-04 Project Program Modification Request](#) to the Production and Letting Schedule and STIP Modifications - This Infrastructure Design Directive (IDD) provides guidance to NMDOT Program Management Division and Transportation and Planning Division staff for carrying out metropolitan transportation planning responsibilities.

120.3 Definitions

The following select definitions are from federal planning regulations. A full listing of references is included in [23 United States Code \(USC\) 101\(a\)](#), Federal-Aid Highways, the

NMDOT [Location Study Procedures](#), and [23 USC 135](#), Statewide and Nonmetropolitan Transportation Planning.

- **Alignment study** - A study performed by NMDOT to accomplish project scoping and conceptual design for less complex actions where the roadway location is already established; for example, a shift in the roadway centerline due to lane and/or shoulder widening, or the need to flatten horizontal or vertical curves.
- **Corridor study** - A study performed by NMDOT to accomplish project scoping and conceptual design for more complex actions where the route location is not established, or the magnitude of improvements may result in a substantial change to an existing alignment; for example, a new roadway or major changes to the typical section and/or alignment of an existing highway.
- **Environmental level of effort** - The type of document required for certification of a project under the National Environmental Policy Act (NEPA). The level of effort may be a Categorical Exclusion (CE), Environmental Assessment (EA), or an Environmental Impact Statement (EIS).
- **Maintenance area** - An area that was designated as an air quality nonattainment area, but was later re-designated by the Administrator of the Environmental Protection Agency as an air quality attainment area, under section 107(d) of the Clean Air Act (42 USC 7407 [d]).
- **Metropolitan Planning Organization (MPO)** - The organization designated by the Governor to carry out the continuing, cooperative, and comprehensive transportation planning process for an urbanized area (over 50,000 population).
- **Rural areas** - All areas of a state not included in urban areas.
- **Regional Transportation Planning Organization (RTPO)** - The organization established by New Mexico, in accordance with 23 USC 135(m), to enhance the planning, coordination, and implementation of statewide strategic long-range transportation plans and transportation improvement programs with an emphasis on the needs of nonmetropolitan areas.

- **Urbanized area** - An area with a population of 50,000 or more designated by the United States Census Bureau, within boundaries to be fixed by the responsible state and local officials in cooperation with each other, subject to approval by the United States Secretary of Transportation. Such boundaries shall encompass, at a minimum, the entire urbanized area within a state as designated by the Census Bureau.

120.4 Major Planning Efforts

Below is a discussion of the planning elements in New Mexico including long-range planning, near-term programming, and defining the project (project definition).

120.4.1 Long-Range Planning

The statewide long-range plan sets long-term goals, objectives, and transportation system needs for a period of at least 20 years into the future. NMDOT's long-range transportation plan outlines a vision for multimodal transportation in New Mexico and defines the goals, objectives, performance measures, and targets to achieve that vision. The plan integrates, harmonizes, builds upon, and refines existing studies, plans, and policies from the NMDOT, MPOs and RTPOs, and other agencies. The plan identifies:

- Strategies and actions needed to connect all elements of the state's transportation system
- Elements of the system needing improvement
- New elements (including programs) needed to ensure that New Mexico's multimodal transportation system is safe, efficient, and effective

In addition, a Statewide Freight Plan is a component of NMDOT's long-range transportation plan that provides a comprehensive plan for the immediate and long-range planning activities and investments with respect to freight. NMDOT also uses other subject-specific plans—based on funding programs, modes, or strategies—that establish additional goals, objectives, and performance measures that must be considered when selecting, defining, and designing projects. These plans include the

Transportation Asset Management Plan, the Strategic Highway Safety Plan, and the Bicycle/Pedestrian/Equestrian Plan.

Federal law requires urban areas with a population of 50,000 or more to develop their own long-range transportation plans. Currently, there are five of these areas, known as MPOs, in New Mexico: Mid-Region (Albuquerque area), Santa Fe, Farmington, Mesilla Valley (Las Cruces area), and a portion of the El Paso, Texas, metropolitan planning area that extends into New Mexico. Projects within these MPOs must be included in the adopted long-range MTP before they can be authorized for design and construction using federal funds.

For rural locations outside of an MPO boundary, RTPOs are developed. The RTPOs serve to enhance the planning, coordination, and implementation of statewide strategic long-range transportation plans and programs, with an emphasis on addressing the needs of non-urban areas. The RTPOs define regional needs in RTPs. There are currently seven RTPOs in New Mexico: Mid-Region, Northeast, Northern Pueblos, Northwest, South Central, Southeast, and Southwest.

At the statewide level, the long-range transportation plan should reference, summarize, or incorporate other applicable short-range planning studies, strategic planning and/or policy studies, and other policies, goals, and objectives relevant to the development of the long-range transportation plan. Additionally, all MTPs and RTPs must be consistent with the statewide long-range plan.

120.4.2 Near-Term Programming

Project programming for NMDOT is accomplished through the STIP which lists funded and prioritized projects over a four-year period (as well as two additional years of unfunded projects). By federal law, transportation programs must be updated at least every four years, although the NMDOT practice is to update the STIP every two years. Transportation projects in the STIP must be consistent with the long-range plans ([23 CFR Part 450.216\[k\]](#)) and, for NEPA clearance documents, the STIP must match the details of the proposed project including:

- Funding source—state, federal, and other

- General project scope
- Project phasing—construction, final design, right-of-way acquisition, environmental documentation, and/or preliminary design
- Project location and termini

Similarly, MPOs are required to develop a TIP that must be included in the STIP. The TIP must cover a period of no less than four years, although most New Mexico TIPs cover a six-year period. The TIPs must be updated at least every four years; however, to maintain consistency with the STIP, New Mexico MPOs update their TIPs every two years.

Additional information on the STIP/TIP development process is included in Section 120.2.1 of the Design Manual.

120.4.3 Project Definition

The definition phase of project development identifies the level of effort and general approach and steps needed to initiate projects. It is an iterative planning process that builds on the identification of the project in the long-range plan and assists with programming projects in the STIP. Typically, project definition is the responsibility of the Districts and involves interdisciplinary input from the various functional groups within the NMDOT. Major outcomes of the project definition phase include the level of effort, anticipated schedule, initial cost estimate, and major issues to be considered (as identified in the Project Definition, Initial Cost Estimate, and Project Control Number Request Form). Requests for specific information such as traffic, crash, and pavement condition data may be initiated in this step.

This step also includes identifying preliminary project termini, developing the project need (general, at this time), and requesting a project control number. Obtaining a project control number is a critical step for initiating a project in the NMDOT's funding and tracking system. To aid in this process, the NMDOT uses a Project Definition, Initial Cost Estimate, and Project Control Number Request Form that needs to be completed at the beginning of the project definition phase. An example of the form is provided at the end of this chapter.

Project Control Number Request

Obtaining a project control number is a critical step for initiating a project in the NMDOT's funding and tracking system. To aid in this process, the NMDOT has developed a Project Definition, Initial Cost Estimate, and Project Control Number Request Form that needs to be completed at the beginning of the project definition phase. An example of the form is provided at the end of this chapter.

Identifying the appropriate level of effort is an essential part of project definition. The level of effort and detail required depends on the scope, complexity, potential impacts, and location of a particular project. Identifying this level of effort assists in developing an accurate budget and schedule, which in turn will assist with developing or adjusting the overall project budget and design/construction schedule programmed in the STIP.

Several issues can affect the cost, schedule, and staffing needs for a project. These issues are often first discovered during the project definition phase and may include:

- Engineering issues (drainage, structures, traffic, mapping, etc.)
- Environmental considerations (wetlands, air quality, cultural resources, etc.)
- Consistency with applicable plans (long-range plan, State Freight Plan, Transportation Asset Management Plan, Bicycle/Pedestrian/Equestrian Plan, Strategic Highway Safety Plan, State Rail Plan, and adopted local plans) and compatibility with adjacent land uses
- Public involvement issues (public interest, special needs populations, public controversy)
- Safety considerations (crash data, safety countermeasures, multimodal accommodation)
- Right-of-way (land ownership, encroachments)

Additional guidance concerning the project definition phase can be found in NMDOT's Location Study Procedures, as well as in Chapter 110 in the Design Manual.

120.5 Documentation

The following documentation is required for this stage of project development:

- Project Definition, Initial Cost Estimate, and Project Control Number Request Form



Project Definition, Initial Cost Estimate, and Control Number Request Form

This form documents the activities of project definition. It is to be completed by Districts in collaboration with the design regions and various technical services lines within the NMDOT. Project definition identifies the level of effort, general approach, critical issues, and approximate cost to program and initiate a project. The required elements for project definition are the same for projects involving a Scoping Report or Phase A/B study. This form must be completed before a project is added to the STIP. Additional information can be found in Chapter 120 of the NMDOT Design Manual.

REQUESTING DISTRICT District 1 District 2 District 3 District 4 District 5 District 6

WHY IS THE PROJECT NEEDED? (Check all that apply)

- Improve unsafe conditions (unsafe physical and/or geometric deficiencies)
- Address congestion and capacity problems
- Condition of pavement and/or structures
- Drainage improvements
- Improve access and/or access management
- Project is part of an adopted economic development initiative or other legislative mandate
- Other (Describe) _____

PROJECT PHASE (check all that apply)

Study Phase/Env. Document Design Right-of-Way Construction Utilities Other

PROJECT DESCRIPTION (check all that apply)

- Roadway Bridge Drainage Right-of-Way
- Fencing Rehabilitation Realignment
- Other project type (describe) _____

Route Number _____

Logical Termini _____
(Include transitions)

Beginning Milepost _____ Ending Milepost _____

Structure Number(s) _____

PROJECT SCOPE FOR TIP/STIP (provide brief description suitable for inclusion in the TIP or STIP)

POTENTIAL ISSUES THAT MAY SUBSTANTIALLY ADD TO PROJECT BUDGET AND/OR SCHEDULE (check all that apply)

- Extensive right-of-way acquisition
- Complex geotechnical issues
- Complex environmental issues (e.g., seasonal constraints for T&E survey)
- Extensive cultural resource issues (e.g., extensive data recovery)
- Public controversy
- Extensive agency and/or tribal coordination (US Army Corps, BLM, Forest Service, tribal, etc.)
- Utilities relocations
- Complex maintenance of traffic
- Other (describe) _____

PROJECT ESTIMATE

- Cost/lane mile: _____ Cost/sq.ft.: _____
- Other method (Describe) [attach supporting documentation]: _____

ESTIMATE DATA

Project 1:

CN: _____ Program Year: _____ Letting Date: _____

Reason for Selection: _____

Project 2:

CN: _____ Program Year: _____ Letting Date: _____

Reason for Selection: _____

Project 3:

CN: _____ Program Year: _____ Letting Date: _____

Reason for Selection: _____

Project 4:

CN: _____ Program Year: _____ Letting Date: _____

Reason for Selection: _____

TOTAL PROJECT STIP ESTIMATE: _____

FISCAL YEAR FUNDING

- Working STIP FY 2020 Year 1 Year 2 Year 3 Year 4
- Planning STIP FY 2020

COORDINATION

Contact

Date

Signature

<input type="checkbox"/> Regional Design Manager	_____	_____	_____
<input type="checkbox"/> District Engineer	_____	_____	_____
<input type="checkbox"/> Project Development Engr.	_____	_____	_____
<input type="checkbox"/> Assistant District Engr.	_____	_____	_____
<input type="checkbox"/> Bridge Design	_____	_____	_____
<input type="checkbox"/> Drainage Design	_____	_____	_____
<input type="checkbox"/> Traffic Design	_____	_____	_____
<input type="checkbox"/> Geotechnical Section	_____	_____	_____
<input type="checkbox"/> Environmental Development	_____	_____	_____
<input type="checkbox"/> Environmental Geology	_____	_____	_____
<input type="checkbox"/> Right-of-Way Bureau	_____	_____	_____
<input type="checkbox"/> Planning Bureau	_____	_____	_____
<input type="checkbox"/> Utilities	_____	_____	_____
<input type="checkbox"/> Others	_____	_____	_____

Concerning this request:

- Are all ADE's aware of this request?
- Has this request been reconciled with the SAAG?

DISTRICT REVIEW:				
ADE Engineering Support:	Date:	Recommended:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
District Engineer:	Date:	Recommended:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Chief Engineer/Div. Director	Date:	Recommended:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Received STIP Coordinator		Programmed:	Yes <input type="checkbox"/>	No <input type="checkbox"/>