



# ITS Project Checklist - Systems Engineering Compliance

For All ITS Projects, a systems engineering checklist must be submitted to the Federal Highway Administration (FHWA) for review. Typically this form will be filled out by the ITS bureau to be submitted with the PS&E for ITS projects.

If all requirements in this form can be identified at 30% design, the project is considered a "minor" ITS project, and it is likely that systems engineering planning requirements have been met partly or entirely; otherwise the project is considered a "major" ITS project and a System Engineering Management Plan must be submitted to the FHWA for approval.

Note: Either way, testing and validation will still need to occur during construction for both Major and Minor ITS projects. A guide for this checklist can be found at: <http://dot.state.nm.us/en/ITS.html>

## Section 1 - Project Information by Applicant

<b>Name:</b> <b>Title:</b> <b>Phone number:</b> <b>Email:</b>	<b>Project Contact (if this is not you)</b>
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<b>Project Title:</b>	<b>Control Number:</b>	
<b>Project Location:</b> County: 2nd County, if any: Route: Limits: Nearest Municipality:	<b>Estimated Project Date:</b> Start: End:	<b>Total Funds:</b> State _____ Fed _____ Local _____ Other _____ Amount:

**Project Description (include list of ITS elements):**

<b>Re-Cert Request?</b>	<b>No</b>	<b>Yes</b>	
Reason :	Previous Cert Expired*	Change in project limits	Change in project scope
(check all that apply, modify above fields accordingly)			

\*Certifications expire after one year. Check if letting date is expected to be more than one year past original cert.

**Is this a Non-Systems Engineering Project (NSE)?**      Yes      No (if No, complete Sections 2 & 3)

**If your project does not include any ITS devices, or only devices listed below, then select "Yes" - stop after Section 1.**

Signal controller upgrades, signal re-timing/coordination, stand-alone ITS devices that do and will never communicate, or projects with fiber or conduit only are not considered ITS projects. If the project impacts existing ITS infrastructure within the project limits, then a systems engineering analysis may be necessary. Contact the ITS Bureau for assistance, (505)222-6552, TimothyJ.Brown@state.nm.us

**New Project or Modification**

Is project currently programmed for planning and/or implementation, or a result of a corridor study?

CMP, Project ID# \_\_\_\_\_  
MTP, Project ID# \_\_\_\_\_  
TIP Project ID # \_\_\_\_\_  
STIP, Project ID# \_\_\_\_\_  
Corridor Study, Project ID# \_\_\_\_\_  
ITS Architecture Project # \_\_\_\_\_  
Other \_\_\_\_\_

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**Nature of Work (skip if no ITS)**

Software Development	Implementation of ITS	Traditional Construction w/ ITS
Operations (e.g. HELP Trucks)	Maintenance (Equipment Replacement)	Other

If "Other," explain:

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**Relationship to Other Projects and Phases:**

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## Section 2 - MPO and/or Planning Data

What issues are the ITS elements intended to address?

**Portions of the Regional ITS Architecture Being Implemented** - check service corresponding to the ITS architecture used (stakeholder and responsibilities table)

Archived Data Management	Parking Management
Asset Management	Public Transportation
Commercial Vehicle Operations	Traffic Management
Electronic Payment	Traffic Signal Control
Emergency Management	Transit Management
Highway Management	Traveler Information
Incident Management	Vehicle Safety
Maintenance and Construction Management	

**Market Packages** - Attach all applicable market packages from Turbo or Online Architecture

Service packages for NMDOT projects may be found at

<http://www.consystem.com/nm2012/web/services.htm>

**Regional Architectures Impacted by the Project**

NM Statewide	Albuquerque	Farmington	Las Cruces	Santa Fe
El Paso, TX	Other: _____			

**Changes Recommended to Regional Architectures Due to the Project**

No      Yes

If "Yes," provide detail:

**Party/Agency Responsible for Maintenance and Funding Source**

**List Any Agreements Utilized or Needed for this Project**

Existing:

Potential:

## Section 3 - Project Implementation and Design

**Procurement Methods (should correspond with project risk) - Check all that apply**

**Commodity Supplier** - Off-the-shelf ITS products (low-bid selection of pre-qualified packages)

**Low Bid Contractor with CD** - Typical for construction projects (low-bid contractor)

**Systems Manager** - Manager responsible for delivering operational system (quality based selection)

**Design-Build** - Major projects with construction (best value selection)

**Consultant** - Supplement in-house capability or function rather than a specific system (best value or low bid)

**Outsourcing** - For a capability or function rather than a specific system (best value or low bid)

**Other**

Comments:

**Project Matrix - Documentation (If existing, attach to checklist or make available)**

The matrix below should be completed by an engineer familiar with the SE on past projects. Note some projects have multiple ITS elements, only some of which will have the required documentation. Please check all that apply to the project.

**Existing** - Documentation is available from previous projects which would apply to the current project without modification (for typical deployments, e.g. DMS signs). If this is chosen incorrectly, the project could be held up at a later date.

**To Be Modified** - Documentation is available from previous projects, which would apply to the current project after some modification (could be due to a policy change, new communications standard or new jurisdiction involvement on a typical deployment). Please note the required changes.

**To Be Completed** - This is for new or new to the agency projects. Indicates a "Major" ITS project and that a systems engineering management plan is required.

**Not Applicable** - In some instances, an off-the-shelf project may be used. In these cases, testing may have been done by the supplier. Please not why the requirement is not applicable to the project.

	Existing	To Be Modified	To Be Completed	Not Applicable	Comments
High Level Design					
Alternatives Analysis					
Concept of Operations					
Detailed Design					
Integration Plan					
Test Plan					
System Acceptance Plan					

For information on ITS training opportunities, please contact the ITS Bureau at (505)222-6552 or visit <http://www.citeconsortium.org/Model/index.htm>

## Section 4 - For ITS Bureau Use Only

NSE

ITS Within Project Limits†

MIN

MAJ

NMDOT Approval:

\_\_\_\_\_

Print Name

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

This certification expires on: \_\_\_\_\_. If the project is obligated after this date, then an updated certification is required.

**†For projects with existing ITS infrastructure within project limits:**