

FY2015 IT Plan Highlights

805 DOT– New Mexico Department of Transportation

Executive Summary:

1. The New Mexico Department of Transportation (NMDOT) is responsible for the design, construction and maintenance of New Mexico's transportation infrastructure including highways, roadways, bridges, railroad tracks and airports.
2. Dedicated to the safety and welfare of the traveling public while promoting economic activity throughout the State.
3. Given the significant challenges we face including long-term debt, minimal growth in projected revenues, and growing transportation needs, NMDOT has reorganized and refocused from activities that add capacity to our transportation network, to extending the life and preserving our current network.
4. In the fall of 2011, the NMDOT management team conducted a "Strengths, Weaknesses, Opportunities, and Threats" analysis workshop. The result was the development of a Vision, Mission and Values statement which will provide the guide for NMDOT's performance of activities.
5. In support of the Agency's overarching strategic goals, the IT Division's FY15 Plans include:
 - Continuous Improvement in Information Technology resources optimization.
 - Implement and maintain a high quality technology infrastructure to serve NMDOT, the traveling public and other government partnerships.
 - Improve data management, reporting and analysis systems to support infrastructure preservation.
 - Identify and implement best practices for application development and enhancement to support pavement preservation and to improve the condition of our highways
 - Promote research for Information Technology excellence to support preservation programs

Agency Vision:

Set the standard for a safe, reliable and efficient transportation system.

Agency Description:

1. The Territorial Legislative Assembly created the Territorial Roads Commission in 1909. When NM achieved statehood in 1912, the State Legislature created the State Highway Commission; and in 1913 a tentative system of state highways was created. The NM State Highway and Transportation Department was created in 1987; and in 2003 the name of NM State Highway and Transportation Department was changed to New Mexico Department of Transportation (NMDOT) and the name of NM State Highway Commission was changed to State Transportation Commission.
2. Currently, NMDOT is organized into three program areas as directed by the Department's Cabinet Secretary and State Transportation Commission: Programs and Infrastructure, Highway Operations and Business Support. Combined, these programs represent a workforce of over 2,500 employees dedicated to providing quality transportation services.

Major IT Accomplishments of FY13:

- Scanning of district project files
- Major HR application software upgrade
- Agency intranet migrated to content management system
- CADD Software Upgrade - The CADD Support Unit successfully managed and completed the software configuration and implementation phase of the department's Autodesk CADD upgrade project.
- Successfully completed AutoCAD 2013 training for all Engineering Division CADD users.
- Photogrammetry Business Process Upgrade - The NMDOT CADD Support Unit successfully upgraded the current softcopy photogrammetry workflow. As a result of the department's move to an Autodesk Survey/Engineering
- Update of NMDOT drafting and design manuals - The NMDOT CADD standards drafting and design manuals were updated to reflect new Autodesk software.
- Upgraded Primavera replacement and upgrade - in house built report replacement and system interfaces.
- Re-configure PMS - new business rules in upgraded pavement management system
- SHARE outside Agency work / SHARE GAP
- TIMS upgrade/training
- Sustain FHWA Billing
- STIP - Application is now current with latest technology and windows 7 compliant.
- Primavera p6 Application has been upgraded from version 7 to 8.2 and is windows 7 compliant.
- HPMS - is a federally mandated yearly reporting effort tied to federal funding.
- Traffic Area - data is crucial for many systems such as National Bridge Inventory (NBI) extract, HPMS, and other Traffic engineering needs.
- Pontis - national bridge inventory (NBI) extract
- Pavement management system and Pavement data collection RFP

- AASHTOWare project PES/LAS and pre construction - testing of preconstruction web based application upgrade from client/server.
- AASHTOWare project DSS - upgraded SAS to version 9.2 and Windows 7 environment.
- AASHTOWare bridge management (Pontis) - testing web based application version 5.1.2 upgrade from client/server.
- Rail billing management system - modifications have been made to several reports and screens. (Oracle APEX).

Infrastructure Services – Plans to Expand:

- VoIP
- Video Conferencing
- Intelligent Transportation Systems

Business Applications Services – Expand and Enhance:

- Primavera
- AASHTO Expedite, Bid Express, PES, LAS, Estimator, SiteManager, Virtis, Opis, DARWin-ME, Pontis
- Transportation Information Management System (TIMS)
- Pave Management System (PMS State Transportation Improvement Program (STIP)
- Rail Billing Management System
- Fleet Focus
- CADD
- ESRI GIS
- TRACS
- Records Retention Electronic Document Management Services (EDMS)
- Human Resource Application
- Office Inspector Forms Application
- Application Development Services
- Search Engine Optimization/Marketing

Changes in Federal or State of New Mexico Requirements with IT Impact:

- MAP-21 - Upgrade and enhance applications and data collection
- SHARE Upgrade - Federal billing requirements with a major financial and resource investment impact

Agency IT Strategic Goals:

- Goal 1: Develop and Implement Transportation Asset Management (TAM) system.
- Goal 2: Improve and enhance data collection systems, reporting, analysis, dynamic messaging, and web based public information system.

Joint Funding Opportunities:

- SHARE Upgrade – DoIT
- TRACS - Law Enforcement Agencies
- Electronic Citation - Administrative Office of the Courts
- Rail Runner Wireless System - Mid-Regional Council Of Governments
- ITS - Local Governments and Federal Agencies

Staffing Gaps and Recruitment

- IT Business Analyst and SHARE Support

IT Staff Training Plans:

- New Document Imaging System Solution
- HR Application / Forms Application
- Time Management
- VoIP / Networking
- Microsoft Server 2012
- EMC Storage / Backup/Archive
- IT Project Management / IT Business Analyst
- ITIL
- Java Script and Java Training
- Adobe CQ Dev Training / Adobe CQ Admin Training

- Individual Course Requests
- Active Directory Management / Windows Printer Server Management
- PeopleSoft People Code
- App Development and Database Training
- Pavement Management System
- SQL Server, SQL Server 2008/10
- Oracle PL/SQL, Oracle 11g Database Admin I, Admin II and Web Application Server Admin
- Crystal Reports
- AutoCAD 2013 Fundamentals, Raster Design Essential, Advance, Civil 3D for Surveyors
- Autodesk Storm & Sanitary Analysis Fundamental
- Linear Referencing and Using Linear Data
- Intro to Visual Studio.NET / ASP Net / Basic Python/ Intro to Java Script. Geodatabase
- Editing in ArcGIS 10
- Getting Started with Geodatabase and Working with Geodatabase Domains and Subtypes
- Intro to Editing Parcel Data and Managing Parcel Data, Python
- Scripting for Map Automation
- Pathfinder Office