NEVADA DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL NOTICE NO. 3 to RFP NO. 035-13-050

Reference is made to the Request for Proposal to Service Providers for Asset Management Plan upon which proposals will be received **NO LATER THAN 3:00 P.M., on March 22, 2013.**

Q1 For the NDOT assets is the data readily available in electronic format such as a database or spreadsheet? If not, then what format is the asset information in?
Yes for some and no for most other types; it depends on the asset type. Some examples of data the Department has available:

For Pavements. There are the Pavement Management System (PMS), the Highway Performance Monitoring System (HPMS), and the Roadbed History Application.

For Bridges. There is Inspect Tech (replaces PONTIS system).

For guardrail. There is an inventory called GUARDRAIL in a LRS9 database.

For hydraulic facilities. The assets collected are for basins, channels, drop inlets, manholes, pipes, and miscellaneous structures. The NDOT process is currently at the initial stages and not much information has been collected (<10%), while the plan for the process is developed. Collected information will be stored in a GIS geodatabase and when finished will be readily available.

For Facilities. There is an asset inventory and a recent conditions assessment (in spreadsheet form).

There are various different types of other inventories throughout the different Divisions. Most of the assets listed in Attachment B, I Introduction, C "Transportation Assets" do not have complete inventories that NDOT holds.

Please see the attached excerpts from our current Business Intelligence Implementation RFI (NDOT Organizational Chart and pages 58 thru 73) to help the Proposer become more familiar with the NDOT's organizational structure and current data.

Q2 For the "Transportation Assets" listed in Attachment B, I C. a) is data readily available?
Yes for some and no for most other types; it depends on the asset type. Please see response to Q1 above.

Can NDOT identify for which assets data is available for?

Please see response to Q1 above.

Q3 In Attachment B, I – Introduction, C. a) sign "structures" are listed but not signs. Does NDOT have a sign inventory that will be included in the AM Plan?
Yes, the Department has a partial inventory of signs and is in the process of collecting a statewide sign inventory. The AM Plan should cover signs.

Q4 Section VI "Objective" states that the "focus of this effort will be on pavements and bridges on the National Highway System (NHS)." However, the "Scope of Work" in Attachment B, I – Introduction, C. Transportation Assets covered, a) includes many elements not part of the NHS.
The paragraph on "Objective" was replaced with Supplemental No. 1.

Is the AM Plan for NHS and State assets, or only NHS assets?
The AM Plan should cover both NHS and State assets maintained by the Department.

Q5 Can NDOT provide a work space in their offices for conducting the research?
For equality to all Proposals, the work space shall be considered the responsibility of each Proposer.

We will consider a daily work space for conducting research on NDOT assets or other information pertaining to this project. This also depends on the number of work spaces available, city locations, equipment requested, and other such considerations. These may be better addressed during negotiation with the selected Proposer.

Q6 Will NDOT provide assistance in accessing the asset inventory records?
Yes. Working with the Proposer, the Department will develop a Core Team. This Core Team will assist the Proposer in accessing the asset inventory records.

Q7 In reference to Attachment B, Table 2 and II C "Sub Task 5A Meetings with NDOT" which states "meetings with ... numerous other NDOT divisions" and the required framework being MAP-21, can we assume that meetings will not be held with Aviation/Rail Division?
Please see the attached NDOT Organizational Chart.

The Department has a Transportation/Multimodal Planning Division who coordinates with other local agencies in regards to Aviation, Bicycle and Pedestrian, Freight, Rail, and Transit.

Q8 Can NDOT confirm that meetings will be required with Bicycle, Freight and Public Transit Divisions since these are part of MAP-21 along with Divisions already identified?
Yes, meeting will be required with our Transportation/Multimodal Planning Division who deals with Bicycle, Freight and Public Transit assets.

Q9 Given that we know there is missing data for some of the assets listed on pages 17-18 of the RFP, does NDOT expect to have an AM Plan for each one of these various assets? The Department expects the Proposer to develop an AM Plan for the assets where there is enough quality asset data. The Proposer shall identify which assets are needed to support the Department's asset management decision making process. For the assets where we do not have enough data, the Proposer shall give a development approach for the future.

Q10 Where can proposers find the description of the minimum qualification for the Asset Management Specialist discipline?
Section I – INSTRUCTIONS TO PROPOSER, Paragraph 5 - **Asset Management (AM) Plan:**

and Attachment B, Scope of Work, I. B. Team members (see Supplemental No. 1).

Q11 Will a proposal cover count against the page limit?
No, also see Section IX – Proposal Content, B. Proposal Limitations.

Q12 Re pg. 7, Section IX – Proposal Content: Because proposals are to be submitted electronically, will NDOT accept blank pages in between sections to comply with the requirement of tabbed divider pages?
Yes.

Q13 The request for proposals mentions that proposers will be furnished a copy of the draft agreement. Does the Department intend to use its Service Agreement Template for contracting purposes on this project, or if there is a different template that we should review.
Yes. The Service Agreement Template can be found on the nevadadot.com website at the following link:

http://www.nevadadot.com/Documents/Doing_Business/RFP/RFQ/RFI_Opportunities.aspx

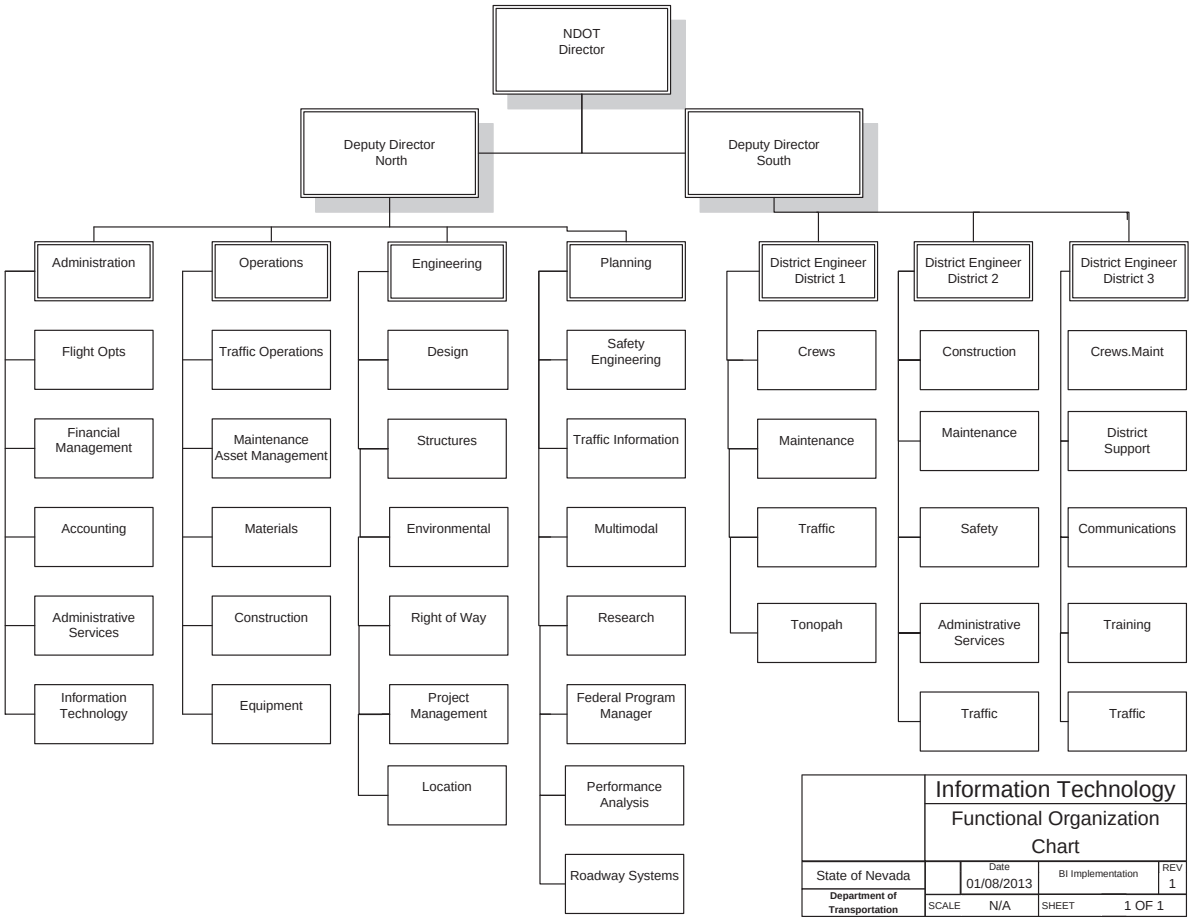
Q14 Please advise the type, detail, completeness and format of data and databases NDOT holds in relation to the highway assets that it intends to be incorporated into the AMP.
See responses to Q1, Q2, and Q9 above.

Q15 Is the cost proposal to be included in the 10 page count?
No.

Q16 The section entitled "Cost Proposal" (Page 8) requests that the proposer provide labor rates by categories for all staff (assuming this is Project Manager, Project Engineer, Technical Writer, etc), but Attachment A requests that the labor rates be an average of rates for each subtask. Is the proposer required to submit additional cost information that breaks down the hourly rate for each staff person? Please clarify.
Attachment A will be reviewed within the Cost Proposal for scoring and all Proposers should review Note 1 at the end of Table 1. The Cost Proposal information requested from p. 8 is secondary information.

Q17 There is no requirement in the proposal for one page resumes. Typically these are required and outside of the page count. Please confirm that resumes are not required.
Resumes are not required, however one page resumes may be attached outside of the page count.

2.3 NDOT Organizational Chart



3. Inventory of NDOT Systems, Applications, and Spreadsheets

The table on the next several pages identifies various NDOT systems sorted by proposed Business Intelligence Phase. This inventory listing provides additional information for the Key Source Systems as well as other systems used at NDOT. The potential Core Data Integration Impact is also noted.

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
Pavement Management System / Internal	75	1	LRS9	PMSUSER - Pavement Management System	Internal	Pavement Management System (PMS) (I.E. repair needs, costs for repairs, smoothness, etc.). When the PMS application estimates the cost of a District's repair costs, the MMS system data is used as a guideline. Annually, inspections of roads are performed. The PMS system includes tracking each segment of state owned road in Nevada. It monitors the contracts for new roads and maintenance of old roads. They also track when maintenance is due for each segment of road. They test all new road construction and maintenance for quality control, by taking core samples and using the Falling Weight Deflection device to assure compliance with the contract. Their recommendations are reviewed by the 3R team and the front office.	Materials (PMS Section)	BI and GIS

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
IFS / Advantage Data Warehouse	23	1	FDOTDW	DW	Internal	Contains historical IFS/Advantage Financial data used for reporting and data analysis. Nightly batch processing extracts transactional data from the IFS/Advantage Financial operational database (FDOT). ETL (extract, transform, load) scripts summarize and load the data into the data warehouse. The data warehouse provides accounting reports, budget reports, other reports, data analysis tools, and data warehouse administration functions.	Accounting Administrative Services Construction	BI and GIS
GUARDRAIL	32	1	LRS9	GUARDRAIL	Internal	The Guardrail system (LRS9 database) contains an inventory of all guardrail sections within the State of Nevada Highway System. Each section is identified as to location, condition, type of hazard being guarded, etc. This information is collected by road crews using visual inspections then manually recorded on a form "NDOT Guardrail Inventory Data Sheet". The sheets are submitted to headquarters where they are reviewed and keyed into the ON-line Safety Engineering Division, Guardrail Maintenance screen. Contains current inventory of guardrails. Primary use is for crash analysis.	Safety	BI, Asset Management, GIS
Event Geo Locator (EGL)	47	1	LRS9	EGL	ITIS	Generates and validates the location of crashes. Input from NCATSDW. Primary output to Safety Applications for Crash Analysis	Safety	BI and GIS

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
MILEPOST INDEX	67	1	LRS9	MPINDEX	Internal	Contains data related to the individual mile posts located throughout Nevada on all routes regardless of the fact that they are state maintained or if they are non-state maintained. (It is important to note that a "mile post" does not always relate to a physical marker on the road, it often is simply a reference to a physical location along a route, based upon long/lat, etc.). New mile post information is keyed into a web based application using data received within documentation submitted for contracted road maintenance as well as information received from NDOT crews. Each milepost marker is stored with information as to its geographic location, including longitude, latitude and elevation, cumulative miles to that milepost from the beginning of the specific route it is associated with, Modifications can be made using the NDOT application "Milepost Index Maintenance", by the Roadway Division. MPINDEX is only for the cardinal direction of Routes.	Roadway Systems	GIS, Asset Management
Nevada Citation and Accident Tracking System - NCATS & NCATSDW	69	1	LRS9	NCATSDW	Internal	State and local governments in Nevada recognize the need to work together to integrate a state-wide Highway Safety Information System to enhance decision making and save lives and injuries on Nevada roadways. Law enforcement and other agencies collaborate by contributing state-wide traffic data to the Nevada Citation and Accident Tracking System known as NCATS. NCATS is hosted by the DPS Records and Technology Division. NCATS supplies traffic crash data to government and non-governmental agencies and the public through Nevada Department of Transportation Safety Engineering. NCATS data is used in many ways, from planning or mitigating roadway construction and improvement projects to safety program data for better, safer roadways and vehicles. NCATS data is also used to improve outcomes in emergency and trauma medical care. The TRCC (Traffic Records Coordinating Committee) and NCATS are funded through grants from the National Highway Traffic Safety Administration, administered through the Office of Traffic Safety (OTS).	Safety	BI and GIS

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
Road Network, NDOT County and State Road Networks	86	1	LRS9	RN	Internal - Intergraph	Contains the three LRM's utilized by NDOT, State Cum LRM, generic COUNTY Cum LRM, and MILEPOST LRM. Interfaces with ROUTE MASTER for assignment of ROUTE_MASTER_ID.	Safety and Location	BI, Asset Management, GIS
Route Master	90	1	LRS9	ROUTE_MASTER	Internal	One of the most widely used schemas at NDOT. Most everything is tracked with route information. It contains two different sets of information. The first set contains all information related to routes (freeways, highways, roads, etc) and ramps which are maintained by NDOT. Information is submitted to the Roadway Division from various sources (i.e. Federal Government survey data, NDOT crew surveys, documents relating to change in ownership of routes, etc.) The second set contains information related to all other public roads and streets which are maintained by other entities such as counties, cities, or other regional groups. The first set is maintained by Roadway Systems. The second set is maintained by the NDOT Safety Engineering Division.	Roadway and Safety	BI and GIS
BridgeInspect/	117	1	Cloud-based	Bentley/InspectTech		Bridge Management System (replaces PONTIS system).	Structures	BI and GIS
Equipment Management System (EMS)	63	2	EMS9	M4	Asset Works	The EMS provides data for all NDOT equipment, (rolling stock with a license, or a removable attachment to a piece of rolling stock). It includes work order management for fleet asset, supply management, fuel, parts, usage, etc. Life cycle management for fleet. CCure feeds EMA information on who filled the tanks. EMS is also used for stockroom inventory (but only for Reno and Carson, not the rest of the state). It interfaces with Phoenix (fuel module) Petro Vend. All state departments use fuel system (which gathers charges and automatically uploads data daily to EMS). EMS used to interface with Advantage, but Accounting no longer uses it. Now Accounting manually enters information from the system and manually bills the other state departments for fuel charges. In areas where fuel pumps do not gather information, paper records are filled out by the person receiving fuel and then those records are forward to Accounting where they are manually entered into the EMS system.	Equipment Division	BI, Asset Management

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
MMS (Maintenance Management System) Data Entry	66	2	LRS9	MMS	Internal	The MMS system provides the ability to track and report on the work employees perform in the field. Tasks, Materials, Crews and Work/Time performed are managed. Betterment Completion and Flood Report Forms are created using the system. MMS data is overseen by Maintenance and Asset Management.	Maintenance	BI, Asset Management
Project Scheduling and Management System Dashboard	78	2	LRS9	PSAMS	Internal	PSAMS is an integrated Scheduling and Work Flow management tool covering the Planning and Design Phases of a Project, with some support for the Construction phase. NDOT management can visualize the status of NDOTS' project portfolio via a Dashboard and drill down to projects of interest. PSAMS is template driven, using standard templates for phases, tasks and documents to ensure consistency in the management of projects. It allows individuals and Divisions/Sections to manage their own workload and indicate progress. It can also access program papers and agreements. PSAMS handles the following components of the project life cycle: Projects, Team Members, Schedules, Unscheduled Work / Event Driven Work, Issues, Schedule / Task Progress, Public Information, Financial Data, Workload and Document Management.	Design	BI and GIS
Annual Work Program	79	2	LRS9	PTS	Internal	The AWP provides a central location for the development of AWP programs. Each project may consist of multiple packages, each of which may have funding applied and phases tracked. AWP Funding and Phases are maintained separately from STIP Funding and Phases. Project, Package and Location information are shared between AWP and STIP. AWP data is maintained by Program Development.	Planning Division	BI and GIS

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
Project Submittal	80	2	LRS9	PTS	Internal	All proposed projects within Nevada which relate to transportation improvement are submitted to NDOT for review and potentially approval. Recommendations for projects may originate anywhere within the State (i.e. local agencies, cities, counties, or within NDOT). These projects are detailed in Excel spreadsheets and submitted to the NDOT Program Development Section. The info from the spreadsheets is visually checked for completeness and accuracy. If all supporting documentation has been provided the info is manually keyed into the Project Submittal Program online application. Once entered, the application is reviewed and rated by a 12 member evaluation Committee composed of NDOT Divisions and District Offices. All scoring is based upon a pre-defined set of criteria. A ranking of High, Medium and Low is scored. High ratings are submitted to the Asst. Director of Planning then forwarded to the Director for funding approval. Funded projects are submitted to the Statewide Transportation Board for final approval. Medium and Low ratings are retained for two years and may be elevated to a high level and submitted for approval at a later date during that two year period. Approved applications are downloaded into various other areas such as the Annual Work Program Bicycle Facilities, etc. All projects, regardless of source or purpose, are entered into this system. It could become the single repository of the data rather than downloading into other systems such as PSAMS, etc. eliminating redundancy of data entry into multiple areas.	Planning Division	BI and GIS
State Transportation Improvement Program (STIP)	81	2	LRS9	PTS	Internal	The STIP provides a central location for the development of STIP programs and for creation of the STIP report for the FHWA. This includes the development of Scenarios to work out how funds will be distributed among projects, and how projects are funded. Each project may consist of multiple packages, each of which may have funding applied and phases tracked. STIP Funding and Phases are maintained separately from AWP Funding and Phases. Project, Package, and Location information are shared between AWP and STIP. STIP data is maintained by Program Development.	Planning Division	BI and GIS

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
IRWIN	26	3	IRWINSDS	ENCROACHMENT, PERMITTING	Internal	ENCROACHMENT is a copy of the original LRS9.ENCROACHMENT application. There is a different front end used for data entry, but tables are exactly the same. It is also not part of the AX5 Documentum application. AX5 Documentum is the imaging application and handles all scanned documents . IRWINSDS.ENCROACHMENT and PERMITTING are applications that provide imaged documents to the imaging software (AX5).	Right of Way	BI and GIS
Highway Performance Monitoring System (HPMS)	37	3	LRS9	HPMS	Internal	This HPMS is for historical information only, up to 2010. It records the make-up of all road segments in Nevada, including mileposts, responsibilities, road type, and various road attributes. HPMS data is maintained by Roadway Systems.	Roadway Systems	GIS Road & Highways
LOIS Survey Monuments System	56	3	LRS9	LOIS	Internal	The Survey Monument Location Information System (LoIS) was designed and developed by GeoDecisions. LoIS was developed to assist NDOT with distributing survey monument information to Nevada DOT personnel and all other Nevada professionals with need for survey monument information. Survey data is collected by NDOT survey crews and submitted for quality review then manual entry into "Survey Data Importer", SQL Server application. Each night a process is run which manipulates and transforms the data loaded into LRS9 Oracle database. It should be noted the new LoIS application enhances accessibility by making all the data available via a web service that can be consumed by a wide range of software applications such as Google Earth and ArcGIS desktop and web mapping applications.	Location	BI and GIS

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
Roadview Explorer	60	3	LRS9	MANDLI	Mandle Communication	Integrates high resolution right-of-way images, GPS data and centerline maps into an intuitive point and click interface. Al images and data can be accessed via inter/intranet.	Roadway Systems	GIS
Railroad Systems	93	3	LRS9	RRSUSER	Internal	Application used by Railroad personnel to track and classify all Nevada Railroad Crossing. Data includes the road that crosses the track, number of tracks, signal and sign devices present at the crossings, the sight distance trains may be seen in both directions, the markings on the pavement, the material in the road and the spacers between the tracks. Data is used for annual reporting to the Federal Government.	Railroad Section	BI, GIS
Road Weather Information System	94	3	LRS9	RWIS_ADMIN	Internal	RWIS is a unique system consisting of numerous meteorological stations strategically located alongside the highway that allow NDOT to make more informed decisions during winter storms. The Nevada DOT has a network of approximately 80 RWIS sites located throughout the state. The RWIS sites provide continuous, near real time atmospheric and pavement data for most sites. The data is collected at approximately ten minute intervals. On various routes and roads within Nevada, sensors are placed to gather information on weather conditions and road conditions influenced by the weather conditions. There are various types of sensors which are used for this data gathering. Some are located within the asphalt of the road; others are infrared beams that are located above the asphalt. Weather vanes are used to monitor wind direction. Anemometers are used to gather wind speed. Data is gathered by different polling software and combined into a single database currently holding 9 million historical records. All RWIS data is displayed on the NDOT Intranet while only atmospheric information is available for public viewing on the internet.	Traffic Operations Division	None

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
Fuel Tax, Diesel Usage, etc.	115	3	N/A	N/A Excel spreadsheets	Internal	Miscellaneous spreadsheets created by Dale Lindsey of Traffic Operations. Not sure where he gets his data from but he creates a bunch of spreadsheets that are used for reporting on DMV taxes road taxes, etc.	Performance Analysis/Traffic Ops	BI and GIS
Legacy J50 Reporting	3	4	ORA9	ACCOUNT_HISTORY	Internal	Contains Accounting Information used by Project Accounting to generate the J50 Report. This information was originally stored in Legacy Application on the mainframe was moved to an Oracle Database where a Discoverer Report was created for Project Accounting to access this data. The J50 Report along with the Account Distribution Report (NDOT Financial Data Warehouse) is used by Project Accounting to report on various Highway Projects.	Project Accounting	Discoverer?
Primavera System	5	4	ORA9	ADMUSER	Primavera System	Primavera P6 is an integrated construction project management product created for globally prioritizing, planning, managing and executing projects, programs and portfolios. By utilizing what-if scenario modeling, capacity analysis, tabular scorecards and optimization functionality, P6 enables users to align their portfolios with their strategic objectives. Other capabilities of Primavera P6 include project proposal workflow, automatic portfolio creation and maintenance, configurable criteria modeling, top-down planning, interactive scorecards, rich graphics, portfolio capacity planning, team collaboration and performance reporting.	IT	BI and GIS
Bicycle Facilities Checklist	8	4	ORA9	BFC	Internal	This system tracks the approval process for projects that affect bicycles. Each project must be approved by the Planning division, Chief Roadway Design, and the Director. The individual responsible for each approval is tracked, along with the approval date and appropriate information. The BFC data is maintained by Intermodal Planning.	Intermodal Planning	Planning Portal

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
Disadvantaged Business Enterprise (DBE)	13	4	ORA9	CONCOMUSER	Internal	Tracks percentage of minority businesses used by NDOT to meet the federal regulations. Each NDOT contract that uses Federal funding is required to use a small percentage of the contract price to pay business owned and operated by minorities. This NDOT agency monitors each contractor to assure compliance with Federal Requirements.	Contract Compliance	BI and GIS
Concrete Testing System	14	4	ORA9	CONCRETE_ADMIN	Internal	Tests the strength of cement from every truck load delivered to an NDOT project and compares it against the contract specifications. Also tests the tensile strength of the re-bar used in the cement project.	Materials Division Concrete Section	BI, Asset Management
DARWin (3.1)	18	4			AASHTO	DARWin 3.1 is a metric-compliant AASHTOW are computer software product that conforms to and is compliant with the pavement design models presented in the respective design guide documents. However, DARWin allows the pavement design engineer to accomplish much more. For example, in flexible pavement design, DARWin allows the calculation of layer thickness by three user-selected methods, including an optimization scheme. Rigid pavement design is enhanced by the addition of the steel design equations for JRCP and CRCP and by the inclusion of in-depth guidance on many of the inputs to the rigid pavement design equation. The overlay design module incorporates the revised approach to pavement overlay design developed under NCHRP Project 20-7. The overlay design module provides a fully automated means of performing all of the different overlay design calculations, including automated FWD file processing and back calculation.	Materials Division Road Bed Design	BI, Asset Management

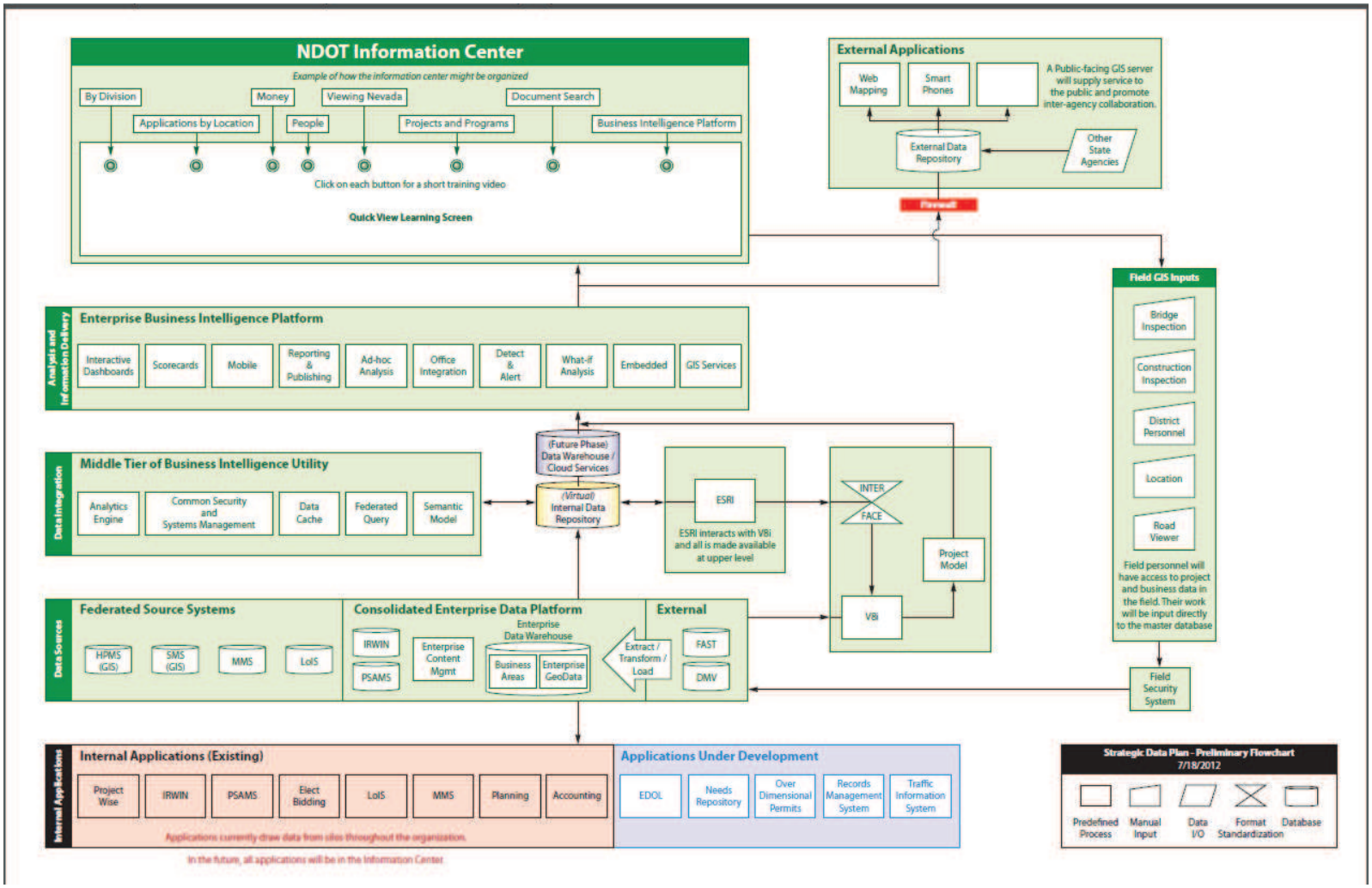
Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
E-bidding (iPD) Integrated Project Development	24	4	ORA9	EBS, IPD_INTERFACE, IPD_OWNER	Internal	The application provides the following functions: preparation of project cost estimates by NDOT personnel, bid advertising, plans procurement, electronic bid opening and contract preparation. The system also facilitates the communication between NDOT and the bidders through a Contractors Desktop Application. Bidders submit their complete bid package including bid bond information, DBE commitments and Good Faith Estimates.	Admin Services	None
Road Bed History Application	85	4	LRS9	RBH	Internal	This application records each contract for new roads and maintains the data on the road bed, the structure of the surface and each layer that has been added over the years. Data is available for most roads back fifty years. The data has not been updated in the past eight years due to lack of personnel for data entry.	Materials (PMS Section)	BI, Asset Management
Phoenix Plus (1.6) Win Phoenix Plus (1.6) Win (Petrovend)	110	4	EMS9	migrating to SQL Server	Petrovend	Only allows authorized card, code or ChipKey holders to access fuel, tracking every fueling transaction and restricting vehicles to the type of fuel and quantities they need. System2 provides you with the security, accountability and control your unattended fueling operation needs.	Maintenance	Asset Management???
Materials Testing System	68	4	ORA9	MTS	Internal	The MTS system tracks the testing/approval process for the thousands of asphalt material samples tested by NDOT each year. It records information about each sample, the tests that were performed on the sample, and whether the sample passed requirements. It also generates standard, as well as custom reports/queries. The MTS data is maintained by Materials Field Operations.	Materials	BI and GIS

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
Equipment Training & Certification	28	None	ORA9	ETC	Internal	The ETC tracks training, certifications, and accidents for NDOT employees. Certifications are specific to types of equipment, specific function (e.g. Flagging), or Federal requirement (e.g. OSHA). It also emails supervisors when their employees are close to certification expiration.	Maintenance	None
Highway Advisory Radio System (HAR)	34	None	ORA9	HAR	Internal	The NDOT HAR is a radio system that keeps motorists informed of road conditions, road construction, road incidents, and weather on some of the Nevada's state maintained roads. It is an AM radio system that broadcasts on 530 or 1610. The data base stores only the current HAR broadcast; there are not any historical data in the HAR database.	Operations and Traffic	None
GIS Schema LOC	55	None	LRS9	LOC	Internal	This is not an application. It is a schema that houses GIS data in ORACLE SPATIAL data object and read by other applications.	GIS/Location	BI and GIS
Microfilm Archive and Retrieval System (MARS)	62	None	ORA9	MARS	Internal	The MARS system is a cataloging system for microfilmed documents. It records the reel numbers, frame numbers, and/or Blip/Odometer numbers for Agreements, Engineering Projects, Permits, and Timesheets. MARS data is maintained by Records Management.	Records Management	None
MMS (Maintenance Management System) Reports	65	None	LRS9	MMS	Internal	The MMS Reporting system is made up of 87 user-requested reports, enabling extensive reporting on the MMS system. Various report-specific parameters are provided to customize the reports to the user's requirements. Reports can be exported to Excel and/or Word. MMS report function is requested by Maintenance and Asset Management.	Maintenance	BI and GIS

Application Name / Vendor	Original Application ID	BI Implementation Phase	Database (If applicable)	Schema/User	Vendor / Internal App	Description	Responsible Division	Core Data Integration Impact
Payment Voucher System	84	None	ORA9	PVS	Internal	PV File creation process creates a text file with all Payment Vouches to be sent to the NDOT Integrated Financial System (IFS). The PV System tracks the PV through the creation - approval - check written process. So there is information in the PV system that does not exist in the IFS. Metrics could be obtained on how long each phase of the PV process takes before it gets to IFS.	Accounting	None
STAFF PLANNING	102	None	ORA9	STAFF_PLANNING	Internal	This is an application for maintaining employee employment history. Employee education, disciplinary actions, pay rates, etc. are maintained. Several reports are available.	HR	None
Sure Trak Project Manager	114	None	????		PCI Group	For resource planning and control of small to medium sized projects. Supports project modeling up to 10,000 activities per project.	Construction	None
DBE Database E-bidding	19	None	ORA9	DBE_BID	Internal	"DBE_Bid" is the database schema of the current E-Bidding Portal application. This is currently used by NDOT highway contractors to submit the DBE subcontractor proposal/bid & bidder's preference affidavit. Users first register to the site and submit the information. This schema will have more hits when we rollout the NDOT portal app where Consultants will be submitting the service procurements proposals online.	Admin Services	None

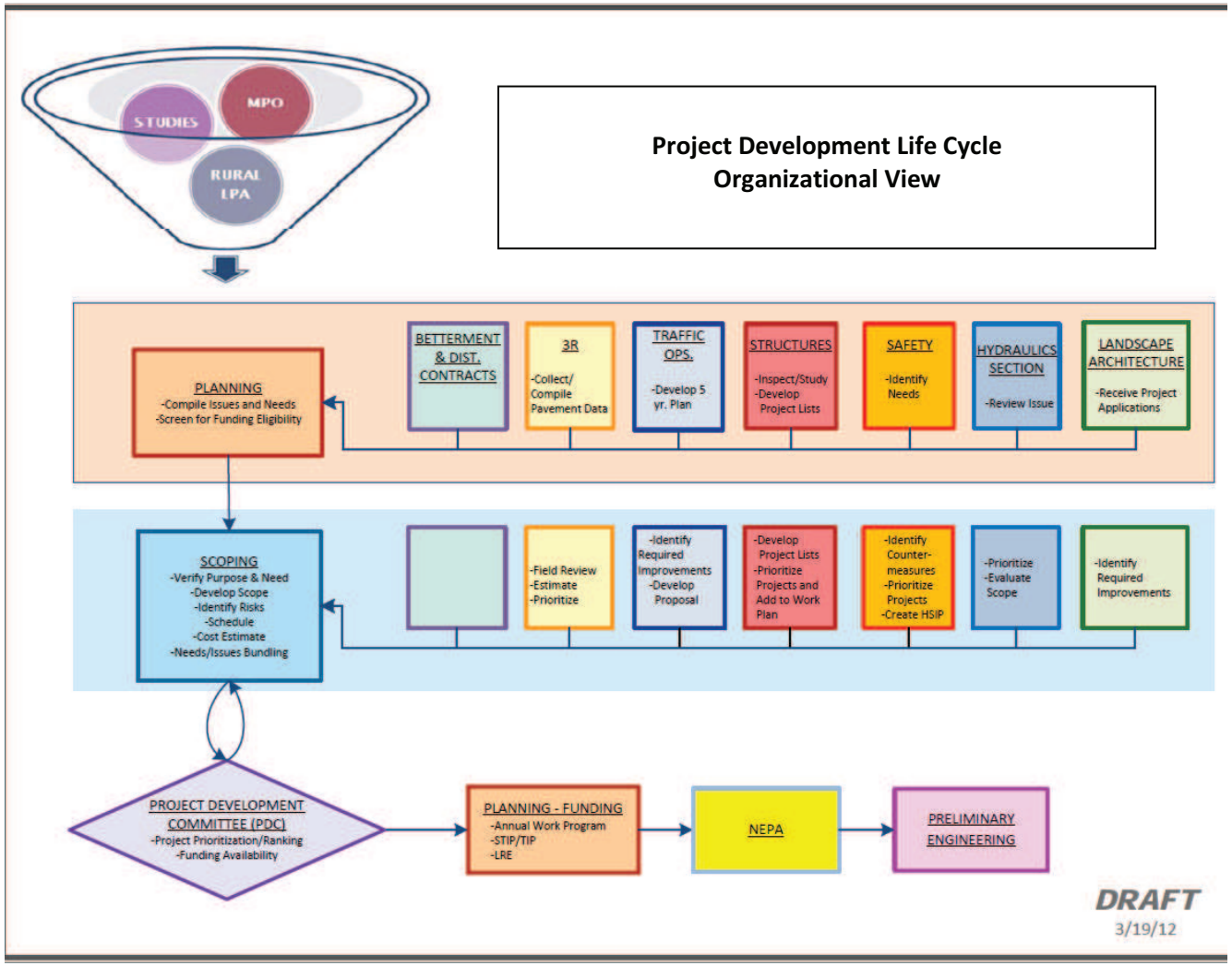
4. Strategic Data Plan Flowchart

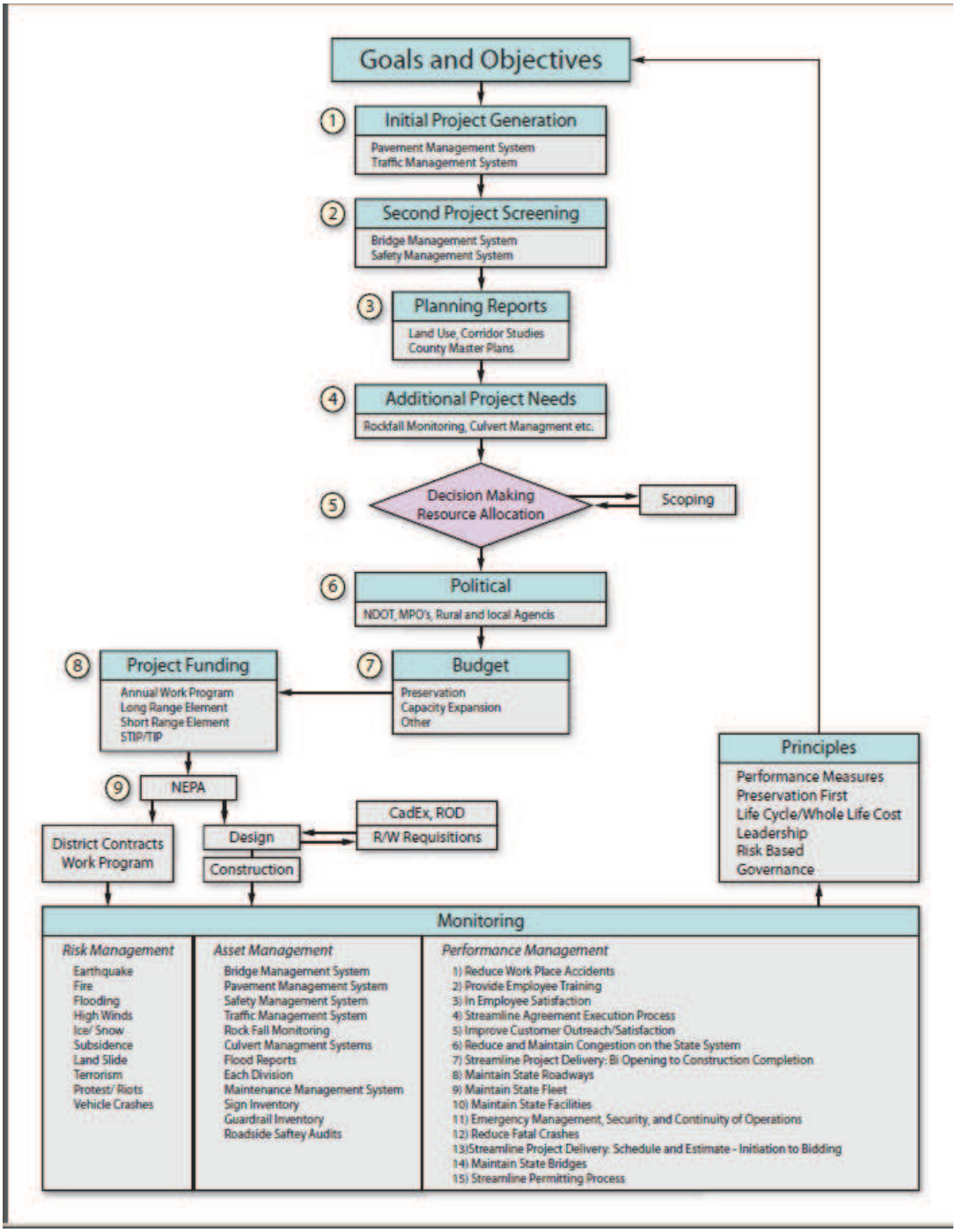
The flowchart below illustrates NDOT's initial thoughts of how the Business Intelligence Implementation fits into the Strategic Data Plan. The NDOT Information Center is also shown.



5. Project Development Life Cycle – Organizational View

The diagram below illustrates how projects (both internal and external) flow into NDOT and the divisions that provide input into the planning process.



6. Project Development Life Cycle – Core Data View

The diagram below illustrates how projects (both internal and external) flow into NDOT and the key source data used in the beginning of the planning process.