

GEOSPATIAL New Mexico

Overview of Activities

January 2020



Office of Geospatial Technologies



New Mexico Geospatial Advisory Committee

GeoPLAN: NM Strategic Plan*

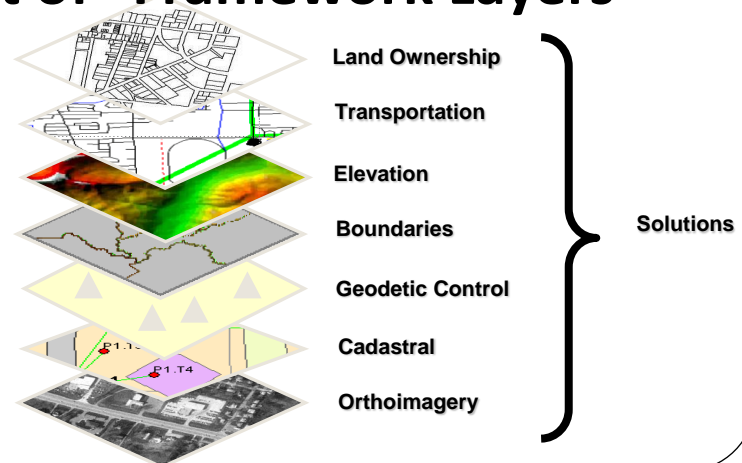
RECOMMENDATIONS:

- **GIO: Establish a Geographic Information Officer position**
- **Services: Designate** and fund NM GeoData Clearinghouse (EDAC)
- **Budget: Provide an annual budget (Submitted)**
- **Re-Engage: Involve highest levels of management.**
- ~~SDI: Create a Spatial Data Infrastructure Committee~~
- **Update Business Plans: Development of “Framework Layers”**
- **Funding: Data Acquisition/Analysis**

* Currently Updating Strategic Plan

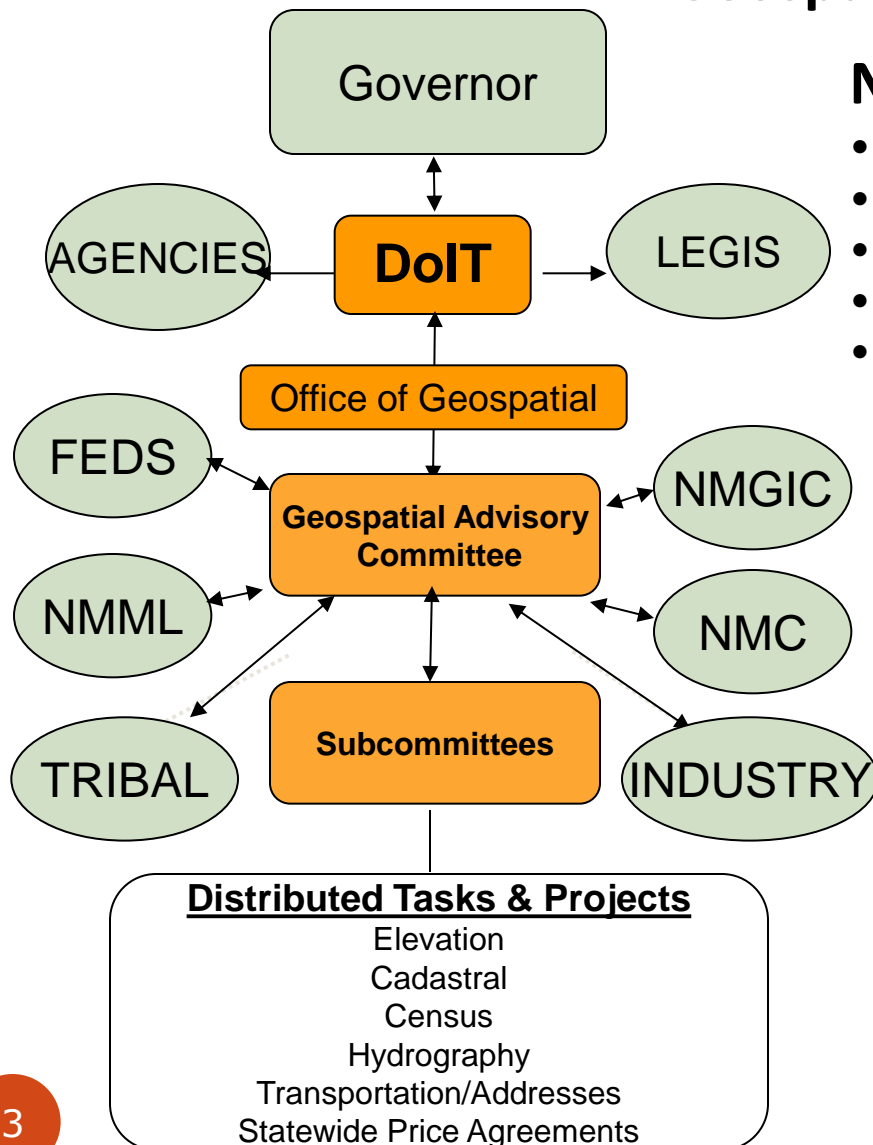
PLAN: <http://www.gac.state.nm.us/docs/NMGeospatialStrategicPlan.pdf>

MEMORIAL: <http://www.gac.state.nm.us/docs/HJM81-TaskForce-FindingsAndRecs.pdf>



GeoADMIN: Communication

Geospatial Information Technology (GIT)



New Mexico GeoDrivers:

- NMGAC: NM Geospatial Advisory Committee
- NMGIC: NM Geographic Information Council
- NMC: NM Counties
- NMML: NM Municipal League
- INDUSTRY: Professional Groups

Participants:

- Local Governances
- State Governances
- Federal Governances
- Tribal Nations
- Industry/Professional

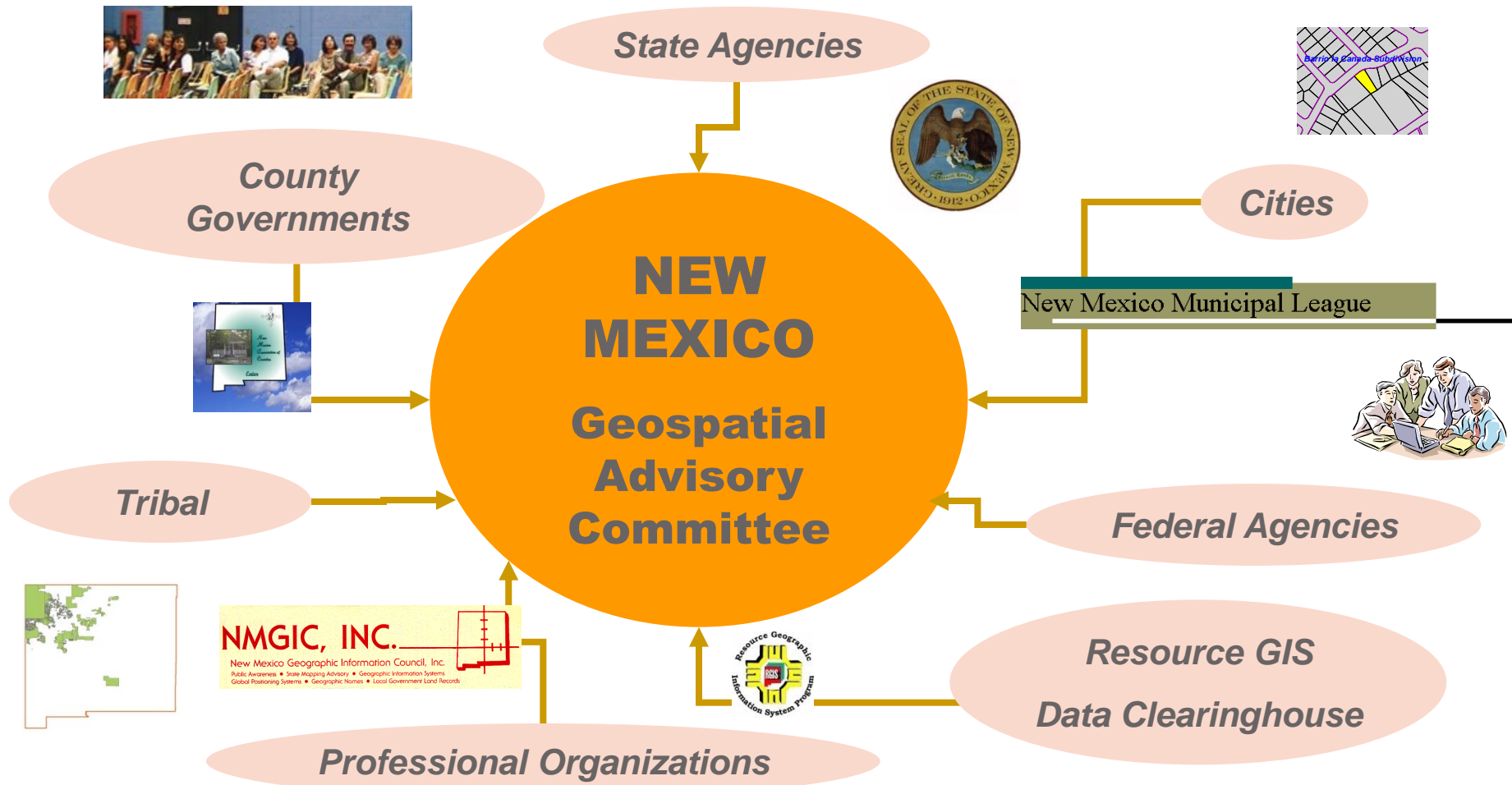
The New Mexico Geospatial Advisory Committee (GAC) guides the use and development of Geospatial Technologies within New Mexico by advising the State Department of Information Technology (DoIT) Cabinet Secretary and CIO. The committee meets monthly and includes representatives from state, federal, local, tribal, and professional interests.

GAC: <http://www.gac.state.nm.us/index.html>

GeoADMIN: Advisory Committee



New Mexico Geospatial Advisory Committee



GAC MEMBERSHIP: http://www.gac.state.nm.us/docs/gac_membership.pdf

GAC Map Gallery: Services - <http://www.gac.state.nm.us/maps/mapservices.html>

GAC Map Gallery: State Maps: http://www.gac.state.nm.us/maps/nm_maps.html

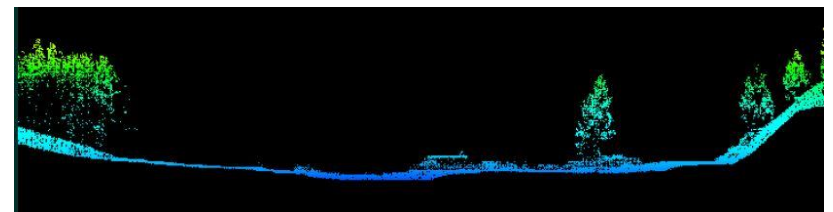
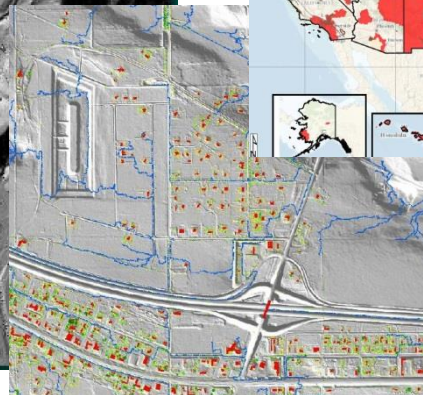
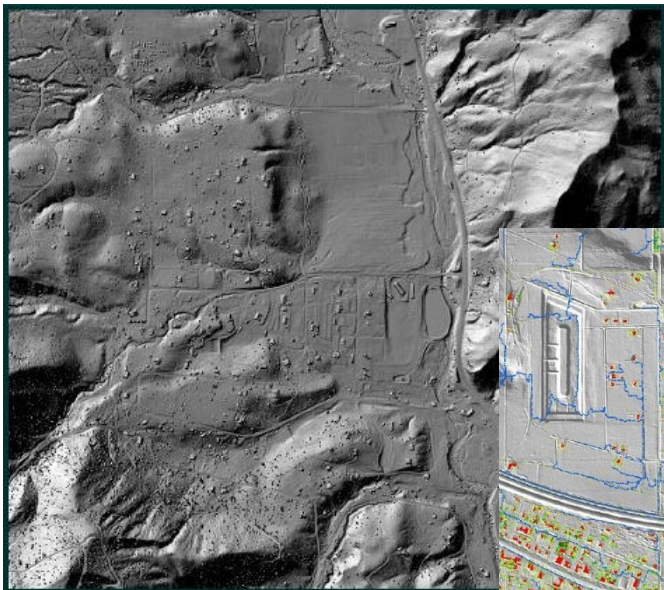
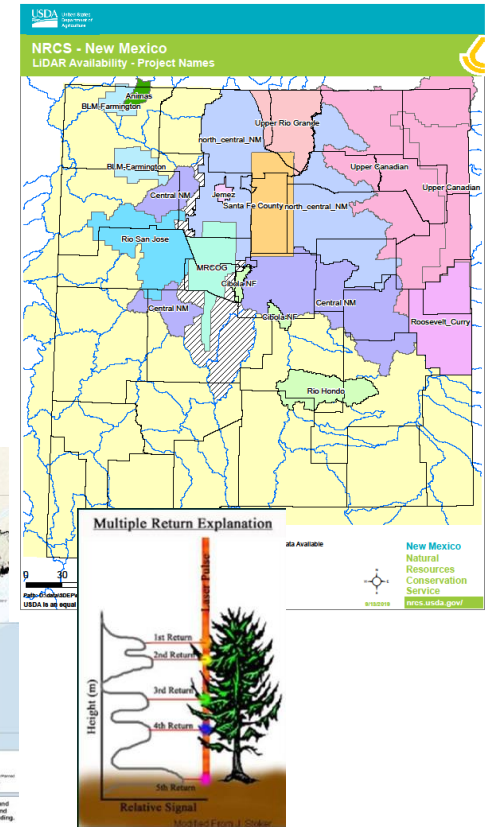
GAC Announcements: <http://www.gac.state.nm.us/Announcements.html>

GeoADMIN – Elevation



New Mexico Elevation Data Planning and Acquisition Subcommittee

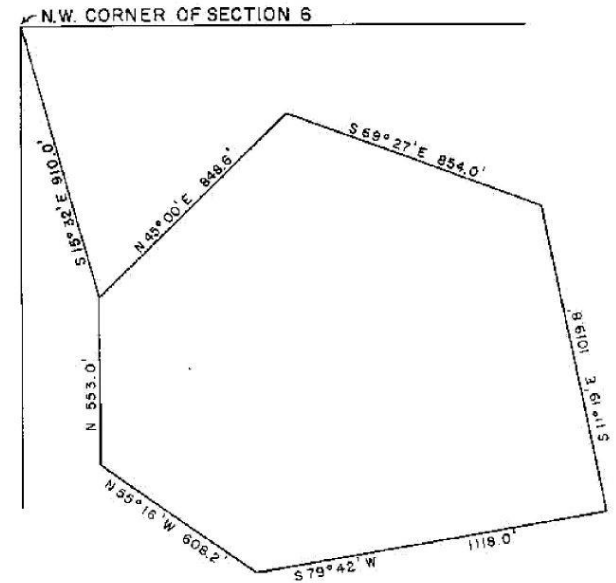
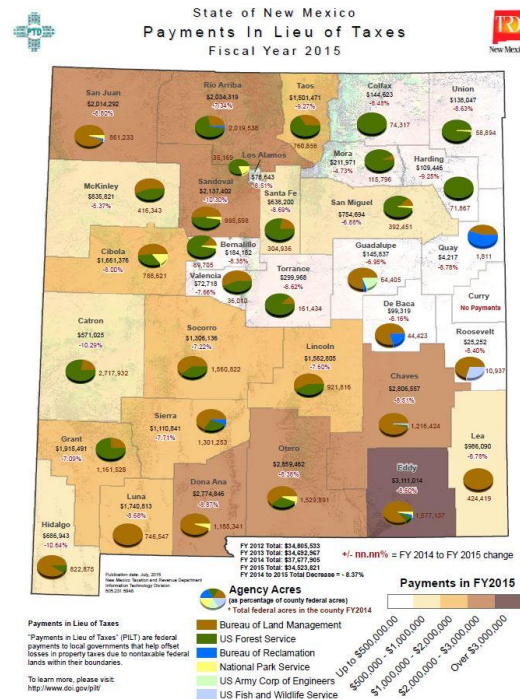
- Represents the State in Elevation Data Issues.
 - NM designated Top Priority State
 - Entire State (\$25M+) has been collected
 - Partners: Federal and Local Funding (No State Funds)
 - Future: Training, processing, and deployment
 - NM Counties presented legislation (Map Fund)
 - Resides with the Office of the State Engineer
- Considering re-purposing this subcommittee to “All Data”





- Represents the State Cadastre, Boundaries, and Geodetic Survey

-

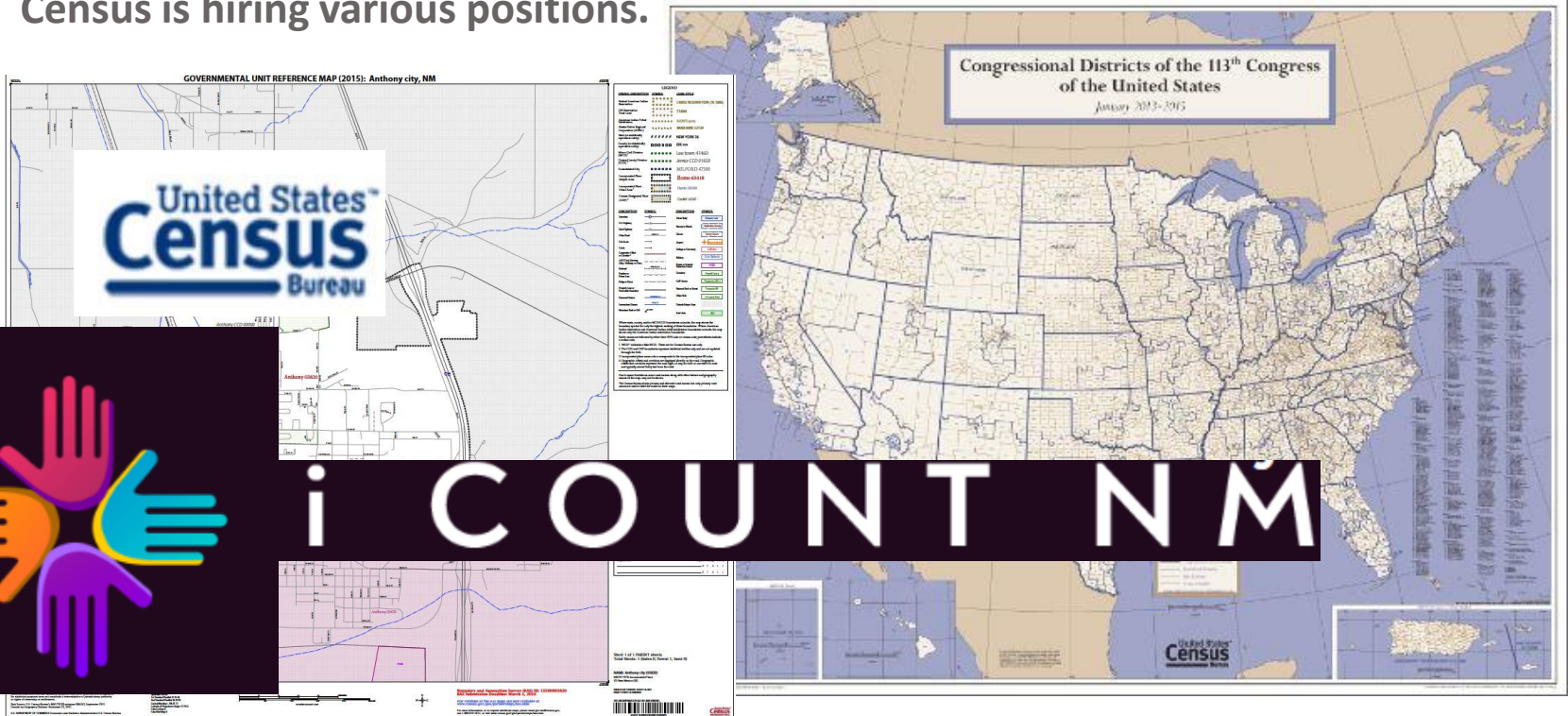


GeoADMIN – Decennial Focus



Decennial Census Focus Group Subcommittee

- Support local, state, and federal coordination and facilitation towards 2020 Census
 - Provide cohesive, unified, and focused engagement with Census Bureau
 - Educate executives and legislatures on the value of a “complete count”
 - Governors Complete Count Committee in full swing with all Counties onboard
 - Census is hiring various positions.



I COUNT NM: <https://www.icountnm.gov/>

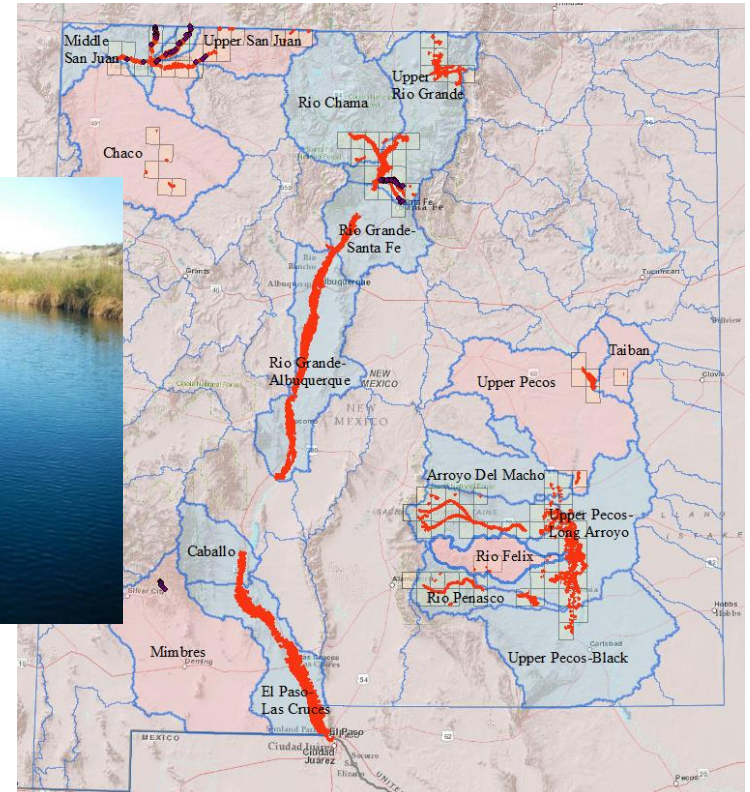
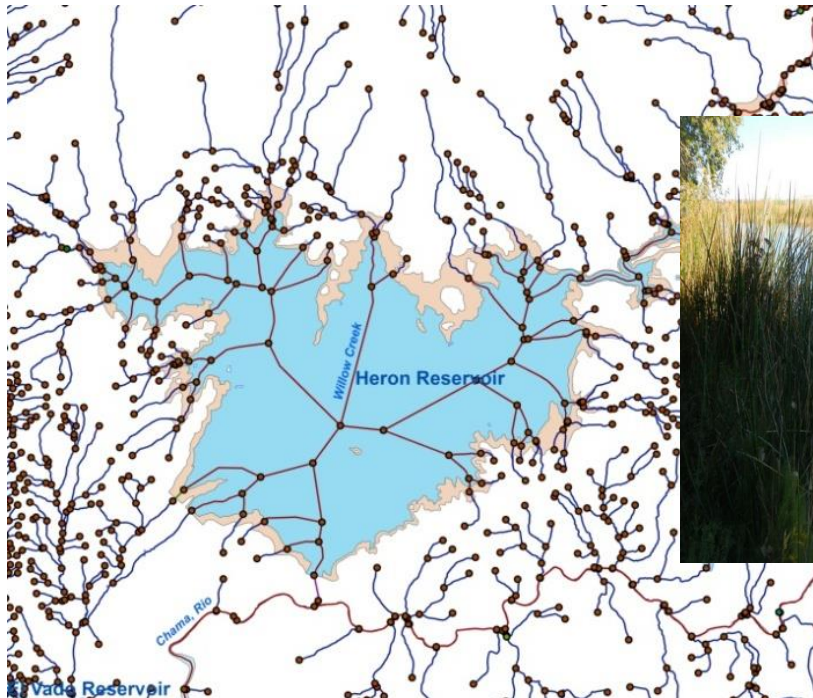
CENSUS: <http://www.gac.state.nm.us/subcommittees/decennialcensus.html>

GeoADMIN – Hydrography



New Mexico National Hydrography Dataset (NHD) Subcommittee

- Represents the State in Hydrography Data Issues.
 - NM Environment Department: Data Steward for New Mexico with USGS
 - EDAC: Employs USGS Certified NHD Editors
 - Project: Conveyances/Acequia

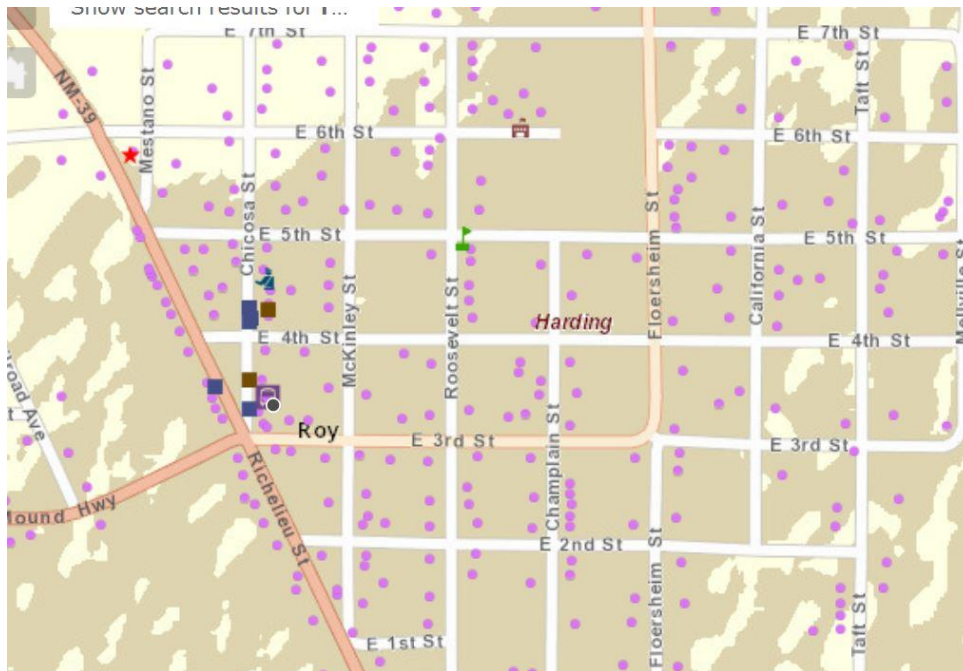


GeoADMIN – Transportation/Addresses

New Mexico Transportation/Address Subcommittee



- Represents the State in transportation and address data issues
 - Single comprehensive up to date statewide datasets
 - Routable Transportation Network and Master Address Dataset (MAD)
 - Integrated network to support DoIT/NM911, DPS/CAD, DOT/ARNOLD/TDM/LWL
 - Local Government engagement an important component



GeoADMIN – State Strategic Plan



New Mexico Geospatial Strategic Planning Subcommittee (TBD)

- Update the Statewide Geospatial Strategic Plan
 - DoIT Office of Geospatial Technology will be the lead
 - Participants: Looking for volunteers from all sectors
 - Process: Assess previous documents and update

GEOSPATIAL ADVISORY COMMITTEE

State of New Mexico

Department of Information Technology

Charter



GAC STRATEGIC PLAN - 2006

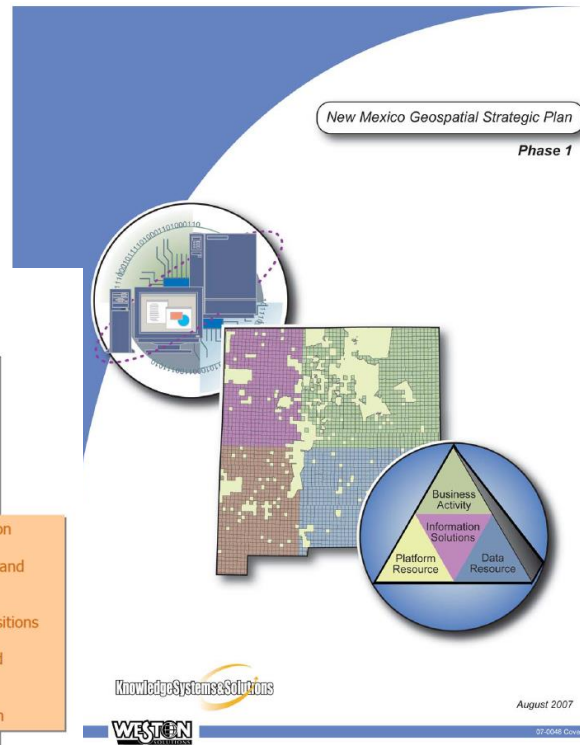
GAC: The Geospatial Advisory Committee (GAC) reports to the Office of the Chief Information Officer that guide the use and development of GIS technology within New Mexico State Government. The committee meets monthly and includes representatives from federal, state, and local government.



Standardization
Data Sharing and Distribution
Shared Acquisitions
Education and Outreach
Administration

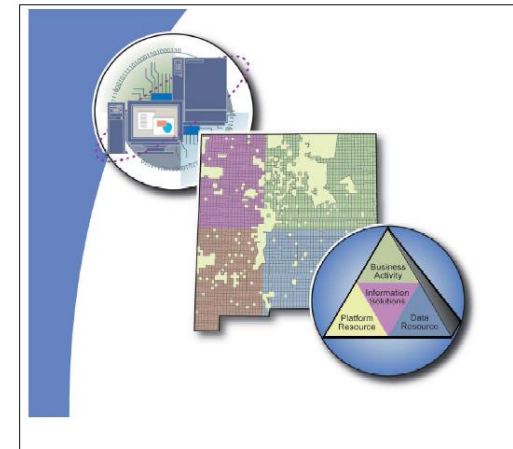
Prepared For: Office of the Chief Information Officer

Prepared By: Geospatial Advisory Committee
Date: March 2006



HOUSE JOINT MEMORIAL 81 Geospatial Information and Data Services

Findings and Recommendations
October 1, 2009



House Joint Memorial 81 Task Force

GeoADMIN – Agreements/Contracts

GeoType Service Agreements

One Stop Shop (OCR Compliant)

- <http://www.gac.state.nm.us/Resources.html#purchase>

Geospatial Technology Services

- Total Vendors: 15
- Site: <https://www.generalservices.state.nm.us/statepurchasing/90-000-19-00065.aspx#Cat4>

Geospatial Products and Support Services

- Total Vendors: 11
- Site: https://www.generalservices.state.nm.us/statepurchasing/Statewide_Price_Agreements.aspx
 - Scroll to IT/GIS

Geo911 Equipment and Services

- Total Vendors: 5
- Site: https://www.generalservices.state.nm.us/statepurchasing/Statewide_Price_Agreements.aspx
- Scroll to IT/E911



GeoADMIN – NSGIC



National States Geographic Information Council

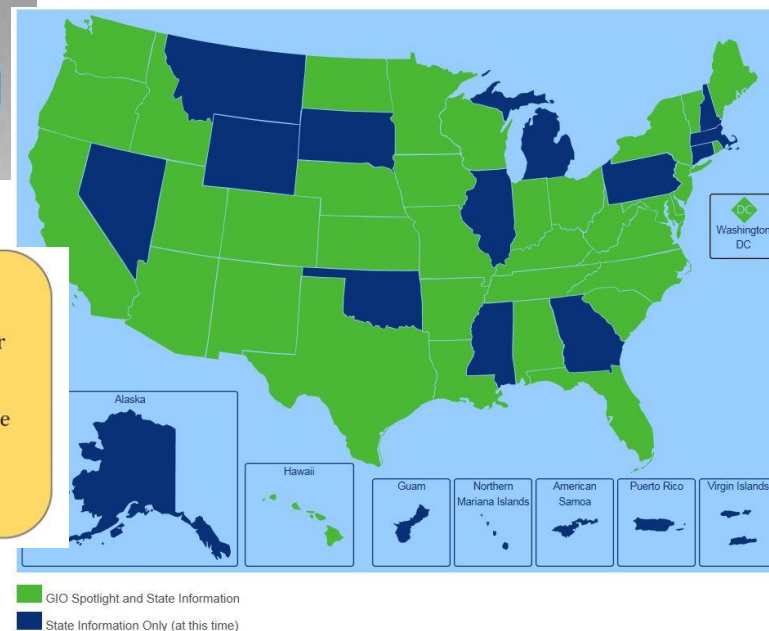
- Represents the State in National Geospatial Initiatives (Five Memberships)
 - NM Members: Transportation, GeoPreparedness, Addresses, GeoClearinghouse, GIO
 - NM Tribal: Represent NSGIC as the National Tribal Liaison
 - Advocate for National Issues: Elevation, Imagery, Legislation, NG911, Public Safety
 - Collaborate: Engage local, state, federal, and industry interests
 - Mid-Year Meeting: Albuquerque, New Mexico (2-5 March 2020)



Emergency Response and Next Generation 9-1-1



- First Responders are typically sent to specific addresses by their Public Safety Answering Points (PSAPs or 9-1-1 Call Centers).
- These addresses must include X & Y coordinates that allow emergency personnel to find the location the first time, and to be dispatched by the shortest routes.
- An accurate National Address Point Database will save lives.



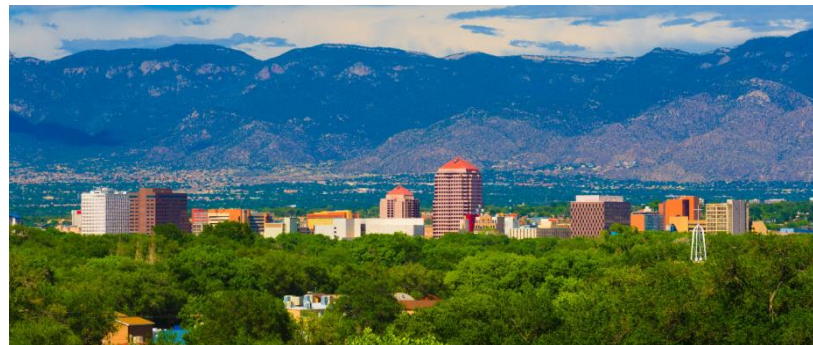
GeoADMIN: NSGIC – MidYear



National States Geographic Information Council

- Preliminary Agenda Items Include the following:

- 3DEP Workshop
- Western States Caucus
- Speed Networking
- Emerging Partner Spotlights
- National Address Stakeholder Workshop
- Coastal Caucus
- GeoWomen Meeting



- Other Items TBD

- Abstracts are currently being reviewed for the “Session Times”
- Topics will include NG911, Census, Transportation, Hydrography, and more

- **REQUEST: Volunteers needed to assist. Free registration (\$735), yet you'll have to work.**

- Contact Gar Clarke (george.clarke@state.nm.us)



GeoADMIN: NSGIC – GMA



NSGIC Geospatial Maturity Assessment – Wahoo New Mexico!!!!

• New Mexico Scored a B+:

- No other state scored above B+
- Eleven states joined NM at B+
- Ranked an A Score in -

- Addresses
- Transportation
- Cadastre

Reference to “State Led Themes”
yet these successes are due to
Local Government

- Ranked an A+ in Government Units
- Need funding to support Hydrography Program (C+)
- Coordination was low in most opinions (B)

STATE	OVERALL GRADE	STATE	OVERALL GRADE
Alabama	C+	North Carolina	B+
Arkansas	B+	North Dakota	B-
Arizona	B-	Nebraska	B
Colorado	C+	New Jersey	B
Delaware	B-	New Mexico	B+
Florida	B-	Nevada	C-
Georgia	C	New York	B+
Hawaii	C-	Ohio	B
Idaho	B	Oklahoma	C+
Illinois	C+	Oregon	B+
Indiana	B	Pennsylvania	B-
Iowa	C	Tennessee	B+
Kansas	B+	Texas	B
Kentucky	B+	Utah	B+
Louisiana	C	Virginia	C+
Massachusetts	B+	Vermont	B
Michigan	B	Washington	B
Minnesota	B+	Wisconsin	B-
Missouri	C+	West Virginia	B+
Mississippi	C+	Wyoming	C-
Montana	B-		

New Mexico Report Card

Overall Grade: B+

COORDINATION	GRADE: B	
STATE-LED THEMES	GRADE	
Address	A	
Cadastre	A	
Elevation	B	
Orthoimagery Leaf-Off	N/A	
Transportation	A	
FEDERAL-LED THEMES	GRADE	
Geodetic Control	B+	
Government Units	A+	
Hydrography	C+	
Orthoimagery Leaf-On	B+	
METRICS:		
A - Superior	C - Average	F - Failure
B - Above average	D - Below average	N/A - Not Applicable

First, the State of New Mexico (NM) commends the National States Geographic Information Council (NSGIC) for lending resources to support the Geospatial Maturity Assessments (GMA). We believe this is a wonderful measure of how we're performing and where we can improve. In addition, using the GMA to leverage requests for State Support for programs not performing well provides us with a useful tool. Thank you.

National Geospatial Advisory Committee

- Advises the Federal Geographic Data Committee (FGDC)
 - NM: New Mexico GIO selected to participate and represent State Interests
 - Membership includes industry, local, federal, and tribal interests
 - GDA: Geospatial Data Act – new federal legislation recognizes NGAC advisory role
 - Requires strengthening data relationships with local governments
 - FGDC: Requests NGAC to research and provide recommendations on GeoIssues
 - Subcommittees: FGDC requests have resulted in the following subcommittees
 - Landsat Advisory Group: Assure future launches have correct sensor technology
 - NSDI Strategic Plan: Revise the vision, mission, and guiding principals
 - Public Private Partnership: Research various models and propose options
 - GDA Reporting: Provide guidelines for federal agency reporting per GDA
 - Support: Inform the National Spatial Data Infrastructure (NSDI)
 - Support: The GeoPlatform Portal (<https://www.geoplatform.gov/>)
 - NGDA: Assist to clarify the National Geospatial Data Assets
 - Meeting: Next meeting 4-5 March 2020



GeoADMIN – NG911

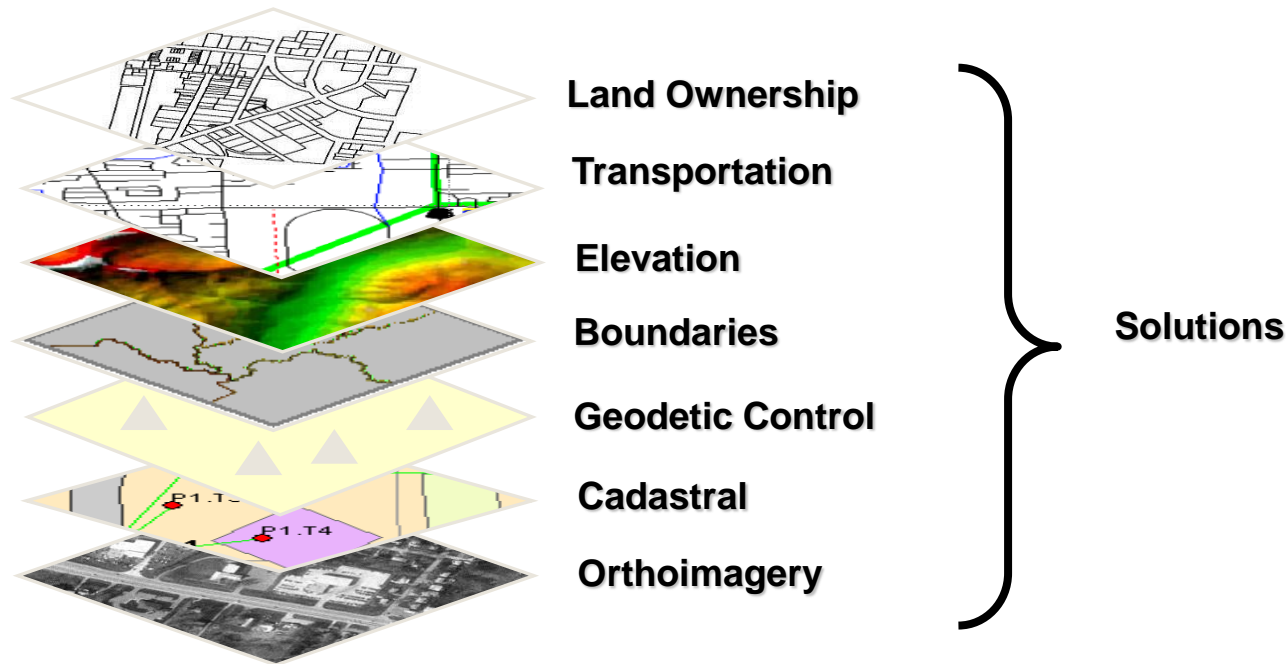


National NG911 Data Stakeholders Committee

- Advises the National Highway Transportation Safety Administration (NHTSA)
 - NM: New Mexico GIO selected to participate and represent State Interests
 - Membership includes industry, local, federal, and tribal interests
 - Objectives:
 - Inform on Next Generation data reporting requirements, training, and statistics



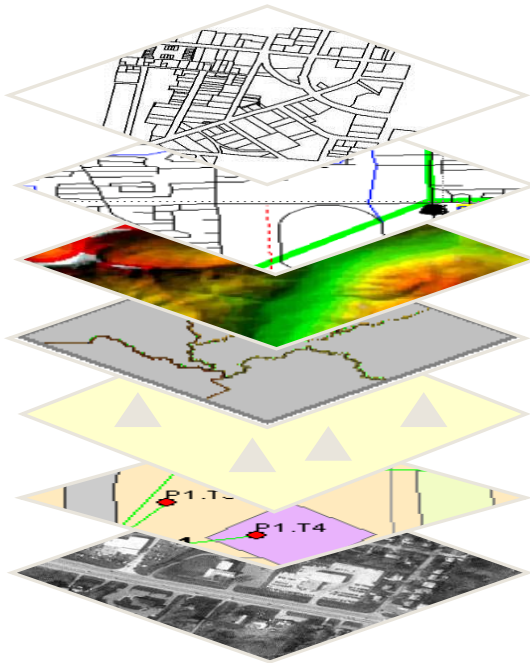
GeoDATA: Framework Layers



Base Map Data Requirements:

- Steward
- Business Plan
- Metadata
- Quality Check
- Accuracy Check

GeoDATA: Stewardship



Hydrography – **ENV/USGS**
Transportation – **DOT/USDOT**
Elevation – **EDAC/USGS**
Boundaries – **TRD/Census**
Geodetic Control – **DOT/NGS**
Cadastral – **TRD/BLM**
Orthoimagery – **EDAC/USGS**

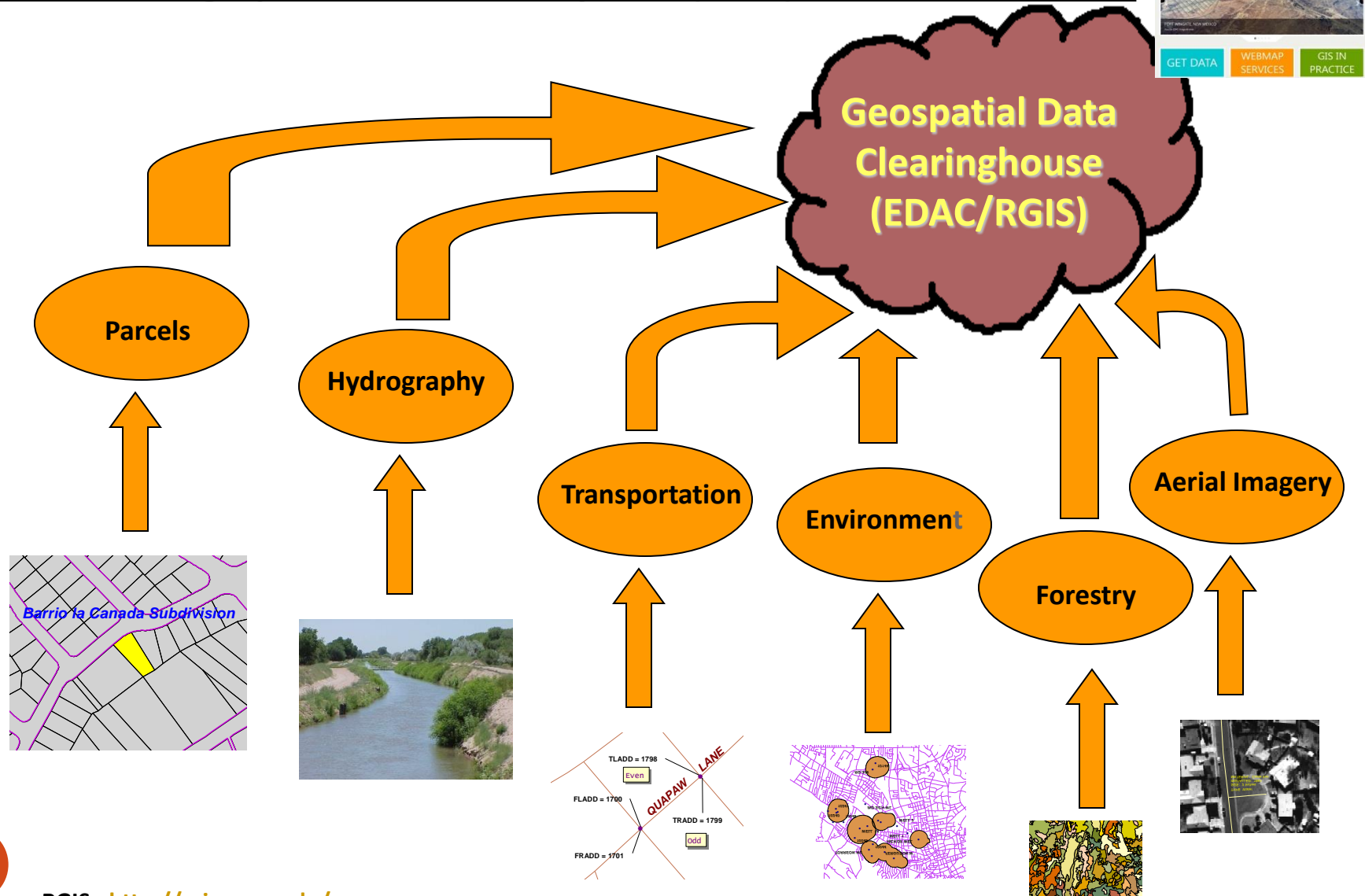
Local
Governance

State Agreements

- Administration Steward: DoIT
- Technical Steward: EDAC
- Data Steward: Agency

GeoDATA: RGIS Data Clearinghouse

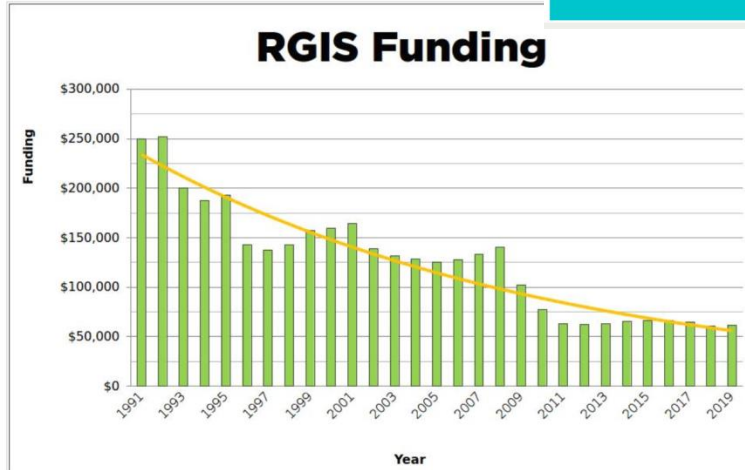
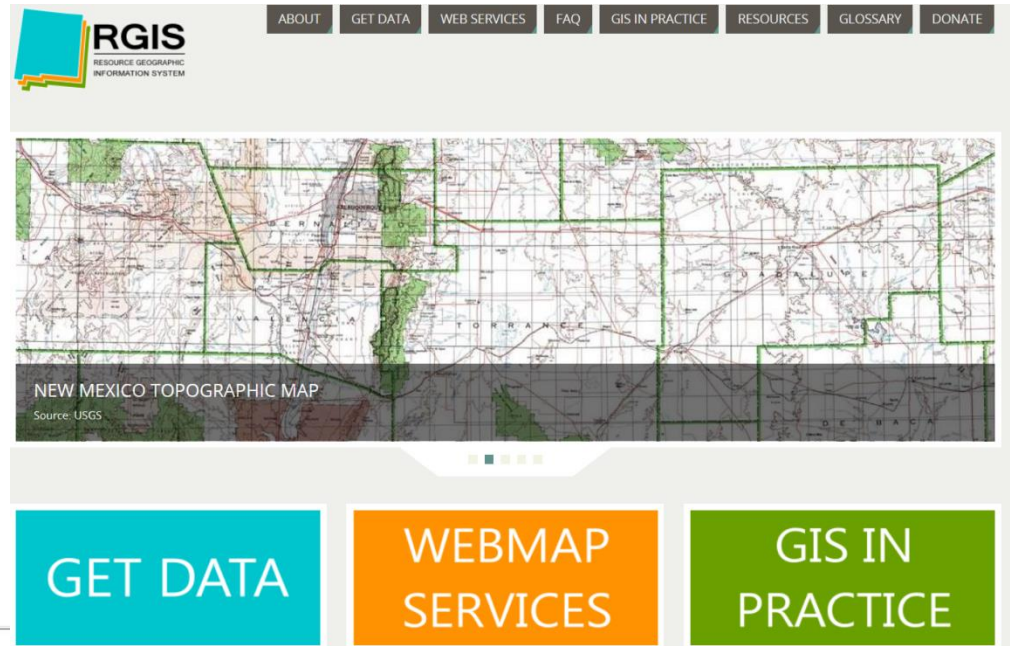
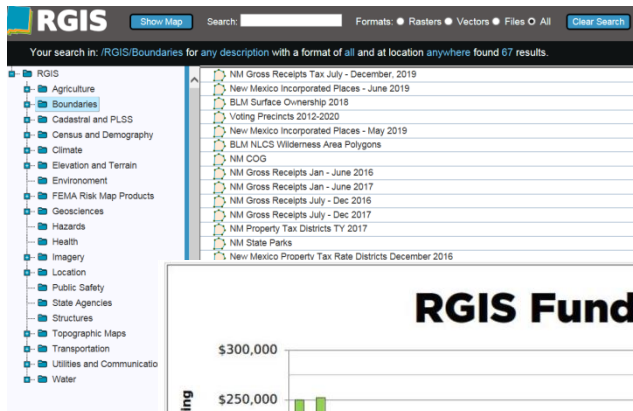
Resource Geographic Information System (RGIS) - Data and Services



GeoDATA: RGIS Portal – Version 6.0

NEW PORTAL

- State Statute Designated
- Free Downloads
- Five Terabytes and Growing
- Over 100K Datasets as a Service
- Open Source Service



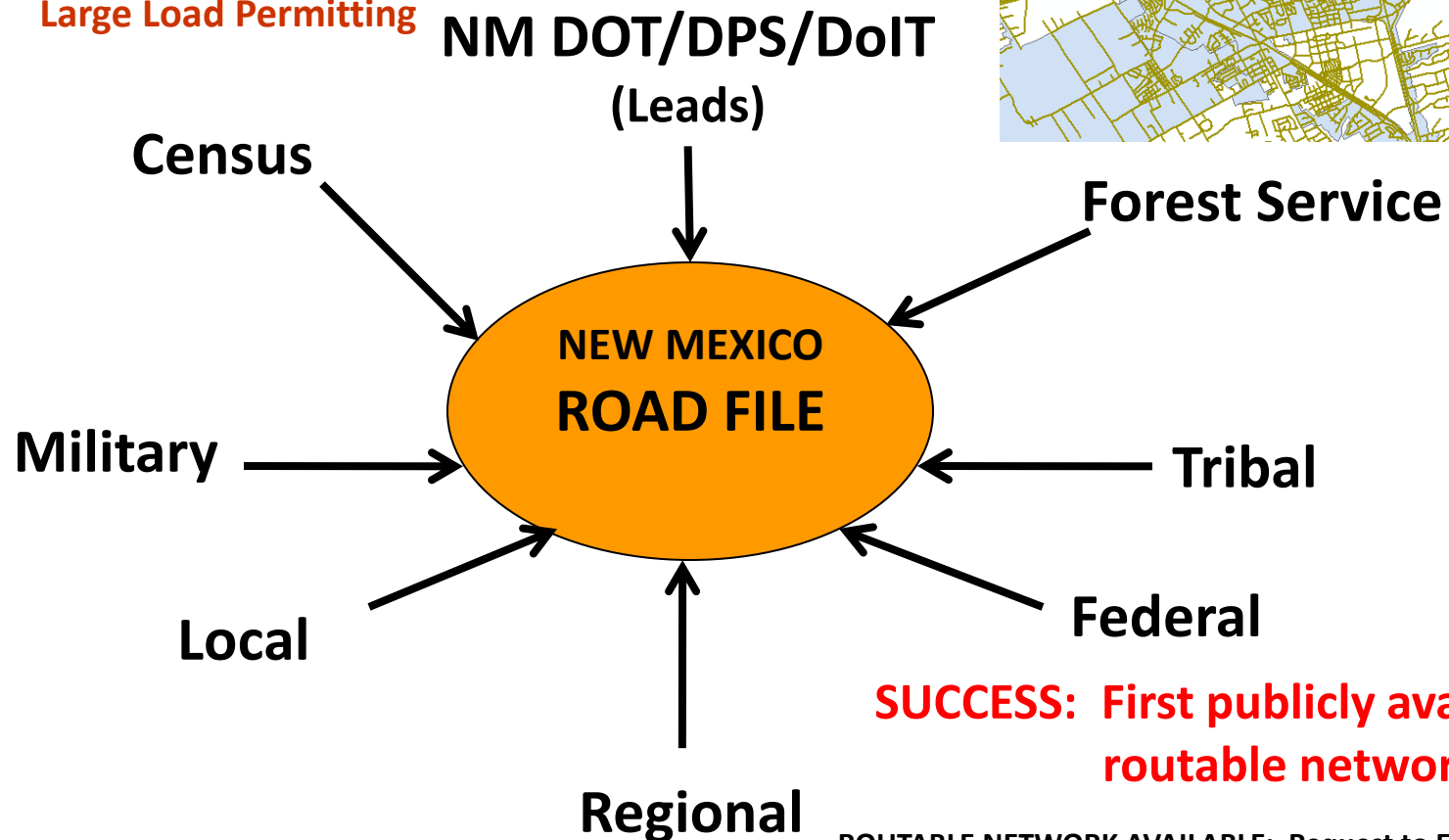
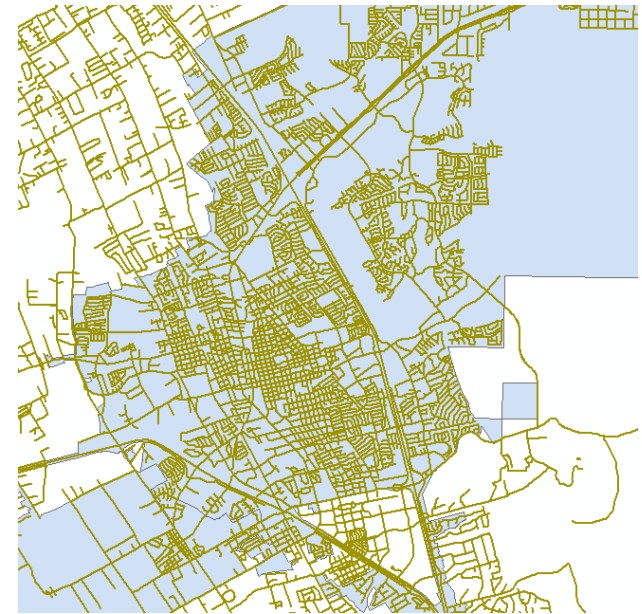
RGIS HISTORY:

- 1988 – New Mexico State agencies surveyed by four UNM units to assess the feasibility for developing a statewide computer mapping and geographic information system (RGIS)
- 1989 – House Bill 218 requested funds for establishing a GIS clearinghouse
- 1992 – RGIS clearinghouse opened and provided digital data via 4mm and 8 mm tapes
- 1996 – rgis.unm.edu established
- 2013 – Legislation: Designated State Geospatial Clearinghouse

GeoDATA: NM Roads

Collaborative:

- NM911/DoIT/DFA
 - Local Governments
- Public Safety
 - Computer Assisted Dispatch
- Transportation
 - ARNOLD
 - Large Load Permitting

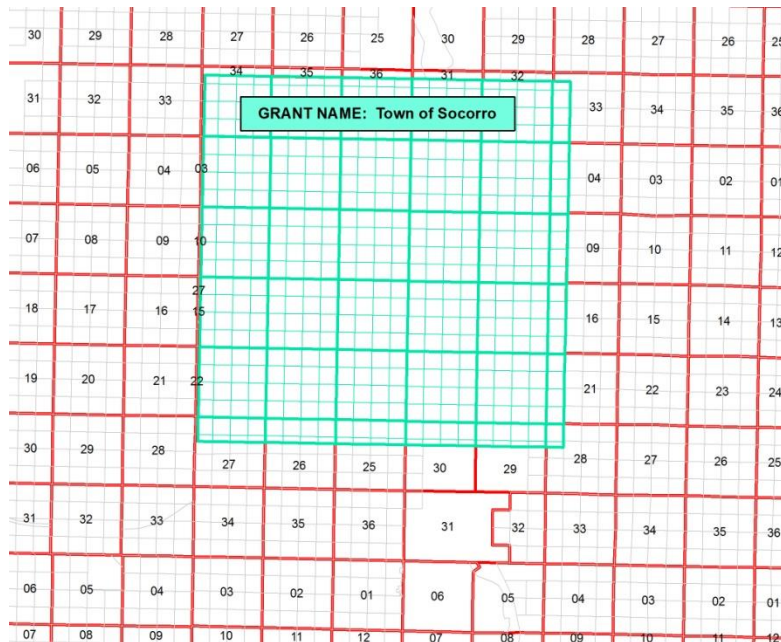


ROUTABLE NETWORK AVAILABLE: Request to EDAC

GeoDATA: NM Land Index

New Mexico Lands Index: Standard Indexing System – Aligned with PLSS

- Funding: State Land Office/Dept. of Information Technology (SLO/DoIT)
- Content: PLSS-like Grid extension into Land Grants and No Data Areas
- Available: EDAC/RGIS Geospatial Data Clearinghouse
- Objectives
 - SLO requirement for State Lands accounting
 - DoIT requirement to support broadband provider data validation
 - Assist in “geocoding” legacy data based on extruded PLSS



Application: UPC GeoLocator*

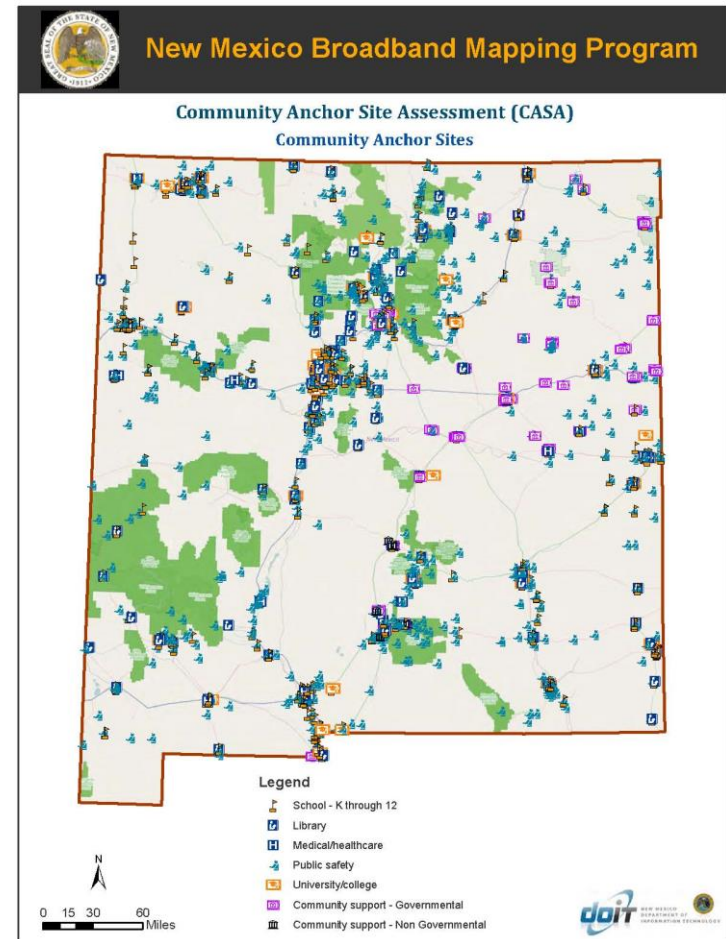
- Create Parcel Centroid
- Statewide UPC Feature Class
- Emergency Response/Notification

* Uniform Property Code

GeoDATA: CASA

- Community Anchor Site Assessment (CASA)

- Integrated Database of Structures
 - Fire Stations (Fire Marshal)
 - Government Buildings (General Services/LCS)
 - Health Facilities (Dept. of Health)
 - Libraries (State Library)
 - Schools (Public Schools Facilities Authority)
 - Readiness Centers (National Guard)
 - Emergency Operations Center (US DHS/HSIP)
 - Miscellaneous (USGS/GNIS)
- Update Strategy – CrowdSourcing
- First for New Mexico
- Project: Government Facility Inventory
 - State/Local Collaborative (LCS/TRD)
 - Letters Requesting Assistance
 - Assessor Database Standards Opportunity

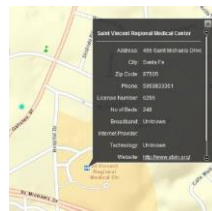
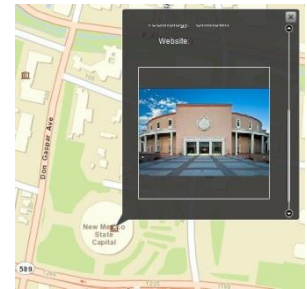




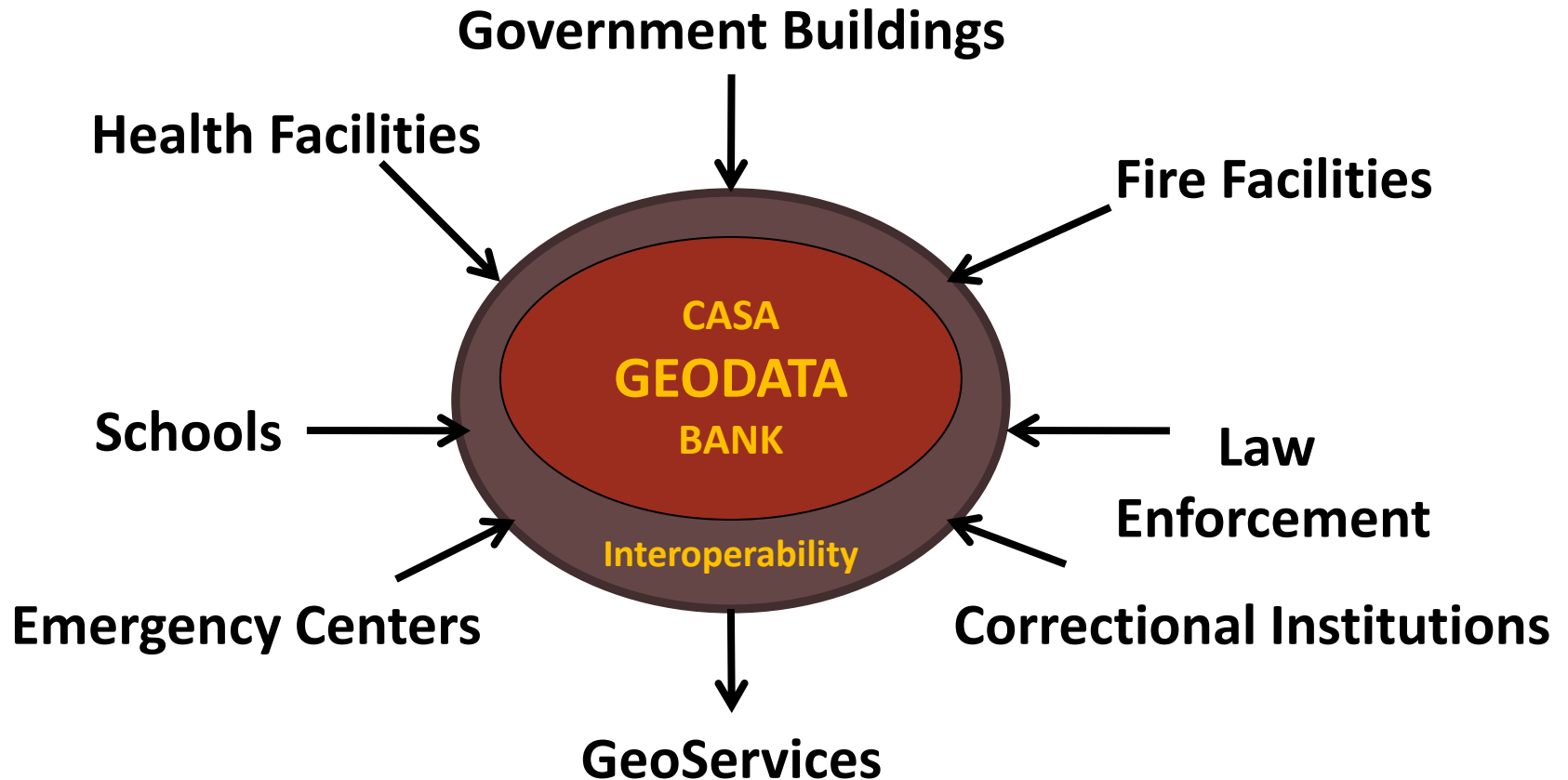
CASA: Data Classification

TOTAL: 4,252

- Medical/Healthcare (191)
 - Hospitals
 - Nursing Homes
 - Urgent Care
 - School-Based HC
 - Federally Qualified HC
 - Emergency Medical Services
- Public Safety (969)
 - EOC (73)
 - Fire Stations (645)
 - Law Enforcement (251)
 - Correctional Facilities
- Education (1,173)
 - Public Schools – K12 (1,033)
 - District Offices
 - Traditional
 - Alternative
 - State/District Charter
 - Grant/BIE Tribal
 - Higher Education (140)
- Government (1342)
 - State Government
 - Local Government
- Library (160)
 - Regional
 - Branch
 - Bookmobile Stop
- Non-Governmental (77)



CASA: Asset Management



GeoServices: NM911

OBJECTIVE/PROCESS:

- Assist First Responders in quickly locating public facilities
- Disaster planning and identify potential shelters
- Base requirement for Next Generation 911 Statewide implementation

RESOURCES:

- DoIT NM Broadband Program CASA Database
- DFA NM 911 Address/Road Centerline Database (Local Agencies)
- DoIT NM Public Safety Broadband Network Critical Infrastructure Data
- DPS NM Routable Road Network (Local/Federal Agencies)

COLLABORATIVE

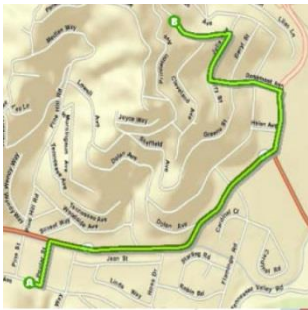
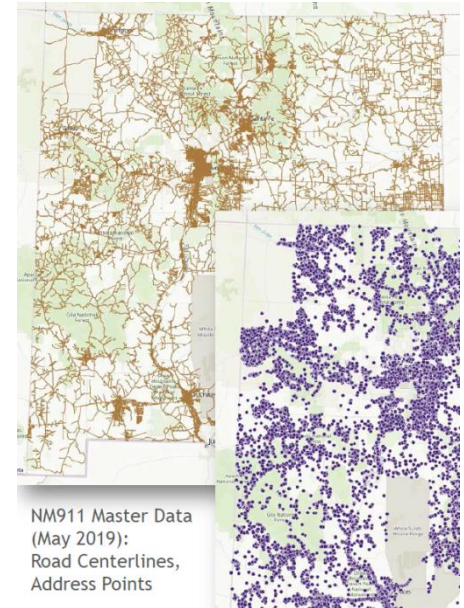
- Local Government Agencies
- Department of Information Technology
 - NM Broadband Program
 - NM 911 Program
 - NM Geospatial Advisory Committee
 - NM Public Safety Broadband Network
- Department of Finance Administration
- Department of Public Safety
- Department of Transportation



GeoServices: NM911.org

NM911 Data Portal/Website:

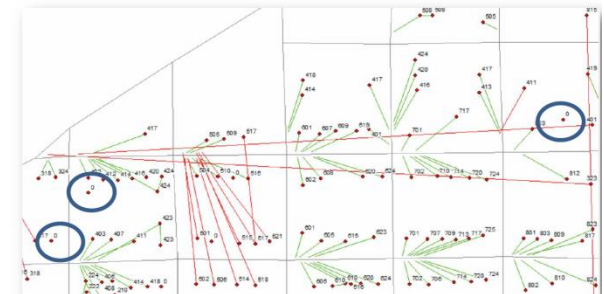
- Constructed with Open Source Code
- Functions:
 - Information sharing among NM911 GeoData Providers (80+) and Public Safety Answering Points (41)
 - Portal for GeoData Providers to upload their data
 - Coded error checking with over 21 functions
 - Automatic cross walking to Statewide Schema
 - PSAP clips, map server conversion, and download to consoles



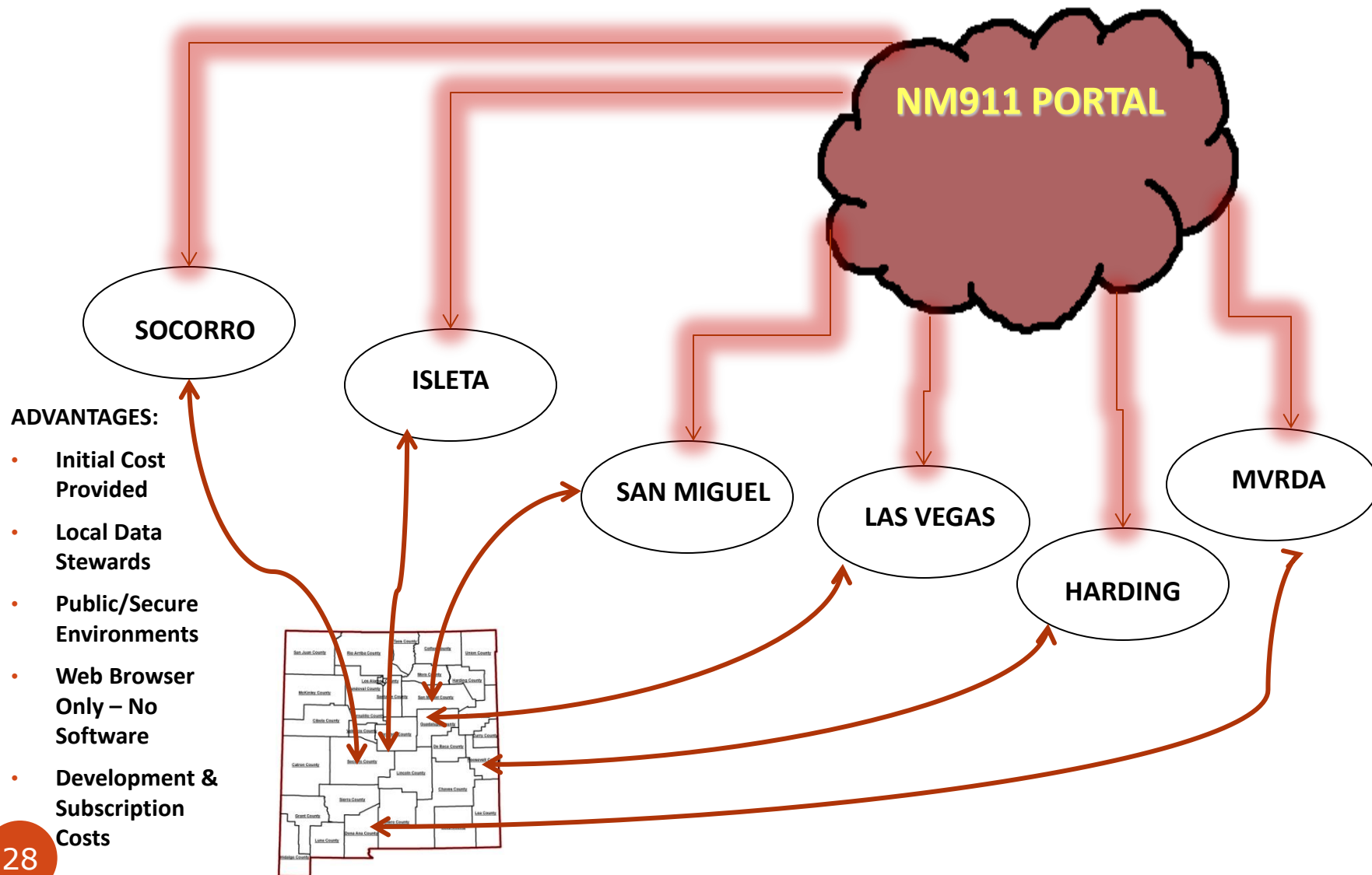
Thanks for uploading!



Fishbone Analysis



GeoSERVICES: NM911 Data Sources



GeoSERVICES: Broadband Map

TEST YOUR BROADBAND
SPEED & QUALITY

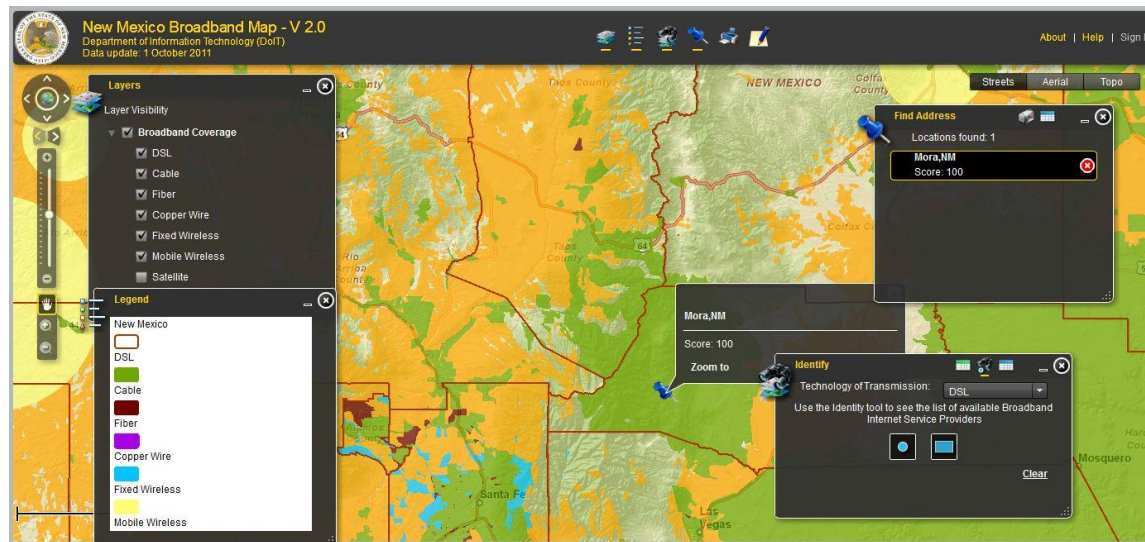


New Mexico Broadband Map (Availability)

- Source – Provider Data
- Type of Technology
- Search – Address, Community, Area, or Point

MAP SERVICES

BROADBAND



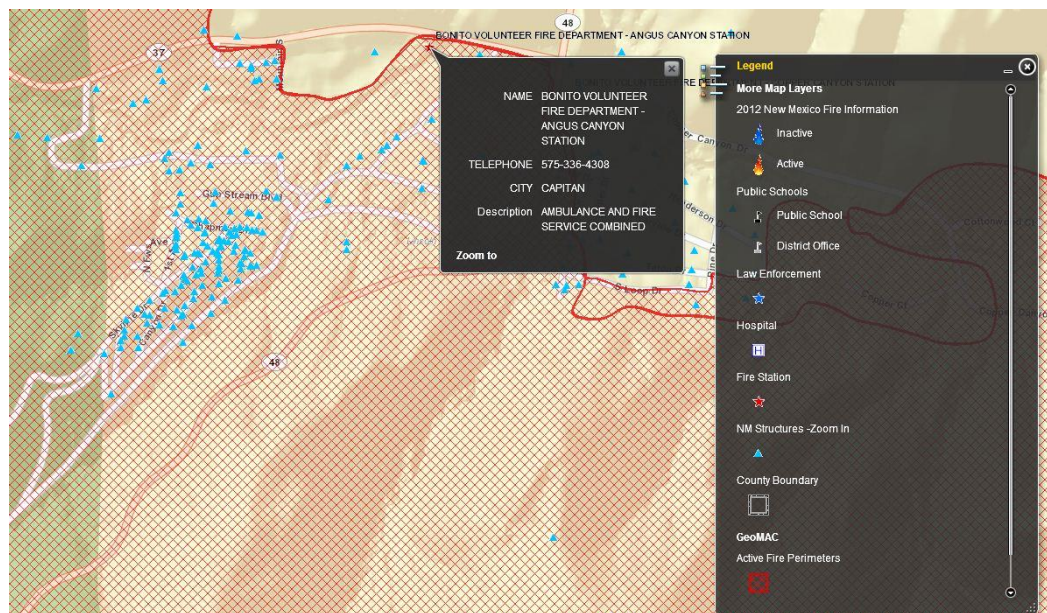
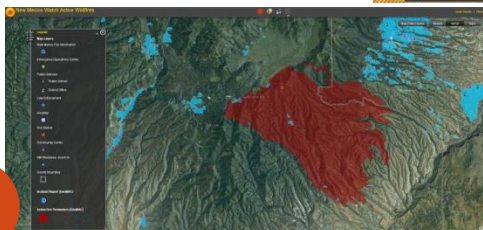
GeoSERVICES: Wildfire Watch



DATA SOURCES:

- County Structures
- Broadband CASA
- NM DOH Health Facilities
- NM Fire Marshal Stations
- NM National Guard Centers
- HSIP Facilities
- NHD/NRCS HUC
- GeoMAC Fire Data
- NWS Rain and Smoke
- BAER Team Soil Burn Severity
- USGS Stream Gages/Flow
- USGS Earthquake Hazards
- BLM Federal Lands

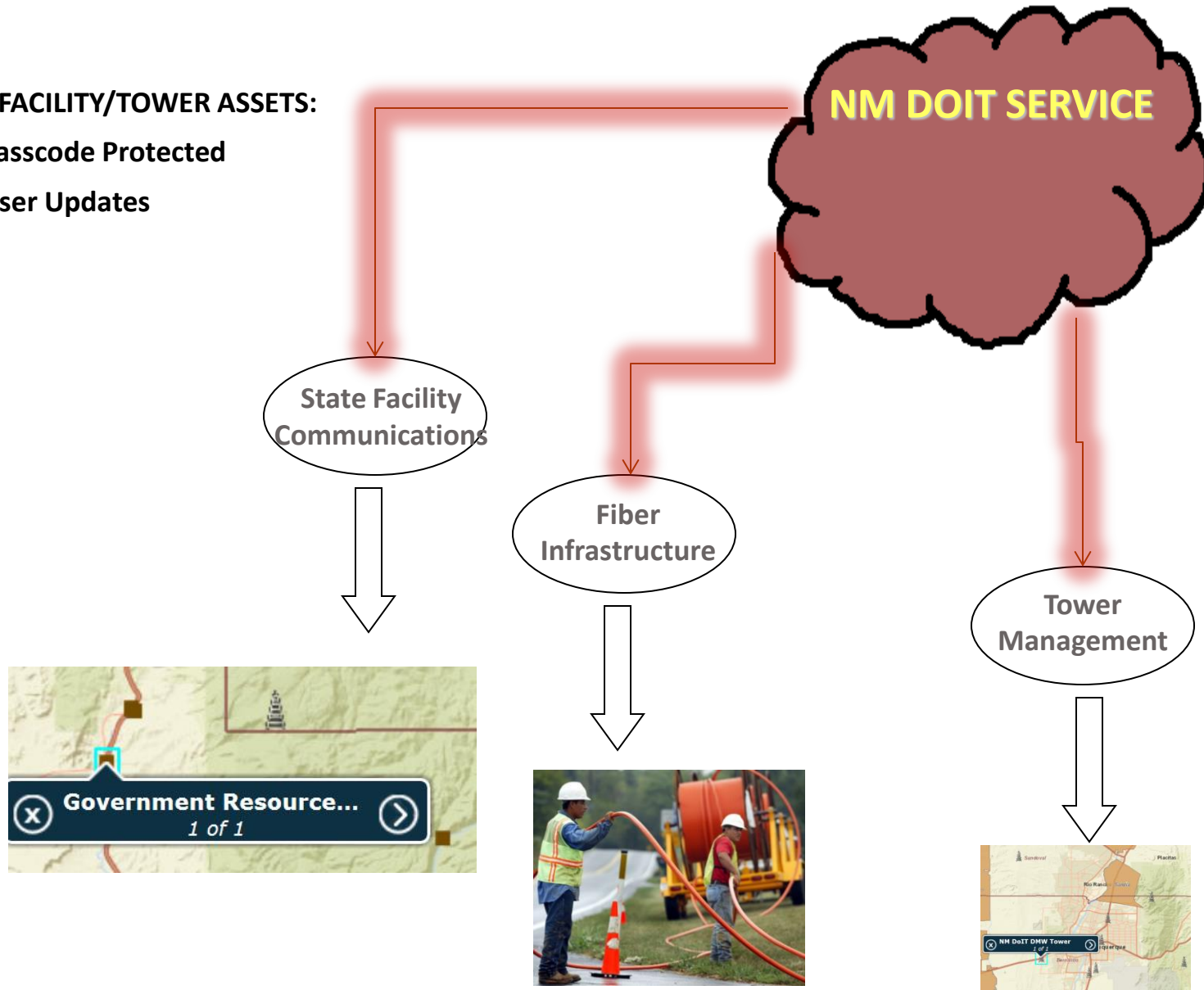
EMERGENCY



GeoSERVICES: DoIT Asset Tracking

DoIT FACILITY/TOWER ASSETS:

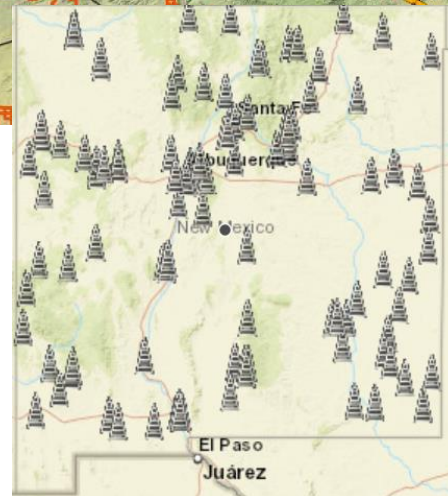
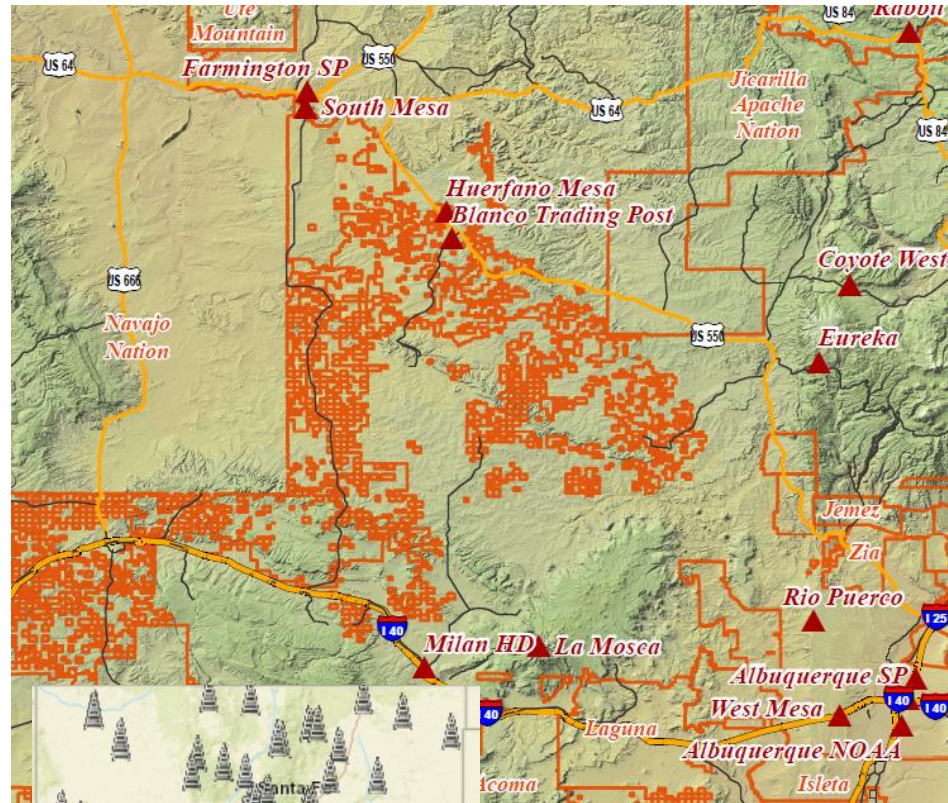
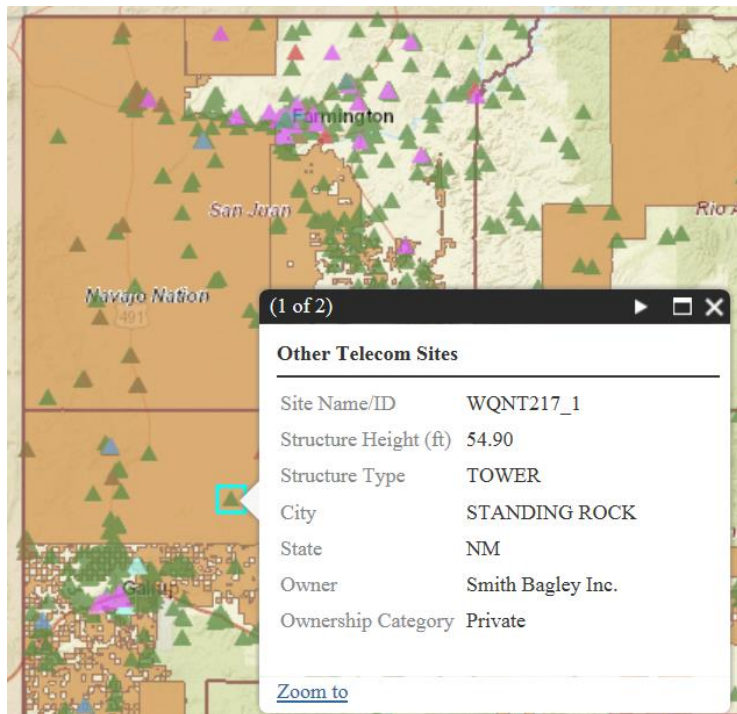
- Passcode Protected
- User Updates



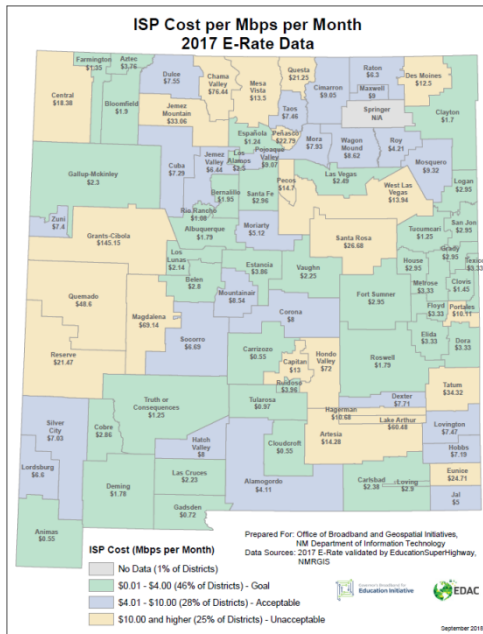
GeoSERVICES: DoIT Tower Conversion

STATE COMMUNICATION TOWERS:

- Total: 105 Towers
- Analog to Digital Conversion Completed
- Currently densifying with P25 Technology
- Boosting from 100 to 300 mags
- Subscription available



GeoSERVICES: Education



NM BROADBAND FOR EDUCATION

- \$65M Federal/\$6M State
- Cost \$14/\$4 mbps
- 115K New Kids Connected
- 98+% Schools Connected Ffiber)



Facilities within one mile radius to the school

Career Prep Alternative High School-Based Health Center |
Career Prep High School | Dine College - Shiprock South | Eva B.
Stokely Elementary | New Mexico Human Services Department -
Child Support Enforcement Division - County Office 9 | Nizhoni
Elementar

ISP·Contract·Expiration·by·School·District·
(Data·Transmission·and/or·Internet·Access·Only)

Data·Source:·USAC·2017·E·Rate·Data·&·E·Rate·data·validated·by·EducationSuperHighway

Alamogordo·Public·Schools—1211·Hawaii·Ave,·Alamogordo,·NM·88310

Internet·Service·Provider	Contract·Expiration·Date
CenturyLink·Qwest·Communications·Company·LLC	6/30/2019
TDS·Baja·Broadband·LLC	11/10/2019
Tularosa·Communications,·Inc.	6/30/2019

GeoCOMM: Synergistic Chatter



NEW MEXICO GEOGRAPHIC INFORMATION COUNCIL (NMGIC)

- **Function:** Geospatial Professionals Statewide and Beyond
- **Provides:** Digital Newsletter, Conferences, Workshops, Vendors, and Email Information
- **Fee:** \$30 Includes above and two box lunches
- **Join:** <http://nmgic.com/>



DOIT GEOSPATIAL ADVISORY COMMITTEE

- **Function:** Advises the State on Geospatial Issues (Standards, Data Acquisitions, etc.)
- **Membership:** State, Federal, Local, Industry, Public, and Professional Groups
- **Access:** No Restrictions and Meetings Open to All
- **Meetings:** Monthly on the Second Tuesday usually in Santa Fe
- **Provides:** Information Email Announcements (george.clarke@state.nm.us)
- **Website:** <http://www.gac.state.nm.us/>