



# NCIS

## The Navajo County Information System



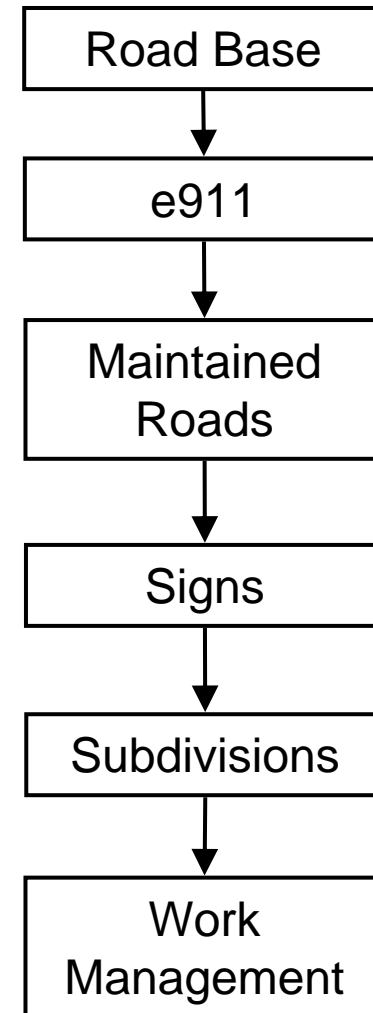
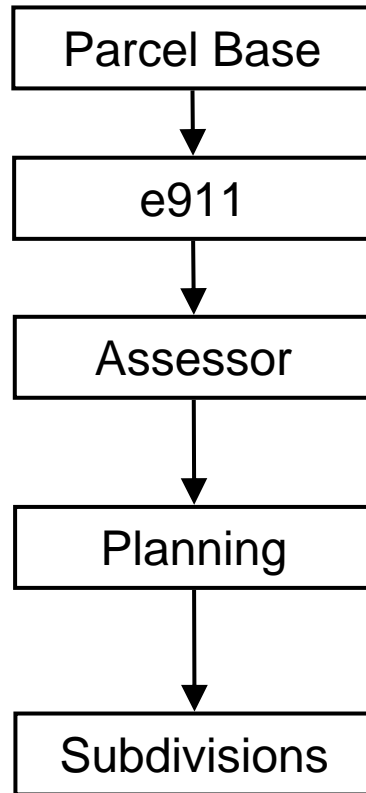
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- **The Navajo County Information System was initiated as a replacement for a legacy work management system.**
- **The managerial goal of the project was to use the work management system as a seed to grow an Enterprise Information Integration (EII) system.**

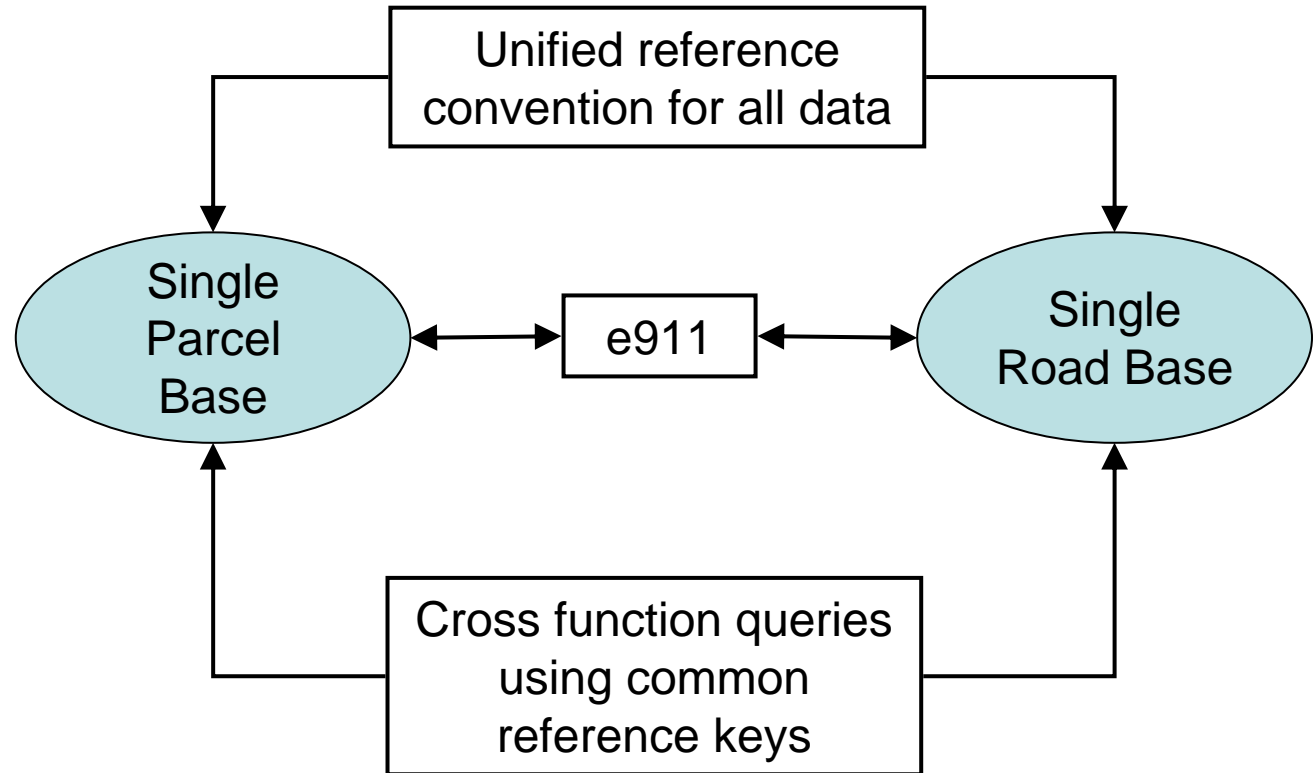
# Background

- **GIS director, a proponent of GIS as an integration tool, sanctioned the TxDOT MST approach.**
- **The County dealt with engineering-scale roads and planning-scale parcels.**
- **The GIS director viewed GIS augmented with GPS precision as means to bring these two worlds together within an integrated environment.**

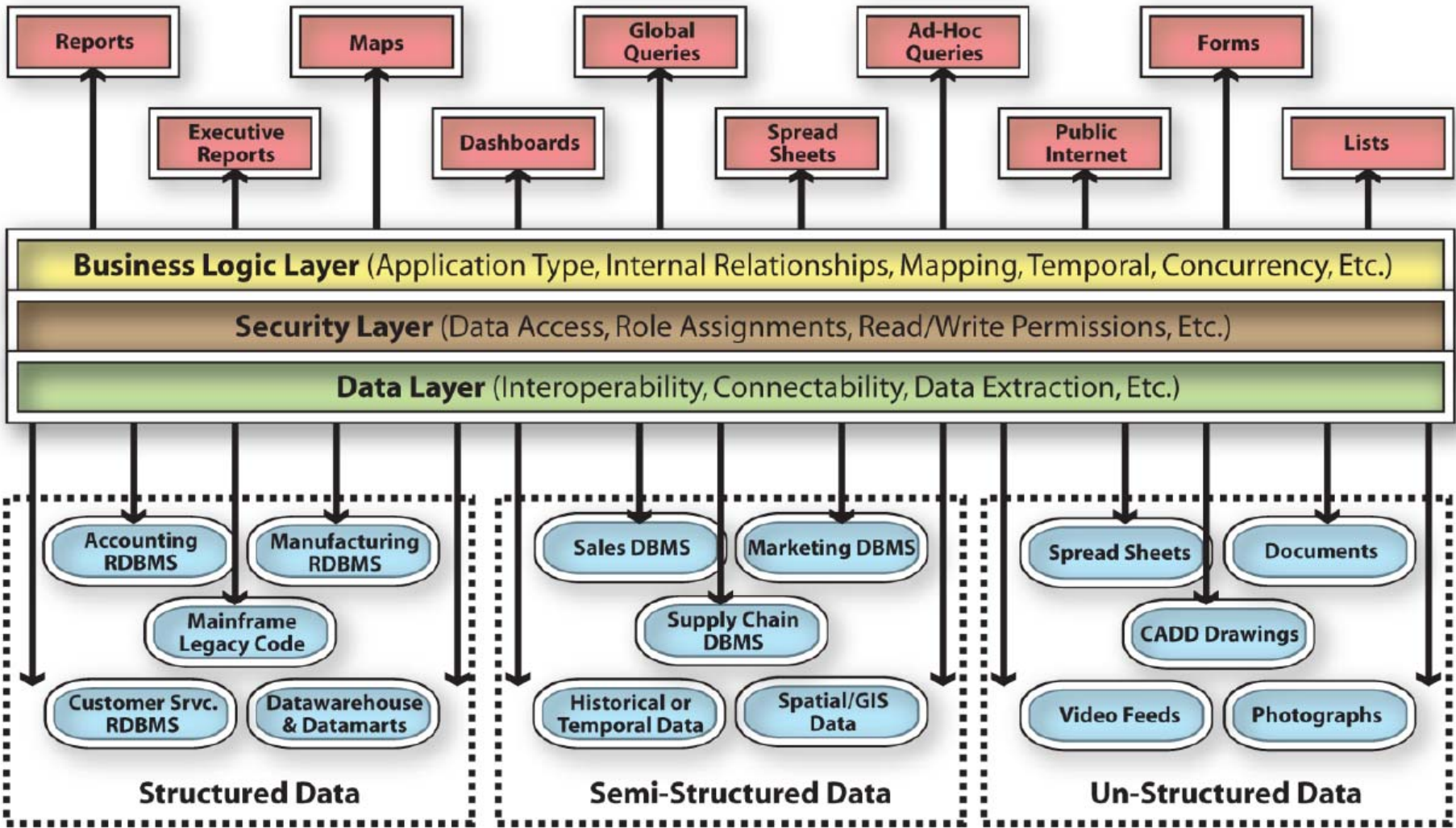
# Two Disparate Dataset Areas



# E11 Approach



# Architecture



# Differentiation

- **Database relationships modeled as metadata simplifying IT/DBA interactions.**
- **Hardcore IT credentials not required to use the application development side of the product.**
- **Ground-up as a fused spatial-temporal EII system.**

# Demonstration

Database Connections Subtab		
USAGE STATUS	CONNECTION NAME	CONNECTION STRING
33 <span>UP</span>	<u>ALRIS</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=sa;Initial Catalog=ALRIS;Data Source=mikasa;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation ID=mikasa;Use Encryption for Data=False;Tag with column collation when possible=False;server=mikasa;
1 <span>DOWN</span>	<u>SVRSQL1</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=genii_user;Initial Catalog=assessor;Data Source=SVREXTSQL1;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation ID=SVREXTSQL1;Use Encryption for Data=False;Tag with column collation when possible=False;
4 <span>UP</span>	<u>PetroVend</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=genii_user;Initial Catalog=petrovend;Data Source=mikasa;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation ID=mikasa;Use Encryption for Data=False;Tag with column collation when possible=False;server=mikasa;
53 <span>UP</span>	<u>NCIS_FLEET</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=genii_user;Initial Catalog=NCIS_FLEET;Data Source=mikasa;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation ID=mikasa;Use Encryption for Data=False;Tag with column collation when possible=False;server=mikasa;
17 <span>UP</span>	<u>Health</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=genii_user;Initial Catalog=Health;Data Source=mikasa;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation ID=mikasa;Use Encryption for Data=False;Tag with column collation when possible=False;server=mikasa;
5 <span>UP</span>	<u>PW_CONTRACTS</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=genii_user;Initial Catalog=PW_CONTRACTS;Data Source=mikasa;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation ID=mikasa;Use Encryption for Data=False;Tag with column collation when possible=False;server=mikasa;
12 <span>UP</span>	<u>NCIS_BUILDING</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=genii_user;Initial Catalog=NCIS_BUILDING;Data Source=mikasa;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation ID=mikasa;Use Encryption for Data=False;Tag with column collation when possible=False;server=mikasa;
24 <span>UP</span>	<u>NCIS_PZ</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=genii_user;Initial Catalog=NCIS_PZ;Data Source=mikasa;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation ID=mikasa;Use Encryption for Data=False;Tag with column collation when possible=False;server=mikasa;
8 <span>UP</span>	<u>CCIS</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=sa;Initial Catalog=CCIS;Data Source=mikasa;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation ID=mikasa;Use Encryption for Data=False;Tag with column collation when possible=False;
0 <span>DOWN</span>	<u>NCIS (SDE)</u>	Provider=SQLOLEDB.1;Persist Security Info=False;User ID=genii_user;Initial Catalog=ncis;Data Source=SVREXTSQL1;Use Procedure for Prepare=1;Auto Translate=True;Packet Size=4096;Workstation



# Changes to Methodology

- **Application development mirrors a writers' method. Write it, and then get it right.**
- **If one cannot write a technical paper from beginning to end without error or rewrite, why do we expect this of software applications?**

# Changes to GIS Methods

- **Mission of GIS shifted from map making (the G) to data integration through location (the IS).**
- **Mission focus shifted from getting line work straight to the association of data with line work to ensure interoperability.**
- **GIS unit changed its name to Information Services.**


# Key Project Points

- **Current enterprise is 300 data application with extreme connectivity.**
- **But, that enterprise was built one application at a time.**
- **Initially “prime data” had a home and was not to be touched. Only data with no home were to be ‘integrated.’**
- **Within a year “prime data” either tapped through ODBC or unplugged if enterprise non-cooperative.**

# Questions

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