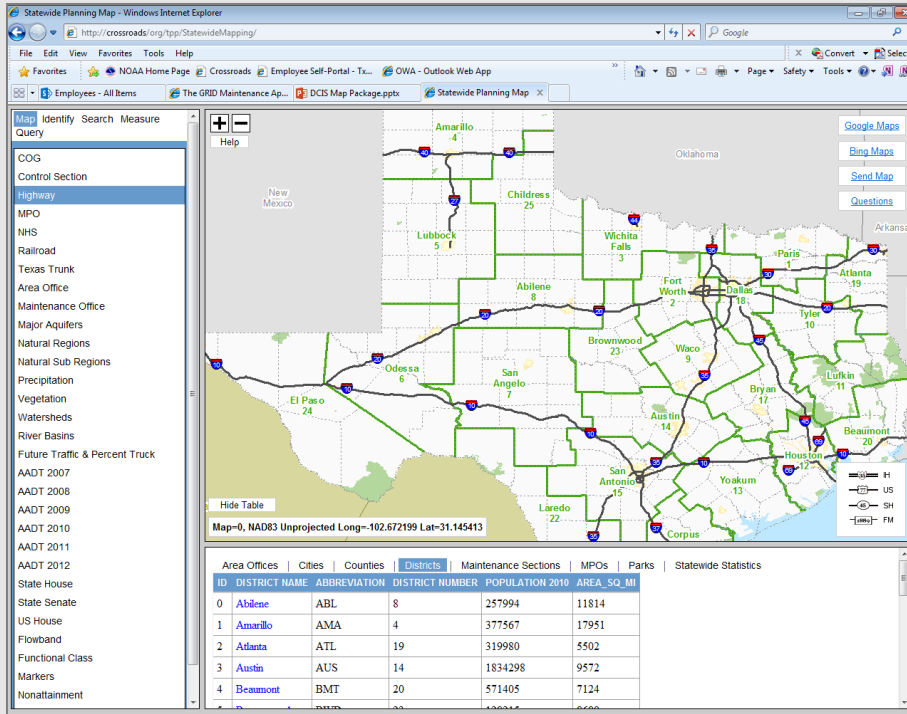




STATEWIDE PLANNING MAP DESKTOP

Jenn Sylvester

Statewide Planning Map - Desktop



What is it?

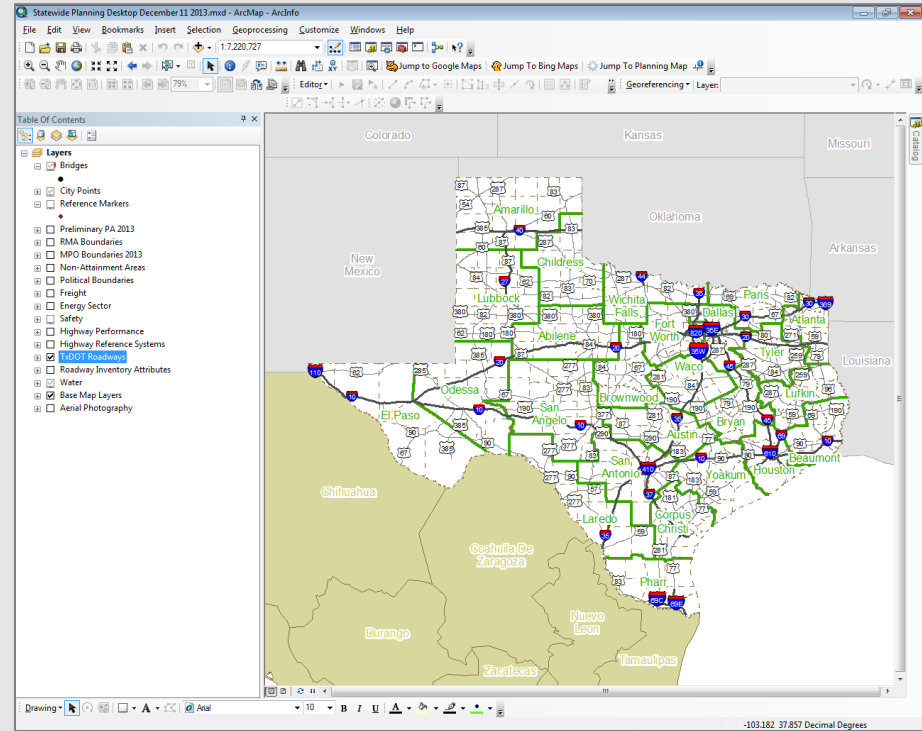
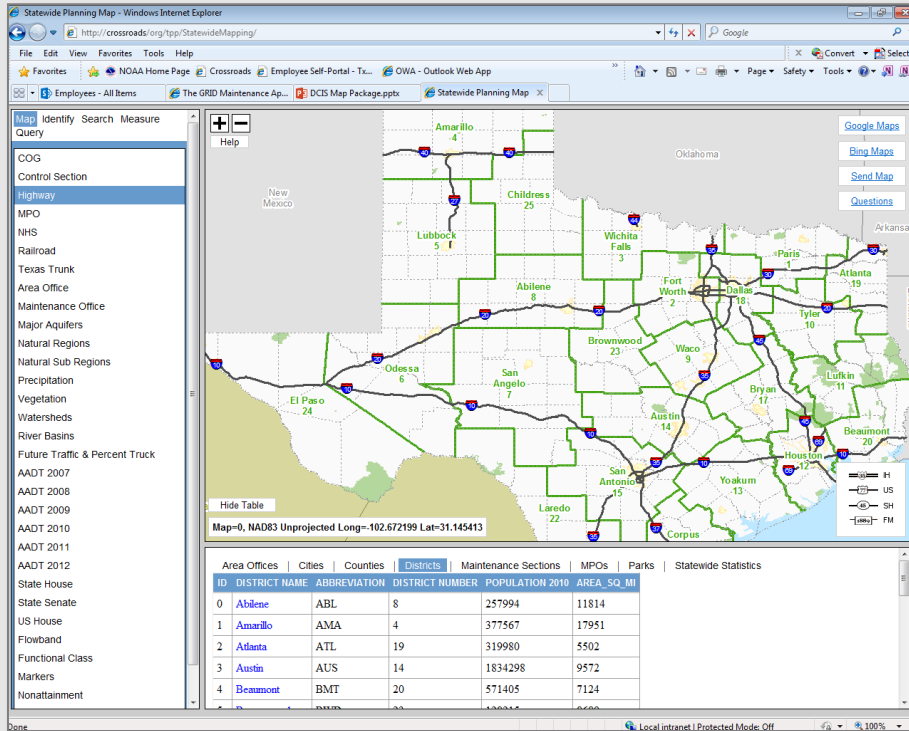
- ESRI map Document
- Software Program used for mapping and analysis purposes
- Current package available internally to TxDOT users and contractors

Purpose:

- Tool to increase data awareness
- Provides TxDOT employees a way to view/query roadway data
- Provide the tools to create custom data files and maps

Statewide Planning Map - Desktop

- How is it more useful than the Planning Map Web?
 - More Query Options
 - Definition and location queries
 - Export layers and maps
 - Customizable Appearance



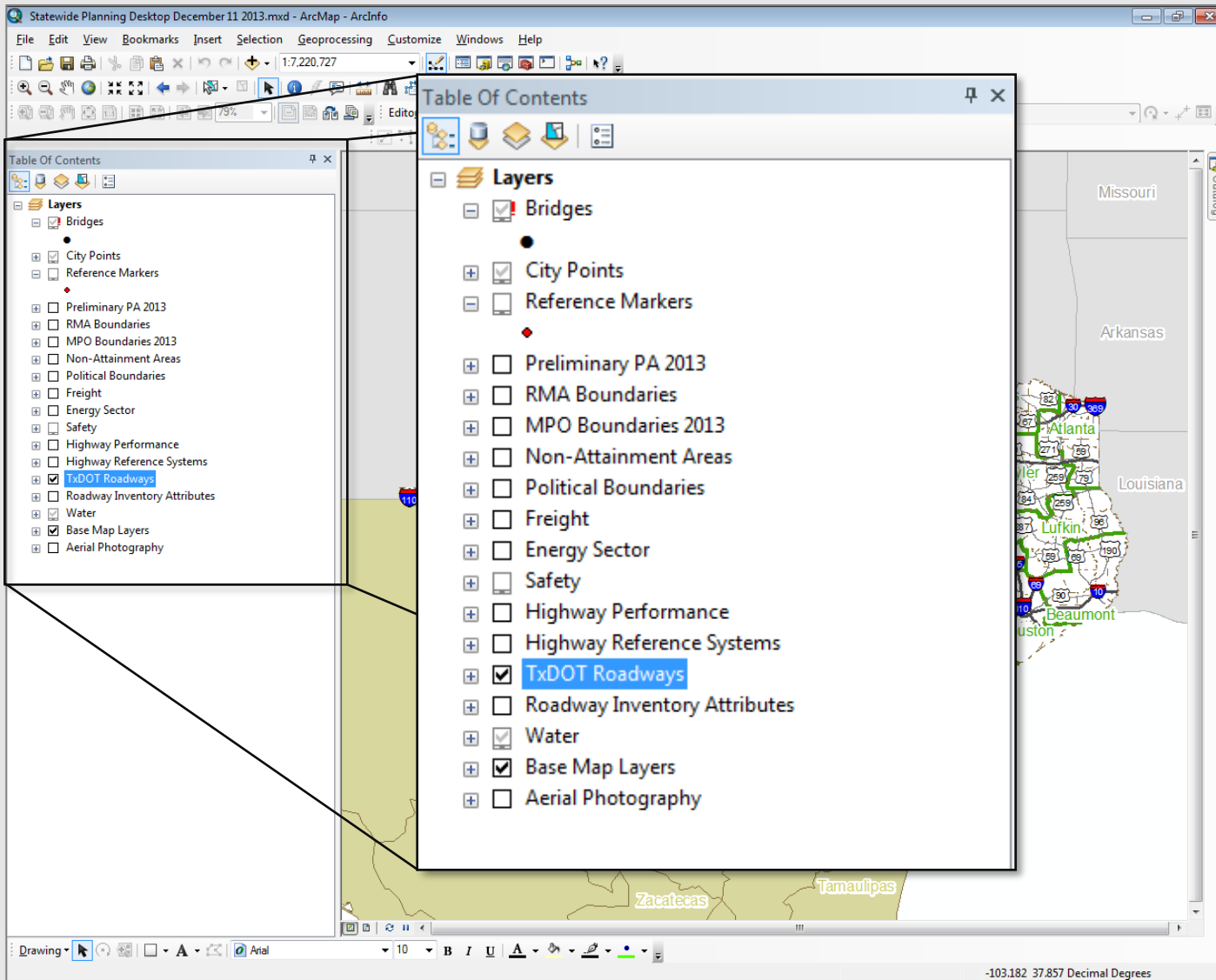
Statewide Planning Map - Desktop

- Where is the Planning Map Desktop located?
 - [SharePoint](#)
 - ESRI Map Package
 - Instruction documents

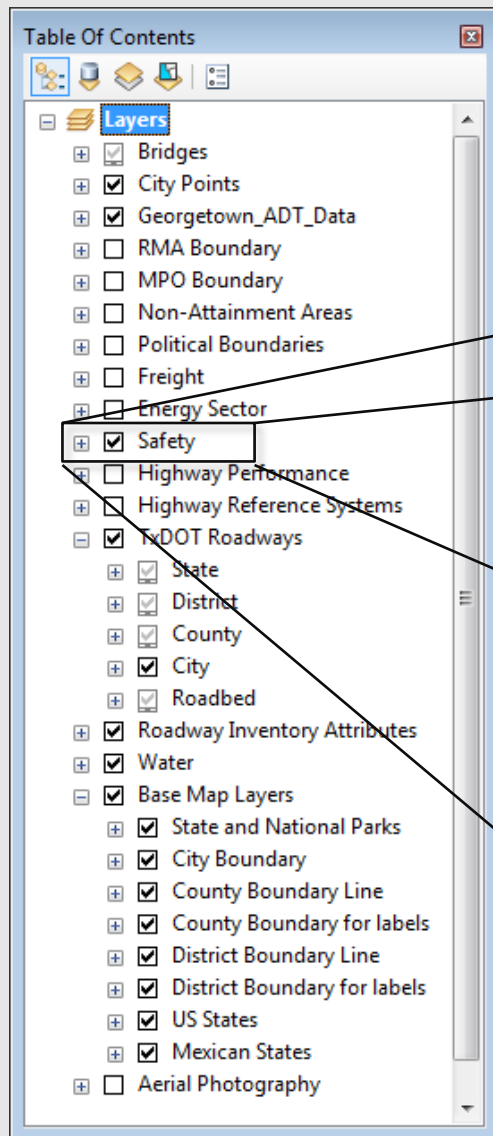
The screenshot shows the Office 365 SharePoint interface. The top navigation bar includes 'Office 365' and links to 'Outlook', 'Calendar', 'People', and 'Newsfeed'. Below this, the 'BROWSE' tab is active, showing 'FILES' and 'LIBRARY' options. The main content area displays the 'Shared Documents' library for 'GIS Coordination'. The left sidebar shows the 'Sites' list with 'TPP-HPMS', 'Software Testing', and 'HPMS' listed. The 'All Documents' view is selected, and a search bar is present. The document list table is as follows:

Name	Document Class	Record Type	Created	Created By	Modified	Modified By
Facilities_Package	Transportation Planning	Transportation Planning	February 11	Chris Bardash	February 11	Chris Bardash
Instructions for Using the Statewide Planning Map Desktop Version	Data Management	GIS, Road Inventory, HPMS	December 30, 2013	Chris Bardash	December 30, 2013	Chris Bardash
Statewide Planning Desktop December 11 2013	Transportation Planning	GIS, Road Inventory, HPMS	December 19, 2013	Michael Zugelder	December 19, 2013	Michael Zugelder

Statewide Planning Map - Layers

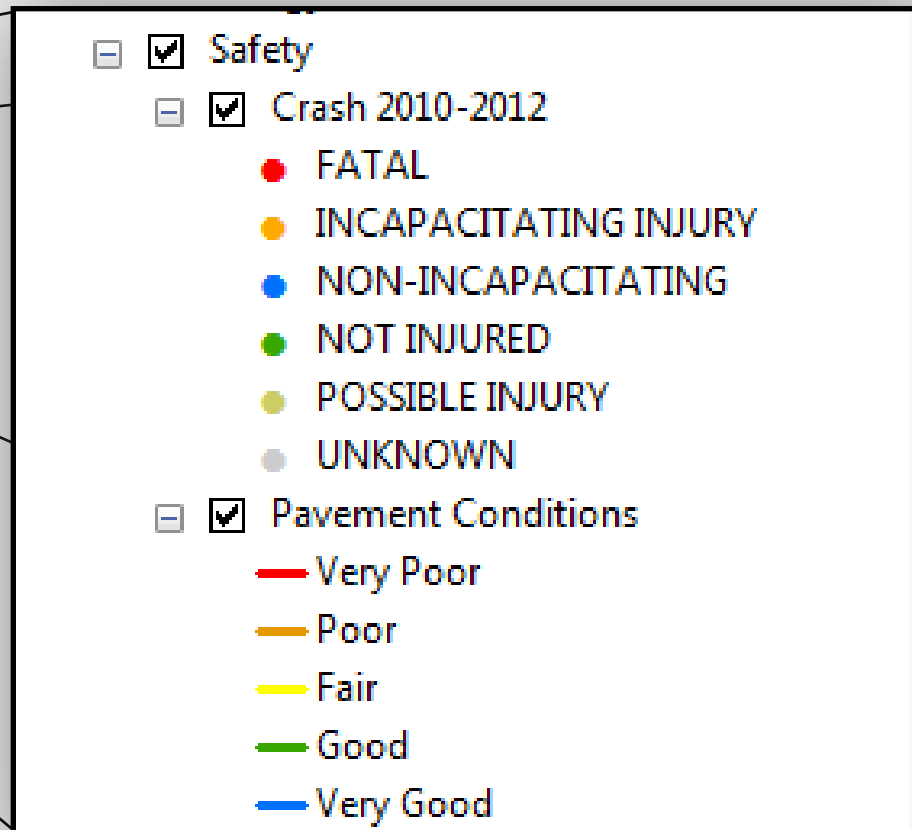


Statewide Planning Map – Group Layers

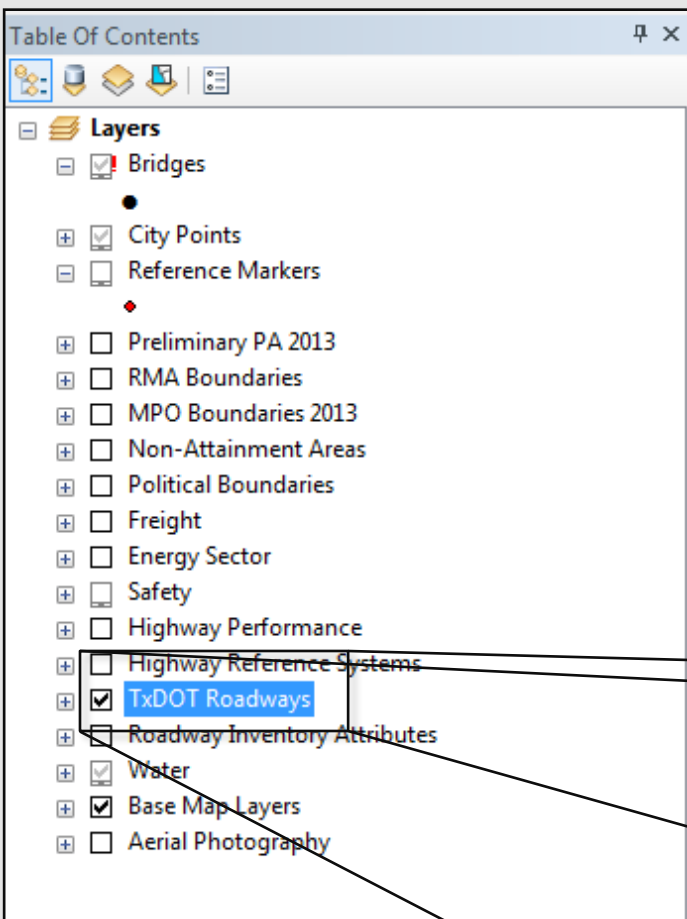


What are they?

- Some layers in the map are 'Group Layers' that hold multiple datasets and are grouped by function

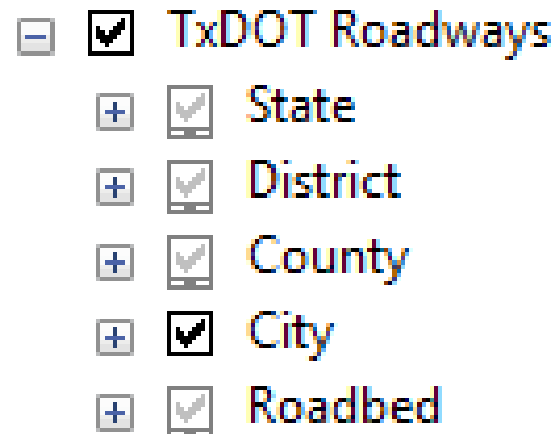


Statewide Planning Map – Roadway Group Layer



How does it Function?

- The TxDOT Roadways Group layer has multiple instances of the roadway dataset grouped
- Each group only displays at specific scale ranges
- This makes labeling and map views much easier to scale for mapping purposes



Statewide Planning Map – Base Map Layers

What are they?

- The layers that create the style of the map
- Grouped together
- Boundary lines
- Polygons for labels
- Can be queried/used in analysis

Table Of Contents

- ☒ Layers
 - ☒ Bridges
 - ☒ City Points
 - ☒ Georgetown_ADT_Data
 - ☐ RMA Boundary
 - ☐ MPO Boundary
 - ☐ Non-Attainment Areas
 - ☐ Political Boundaries
 - ☐ Freight
 - ☐ Energy Sector
 - ☒ Safety
 - ☐ Highway Performance
 - ☐ Highway Reference Systems
 - ☒ TxDOT Roadways
 - ☒ Roadway Inventory Attributes
 - ☒ Water
 - ☒ Base Map Layers
 - ☒ State and National Parks
 - ☒ City Boundary
 - ☒ County Boundary Line
 - ☒ County Boundary for labels
 - ☒ District Boundary Line
 - ☒ District Boundary for labels
 - ☒ US States
 - ☒ Mexican States
 - ☐ Aerial Photography

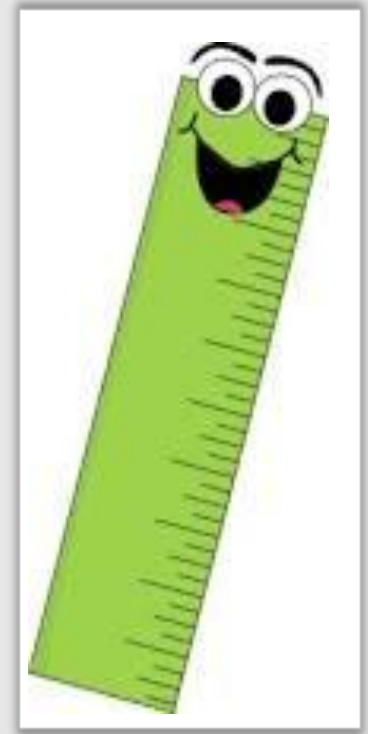
Table Of Contents

- ☒ Base Map Layers
 - ☒ State and National Parks
 - ☒ City Boundary
 - <all other values>
 - CLR_CD
 - 1
 - 2
 - 3
 - 4
 - 5
 - ☒ County Boundary Line
 - ☒ County Boundary for labels
 - ☒ District Boundary Line
 - ☒ District Boundary for labels
 - ☒ US States
 - ☒ Mexican States

Statewide Planning Map – Tools

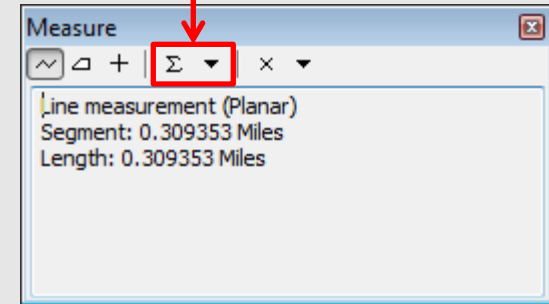
Interactive Tools

- Creating Custom Data
 - Queries
 - Export Shapefile
 - Create Selection Layer
 - Symbology
- Add other spatial data to a map
- Find DFO's
- Measure Tools
- Create a PDF Map



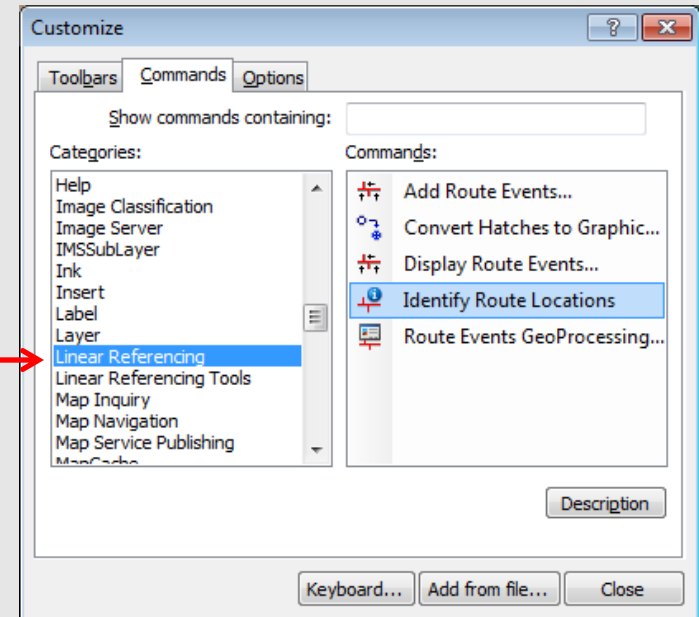
Measure Tool

- Measure distances between highways or other landmarks
- Can adjust measure value between units



Route Identify Tool for Route DFO

- Returns the DFO value from the point the user clicks on the line
- Not on standard tool bar; must be added



Spatial Data – Create Your Own

Why?

- Provides users the ability to create data that fits their specific needs

How?

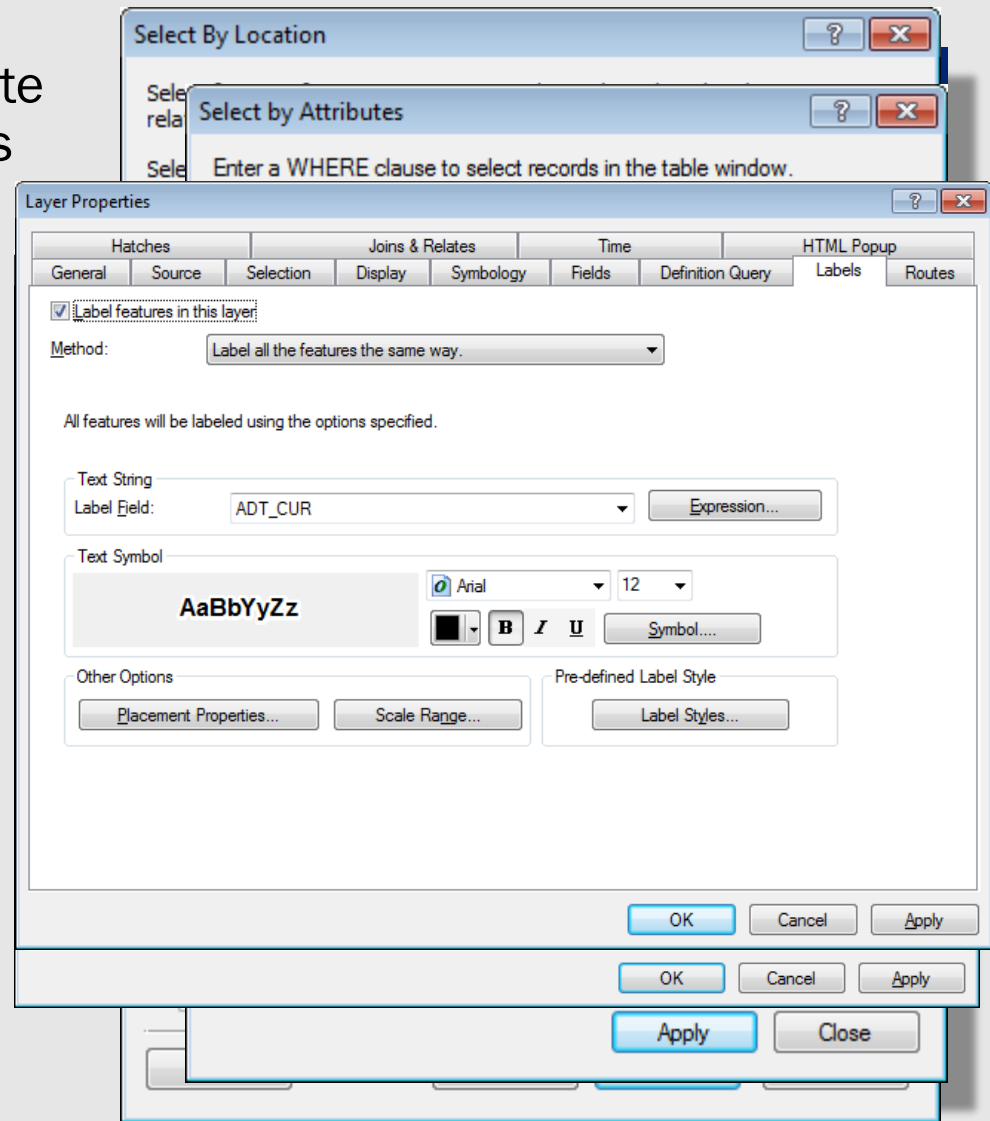
- Data Queries
 - *Definition Queries*
 - *Selection Queries*
 - *Spatial Queries*

Represent data in meaningful ways

- Create custom symbologies
- Custom label styles
- Show what is important

Result:

- Custom maps!



Spatial Data

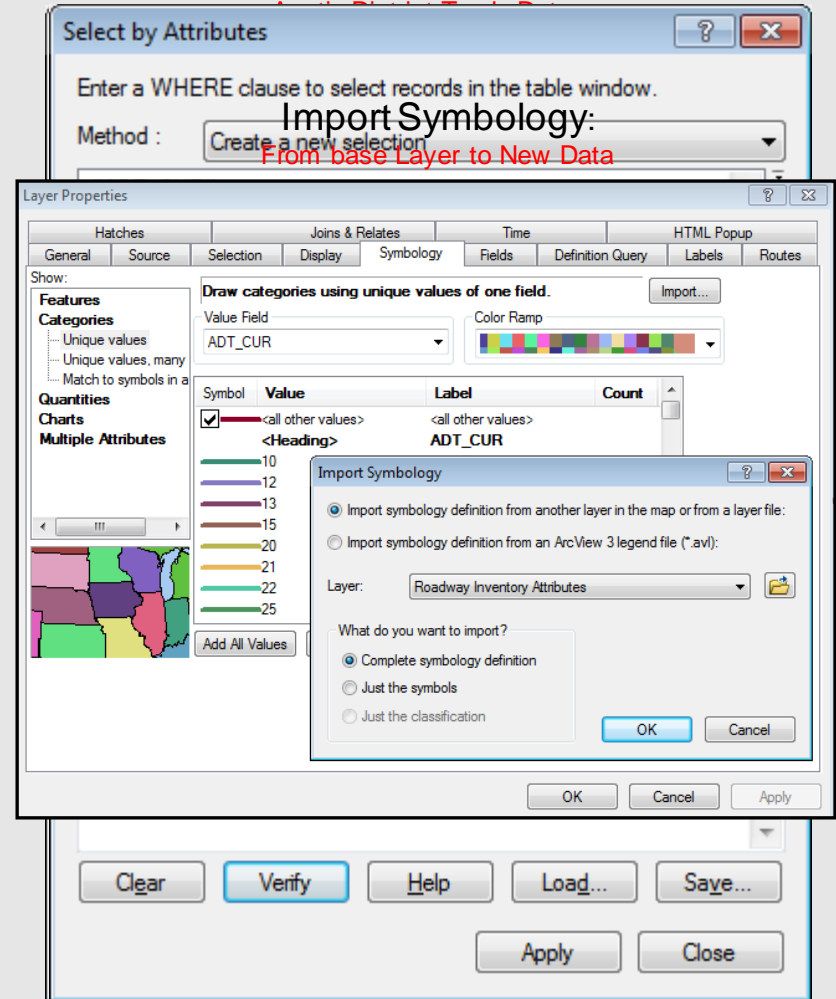
Querying Data

- Find the answers you need!
 - *Query and view roadway attributes and roadbed features*
- Exporting data
 - *Create and share custom datasets*
 - *Create tables and reports*
- Create selection layers
 - *Select and edit subsets of data*
 - *Can edit sets of records in the original dataset without losing the selection*

Map Symbology

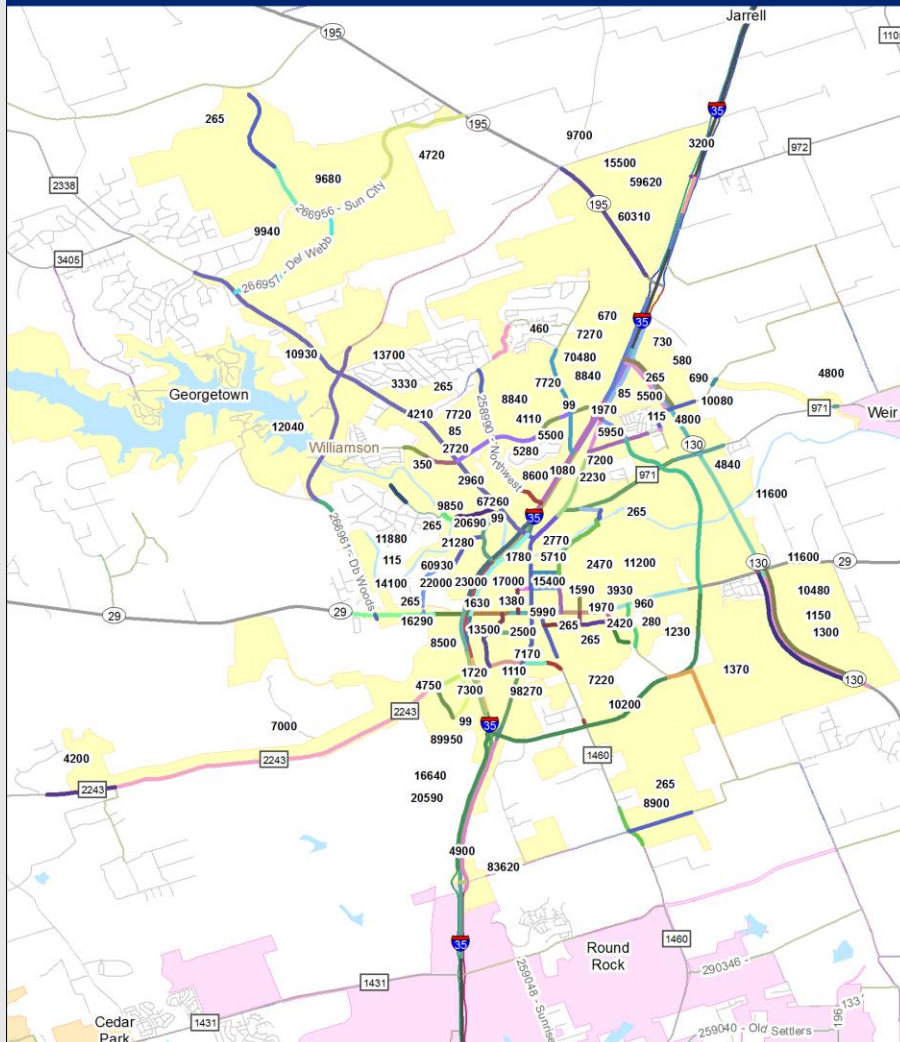
- Import from other layer
- Control the look/feel of the map

Query Roadway Inventory:
Export Roadways Inventory Selection:



Customizing Maps

Georgetown Average Daily Traffic

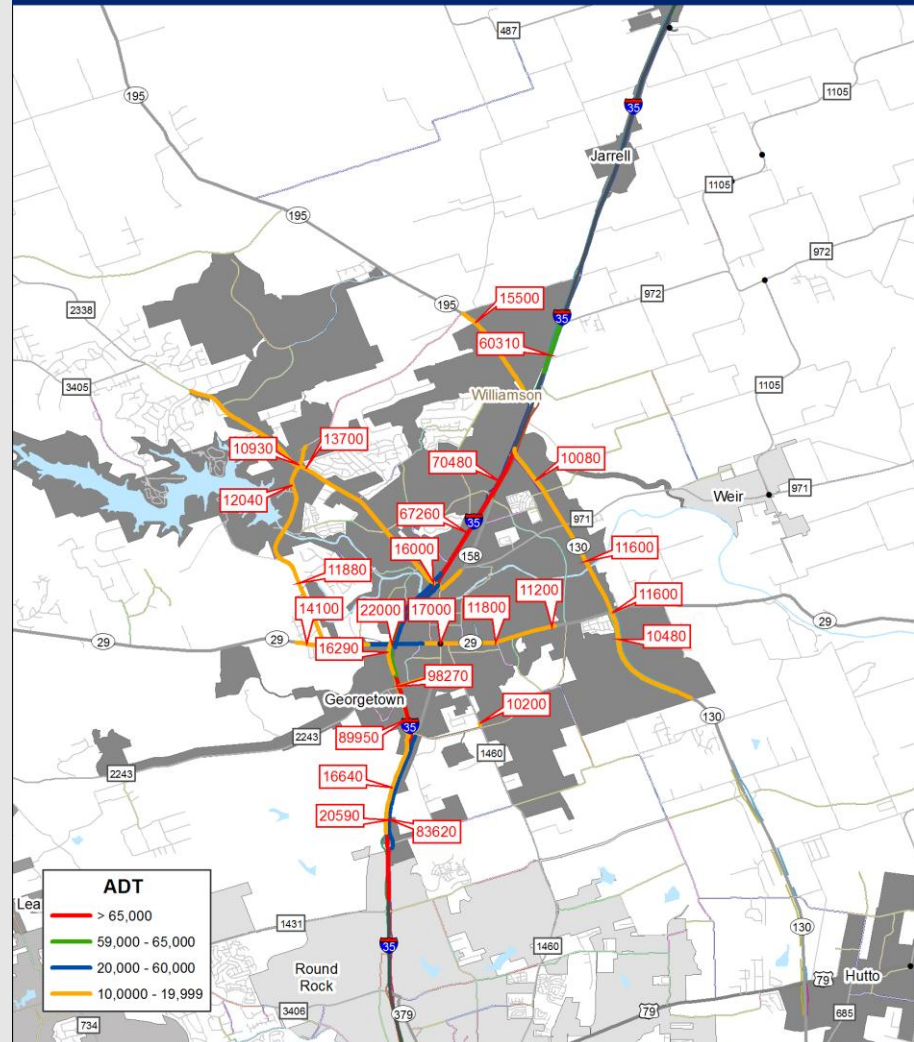


Texas Department of Transportation
Transportation Planning and Programming Division
Data Analysis, Mapping and Reporting Branch
Thursday, May 29, 2014

Copyright 2014
Texas Department of Transportation
Notice
This map was produced for internal use
with the Texas Department of Transportation.
Accuracy is limited to the validity of available
data as of December 31, 2013.



High Traffic Roadways - Georgetown



Texas Department of Transportation
Transportation Planning and Programming Division
Data Analysis, Mapping and Reporting Branch
Friday, May 30, 2014

Copyright 2014
Texas Department of Transportation
Notice
This map was produced for internal use
with the Texas Department of Transportation.
Accuracy is limited to the validity of available
data as of December 31, 2013.



Basic Queries and Data Exports

- Reference Markers for Specific Highways
- County Roads within a Specific County
- Frontage Road and Roadbed Data
- Centerline Files
- District, County, or City Data
- Functionally Classified Streets
- Distances
- DFO Values
- Find the answers with ArcMap!





THANK YOU!

Mike Zugelder
Jennifer Sylvester

Texas Department of Transportation
(512) 486-5052 | TPP-GIS@txdot.gov



STATEWIDE PLANNING MAP DESKTOP

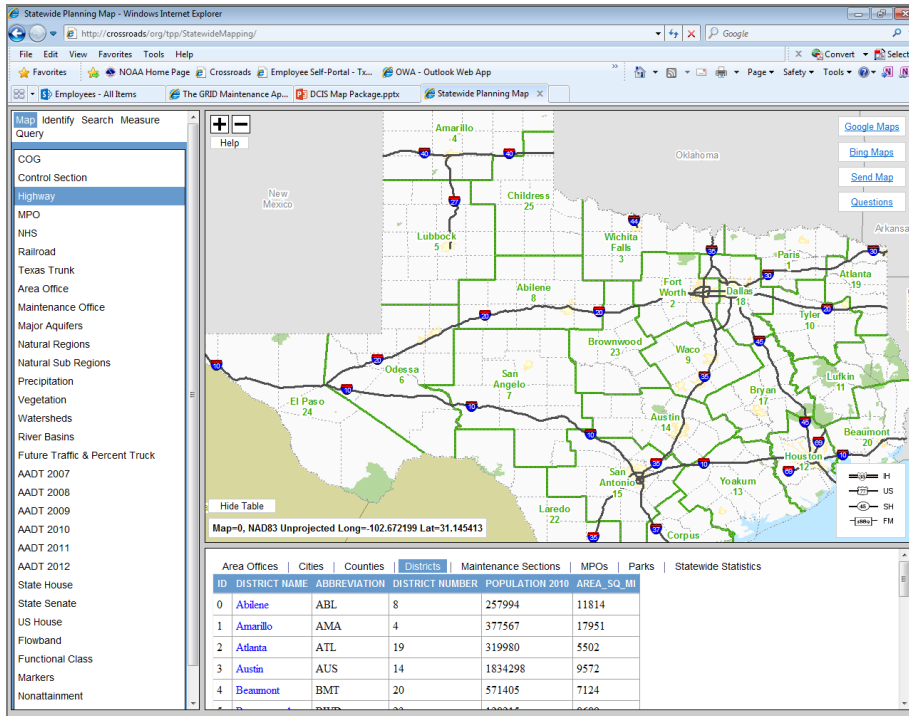
Jenn Sylvester

Statewide Planning Map - Desktop

- ESRI map Document
- Software Program used for mapping and analysis purposes
- Current package available internally to TxDOT users and contractors

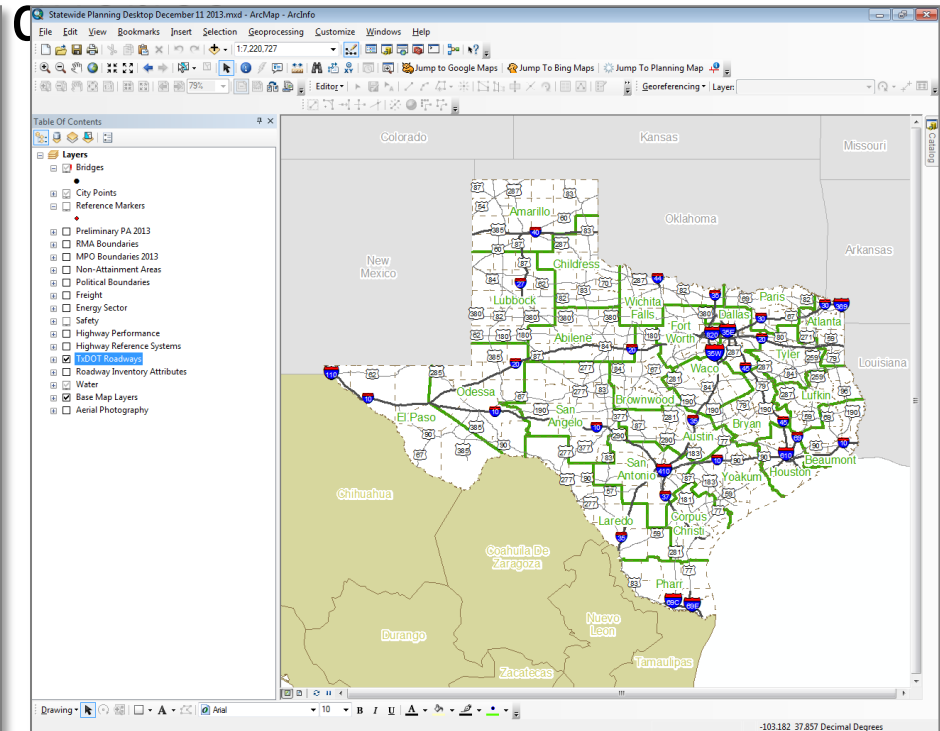
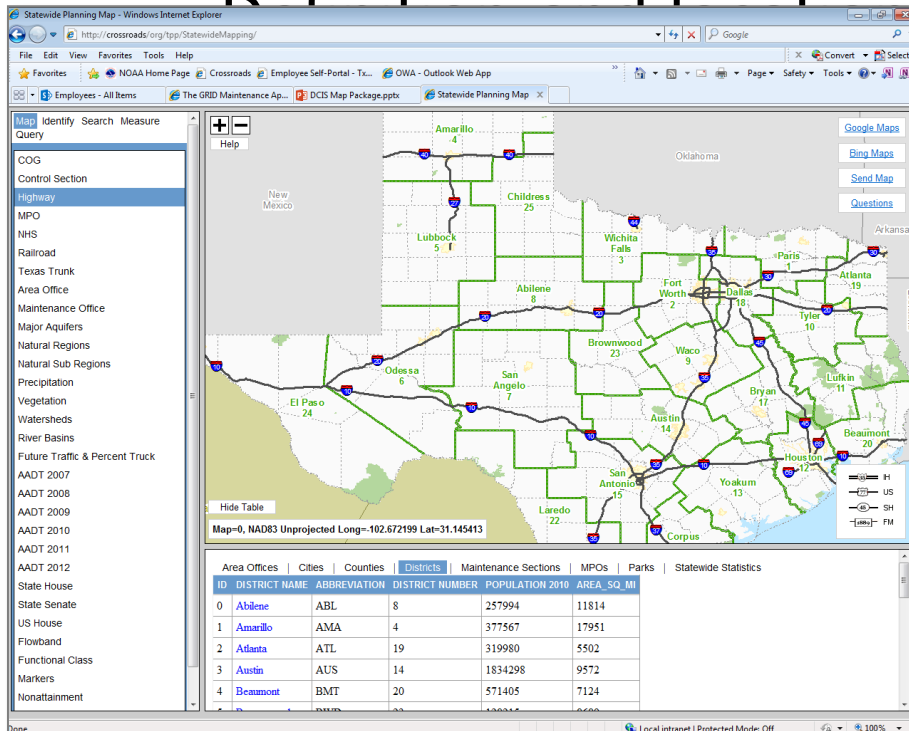
Purpose:

- Tool to increase data awareness
- Provides TxDOT employees a way to view/query roadway data
- Provide the tools to create custom data files and maps



Statewide Planning Map - Desktop

- How is it more useful than the Planning Map Web?
 - Export layers and maps
 - Customizable Appearance



Statewide Planning Map - Desktop

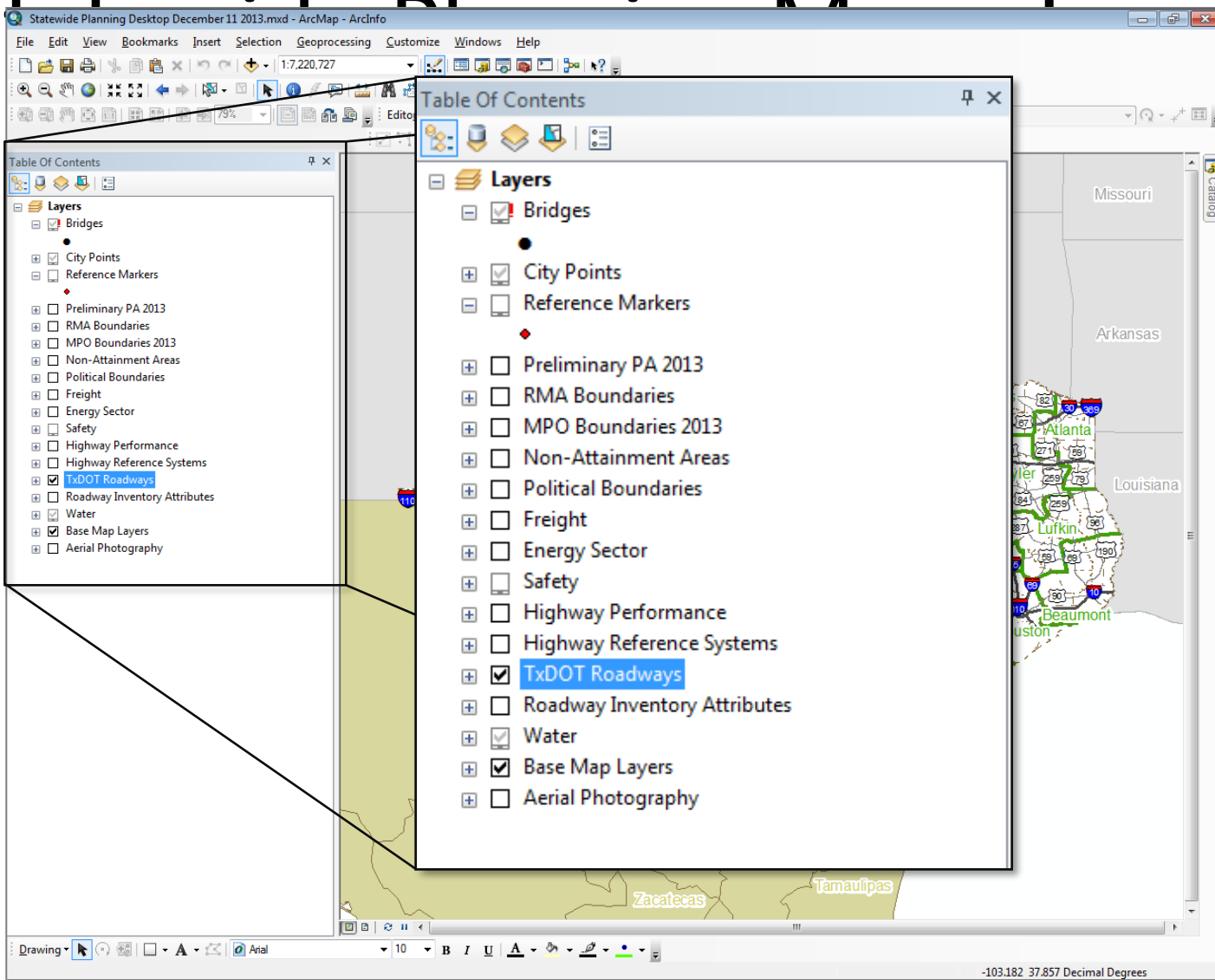
- Where is the Planning Map Desktop located?
 - [SharePoint](#)
 - ESRI Map Package

The screenshot shows the Office 365 SharePoint interface for the 'GIS Coordination' site. The left sidebar lists sites including TPP-HPMS, Software Testing, HPMS, Pictures, County Roads, Libraries, Shared Documents, and Workgroup Pages. The main content area displays a list of documents. The document 'Instructions for Using the Statewide Planning Map Desktop Version' is highlighted with a red box. Below it, another document 'Statewide Planning Desktop December 11 2013' is also highlighted with a red box. The table below lists the documents and their details.

Name	Document Class	Record Type	Created	Created By	Modified	Modified By
Facilities_Package	Transportation Planning	Transportation Planning	February 11	Chris Bardash	February 11	Chris Bardash
Instructions for Using the Statewide Planning Map Desktop Version	Data Management	GIS, Road Inventory, HPMS	December 30, 2013	Chris Bardash	December 30, 2013	Chris Bardash
Statewide Planning Desktop December 11 2013	Transportation Planning	GIS, Road Inventory, HPMS	December 19, 2013	Michael Zugelder	December 19, 2013	Michael Zugelder

S

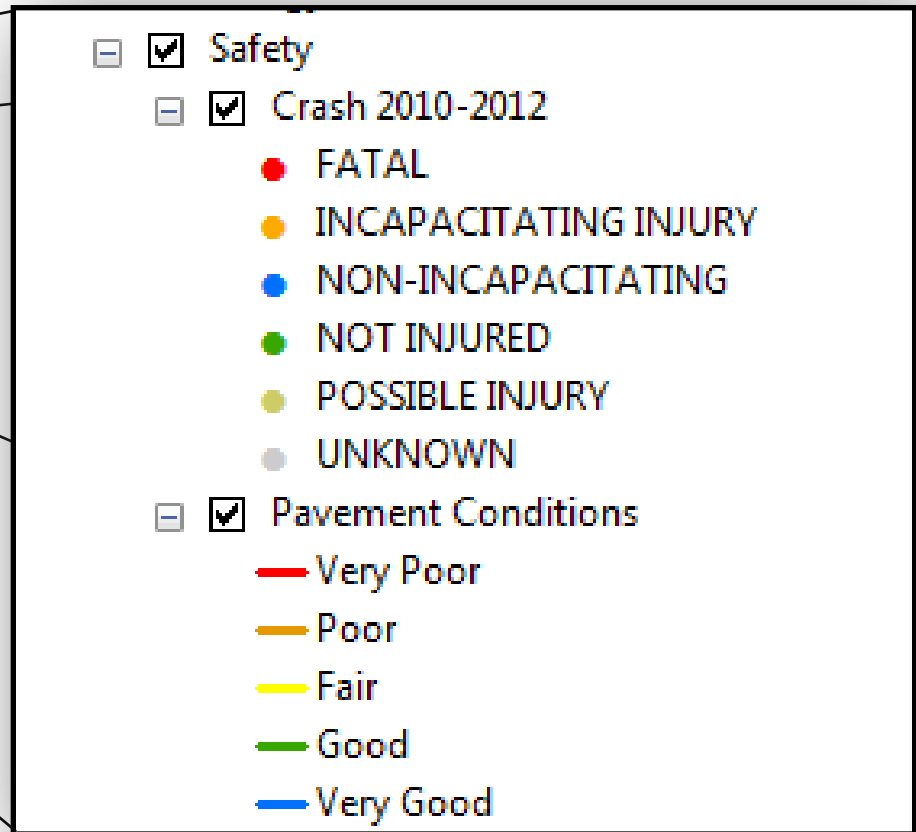
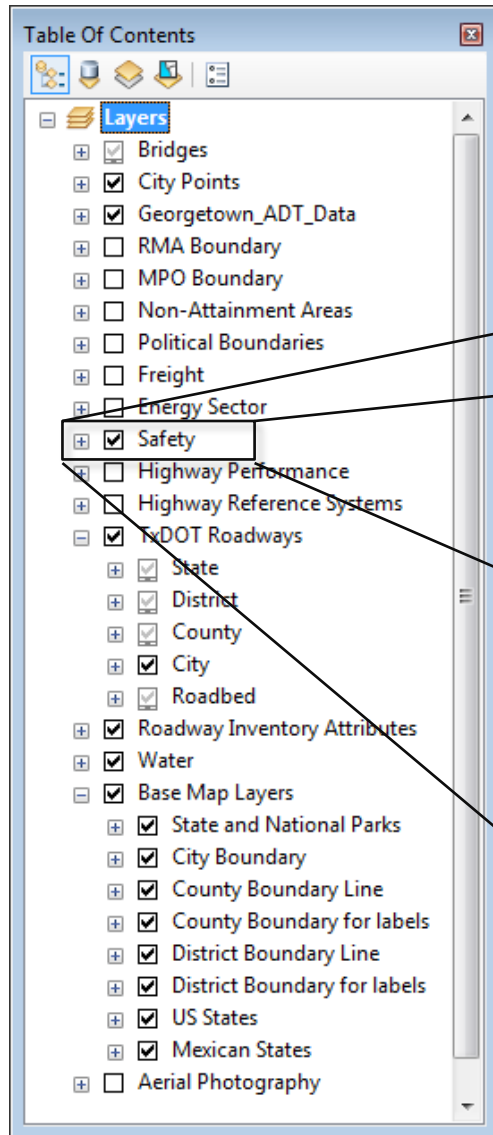
rs



Statewide Planning Map – Group

What are they? Layers

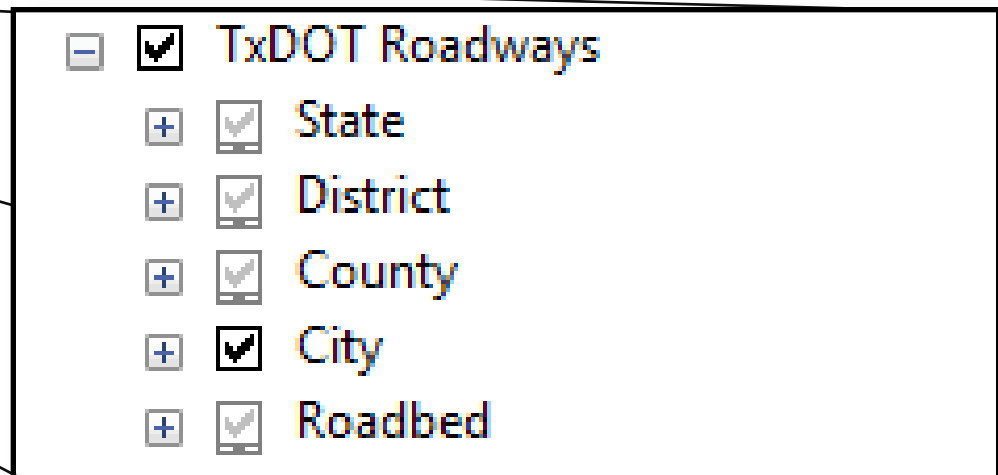
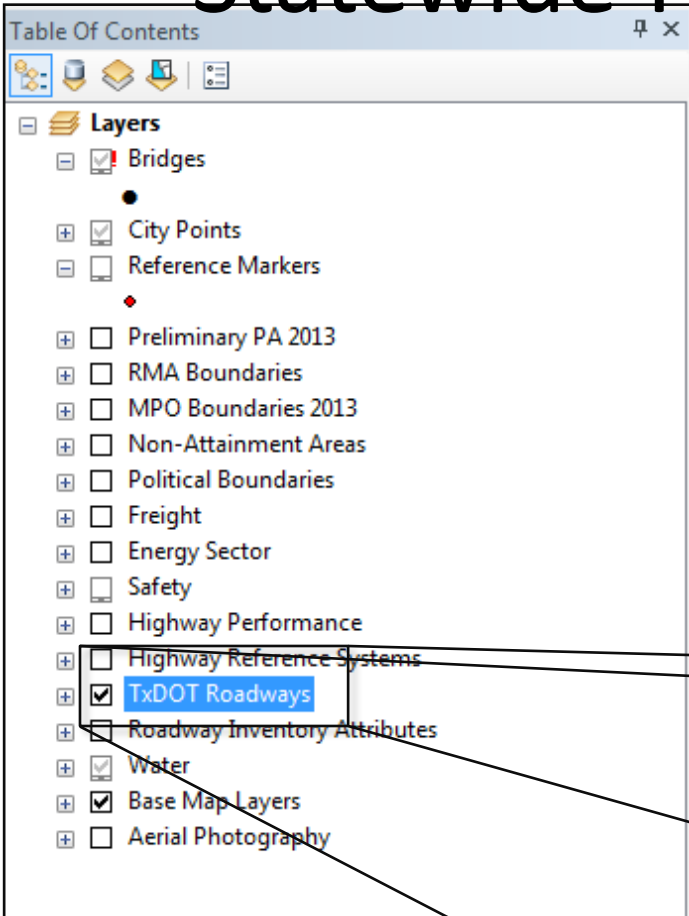
- Some layers in the map are 'Group Layers' that hold multiple datasets and are grouped by function



Statewide Planning Map – Roadway

How does it Function?

- The TxDOT Roadways Group layer has multiple instances of the roadway dataset grouped
- Each group only displays at specific scale ranges
- This makes labeling and map views much easier to scale for mapping purposes



Statewide Planning Map – Base

What are they?

- The layers that create the style of the map
- Grouped together
- Boundary lines
- Polygons for labels
- Can be queried/used in analysis

Map Layers

Table Of Contents

- ☒ Bridges
- ☒ City Points
- ☒ Georgetown_ADT_Data
- ☐ RMA Boundary
- ☐ MPO Boundary
- ☐ Non-Attainment Areas
- ☐ Political Boundaries
- ☐ Freight
- ☐ Energy Sector
- ☒ Safety
- ☐ Highway Performance
- ☐ Highway Reference Systems
- ☒ TxDOT Roadways
- ☒ Roadway Inventory Attributes
- ☒ Water
- ☒ Base Map Layers
 - ☒ State and National Parks
 - ☒ City Boundary
 - ☒ County Boundary Line
 - ☒ County Boundary for labels
 - ☒ District Boundary Line
 - ☒ District Boundary for labels
 - ☒ US States
 - ☒ Mexican States
- ☐ Aerial Photography

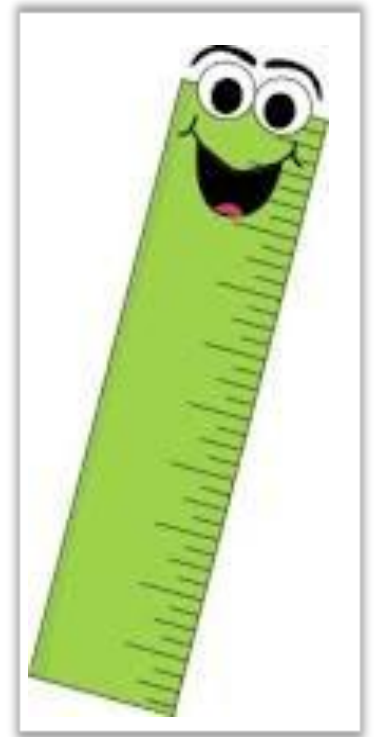
Table Of Contents

- ☒ Base Map Layers
 - ☒ State and National Parks
 - ☒ City Boundary
 - <all other values>
 - CLR_CD
 - 1
 - 2
 - 3
 - 4
 - 5
 - ☒ County Boundary Line
 - ☒ County Boundary for labels
 - ☒ District Boundary Line
 - ☒ District Boundary for labels
 - ☒ US States
 - ☒ Mexican States

Statewide Planning Map – Tools

Interactive Tools

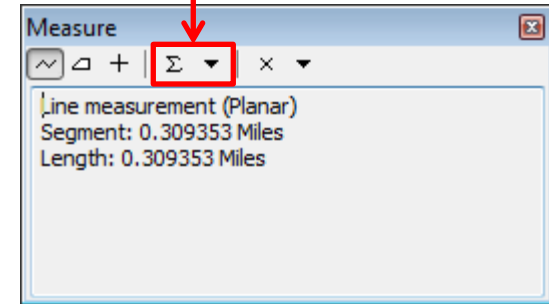
- Creating Custom Data
 - Queries
 - Export Shapefile
 - Create Selection Layer
 - Symbology
- Add other spatial data to a map
- Find DFO's
- Measure Tools
- Create a PDF Map



Spatial Data

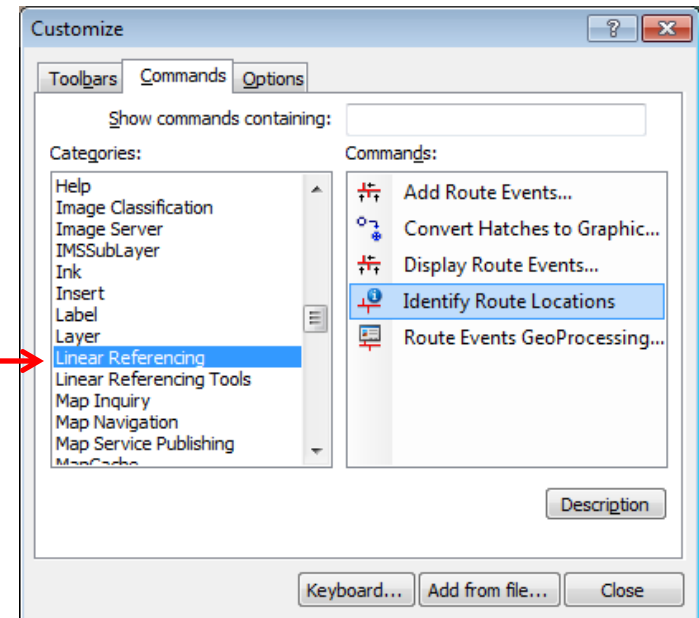
Measure Tool

- Measure distances between highways or other landmarks
- Can adjust measure value between units



Route Identify Tool for Route DFO

- Returns the DFO value



Spatial Data – Create Your Own

Why?

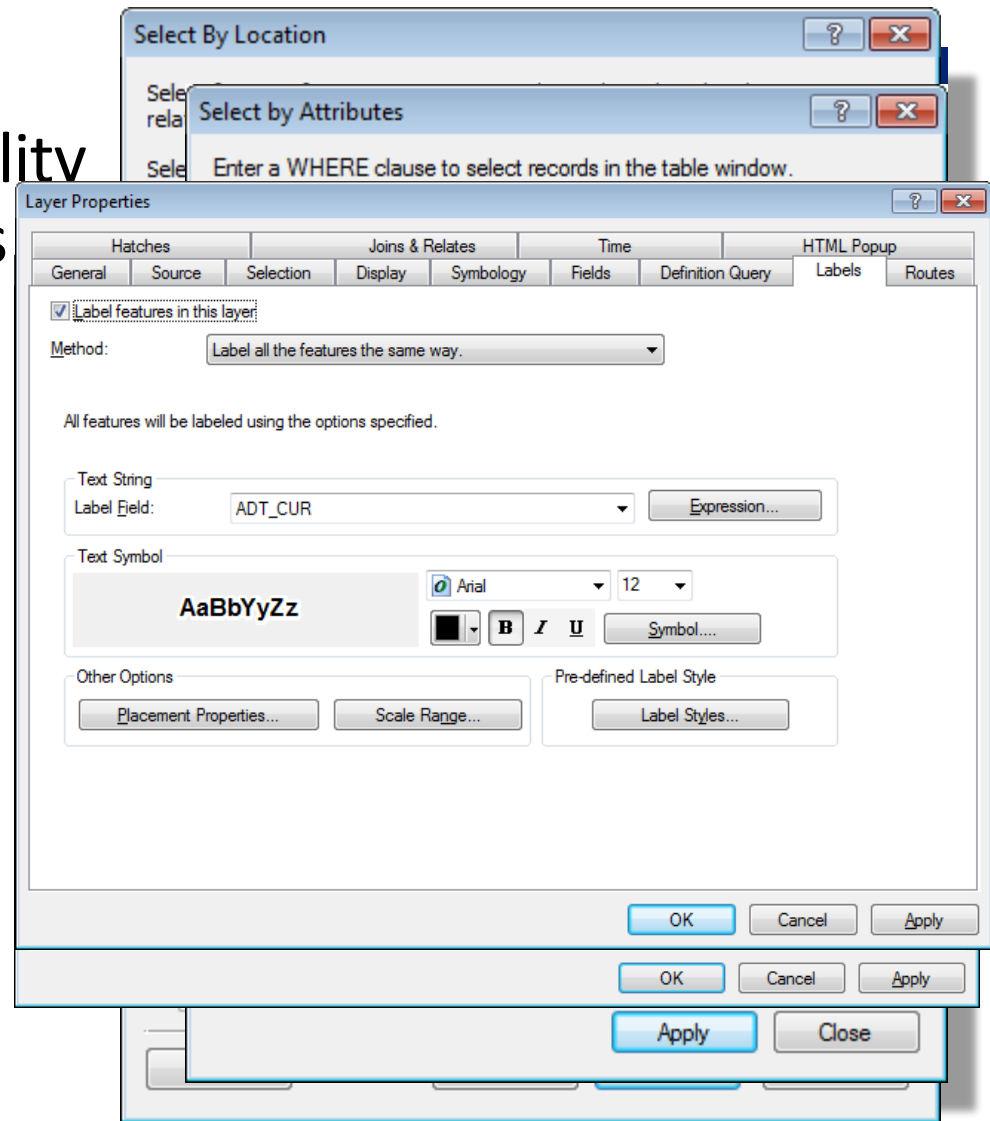
- Provides users the ability to create data that fits their specific needs

How?

- Data Queries
 - *Definition Queries*
 - *Selection Queries*
 - *Spatial Queries*

Represent data in meaningful ways

- Create custom symbologies
- Custom label styles



Querying Data Spatial Data

– Find the answers you need!

- *Query and view roadway attributes and roadbed features*

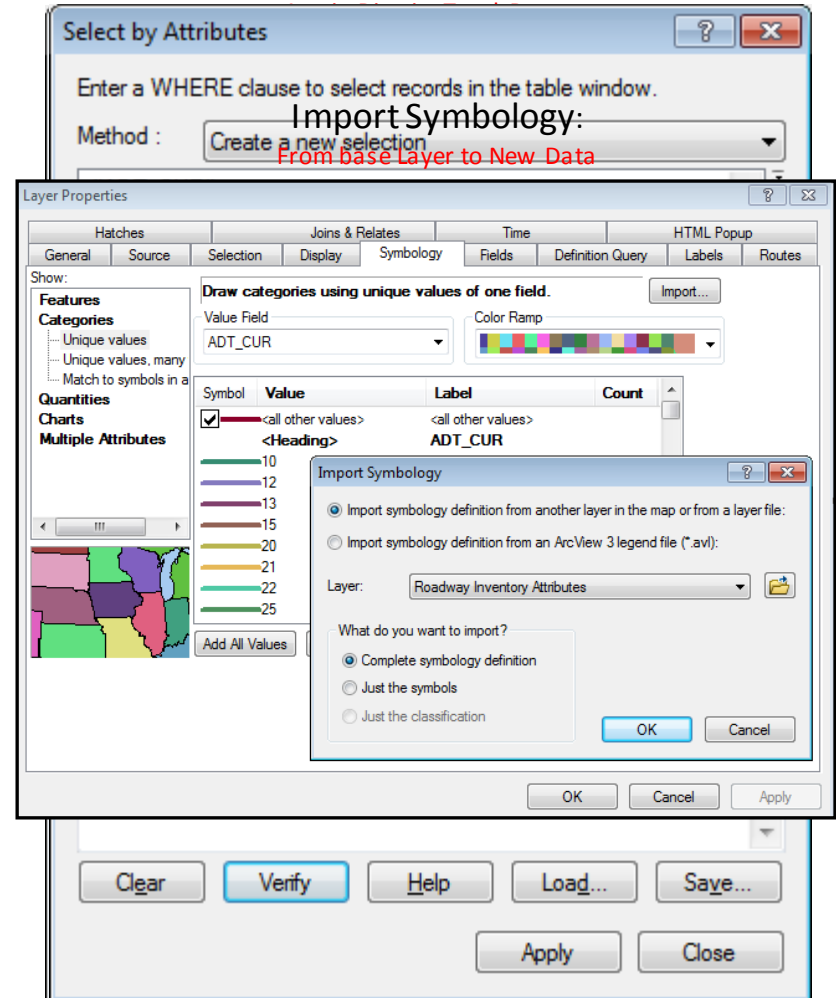
– Exporting data

- *Create and share custom datasets*
- *Create tables and reports*

– Create selection layers

- *Select and edit subsets of data*
- *Can edit sets of records in*

Query Roadway Inventory:
Export Roadways Inventory Selection:



Basic Queries and Data Exports

- Reference Markers for Specific Highways
- County Roads within a Specific County
- Frontage Road and Roadbed Data
- Centerline Files
- District, County, or City Data
- Functionally Classified Streets
- Distances
- DFO Values





THANK YOU!

Mike Zugelder
Jennifer Sylvester

Texas Department of Transportation
(512) 486-5052 | TPP-GIS@txdot.gov



STATEWIDE PLANNING MAP DESKTOP

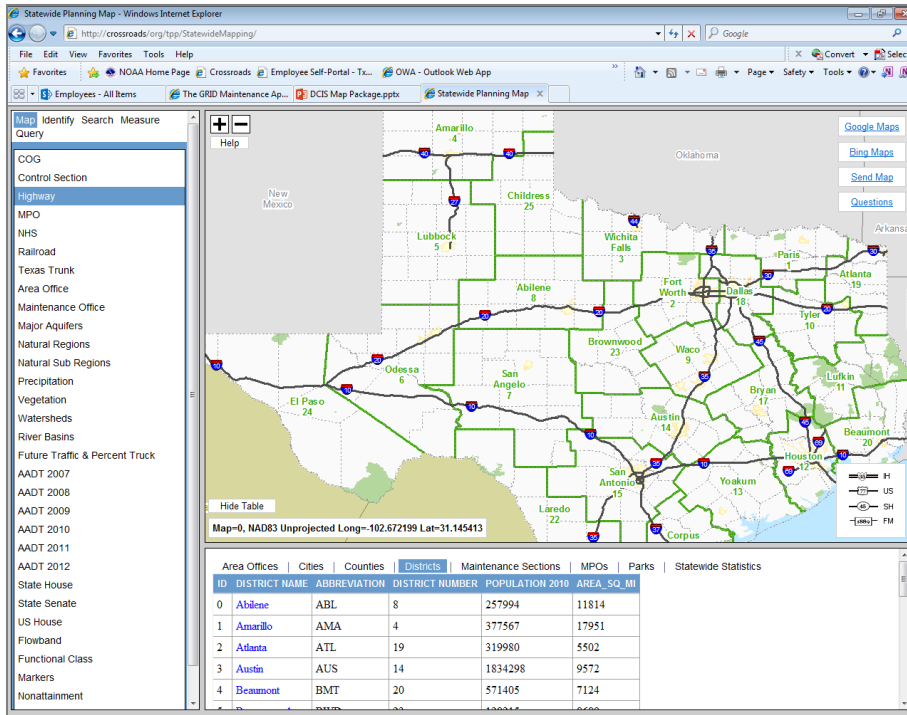
Jenn Sylvester

Map - Desktop

- ESRI map Document
- Software Program used for mapping and analysis purposes
- Current package available internally to TxDOT users and contractors

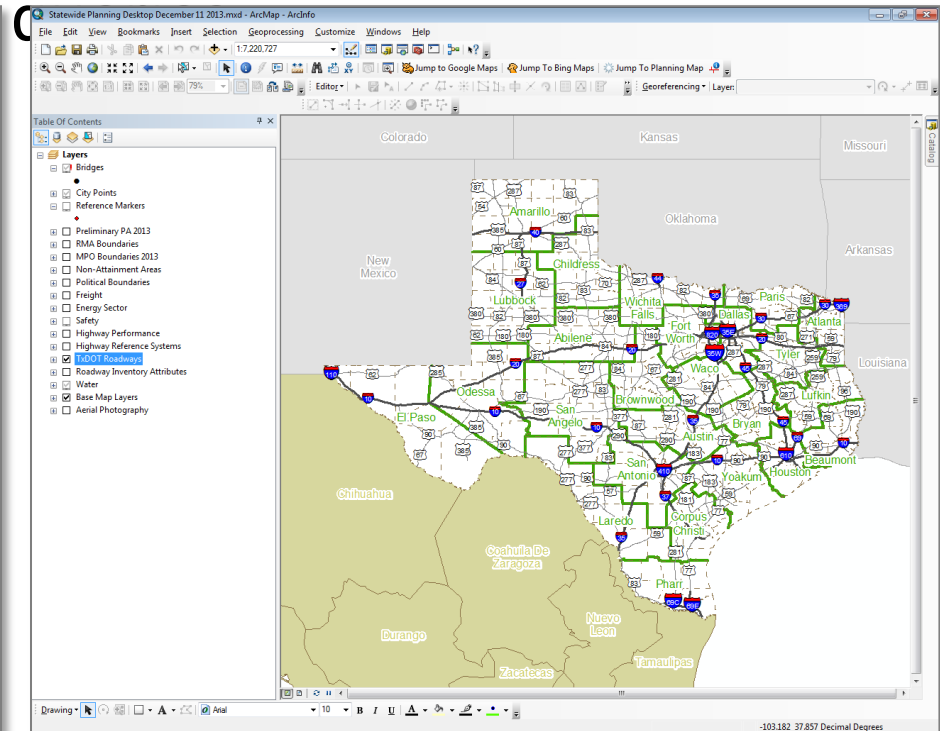
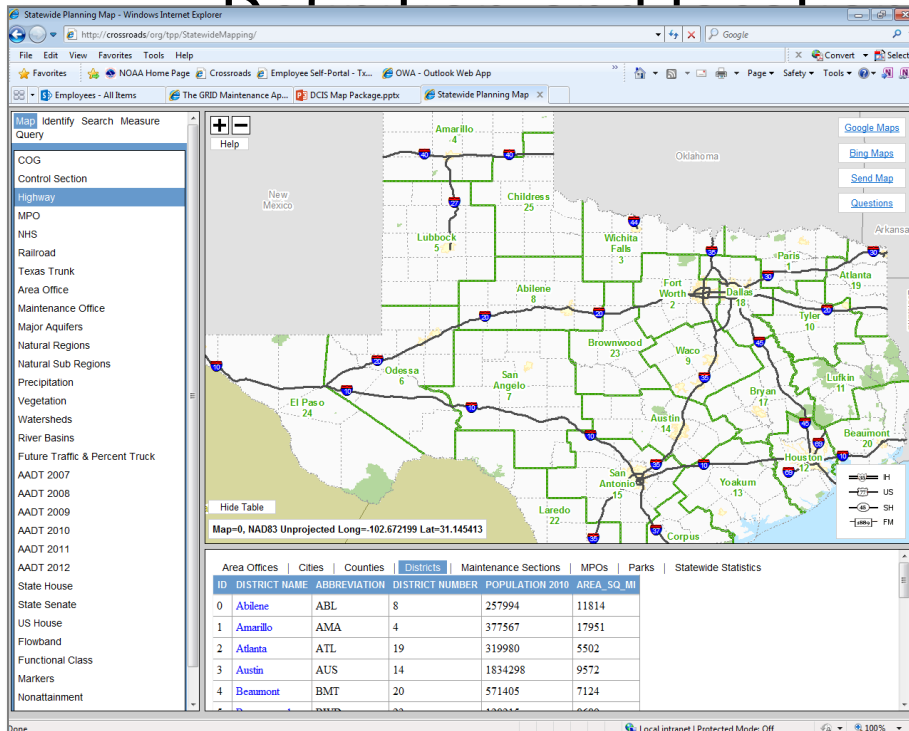
Purpose:

- Tool to increase data awareness
- Provides TxDOT employees a way to view/query roadway data
- Provide the tools to create custom data files and maps



Statewide Planning Map - Desktop

- How is it more useful than the Planning Map Web?
 - Export layers and maps
 - Customizable Appearance



Statewide Planning Map - Desktop

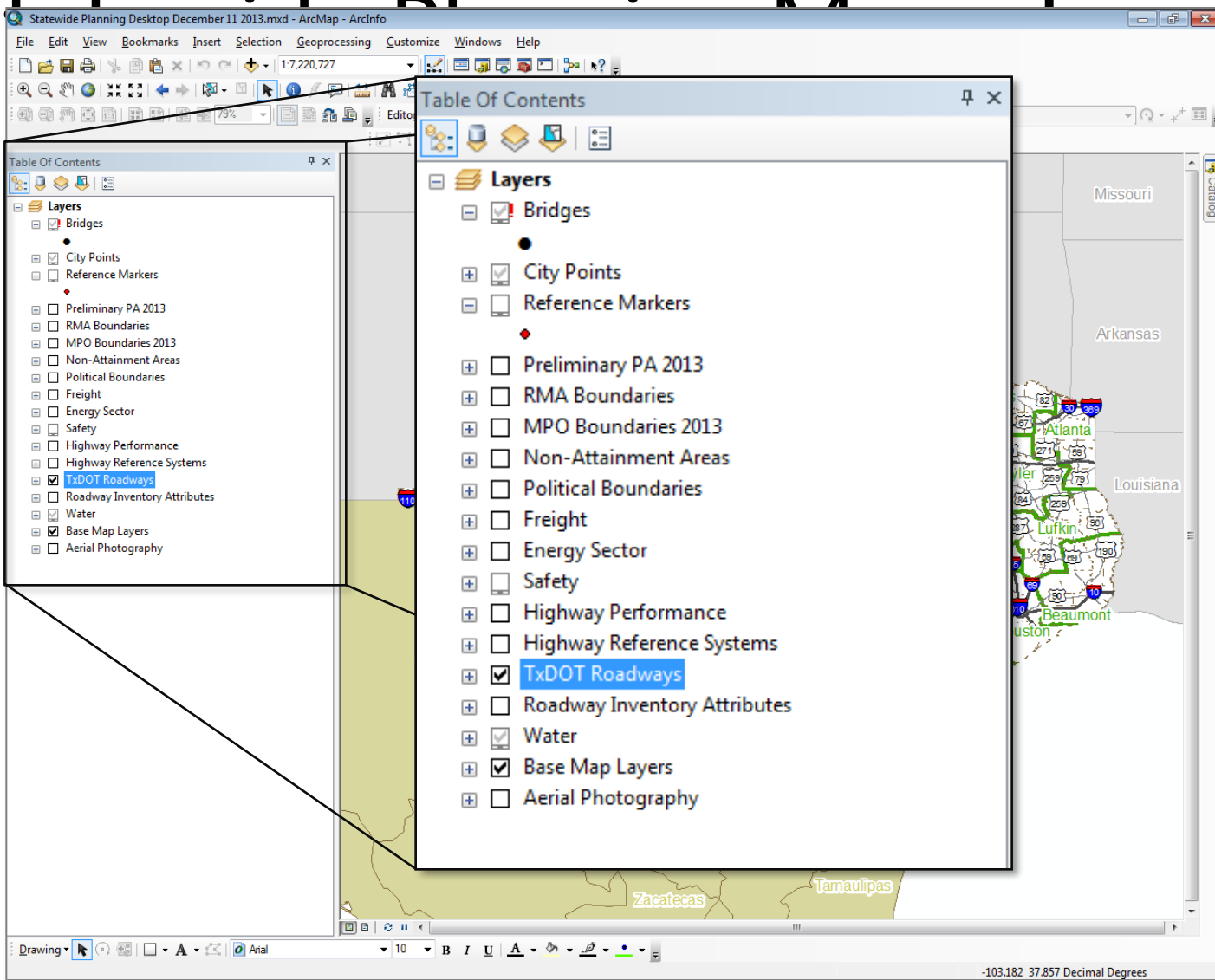
- Where is the Planning Map Desktop located?
 - [SharePoint](#)
 - ESRI Map Package

The screenshot shows the Office 365 SharePoint interface for the 'GIS Coordination' site. The left sidebar lists various sites including 'TPP-HPMS', 'Software Testing', 'HPMS', 'Pictures', 'County Roads', and 'Libraries'. The main content area displays a list of documents. The document 'Instructions for Using the Statewide Planning Map Desktop Version' is highlighted with a red box. Below it, another document 'Statewide Planning Desktop December 11 2013' is also highlighted with a red box. The table below lists the documents and their details.

Name	Document Class	Record Type	Created	Created By	Modified	Modified By
Facilities_Package	Transportation Planning	Transportation Planning	February 11	Chris Bardash	February 11	Chris Bardash
Instructions for Using the Statewide Planning Map Desktop Version	Data Management	GIS, Road Inventory, HPMS	December 30, 2013	Chris Bardash	December 30, 2013	Chris Bardash
Statewide Planning Desktop December 11 2013	Transportation Planning	GIS, Road Inventory, HPMS	December 19, 2013	Michael Zugelder	December 19, 2013	Michael Zugelder

S

rs

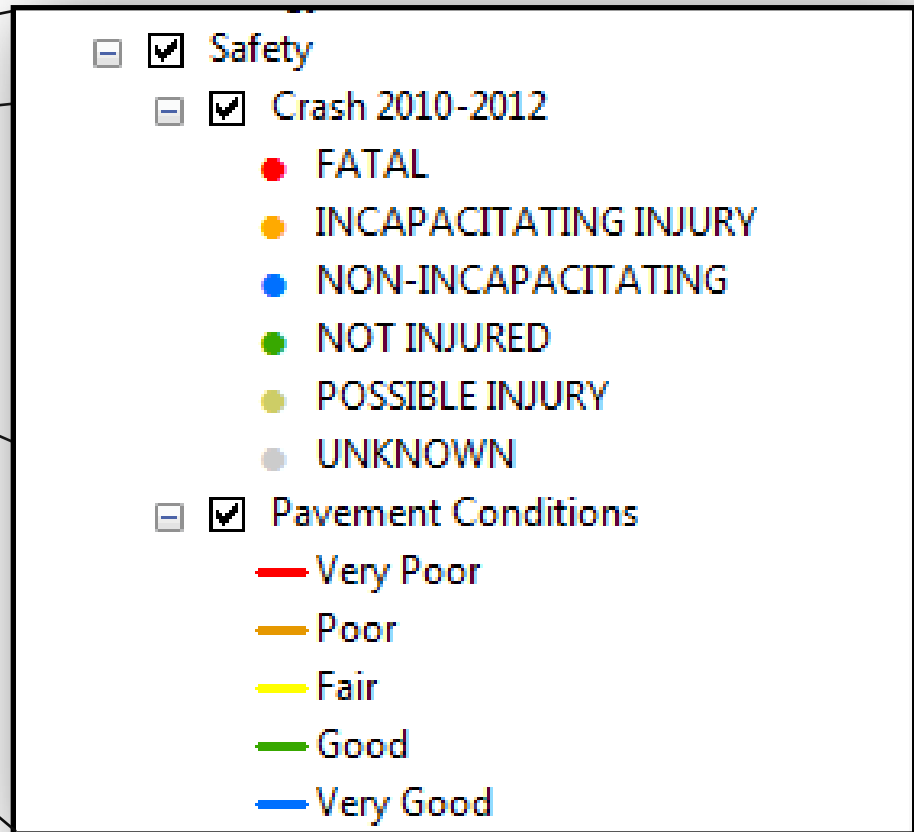
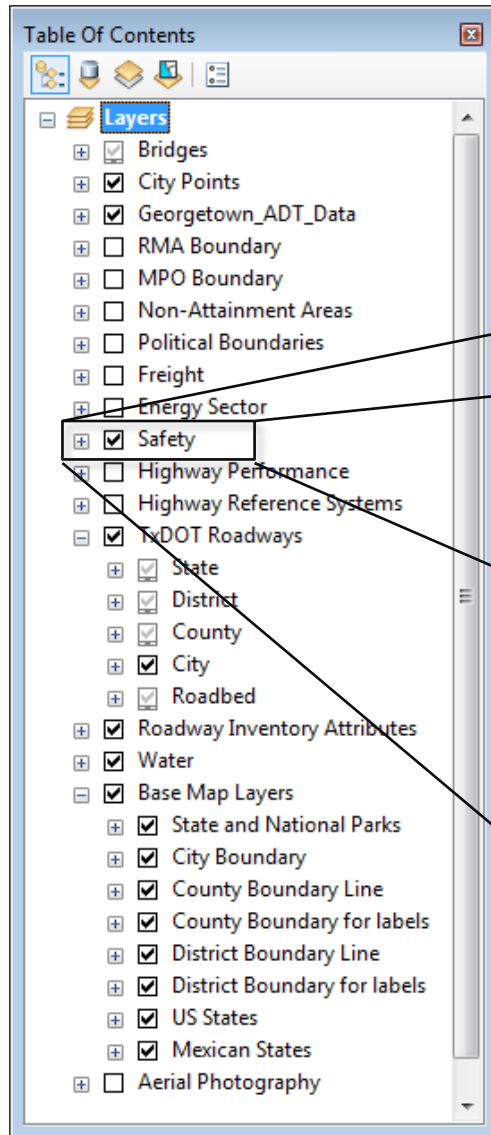


Statewide Planning Map – Group

What are they?

Layers

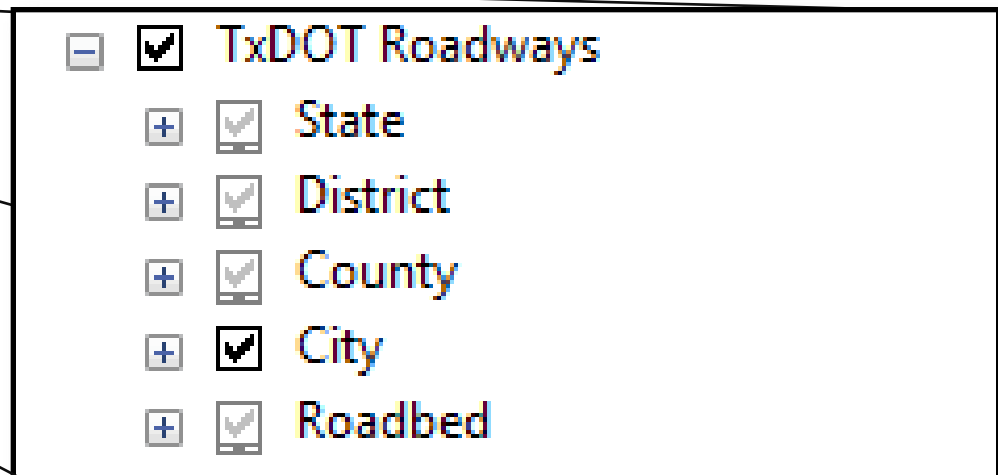
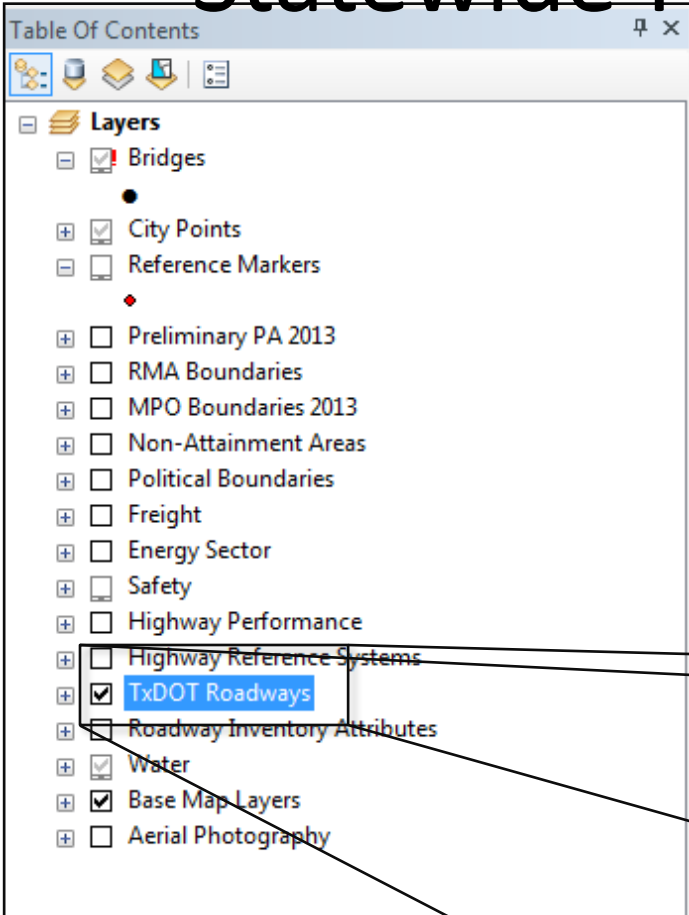
- Some layers in the map are 'Group Layers' that hold multiple datasets and are grouped by function



Statewide Planning Map – Roadway

How does it Function?

- The TxDOT Roadways Group layer has multiple instances of the roadway dataset grouped
- Each group only displays at specific scale ranges
- This makes labeling and map views much easier to scale for mapping purposes

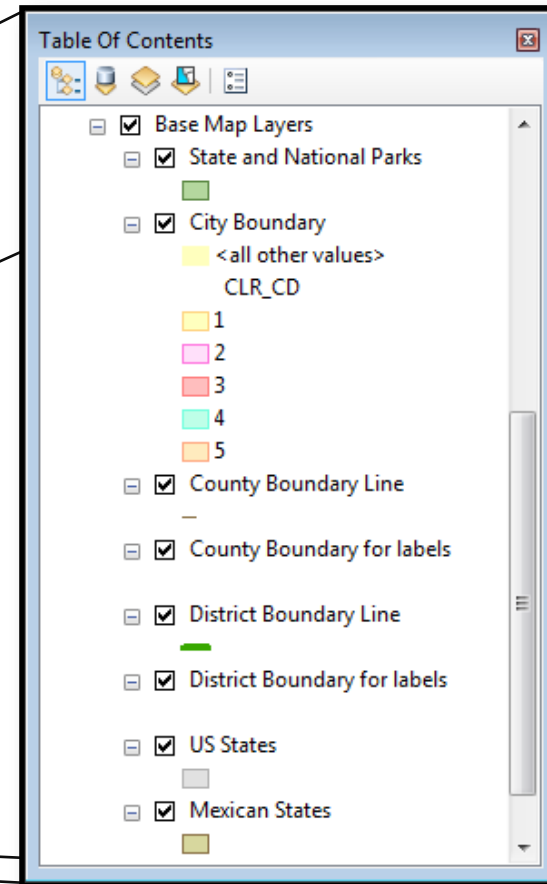
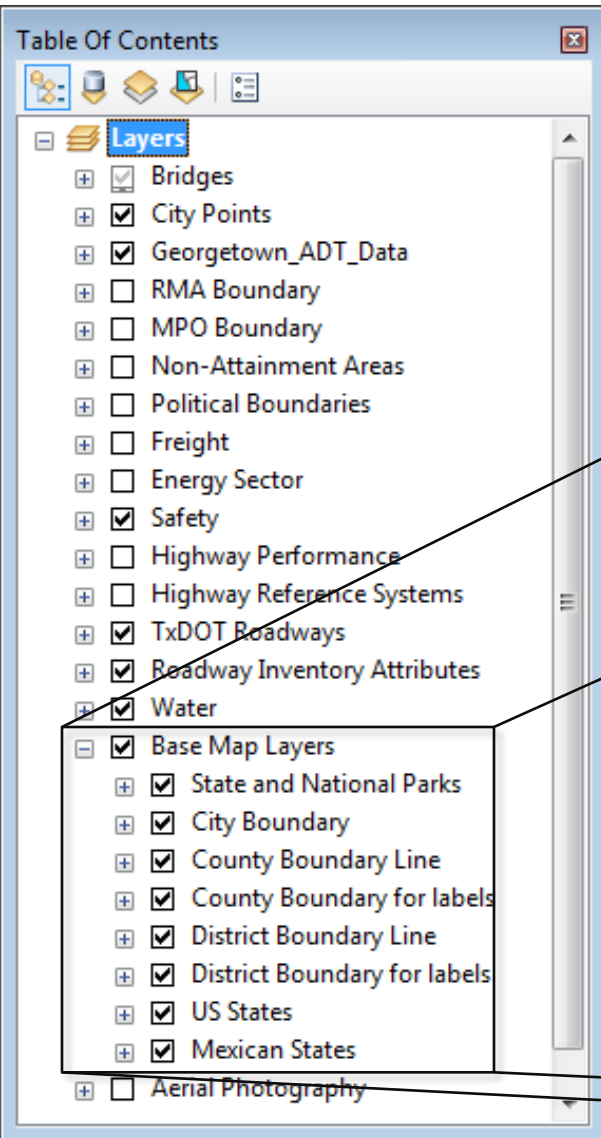


Statewide Planning Map – Base

What are they?

- The layers that create the style of the map
- Boundary lines
- Polygons for labels
- Grouped together
- Can be queried/used in analysis

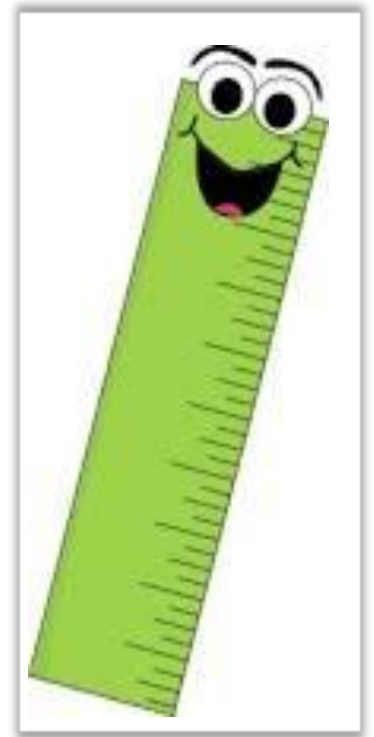
Map Layers



Statewide Planning Map – Tools

Interactive Tools

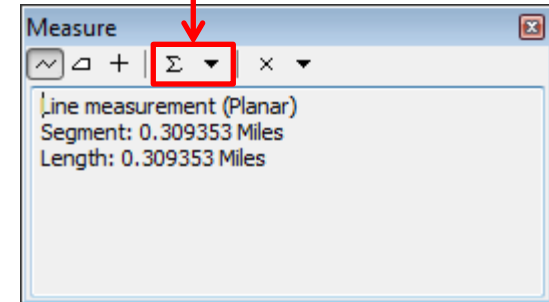
- Creating Custom Data
 - Queries
 - Export Shapefile
 - Create Selection Layer
 - Symbology
- Add other spatial data to a map
- Find DFO's
- Measure Tools
- Create a PDF Map



Spatial Data

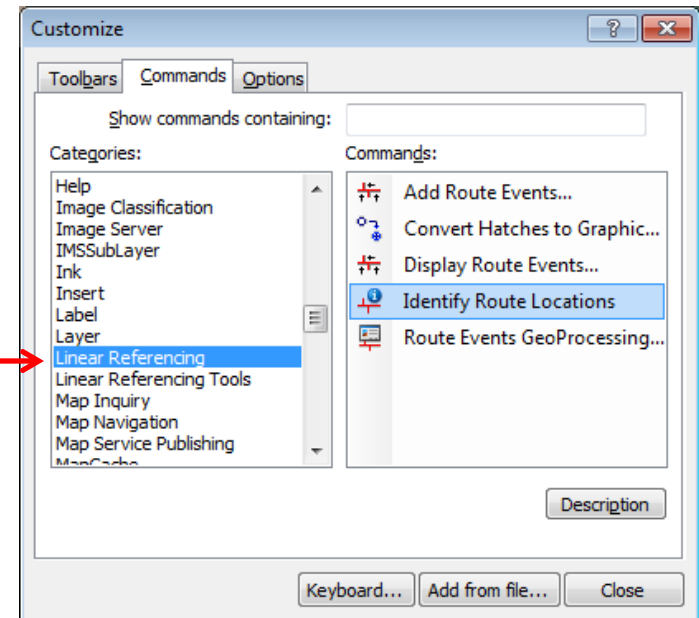
Measure Tool

- Measure distances between highways or other landmarks
- Can adjust measure value between units



Route Identify Tool for Route DFO

- Returns the DFO value



Spatial Data – Create Your Own

Why?

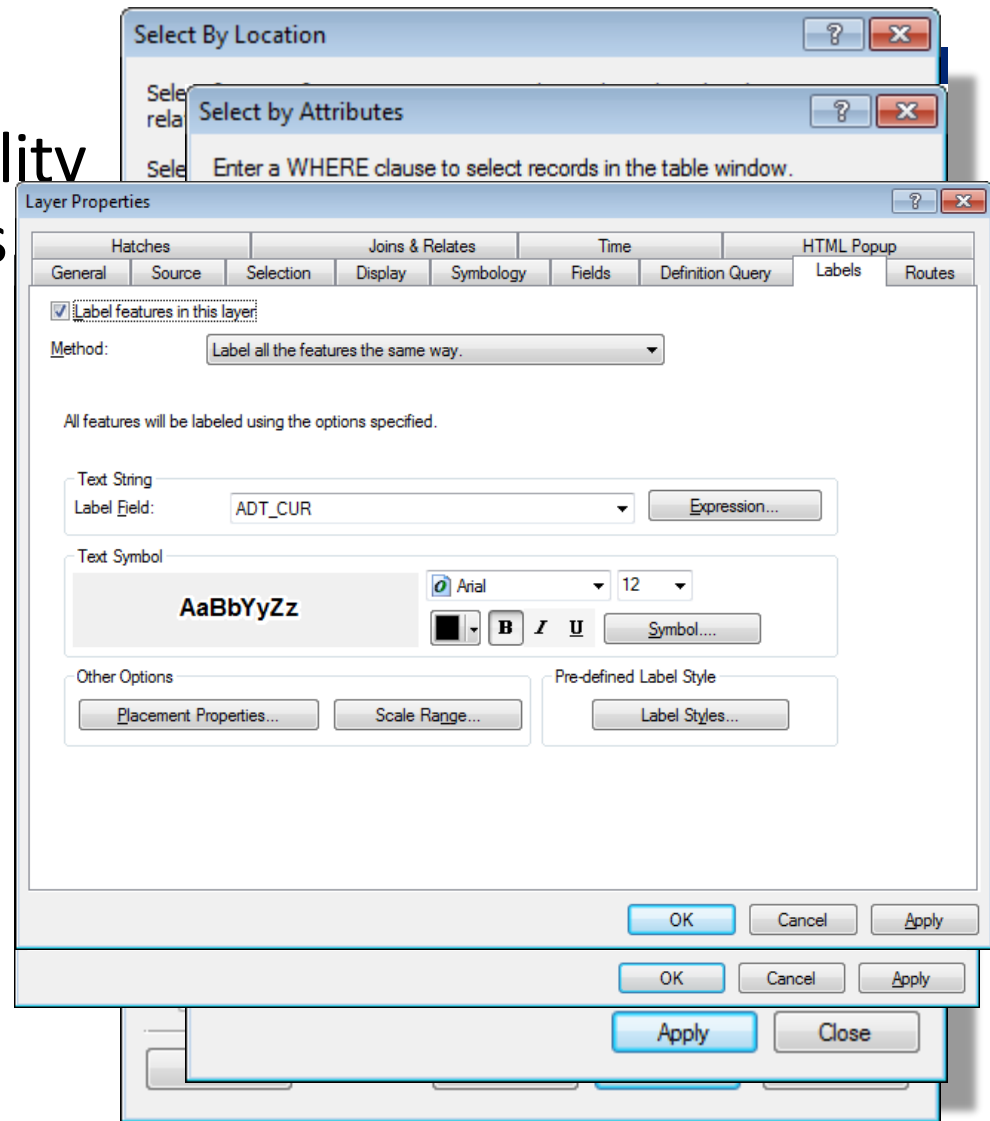
- Provides users the ability to create data that fits their specific needs

How?

- Data Queries
 - *Definition Queries*
 - *Selection Queries*
 - *Spatial Queries*

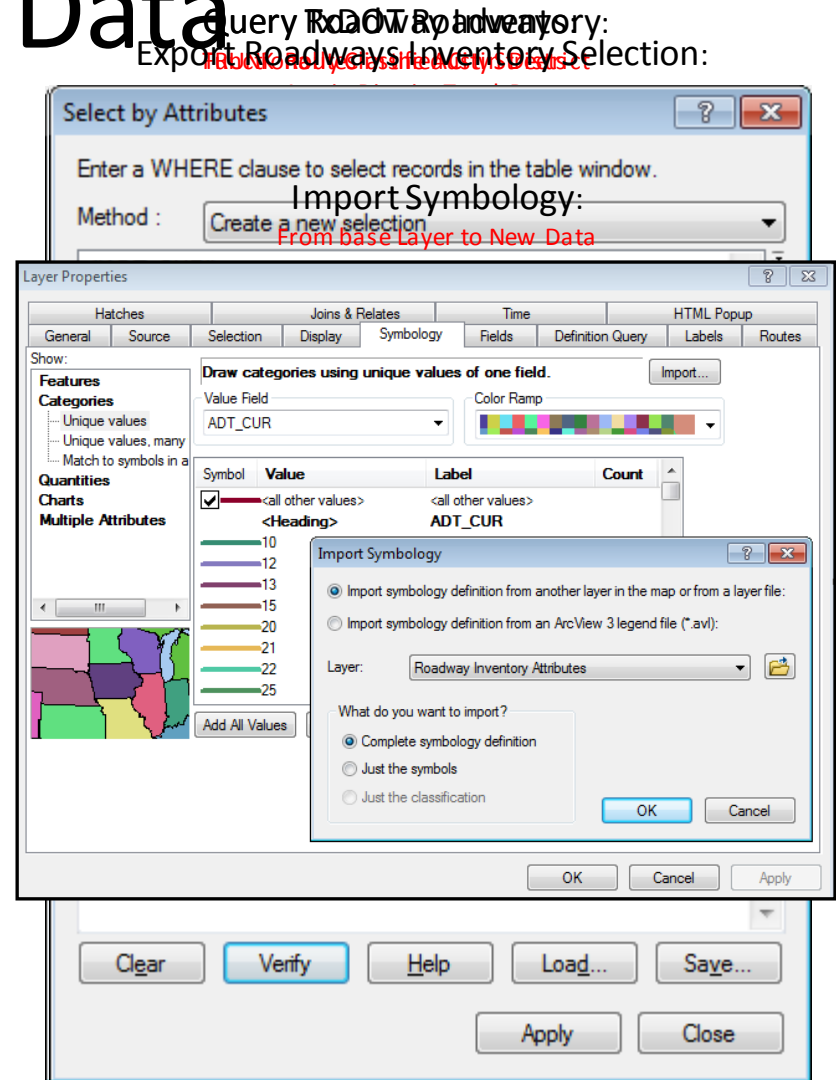
Represent data in meaningful ways

- Create custom symbologies
- Custom label styles



Querying Data Spatial Data

- Find the answers you need!
 - *Query and view roadway attributes and roadbed features*
- Exporting data
 - *Create and share custom datasets*
 - *Create tables and reports*
- Create selection layers
 - *Select and edit subsets of data*
 - *Can edit sets of records in*



Basic Queries and Data Exports

- Reference Markers for Specific Highways
- County Roads within a Specific County
- Frontage Road and Roadbed Data
- Centerline Files
- District, County, or City Data
- Functionally Classified Streets
- Distances
- DFO Values





THANK YOU!

Mike Zugelder
Jennifer Sylvester

Texas Department of Transportation
(512) 486-5052 | TPP-GIS@txdot.gov