# Meta File for Energy Impact (TxDOT Project # 0-6513) GIS Files

### Overview of the Contents of the Energy Impact DVD

The Energy Impact DVD contains the following 4 folders:

0-6513\_EnergyImpactRoutes
0-6513\_Facilities\_Roads\_Boundaries
0-6513\_Geodatabase\_Individual\_Routes

The "0-6513\_EnergyImpactRoutes" folder contains an Energy Impact Routes geodatabase (.gdb file extension) that contains all the final, projected feature classes created and used for TxDOT project 0-6513. The Energy Impact Routes geodatabase contains separate feature classes for the different types of routes (BS is for Barnett Shale and PB is for Permian Basin):

■ EnergyImpactRoutes.gdb
 ⊕ BS\_Rig\_Traffic\_Routes
 ⊕ BS\_Saltwater\_Routes
 ⊕ Oil\_Production\_Routes
 ⊕ PB\_Rig\_Traffic\_Routes
 ⊕ Wind\_Turbine\_Routes

The "0-6513\_Facilities\_Roads\_Boundaries" folder contains a file geodatabase with point features of different energy-related locations (e.g., gas and oil wells) and place names, line features of railroads and of TxDOT roadway centerlines as of 2008 (TxDOT\_Routed\_EOY\_2008\_Centerline), and shape features for state (tl\_2009\_us\_state) and county boundaries. (StratMapv2\_County\_poly).

The "0-6513\_Geodatabase\_Individual\_Routes" folder contains the individual routes as separate geodatabases, and the individual routes as layer files. The files in this folder are not projected.

### **Energy Impact Routes Geodatabase**

The files in the Energy Impact Routes geodatabase are projected in the following coordinate system:

Projection: Lambert\_Conformal\_Conic False\_Easting: 1000000.000000 False\_Northing: 1000000.000000 Central\_Meridian: -100.000000 Standard\_Parallel\_1: 27.416667 Standard\_Parallel\_2: 34.916667 Latitude\_Of\_Origin: 31.166667 Linear Unit: Meter (1.000000)

Geographic Coordinate System: GCS North American 1983

Angular Unit: Degree (0.017453292519943299)

Prime Meridian: Greenwich (0.00000000000000000)

Datum: D North American 1983

Spheroid: GRS\_1980

Maps of each of the routes and facilities are provided in the last section of this report.

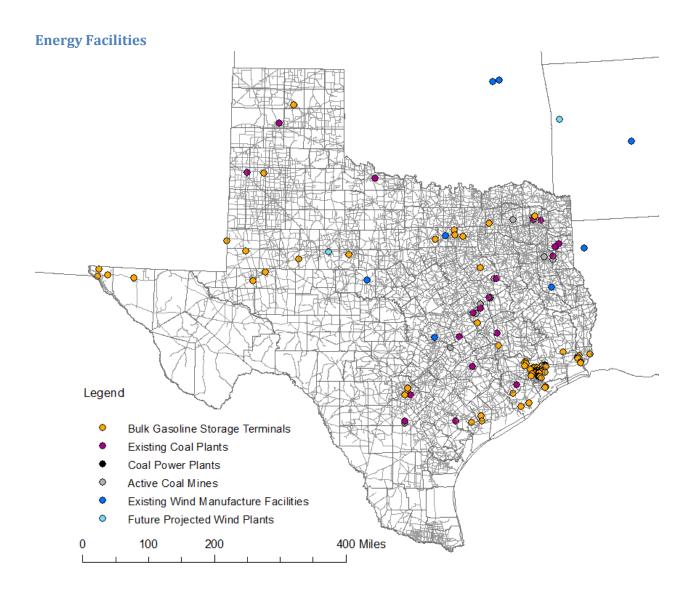
#### **Background on Data for Routes and Facilities**

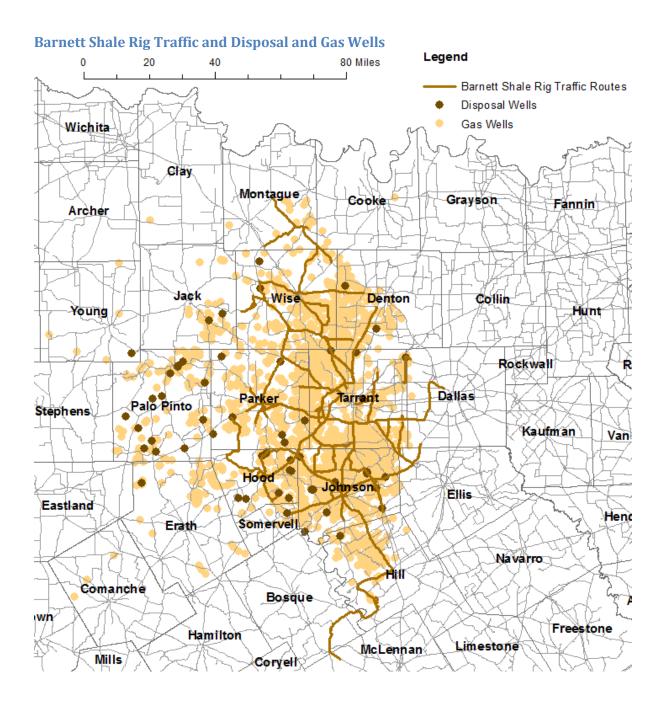
Section 3.3.5, Selection of Pavement Sections, of the *Impacts of Energy Developments on the Texas Transportation System Infrastructure* Report 0-6513-1A, dated October 2011, provides an explanation of how the routes were selected and entered into GIS.

The routes labeled in the four folders on the DVD are coded with their record ids and not the permit ids. The record id refers to the line number of the particular record in the Oversize/Overweight database (OS/OW) database for a particular year.

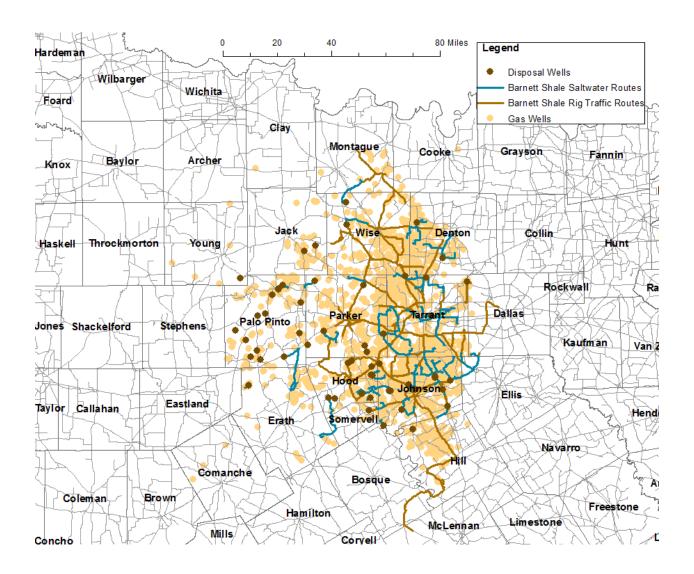
All the information regarding location of key energy facility installations were obtained from the Texas Railroad Commission (RRC). Some of this was queried through a feature that was earlier available on their website but RRC decided to take that feature out sometime in 2010. The rest of the information was obtained through Open Records Request and from RRC staff.

# Maps of the Data Provided on DVD

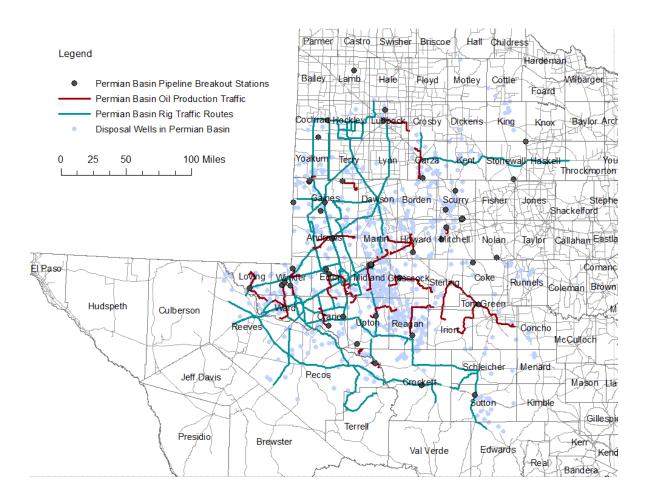




# Barnett Shale Rig and Saltwater Traffic Routes and Disposal and Gas Wells



# Permian Basin Rig and Oil Production Routes, Disposal Wells and Pipeline Breakout Stations



# Permian Basin Rig and Oil Production Routes, Oil Wells and Pipeline Breakout Stations

