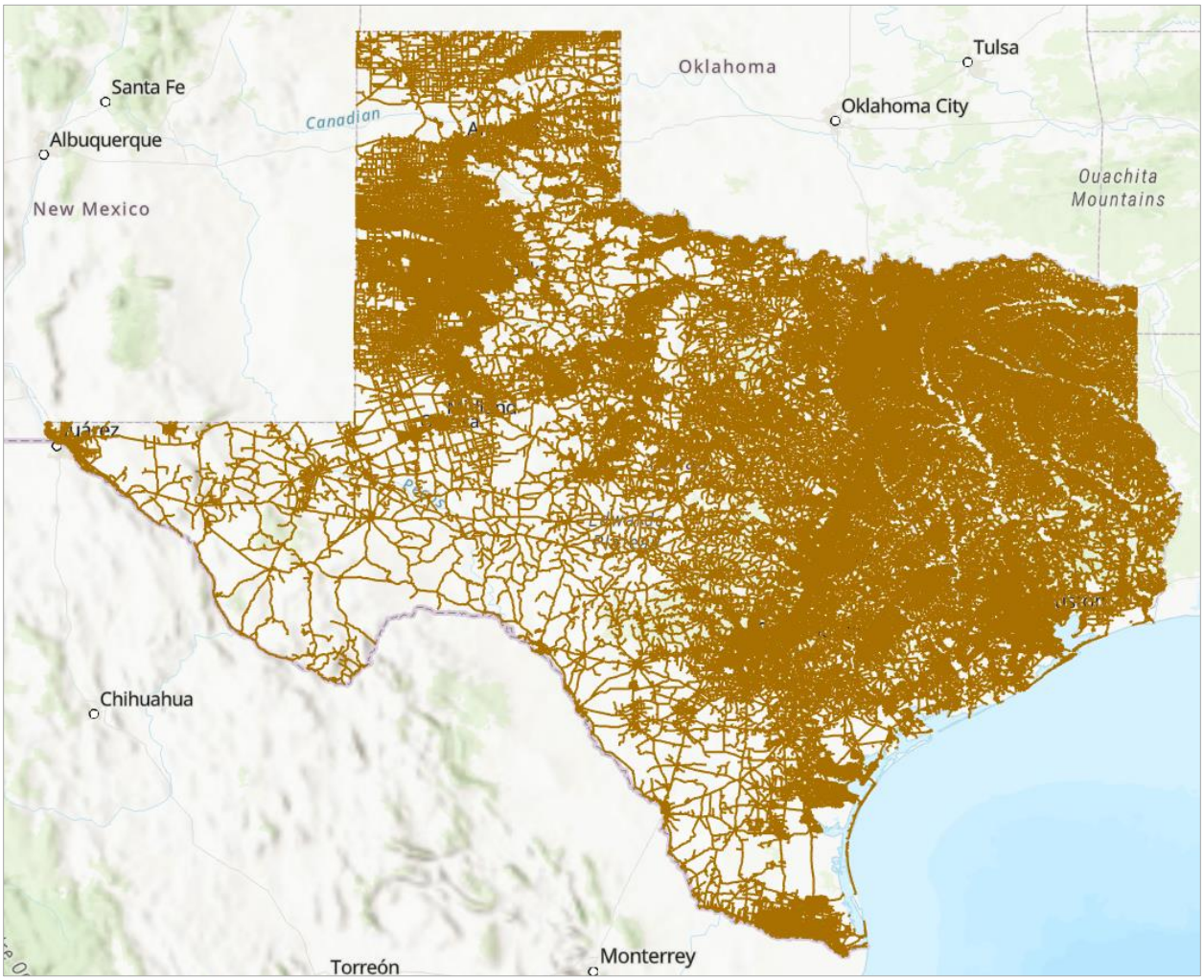
TxDOT Road Inventory

The complete copy of the TxDOT Roadway Inventory can be found in the TxDOT Open Data Portal at: https://gis-txdot.opendata.arcgis.com/datasets/TXDOT::txdot-roadway-inventory/ It is described as:

This feature class displays a polyline layer that contains roadway attributes of certain roadbeds that was routed using linear referencing tools to the TxDOT Roadway Linework (exludes supplemental roadbeds).

The TxDOT Roadway Inventory layer is a statewide dataset that has attribute information routed to TxDOT Roadway linework. By using linear referencing tools, attribute information from the TxDOT Roadway Inventory table are located on the linework. Roadway attributes such as functional system, traffic counts, surface types among many others can be found on a roadway simply by selecting it or performing a query.

This original dataset as of 28 November 2022 has 883,837 records in it.



For work on the Streamflow II project, we have been advised by Michael Chamberlain of TxDOT TPP to filter the dataset using the following criteria:

RDBD_ID IN ('GS', 'RG', 'AG', 'BG', 'LG', 'MG', 'PG', 'SG', 'XG', 'YG', 'TG')

OR (RDBD_ID = 'KG' And (MED_TYPE = 0 Or HWY_DES1 NOT IN (0, 3, 4, 5)))

OR HSYS IN ('LS','CR')

These identifiers can be understood from the roadway inventory data dictionary accessible at: https://gis-txdot.opendata.arcgis.com/documents/txdot-roadways-data-dictionary-for-2020

RDBD_ID	**For Centerline File** AG=Right Frontage Road CG=Centerline / Single Roadbed GS=Grade Separated Connector *(New for YE2014)* XG=Left Frontage Road	**For Roadbed File** AG=Right Frontage Road BG=Right Supplemental Frontage Road GS=Grade Separated Connector *(New for YE2014)* KG=Centerline / Single Roadbed LG=Left Roadbed MG=Left Supplemental Mainlane PG=Left Supplemental Supplemental Mainlane RG=Right Roadbed SG=Right Supplemental Mainlane TG=Right Supplemental Supplemental Mainlane XG=Left Frontage Road YG=Left Supplemental Frontage Road

RDBD_ID IN ('GS', 'RG', 'AG', 'BG', 'LG', 'MG', 'PG', 'SG', 'XG', 'YG', 'TG')

This query identifies all roadway inventory lines except for KG, the roadway centerline.

MED_TYPE	0=No median 2=Unprotected 3=Curbed 4=Positive Barrier - Unspecified 5=Positive Barrier Flexible 6=Positive Barrier Semi-Rigid 7=Positive Barrier Rigid 99=Unknown

MED_TYPE = 0 means no median

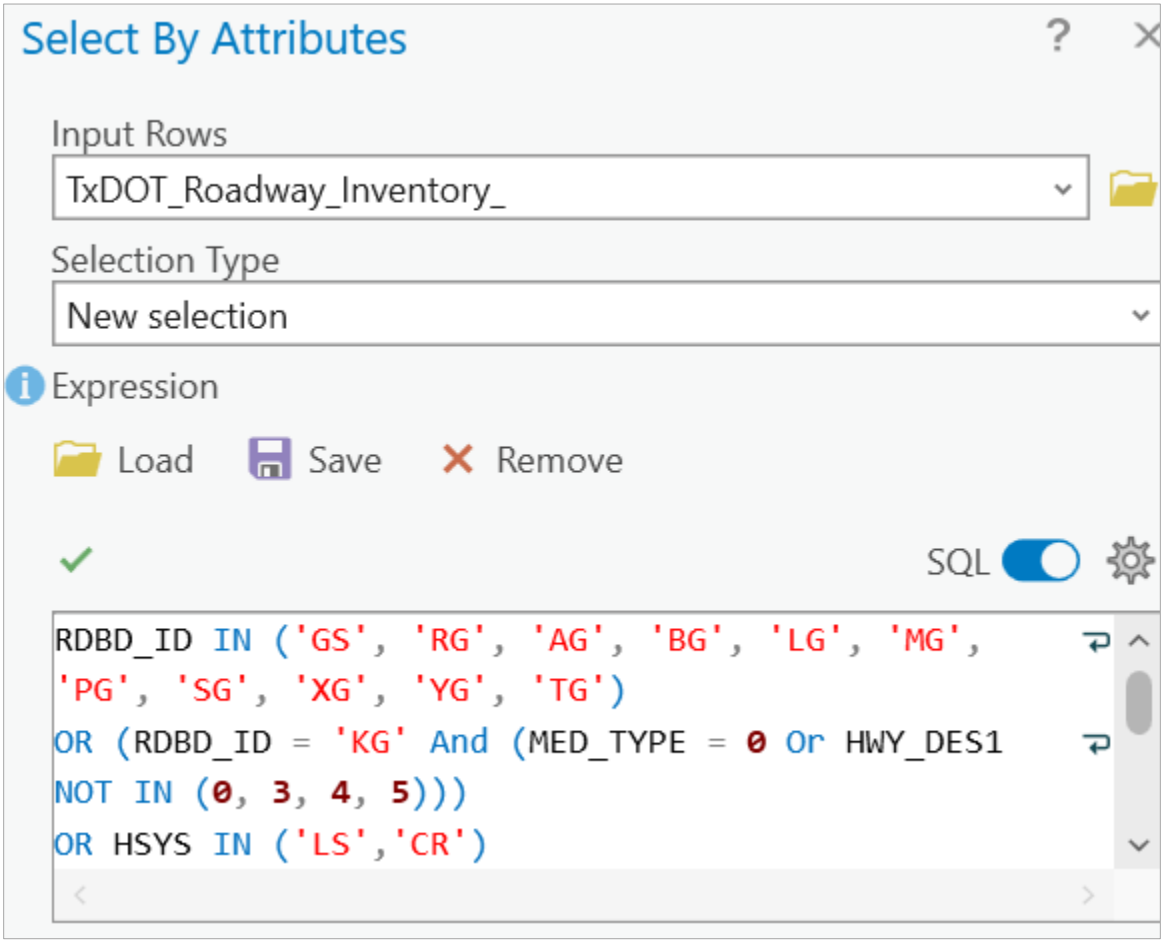
HWY_DES1	0=One-way-pair (couplet) 1=One-way 2=Two-way, Undivided 3=Two-way, Divided - Boulevard 4=Two-way, Divided - Expressway (partial access control) 5=Two-way, Divided - Freeway (full access control) 99=Unknown

HWY_DES1 NOT IN (0, 3, 4, 5) HWY_DES1 not in 0,3,4,5 means that the Highway Designation is One-way or Two-Way undivided.

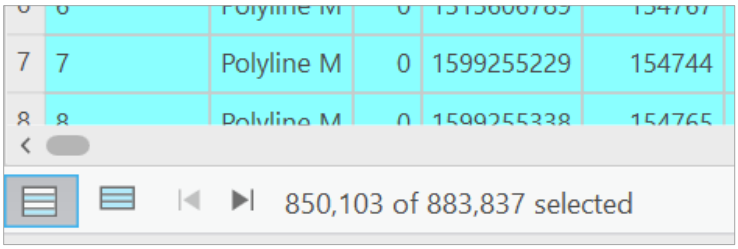
HIGHWAY-SYSTEM	HSYS	**On-System:** BF=Business FM BI=Business IH BS=Business State BU=Business US FM=Farm to Market FS=FM Spur IH=Interstate PA=Principal Arterial PR=Park Road RE=Rec Road RM=Ranch to Market RP=Rec Road Spur RR=Ranch Road RS=RM Spur	**On-System (continued):** RU=RR Spur SA=State Alternate SH=State Highway SL=State Loop SS=State Spur UA=US Alternate UP=US Spur US=US Highway **Off-System:** CR=County Road FD=Federal Road LS=(Local) City Street TL=Off-System Toll Road

HSYS IN ('LS','CR') means City Street or County Road

The effect of this query is to select out the KG centerline from major highways but include it on the smaller roads. In ArcGIS Pro, this query is applied using Select by Attributes:



This produces a slightly reduced number of roadway lines 850,103 out of 883,837, or 96% of the original dataset.



The image below shows the filtered roadways in purple and the original inventory in brown. It can be seen that the KG line appears on all the smaller streets and roads, but is omitted from the centerline of IH-35 going over the Colorado River.