TxDOT District and Maintenance Section Boundaries

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The TxDOT Maintenance Section boundaries are provided on the TxDOT Open Data Portal https://gis-txdot.opendata.arcgis.com/datasets/txdot-maintenance-section-boundaries

These data record the Maintenance Sections by District Name, Maintenance Section Number and Maintenance Section Name.

OBJECTID *	SHAPE *	DIST_NM *	MAINT_SEC_NBR	MAINT_SEC_NM
1	Polygon	Paris	2	Red River County
2	Polygon	Bryan	4	Burleson County
3	Polygon	Beaumont	8	Port Arthur
4	Polygon	Childress	4	Matador

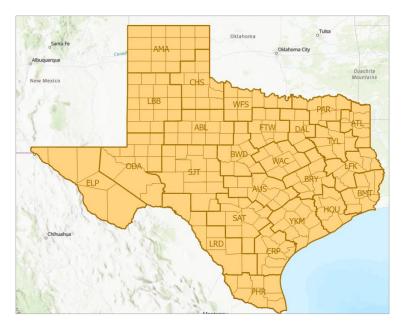
To get the corresponding District number, the corresponding TxDOT Districts coverage can be found at: https://gis-txdot.opendata.arcgis.com/datasets/txdot-districts/ and this records the corresponding District Abbreviation, District Number and District Name

DIST_ABRVN	DIST_NBR	DIST_NM
ABL	8	Abilene
AMA	4	Amarillo
ATL	19	Atlanta
AUS	14	Austin
BMT	20	Beaumont

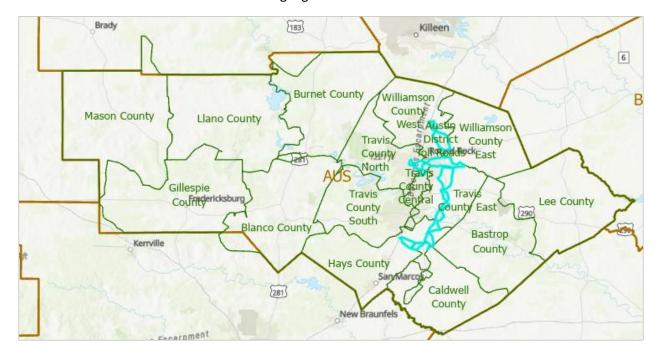
It turns out that **TxDOT Districts are defined geographically as sets of counties**, which are found on the open data portal at: https://gis-txdot.opendata.arcgis.com/datasets/texas-county-boundaries

DPS_CNTY_NBR	FIPS_ST_CNTY_CD	TXDOT_CNTY_NBR	TXDOT_DIST_NBR	CNTY_NM ^	GID
1	48001	1	10	Anderson	136
2	48003	2	6	Andrews	155
3	48005	3	11	Angelina	105
4	48007	4	16	Aransas	15
5	48009	5	3	Archer	208
6	48011	6	4	Armstrong	236
7	48013	7	15	Atascosa	29
8	48015	8	13	Austin	52
	1 2 3 4 5 6		1 48001 1 2 48003 2 3 48005 3 4 48007 4 5 48009 5 6 48011 6 7 48013 7	1 48001 1 10 2 48003 2 6 3 48005 3 11 4 48007 4 16 5 48009 5 3 6 48011 6 4 7 48013 7 15	1 48001 1 10 Anderson 2 48003 2 6 Andrews 3 48005 3 11 Angelina 4 48007 4 16 Aransas 5 48009 5 3 Archer 6 48011 6 4 Armstrong 7 48013 7 15 Atascosa

Hence there is a clean definition of District Boundaries in terms of county boundaries.

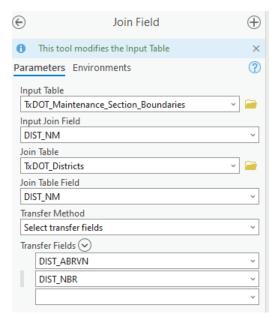


The Maintenance Section Boundaries are defined geographically by a polygon coverage that has many locations where it differs from the District Boundaries. In the Austin District, there is a special Maintenance Section for toll roads shown highlighted below.



DIST_NM	MAINT_SEC_NBR -	MAINT_SEC_NM
Austin	1	Bastrop County
Austin	2	Blanco County
Austin	3	Burnet County
Austin	4	Caldwell County
Austin	5	Gillespie County
Austin	6	Hays County
Austin	7	Lee County
Austin	8	Llano County
Austin	9	Mason County
Austin	10	Travis County East
Austin	11	Travis County North
Austin	12	Williamson County West
Austin	13	Williamson County East
Austin	14	Travis County Central
Austin	15	Travis County South
Austin	25	Austin District Toll Roads

It follows that to get the correct District number and abbreviation for any Maintenance Section, these should be obtained by a **Join Field** operation in ArcGIS:



This produces an attribute table with two sets of numerical identifiers: District Numbers and Maintenance Section Numbers

DIST_ABRVN	DIST_NBR	DIST_NM *	MAINT_SEC_NBR	MAINT_SEC_NM
AUS	14	Austin	15	Travis County South
AUS	14	Austin	5	Gillespie County
AUS	14	Austin	6	Hays County
AUS	14	Austin	8	Llano County
AUS	14	Austin	12	Williamson County W
AUS	14	Austin	9	Mason County
AUS	14	Austin	25	Austin District Toll Roa
AUS	14	Austin	10	Travis County East
AUS	14	Austin	7	Lee County
AUS	14	Austin	13	Williamson County East

The corresponding files can be exported as a **shape file** and as an **excel file** and these can be found at:

https://utexas.box.com/s/2seftdwmgvxkik8ckz7nexdh5chq26q9

Δ	Α	В	С	D	E
1	DIST_ABRVN	DIST_NBR	DIST_NM	MAINT_SEC_NBR	MAINT_SEC_NM
2	PAR	1	Paris	1	Fannin County
3	PAR	1	Paris	2	Red River County
4	PAR	1	Paris	3	Delta County
5	PAR	1	Paris	4	Rains County
6	PAR	1	Paris	5	Hunt County
7	PAR	1	Paris	6	Franklin County
8	PAR	1	Paris	7	Lamar County
9	PAR	1	Paris	8	Grayson County
10	PAR	1	Paris	9	Hopkins County
11	FTW	2	Fort Worth	1	Keene
12	FTW	2	Fort Worth	2	Decatur
13	FTW	2	Fort Worth	3	South Tarrant
14	FTW	2	Fort Worth	4	North Tarrant
15	FTW	2	Fort Worth	5	Granbury
16	FTW	2	Fort Worth	6	Mineral Wells
17	FTW	2	Fort Worth	7	Stephenville
18	FTW	2	Fort Worth	9	Weatherford
19	WFS	3	Wichita Falls	1	Archer
20	WFS	3	Wichita Falls	2	Bowie
21	WFS	3	Wichita Falls	3	Electra
22	WFS	3	Wichita Falls	4	Gainesville

It can be concluded from this exercise that to obtain a clean set of boundaries for classifying TxDOT Bridge Polygons, we should use the TxDOT District and County boundaries and not the Maintenance Section Boundaries.