



# CORRIDOR CONGESTION DASHBOARD

UNDERSTANDING DATA,  
METHODOLOGY & TASKS DONE



# Files



DATABASE FILES



GEOSPATIAL FILES

# Database Files

- **NTP\_COUNTRYLUT\_NA\_LINK\_FC1\_4\_201H0** : Contains link IDs of Functional Class 1-4 links in North American Continent
- **NTP\_COUNTRYLUT\_NA\_LINK\_FC5\_201H0** : Contains link IDs of Functional Class 5 links in North American Continent
- **NTP\_REF\_NA\_LINK\_FC1\_4\_201H0** : Contains link IDs of Functional Class 1-4 links in North American Continent with their speed patterns numbers by day (U – Sunday .... S – Saturday)
- **NTP\_REF\_NA\_LINK\_FC5\_201H0**: Contains link IDs of Functional Class 5 links in North American Continent with their speed patterns numbers by day (U – Sunday .... S – Saturday)
- **NTP\_SPD\_NA\_15MIN\_KPH\_201H0** : 15 minutes resolution of average speeds in kmph
- **NTP\_SPD\_NA\_15MIN\_MPH\_201H0** : 15 minutes resolution of average speeds in mph
- **NTP\_SPD\_NA\_60MIN\_KPH\_201H0** : 60 minutes resolution of average speeds in kmph
- **NTP\_SPD\_NA\_60MIN\_MPH\_201H0** : 60 minutes resolution of average speeds in mph

# Database Files

- NTP\_COUNTRYLUT\_NA\_LINK\_FC1\_4\_201H0 :  
Contains link IDs of Functional Class 1-4 links  
in North American Continent

NTP_COUNTRYLUT_NA_LINK_FC1_4_201H0			
	OBJECTID *	LINK_PVID	COUNTRY_CODE
▶	1	753676029	MEX
	2	1123577271	MEX
	3	107053306	USA
	4	1229322779	USA
	5	999994706	USA
	6	1027833673	USA
	7	1255389452	USA
	8	1129231202	USA
	9	1178266634	USA
	10	1186589868	USA
	11	22313625	USA
	12	118546072	CAN
	13	1220180065	USA
	14	108702054	USA
	15	1262981744	USA
	16	41557385	USA
	17	862743143	USA
	18	1257704421	USA
	19	21626291	USA
	20	1220066095	USA
	21	772906717	USA
	22	39121478	USA

# Database Files

- **NTP\_COUNTRYLUT\_NA\_LINK\_FC5\_201H0 :**  
Contains link IDs of Functional Class 5 links in North American Continent

NTP_COUNTRYLUT_NA_LINK_FC5_201H0		
OBJECTID *	LINK_PVID	COUNTRY_CODE
1	108618878	USA
2	25132130	USA
3	122122699	USA
4	1265947533	USA
5	19910036	USA
6	29496091	CAN
7	891876396	USA
8	1264425945	USA
9	1166963586	MEX
10	124971021	USA
11	24921997	USA
12	98973360	USA
13	21153166	USA
14	110107454	USA
15	1115465267	MEX
16	921249031	MEX
17	1282088825	USA
18	1160174758	USA
19	87114353	USA
20	1267644242	CAN
21	1163156316	USA
22	1280179399	USA
23	23644497	USA
24	103843631	USA
25	929948267	MEX

# Database Files

- **NTP\_REF\_NA\_LINK\_FC1\_4\_201H0** : Contains link IDs of Functional Class 1-4 links in North American Continent with their speed patterns numbers by day (U – Sunday .... S – Saturday)

NTP_REF_NA_LINK_FC1_4_201H0										
	OBJECTID *	LINK_PVID	TRAVEL_DIRECTION	U	M	T	W	R	F	S
▶	1	1167329729	F	88	88	88	88	88	88	88
	2	1176451233	T	88	88	88	88	88	88	88
	3	1199568452	T	38	12916	7143	13823	897	5939	9000
	4	1262134187	F	9647	2590	8612	10041	8218	3053	3053
	5	1032697043	T	13952	12101	5839	12101	482	12101	10200
	6	1267457744	T	39	2624	39	3676	1907	14182	39
	7	1278030589	F	71	71	71	71	71	71	71
	8	1182168118	T	104	104	104	104	104	104	104
	9	111833792	F	47	47	47	47	47	47	47
	10	118960338	F	88	88	88	88	88	88	88
	11	32649340	F	3128	10103	9989	13687	9989	9989	13837
	12	105383566	T	63	6877	63	10327	12330	63	63
	13	1170257752	F	3508	6171	5366	11184	5366	6639	4017
	14	1074977173	T	71	71	71	10587	11670	71	71
	15	1189892455	T	507	1259	6350	6310	8179	4758	10064
	16	1261068253	T	52	2927	9473	621	621	9571	6674

# Database Files

- **NTP\_REF\_NA\_LINK\_FC5\_201H0:** Contains link IDs of Functional Class 5 links in North American Continent with their speed patterns numbers by day (U – Sunday .... S – Saturday)

NTP\_REF\_NA\_LINK\_FC5\_201H0

	OBJECTID *	LINK_PVID	TRAVEL_DIRECTION	U	M	T	W	R	F	S
▶	1	1218786015	F	9455	6043	10510	3770	11905	11905	14509
	2	906630924	T	39	39	39	39	39	39	39
	3	1274443542	F	9	9	9	9	9	9	9
	4	1258660875	T	9	9	9	9	9	9	9
	5	103140511	T	9	9	9	9	9	9	9
	6	1257159010	T	9	9	9	9	9	9	9
	7	811237246	F	19	19	19	19	19	19	19
	8	20962455	F	6731	4588	1646	14867	11960	7835	3743
	9	996249252	T	9	9	9	9	9	9	9
	10	833435552	F	9	9	9	9	9	9	9
	11	1201705985	T	39	39	39	39	39	39	39
	12	921630244	F	79	79	79	79	79	79	79
	13	931373486	T	19	19	19	19	19	9592	3008
	14	1114213578	T	19	19	19	11799	14744	8627	19
	15	102742083	F	39	39	39	39	39	39	39
	16	35178115	T	19	19	19	19	19	19	19

# Database Files

- NTP\_SPD\_NA\_15MIN\_KPH\_201H0 : 15 minutes resolution of average speeds in kmph for the entire day
- NTP\_SPD\_NA\_15MIN\_MPH\_201H0 : 15 minutes resolution of average speeds in mph for the entire day

TP_SPD_NA_15MIN_KPH_201H0									
OBJECTID *	PATTERN_ID	H00_00	H00_15	H00_30	H00_45	H01_00	H01_15	H01_30	H01_45
1	0	1	1	1	1	1	1	1	1
2	1	2	2	2	2	2	2	2	2
3	2	3	3	3	3	3	3	3	3
4	3	4	4	4	4	4	4	4	4
5	4	5	5	5	5	5	5	5	5
6	5	6	6	6	6	6	6	6	6
7	6	7	7	7	7	7	7	7	7
8	7	8	8	8	8	8	8	8	8
9	8	9	9	9	9	9	9	9	9





# Geo-Spatial File

- Streets : Containing shapefiles of roadway links functional class from 1-5

	FID	Shape	LINK_ID	ST_NAME	FEAT_ID	ST_LANGCD	NUM_STNMES	ST_NM_PREF	ST_TYP_BEF	ST_NM_BASE	ST_NM
▶	0	Polyline	16973829	LOXAHATCHEE RIVER RD	717723303	ENG	1			LOXAHATCHEE RIVER	
	1	Polyline	16973830	FOX RUN DR	732938875	ENG	1			FOX RUN	
	2	Polyline	16973832	LOXAHATCHEE RIVER RD	717723303	ENG	1			LOXAHATCHEE RIVER	
	3	Polyline	16973838	OLD INDIANTOWN RD	733353021	ENG	1			OLD INDIANTOWN	
	4	Polyline	16973839	189TH CT N	719726339	ENG	1			189TH	N
	5	Polyline	16973840	120TH TER N	717782493	ENG	1			120TH	N
	6	Polyline	16973841	188TH ST N	721103854	ENG	1			188TH	N
	7	Polyline	16973842	125TH AVE N	717367376	ENG	2			125TH	N
	8	Polyline	16973843	134TH WAY N	717782600	ENG	1			134TH	N
	9	Polyline	16973844	187TH PL N	719726347	ENG	1			187TH	N
	10	Polyline	16973845	COCHISE TRL	735343864	ENG	2			COCHISE	
	11	Polyline	16973846	127TH DR N	719726346	ENG	1			127TH	N
	12	Polyline	16973847	187TH PL N	719726347	ENG	1			187TH	N
	13	Polyline	16973848	125TH AVE N	717367376	ENG	2			125TH	N



# METHODOLOGY

## NTP\_REF\_NA\_LINK\_FC1\_4\_201H0

NTP_REF_NA_LINK_FC1_4_201H0									
OBJECTID *	LINK_PVID	TRAVEL_DIRECTION	U	M	T	W	R	F	S
1	1167329729		88	88	88	88	88	88	88
2	1176451233		88	88	88	88	88	88	88
3	1199568452		38	12916	7143	13823	897	5939	9000
4	1262134187		9647	2590	8612	10041	8218	3053	3053
5	1032697043		13952	12101	5839	12101	482	12101	10320
6	1267457714		39	2624	39	3676	1907	14182	39
7	1278030589		71	71	71	71	71	71	71
8	1182168118		104	104	104	104	104	104	104
9	111833792		47	47	47	47	47	47	47
10	118960338		88	88	88	88	88	88	88
11	32649340		3128	10103	9989	13687	9989	9989	13837
12	105383566		63	6877	63	10327	12330	63	63
13	1170257752		3508	6171	5366	11184	5366	6639	4017
14	1074977173		71	71	71	10587	11670	71	71
15	1189892455		507	1259	6350	6310	8179	4758	10064
16	1261068253		52	2927	9473	621	621	9571	6674

## NTP\_SPD\_NA\_15MIN\_MPH\_201H0

NTP_SPD_NA_15MIN_MPH_201H0									
OBJECTID *	PATTERN_ID	H00_00	H00_15	H00_30	H00_45	H01_00	H01_15	H01_30	H01_45
1	0	1	1	1	1	1	1	1	1
2	1	2	2	2	2	2	2	2	2
3	2	3	3	3	3	3	3	3	3
4	3	4	4	4	4	4	4	4	4
5	4	5	5	5	5	5	5	5	5
6	5	6	6	6	6	6	6	6	6
7	6	7	7	7	7	7	7	7	7
8	7	8	8	8	8	8	8	8	8
9	8	9	9	9	9	9	9	9	9

## Streets

Streets										
FID	Shape	LINK_ID	ST_NAME	FEAT_ID	ST_LANGCD	NUM_STNMES	ST_NM_PREF	ST_TYP_BEF	ST_NM_BASE	ST_NM
0	Polyline	16973829	LOXAHATCHEE RIVER RD	717723303	ENG	1			LOXAHATCHEE RIVER	
1	Polyline	16973830	FOX RUN DR	732938875	ENG	1			FOX RUN	
2	Polyline	16973832	LOXAHATCHEE RIVER RD	717723303	ENG	1			LOXAHATCHEE RIVER	
3	Polyline	16973838	OLD INDIANTOWN RD	733353021	ENG	1			OLD INDIANTOWN	
4	Polyline	16973839	189TH CT N	719726339	ENG	1			189TH	N
5	Polyline	16973840	120TH TER N	717782493	ENG	1			120TH	N
6	Polyline	16973841	188TH ST N	721103854	ENG	1			188TH	N
7	Polyline	16973842	125TH AVE N	717367376	ENG	2			125TH	N
8	Polyline	16973843	134TH WAY N	717782600	ENG	1			134TH	N
9	Polyline	16973844	187TH PL N	719726347	ENG	1			187TH	N
10	Polyline	16973845	COCHISE TRL	735343864	ENG	2			COCHISE	
11	Polyline	16973846	127TH DR N	719726346	ENG	1			127TH	N
12	Polyline	16973847	187TH PL N	719726347	ENG	1			187TH	N
13	Polyline	16973848	125TH AVE N	717367376	ENG	2			125TH	N

# Congestion Calculation

- Compute the weekly average speeds by link ID
- Divide the daily average speed with the posted speed limit in the streets data layer
- Visualize the ratio calculated to the map
- Legend

The image features a light beige background with a large, bold, black L-shaped bracket on the left side, consisting of a vertical line and a horizontal line. A second, identical L-shaped bracket is positioned on the right side, also in bold black. Centered between these two brackets is the word "DASHBOARD" in a bold, black, sans-serif font.

DASHBOARD

# Dashboard

- Use of Webgl libraries written for R
- Dynamic Nature of Dashboard to build queries and filter data
- Added Welcome Guide section
- About Tab that shows the meta-data for the dashboard
- Congestion Tab showing Congestion calculations from HERE data
- TAZ tab showing the socio-economic growth between Model base and Horizon Year
- O-D Subarea tab as a placeholder for trip making patterns
- Socio-Economic growth tab showing LEE County growth and will display a datable of regions growth