



Congestion Management Process Assessment Tool (COMPAT)



Why COMPAT?

- To simplify system congestion analysis for MPOs.
 - To simplify how speed and volume data sets are merged across all 25 Texas MPOs.
- To provide system congestion performance results quickly an easily accessible web tool format.
- To make the underlying data and shapefiles downloadable for use in individual MPO planning analyses and deliverables.
- To help monitor system congestion over time.
 - In subsequent iterations the COMPAT team aims to make the merger of regional CMP networks and the select a road section permanent.

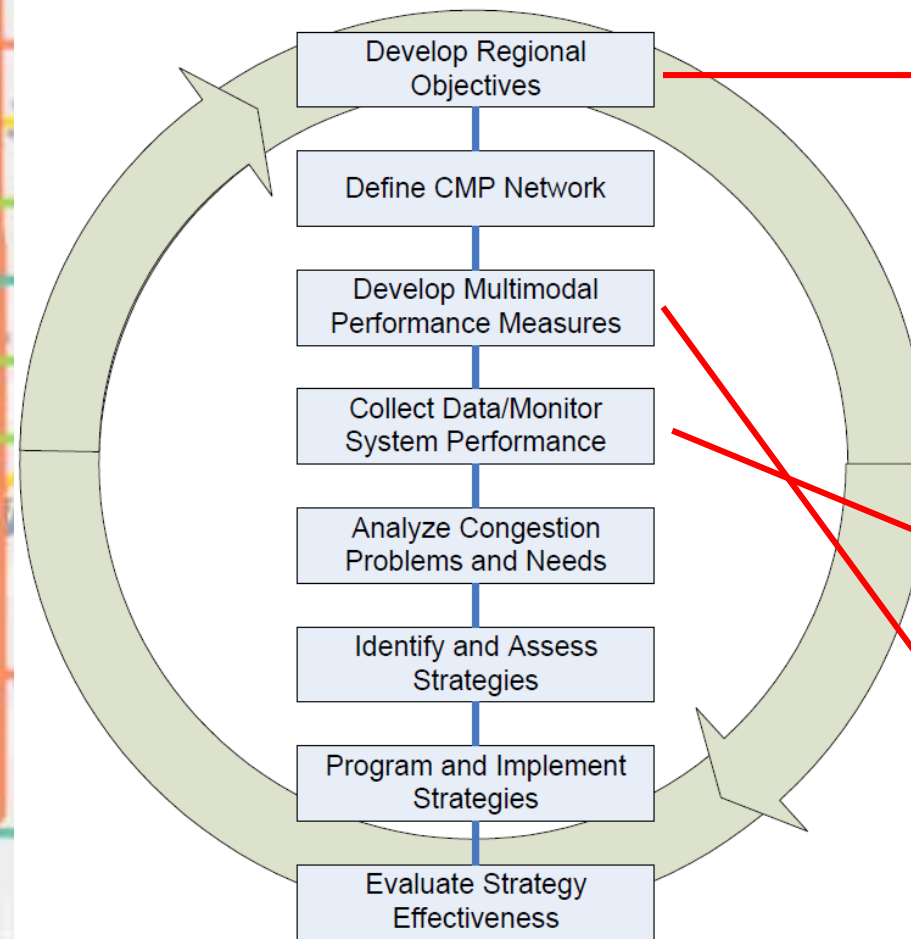


COMPAT Uses

- Visualization Tool for Congestion Performance
 - Anticipated for use within CMP subcommittee or technical advisory committee settings
 - Quickly highlight poorly performing highways, roadway networks by:
 - major roadways
 - functional classification,
 - NHS and non-NHS,
 - county,
 - Quickly compare and export congestion data for multiple performance metrics.
 - Select and compare multiple roadways using performance metrics
 - Develop average hourly speed profiles for select roadways

For Transportation Management Areas

Figure 2. Elements of the Congestion Management Process



Reduce hours of delay by 15% percent by 2030

Select metrics

- Person Hours of Delay Annual Person Hours of Delay
- Planning Time Index 80 80th Percentile Planning Time Index
- Planning Time Index 95 95th Percentile Planning Time Index
- Truck Vehicle Hours of Delay Annual Hours of Truck Delay

Selected Data Year is 2017

Traffic and Speed Data Sources

INRIX speed data procured by TxDOT
[TxDOT Roadway Inventory](#)

Select summary category: National Highway System | Customize table

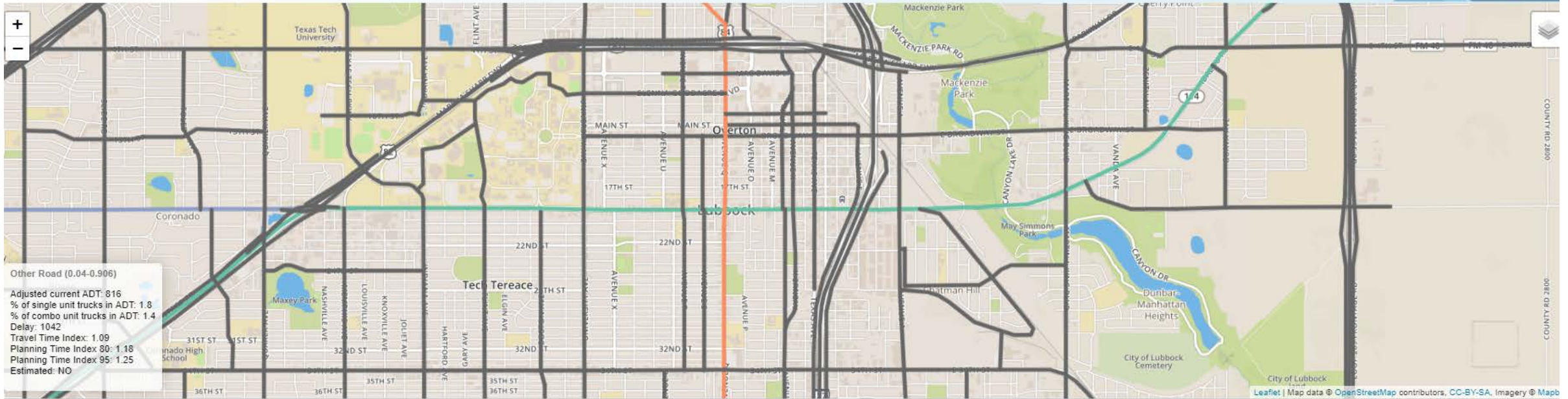
Summary Table

Category	Person Hours of Delay	Truck Vehicle Hours of Delay
Not on the NHS	3,318,146	74,461
On the NHS, not an intermodal connector	4,162,751	98,713
Major Airport	12,251	203
All	7,493,148	173,377

Download as a csv file

Quickly Comparing / Contrasting Different Congested Routes

CONGESTION MANAGEMENT PROCESS ASSESSMENT TOOLS (COMPAT)



Regional summary

Monitored road sections

Select a road section

Ria Route Id

Segment A

Segment B

Selected Data Year is

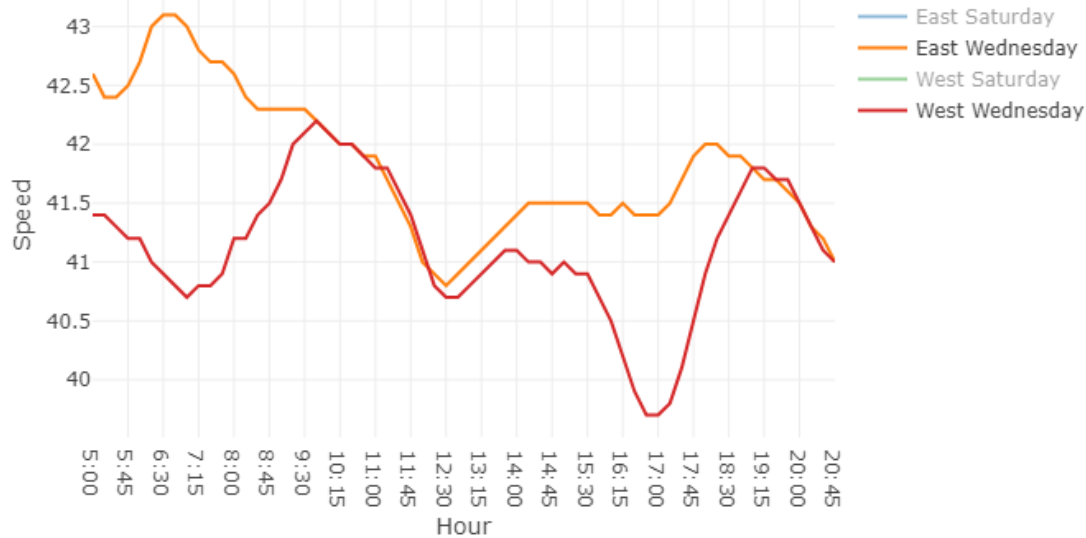
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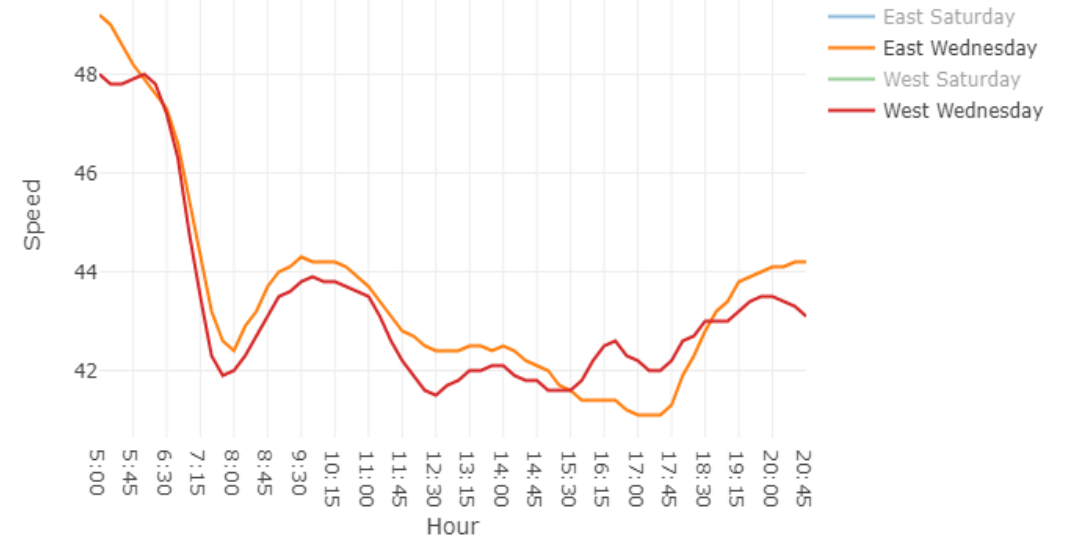
	Person Hours of Delay	Planning Time Index 80	Planning Time Index 95	Truck Vehicle Hours of Delay	Truck Planning Time Index 80	Truck Planning Time Index 95	Estimated Coverage - VMT	Estimated Coverage - Miles
<input type="checkbox"/> US0062-KG (219.539-241.164)	278,454	1.15	1.18	8,806	1.13	1.18	12.62%	15.83%
<input type="checkbox"/> US0084-KG (60.333-76.862)	296,316	1.16	1.19	15,109	1.16	1.21	31.51%	25.79%
<input type="checkbox"/> SH0114-KG (60.992-70.188)	253,166	1.23	1.27	4,261	1.19	1.25	7.26%	6.45%

Quickly Comparing / Contrasting Different Congested Routes (pt. 2)

Speed Profiles: US0084-KG (60.333 - 76.862)

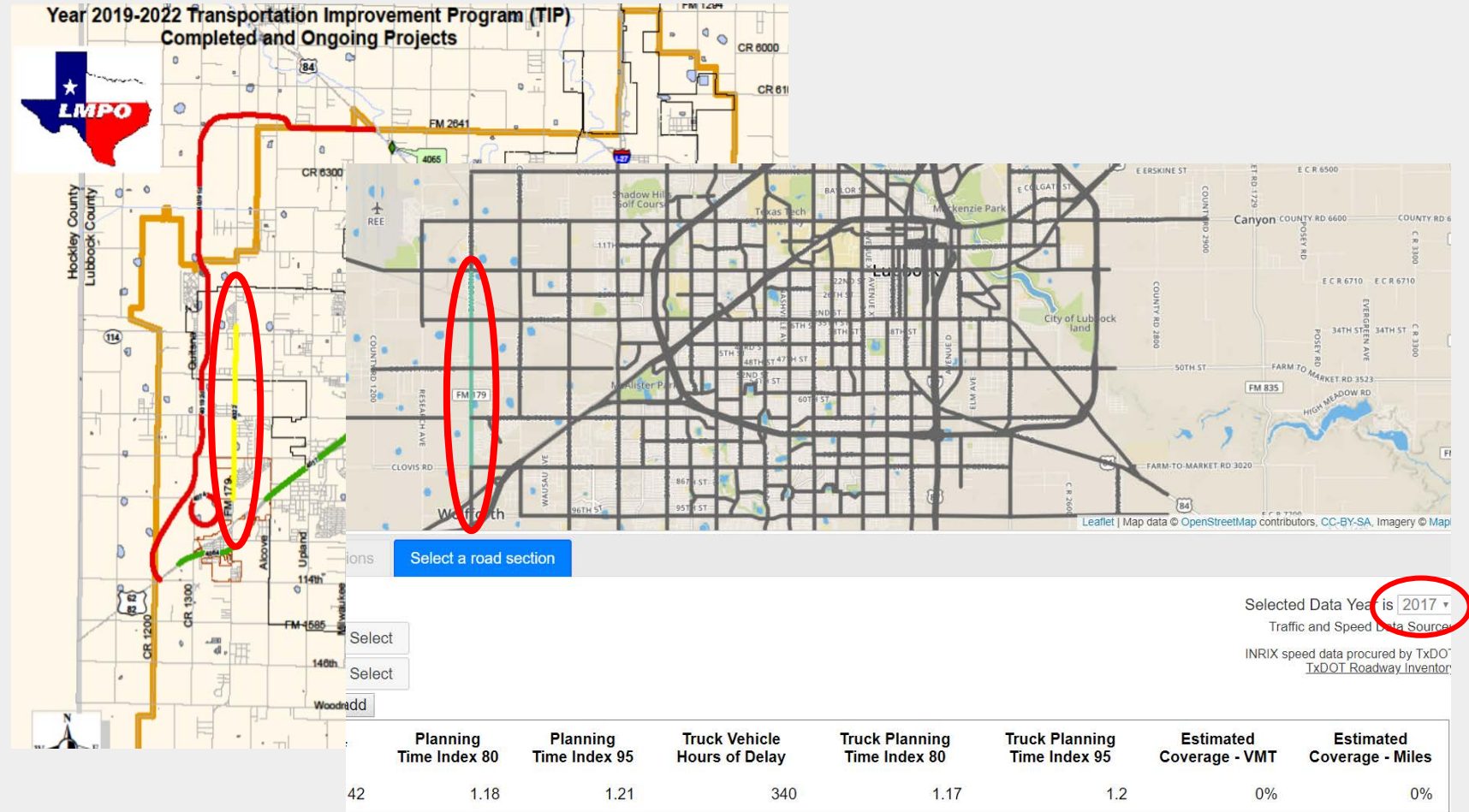


Speed Profiles: SH0114-KG (60.992 - 70.188)



Project Selection and System Performance Monitoring

- Overlay select road sections for CMP network on proposed projects in TIP.





Without further ado...

<https://compat.tti.tamu.edu/>

COMPAT Shapefiles

- TTI can provide underlying COMPAT shapefiles on request.
- For questions related to congestion analysis and related details contact David Schrank (d-schrank@tti.tamu.edu) or Tim Lomax (t-Lomax@tti.tamu.edu).

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