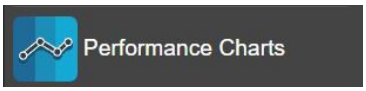
The CMP is a regional program to address and manage congestion within the 10-county Southwestern Pennsylvania region in order to facilitate the movement of people and goods.

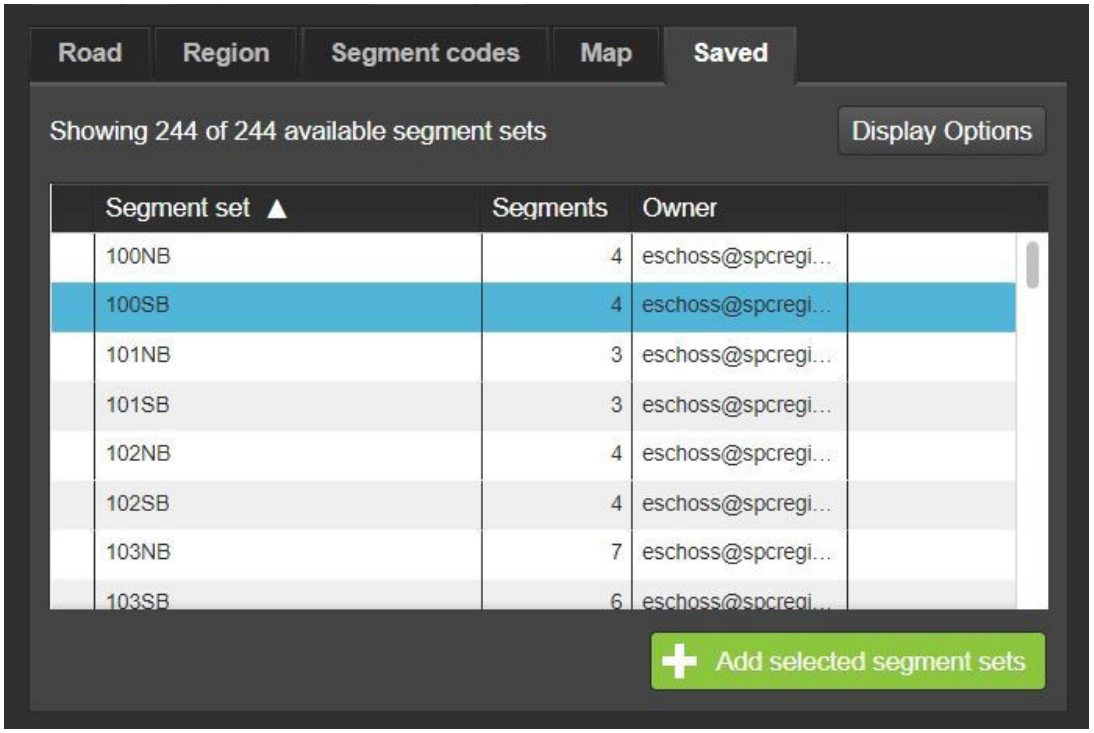
Congestion Management Process

RITIS Data Analysis

1. Log onto the RITIS Probe Data Analytics Suite website listed here: https://pda.ritis.org/suite

2. At the top, navigate to the **Performance Charts** section.
   This is the INRIX data we use for each corridor.
   The corridors have 2 TMC sets each, by direction, which can be accessed through the "SAVED" TMC sets tab (see below).





3. **Select Roads:** Select the corridor TMC set you wish to download data for, and click Add.

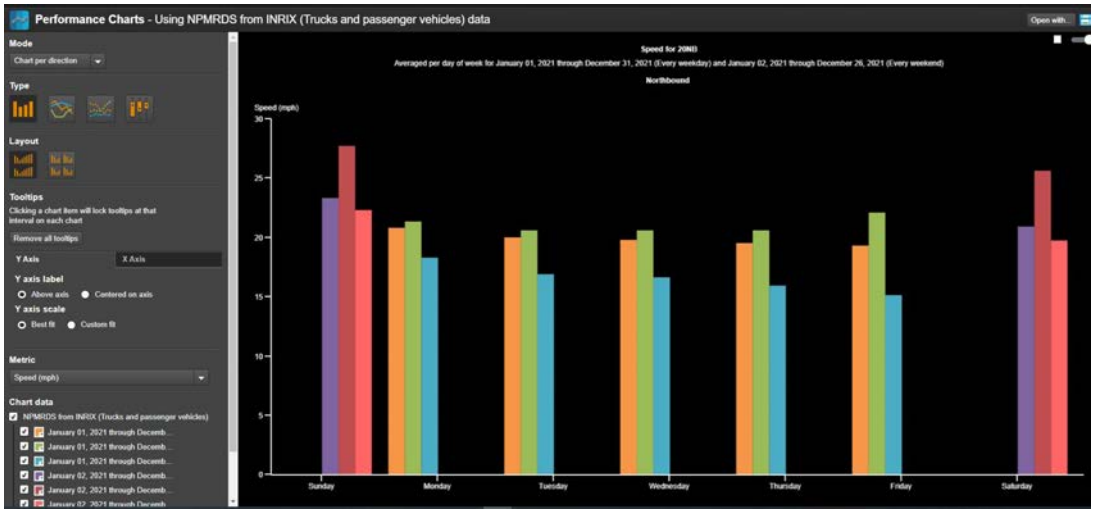
4. **Select Time Period:** From the days tab, select a full calendar year.
   Jan. 1, 202X-December 31, 202X

   Check the *Limit to Specific Days of the Week* box, and select 2 separate time periods.
   One for the weekdays (M-F) and one for the weekends (S&S).

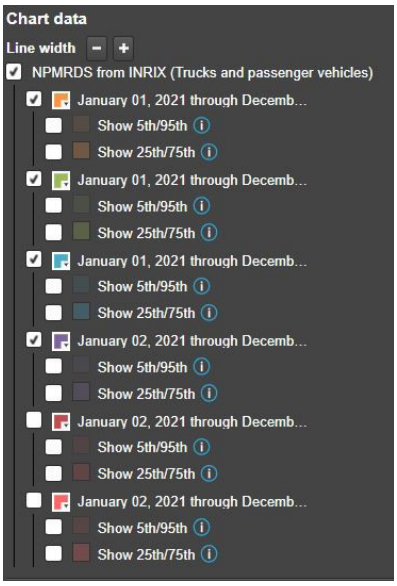
5. **Select Data Source:** *NPMRDS from INRIX* (Trucks and Passenger Vehicles)

6. **Select Granularity:** select *Day of the Week*. We need to have 3 time periods; therefore, we need to add two time periods.
   Full day 12AM-12PM is already present.
   Add the Morning Peak, 6AM-10AM.
   Add the Evening Peak, 3PM-7PM.

7. Click Submit, and your download will begin in a new window.
   (See next page for data display specifics)



In order to display the data in the format we need, we need to make a few changes.



1. **Type:** Switch the display from column to line.
2. **Metric:** Planning Time Index: Free Flow Speed followed by Travel Time (minutes)
3. **Chart Data:** Turn off all of the percentile data, and remove the am and pm peak periods from the chart by unclicking the boxes as shown on the right.
4. In the top right, hover over the disk icon and click save as: Select XML file, and click save. Once it downloads, open the file in excel, and enable editing.
5. Once it downloads, open the file in excel, and enable editing. Select all of the values in the chart and right click, copy.

	A	B	C	D	E	F	G
1		Planning time index: Free Flow Speed for 20NB					
2							
3			Northbound				
4			DS from INRIX (Trucks and passenger ve				
5			December	31, 2021 (	r 31, 2021	December 26, 2021 (E	
6	Sunday					4.29	
7	Monday		4.47	4.05	5.2		
8	Tuesday		4.83	4.36	5.3		
9	ednesday		4.88	4.13	5.75		
10	Thursday		4.88	4.26	5.74		
11	Friday		5.08	3.84	5.92		
12	Saturday					4.68	

6. Open the template file and paste the data into the file. Select save as, and save the file as a pdf (with the set naming convention) into the CMP folder:

   "(#CMP)(Direction) (PlanningTimeIndex or TravelTime) for (Year)"

   Example: *CMP20NB PlanningTimeIndex for 2021.pdf*

	Northbound Planning Time Index			
	NPMRDS from INRIX (Trucks and passenger vehicles)			
	Weekday All Day	Weekdays AM Peak (6-10am)	Weekdays PM Peak (3-7pm)	Weekends All Day
Sunday				4.29
Monday	4.47	4.05	5.2	
Tuesday	4.83	4.36	5.3	
Wednesday	4.88	4.13	5.75	
Thursday	4.88	4.26	5.74	
Friday	5.08	3.84	5.92	
Saturday				4.68

7. Complete this step for both the Planning Time Index and Travel Time charts for each direction, and combine them with adobe into a single pdf by corridor. As long as the corridor length or posted speed limit hasn't changed, you can reuse the previous years header information.

CMP 15 - SR 51 - Northbound 2020	
Corridor Length (miles)	6.2
Avg. Posted Speed Limit (mph)	42.9
Travel Time @ Posted Speed Limit (min)	8.7

Northbound Travel Time (in mins.)
NPMRDS from INRIX (Trucks and passenger vehicles)

	Weekday All Day	Weekdays AM Peak (6-10am)	Weekdays PM Peak (3-7pm)	Weekends All Day
Sunday				11.58
Monday	12.78	12.08	13.87	
Tuesday	12.78	12.03	13.97	
Wednesday	12.85	12.06	14.13	
Thursday	12.93	12.1	14.28	
Friday	13.02	12.07	14.48	
Saturday				12.28

Northbound Planning Time Index
NPMRDS from INRIX (Trucks and passenger vehicles)

	Weekday All Day	Weekdays AM Peak (6-10am)	Weekdays PM Peak (3-7pm)	Weekends All Day
Sunday				2.40
Monday	2.59	2.36	2.8	
Tuesday	2.6	2.38	2.85	
Wednesday	2.63	2.38	2.85	
Thursday	2.64	2.34	2.95	
Friday	2.74	2.39	3.07	
Saturday				2.72

CMP 15 - SR 51 - Southbound 2020	
Corridor Length (miles)	6.2
Avg. Posted Speed Limit (mph)	42.9
Travel Time @ Posted Speed Limit (min)	8.7

Southbound Travel Time (in mins.)
NPMRDS from INRIX (Trucks and passenger vehicles)

	Weekday All Day	Weekdays AM Peak (6-10am)	Weekdays PM Peak (3-7pm)	Weekends All Day
Sunday				11.53
Monday	12.56	11.81	13.91	
Tuesday	12.6	11.77	13.88	
Wednesday	12.73	11.72	14.25	
Thursday	12.67	11.78	14.03	
Friday	12.87	11.85	14.37	
Saturday				12.28

Southbound Planning Time Index
NPMRDS from INRIX (Trucks and passenger vehicles)

	Weekday All Day	Weekdays AM Peak (6-10am)	Weekdays PM Peak (3-7pm)	Weekends All Day
Sunday				2.51
Monday	2.55	2.23	2.86	
Tuesday	2.57	2.16	2.87	
Wednesday	2.59	2.18	3.06	
Thursday	2.55	2.21	2.88	
Friday	2.65	2.21	3.03	
Saturday				2.68

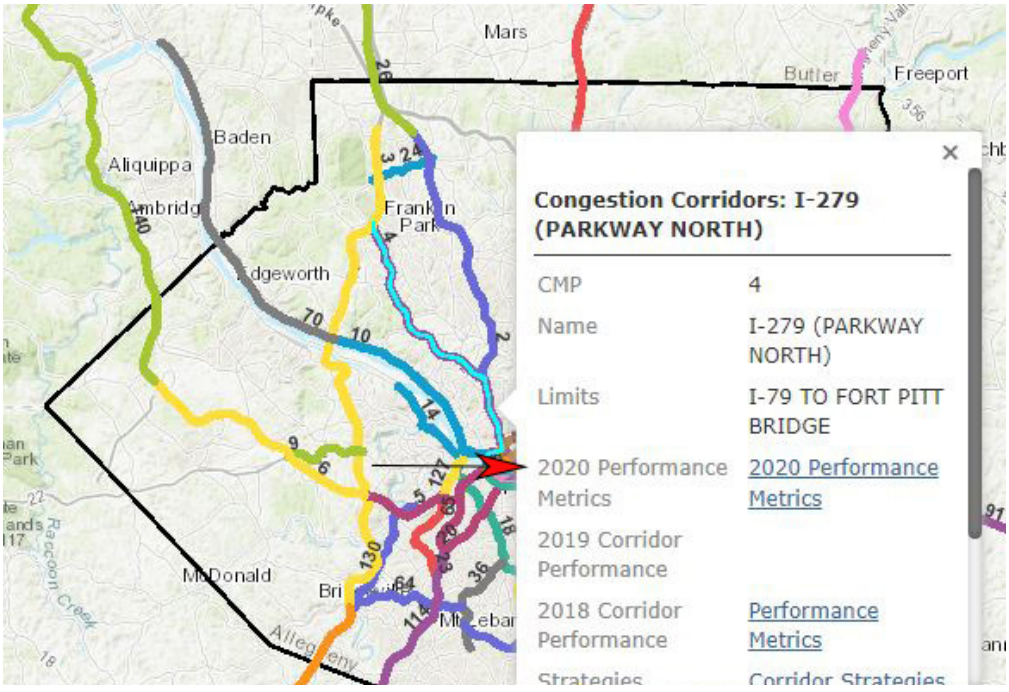
8. Once completed, these files need to be linked into the SPC CMP ArcGIS web app.

9. Open the individual county CMP maps/layers that feed into the CMP app.

10. Create a new field called 2021 Performance Data. Calculate the values for the field based on the 2020 performance data. Edit the field. Change the hyperlink address to match the filename of the 2021 data. Save your edits. Share the service, rewrite an existing service, select the existing service name (usually highlighted) and keep all of the same settings. Select Share.

11. Upload the completed 2021 CMP data to the ArcServer. In the CMP folder (wwwroot>inetpub>CMP), create a new folder for the 2021 data, and paste all of the pdf charts into that folder.

12. Once completed, check the CMP app to make sure the changes to the county maps are being shown in the app. You may need to clear your cache if the performance data isn't showing correctly.



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