Delmarva #FreightFriday

Freight Operations

June 12, 2020

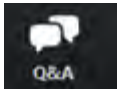
Presented by the University of Delaware Institute for Public Administration in partnership with:

Delaware Department of Transportation (DelDOT), Dover/Kent County MPO, Salisbury/Wicomico MPO, and WILMAPCO

UNIVERSITY OF DELAWARE

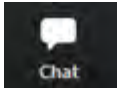
Welcome to this webinar!

As a webinar participant you are **automatically muted and your video is disabled.** Hover your mouse over the lower portion of your Zoom screen to access your controls:



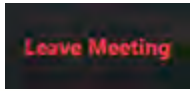
Use the Q&A box to type in your questions for the speakers. You can "Upvote" your favorite questions by clicking the "thumbs up" icon.

Raise your hand to show your engagement when the speakers request your participation.



Use the chat window to request technical support from the host.

We are recording this webinar to share online.



Participate in the evaluation when you leave the webinar.

Agenda

Delmarva Central Railroad: Operations Update and Seaford Transload Case Study

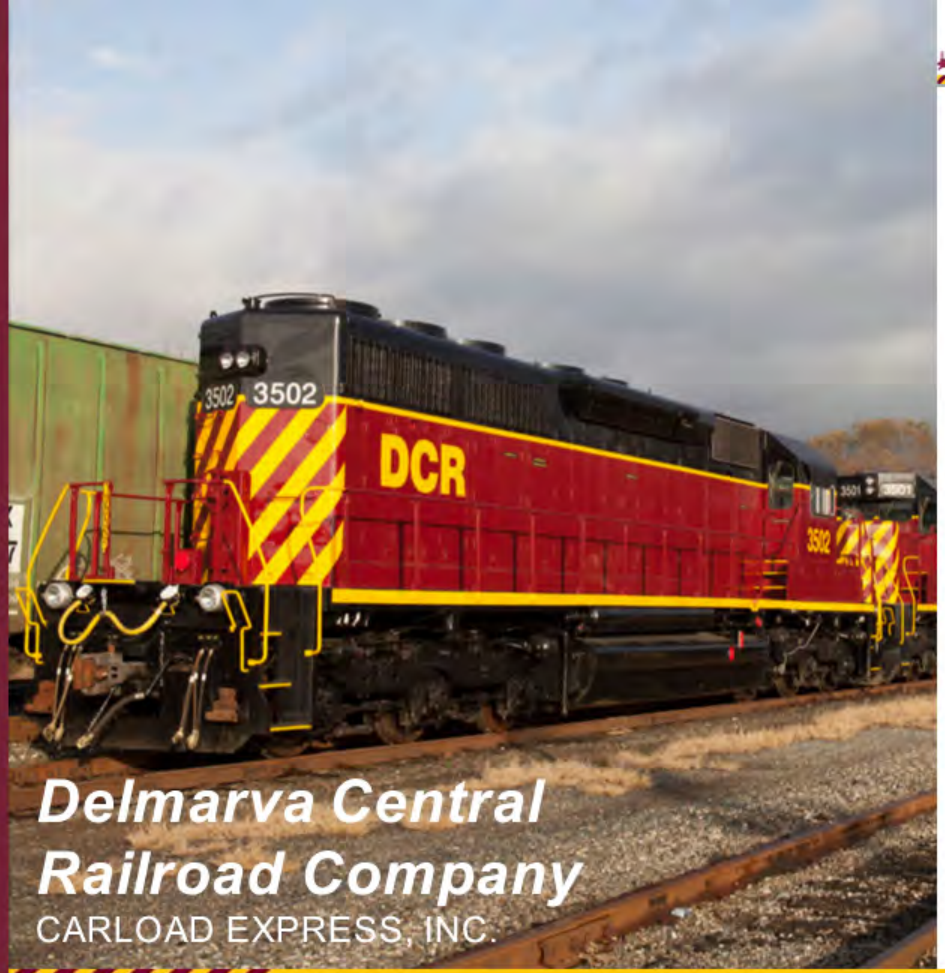
Cliff Grunstra, Chief Marketing Officer, Delmarva Central Railroad

Revised Hours of Service Regulations

Philip Strohm, Delaware Division Administrator, Federal Motor Carrier Safety Administration

Traffic Impacts of the COVID-19 Shutdown

Dan Blevins, Principal Planner, WILMAPCO



Delmarva Central Railroad Company

CARLOAD EXPRESS, INC.

June 12, 2020

Delmarva Central Railroad

ABOUT DCR: START UP

On December 17, 2016, Carload Express subsidiary Delmarva Central Railroad (DCR) took over 162 miles of Norfolk Southern Trackage on the Delmarva Peninsula in Maryland and Delaware.

START-UP	
48	Hours to transition operations
12	Locomotives moved into place
20	Contractors mobilized for support
5	Offices established (IT, Communications, Etc…)
9	Dispatch Radio Bases Transitioned
1,000+	Locks Changed out
CTC & TWC	Cutover of operating control systems from NS to DCR including Centralized Traffic Control (CTC) and Track Warrant Control (TWC)
45+	Customers seamlessly transitioned from NS to DCR

Delmarva Central Railroad, 2016

Delmarva Central Railroad

ABOUT DCR: FIRST THREE YEARS OF GROWTH

Major Milestones

- Invested over **$10.0 million**
- Over 60,000 ties installed since 2016
- 13 locomotives acquired & refurbished
- Over 40 grade crossings resurfaced (track & highway)
- Expanded operations over two additional lines, bringing total network to 188 miles
- Added 6 rail-served customers
- Operated 1st Unit Trains for an Agricultural Customer in over 17 years
- Improved unit aggregate train cycle times by over 30%
- Grew corn traffic 128% since 2016
- Worked closely with propane customer to double track capacity in their facility
- Invested over $1.5 million to develop multi-commodity rail-to-truck transload facility in Seaford, DE

2019 MILESTONE: Grew Aggregates Volumes 39.5% over 2018!

Delmarva Central Railroad

CASE STUDY: SEAFORD TRANSLOAD

In 2018, DCR purchased the vacant former BASF bulk liquids facility at Seaford, Delaware. DCR parent company Carload Express makes strategic investments in vacant rail-served real estate in order to secure properties as future rail customers.

Delmarva Central Railroad

CASE STUDY: SEAFORD TRANSLOAD

In 2019, DCR redeveloped the facility and opened it as the new Seaford Transload Terminal.

By leveraging existing relationships and through extensive research, DCR generated two new lanes of steady rail business at the Seaford Transload Terminal.

- Through deep discussions with existing customers, it was uncovered that certain liquid ingredients, vital to the manufacture of chicken feed, were being trucked in from beyond the Delmarva Peninsula.
- DCR approached the market leaders and partnered with these suppliers via long term agreements to ship railcars of liquid feed ingredients to the eastern shore of Delaware, Maryland, & Virginia for transloading at the previously-acquired facility in Seaford.
- Significant investments were made to the site to allow for the efficient handling of this new rail traffic that was a pure 100% conversion from long-haul trucks. DCR coordinated with multiple departments of the City of Seaford to make this vision a reality.

Delmarva Central Railroad

CASE STUDY: SEAFORD TRANSLOAD

A roadway was built adjacent to an existing rail siding in the facility to allow direct railcar-to-truck transloading of liquid feed ingredients. Railcars are loaded in Texas and are spotted at the Seaford Transload upon arrival. This system gives the customers trucks 24/7/365 access for transloading activities.

DCR subsequently added a complete pump, pipe, tank and truck loadout system to allow a second new Fortune 50 customer to ship railcars of liquid feed ingredients to the DCR. These cars originate in the Midwest and the DCR transloads the railcars into the tanks so truckers can load at the Seaford Transload Terminal on-demand to serve our mutual customers. The entire liquid transloading and storage system is heat-traced and insulated and was designed and 100%-funded by DCR to secure this long-term business.

Delmarva Central Railroad

CASE STUDY: SEAFORD TRANSLOAD

As a result of these two projects, DCR secured several hundred new railcars of highly-consistent traffic per year. These liquid feed ingredients are critical to the chicken industry on the eastern shore, and now they are available in quantity at a centralized location, eliminating the unpredictability and risk associated with sourcing this highly valued material via long-haul trucks.

ADM

NOVUS

The DCR uncovered an opportunity, provided unique solutions, invested in that vision, and created a new innovative supply chain that has boosted the local economy, strengthened relationships with some of our most important customers, put a previously idle industrial site to use, and created long-term value for all stakeholders (suppliers, receivers, community and the railroad).

Delmarva Central Railroad

CONTACT

Cliff Grunstra

Chief Marketing Officer

Mobile: 412.780.7767

Email: cliffgrunstra@carloadexpress.com

CARLOAD EXPRESS, INC.

519 Cedar Way
Bldg. 1, Suite 100
Oakmont, PA 15139
Fax: 412.426.4000

U.S. Department of Transportation
Federal Motor Carrier Safety Administration

Hours of Service

What's new in the final rule published June 2020

Hours of Service (HOS) Final Rule

- FMCSA published a revised HOS final rule on June 1st, 2020
- Drivers must operate under new rule starting on September 29th, 2020, not before
- HOS final rule changes the following 4 provisions

Short-Haul Exception

Adverse Driving Conditions Exception

30-Minute Break Requirement

Sleeper Berth Provision

Why did the HOS rule change?

- Developed based on the direct **input from truckers, industry, safety advocates, Congress, and the American people.**
- Rule will result in **critical regulatory savings of over $270 million**—which will help create more jobs and strengthen the motor carrier industry.

Rule aims to **provide drivers with greater flexibility** while **maintaining safety** on our Nation's roads

Engaging Stakeholders in HOS Rulemaking

2018 **Advanced Notice of Proposed Rulemaking**

Determine if HOS revisions may alleviate unnecessary burdens placed on drivers while maintaining safety

5,000+
public comments

2019 **Notice of Proposed Rulemaking**

Seek input on five specific changes to HOS provisions

2,800+
public comments

Understanding the HOS Changes

Short-Haul Exception

CDL carriers using the short-haul exception are not required to use a RODS or ELDs, or take a 30-minute break (§395.1(e)(1))

HOS final rule:

1. Extends maximum driving distance allowed under the short-haul exception from a 100 to a **150 air-mile radius**
2. Extends maximum duty period from 12 to **14 hours**

EXAMPLE Under the previous rule, a driver based in Peoria could not service Chicago and St. Louis. The new rule allows the driver to service those two cities, as well as an additional 2 hours to do so

Previous rule:

New rule:

Short-Haul Exception

CDL carriers using the short-haul exception are not required to use a RODS or ELDs, or take a 30-minute break (§395.1(e)(1))

HOS final rule:

1. Extends maximum driving distance allowed under the short-haul exception from a 100 to a **150 air-mile radius**
2. Extends maximum duty period from 12 to **14 hours**

EXAMPLE Under the previous rule, a driver based in Dover, could not service New York and Richmond. The new rule allows the driver to service those two cities, as well as an additional 2 hours to do so.

Previous rule:

New rule:

Short-Haul Exception

- No other provisions of the CDL short-haul exception changed
- New HOS rule does not change the non-CDL short-haul exception in §395.1(e)(2)

To be able to use the short-haul exception, the CMV driver must:

- Operate within a 150 air-miles radius
- Not exceed a maximum duty period of 14 hours
- Start and end shift in the same location
- Have at least 8 (passenger) or 10 (property) hours off between shifts
- Include the start and end times for the day and the total hours on-duty on the time record for the day

Short-Haul Exception and Logs

While operating under the short-haul exception, drivers are not required to fill out a log with a graph grid or use an Electronic Logging Device (ELD), they can use a time record instead

- Motor carrier must record the driver's time in, time out, and total # of hours per day
  - Time must include the total time for the 7 preceding days
  - Records must be maintained for 6 months

- When a driver no longer meets the exception, (drives too far/works too many hours), the driver must complete a regular log or use an ELD for the day (§395.8)
  - If driver is required to complete a log:
    - **8 or fewer days** within the last 30 days ► driver can use **paper log with a graph grid**
    - **More than 8 days** within the last 30 days ► driver must use an **ELD** to record time for that day

Adverse Driving Conditions Definition

Previous

Adverse driving conditions means snow, sleet, fog, or other adverse weather conditions, a highway covered with snow or ice, or unusual road and traffic conditions, none of which were apparent on the basis of information known to the person dispatching the run at the time it was begun

New

Adverse driving conditions means snow, ice, sleet, fog, or other adverse weather conditions or unusual road or traffic conditions that were not known, or could not reasonably be known, to:

a driver immediately prior to beginning the duty day or immediately before beginning driving after a qualifying rest break or sleeper berth period, or

a motor carrier immediately prior to dispatching the driver

Adverse Driving Conditions Exception

Under the previous rule, drivers were granted an exception to the 10- or 11-hour driving limits when unforeseeable adverse driving conditions affected their route

HOS final rule:

1. **Extends the duty day by 2 hours when adverse driving conditions are encountered**
   - In addition to the 2 hours of driving time already allowed, and **applies to both:**
     - **Property carrier 14-hour driving window** (§395.3(a)(2)) and
     - **Passenger carrier 15-hour on-duty limit** (§395.5(a)(2))
2. Updates the **adverse driving conditions definition** to include the role of the driver

Adverse Driving Conditions Exception

EXAMPLE A driver is 15 miles from his destination when there is a gravel spill on the bridge ahead (the bridge is the only access to the destination)

- Driver has 1 hour left of driving time and 1 hour left in the driving day
- Driver can stop at the next exit (for up to 2 hours) until the road is clear, and still have time to get to the destination without violating HOS rules

Drivers should annotate, and include details about, the adverse driving condition in their log or Electronic Logging Device (ELD)

30-Minute Break Requirement

Under the previous rule, property-carrying drivers were required to take a 30-minute break after 8 hours **on-duty** §395.3(a)(3)(ii)

HOS final rule:

1. 30-minute break is required after **driving** for 8 hours without at least a 30-minute break
2. 30-minute break can also be satisfied by an "on-duty not driving period"

Previous
30-minute break can be satisfied by:
Off-duty
Sleeper birth

New
30-minute break can be satisfied by:
Off-duty
Sleeper birth
On-duty, not driving

30-Minute Break Requirement

EXAMPLE The examples on this slide assume the driver has driven for 8 hours and needs to take a 30-minute break

- **Previous Rule:** only the top log is compliant
- **New Rule:** both logs are compliant

Short *non-consecutive* periods cannot be combined to reach 30 minutes of non-driving time. 30 minutes must be consecutive.

Sleeper Berth Provision

Allows drivers to split 10-hour off-duty period, as long as:

- **One off-duty period (whether in or out of the sleeper berth) is at least 2 hours long**, and
- **The other involves at least 7 consecutive hours in the sleeper berth**

When used together, neither period counts against the 14-hour driving window

- 8-hour sleeper-berth period by itself can no longer be excluded from the 14-hour driving window

Note: Short-haul drivers are still exempt from requirement

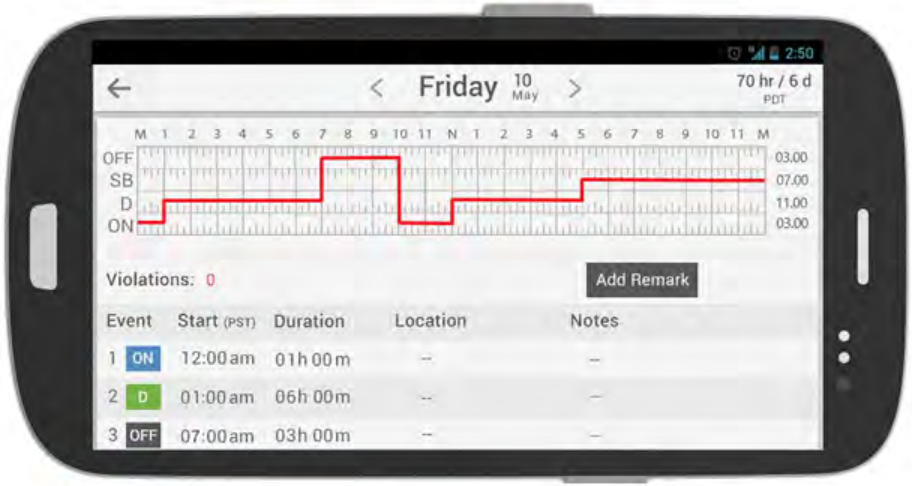
Sleeper Berth Provision

EXAMPLE

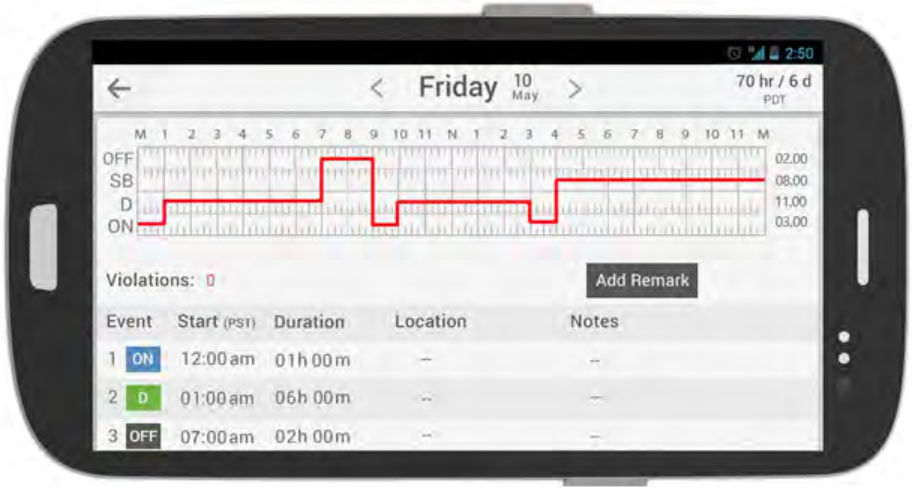
The example on this slide assumes the driver starts day 1 having just completed 10 consecutive hours off-duty

- None of the 4 break periods count against the driver's 14-hour window

Day 1: Driver used a 7/3 split



Day 2: Driver used an 8/2 split



When do the changes take effect?

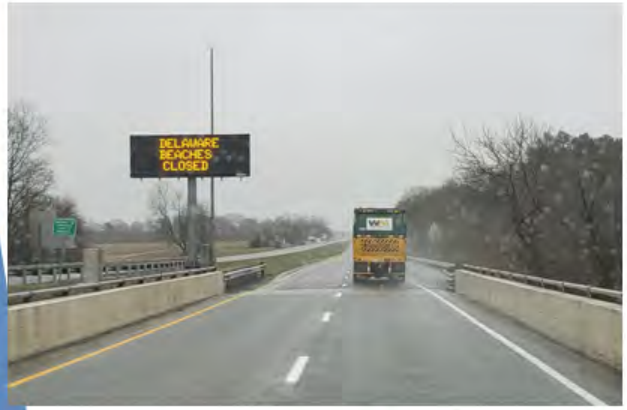
PUBLICATION DATE	COMPLIANCE DATE
JUNE 1st	SEPT. 29th

Drivers and carriers must operate under the HOS final rule starting on the compliance date, and not before

More Information & Resources

For information and example logbooks, visit:
https://www.fmcsa.dot.gov/regulations/hours-of-service

Travel Impacts of the CoVID-19 Shutdown: The Delaware Perspective



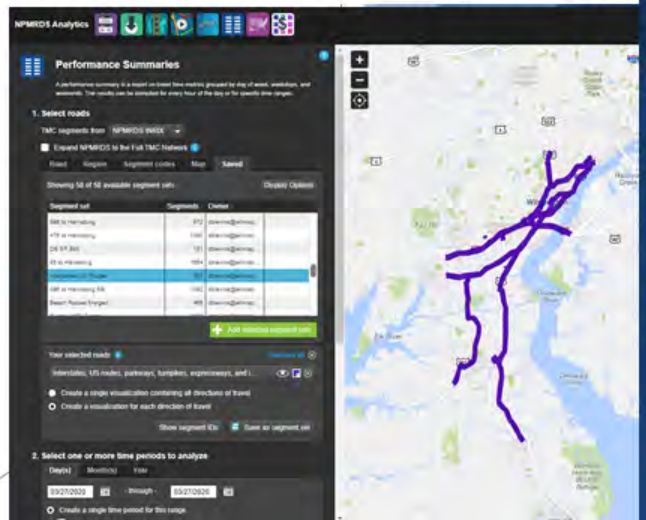
Measuring the Impacts

- Easier than ever before!
- Use of new tools and technology
- Capture more data with quick turn around

Streelight©

Permanent Counters

Archived Travel Time Data (NPMRDS)



Measuring the Impacts…Why does it matter?

- Estimating revenue forecasts which are based on tolls/fuel taxes
- Timing of future data collection efforts (i.e. turning movements, AADT) for use in future traffic analysis
- What does the a new "normal" look like for freight???

Measuring the Impacts…Why does it matter?

- Estimating revenue forecasts which are based on tolls/fuel taxes
- Timing of future data collection efforts (i.e. turning movements, AADT) for use in future traffic analysis
- What does the a new "normal" look like for freight???

Curbside pickup is here to stay.

Because convenience plays a large role in customer satisfaction, and now safety too, retailers need to adjust quickly. Providing more ways for contactless shopping gives physical stores the ability to provide what a customer needs quickly while reducing shipping costs and increasing brand loyalty.

59%
Of consumers said they are **more likely to use curbside pickup** following the coronavirus outbreak.

75%
Of those who subscribed to multiple delivery services (including Amazon Prime), said they were still **likely to opt for curbside delivery** once the pandemic subsides.

Measuring the Impacts…Why does it matter?

- Estimating revenue forecasts which are based on tolls/fuel taxes
- Timing of future data collection efforts (i.e. turning movements, AADT) for use in future traffic analysis
- What does the a new "normal" look like for freight???

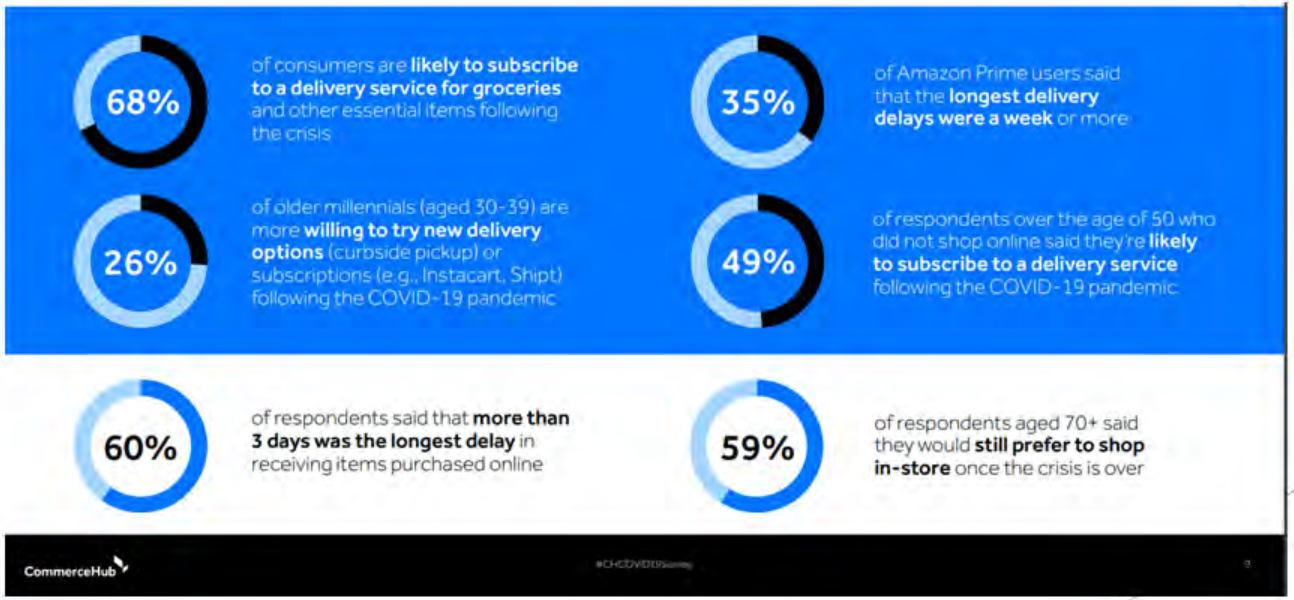
COVID-19 Shopping & Delivery Trends

Results from CommerceHub Consumer Survey

April 2020

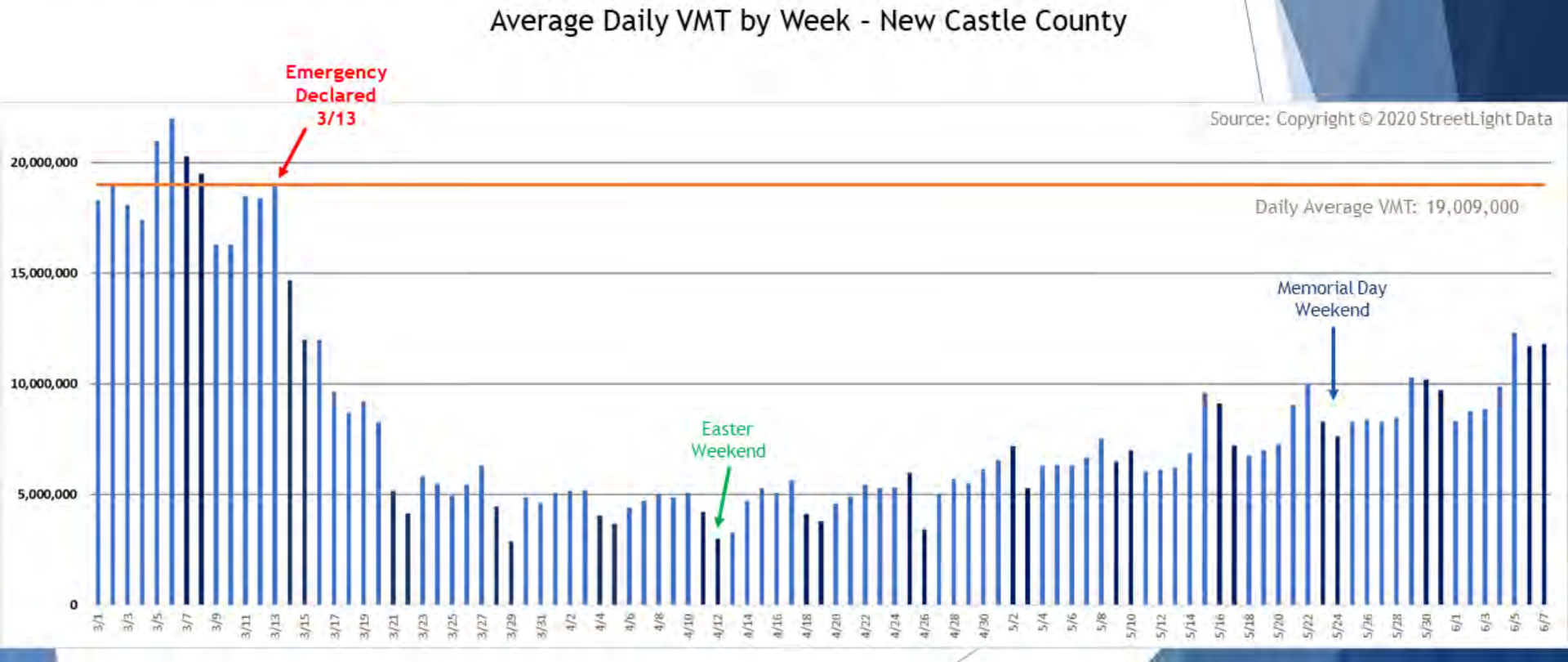
Over 1,500 respondents

CommerceHub



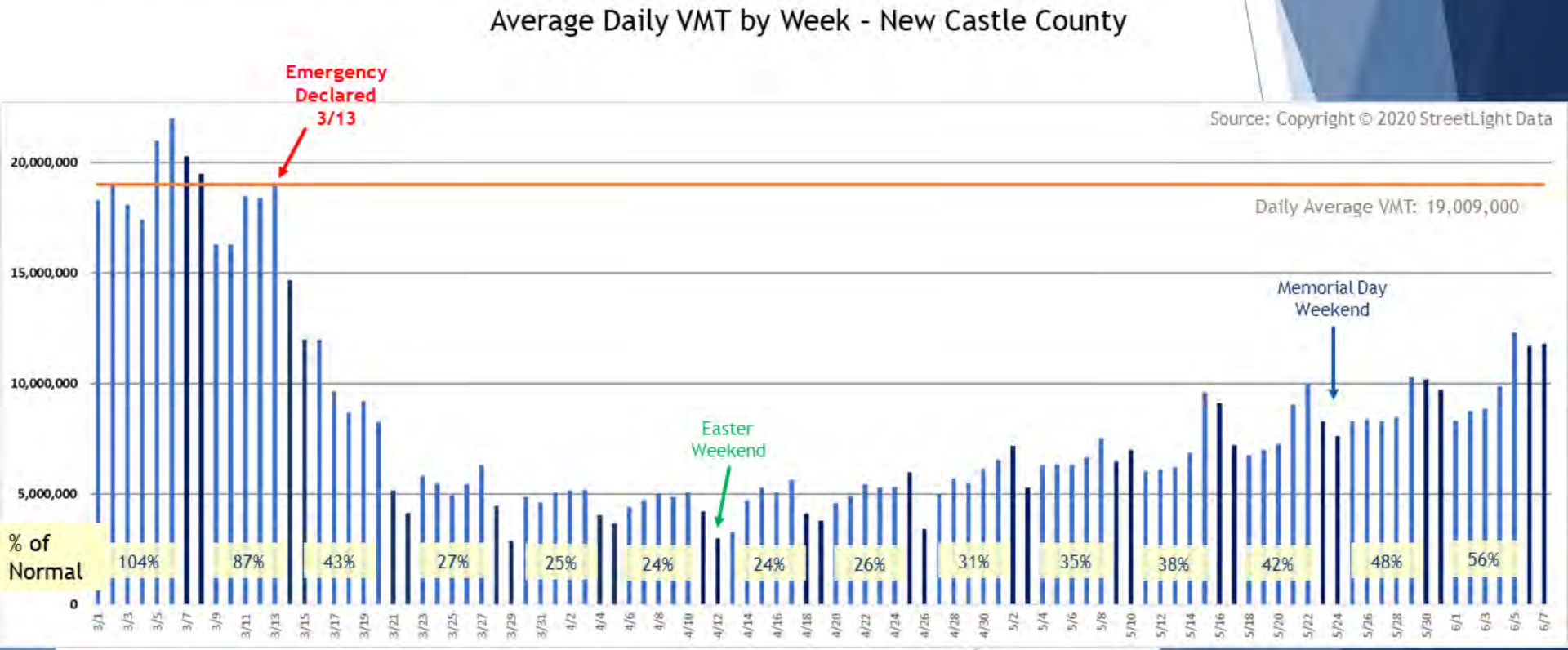
Measuring the Impacts...Overall Travel

- The chart below tracks the measured daily Vehicle Miles Traveled (VMT) in New Castle County leading up to and after the CoVID-19 emergency declaration. The darker blue bars indicate weekends.



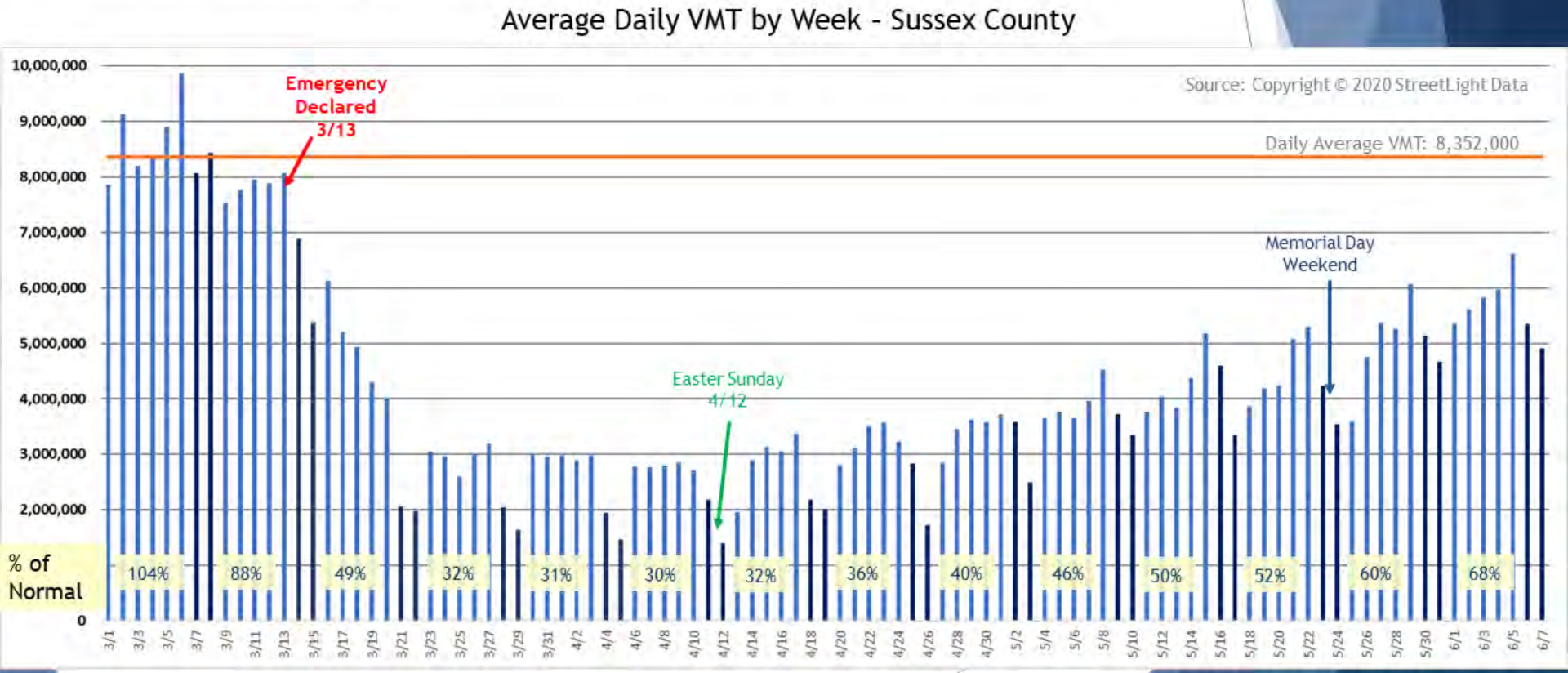
Measuring the Impacts…Overall Travel

- The chart below tracks the measured daily Vehicle Miles Traveled (VMT) in New Castle County leading up to and after the CoVID-19 emergency declaration. The darker blue bars indicate weekends.



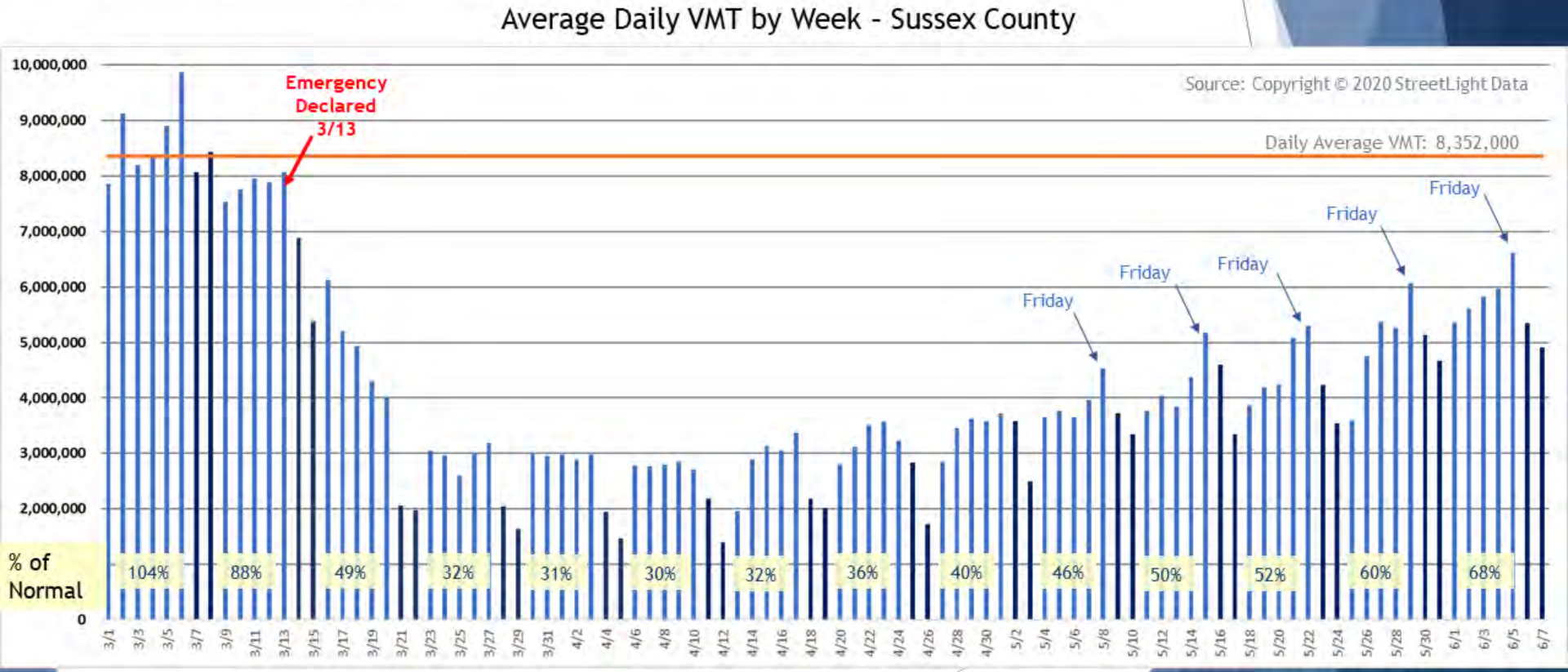
Measuring the Impacts...Overall Travel

- The chart below tracks the measured daily Vehicle Miles Traveled (VMT) in Sussex County leading up to and after the CoVID-19 emergency declaration. The darker blue bars indicate weekends.



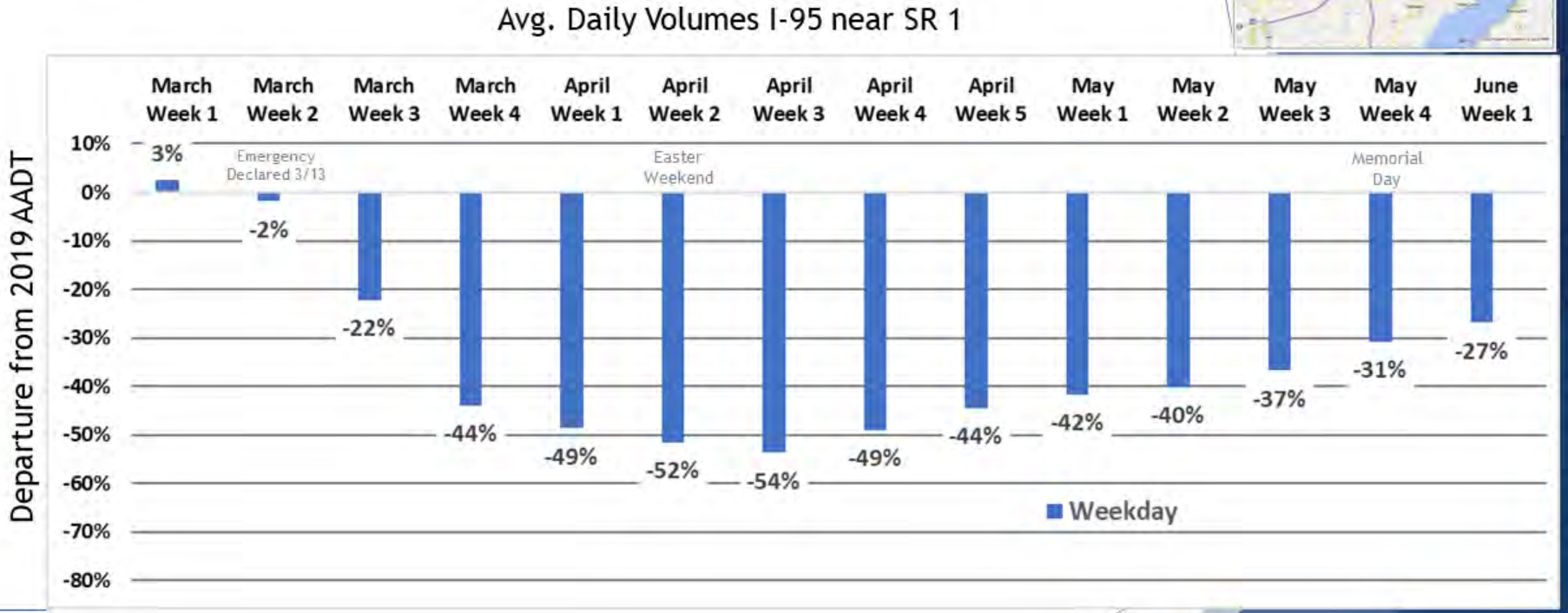
Measuring the Impacts...Overall Travel

- The chart below tracks the measured daily Vehicle Miles Traveled (VMT) in Sussex County leading up to and after the CoVID-19 emergency declaration. The darker blue bars indicate weekends.



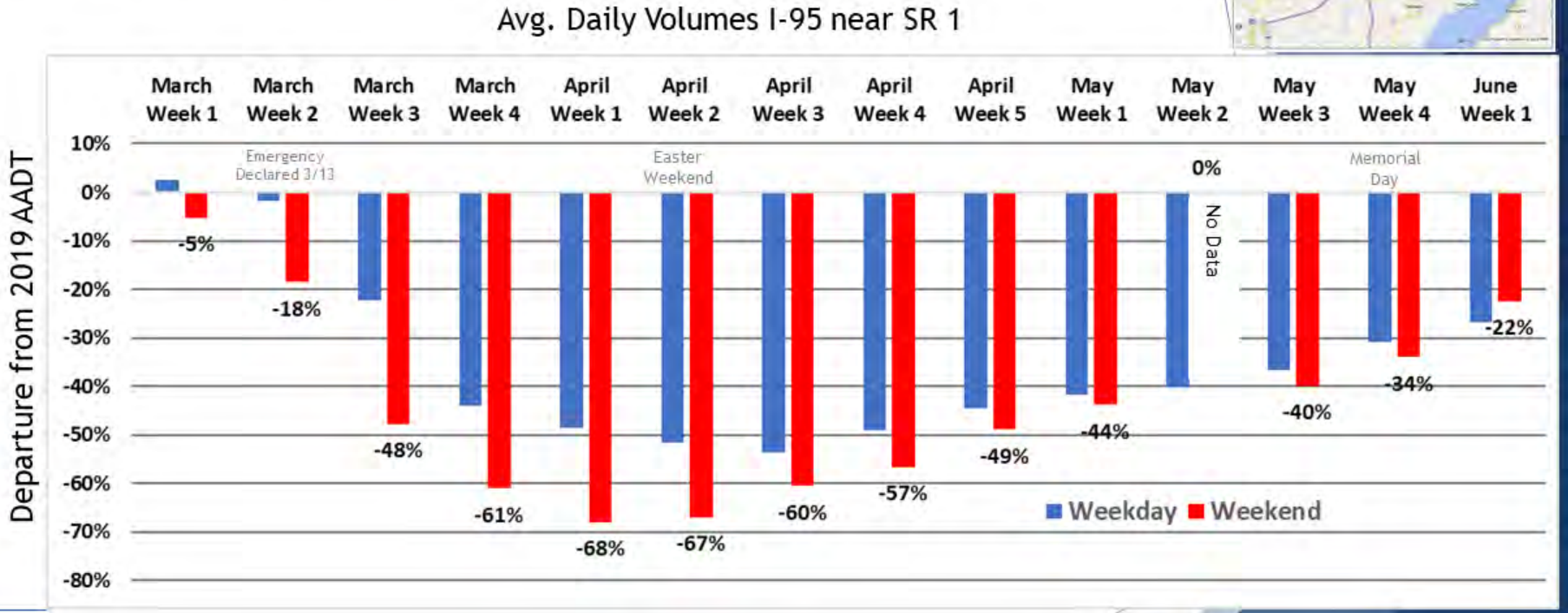
Measuring the Impacts…Traffic Volume

- Changes in weekly traffic volumes between 2019 and 2020



Measuring the Impacts…Traffic Volume

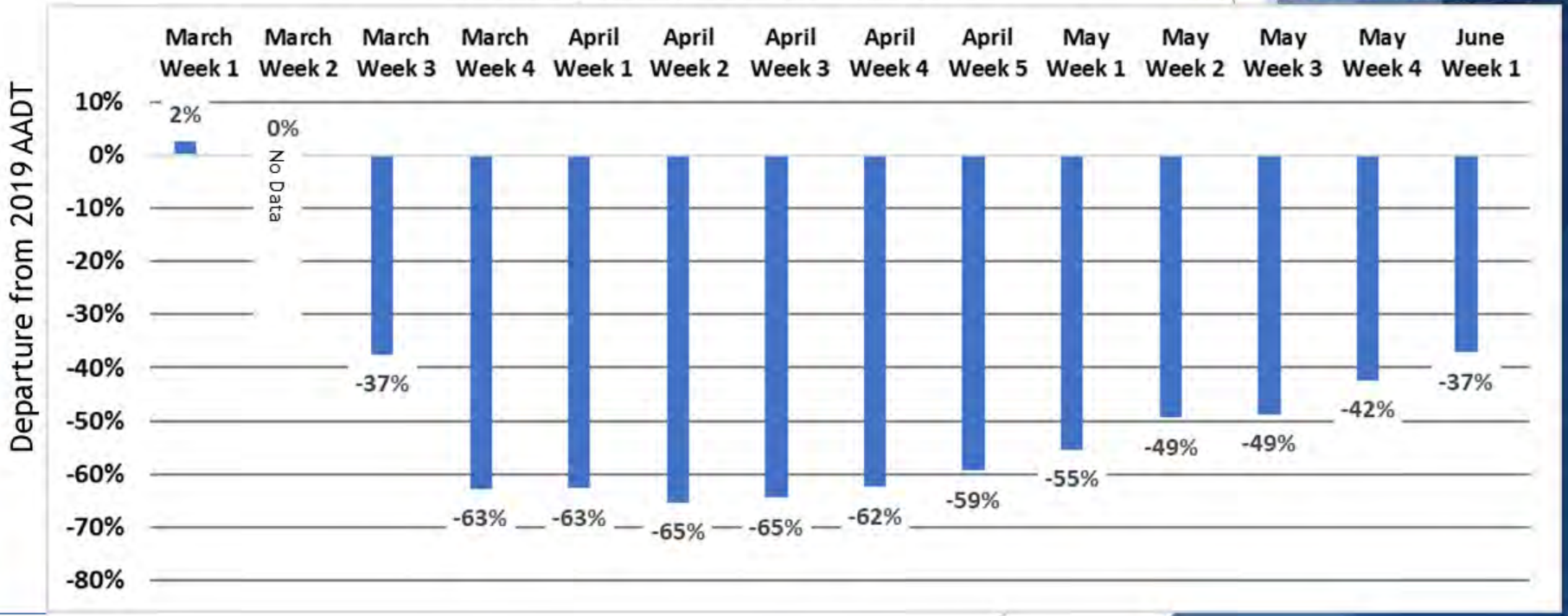
- Changes in weekly traffic volumes between 2019 and 2020



Measuring the Impacts…Traffic Volume

- Changes in weekly traffic volumes between 2019 and 2020

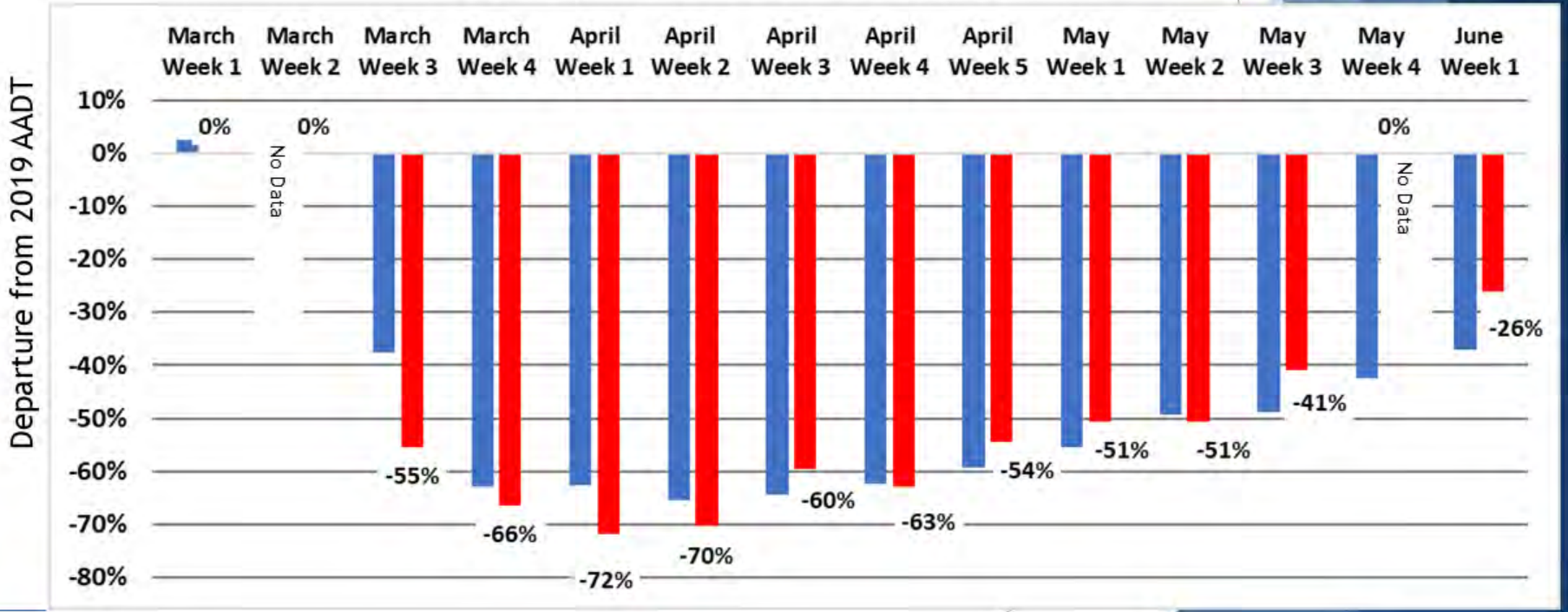
Avg. Daily Volumes US 202 near PA line



Measuring the Impacts…Traffic Volume

- Changes in weekly traffic volumes between 2019 and 2020

Avg. Daily Volumes US 202 near PA line

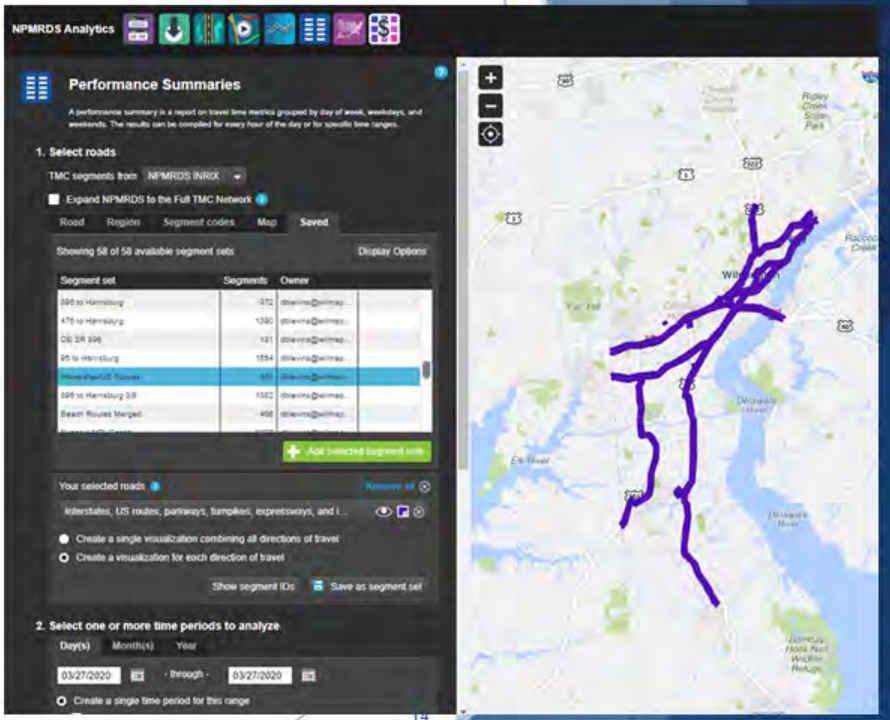


Measuring the impacts…Travel Time

- Use of NPMRDS hourly travel time data along pre-determined key corridors
- Comparison of travel times (avg. of both directions) from the same time period in 2019 to 2020 beginning in the last full week in February
- AM Peak period is measured from 7am-9am.
- PM peak period is measured from 4pm-6pm.

Corridors Currently Monitored:

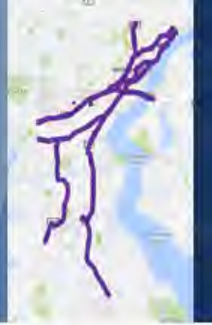
- All Interstates & US Routes (collectively)
- Kirkwood Highway
- US 40
- I-95
- US 202
- US 9 (Sussex)



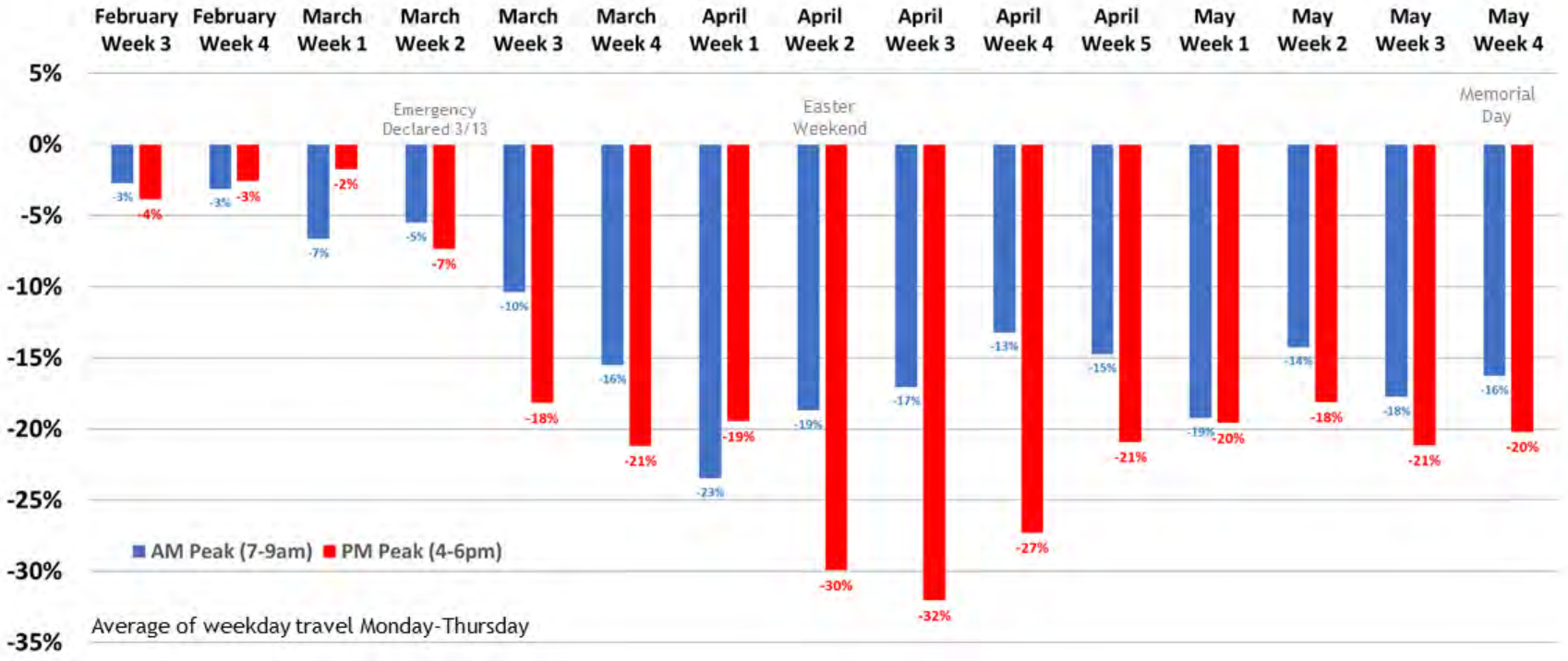
Measuring the impacts…Travel Time

Comparison of combined travel times for all routes Interstate/ US Routes (see map) from the same time period in 2019 to 2020.

NCC Interstates and US Routes

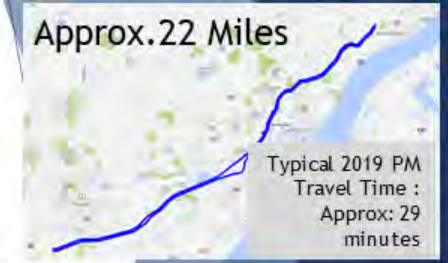


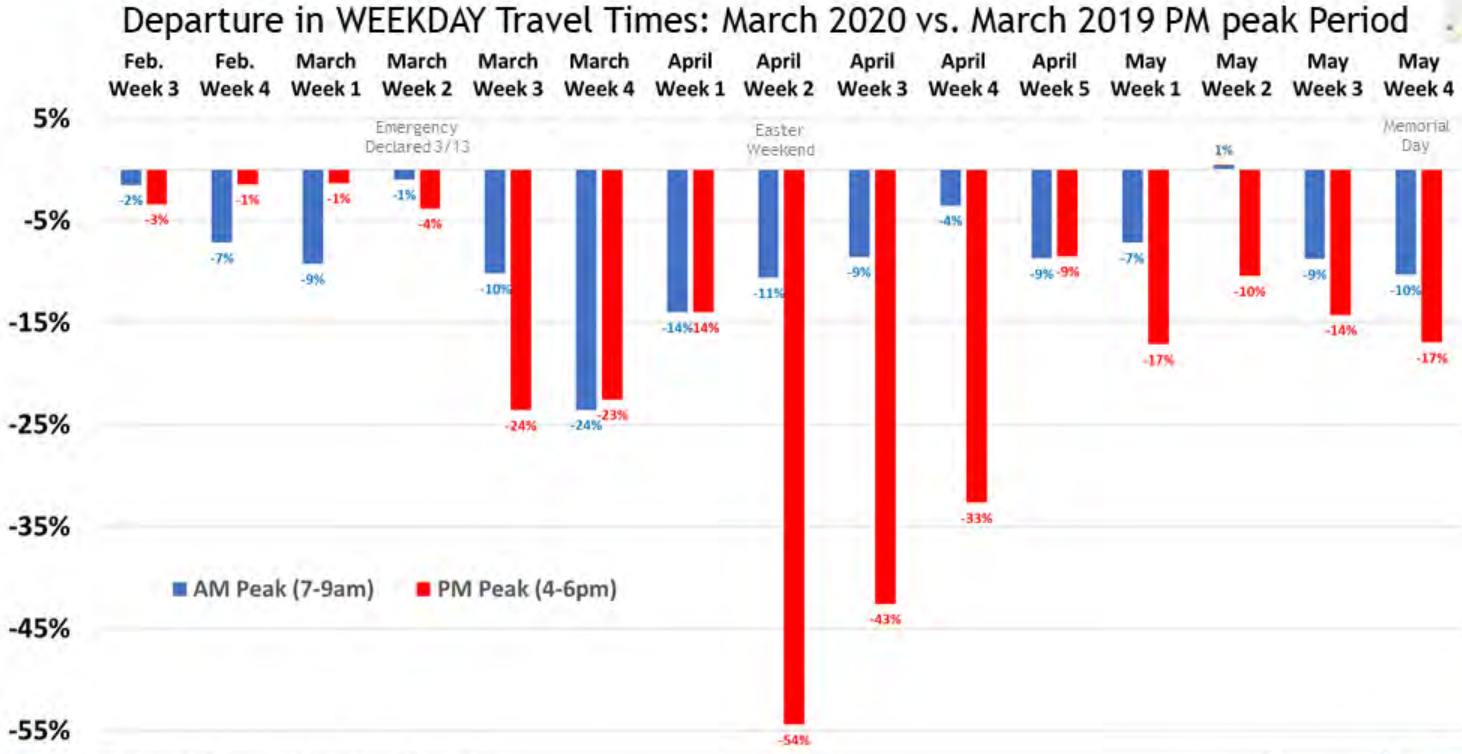
Departures in Travel Times: March 2020 vs. March 2019 Peak Periods



I-95: DE Line to MD Line

Comparison of combined travel times average for both directions(see map) from the same time period in 2019 to 2020.

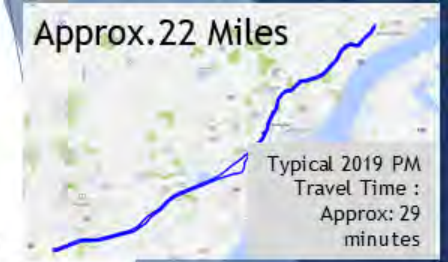


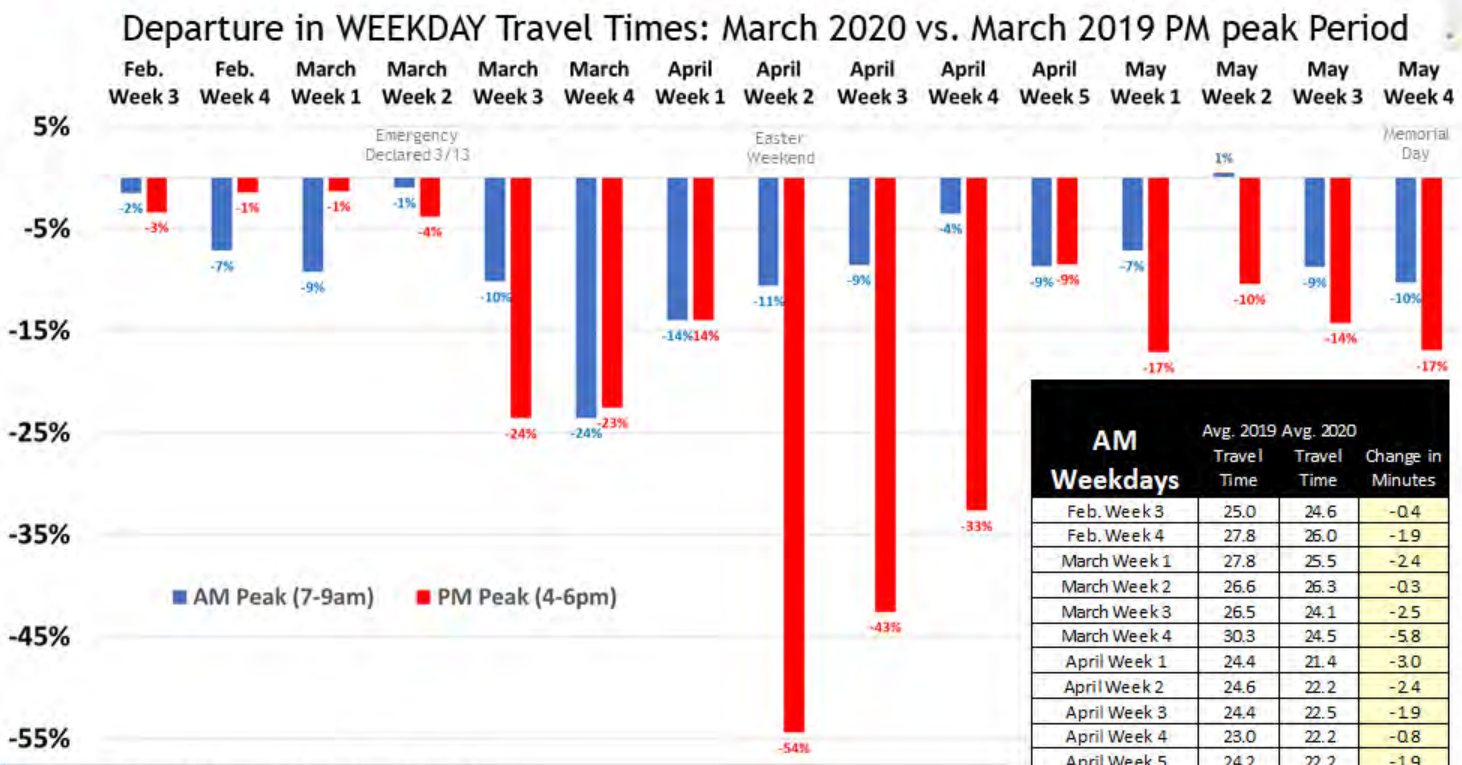


Average of weekday travel Monday-Thursday

I-95: DE Line to MD Line

Comparison of combined travel times average for both directions(see map) from the same time period in 2019 to 2020.





Average of weekday travel Monday-Thursday

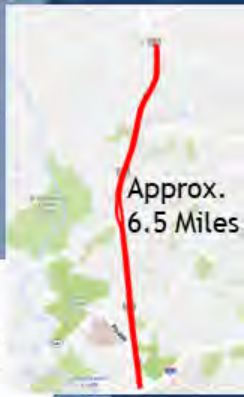
AM Weekdays	Avg. 2019 Travel Time	Avg. 2020 Travel Time	Change in Minutes
Feb. Week 3	25.0	24.6	-0.4
Feb. Week 4	27.8	26.0	-1.9
March Week 1	27.8	25.5	-2.4
March Week 2	26.6	26.3	-0.3
March Week 3	26.5	24.1	-2.5
March Week 4	30.3	24.5	-5.8
April Week 1	24.4	21.4	-3.0
April Week 2	24.6	22.2	-2.4
April Week 3	24.4	22.5	-1.9
April Week 4	23.0	22.2	-0.8
April Week 5	24.2	22.2	-1.9
May Week 1	23.8	22.2	-1.6
May Week 2	26.7	26.8	0.1
May Week 3	25.8	23.7	-2.1
May Week 4	24.6	22.3	-2.3

PM Weekdays	Avg. 2019 Travel Time	Avg. 2020 Travel Time	Change in Minutes
Feb. Week 3	27.5	26.6	-0.9
Feb. Week 4	27.8	27.4	-0.4
March Week 1	28.9	28.5	-0.4
March Week 2	27.1	26.1	-1.0
March Week 3	29.0	23.4	-5.5
March Week 4	28.9	23.6	-5.3
April Week 1	24.6	21.6	-3.0
April Week 2	33.3	21.6	-11.7
April Week 3	30.9	21.6	-9.2
April Week 4	28.8	21.7	-7.1
April Week 5	25.8	23.8	-2.0
May Week 1	25.9	22.1	-3.8
May Week 2	27.0	24.5	-2.6
May Week 3	27.7	24.2	-3.5
May Week 4	25.8	22.0	-3.7

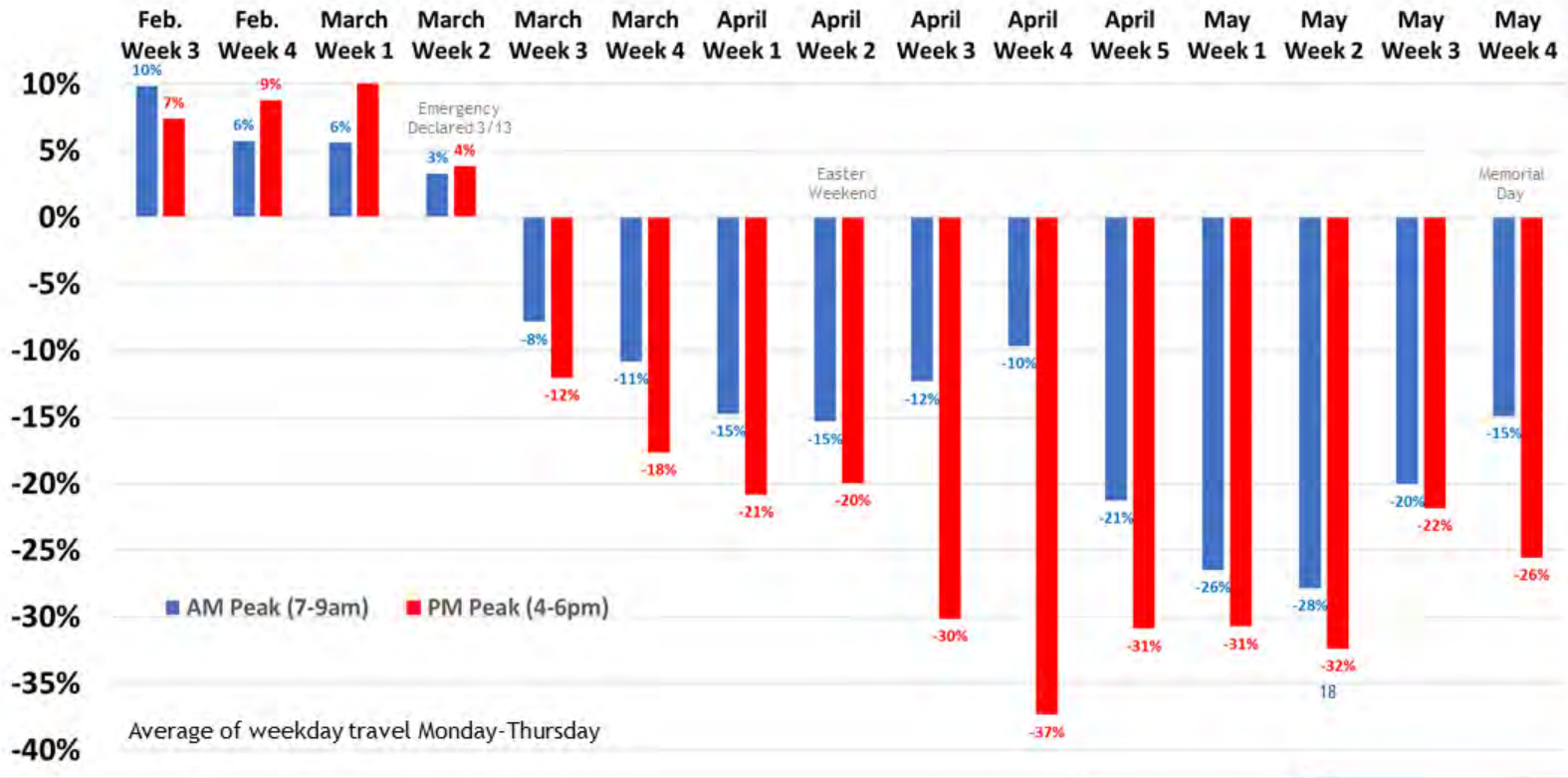
US 202: PA 491 to I-95

Comparison of combined travel times average for both directions(see map) from the same time period in 2019 to 2020.

Typical PM Travel Time : Approx: 13 minutes



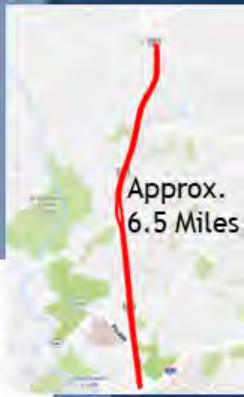
Departures in WEEKDAY Travel Times: 2020 vs. 2019 peak Periods



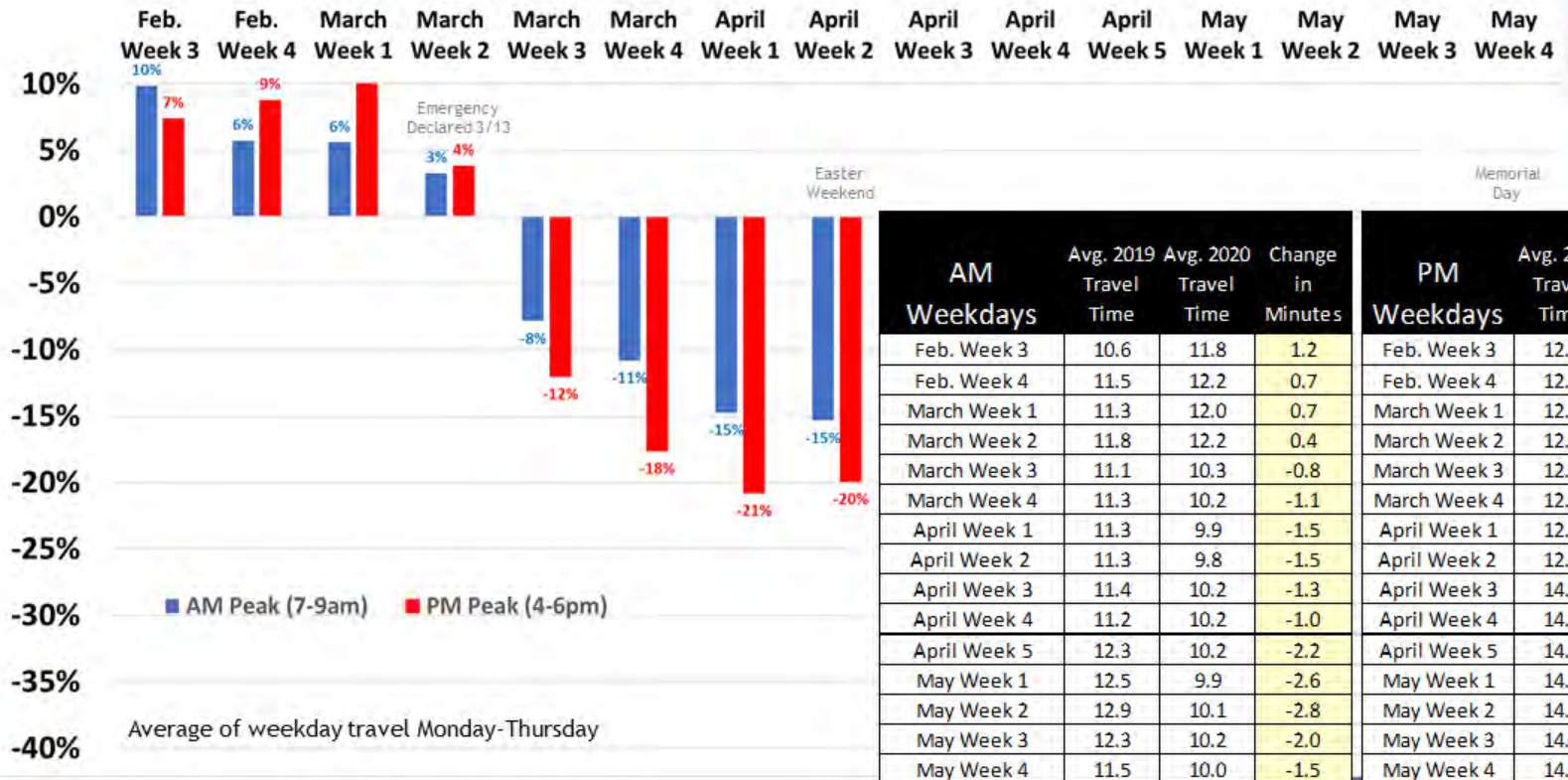
US 202: PA 491 to I-95

Comparison of combined travel times average for both directions(see map) from the same time period in 2019 to 2020.

Typical PM Travel Time : Approx: 13 minutes



Departures in WEEKDAY Travel Times: 2020 vs. 2019 peak Periods

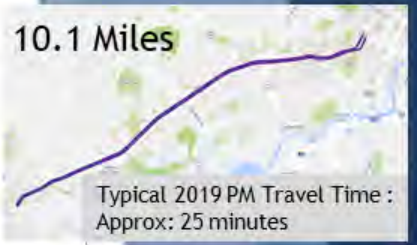


AM Weekdays	Avg. 2019 Travel Time	Avg. 2020 Travel Time	Change in Minutes
Feb. Week 3	10.6	11.8	1.2
Feb. Week 4	11.5	12.2	0.7
March Week 1	11.3	12.0	0.7
March Week 2	11.8	12.2	0.4
March Week 3	11.1	10.3	-0.8
March Week 4	11.3	10.2	-1.1
April Week 1	11.3	9.9	-1.5
April Week 2	11.3	9.8	-1.5
April Week 3	11.4	10.2	-1.3
April Week 4	11.2	10.2	-1.0
April Week 5	12.3	10.2	-2.2
May Week 1	12.5	9.9	-2.6
May Week 2	12.9	10.1	-2.8
May Week 3	12.3	10.2	-2.0
May Week 4	11.5	10.0	-1.5

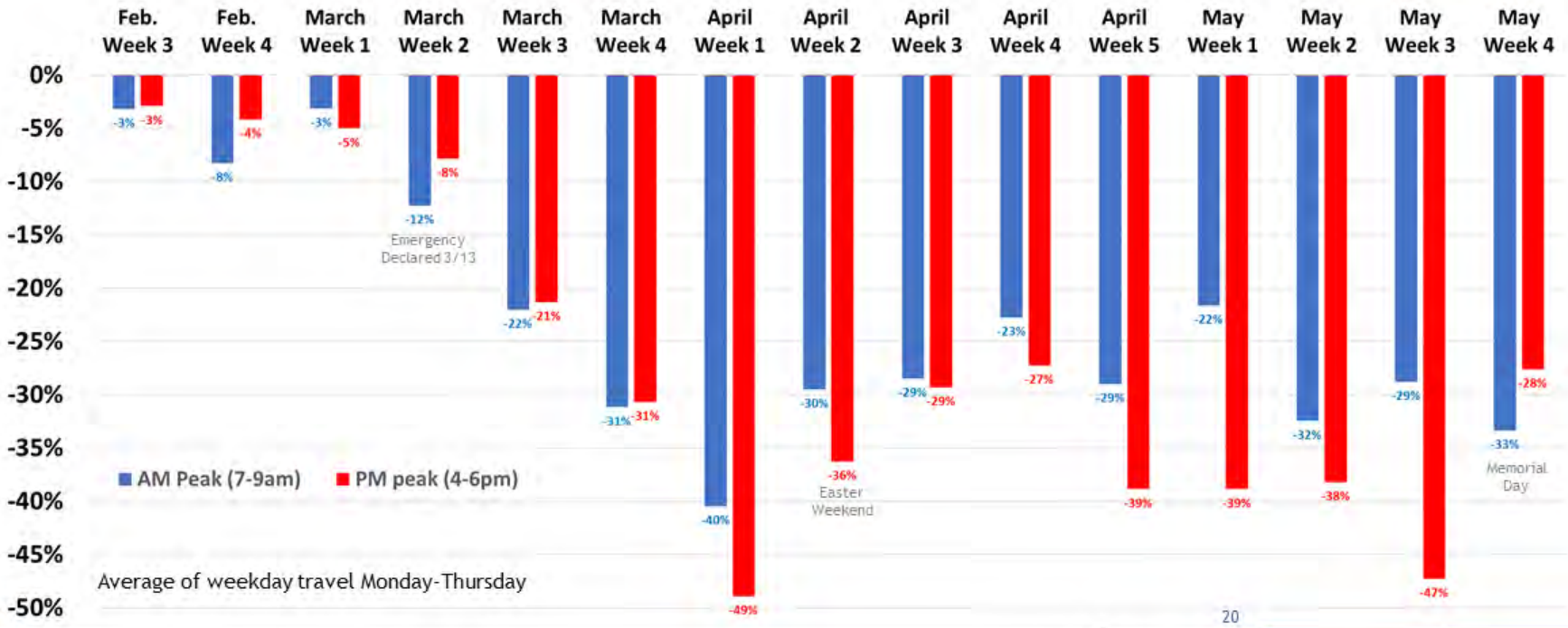
PM Weekdays	Avg. 2019 Travel Time	Avg. 2020 Travel Time	Change in Minutes
Feb. Week 3	12.5	13.5	1.0
Feb. Week 4	12.7	13.9	1.2
March Week 1	12.6	14.1	1.5
March Week 2	12.9	13.4	0.5
March Week 3	12.8	11.5	-1.4
March Week 4	12.9	11.0	-1.9
April Week 1	12.6	10.4	-2.2
April Week 2	12.7	10.6	-2.1
April Week 3	14.1	10.8	-3.3
April Week 4	14.7	10.7	-4.0
April Week 5	14.5	11.0	-3.4
May Week 1	14.6	11.2	-3.4
May Week 2	14.6	11.0	-3.6
May Week 3	14.0	11.5	-2.5
May Week 4	14.8	11.8	-3.0

Kirkwood Highway; Newark to Wilmington

Comparison of combined travel times average for both directions(see map) from the same time period in 2019 to 2020.

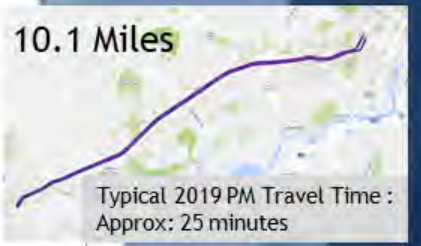


Departures in WEEKDAY Travel Times: 2020 vs. 2019 Peak Period

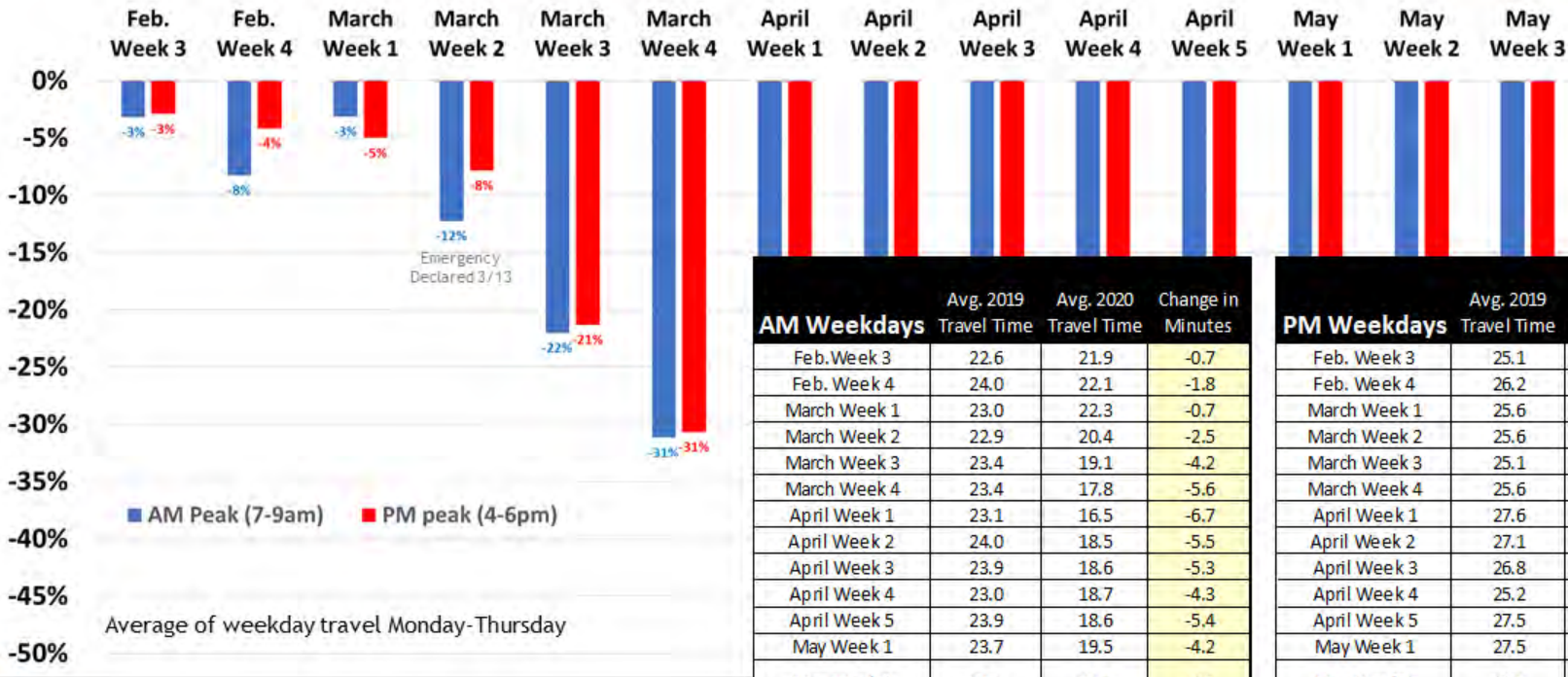


Kirkwood Highway; Newark to Wilmington

Comparison of combined travel times average for both directions(see map) from the same time period in 2019 to 2020.



Departures in WEEKDAY Travel Times: 2020 vs. 2019 Peak Period

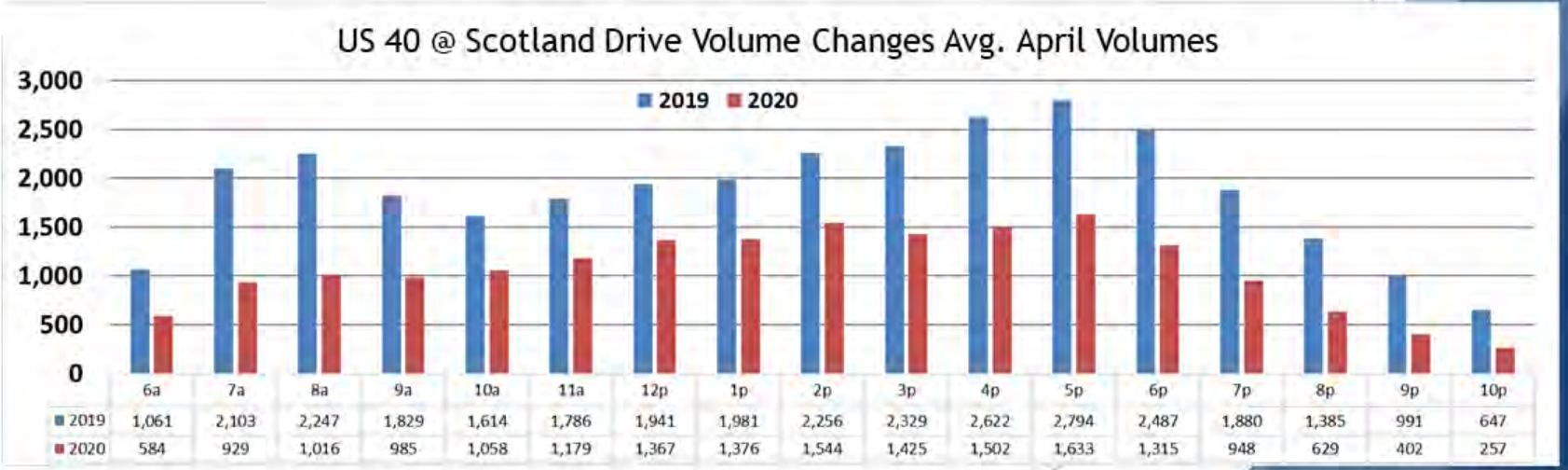


AM Weekdays	Avg. 2019 Travel Time	Avg. 2020 Travel Time	Change in Minutes
Feb. Week 3	22.6	21.9	-0.7
Feb. Week 4	24.0	22.1	-1.8
March Week 1	23.0	22.3	-0.7
March Week 2	22.9	20.4	-2.5
March Week 3	23.4	19.1	-4.2
March Week 4	23.4	17.8	-5.6
April Week 1	23.1	16.5	-6.7
April Week 2	24.0	18.5	-5.5
April Week 3	23.9	18.6	-5.3
April Week 4	23.0	18.7	-4.3
April Week 5	23.9	18.6	-5.4
May Week 1	23.7	19.5	-4.2
May Week 2	24.8	18.7	-6.1
May Week 3	24.4	19.0	-5.5
May Week 4	24.0	18.0	-6.0

PM Weekdays	Avg. 2019 Travel Time	Avg. 2020 Travel Time	Change in Minutes
Feb. Week 3	25.1	24.4	-0.7
Feb. Week 4	26.2	25.1	-1.0
March Week 1	25.6	24.4	-1.2
March Week 2	25.6	23.7	-1.9
March Week 3	25.1	20.7	-4.4
March Week 4	25.6	19.6	-6.0
April Week 1	27.6	18.5	-9.1
April Week 2	27.1	19.9	-7.2
April Week 3	26.8	20.8	-6.1
April Week 4	25.2	19.8	-5.4
April Week 5	27.5	19.8	-7.7
May Week 1	27.5	19.8	-7.7
May Week 2	29.1	21.0	-8.0
May Week 3	30.5	20.7	-9.8
May Week 4	25.9	20.3	-5.6

Measuring the Impacts…Next Steps

- Continue to chart changes
- Begin focus on hourly, peak period changes
- What does the a new "normal" look like for freight
  - How does this impact freight movement with possible lower peak volumes?
  - How does this change capital improvements designed to address peak hour congestion?
  - Does congestion get WORSE during peaks due to drop in mass transit usage?



	6a	7a	8a	9a	10a	11a	12p	1p	2p	3p	4p	5p	6p	7p	8p	9p	10p
2019	1,061	2,103	2,247	1,829	1,614	1,786	1,941	1,981	2,256	2,329	2,622	2,794	2,487	1,880	1,385	991	647
2020	584	929	1,016	985	1,058	1,179	1,367	1,376	1,544	1,425	1,502	1,633	1,315	948	629	402	257

Thank You!

For more information about upcoming projects, please contact
Dan Blevins: dblevins@wilmapco.org (302)737-6205 x121

#FreightFriday Updates and Schedule

Complete evaluation for today's session

Next Live Webinar June 26 - Market Trends

- Presentations from:
  - Gulftainer USA Wilmington
  - Delaware Valley Regional Planning Commission

#FreightFriday Updates and Schedule

Recorded Shipper Updates Targeted for June 19

- Interviews
  - Dot Foods
  - More to come
- Presented on IPA's *First State Insights* podcast (soundcloud.com/first-state-insights/)

Contact me with questions, comments, and offers to be involved

Troy Mix

Associate Director, Institute for Public Administration

Biden School of Public Policy & Administration

mix@udel.edu | 302-831-6191

www.ipa.udel.edu

Delmarva #FreightFriday

Thank you from your host and

Delmarva Freight Working Group partners!

UD Institute for Public Administration

In partnership with:

Delaware Department of Transportation

Dover/Kent County MPO

Salisbury/Wicomico MPO

WILMAPCO