COVID-19 and Transportation

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Presentation Outline

- What transportation impacts and what changes we track
  - Change from the baseline
  - Change from the lowest point in 2020
  - Change from the most recent past (e.g., last 5 weeks)
- How we track them
- Lessons learned and Post Pandemic

What impacts we track

- Daily or weekly changes
  - On people travel
  - On goods movement
- All transportation modes:
  - Road
  - Air
  - Rail
  - Public Transit
  - Maritime
- More than 40 indicators

Transportation Demand Early Indicators Report

Impact Snapshot

Mode	Impact Type+	Date of Data	Current Level	Year Ago Level	Change from Year Ago	Change from Week Ago
Air (TSA Person Throughput at All Airports)	Daily	25-May	340,769	2,438,936	-86%	39%
Passenger Rail (Amtrak Ridership)	Weekly	10-May				
Passenger Vehicle (INRIX Personal Travel)	Weekly	22-May				24%
Freight Truck (INRIX Long Haul)	Weekly	22-May				
25% Freight Rail (AAR Intermodal - Containers and Trailers on Flatcars)	Weekly	16-May	231,700	269,352	-14%	
	2% Maritime		(Twenty-foot equivalent unit Vessel Capacity)			
	Weekly	17-May	2,155,518	2,431,032	-11%	-
3%						

Daily Impact

PASSENGER

Roadways	Date of Data	Change from Same Day of Week from Control Week++
Traffic Volume Index	TBA	
Level of Passenger Travel (INRIX)	22-May	-13%

Aviation	Date of Data	Change from Same Day of Week Last Week		Change from Same Day of Week from Year Ago	
U.S. Total Commercial Flights (Departures)	25-May				
Domestic	25-May				
International	25-May				
Person Throughput at All Airports	25-May	96,236	39%	-2,098,167	-86%
Person Throughput at Large Hub Airports	25-May	54,910	36%	-1,427,790	-86%

	Date of Data	Current Level	Change from Same Day of Week Last Week	Last Year Level	Change from Same Day of Week from Year Ago
Estimated Passenger Load Factor*	25-May				

Transit	Date of Data	Change from Same Day of Week Last Week		Change from Same Day of Week from Year Ago	
Top Ten Agencies (tentative)	TBA				
San Francisco Bay Area Rapid Transit District (BART)	25-May	-16,422	-56%		
Washington Metropolitan Area Transit Authority (WMATA)	25-May	-80,000	-51%	-334,500	-81%
Massachusetts Bay Transportation Authority (MBTA) Subway	21-May	-3,866	-9%	-467,250	-92%

Passenger Rail	Date of Data	Change from Same Day of Week Last Week		Change from Same Day of Week from Year Ago	
Amtrak Daily Bookings (for future travel)	19-May				
Amtrak Northeast Regional (ridership)	19-May				
Amtrak Acela (ridership)**	19-May				
Amtrak State-Supported Routes (ridership)	19-May				
Amtrak Long Distance Routes (ridership)	15-May				

FREIGHT

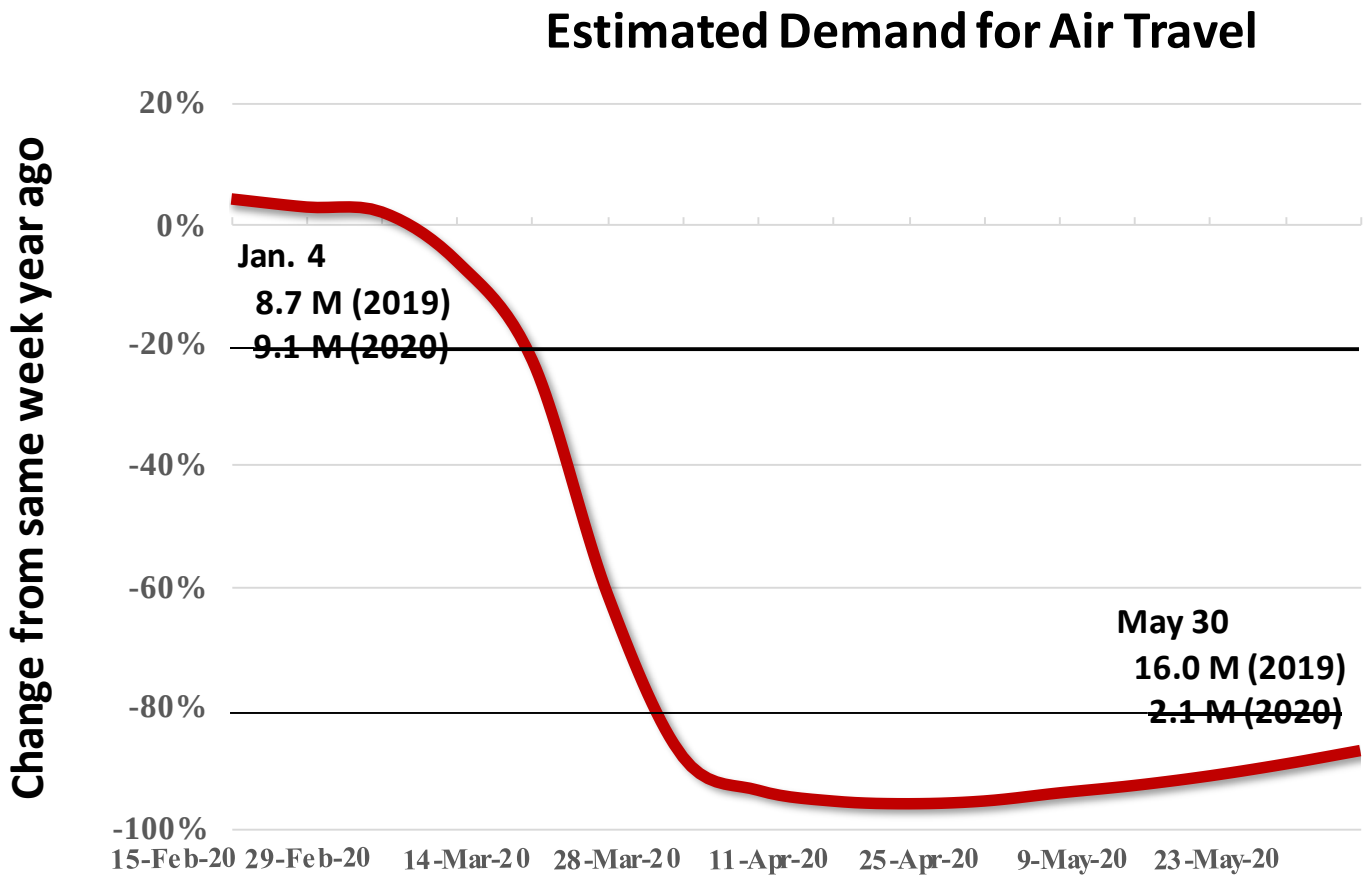
Truck Freight (tentative)	Date of Data	Change from	Change from
Spot Market Rates for Dry Van Linehaul (per mile basis, index 2019 = 100.0)	TBA		
Traffic Volume Index	TBA		

Indicators with color band contain proprietary or confidential data.

The How – Rapid and Deliberate

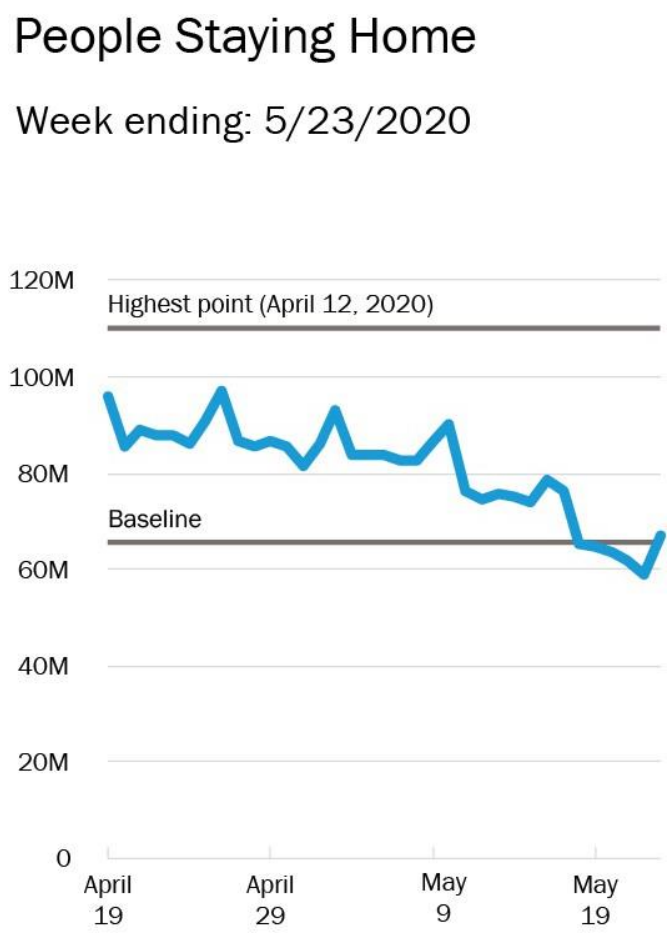
- **Transform mindset**
  - Flash indicators using proxy
  - Preliminary releases
  - Representativeness vs. non-representativeness
- **Leverage alternative data sources**
  - Administrative records
    - ✓ TSA's people counts at security checkpoints
    - ✓ CBP's border crossing data
  - Data from location-based devices
- **Collaborate with stakeholders**
  - Proprietary and confidential data with limited dissemination

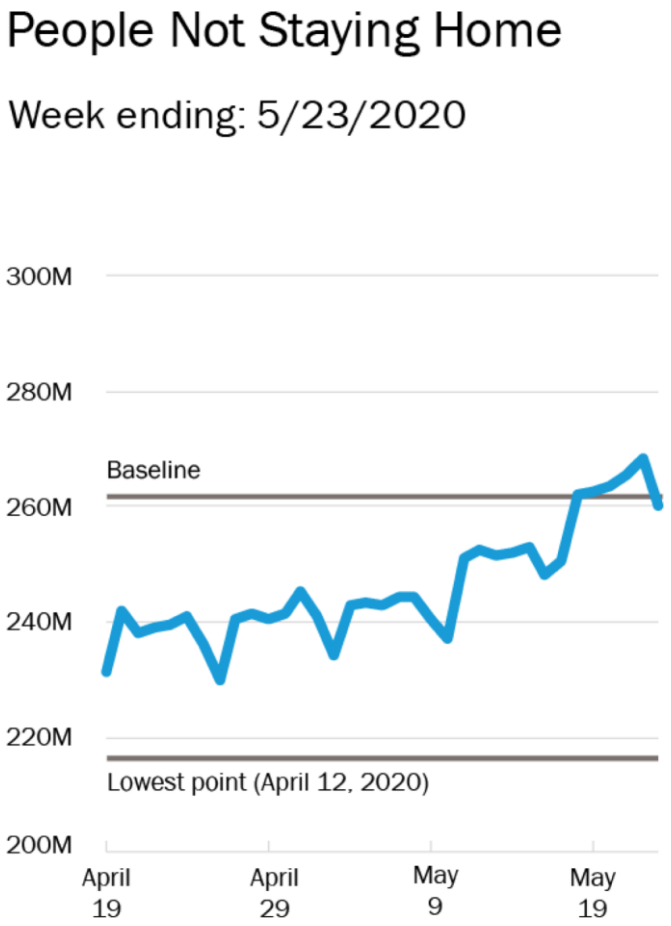
An example of using proxy to gauge the travel demand



Source: Transportation Security Administration

Steady decline in the number of people staying home -- with small upticks in last few weeks.





Source: University of Maryland

Lessons Learned

- Data sharing continues to be challenging, especially with private sector
- Freight indicators are much tougher to obtain than travel indicators partially due to the competitiveness nature of the freight industry.
- While COVID-19 pandemic demands near real-time data, traditional data programs remain relevant and important.

Post Pandemic

- The balance between being credible and being relevant
  - Official statistics are high quality but limited in frequency and timeliness
  - Pandemic or other similar crises demand almost real-time data – "experimental statistics"?
  - Where is that balance? How to sustain that balance moving forward?
- How to be more ready for the next pandemic/crisis for rapid data?
- Whether and how should "experimental statistics" replace and supplement traditional statistics?
- Measuring vs. modeling?

"At a time when statistics are most needed, many statistical systems are struggling to compile basic statistics, highlighting once again the need to invest in data and statistics, and the importance of having modern national statistical systems and data infrastructure."

Source: How COVID-19 is changing the world: a statistical perspective. 2020. United Nations. Committee for the Coordination of Statistical Activities.