Unmasking Transportation After COVID-19
APA Utah Fall Conference

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COVID-19 - The fastest changes to transportation behavior in history

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Regional Volume Changes

- Volume changes were different by region
- Most areas are currently experiencing at or above pre-pandemic volumes
I-15 NB: I-215 - 600 S Hourly Volume Changes

- No major construction between 2018 and 2021
- Major drop in daily volumes at beginning of pandemic
- Volumes increasing in the midday and PM peak
Source: Maryland DOT Policy Manual
Salt Lake Area Speed Changes

Pre-Covid (July 2019): High volume and moderate speeds

- High AM and PM peak volumes
- Reduced speed during the peaks
- Somewhat reliable, speed drops are reoccuring

During Covid (July 2020): Low volume and high speeds

- Low AM and PM peak volumes
- Speeds remain high throughout the day
- Very reliable system

1+ Year In (July 2021): High volume and high speeds

- Volumes higher than pre-pandemic
- Speeds higher than pre-pandemic, but dropping during the peaks
- Reliability eroding
Statewide Delay Changes

- Delay dropped dramatically at the beginning of the pandemic
- In August 2020, delay began to increase.
- What is next?
What Do We Know?

Beginning of Pandemic

- Reduced volumes
- Excessive speeding
- Improved delay
- Improved reliability
- Increased crash severity

Current Conditions

- Increasing volumes above pre-pandemic levels
- Excessive speeding is occurring, but lessening as congestion returns
- Increasing delay
- Diminishing reliability
- Increased crash severity
Big points

1. Telework
2. Outdoor recreation
3. Transit use
4. Length of trips
1. Telework and outdoor recreation

Utah trips this week (all modes) versus 5-week period Jan 3–Feb 6, 2020

Workplace trips: -30%

Telework is here to stay (?)

Trips to parks: +90%

How high will the demand remain for outdoor recreation and bicycling?

Google.com/covid19/mobility
2. Transit stays low in the midst of ongoing Delta variant

Utah Transit Authority Ridership Dashboard
3. The “Great Localization” of trips

*Utah home-based trip lengths through COVID-19*

- **August 2019**
- **August 2020**
- **August 2021**

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<thead>
<tr>
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<td>Mile</td>
<td>&lt;1</td>
<td>1-3</td>
<td>3-5</td>
<td>5-10</td>
<td>10-25</td>
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<td>4,000,000</td>
<td>2,000,000</td>
<td>1,000,000</td>
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</table>

Utah home-based trip lengths through COVID-19

- August 2019
- August 2020
- August 2021

Trip length:
- Avg. Trips <1 Mile
- Avg. Trips 1-3 Miles
- Avg. Trips 3-5 Miles
- Avg. Trips 5-10 Miles
- Avg. Trips 10-25 Miles

https://www.bts.gov/browse-statistical-products-and-data/covid-related/distribution-trips-distance-national-state-and
The teleworker is seeking local trips!

Davis county home-based trip lengths through COVID-19

https://www.bts.gov/browse-statistical-products-and-data/covid-related/distribution-trips-distance-national-state-and
Millennials Less Focused on Commute Time and Public Transit During Pandemic While Older Generations Show More Interest in Walking

% Very Important Factor in Deciding Where to Live By Generation

July 2020

- Sidewalks and places to take walks: Gen Z 50%, Millennials 55%, Gen X 47%
- Being within a short commute to work: Gen Z 55%, Millennials 40%, Gen X 37%
- Being within an easy walk of other places and things: Gen Z 53%, Millennials 40%, Gen X 31%
- Easy access to the highway: Gen Z 45%, Millennials 48%, Gen X 42%
- Having public transit nearby: Gen Z 31%, Millennials 33%, Gen X 30%
- Bike lanes and paths nearby: Gen Z 31%, Millennials 33%, Gen X 29%

February 2020

- Sidewalks and places to take walks: Gen Z 46%, Millennials 49%, Gen X 49%
- Being within a short commute to work: Gen Z 48%, Millennials 43%, Gen X 43%
- Being within an easy walk of other places and things: Gen Z 39%, Millennials 37%, Gen X 33%
- Easy access to the highway: Gen Z 50%, Millennials 43%, Gen X 37%
- Having public transit nearby: Gen Z 36%, Millennials 39%, Gen X 33%
- Bike lanes and paths nearby: Gen Z 23%, Millennials 26%, Gen X 25%

If you were deciding today where to live, please indicate how important each of the following would be to you:
Total Taxable Sales

Taxable sales are calculated by summing data from sales and use tax returns from the local sales tax distribution each month and aggregating by time period, location and industry category. For more information, see the "About These Reports" section of the Utah State Tax Commission's Taxable Sales Reports.

Total Taxable Sales includes taxable sales from all industry categories. Statewide, total taxable sales for the fourth quarter increased 10.4% from 2019 to 2020.

Click on a city for more detailed information about taxable sales and percent change from 2019 to 2020.
Attracting the teleworker

- Streets for strolling
- Nearby town center
- Accessible parks
- Safe bicycling
4. Zoomtown and the super commute (when not teleworking)

Morgan county home-based trip lengths through COVID-19

- August 2019
- August 2021

Trip length:
- Avg. Trips <1 Mile
- Avg. Trips 1-3 Miles
- Avg. Trips 3-5 Miles
- Avg. Trips 5-10 Miles
- Avg. Trips 10-25 Miles
- Avg. Trips 25-50 Miles
- Avg. Trips 50-100 Miles
Active Transportation Trends
Active Transportation During COVID

Comparison of Trail Usage During April of 2019 and 2020

- Murdock Canal Trail
- Provo River Trail
- Jordan River Trail
- Mapleton Lateral Canal

Number of trips

- April 2019
- April 2020
Pedestrian Strava Trips During COVID
Cyclist Strava Trips During COVID

Strava Bike Trip Totals 2018 - 2020

- 2018
- 2019
- 2020

- March
- April
- May
- June
- July
- August
- September
### Scooter Utilization

<table>
<thead>
<tr>
<th>CALENDAR DATE</th>
<th>Trips</th>
<th>Active Riders</th>
<th>Percent Change in Trips 2019 to 2020</th>
<th>Percent Change in Active Riders 2019 to 2020</th>
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<tbody>
<tr>
<td>2019-01-01</td>
<td>19,241</td>
<td>8,213</td>
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<tr>
<td>2019-02-01</td>
<td>21,256</td>
<td>8,990</td>
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<tr>
<td>2019-03-01</td>
<td>44,606</td>
<td>17,625</td>
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<tr>
<td><strong>2019-04-01</strong></td>
<td><strong>64,571</strong></td>
<td><strong>25,378</strong></td>
<td><strong>-49%</strong></td>
<td><strong>-43%</strong></td>
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<td>30,675</td>
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<td>2019-06-01</td>
<td>90,021</td>
<td>36,166</td>
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<td>2019-07-01</td>
<td>105,908</td>
<td>40,632</td>
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<tr>
<td>2019-08-01</td>
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<td>39,983</td>
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<td>2019-09-01</td>
<td>93,336</td>
<td>32,993</td>
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<tr>
<td>2019-10-01</td>
<td>54,908</td>
<td>19,639</td>
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<td>2019-11-01</td>
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<td>12,730</td>
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<td>2019-12-01</td>
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<td>8,897</td>
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<td>2020-01-01</td>
<td>9,848</td>
<td>4,641</td>
<td><strong>-49%</strong></td>
<td><strong>-43%</strong></td>
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<tr>
<td>2020-02-01</td>
<td>12,398</td>
<td>5,985</td>
<td><strong>-42%</strong></td>
<td><strong>-33%</strong></td>
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<tr>
<td><strong>2020-03-01</strong></td>
<td><strong>11,171</strong></td>
<td><strong>5,020</strong></td>
<td><strong>-75%</strong></td>
<td><strong>-72%</strong></td>
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<tr>
<td>2020-04-01</td>
<td>1,446</td>
<td>677</td>
<td><strong>-98%</strong></td>
<td><strong>-97%</strong></td>
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<tr>
<td>2020-05-01</td>
<td>25,156</td>
<td>8,705</td>
<td><strong>-70%</strong></td>
<td><strong>-72%</strong></td>
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<tr>
<td>2020-06-01</td>
<td>29,904</td>
<td>10,838</td>
<td><strong>-67%</strong></td>
<td><strong>-70%</strong></td>
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<td>2020-07-01</td>
<td>44,384</td>
<td>14,887</td>
<td><strong>-58%</strong></td>
<td><strong>-63%</strong></td>
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<td>2020-08-01</td>
<td>51,278</td>
<td>16,746</td>
<td><strong>-52%</strong></td>
<td><strong>-58%</strong></td>
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<tr>
<td>2020-09-01</td>
<td>43,100</td>
<td>14,142</td>
<td><strong>-54%</strong></td>
<td><strong>-57%</strong></td>
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Pedestrian Trends Over Time

**Total Pedestrian Fatalities and Suspected Serious Injuries - Full Year**

- **2015**: 106
- **2016**: 119
- **2017**: 125
- **2018**: 125
- **2019**: 126
- **2020**: 134

**Number of Fatalities**

- **2015**: 49
- **2016**: 40
- **2017**: 43
- **2018**: 37
- **2019**: 42
- **2020**: 36

**Number of Suspected Serious Injuries**

- **2015**: 57
- **2016**: 79
- **2017**: 82
- **2018**: 88
- **2019**: 84
- **2020**: 98

**Total Pedestrian Fatalities and Suspected Serious Injuries - First Quarter**

- **2015**: 11
- **2016**: 13
- **2017**: 19
- **2018**: 28
- **2019**: 28
- **2020**: 32
- **2021**: 31

**Number of Fatalities**

- **2015**: 3
- **2016**: 8
- **2017**: 9
- **2018**: 9
- **2019**: 10
- **2020**: 6
- **2021**: 14

**Number of Suspected Serious Injuries**

- **2015**: 8
- **2016**: 5
- **2017**: 10
- **2018**: 19
- **2019**: 22
- **2020**: 26
- **2021**: 25
Bicyclists Trends Over Time

Total Bicyclist Fatalities and Suspected Serious Injuries - Full Year

Total Bicyclist Fatalities and Suspected Serious Injuries - First Quarter

[Graphs showing trends in bicycle fatalities and serious injuries over time.]
Collision Implications

If hit by a person driving at:

- **20 MPH**
  - Person Survives the Collision: 90%
  - Results in a Fatality: 10%

- **30 MPH**
  - Person Survives the Collision: 60%
  - Results in a Fatality: 40%

- **40 MPH**
  - Person Survives the Collision: 20%
  - Results in a Fatality: 80%

(Images of green cars and walking figures represent the scenarios.)
COVID-19 - the fastest changes to transportation behavior in history

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