CHANGING MOBILITY
DATA, INSIGHTS, AND DELIVERING INNOVATIVE PROJECTS DURING COVID RECOVERY

Regional Transportation Council
November 2020

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Director of Transportation
POLICY METRICS: CHANGING MOBILITY

METRIC 1: Travel behavior response to COVID-19

METRIC 2: Financial implications to traditional revenue sources

METRIC 3: Benefits of travel behavior responses to areas of RTC responsibility

METRIC 4: Prioritization of infrastructure improvements that offset unemployment increases
Metric 1: TRAVEL BEHAVIOR RESPONSE TO COVID-19
TRAVEL BEHAVIOR BY MODE

Bicycle/Pedestrian (+36%, September)

Freeway Volumes (-8%, September)
Toll Road (-24%, August)
Airport Passengers (-47%, September)
Transit Ridership (-57%, September)
ROADWAY TRENDS

Average Weekday Freeway Volumes

Traffic Decrease vs 2019

- March: -10%
- April: -19%
- May: -12%
- June: -10%
- July: -9%
- August: -8%
- September: -8%

Source: TxDOT Dallas/TxDOT Fort Worth Radar Traffic Counters
ROADWAY TRENDS

Regional Average Freeway Speeds

Average Weekday Speeds, Weighted by Traffic Volumes

Source: TxDOT Sidefire Devices
TRANSPORT IMPACTS

**Weekday Ridership**

<table>
<thead>
<tr>
<th>Month</th>
<th>2019 vs 2020 Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar</td>
<td>-27%</td>
</tr>
<tr>
<td>Apr</td>
<td>-59%</td>
</tr>
<tr>
<td>May</td>
<td>-55%</td>
</tr>
<tr>
<td>June</td>
<td>-54%</td>
</tr>
<tr>
<td>Jul</td>
<td>-55%</td>
</tr>
<tr>
<td>Aug</td>
<td>-57%</td>
</tr>
<tr>
<td>Sep</td>
<td>-57%</td>
</tr>
</tbody>
</table>

Source: DART, DCTA, and Trinity Metro
BICYCLE AND PEDESTRIAN IMPACTS

Trail Counts

Increase in Full Week Trail Usage: 2019 vs 2020

Source: NCTCOG - collected at 8 sites located in Plano, North Richland Hills, Denton, Dallas, Fort Worth, and Allen.

Note: No adjustments for weather were applied.
Change in Airport Passengers - 2019 vs 2020

- **February**: 1% (DFW), -52% (Love Field)
- **March**: 8% (DFW), -45% (Love Field)
- **April**: -95% (DFW), -92% (Love Field)
- **May**: -82% (DFW), -79% (Love Field)
- **June**: -62% (DFW), -68% (Love Field)
- **July**: -66% (DFW), -55% (Love Field)
- **August**: -61% (DFW), -52% (Love Field)
- **September**: -57% (DFW), -45% (Love Field)

Source: Dallas Love Field and DFWIA Websites
Metric 2: FINANCIAL IMPLICATIONS TO TRADITIONAL TRANSPORTATION REVENUE
FINANCIAL IMPLICATIONS

+ Motor Vehicle Sales and Rental Tax (4.3%, September)

= Sales Tax (-6%, September)
  Motor Fuel Tax (-10%, September)
  Transit Sales Tax Allocations (-11%, August)
FUNDING IMPACT

Transit - Sales Tax Allocations

Sales Taxes Allocated For Transit: 2019 vs 2020

Mar Apr May Jun Jul Aug

-8% 1% -9% 4% 6% 3% 9%

-8% -12% -14% -1% -1% -1% -4%

-20% DART DCTA Trinity Metro

Source: DART, DCTA, and Trinity Metro
FUNDING IMPACT

Motor Fuel Tax Decrease

Change in Motor Fuel Tax: 2020 vs 2019

- February: 1%
- March: 3%
- April: -12%
- May: -30%
- June: -24%
- July: -2%
- August: -12%
- September: -10%

Source: Texas Comptroller of Public Accounts
Month reflects reporting data, not collection date.
FUNDING
IMPACT

Sales Tax
( Component of Proposition 7\(^1\) )

Change in Fuel Tax: 2019 vs 2020

<table>
<thead>
<tr>
<th>Month</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax</td>
<td>3.5%</td>
<td>2.9%</td>
<td>-9.3%</td>
<td>-13.2%</td>
<td>-6.5%</td>
<td>-5.6%</td>
<td>-6%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Texas Comptroller of Public Accounts
\(^1\) Proposition 7 includes General State Sales Tax and Motor Vehicle Sales Tax
Month reflects reporting date, not collection date
FUNDING IMPACT

Motor Vehicle Sales and Rental Tax (Component of Proposition 7\(^1\))

Motor Vehicle Sales and Rental Tax
Change: 2020 vs 2019

February: -44.7%
March: -2.6%
April: 2.1%
May: -38.2%
June: -7.6%
July: -3.7%
August: -4.1%
September: 4.3%

Source: Texas Comptroller of Public Accounts
\(^1\) Proposition 7 includes General State Sales Tax and Motor Vehicle Sales Tax
Month reflects reporting date, not collection date
Proposition 1 (Oil & Gas Severance Tax)
Transfers to the State Highway Fund, Millions

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>734</td>
<td>1,380</td>
<td>1,660</td>
<td>1,100</td>
<td>620</td>
</tr>
</tbody>
</table>

Projected in July 2020 Revised Comptroller Certification Revenue Estimate

Source: Texas Comptroller of Public Accounts
FUNDING IMPACT

NTTA Transactions, Including SH 360

Change in Tollway Transactions: 2019 vs 2020

March: -29% 360 Tollway: -15%
April: -57% 360 Tollway: -38%
May: -41% 360 Tollway: -22%
June: -27% 360 Tollway: -26%
July: -26% 360 Tollway: -7%
August: -24% 360 Tollway: -7.6%

Source: NTTA
Note: Change for NTTA includes 360 Tollway
Additional Note: Despite decline in transactions, the revenues are sufficient to meet debt service for SH 360. No current impact to RTC backstop expected.
FUNDING IMPACT

I-35E TEXpress Lane Transactions

Change in Transactions: 2019 vs 2020

<table>
<thead>
<tr>
<th>Month</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>-31%</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td></td>
<td>-74%</td>
</tr>
<tr>
<td>May</td>
<td>-41%</td>
<td>-60%</td>
</tr>
<tr>
<td>June</td>
<td>-38%</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>-39%</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>-33%</td>
</tr>
</tbody>
</table>

Source: TxDOT
Note: TIFIA loan not impacted at this time as interest only payment period does not begin until May 2022
<table>
<thead>
<tr>
<th>Month</th>
<th>Transaction Decrease vs February 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>-29%</td>
</tr>
<tr>
<td>April</td>
<td>-84%</td>
</tr>
<tr>
<td>May</td>
<td>-75%</td>
</tr>
<tr>
<td>June</td>
<td>-60%</td>
</tr>
<tr>
<td>July</td>
<td>-63%</td>
</tr>
<tr>
<td>August</td>
<td>-60%</td>
</tr>
<tr>
<td>September</td>
<td>-53%</td>
</tr>
</tbody>
</table>

Source: GoCarma Dashboard
Metric 3: Benefits of Travel Behavior Responses to Areas of RTC Responsibility
8-HOUR OZONE NAAQS HISTORICAL TRENDS

Exceedance Days Per Year by Category

Source: Texas Commission on Environmental Quality

Exceedance Level indicates daily maximum eight-hour average ozone concentration as of August 18, 2020. Exceedance Levels are based on Air Quality Index (AQI) thresholds established by the EPA for the revised ozone standard of 70 ppb.
Historical Ozone Season Weekly Design Values: 2016-2020
(Starting Week 31)

- 2008 Standard ≤ 75 ppb (Serious by 2021)
- 2015 Standard ≤ 70 ppb¹ (Marginal by 2021)

76 ppb, as of 9/28/2020 starting week 31

Data Source: Texas Commission on Environmental Quality
Increased Truck Travel Time Reliability

Reliability has improved since March over 2019
Improvement is due to the reduced traffic volumes causing less non-reoccuring delays

Explanation: Due to COVID-19 truck travel times have improved. This is likely due to the reduced number cars traveling on the region’s roadways, improving bottleneck locations, and a decrease in the total number of crashes, which are causes of non-reoccuring congestion

Post COVID-19 Expectations: Continue to see improvement of the Truck Travel Time Reliability which has been established since the pandemic and lockdowns began in the first half of 2020.

Policies that could achieve a continuation of the outcome include:
• **FP3-001** – Foster regional economic activity through safe, efficient, reliable freight movement while educating elected officials and the public regarding freight’s role in the Dallas-Fort Worth region’s economy.
• **FP3-002** – Encourage the freight industry to participate in freight system planning and development to improve air quality and delivery time reliability.
Truck Travel Time Reliability 2020

Lower is Better

Remain below 1.83 to achieve target


2020 TTTR Target: 1.83
Metric 4: Prioritization of infrastructure improvements that offset unemployment increases
$1 billion in transportation investment = 12,000-15,000 jobs

No conclusive evidence of different types of construction projects generating more/fewer jobs

For a long-term unemployment event, need near-term and long-term transportation investment for maximum benefit

Sources: Federal Highway Administration, McKinsey & Company
CANDIDATE PROJECTS

High Speed Rail: Dallas to Houston
High Speed Rail: Dallas to Fort Worth
Autonomous Transit (Tarrant, Midtown)
Technology (Freeway Induction Loops)
State Highway 183 (Section 2E+)
Y Connector (IH820/IH20)
COVID-19 #00X Program
Online Dashboard: Providing Updated Information to the Public
DASHBOARD PLATFORM

www.nctcog.org/pm/covid-19

Newly launched online dashboard to display Changing Mobility information to the public

Replicates material presented to committees with enhanced interactivity

Separate dashboard for each metric tracked

Clean layout to help the public understand the story of the metrics at a glance