AV2.2/2.3 “Round 2” Projects

PUBLIC MEETING
Clint Hail, Transportation Planner
Transportation Innovation & Technology Program, NCTCOG
14 March 2022
### AV 2.2/2.3 Funding Overview

#### 2021
- Round 1 projects approved
- Remaining funds consolidated for Round 2

#### Round 1
<table>
<thead>
<tr>
<th>Institution</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas College</td>
<td>$8.7M</td>
</tr>
<tr>
<td>DART</td>
<td>$1.75M</td>
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<tr>
<td>FW Truckport</td>
<td>$4.79M</td>
</tr>
<tr>
<td>Paul Quinn College</td>
<td>$1.57M</td>
</tr>
<tr>
<td>Richardson</td>
<td>$4.8M</td>
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<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>$21.6M</strong></td>
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<tr>
<td><strong>REMAINDER:</strong></td>
<td><strong>$8.3M</strong></td>
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</tbody>
</table>

#### 2022
- Round 2 projects
- Completed funding allocations

#### Round 2
<table>
<thead>
<tr>
<th>Institution</th>
<th>Funding</th>
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<tbody>
<tr>
<td>Arlington</td>
<td>$600K</td>
</tr>
<tr>
<td>DFWIA</td>
<td>$1.5M</td>
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<tr>
<td>McKinney/Dallas</td>
<td>$5M</td>
</tr>
<tr>
<td>Fort Worth</td>
<td>$4.2M</td>
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<td><strong>TOTAL:</strong></td>
<td><strong>$11.3M</strong></td>
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<tr>
<td><strong>PROJECTS SHORTFALL:</strong></td>
<td><strong>$3M</strong></td>
</tr>
</tbody>
</table>
Dallas College: AV Circulator/Workforce Dev
DART: AV LoveLink
Fort Worth: AV Truckport
Paul Quinn College: Food Desert Delivery
Richardson: IQ Testbed
Arlington: AV RAPID
DFWIA: AV Parking/Curb Mgmt.
McKinney/Dallas: AV Broadband Services
S/SE Fort Worth Projects

Round 1
- Dallas College: AV Circulator/Workforce Dev
- DART: AV LoveLink
- Fort Worth: AV Truckport
- Paul Quinn College: Food Desert Delivery
- Richardson: IQ Testbed

Round 2
- Arlington: AV RAPID
- DFWIA: AV Parking/Curb Mgmt.
- McKinney/Dallas: AV Broadband Services
- S/SE Fort Worth Projects

AV2.2/2.3 Project Map
# AV2.2/2.3 Technologies Portfolio

<table>
<thead>
<tr>
<th>Round 1</th>
<th>Round 2</th>
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</thead>
<tbody>
<tr>
<td>Automated Vehicle (AV) Shuttle</td>
<td>App-Based Ridesharing</td>
</tr>
<tr>
<td>AV Trucking</td>
<td>Automated Parking</td>
</tr>
<tr>
<td>Connected Vehicle (CV)</td>
<td>Broadband Access/Virtual Transport</td>
</tr>
<tr>
<td>Neighborhood Delivery Bots</td>
<td>CV Emergency Alerts</td>
</tr>
<tr>
<td>Public Transit Buses</td>
<td>CV Traffic Signals</td>
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<tr>
<td></td>
<td>Curb Management</td>
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<tr>
<td></td>
<td>AVs as Service Delivery Tools</td>
</tr>
<tr>
<td></td>
<td>Teleoperation</td>
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Arlington RAPID Tech Expansion

**Project:** Two-year continuation of Arlington RAPID, which has been growing ridership (200+/day) and has a predominately low-income/transit dependent ridership base. Adding teleoperation and emergency vehicle alert tech, which will help speed transition to fully driverless operation.

**Team:** Arlington, UTA, May Mobility (Toyota), Via

**Amount:** $600K (net of redeploy of Dallas College Eastfield AV project funds)
DFWIA: Self-Parking Vehicle/Curb Management/Parking Management Test Site

**Project:** Automated parking test bed

1. Automated Parking using Low-Speed Vehicle Automation (LSVA)
2. Supervisory Parking Management (SPM)
3. Active Curb Management (ACM)

**Team:** DFWIA, NREL

**Amount:** $1.5M
VIRTUAL TRAVEL: A NEW TRAVEL MODE

Benefits of substituting trips with “virtual travel”:
• Air Quality
• Mobility

Improving accessibility to destinations:
• Access to needs via technology

Challenges driving this approach:
• Lack of vehicle
• Lack of transit
• Lack of bike / sidewalks
• Income constraints
• Age / disability constraints
DEVELOPING IN TWO SIMULTANEOUS PHASES

PHASE 1

Autonomous mobile vehicle to residential locations:

• Open platform incubator

Locations:
• McKinney
• Dallas

PHASE 2

Access to broadband:

• Retrofit and new location

Location:
• Fort Worth
PHASE 1: VEHICLE-BASED TRANSPORTATION DEMAND MANAGEMENT AND ACCESSIBILITY

Use teleoperated and automated vehicles to deliver services to multiple users per vehicle/trip (Technology Incubator)

Takes users off the road for redundant trips

Provides access where none exist

Supports Congestion Management Plan (CMP) as part of Transportation Demand Management strategies supporting CMP

Project: McKinney/City of Dallas (subject to final approvals)
## Recommendations in South and Southeast Fort Worth

<table>
<thead>
<tr>
<th>Project</th>
<th>Funds</th>
<th>Source</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Application of Expanded ZIPZONE Transit Service in Zip Code 76104</td>
<td>$700K</td>
<td>CMAQ with Regional TDC</td>
<td>Added to $300K Planning Submittal to FTA (two years)</td>
</tr>
<tr>
<td>Pilot Project on Design and Implementation of Equal Access to the Internet as a Travel Demand Management Tool: Southeast Fort Worth Lancaster and Rosedale</td>
<td>$3000K</td>
<td>STBG with Regional TDC</td>
<td>$200K RTC Local, Lancaster (new) and Rosedale (retrofit)</td>
</tr>
<tr>
<td>Western Application of Next Generation Traffic Signals: Emergency Vehicles and Transit Vehicles</td>
<td>$500K</td>
<td>STBG with Regional TDC</td>
<td>Hospital District (emergency) and Lancaster (transit)</td>
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1. Supporting City of Fort Worth Resolution 5028-12-2018 (Task Force on Race and Culture)
Contacts

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