The Use Case for Automated Vehicles
TNCs and E-Hailing in Paratransit

Ngani Ndimbie
Traffic21 Institute at CMU
Women in Transportation Fellow
nndimbie@andrew.cmu.edu
Emerging Partnerships
<table>
<thead>
<tr>
<th>Service</th>
<th>THE RIDE</th>
<th>Pilot Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fare</td>
<td>$3.15 or $5.25 for premium trips</td>
<td>As low as $2.00</td>
</tr>
<tr>
<td>Booking Timeframe</td>
<td>At least 1 day in advance</td>
<td>On demand - Instant request to dispatch</td>
</tr>
<tr>
<td>Day-of Wait Time</td>
<td>30-minute window</td>
<td>As low as 5 minutes in core service areas</td>
</tr>
<tr>
<td>Trip Reservations</td>
<td>By phone</td>
<td>Via smartphone app or phone call (Lyft only)</td>
</tr>
</tbody>
</table>

Massachusetts Bay Transportation Authority + Lyft + Uber
The Use Case for Automated Vehicles

John Whitt
US Army Aberdeen Test Center
Light Tactical Vehicles Branch Chief
john.m.whitt4.civ@mail.mil
Aberdeen Test Center’s Autonomous Mission

To test current, new and emerging systems that operate remotely or autonomously to include systems that work by remote control, robotics, autonomous operations and artificial intelligence.
Connected Vehicle Use Cases

Military Application

- Autonomous Mobile Applique System

Commercial Application

- Cooperative Adaptive Cruise Control
The Use Case for Automated Vehicles

Fred Bergstresser
Royal Truck & Equipment, Inc.
Government Account Manager
FBergstresser@royaltruckequip.com
Autonomous TMA Truck

THE WORLD'S FIRST DRIVERLESS WORK ZONE VEHICLE
Driverless Cab

BENEFITS

✓ INCREASE SAFETY FOR WORKERS
✓ COST REDUCTIONS
✓ SAFER WORK SITE
✓ WORK ZONE OPTIMIZATION
✓ USE FOR ROLLING OPERATIONS

DRIVERLESS CAB REMOVES DRIVER FROM TMA TRUCK FROM A “HIGH-RISK” SITUATION
Global TMA Deployment Initiative

Connecting the DOTs™
A Global TMA Deployment Initiative
The Use Case for Automated Vehicles

David De Notaris
Office of Vocational Rehabilitation
Executive Director
ddenotaris@pa.gov
OVR BY THE NUMBERS

2016-17

74,594: Individuals engaged with OVR
9,304: Customers placed into employment
13,946: Students engaged with OVR
6,000: Pennsylvania employers with whom OVR worked

$35.5M State dollars = $131.3M Federal dollars
• Accessibility needs to be baked in, not layered on.
  – AT = assistive technology, not “after thought”.
  – Accessibility should not be considered a feature; it is a requirement.
  – Regardless of the interface, it needs to be usable/accessible.

• Inclusion Works
  – Clear policies on who can operate the vehicle to be inclusive, not limiting
  – Consider individuals with disabilities when developing/testing

This technology will open doors, improve opportunities and level the playing field for residents that experience the real challenge of transportation as a barrier to education, training and employment.
QUESTIONS?