## Demand Responsive Service Micro Transit

CAC Technology \& Innovation Ad Hoc Committee

## What is Micro-Transit?

- Shared-Ride
- Curb-to-Curb, Hub-to-Hub
- On-Demand Software Dispatching
- Service for Low-Demand or New Markets



## Where Could Micro-Transit Work in OC?

- First/Last Mile Connections to Transit Hubs
- Existing Low-Demand Transit Areas
- Areas Previously Unserved by Transit




## Partnerships with TNCs vs. OCTA Operated

- FTA Considerations
- Allow for alternatives methods of payment besides a credit card
- Allow for alternative methods of reservations besides a smartphone
- Accessibility for persons with physical or intellectual disabilities
- Comparable level of service for non-ambulatory passengers
- Personnel must be ADA trained/sensitive


## - Issues with Partnerships

- Lack of accessible vehicles
- Unwillingness to provide data required to substantiate services provided
- Legal risk


## Goals of OCTA Micro-Transit Pilot

$>$ Provide public transit mobility in lower-demand areas
$>$ Reduce total operating \& capital costs
>Reduce Vehicle Miles Travelled (VMT)
$>$ Meet customer needs

## Market Research: Response Time \& Cost



## Market Research: Where and When

When would you use such a service? Please specify weekday and weekend time frames. Check all that apply.

| Day | $\begin{gathered} \text { Morning } \\ \text { (5:30AM-9:30AM) } \end{gathered}$ | $\begin{gathered} \text { Mid-Day } \\ (9: 30 \text { AM-3:30AM) } \end{gathered}$ | $\begin{gathered} \text { Afternoon } \\ \text { (3:30PM-6:30PM) } \end{gathered}$ | $\begin{gathered} \text { Evening } \\ \text { (6:30PM-10:30PM) } \end{gathered}$ | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Weekdays | 10.3\% | 16.9\% | 14.9\% | 11.0\% | 53\% |
|  |  |  | $5$ | 0 |  |
|  | 6.2\% | 15.4\% | 13.3\% | 12.0\% | 47\% |
| Weekends |  | $2$ |  | 5 |  |
| Grand Total | 17\% | 32\% | 28\% | 23\% | 100\% |

## Market Research: Where and When

| Top 20 Destinations for Weekday \& Weekends | Morning (5:30AM-9:30AM) | Mid-Day (9:30AM-3:30PM) | Afternoon (3:30PM-6:30PM) | Evening (6:30PM-10:30PM) | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| grocery store | 4.70\% | 11.03\% | 9.03\% | 7.15\% | 31.92\% |
| mall / shopping center | 1.38\% | 2.77\% | 2.69\% | 2.33\% | 9.17\% |
| warehouse stores | 1.30\% | 2.73\% | 2.54\% | 2.17\% | 8.75\% |
| shopping | 0.88\% | 2.15\% | 2.08\% | 1.70\% | 6.81\% |
| school | 0.86\% | 1.38\% | 1.38\% | 1.12\% | 4.74\% |
| restaurant | 0.48\% | 1.25\% | 1.31\% | 1.07\% | 4.11\% |
| pharmacy | 0.38\% | 1.00\% | 0.73\% | 0.51\% | 2.63\% |
| home improvement store | 0.41\% | 0.89\% | 0.69\% | 0.46\% | 2.45\% |
| hospital | 0.42\% | 0.95\% | 0.62\% | 0.36\% | 2.35\% |
| park | 0.43\% | 0.59\% | 0.63\% | 0.69\% | 2.35\% |
| beach / lake | 0.30\% | 0.77\% | 0.68\% | 0.54\% | 2.29\% |
| doctor / medical appointment | 0.36\% | 0.81\% | 0.60\% | 0.44\% | 2.21\% |
| gym | 0.45\% | 0.65\% | 0.62\% | 0.49\% | 2.21\% |
| library | 0.32\% | 0.73\% | 0.64\% | 0.41\% | 2.10\% |
| movie theater | 0.24\% | 0.50\% | 0.54\% | 0.47\% | 1.75\% |
| bank | 0.24\% | 0.72\% | 0.45\% | 0.27\% | 1.68\% |
| church | 0.29\% | 0.60\% | 0.35\% | 0.33\% | 1.56\% |
| fast food | 0.26\% | 0.42\% | 0.52\% | 0.27\% | 1.47\% |
| college | 0.29\% | 0.39\% | 0.39\% | 0.33\% | 1.39\% |
| mail / post office | 0.14\% | 0.32\% | 0.29\% | 0.24\% | 0.98\% |
| Grand Total | 14.13\% | 30.65\% | 26.78\% | 21.35\% | 92.91\% |

## Technology

1 SETUP

DEFINE REGIONS


Map out service area regions.


Pre-allocate vehicles to Pre-ailocate vehicles to
regions \& services-change
them at any time.


Configure operating hours to best fits your needs. to best fits your needs.

## 3 EXECUTION

BOOK RIDES
MANAGE TRIPS (AND YOUR BUDGET)
IMPROVE THE PASSENGER EXPERIENCE


Passengers request rides vis their mobile phone or online \& dispatchers field calls to book rides from anywhere


OnDemand optimizes driver directions \& groups rides/ididers based on origin/destination, making your system more efficient \& economical-automagically!


Your passengers stay in the know with real-time tracking and get alorts when their ride is close-reducing their wait time and keeping passenger satisfoction at an all-time high.

## 2 OPERATION

DIRECT OPERATORS


## TransLoc - Simulator

