Next OS Webinar | August 21, 2019
Today’s Presenters

Coleen Clementson
Interim Planning Director
SANDAG

Antoinette Meier
Principal Planner
SANDAG

Scott Corwin
Global Director - Future of Mobility
Deloitte

Mandy Bishop
Program Manager
Smart Columbus
5 Big Moves

NEXT OS
Enabling technology

COMPLETE CORRIDORS
Backbone of the system

FLEXIBLE FLEETS
Last mile options

TRANSIT LEAP
Alternatives to automobiles

MOBILITY HUBS
Transfer points
A Bold New Vision
Next OS
Mobility Management

- Smart and connected transportation system
  - Real-time information
  - Efficient operations
  - Reliable trip planning
Mobility as a Service

• Competitive travel choices
• Integrated transportation services
• Seamless mobility experience

Credit: Cooper Hewitt, Smithsonian Design Museum

Credit: Whim
Next OS in Action

12 a.m - 6 a.m
6 a.m - 11 a.m
11 a.m - 4 p.m
4 p.m - 12 a.m
Scott Corwin
Global Director – Future of Mobility Practice
Deloitte
Shaping the Future of Mobility

August 21, 2019
Let’s look at the evolution of human mobility

With mechanical leverage

Engineering as a discipline

ICE + wagon = motor Car

Airplanes

What will be the next major technology shift?

On foot

Domesticated animal power

Materials innovations

The pace of change has increased dramatically over the last century
Just imagine: what would it have been like to live in the days of **Ford, Edison and Rockefeller**?

Their inventions led to **huge** (not just incremental) shifts and convergences.
Let’s look at **Fifth Avenue in NYC on Easter Sunday** - can you name the years?

Source: Tony Seba, tonyseba.com, 2014
A number of forces are now **challenging the century old automotive system** . . .

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<tr>
<th>Today’s Realities</th>
<th>Orthodoxy Being Challenged</th>
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<td><strong>2.0B</strong>&lt;br&gt;Global cars on the road are <strong>expected to double</strong> by 2040</td>
<td><strong>Mobility does not require owning a car</strong>, as new forms of mobility use fewer assets to enable traveling more miles, faster</td>
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<td><strong>1.25M</strong>&lt;br&gt;People dying every year on roads principally due to <strong>human error</strong></td>
<td><strong>We do not have to tolerate and can greatly reduce these tragic losses</strong> through smart technologies and soon the advent of autonomous vehicles</td>
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<td><strong>70%</strong>&lt;br&gt;Estimated <strong>rise in total emissions</strong> by 2050, warming our planet to <strong>increasingly catastrophic levels</strong></td>
<td><strong>We do not need to rely solely on fossil fuels</strong>, and can migrate towards a zero-emission future built on renewable energy</td>
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... as new modes are being introduced and adopted at unprecedented rates

On-Demand Rentals

Ubiquitous Bike Sharing Programs

Rise of EVs and AVs

Drones & Hyperloop

Ride Hailing Revolution

On-Demand Shuttles

Swift Adoption of E-Scooters
Let’s explore how San Diegans might experience **seamless intermodal mobility** in the future.
We now stand at a crossroads . . .

. . . and the question is what path will we choose?
Next OS
Mandy Bishop, PE, SI
Deputy Director of Public Service
Smart Columbus Program Manager
The NEXT Operating System – Columbus Implementation
THE SMART COLUMBUS OPERATING SYSTEM

PRIVATE SECTOR
ACCESS TO PUBLIC DATA ALLOWS BUSINESSES TO IDENTIFY OPPORTUNITIES AND SOLUTIONS

NON-PROFIT
DATA SHARING ALLOWS ORGANIZATIONS TO CONNECT AND LIFT UP THE COMMUNITY

CIVIC ENGAGEMENT
RESIDENTS BENEFIT FROM SAFER, FASTER MOBILITY, WHETHER IN THEIR CAR OR ON TRANSIT

PUBLIC SECTOR
INSIGHTS INCREASE AGENCY EFFICIENCY, SPUR INNOVATION-FRIENDLY POLICIES

ACADEMIC
RESEARCHERS ARE ABLE TO CONSUME DATA WITH EASE, PRODUCING RICH VISUALIZATIONS AND INSIGHTS
WHAT ‘MAAS’ MEANS FOR COLUMBUS

MOBILITY PROVIDERS
- Carshare
- Transit
- Uber/Lyft
- Bikeshare
- Taxi/Limo
- Paratransit
- Car/Vanpool

ACCOUNT-BASED COMMON PAYMENT SYSTEM (CPS)

OPERATING SYSTEM

TRAVELERS USING MULTIMODAL TRIP PLANNING APP (MMTPA)

COTA
CENTRAL OHIO TRANSIT AUTHORITY
TRAVELER DEVICES
- Smartphones
- Computers
- Hubs
- TVM
- IVR

OPERATING SYSTEM
- Anonymous Trip Data
- Trip Optimization
- CPS Payment Broker

REGIONAL SYSTEMS
- ODOT
- RTA

MOBILITY PROVIDERS
- Transit, TNC, Carshare, Bikeshare, Taxi/Limo, Car/Vanpool, Paratransit, CEAV

PARKING PROVIDERS
- Garages, lots and on-going street parking

DATA CONSUMERS
- Third-party users
- City of Columbus

Components of the MMTPA reside in the OS
WHAT WE LEARNED

- Integration is hard
- The private sector is not necessarily on your grant schedule
- Implementation of coordinated trip planning is high risk, high reward
Next OS
5 BIG MOVES
NEXT OS

Questions & Answers

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