



THE OHIO STATE UNIVERSITY

COLLEGE OF ENGINEERING

SMART MOBILITY AND SMART CITIES: *ACCESS & OPPORTUNITIES*

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Mobility: The movement of people and goods from place to place, job to job, or one social level to another (across bridges – physical or assumed).





Smart Mobility: The movement of people and goods with...

TRIPLE ZERO

0 Accidents and Fatalities

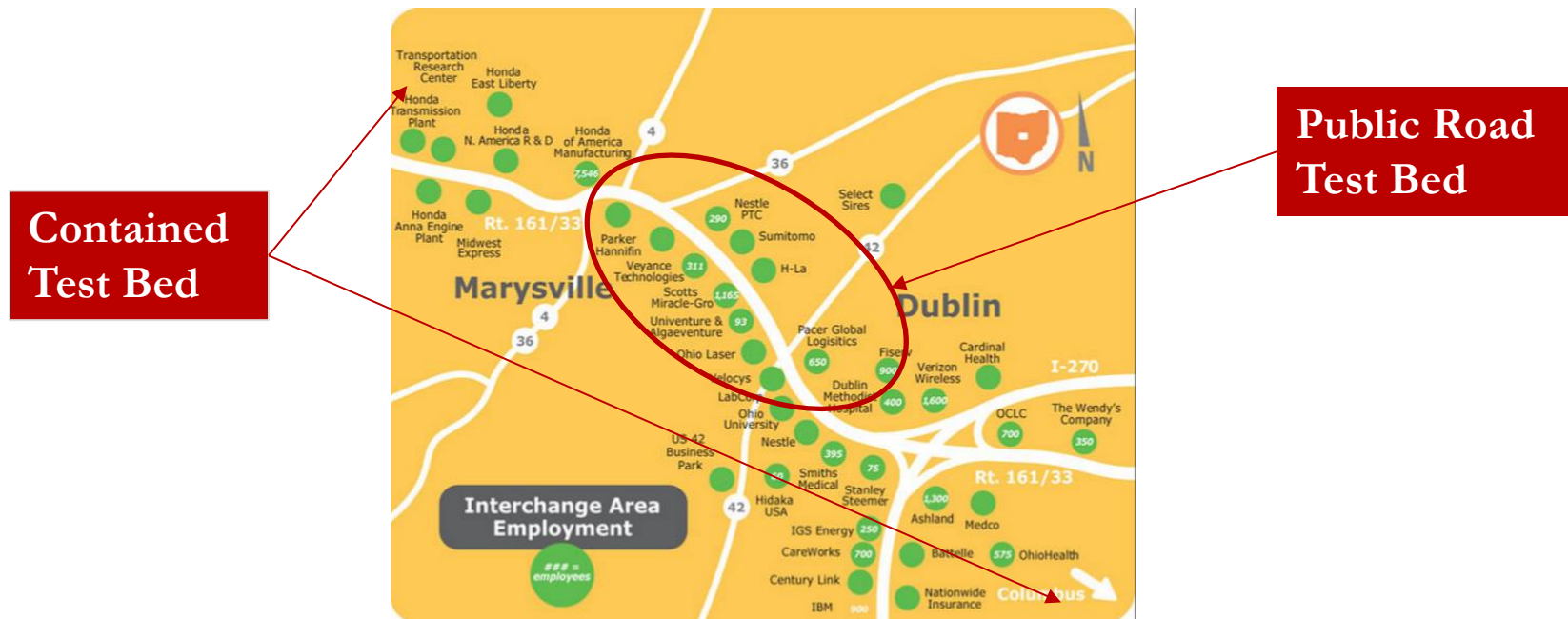
0 Carbon Footprint

0 Stress

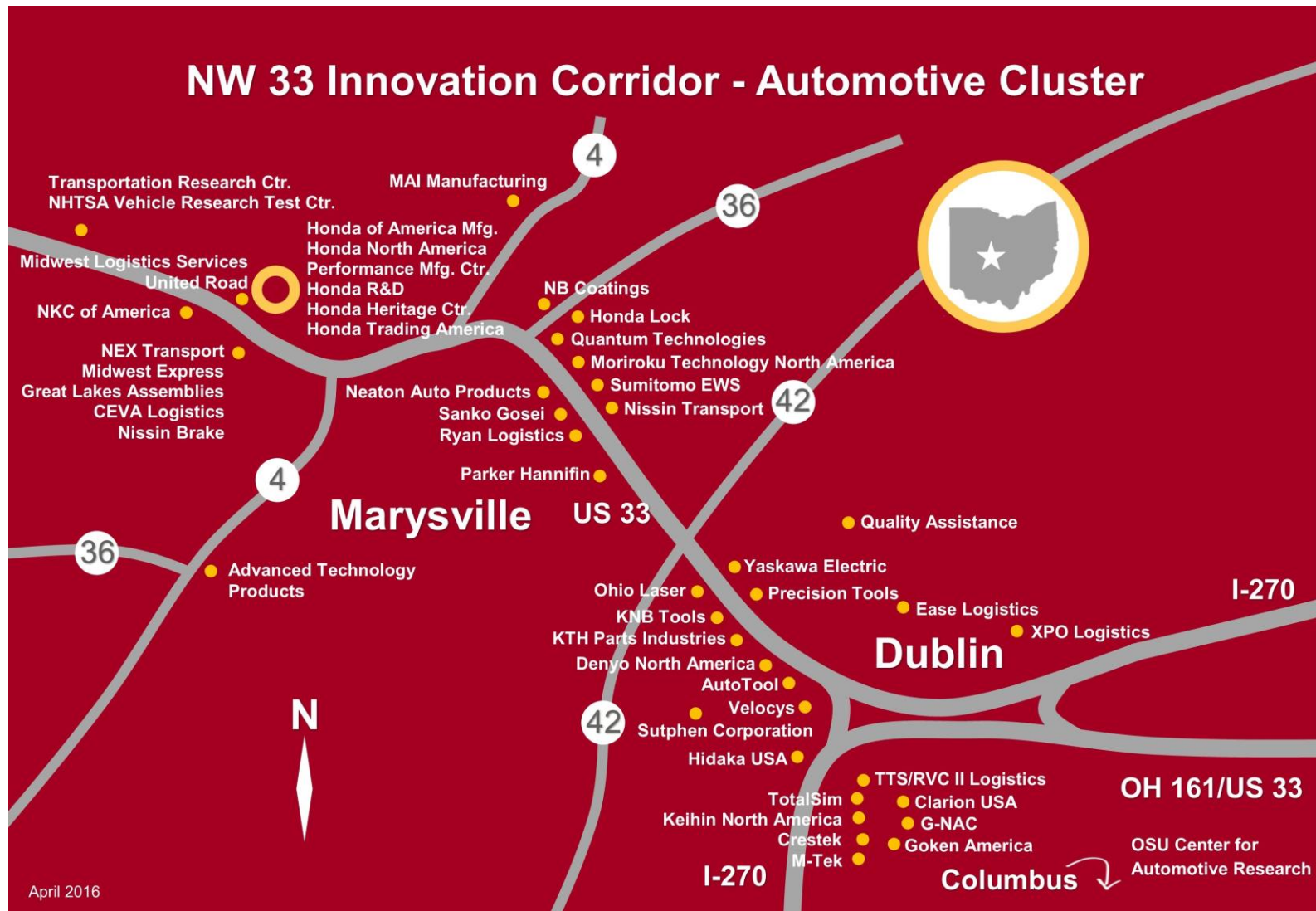


Columbus Smart Mobility

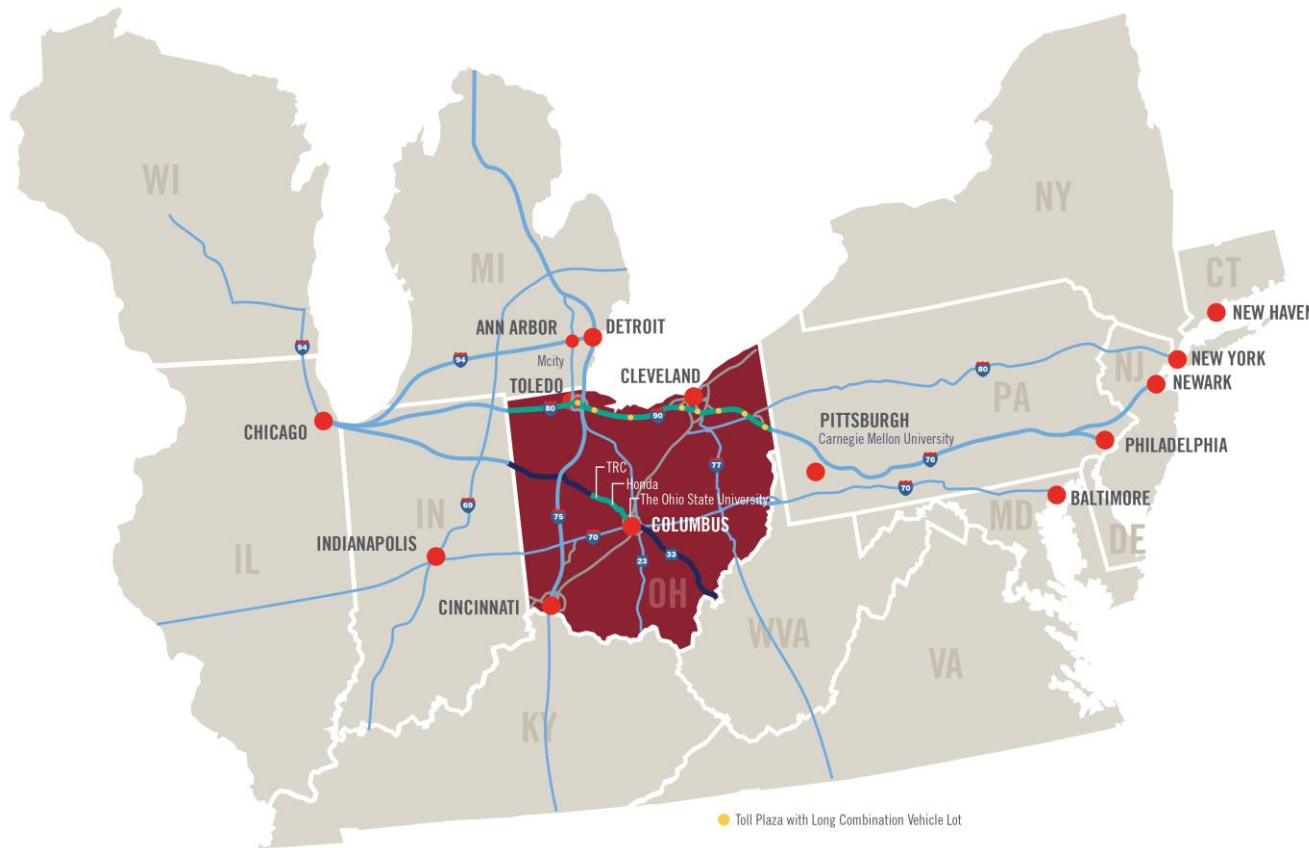
Vision: Ohio leads the nation and world in the development of smart mobility and smart city technologies that have major impact on Ohio transportation industry and drives significant job growth



NW 33 Innovation Corridor



Smart Belt Coalition



Facilities:

- I-76
- City of Ann Arbor
- City of Columbus
- Mcity
- TRC

Smart Roads:

- I-75 Corridor
- I-80/I-90 Turnpike
- I-94 Corridor
- US-33 Corridor
- I-76 Corridor

Stakeholders:

- Columbus 2020
- Carnegie Mellon University
- JobsOhio
- Michigan Dept of Transportation
- Ohio Dept of Transportation
- The Ohio State University
- Ohio Turnpike
- Rev1 Ventures (TechColumbus)
- TRC
- University of Michigan



- Save Lives
- Improve Lives of Older Adults and People with Disabilities
- Transportation in Era of Urbanization
- Environmental Sustainability
- Economic Sustainability



FUTURE MOBILITY SOLUTIONS????

MAAS (MOBILITY AS A SERVICE)
ELECTRIFICATION
INCLUSIVE MOBILITY



Who Drives Mobility As a Service?

Public Sector:

- Infrastructure
- Incentives
- Standards

Private Sector:

- Market Adoption
- End-User Interface
- Navigation Software
- Derivative Technologies



Opportunity

- “It’s all about mobile.”
- Getting users connected to their vehicles
- In-transit data for marketing studies
- Auto-navigate to garage for service
- Vehicle loaning



Electric Vehicle Incentives

Consumer
Outreach/R
ide n Drives

Building
Codes –
Public
and
Private

EV
Stations

Green Car
Spaces in
Garages



Inclusive Mobility



Paratransit Shuttles



Inclusive Mobility



Exploring more robust solutions in accessibility and autonomy



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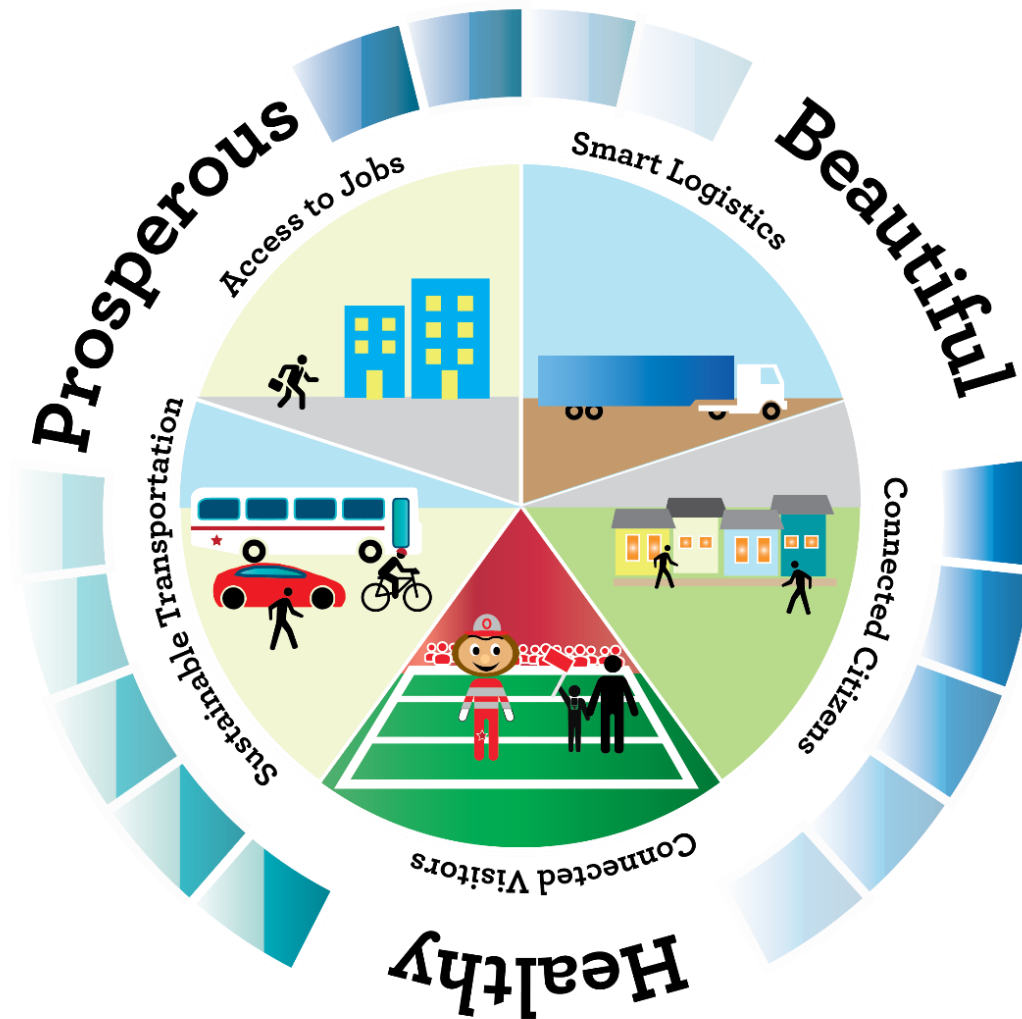
Smart Cities:

The deployment
of technology
and data...

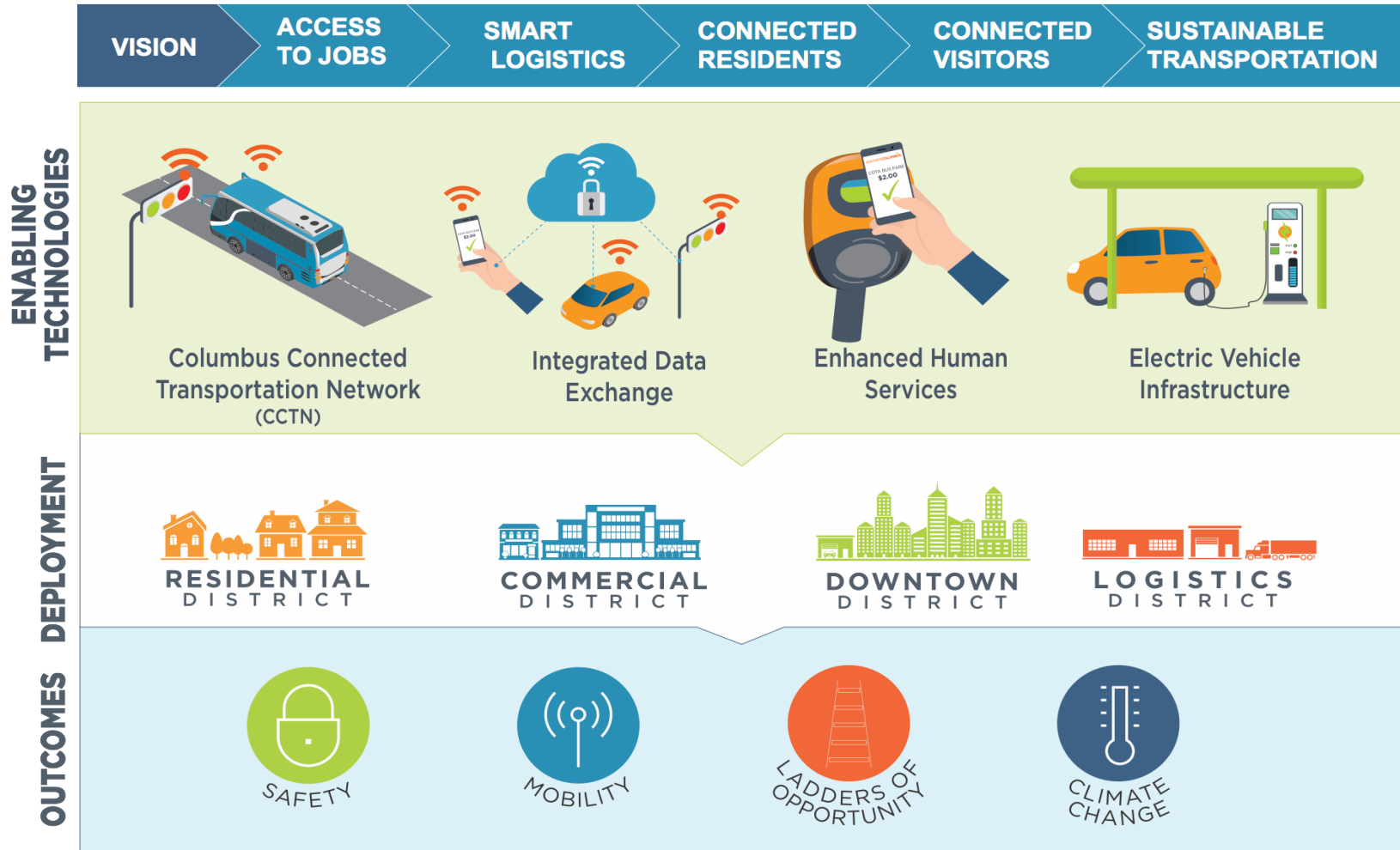
...to improve
people's
lives.



Smart City Goals



Smart Columbus Overview



Easton Shuttle



- Moves parking out of high-traffic areas
- Shuttle is wheelchair-accessible
- Mall Expansion can be further from center
- More space for pedestrians



Truck Platooning



Effects



Mobility For All

- Lower barriers to success



Sustainable transportation encouraged

- Greener Transportation Grid

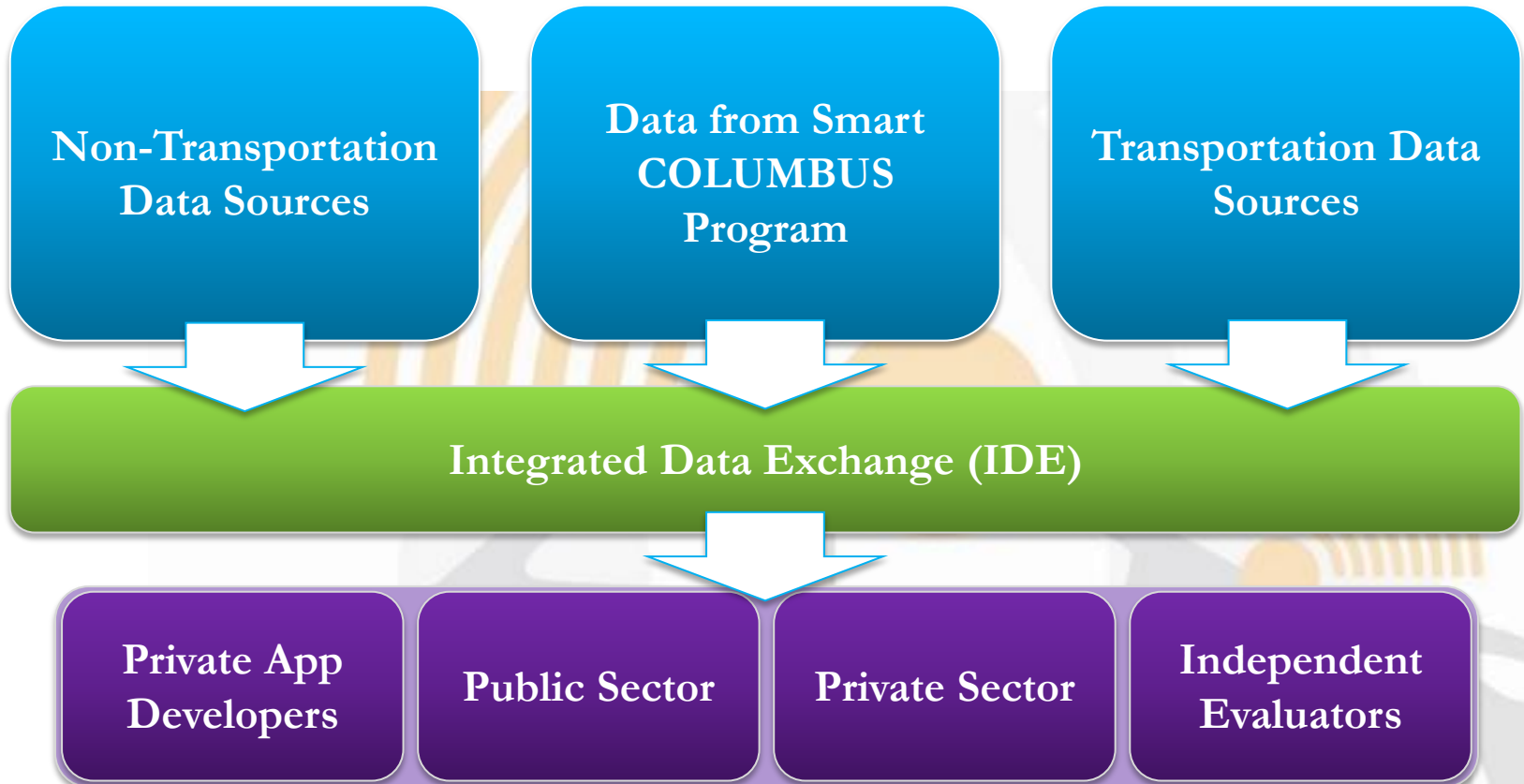


Valuable Data Produced

- Smarter Transportation Solutions



Integrated Data Exchange



Local Engagement



17
Local
Partners



Engaging with USDOT Partners



U.S. DEPARTMENT OF
ENERGY



AUTODESK



VULCAN

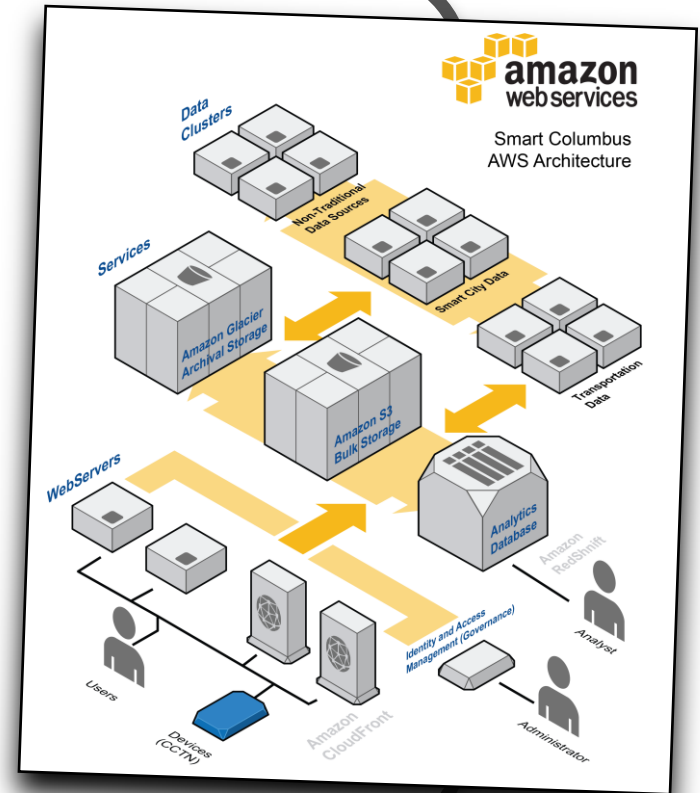


MOBILEYE



amazon
web services™

sidewalk
LABS



THANK YOU!!! Q&A

