

2022

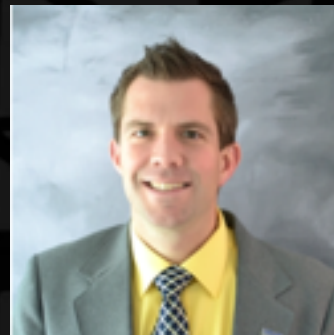
SMART COLUMBUS Mobility Hubs



Speaker Introductions



Andrew Wolpert, PE
City of Columbus
Deputy Program Manager
Adwolpert@columbus.gov



Jeff Kupko, PE, PTOE
Michael Baker International
Consultant Project Manager
Jeffrey.Kupko@mbakerintl.com

\$40 MILLION

78 APPLIED • COLUMBUS WON

VISION:

To empower our residents to live their best lives through responsive, innovative and safe mobility solutions.

MISSION:

To demonstrate how an intelligent transportation system and equitable access to transportation can have positive impacts on every day challenges faced by cities.

OUTCOMES:



SAFETY



MOBILITY



OPPORTUNITY



ENVIRONMENT



AGENCY
EFFICIENCY



CUSTOMER
SATISFACTION

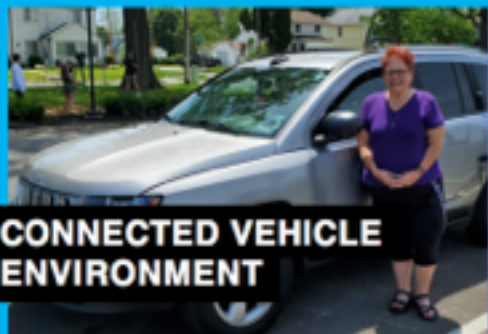


SMART CITY
CHALLENGE

THE MOST COMPREHENSIVE PORTFOLIO OF **EMERGING MOBILITY TECHNOLOGIES** OF ANY CITY IN FIVE YEARS

**SOLUTIONS POWERED BY
OPEN, SHARED DATA**

CONNECTED



AUTONOMOUS



SHARED



ELECTRIC





SMART MOBILITY HUBS



CURRENT SYSTEM

- Fixed route bus service
- Transit system redesign
- Park-and-ride and transit facilities
- CMAX Bus Rapid Transit
- Public 4G Wi-Fi provided at transit centers and on buses
- Mobility providers deploying independently





STAKEHOLDER ENGAGEMENT

- Linden Community workshops
- Community leaders
- Linden Liasons
- Transit and mobility providers
- Community resources/
places of interest



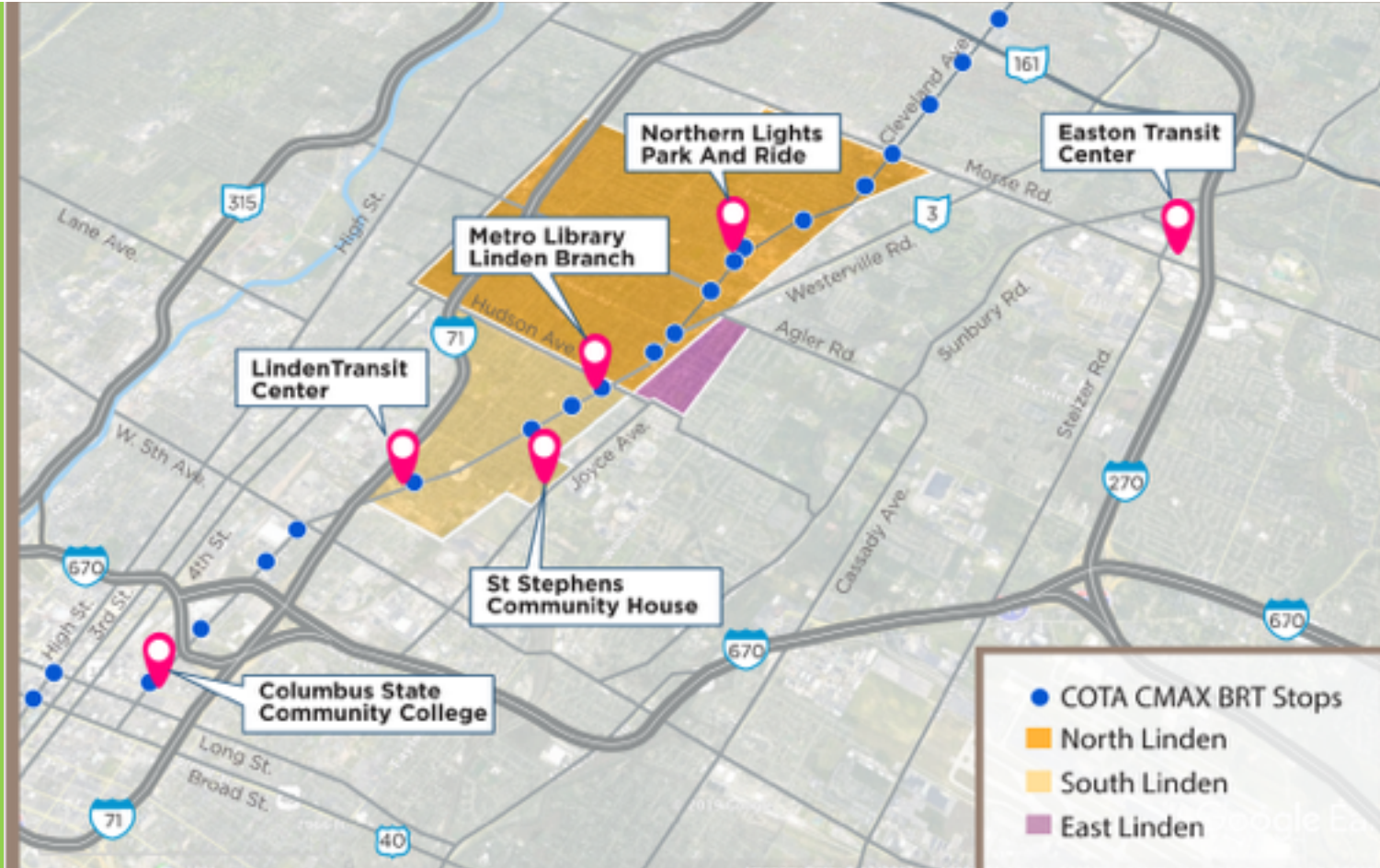
GEOGRAPHIC FOCUS

Linden Area

- Support CMAX
- Bridge first-mile/last-mile gap
- Link to jobs and services

Easton Area

- Provide last link to jobs
- Enable modal transportation in Easton area





SOLUTION

		Park and Ride	Wi-Fi-Enabled	Car-Sharing	Docked Bike-Sharing	Ride-Sharing	Real-Time Displays	Bike Racks	Interactive Kiosk	Comprehensive Trip Planning	Emergency Call Button	EV Charging
Proposed	○		✓									
Existing	✓											
N/A												
Location												
Columbus State Community College			○	○	✓		✓	✓	○	○	○	
Linden Transit Center			✓		○	○	✓	✓	○	○	○	
Northern Lights Park & Ride		✓	✓	○		○	✓	○	○	○	○	○
St. Stephen's Community House		○	○	○	○	○		✓	○	○	○	
Metro Library - Linden Branch			○	○	○			✓	○	○	○	
Easton Transit Center		✓	✓			○	✓	✓	○	○	○	



PARTNERS

Property Stakeholders



Kiosks



Mobility Providers



SMART MOBILITY HUBS FEATURES



SMART MOBILITY HUB —
METRO LIBRARY — LINDEN BRANCH, SMH-3

SMART MOBILITY HUBS FEATURES





SMART MOBILITY HUBS

COST



\$1.3 MILLION
Construction and
installation = \$272K

Engineering, design and
communications = \$1.06M

DEMONSTRATION



**JULY 2020 TO
MAR 2021**

PEOPLE SERVED



**1,084 Bike Share Trips to/
from Hub Locations**

65,000+ Kiosk Interactions

INFRASTRUCTURE



**Hub Locations
Strategic
partnerships:**

- Kiosks (IKE Smart City)
- EV charging (AEP)
- CoGo Bike Share (Paul G. Allen Family Foundation)

OUTCOMES



MOBILITY

- 4 new bike share stations in Linden

OPPORTUNITY

- WiFi-enabled kiosks

CUSTOMER SATISFACTION

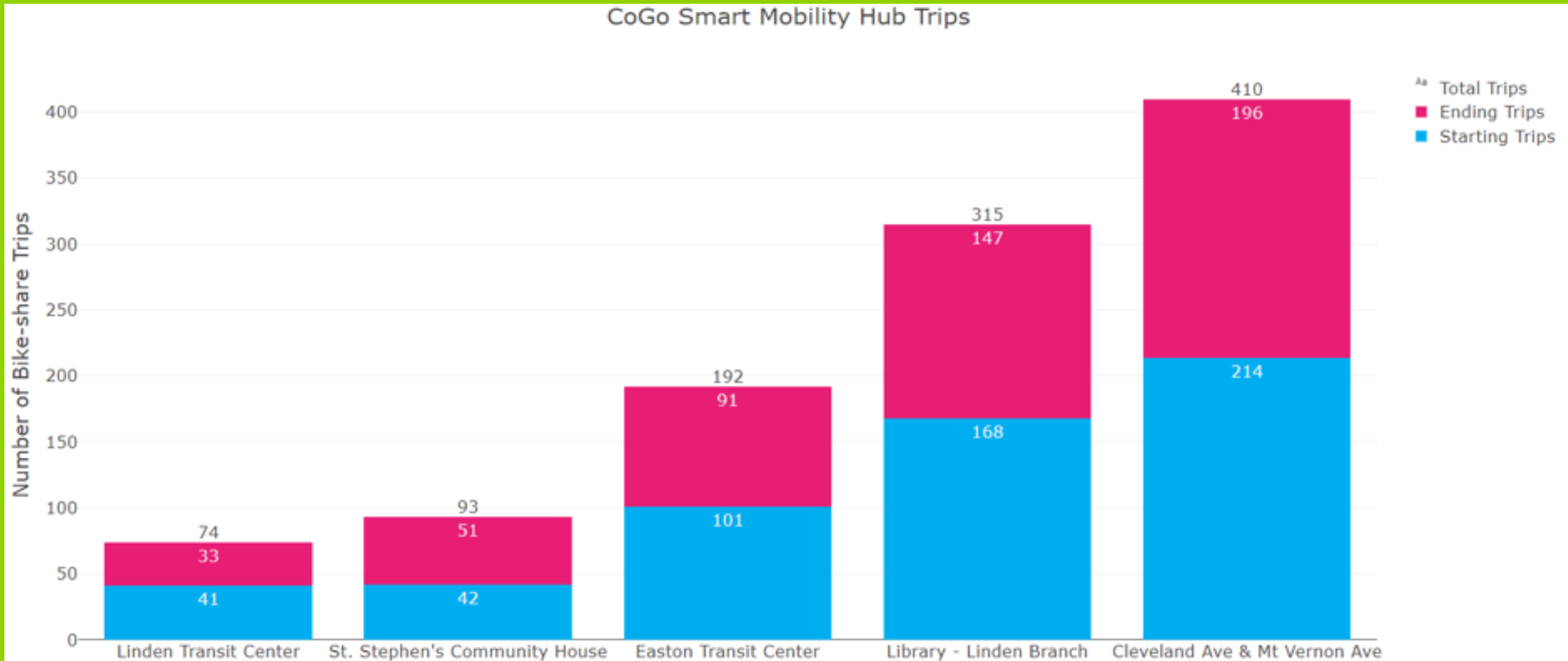
- Low usage (COVID + timeframe)
- As travel returns, more usage anticipated

“Bike-share at smart mobility hubs integrates first mile/last mile connections into the Linden community.”

Chet Ridenour, CoGo Bike Share Operations Manager



SMART MOBILITY HUBS



LESSONS LEARNED

- Stakeholder engagement drove early alignment of goals and hub locations and helped obtain partner commitment
- Mobility provider agreements are necessary for sustainability
- Leveraging partner contributions for kiosks and charging helped create a holistic solution
- Communications after construction helped build awareness for new options and tools

Deploying IKE kiosks at smart mobility hubs helped to equitably distribute the kiosks and solve challenges in growing urban populations

Randall Sistrunk, Director of Development, Orange Barrel Media and IKE Smart City



SUSTAINABILITY SMH

The City of Columbus Department of Public Service will take ownership of the growth of smart mobility hubs.

Additional neighborhoods and mobility corridors are being studied to consider more locations in the future.





WRAP UP and WHAT'S NEXT

HOLISTIC OUTCOMES

Guiding principles:

- Solving community challenges
- ITS can serve residents and businesses
- Smart is for everyone

Creating a sustainable foundation:

- Establishing long-term projects (and the legacy of projects that were removed)
- Identifying champions
- Continuing regional collaboration (Hubs, CV, AV, EV, shared/intelligent mobility)



THE ROLE OF THE RESIDENTS



Our smart city successes were made possible through collaboration with 100,000 residents



Andrew Wolpert, PE,
City of Columbus
adwolpert@columbus.gov

Smart Columbus
smartcity@columbuspartnership.com

Executive Summary

https://d2rfd3nxvhnf29.cloudfront.net/2021-06/20210615-smart-columbus-program-summary-FINAL_0.pdf

Final Report

https://d2rfd3nxvhnf29.cloudfront.net/2021-06/SCC-J-Program-Final%20Report-Final-V2_0.pdf

Performance Measures Results:

https://d2rfd3nxvhnf29.cloudfront.net/2021-06/SCC-C-PfMP%20Results%20Report%20FINAL_Reduced%20File%20Size.pdf

