

Smart and Connected Communities Principal Investigators' Meeting

#### How Nashville Moves, Works and Grows

February 28, 2024

#### **Then**



#### Now



#### Next











## Report: Nashville's economy makes it a top-tier city

"Nashville is the #1 market to watch in 2024."

-PwC 2023



#### Nashville International Airport smashes records for number of passengers in 2023

by Carter Thweatt | Thu, July 20th 2023

(1)

Residential Real Estate

## Nashville ranks No. 1 city to watch for the third year, according to Urban Land Institute study

Ø

Nashville added nearly 100 new residents per day in 2022. Here's why people are moving to Music City

# DOWNTOWN NASHVILLE LEADS IN RECOVERY RATES OF LARGEST U.S. CITIES SINCE 2020

# Nashville ranked as U.S. city with the worst commute. Here's why.



Published 10:33 a.m. CT Oct. 31, 2023 | Updated 10:33 a.m. CT Oct. 31, 2023

Nov 7, 2023 - Real Estate

# You need a six-figure salary to buy a home in Nashville



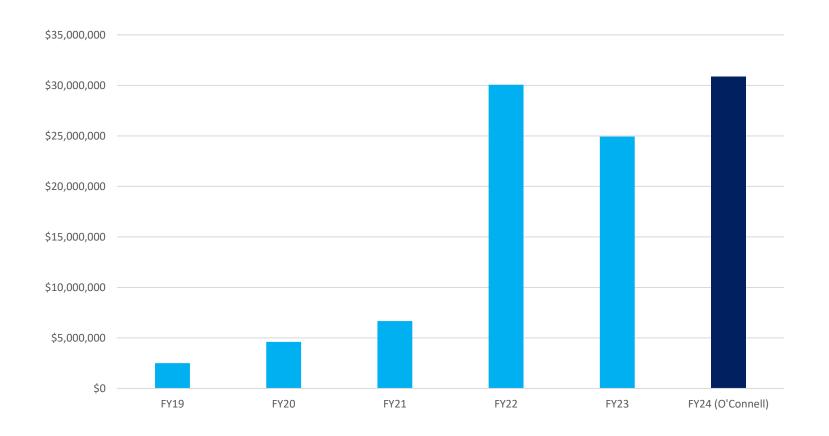
Residential Real Estate

### Rising cost of living, depleted funds create 'perfect storm' for Nashville seniors



#### **Historical CSP Funding Levels**

The FY'24 Capital Spending Plan has the highest investment in transportation over the past 7 years.



#### **CHOOSE HOW YOU MOVE**

- An All-Access Pass to Sidewalks, Signals, Service and Safety in Nashville
- Plan in development: late March
- Possible referendum Nov. 5
- Can we collaborate and innovate toward solutions?







#### Downtown: Work. Play. Live?

Year	Residents
2002	More dogs today than residents then
2006	2,280
2010	5,155
2015	8,313
2020	14,000
Today	17,630
2026	25,000 (based on construction)



CITE WALKABILITY as a top reason they live downtown



5,006 DOGS downtown



SAY

downtown is a FUN place to live





Metro Nashville Davidson County's Portal for Non-Emergency Services and Information

• Dial 311 (8 a.m. to 5 p.m., Monday-Friday)

Visit hub.nashville.gov

Download the app

Responded to nearly 300,000 requests in 2023



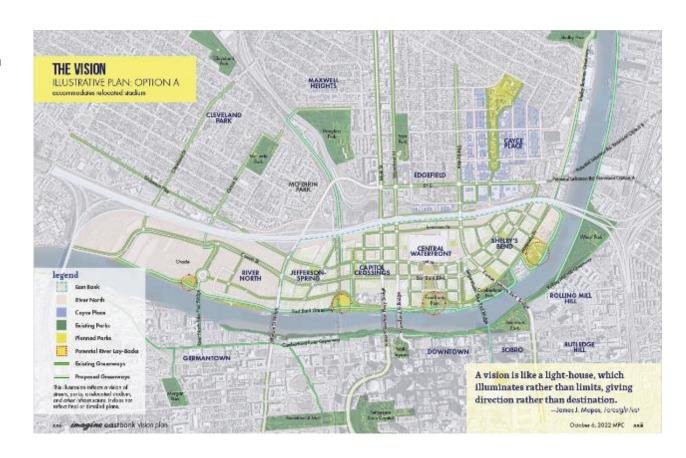


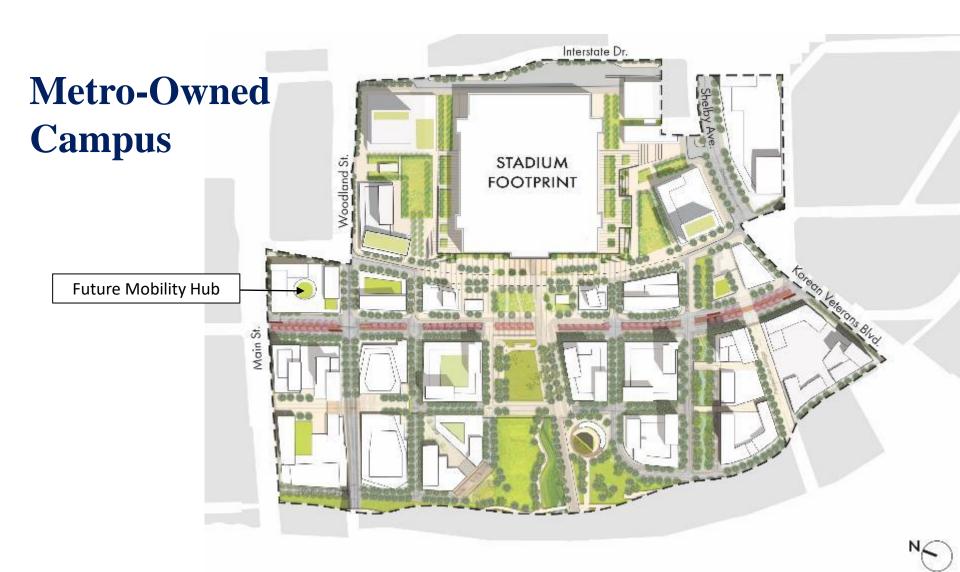
Imagine East Bank Vision Plan approved by MPC October 2022.

Metro owns 113 acres of the 550-acre site.

People-Centric development:

- sidewalks
- multimodal uses
- outdoor space network
- · affordable housing
- resiliency







#### **Case Studies in Collaboration**

#### **University Partners**



Indigent care



Corridor studies with NDOT



Social justice hackathon



Health disparities



Transit Citizen Leadership Academy



Nashville GRAD program



Napier, Sudekum communities

Intelligent Ecosystem Collaborative

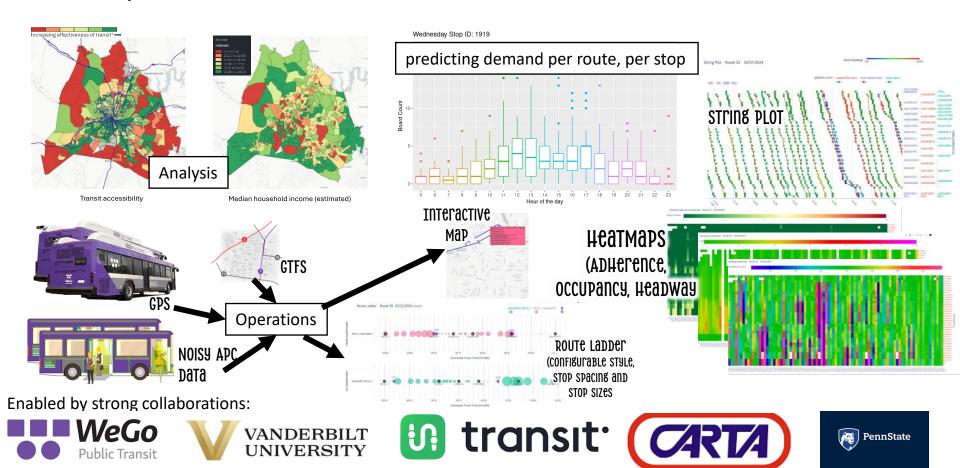
The partnership started through an NSF project in 2015/2016







# Mobility for All through helping public transportation



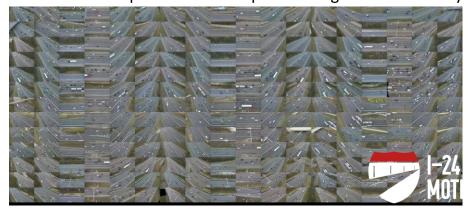
#### Smart Analytics for Helping Bus Operations Monitoring



Partially supported by NSF and FTA

#### Safer roadways through better measurement

I-24 MOTION quantifies and improves congestion and safety



SMART grant measures near-misses to improve pedestrian safety



#### Enabled by strong collaborations:



























Funded by NSF CIVIC Innovation Challenge Program

#### Creating an Al-based Community-wide Efficient and Equitable Emergency Response System

**Partners:** Metro Nashville Emergency Communication, Information Technology Service, Fire Department, Vanderbilt University

311 Caller Auto311 Case Report First Responders

We developed the first system in the US automating 3-1-1 non-emergency calls:

- Community-centric co-design
- Detecting incident types, navigating the conversation, and supporting dispatching.
- Evaluating on 12,000 non-emergency call recordings
- At a fraction of the cost compared to corporate vendors that offer black-box solutions.
- State-of-the-art AI, built with active collaboration with DEC.

#### Outcomes and Impact:

- Prevent 9-1-1 dispatchers from being tied up answering routine non-emergency calls to allow dispatchers the opportunity to answer emergency calls more quickly.
- A system will be deployed in Nashville communication center to handle 60,000 non-emergency calls per year.





#### Challenges

#### **Trust**

- Data integrity
- Cybersecurity
- Privacy and protection of sensitive information
- Ability to control how data is used by the government
- Unintended consequences

# Fusus, the controversial police surveillance contract, has been removed from Nashville's Metro Council agenda

CYNTHIA ABRAMS 🔰 🗳 🛮 FEBRUARY 5, 2024



#### **Advanced Transportation Management System**

Intelligent Transportation Systems + Transit Signal Priority tech:

- Traffic signal synchronization
- Automated traffic signal performance measures
- Updated pedestrian signalization infrastructure
- Prioritize bus movements and maintain transit schedules
- Better safety + mobility. Saves the data we need, not PII.

#### **Continuity and Sustainability**

- From research phase to implementation
- From administration to administration

#### **Connected Nashville: Intelligent Ecosystem Collaborative**



- Increase collaboration on projects focused on intelligent and connected urban infrastructure and services
- Take advantage of opportunities for federal funding
- Possible expansion to include more partners



#### **Opportunities: Our Vision For the Future**

#### A more tech-savvy local government

- A mayor who can code
- Digital Inclusion Trailblazer
- Metro's first Digital Inclusion Officer
- Metro's first Director of Data and Innovation
- Community, Asset, and Land Use (CAL) program
- Retrofit
- Metro's first AI and GenAI Policy
- UI/UX committee: future redesigns for nashville.gov and hub

Pearl Amanfu

Dave Rosenberg

#### A more collaborative approach: Partner-in-Chief



#### **Al-Driven Integrated Multimodal Public Transportation**

The idea is to combine fixed line and on-demand transportation at scale and replicate it across agencies



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