

UNION STATION

Master Plan

Washington Union Station's 2nd Century

DEVELOPMENT PLAN



UNION STATION
REDEVELOPMENT CORPORATION

Akridge



AGENDA

- Introduction
- Station Partners
- The Vision
- Project Schedule
- Development Plan



Washington Union Station
2nd Century

Introduction



Union Station is...

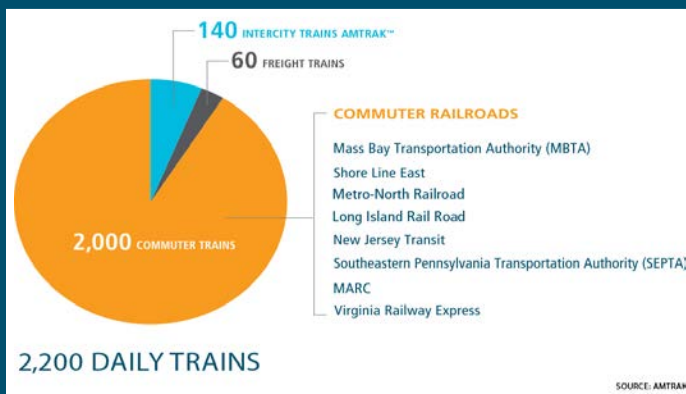
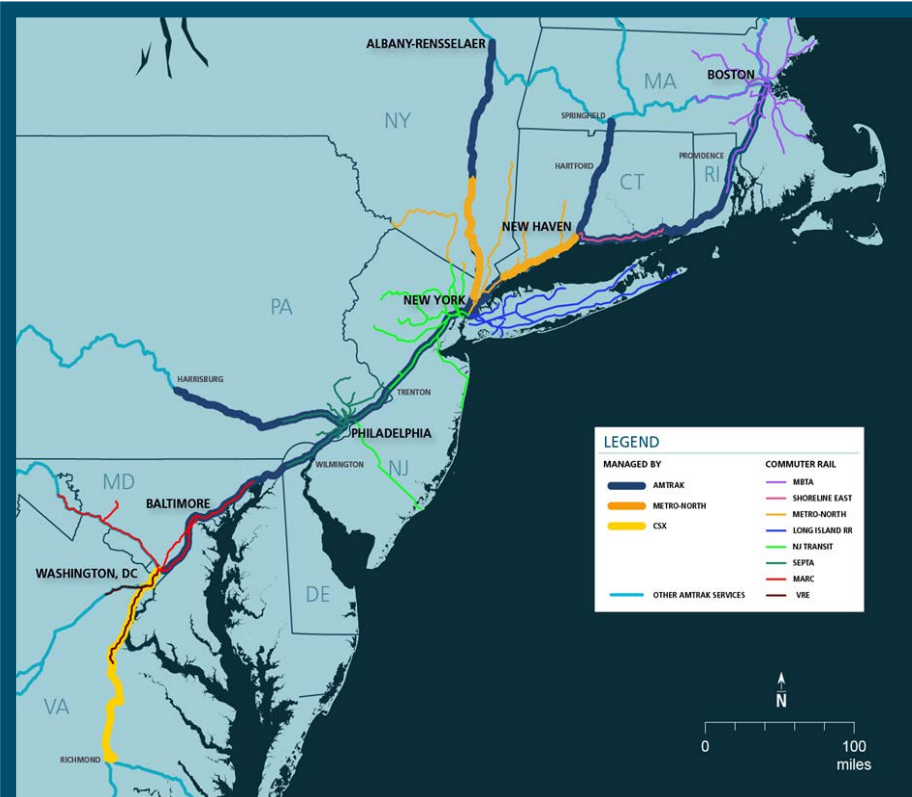
- The southern anchor of the busy Northeast Corridor, and a critical component to unlocking capacity constraints and protecting future high-speed rail opportunities.
- Set at the epicenter of four influential DC neighborhoods, and positioned to reknit two neighborhoods, and to optimize urban connectivity and revitalization.
- An opportunity to serve as a distinguished model of sustainable growth, urban infrastructure and environmental stewardship.
- A historic and iconic structure, preserved and integrated with modern intermodal functionality.
- An economic linchpin for the DC metropolitan region.
- The regions “4th Airport”, and serves more people daily than BWI, Reagan or Dulles.





THE NORTHEAST CORRIDOR: CRITICAL AND COMPLEX OPERATIONS

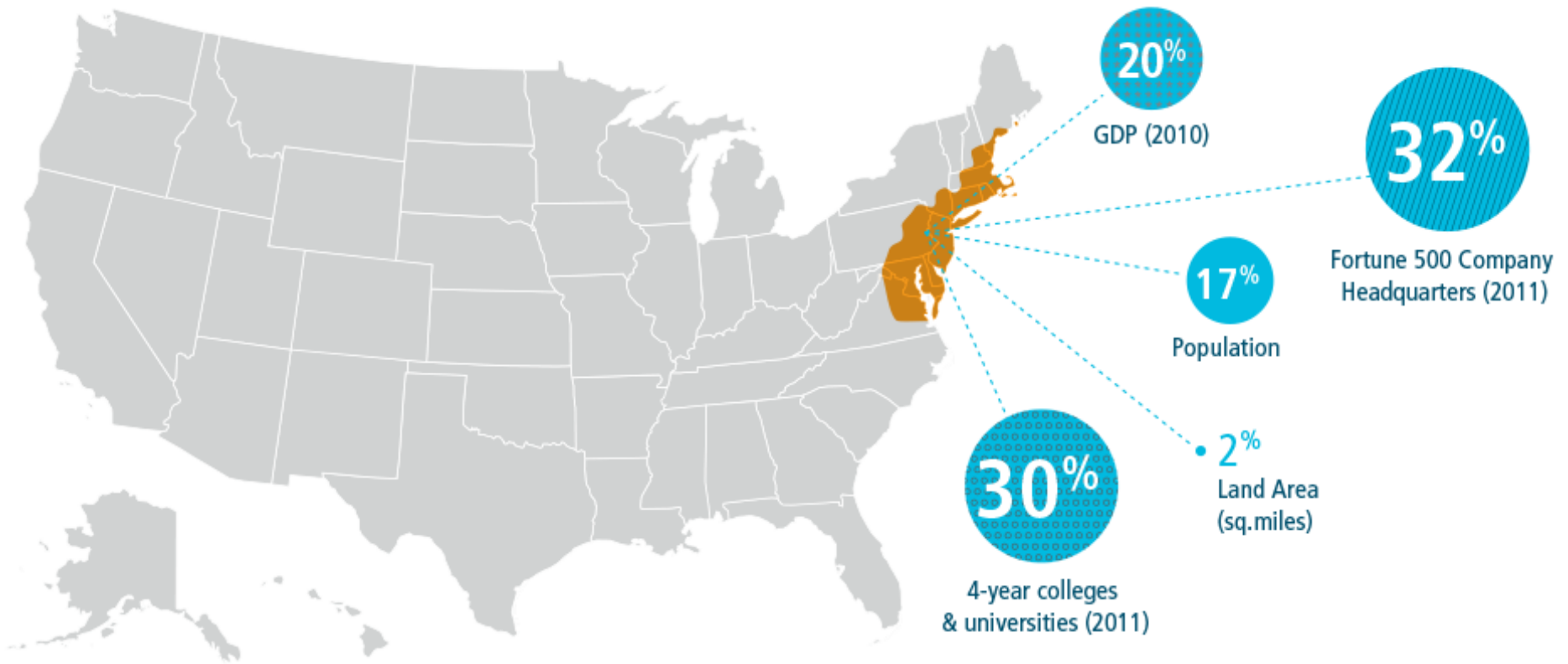
- 899 total route miles
- Carries intercity passenger, commuter, and freight trains
- Amtrak is the majority owner and infrastructure manager (546 route miles)
 - 8 commuter railroads depend upon Amtrak for reliable operations
- 66% electrified
- 150,000 daily trips, 260 million annual passengers
- 1,200 bridges and tunnels, many over a century-old
- U.S. prototype of legacy corridor achieving high-performance, high-capacity service





THE NORTHEAST CORRIDOR IS AN ECONOMIC POWERHOUSE

A single day loss of service would result in \$100 million in lost productivity

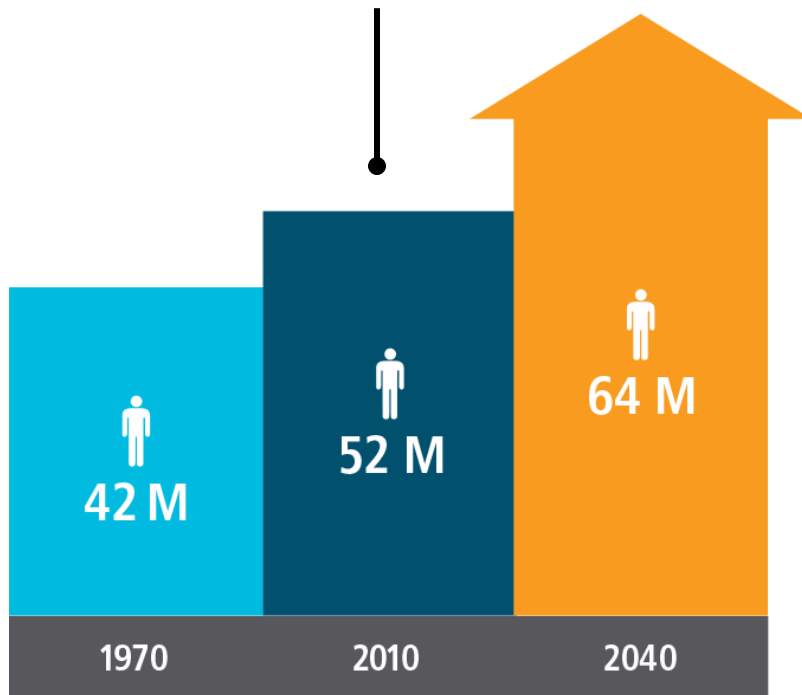


SOURCES: U.S. CENSUS BUREAU, 2010; BUREAU OF ECONOMIC ANALYSIS, 2010; U.S. DEPARTMENT OF EDUCATION, 2011; FORTUNE MAGAZINE, 2011.

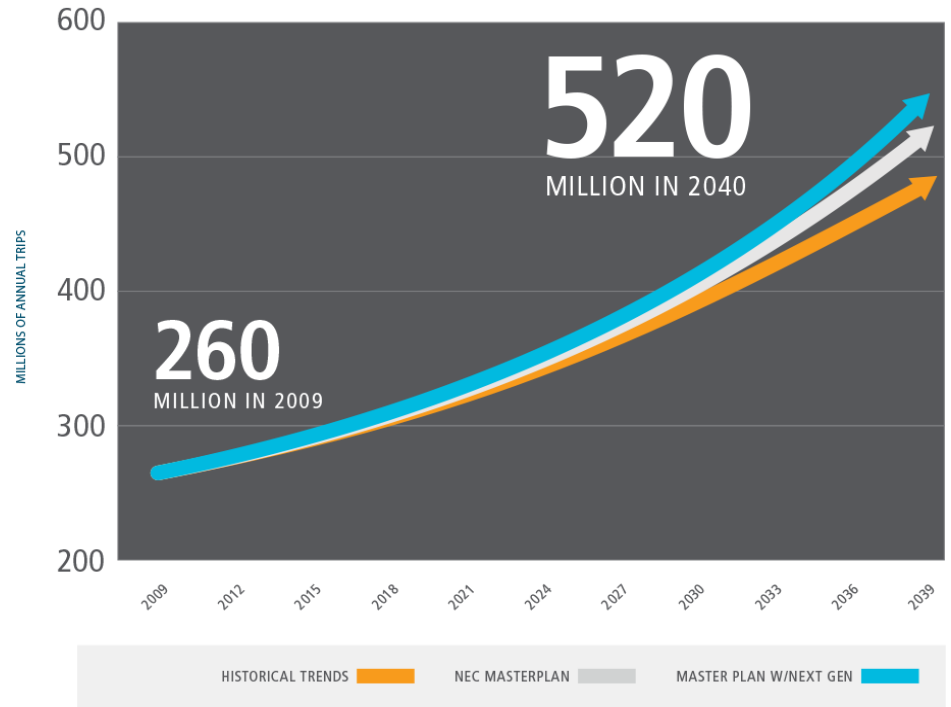


NORTHEAST POPULATION GROWTH

By 2040, the Northeast Megaregion is projected to add 12 million people (23% growth).



SOURCE: REGIONAL PLAN ASSOCIATION



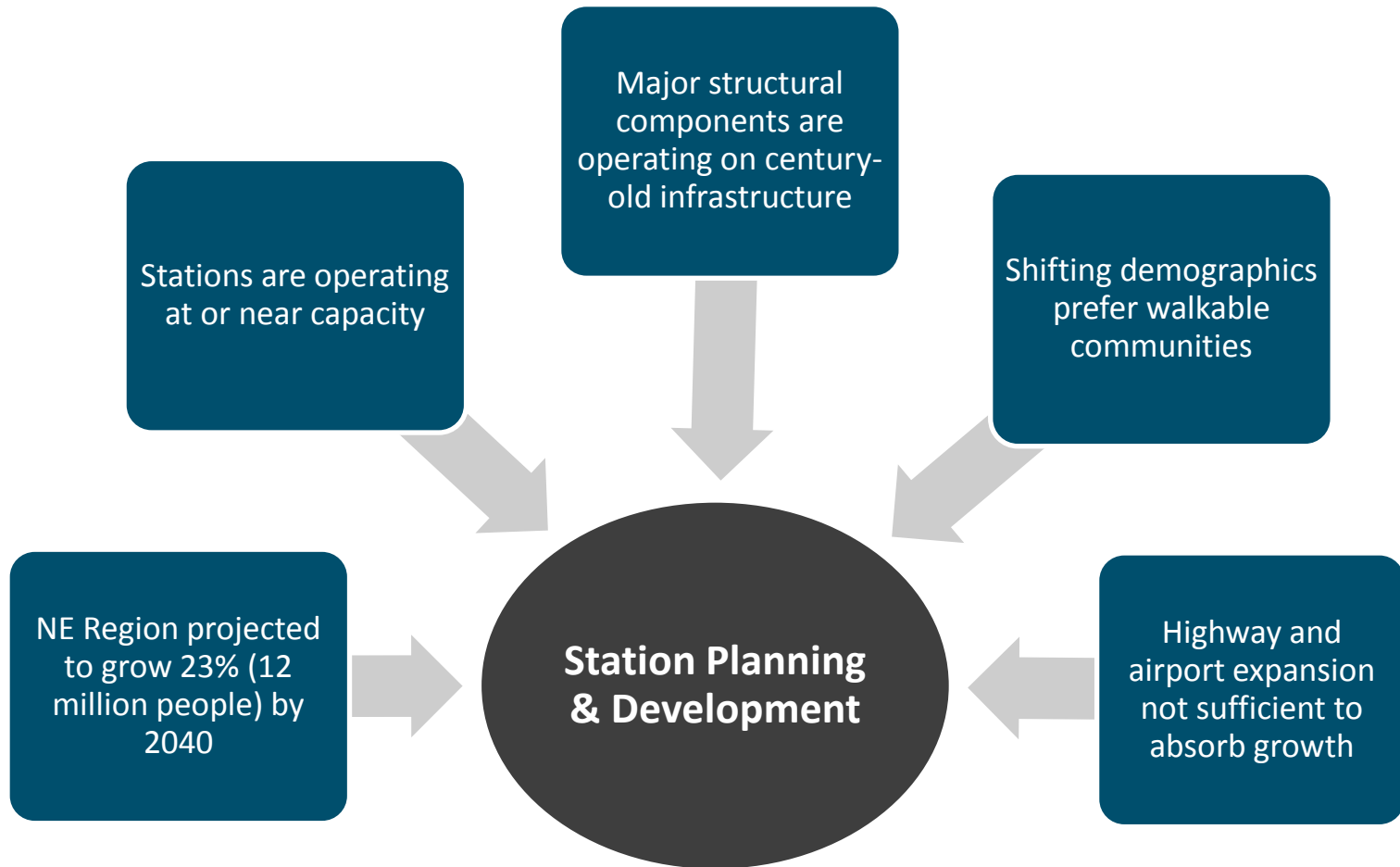
NORTHEAST CORRIDOR RIDERSHIP GROWTH IS PROJECTED TO CONTINUE

Amtrak broken revenue and ridership records. This success is projected to continue as annual trips on all NEC services will roughly double by 2040.



WITH THIS GROWTH AND SUCCESS HAS COME BOTH CHALLENGES AND OPPORTUNITIES

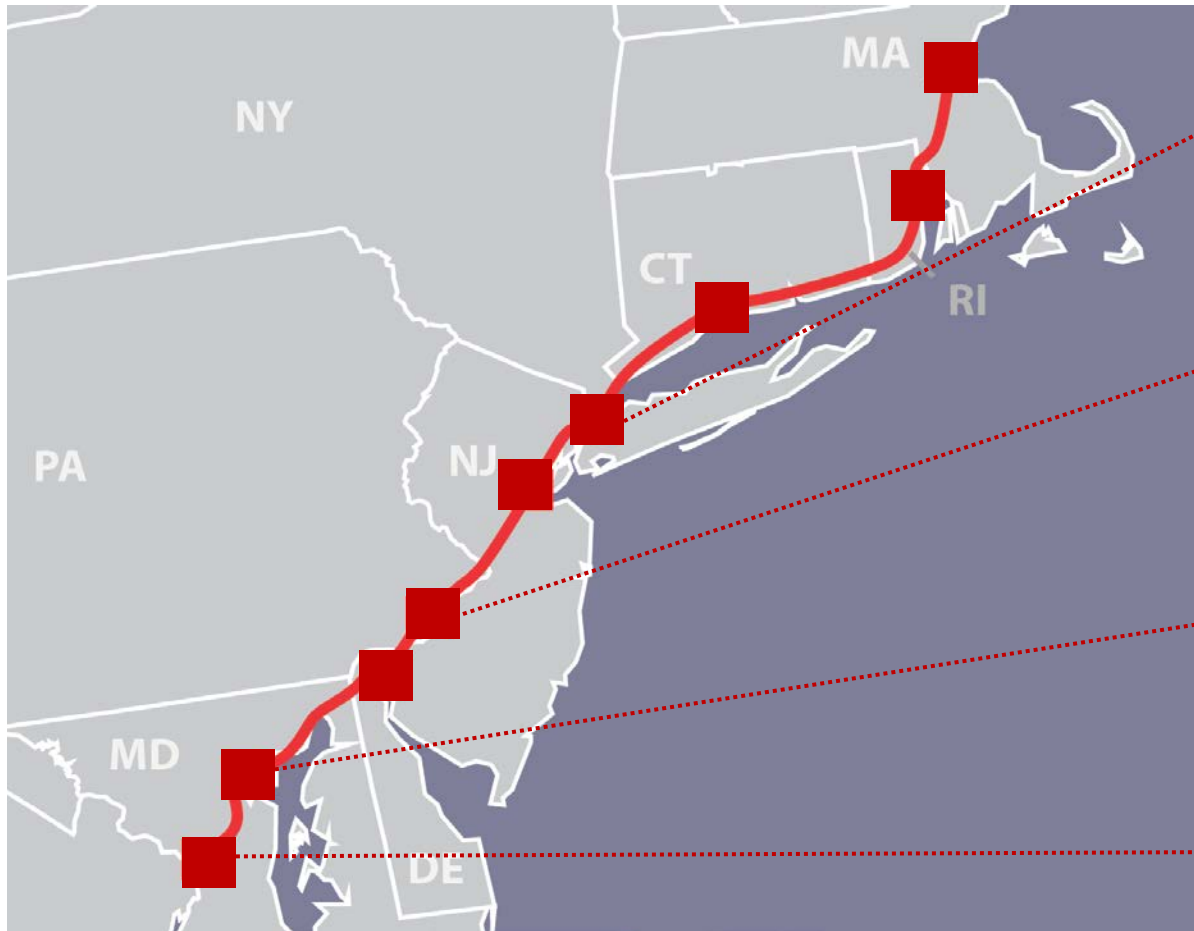
A visionary solution is needed to address capacity constraints within a framework of aging, over-burdened infrastructure






AMTRAK STATIONS MASTER PLANNING ALONG THE NORTHEAST CORRIDOR

Moving 260 million passengers annually (and growing) requires integrated coordination in infrastructure investments up and down the corridor.





Washington Union Station
2nd Century
Station Partners

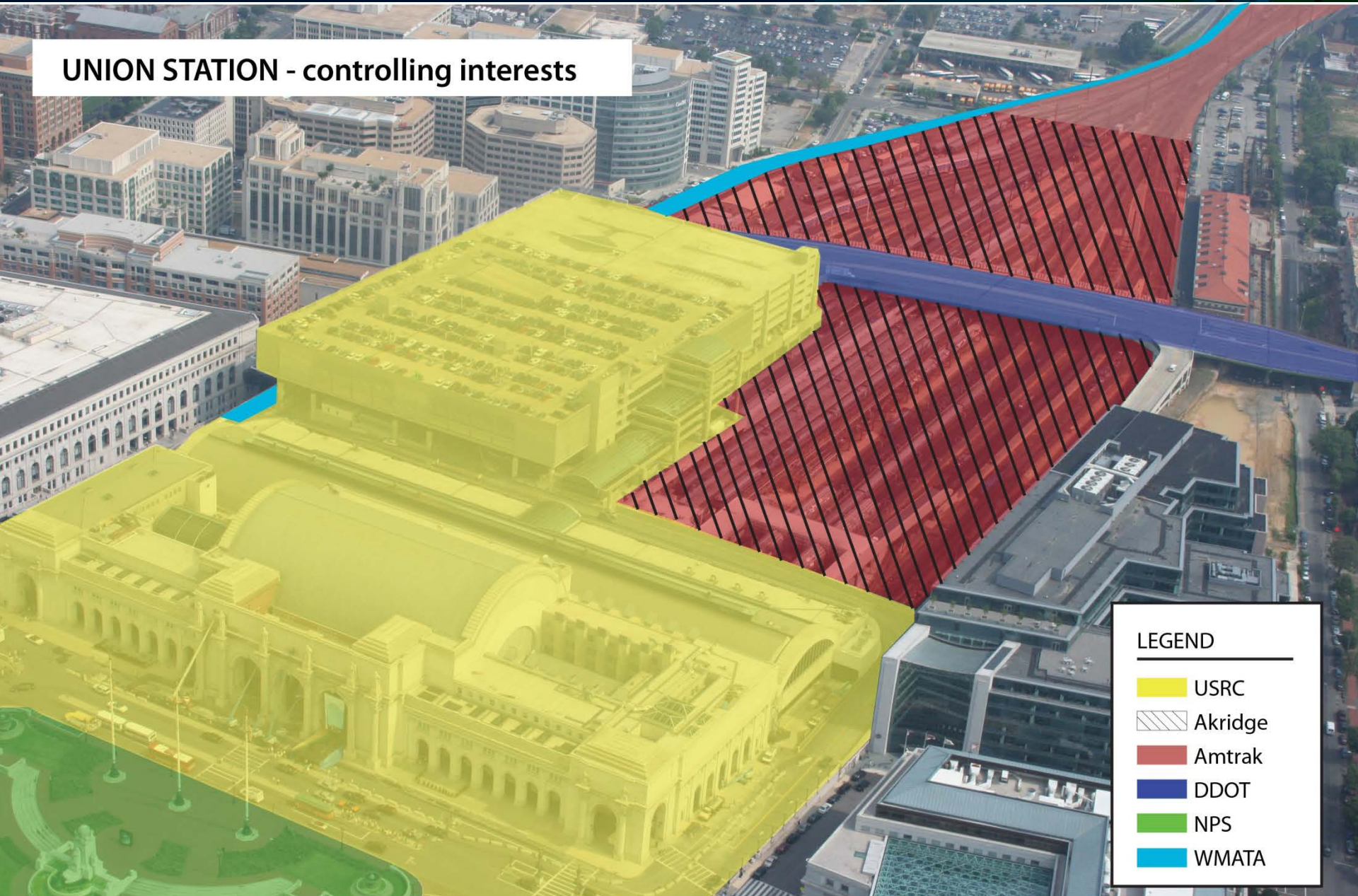


Union Station – Organizational Roles







- **Union Station Redevelopment Corporation (USRC)** – Nonprofit Station complex landlord, and public steward.
- **Amtrak** – Intercity and commuter rail infrastructure owner and operator.
- **Akridge** – Owner/developer of air rights project (Burnham Place)
- **MARC and VRE** – Maryland and Virginia commuter rail providers.
- **WMATA** – Subway station and red line owner and operator. Largest user of the Station (68,000 visits/day)
- **DDOT** – Coordinator of surface transportation elements adjacent to the Station.
- **Ashkenazy (Union Station Investco)** – Leaseholder of the Union Station property.



UNION STATION - controlling interests



LEGEND

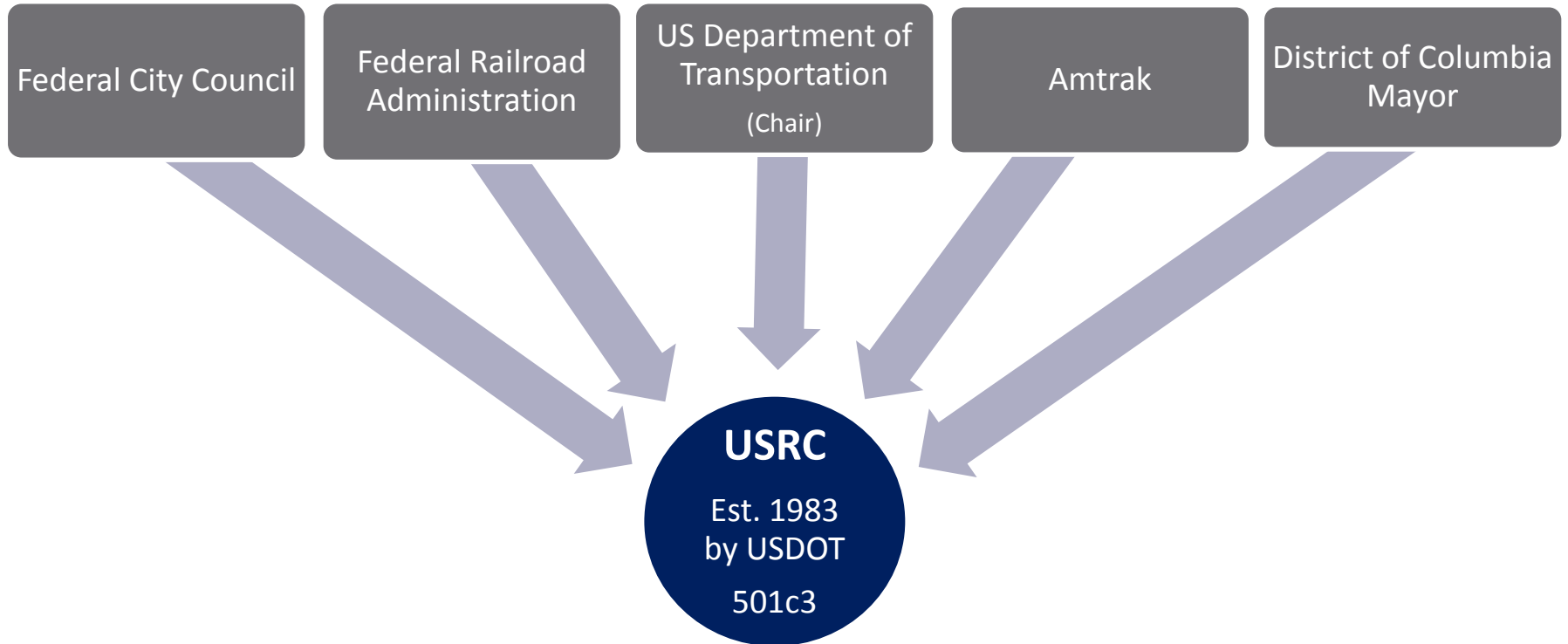
-  USRC
-  Akridge
-  Amtrak
-  DDOT
-  NPS
-  WMATA



Union Station Redevelopment Corporation (USRC)

Founded in 1983 as stewards of the Station, entrusted to protect the Station's history while developing it's future.

Board of Directors



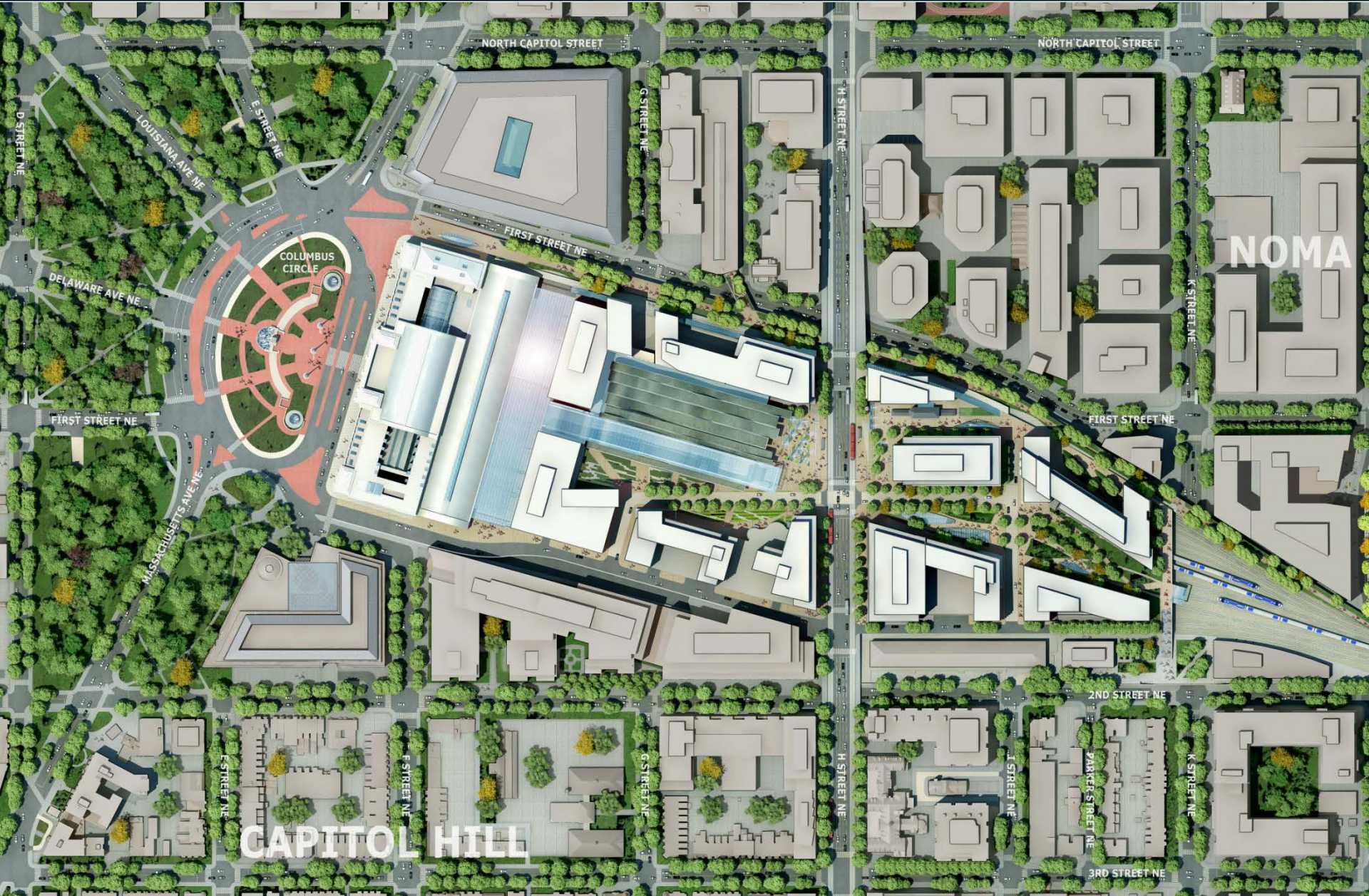


Union Station - Existing Snapshot, *37 Million Visitors Annually*

- Rail (Amtrak, MARC, VRE)
- Metrorail
- Streetcar (coming 2014)
- Intercity buses
- Local buses
- Regional commuter buses
- Tour/Charter buses
- University shuttle buses
- Taxi (24/7)
- Rental cars
- 2,300-spot parking garage
- Bike rentals and storage
- Retail and shopping
- Function/event space
- Amtrak corporate headquarters
- Amtrak package express
- Visitors

- #1 Metro Station for WMATA (68,000 trips/day)
- #1 MARC Station
- #2 Amtrak Station in the country
- #2 VRE Station
- Station handles 32 million visitors as compared to: BWI-22 million; Dulles-23 million; Reagan-19 million
- 2.6 Million riders/year on intercity buses alone
- 7 modes of transportation available; Over 30 transportation providers to choose from

Burnham Place
at
Union Station

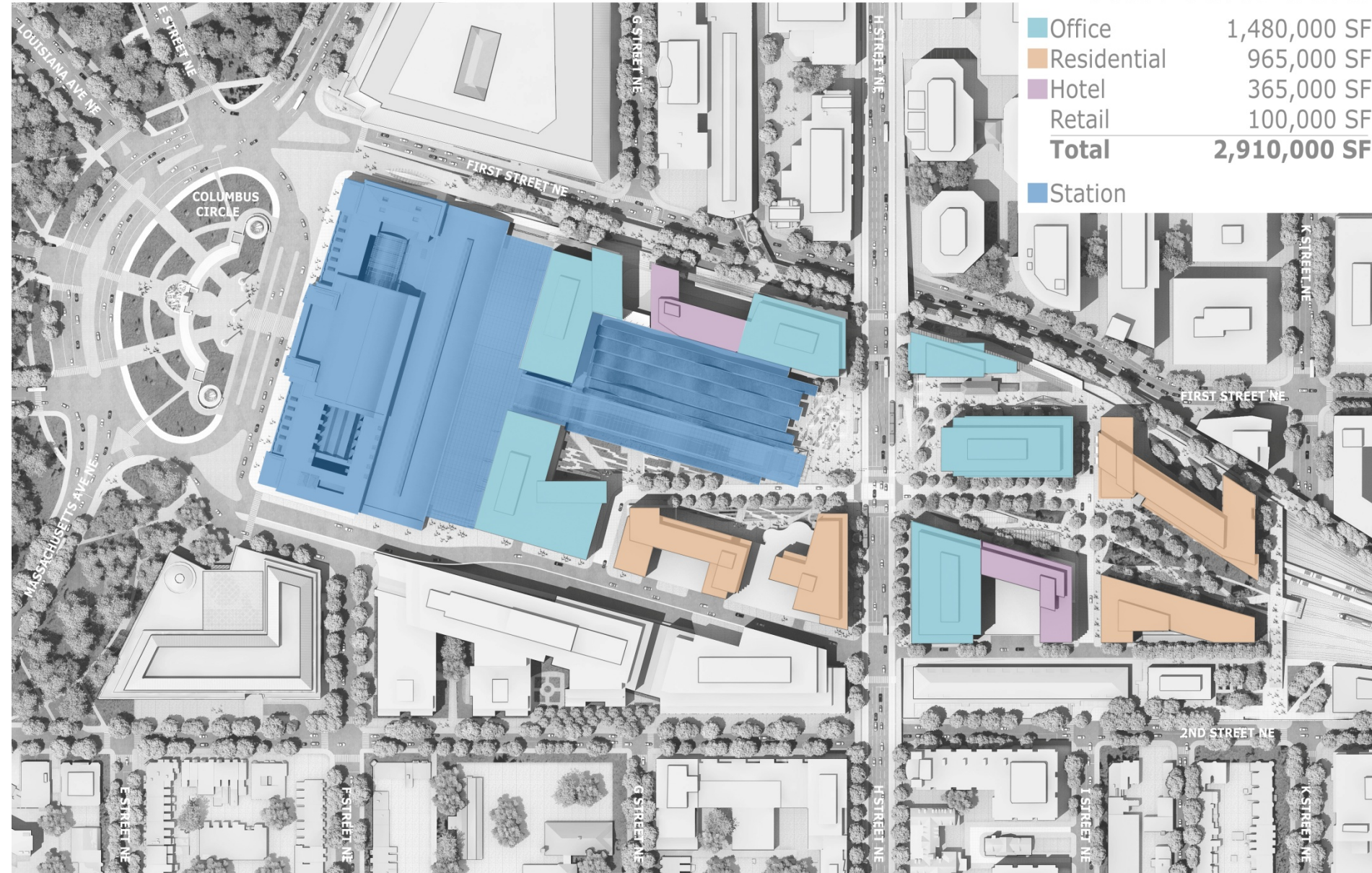


Burnham Place at Union Station



PROPOSED USES

Office	1,480,000 SF
Residential	965,000 SF
Hotel	365,000 SF
Retail	100,000 SF
Total	2,910,000 SF
Station	



UNIONSTATION



Burnham Place
at
Union Station



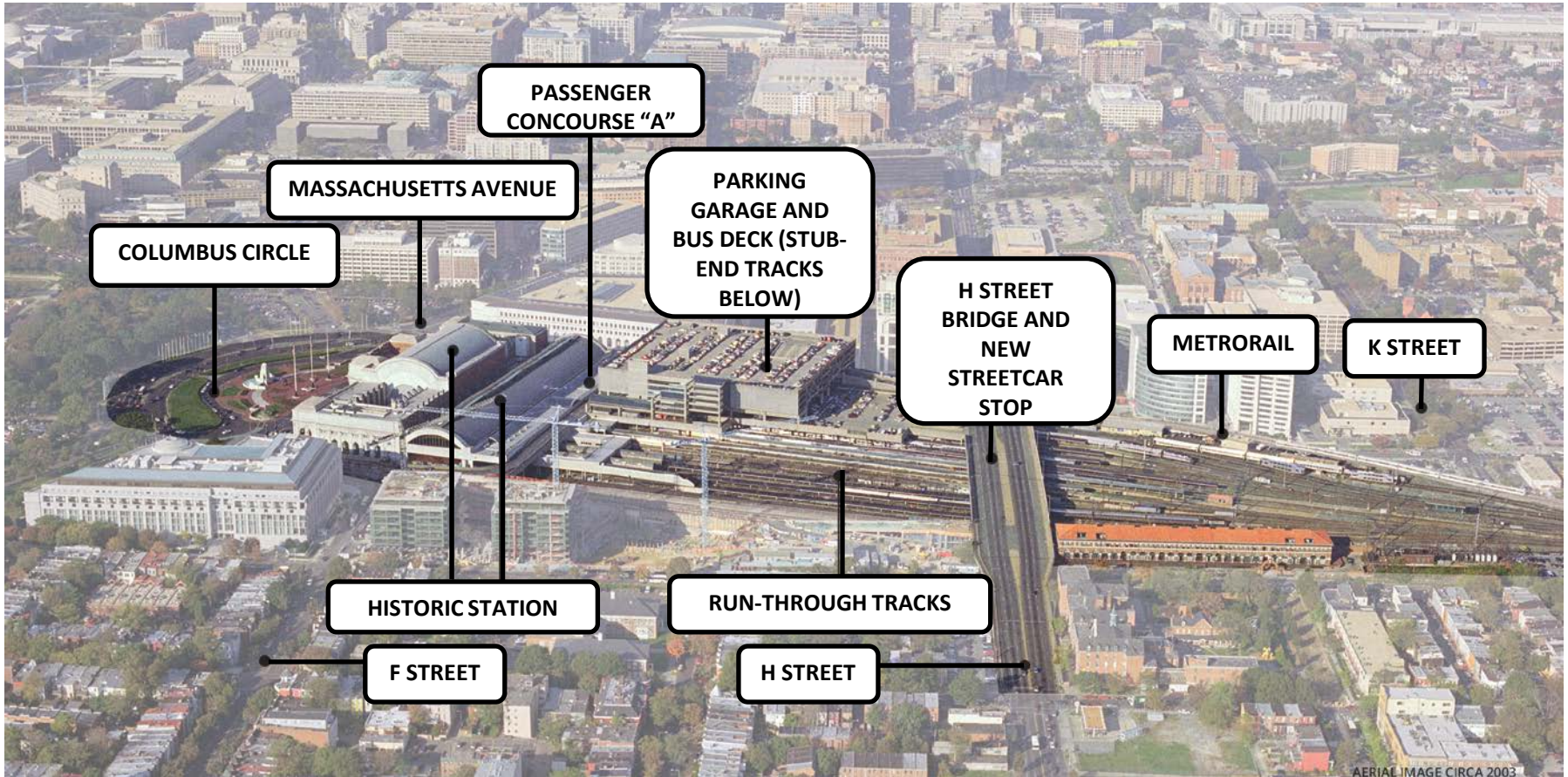


Washington Union Station's
2nd Century

The Vision



Existing Station Complex





The Goals

- Create a world-class intermodal transportation hub
- Match the quality and vision of the original, iconic station
- Provide a gateway worthy of the Nation's Capital
- Create a new urban neighborhood in synergy with adjacent community improvement efforts
- Enhance regional connectivity
- Double the train capacity






How do we achieve this?

- Create a better transportation experience - unlock space below the track and platforms, and expand concourse areas
- Minimize disruption to operations during construction
- Permit investments as capacity is needed
- Take a phased approach to funding and implementation



Key Benefits

- **Optimize Passenger Experience** – new concourses disperse passengers throughout the complex among a breadth of retail and lifestyle amenities.
- **New, Expanded Platforms** – maximizing passenger safety, circulation, and capacity.
- **New Station Entrance Points** – provide routes to connecting transit options as well as neighboring DC destinations.
- **Increased Circulation** – Pedestrians, cyclists, and vehicles will be provided with multiple access points into and around the station.
- **Added Green Space** – Plans for the addition of green space, and the completion of the bike path from the Metropolitan Branch Trail directly to the station.
- **Burnham Place** – The private development, controlled by Akridge, plans for mixed-use office, residential, hotel, and retail amenities with immediate access to the station.
- **Enhanced Multimodal Services and Connections** – Integrated bus, taxi, streetcar, bicycle and parking



Washington Union Station's
2nd Century
Project Schedule



Projects Phasing and Work Element Status

1

2

3

4

**PHASE 1:
IMMEDIATE ACTION
2013-2018**

- Passenger concourse expansion
- New passenger amenities
- Platform improvements
- Metro access improvements
- Rebuild of H Street Bridge

**PHASE 2:
EAST SIDE
2019-2023**

- Rebuilt run-through tracks with modern platforms
- New lower and central concourses constructed
- New taxi operation and bus facilities
- First phase of air rights development completed
- New station parking facilities

**PHASE 3:
WEST SIDE & TRAIN HALL
2024-2029**

- Remaining tracks and platforms constructed to modern configuration
- Garage replaced with new train hall
- New lower level, central concourses, and air rights development completed
- Greenway (linear park) constructed

**PHASE 4:
FUTURE CAPACITY
2029+**

- Rail capacity extended with new lower level tracks & platforms
- Extension of high-speed rail to VA and SE Corridor can be implemented
- Space created for additional retail and passenger amenities



UNDERWAY

Existing Conditions Study

Consultant | Schedule:

AMT Engineering | October 2013 – Fall 2014

Scope and Goals:

- Will create an accurate record of spaces inside and surrounding the station to ensure all parties are working with equivalent and accurate information.

Anticipated Deliverables, Status and Next Steps:

- This effort compiled over 8,000 documents from project partners and associated agencies and included a full survey/scan of the station complex
- Results will be used in virtually every design exercise going forward.
- Information will also be helpful in informing the historic preservation plan.



UNDERWAY

Concourse A Feasibility & Phase 1A

Consultant | Schedule:

SYSTRA completed a Concourse Feasibility study in March 2014

SYSTRA/SOM began work on Phase 1A design alternatives in June 2014 with completion Fall 2014

Scope and Goals:

- To develop options for increasing capacity and circulation in the passenger concourse by relocating support functions and some amenity spaces outside of the concourse to “clear the floor”.
- This project is advancing the feasibility and design of areas in the concourse, specifically areas near Gate A west and also Gates E and F. These spaces include Mechanicals, Station Manager, APD, etc .
- This study is being conducted in coordination with WMATA and Ashkenazy.

Anticipated Deliverables, Status and Next Steps:

- Study deliverables will provide concepts which will lead to design contracts for the renovation, excavation and expansion of Concourse A in Phase 1.



Phase 1 Improvements

Overview of Approach

- **Phase 1a:** New passenger spaces
 - Relocate and expand Amtrak Station manager and APD spaces outside of concourse areas
 - Relocate east and west mechanical rooms outside of concourse area
 - Open up Starlight and Stardust rooms for passenger use
- **Phase 1b:** Expand concourse and passenger amenities
 - Relocate and improve Club Acela
 - Add new First Street entrance
 - Improve connections to retail
 - Reconfigure ticketing and baggage operations



UNDERWAY

Historic Preservation Plan

Consultant | Schedule:

Building Conservation Associates (BCA) | February 2014 – Spring 2015

Scope and Goals:

- The Historic Preservation Plan will provide an important input to the Development Plan, identifying historic resources, their significance, and treatment recommendations.
- To document the current conditions of the historic properties in the Union Station complex and develop a guide for their future preservation efforts.
- Working with a team of preservation stakeholders for input on the plan.

Anticipated Deliverables, Status and Next Steps:

- BCA to assign preservation zone categories for Union Station, and to develop suggested treatment options for all spaces within the historic station building, Columbus Plaza and the perimeter retaining wall.



UNDERWAY

H Street Bridge Analysis – *managed by DDOT*

Consultant | Schedule:

Managed by DDOT

Scope and Goals:

- This study will serve as a precedent for the full bridge design and engineering to occur in 2015-2016
- Bridge superstructure replacement is a precedent for Phase 2
- Environmental Assessment for bridge included within DC Streetcar, and not included within this scope



UNDERWAY

Amtrak NEC Master Plans: Planning Assumptions Catalog

Consultant | Schedule:

Gannett Fleming | September 2014 – March 2015

Scope and Goals:

- Develop a practical, consistent and replicable approach for Amtrak to document its NEC master planning assumptions in a single resource catalog.
- Use all studies, information and data related to Washington Union Station Master Plan to develop a prototype planning assumptions catalog.

Anticipated Deliverables, Status and Next Steps:

- Washington Union Station catalog will be easily referenced and updated by staff to effectively support the full extent of Amtrak's master plan implementation activities including program development and concept feasibility; concept, preliminary and final engineering design; and final construction.
- Catalog will be filled in and used across all station master plans in Amtrak's network.



UNDERWAY

Concept Feasibility

Consultant | Schedule:

Buro Happold and Hensel Phelps | August 2014 – Spring 2015

Scope and Goals:

- To provide a comprehensive analysis of costs, schedule, phasing, staging, and means and methods based on the Amtrak Master Plan.

Anticipated Deliverables, Status and Next Steps:

- Key anticipated deliverables include: cost estimates by phase, project, and component; critical path construction schedules; construction means and design vulnerabilities.



UNDERWAY

Outreach and Communications

Consultant | Schedule:

Carousel30/Amtrak/Akridge/USRC | Ongoing

Scope and Goals:

- Project website under development.
- Ongoing stakeholder engagement and coordination.
- Public education, discussion and forums.

Anticipated Deliverables, Status and Next Steps:

- Project website is expected to launch at the end of this year.
- Increased public engagement anticipated with upcoming significant project advancements in 2015.



PLANNED

Terminal Infrastructure Plan

Consultant | Schedule:

Currently under negotiation | October 2014 – Fall 2015

Scope and Goals:

- Study the operational and physical constraints within the rail yard to provide recommendations and concept design for projects to implement capacity expansion. Infrastructure projects to be included within the Development Plan EA.
- This study is highly integrated with Concept Feasibility.

Anticipated Deliverables, Status and Next Steps:

- The study will provide a conceptual but comprehensive rail yard plan including the consideration of existing conditions, design criteria and assumptions, track and platform analysis, ADA improvements, operations and infrastructure needs, phasing analysis and security requirements.



PLANNED

Burnham Place

Consultant | Schedule:

Shalom Baranes Associates | TBD

Scope and Goals:

- The air rights development above the terminal rail yard, Burnham Place, is a significant part of the vision for Union Station, and must be fully integrated into the planning of the complex, including station entrances, day-lighting to passenger and rail areas, structural coordination, parking, traffic, open space components at H Street, and other elements.
- The Burnham Place design team, under the direction of Akridge, will participate in the coordination of the air rights development with the Development Planning team. This scope of work includes specific coordination with the Burnham Place plan.



Washington Union Station's
2nd Century
Development Plan



Purpose

- Further the vision presented in the 2012 Amtrak Washington Union Terminal Master Plan for improved rail operations and enhanced customer experience.
- Analysis and modification of those initial concepts to ensure that the 2nd Century project provides for the enhanced functionality of the existing regional intermodal facility, is respectful of the historic Union Station setting, is seamlessly integrated with the surrounding neighborhoods, and advances the construction of three million square feet of new development in the air rights over the rail yard.
- Provide opportunity for public engagement on key components of the project: historic preservation, architectural and urban design, transportation capacity and environmental impacts.
- Advance architectural, engineering, and urban design concepts for the Union Station complex, allowing the 2nd Century Partners to complete full architectural and engineering design for selected project phases.
- Assess environmental impacts.
- Specify technical aspects of the plan to be able to develop preliminary cost estimates from which to secure construction funding.



How other plans and studies work with the Development Plan

INPUT

- Concept Feasibility
- Historic Preservation Plan

COORDINATION

- Concourse A Phase 1 Improvements
- Terminal Infrastructure Phase 1 Improvements
- Terminal Infrastructure Plan
- Burnham Place



Plan Components and Elements

- **Facilities Development Component**
 - Station Expansion Framework
 - Urban Design and Open Space Element
 - Retail and Visitor Plan Element
 - Station Infrastructure Element
- **Rail Passenger Component**
 - Rail Passenger Element
 - Terminal Infrastructure Plan
- **Multimodal Transportation Component**
 - Multimodal Transportation Capacity
 - Vehicular Circulation and Parking Element
- **Environmental Assessment**
- **Public Stakeholder and Engagement**



Facilities Development Component

- **Station Expansion Framework**
 - Architectural concepts for Train Hall, concourses, and public spaces in the complex
 - Circulation, retail, and support facilities
- **Urban Design and Open Space Element**
 - Columbus Plaza, greenway concept, streetscape, and coordination with Burnham Place open spaces
- **Visitor and Retail Plan Element**
 - Market demand analysis
 - Retail program and planning concepts
 - Coordinate with pedestrian flow analysis
- **Station Infrastructure Element**
 - MEP and structural concepts
 - Fire and life safety
 - Materials management, telecommunications, and other technical specialties



Rail Passenger Component

- **Rail Passenger Element**
 - Concourse locations, operations and capacities
 - Accommodation of different passenger populations and requirements
 - Rail passenger support spaces: Club Acela, lounges, and customer service
- **Terminal Infrastructure Plan (coordination with separately-led planning process)**
 - Incorporation of rail infrastructure including tracks and supporting MEP infrastructure



Multimodal Transportation Component

- **Multimodal Transportation Capacity**
 - Ridership and modal split
 - Growth projections and plans
 - Pedestrian flow analysis
 - Transportation element program requirements
- **Vehicular Circulation and Parking Element**
 - Local and vicinity street network
 - Parking program
 - Locations and design for taxis, buses, service vehicles



Environmental Assessment

- Provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact
- Aid compliance with the Act when no environmental impact statement is necessary
- Facilitate preparation of a full Environmental Impact Statement when one is necessary
- Developed in conjunction with Facilities Development, Rail Passenger, and Multimodal Transportation components of the plan.
- Historic Preservation Plan complete by start of Development Plan
- H Street Bridge environmental requirements being undertaken by DDOT as part of DC Street Car



Public Stakeholder Engagement

- Public input throughout the process is essential, and will be required at various stages as the work in this scope progresses.
- Formulate and assist in the execution of a public and agency outreach process.
- Coordinate with public engagement process that is included within the Environmental Assessment effort.



Principal Deliverables

- Concept level design in Revit
- Renderings
- Preparation for architectural scale model
- Executive Summary
- Master Development Plan Report
- Technical Report
- Pedestrian Flow Analysis
- Market Demand Analysis
- Environmental Assessment
- Real-time intermodal transportation simulation
- Documentation of Public Engagement process



Optional Scope Components

- Design Guidelines
- Full design of specific projects within the Development Plan



Not Included within Scope

- Approvals plan and approvals coordination with public agencies
- Surveying or documentation of existing conditions including on-site buildings, topography, rail infrastructure, and utilities.



**THANK YOU FOR
ATTENDING**