

NORTH CAROLINA

Department of Transportation



Multimodal Innovations Webinar Series

February 23, 2021

Multimodal Innovations Webinar Series



2021

Jan. 26

S-Line: Leveraging new rail access and transit-oriented development to spur economic growth

Feb. 23

Iconic Multimodal Stations at any scale and how they can spur economic development around them

Mar. 23

Equity & Accessibility

Apr. 27

Transit Technology Showcase

May 25

Autonomous Vehicles - impact on pedestrian and bike safety, autonomous shuttles (CASSI) impact on public transportation

Today's Speakers



David Howard - Chief Deputy Secretary - NCDOT

As the N.C. Department of Transportation's Chief Deputy Secretary, David Howard oversees Civil Rights Division, Historically Black Colleges and Universities, as well as Transportation Planning.

Howard most recently served as Associate Administrator of Policy and Governmental Affairs for the Federal Highway Administration, where he was a principal advisor and managed a team involved in transportation policy development, legislative analysis, highway data collection and analysis, and international programs. His office was also responsible for overseeing the Federal Highway Administration's implementation of the Fixing America's Surface Transportation Act.

Prior to joining the U.S. Department of Transportation, he served as the Senior Vice President of Strategic Initiatives and Fund Development for the Charlotte-Mecklenburg Housing Partnership, the largest developer of affordable workforce housing in the region.

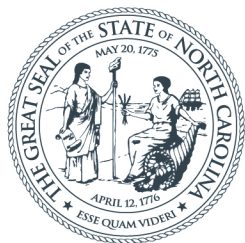
Howard was also a member of the Charlotte-Mecklenburg Planning Commission for six years before being elected in 2009 to serve as an at-large member of the Charlotte City Council.

In addition, Howard has a wealth of national and state leadership experience, including the National Black Caucus of Local Elected Officials, the National Urban Land Institute, The German Marshall Fund, the BMW Foundation's Responsible Leaders Community and the N.C. League of Municipalities.

Howard is a graduate of the University of North Carolina at Charlotte.

Monica Wauck Smith, AICP – Senior Planner – City of Milwaukee

Monica is a Senior Planner at the City of Milwaukee's Department of City Development where she focuses on neighborhood-level planning. She also has a background in transportation and equity issues. She managed the TOD Planning grant, which was used for planning work in two different neighborhoods to address development pressures that will likely results from a planned, future street expansion.



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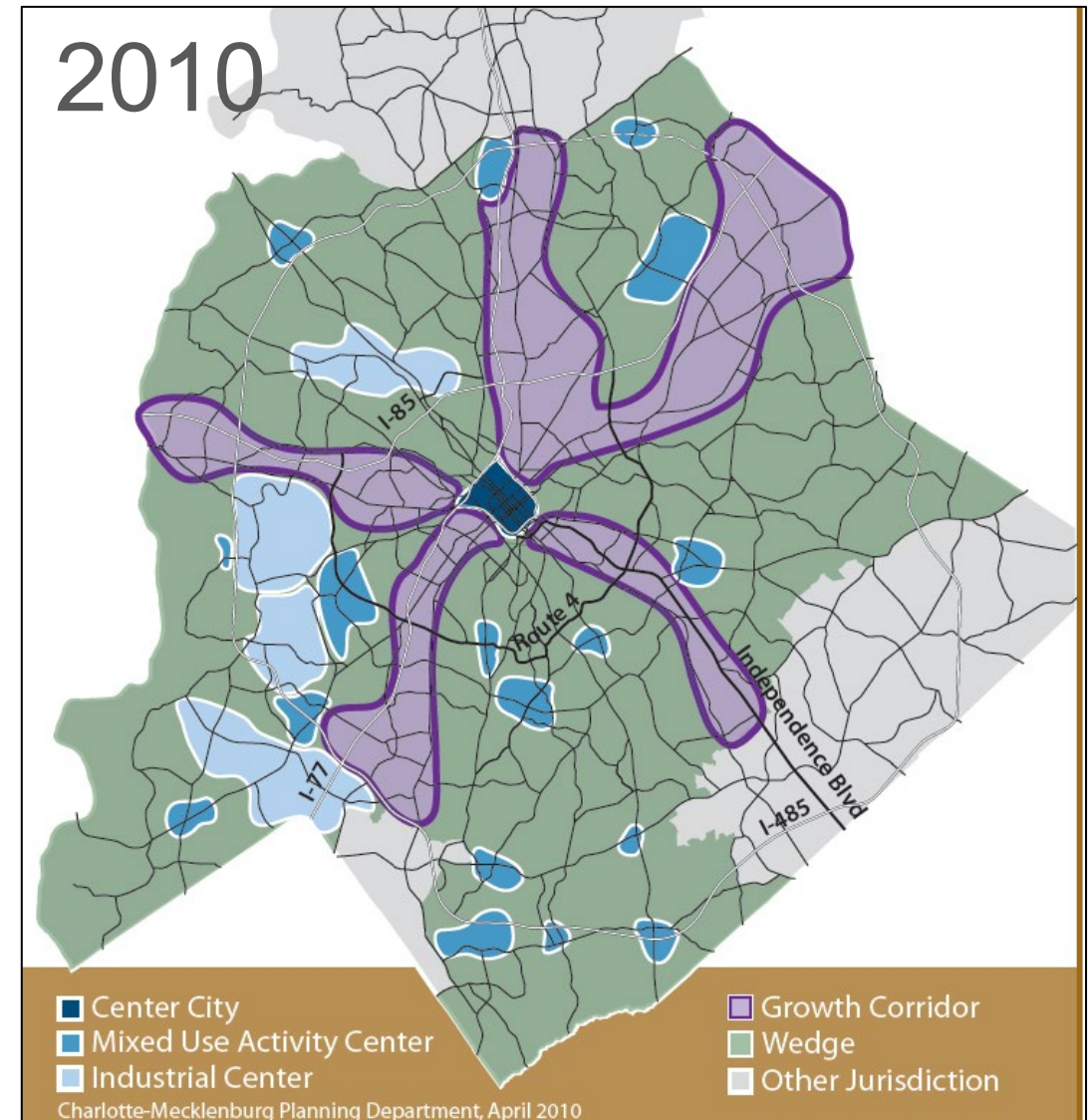
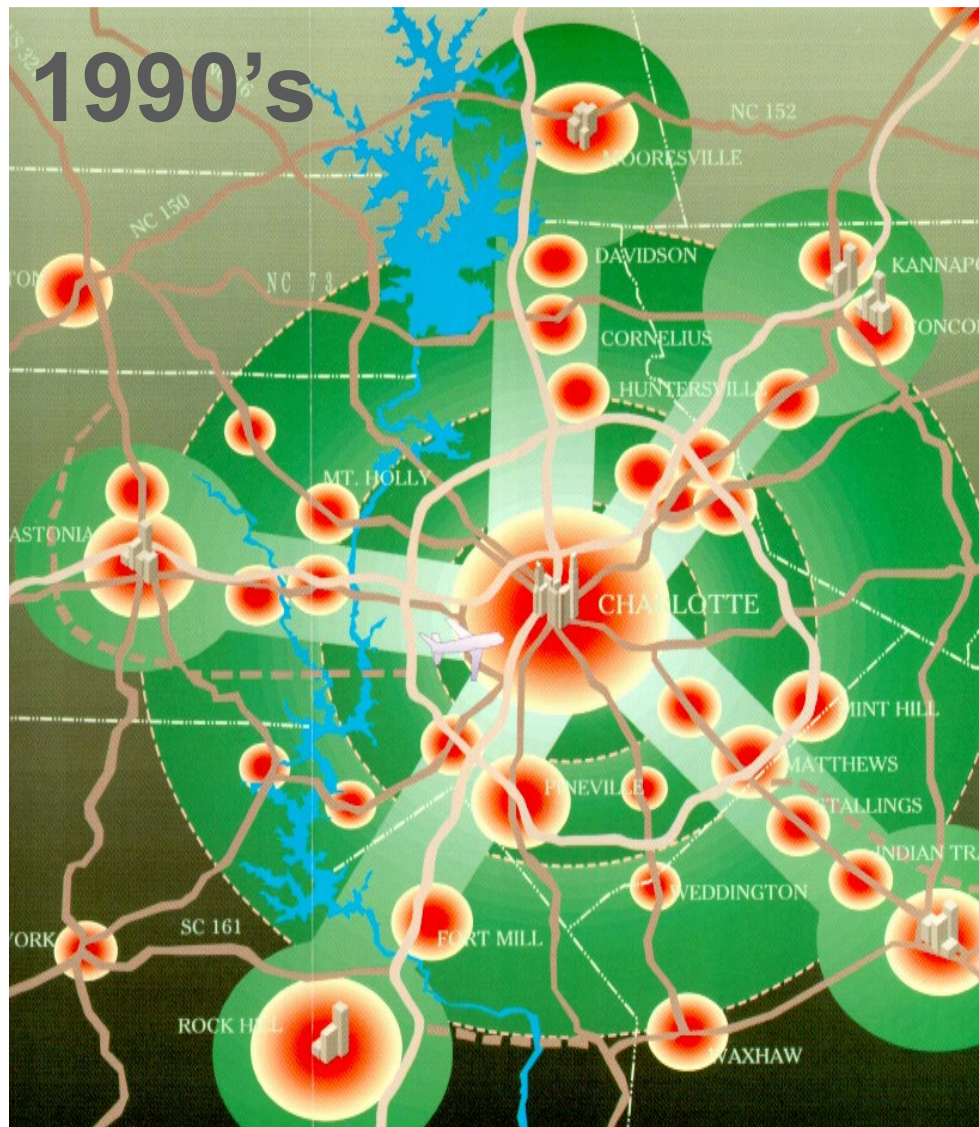
Development Principles for Multimodal Stations

David Howard
Chief Deputy Secretary
Feb. 23, 2021

Great Multimodal Stations

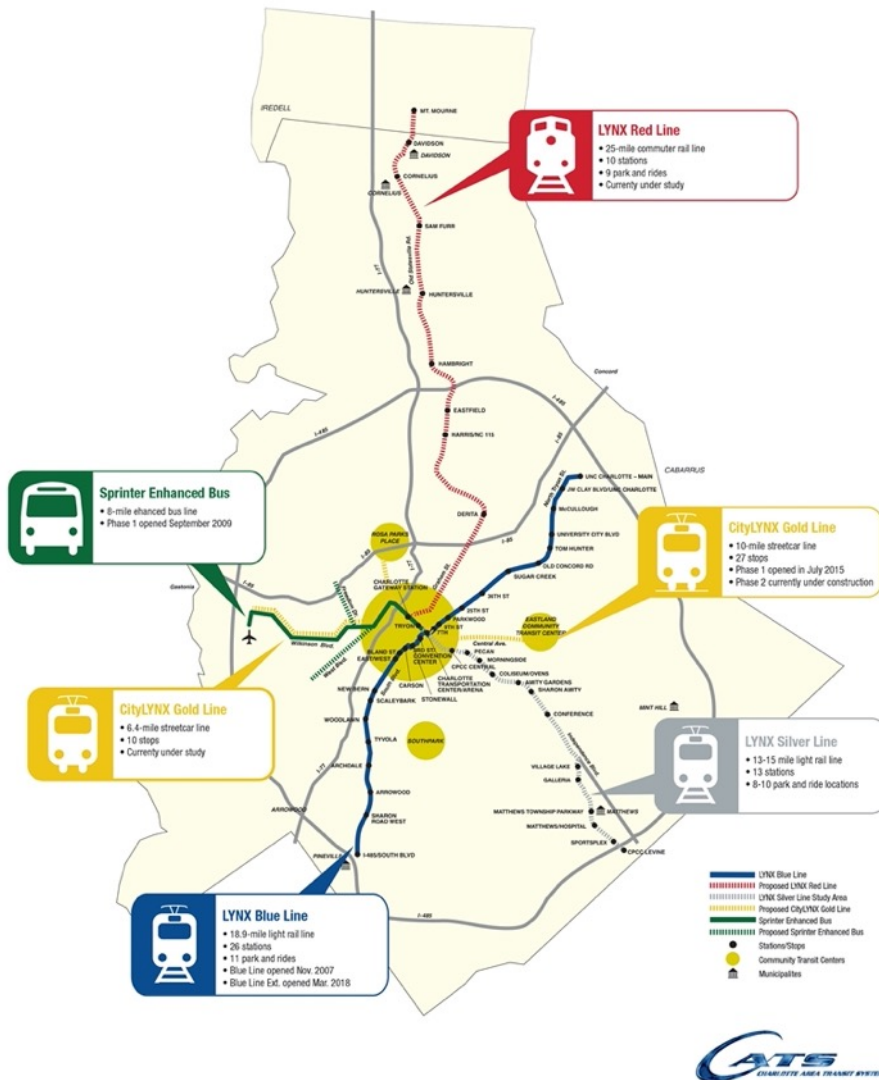
- 1 Charlotte's growth & mass transit plans
- 2 Principles Learned
- 3 Charlotte Gateway Station & development
- 4 Other National multimodal station examples
- 5 Innovation – a game changer
- 6 Lessons Learned

Charlotte Growth and Mass Transit Plans



CATS Lynx System & Services

LYNX SYSTEM MAP



Emerging Vision



Establish **reliable transit** to connect the region, enhance quality of life, and strengthen access to opportunities



Use transit to **influence and shape growth** while respecting community character

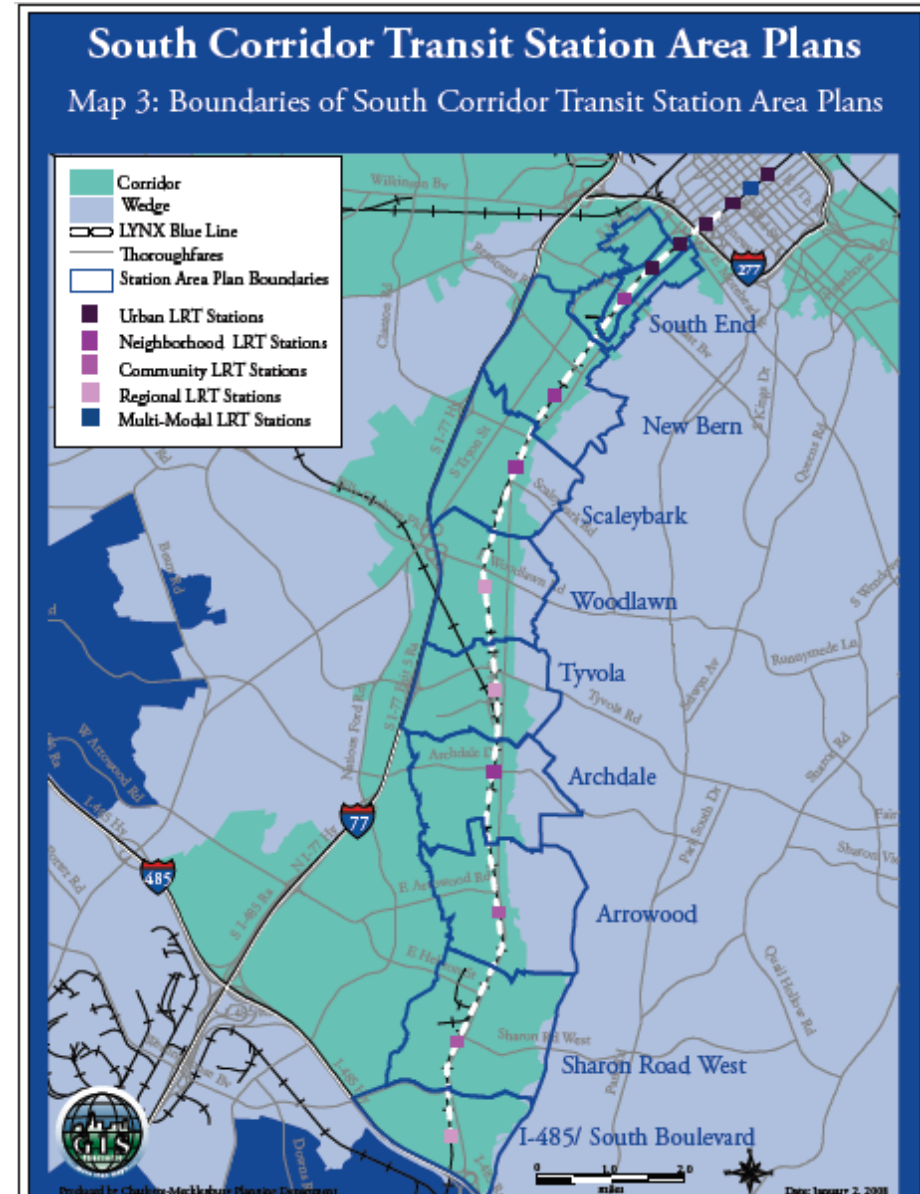


Increase mobility in each corridor through effective transit investments

Transit Station Area Planning

Transit Station Area Plans are adopted for each station and are intended to provide an in-depth look at the current conditions in the area surrounding the station and make recommendations to:

- Facilitate the right mix of development and appropriate infrastructure to complement the transit investment; and
- Optimize the land use and infrastructure within the larger Corridor to support its continued ability to accommodate growth.



Transit Station Area Principles

The Transit Station Area Principles created the framework for the Station Area Plans by focusing on three points.

- Land Use
- Community Design
- Mobility



Transit Station Area Principles



- Encourage highest density uses closest to the transit station and transition to lower densities adjacent to existing single-family neighborhoods.
- Encourage a mixture of residential, office, service-oriented retail and civic uses, either through mixed or multi-use development.
- Disallow automobile-dependent uses, such as automobile sales lots, car washes and drive-thru windows.
- Consider special traffic generators - such as cultural, educational, entertainment or recreational uses - to locate in station areas.
- Preserve existing stable neighborhoods.
- Encourage a mixture of housing types, including workforce/ affordable housing.



- Orient buildings to front on public streets or open spaces.
- Minimize setbacks and locate parking to the rear.
- Provide windows and doors at street level and minimize walking distance to entrances.
- Screen unsightly elements, such as dumpsters, loading docks, service entrances and outdoor storage from the transitway.
- Include active uses on the ground floor of parking structures.
- Include elements such as street trees, pedestrian scale lighting and benches in streetscape design to encourage pedestrian activity.
- Place utilities underground, when possible.
- Establish public open spaces that act as development catalysts and serve as focal points around transit stations.
- Design open spaces to be centers of activity that include benches, fountains, public art, etc.

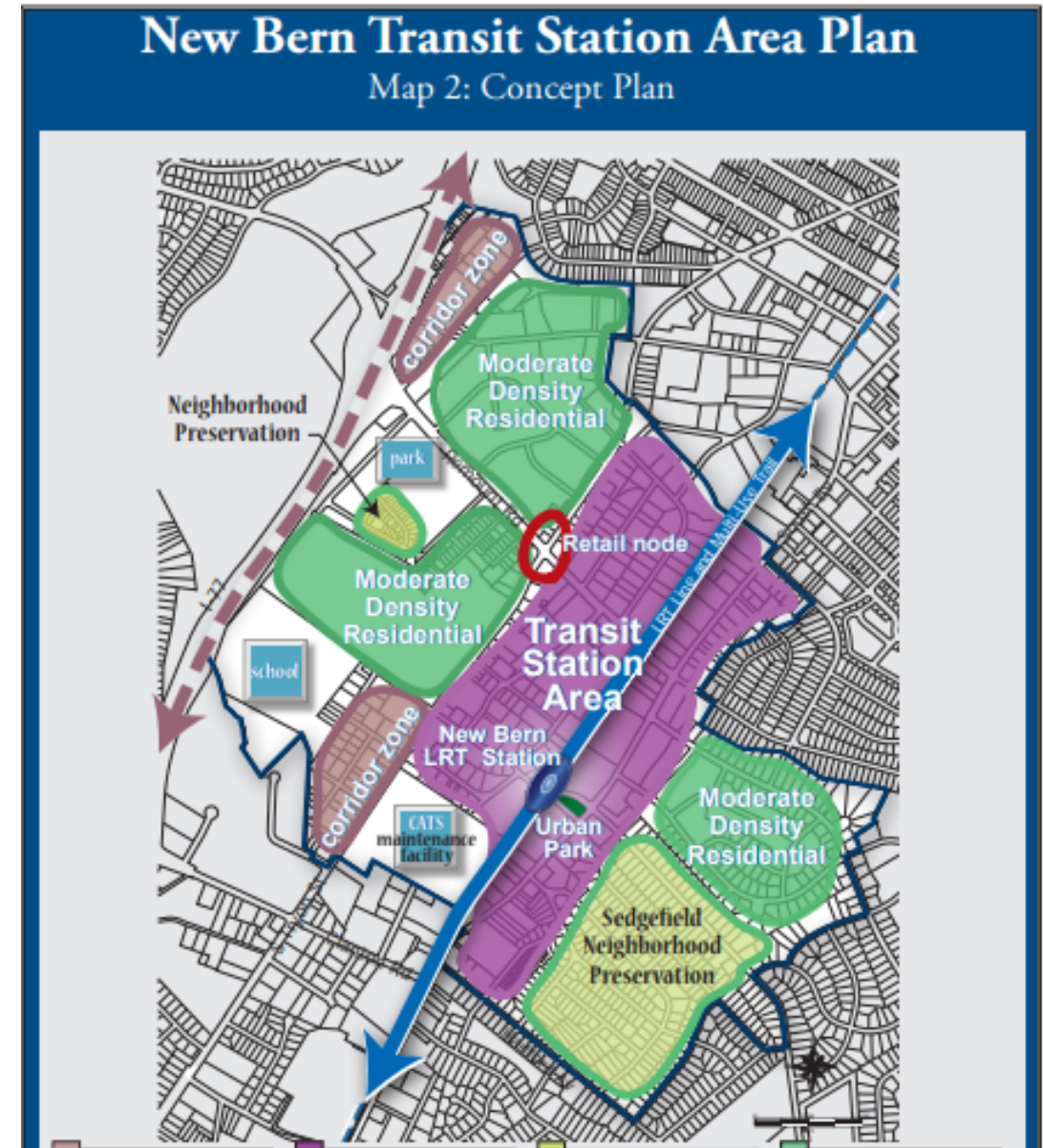


- Create a multi-modal environment that emphasizes pedestrians and bicyclists.
- Provide an extensive pedestrian system throughout the station area to minimize walking distances, connect to neighborhoods, accommodate large groups of people, and eliminate sidewalk gaps.
- Design the pedestrian system to be accessible, safe and attractive, by using planting strips, street trees, on-street parking and bicycle lanes.
- Develop an interconnected street network with maximum block lengths of 400'; provide mid-block crossings if blocks are larger.
- Establish parking maximums, rather than minimums.
- Minimize surface parking and encourage shared parking facilities.

Transit Station Area Plans

The Station Area Plans are organized into chapters that:

- First, provide an overview of the study area and identify opportunities and constraints to achieving the City's objectives for the plan area, especially the transit station area;
- Secondly, propose a vision for the future of the study area and offer recommendations to move towards that vision; and
- Lastly, suggest specific actions to be taken to implement the recommendations



South End – Overview & Economic Development Impact

- The South End is one of Charlotte's most dynamic districts. Originally an industrial area between two historic neighborhoods and along a freight line, the area declined after the rail was abandoned and manufacturing moved. In the 1980s, artists and visionary designers adapted old warehouses and mill buildings into creative studios and workshops.
- In the early 2000s, the historic Charlotte Trolley was revived to operate on the abandoned rail line, sparking interest in rail-based transit in the city. In 2007, Charlotte opened the Blue Line light rail along the original rail right-of-way in the heart of South End.



South End – Overview & Economic Development Impact

- Since 2015, as Charlotte recovered from the recession, dramatic residential development has grown South End's population by over 35% with a total of just over 7,000 housing units. From 2005 to 2017, private development totaling over \$2.2 billion has transformed the area into a bustling mixed-use neighborhood.
- Significant investment in retail followed the residential boom, bringing craft breweries, restaurants and bars, and boosting two hubs for soft-goods retail at Atherton Mill and the Design Center.
- **Today, South End is a hot office market.** Commercial office space and hotels for visitors are planned in the next wave of investment. South End has become the place where newcomers, visitors and locals alike are always eager to see what is new and exciting.



Charlotte Rail Trail – Huge Success



Blue Line – Past Concerns & Current Challenges



Before LYNX BLUE Line there were concerns about:

- Would the development occur?
- Too much affordable housing
- Too much density

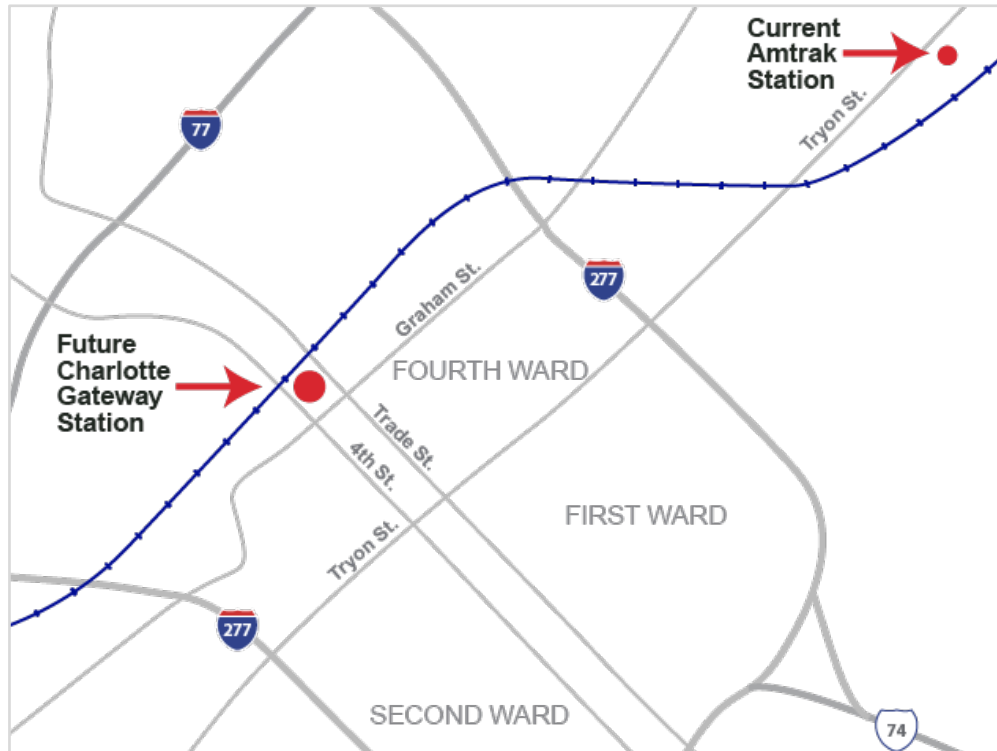
After the LYNX BLUE Line we are asking different questions

- How do we manage the design of the development
- How do we incorporate affordable housing
- Should a greater diversity of density be allowed?

Transit Orientated Design (TOD) – Lessons I've Learned

- Mixed uses
- Mixed income (including affordable housing)
- Design
- Texture
- Context
- Land use
- Mobility & flow
- Safety





- Built – 1964
- Size – 5,500 sq. ft
- Service – Amtrak *Carolinian*, *Crescent* and state-supported *Piedmont* trains

Building issues

- Size and location inadequate, often crowded and has inadequate space to handle baggage.
- Passenger trains must share mainline tracks with freight - operational inefficiency.
- Can't handle future growth and disconnected from Uptown transit connections and amenities.

Current Charlotte Intercity Rail

Two miles from Uptown, busiest Amtrak station in NC and the second busiest in the Southeast



Charlotte Gateway Station and Development

- Multimodal transit hub and destination center
- Connections to Amtrak, Greyhound, CATS bus service, LYNX Silver Line light rail and CityLYNX Gold Line streetcar
- **Phase 1**: Rail Infrastructure
 - Broke ground July 2018;
Completion scheduled for 2023
- **Phase 2**: Private Development Partnership





Charlotte Gateway Station and Development

Will create a dynamic multimodal transportation hub for the growing rail and transit system and act as a catalyst for growth in Uptown, using transit orientated development principles



- The Charlotte Gateway District development will be located in downtown, one-third mile west of the city's geographic center at the intersection of Trade and Tryon streets.
- The site is bound on the west by the railroad corridor which runs north-south through downtown's Third and Fourth Ward neighborhoods.
- The project site is approximately 13.9 +/- acres owned by the City and/or NCDOT within the District.

Charlotte Gateway Station – Phase 1



- Builds bridges to support passenger rail tracks, a center island level-boarding platform, plus railroad track and signals
- Targeted for completion in 2023



Funding Sources	Amount
Federal TIGER 2014 Grant to NCDOT	\$200,000
Federal TIGER 2015 Grant to City	\$30,000,000
NCDOT funds (STI and other)	\$51,593,255
FHWA Surface Trans Block Grant	\$15,000,000
City of Charlotte	\$33,000,000
TOTAL	\$129,793,255

Charlotte Gateway Station – Master Development Team

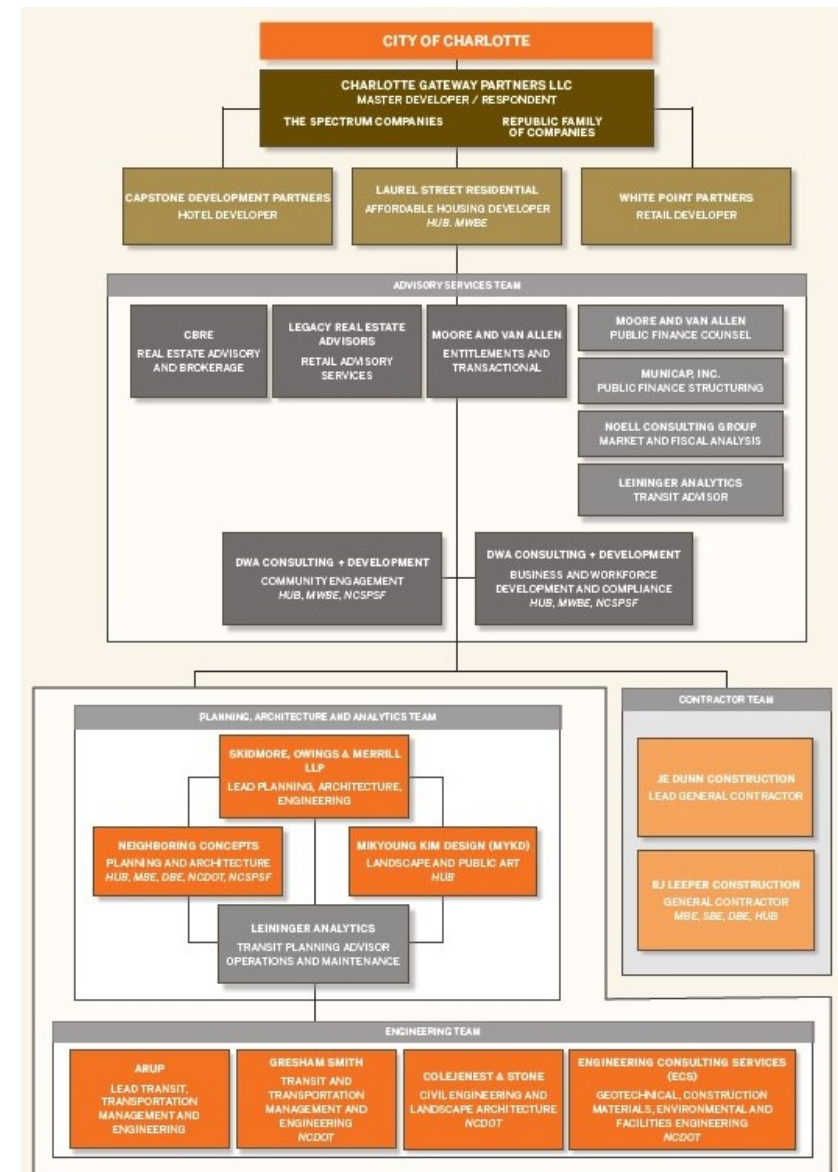
The Charlotte Gateway Steering Committee (CGSC)

- A governance board that guides the development of the future Charlotte Gateway District project and its selected private development partner. The CGSC is comprised of representatives from: **CCCP, City of Charlotte, North Carolina Department of Transportation** and regional economic development stakeholders.

Charlotte Gateway Partners LLC (CGP)

- 50%-50% venture between **Spectrum Development**, a Charlotte-based, full-service real estate firm with a track record for delivering large mixed-use projects of exceptional design and performance, and the **Republic Family of Companies**, which also performs the full-range of real estate services from its offices on both coasts, integrating talents and resources across operating platforms, and specializing in landmark quality, urban, mixed-use projects often of a Transit Oriented Development nature and frequently partnering with public entities.

Collectively, Spectrum and Republic have developed over 35M square feet with value exceeding \$10B. CGP principals and affiliates have the equity necessary to advance the project – and relationships with equity and debt providers to round out financing.



Charlotte Gateway Station – Highlights of the Deal

- Governance Structure
- Purchase and Lease Agreements
- Public-Private Partnership
- Affordable Housing
- Minority and Small Business Participation
- Project Funding
- Sustainability
- Intercity Bus Service(s)



Charlotte Gateway Station – Plan for New District



Create an Iconic and Symbolic Gateway to Charlotte and the Region

- Geography, civic infrastructure, transit, and development patterns will make this a new gravitational center for the City and a welcoming place attracting people and talent from around the world.

Become a Regional Economic Engine

- The scale, visibility, and the location of this development should make it an economic engine and diversified employment hub for the City.

Deliver on Multi-Dimensional Mobility

- A new mixed-use district built around an ambitious multi-modal transportation network that starts with a train station but is designed to embrace rapidly changing methods of mobility.

Embrace Good Urban Design

- Set a new standard for the city with attractive architecture and a civic approach to architecture, public spaces, transportation facilities, and private development that are walkable and accessible for people and families of all cultures, ages and incomes.

Deliver on Sustainability

- Innovative, intentional, and holistic approach to integrating the district into existing natural, social and built systems.

Create a new amenity for the center city

- Provide an interconnected system of public space, parks, retail, culture and recreational facilities that create a great gathering place for the city. Should be imbued with design qualities that reflect the values of the city and region that enhance the neighborhood.

Brightline – Florida



Privately run inter-city rail route between Miami and West Palm Beach

- **March 2012:** Began as *All Aboard Florida* by Florida East Coast Industries, real estate developer owned by Fortress Investment Group
- **Nov. 2014:** Station construction/track improvements began (owner was Florida East Coast Railway, which at the start of construction, was also owned by Fortress (sold in Jan. 2018)).
- **Jan. 2018:** Began operating over current route
- Currently building extension to the Orlando International Airport, target opening ~2022
- **Jan. 2019** – Miami - West Palm Beach: 17 roundtrips M-F, 10 on Sat., 9 on Sun.
- **August 2020:** only privately owned and operated intercity passenger railroad in the US

Ridership:

Jan. 2018: 17,800 (introductory service)
West Palm Beach - Fort Lauderdale

March 2018: 32,900

End 2018: almost 600,000 passengers

Aug. 2019: line welcomed its 1 millionth rider

Denver Union Station



Originally built in 1914

- Recently underwent a significant renovation and expansion to become the hub of Denver's growing regional transit network
- Scope included the renovation of Union Station head house, excavation of an underground bus concourse and construction of a new Train Hall containing tracks and platforms to be used by Amtrak and the future commuter rail system.

August 2011: Union Station light rail station opened

Feb. 2014: Amtrak returned to the station

May 2014: 22-bay underground bus

2016: Launched rail service to Denver International Airport

Project led by City of Denver & RTD (Regional Transit District)

Denver Union Station Project Authority (DUSPA) created to oversee implementation of the station and associated development

DUSPA Representatives included:

- RTD
- Colorado Dept. of Transportation
- City & County of Denver
- Regional Council of Governments
- Metro District

Last-Mile Connections



Questions



David L. Howard, Chief Deputy Secretary
North Carolina Department of Transportation
dlhoward@ncdot.gov

TODCONNECTS

Equitable Growth Through TOD Planning

FTA TOD Pilot Planning Program

Adopted November 2018



the milwaukee STREETCAR

The Opportunity

1. Neighborhood planning around future extension routes
2. Engage private sector through partnerships
3. Build enthusiasm for a future street car extension
4. Address concerns about displacement
5. Address scoring criteria for future Small Starts grant



EQUITABLE TOD
GOALS

What is TOD?

Transit Oriented Development

Development

Public realm

Streetscape

Creating new connections

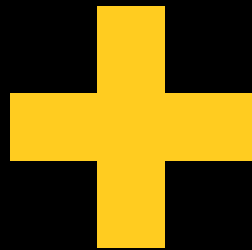
A strategy of connectivity



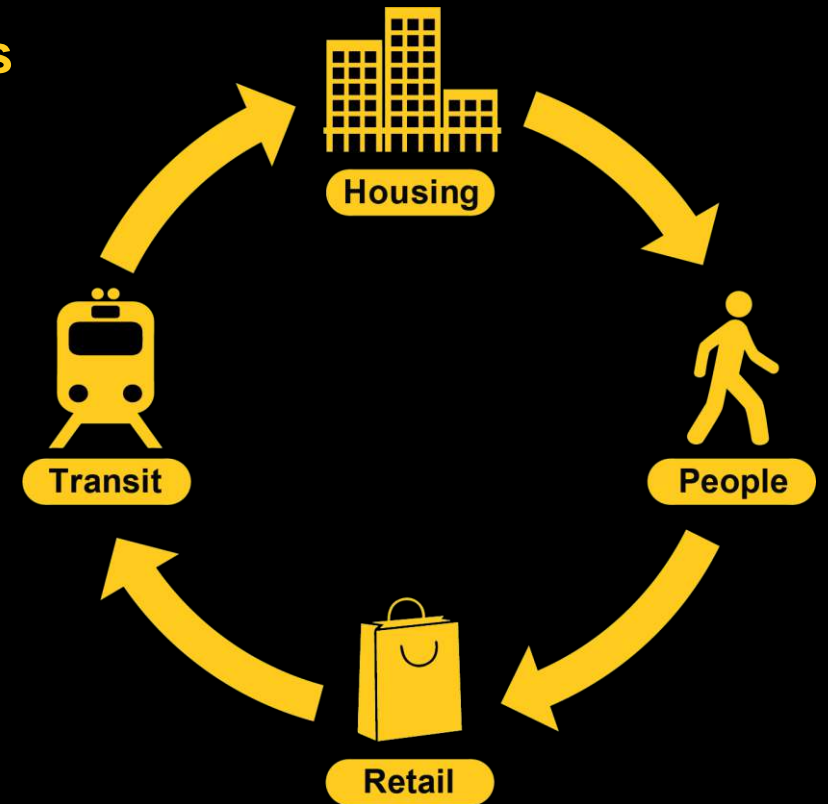
The Milwaukee Idea ... Advancing TOD

Typical TOD Themes

- Commuting
- Mixed use
- Density
- Public realm
- Feasibility
- Value capture



Equitable TOD Themes



A Strategy of Connectivity

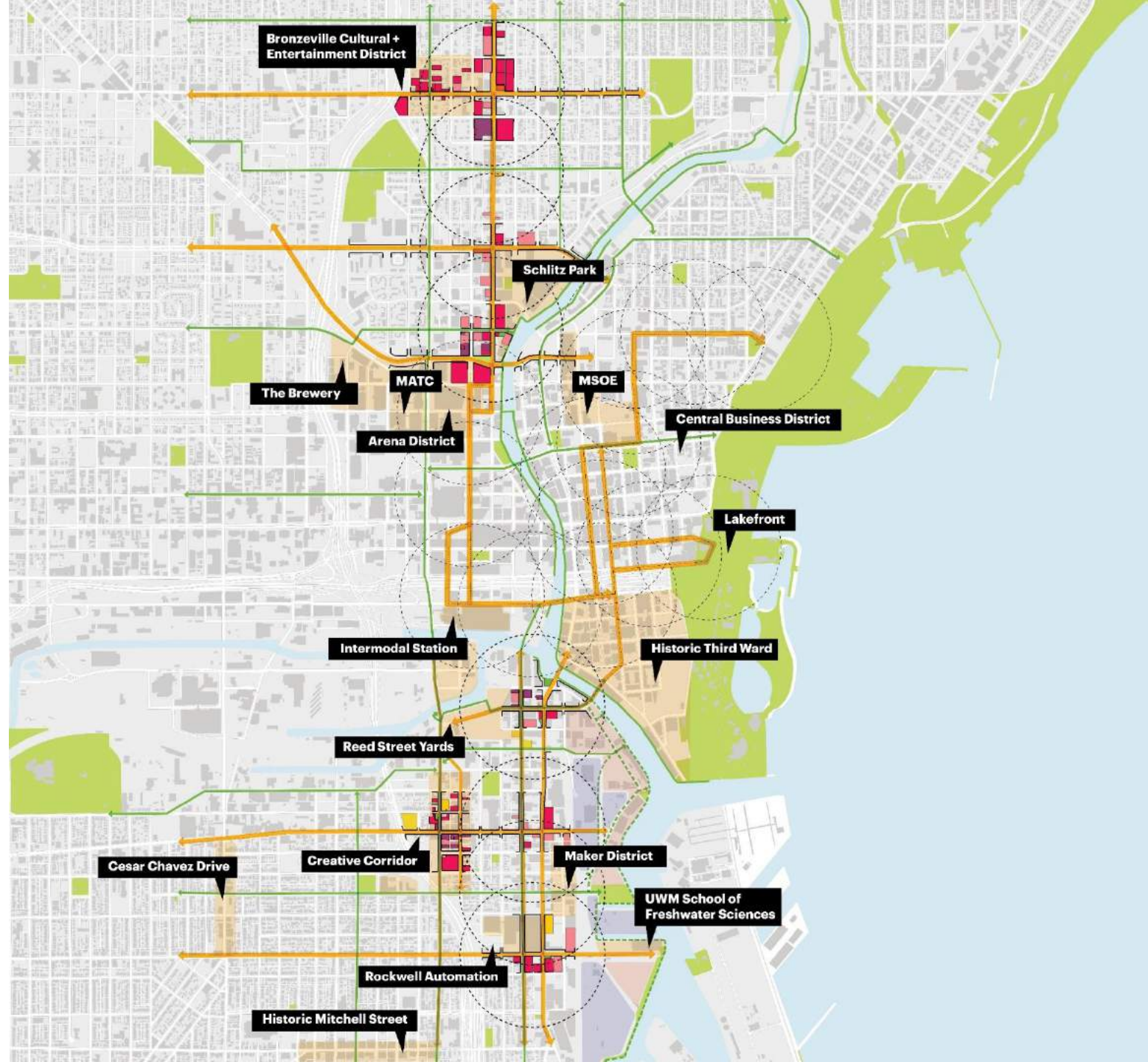
Leverage corridors and connectors

Focus on transit intersections

Create a mix of uses in the neighborhood

Create public open spaces

Add high quality density



Public meetings + workshops

10 Community Workshops

5 Plan Advisory Group Meetings

15 Neighborhood Tabling Events

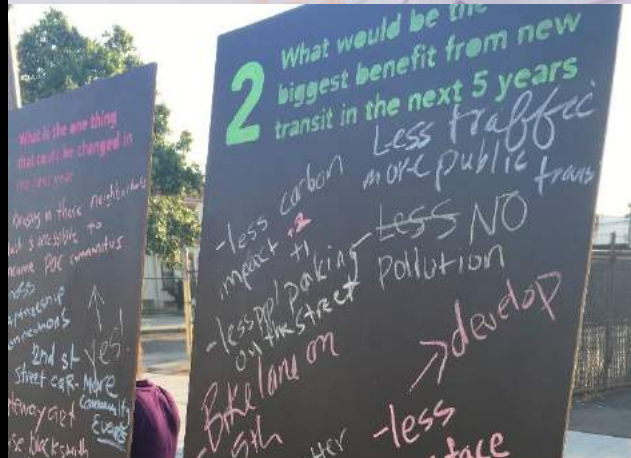
25 Presentations to Groups

Online Survey

3 Business Luncheons

2 Artist Workshop in Bronzeville with 11+ area artists

Over 1,800 people reached



Meetings








T	O	D	C	O	N	N	E	C	T	S		
W	A	L	K	E	R	S		P	O	I	N	T

Transit Focal Points

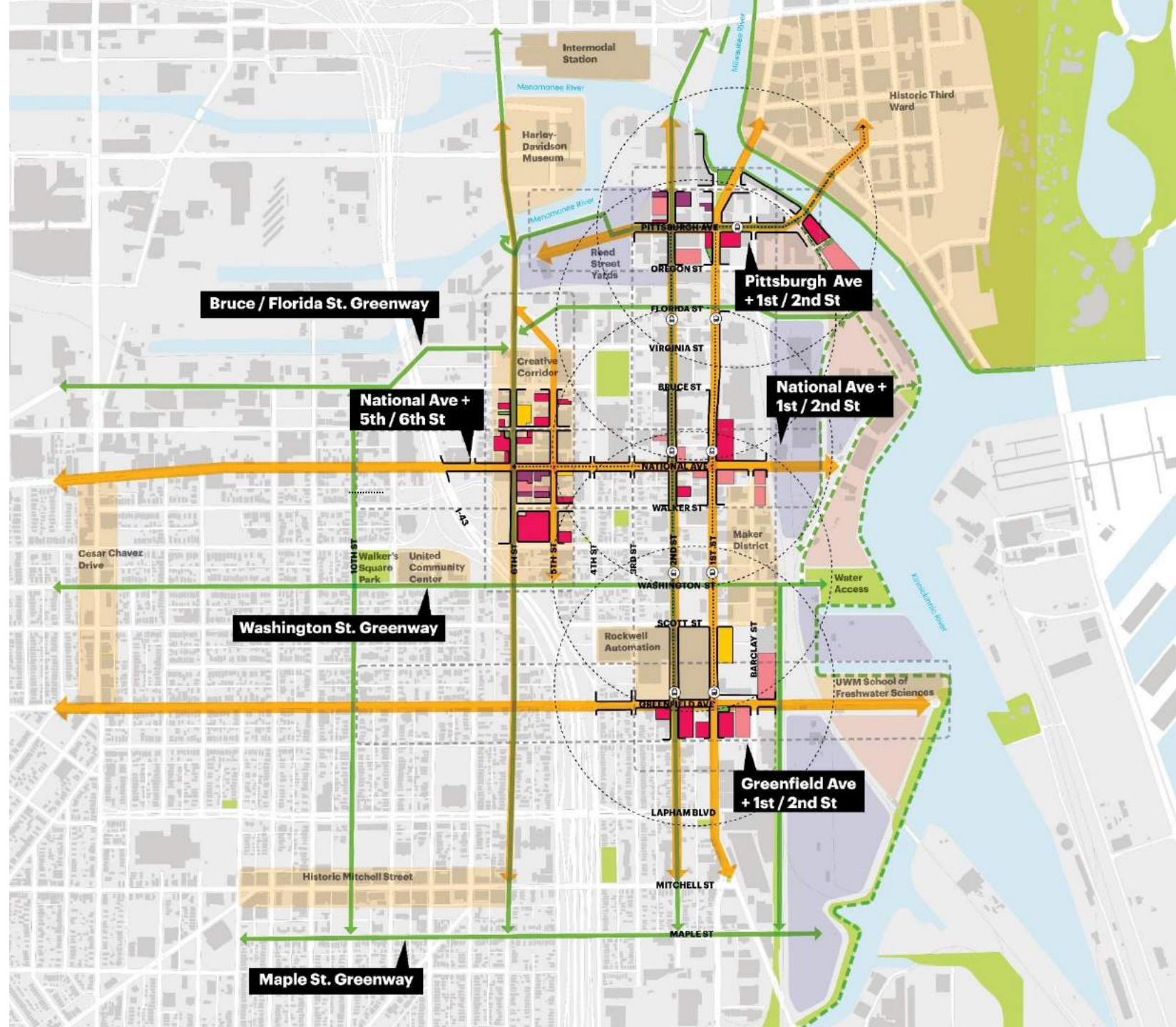
1500-2,000 new homes

10-20 new storefronts

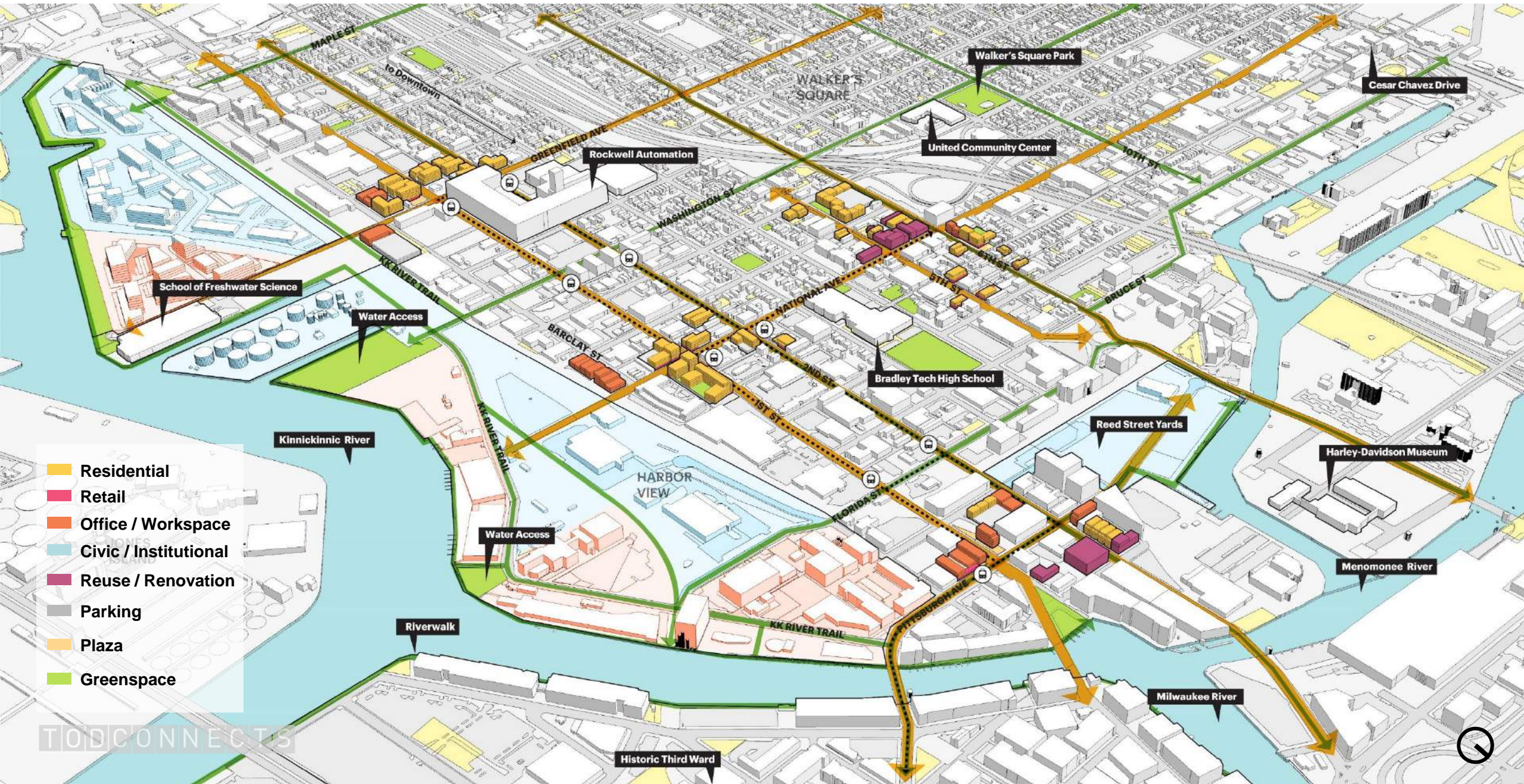
3,000-4,000 new jobs

-  Primary sites
-  Secondary / Longer Term sites
-  Potential Reuse
-  Active Proposal
-  Potential Greenspace

TODCONNECTS

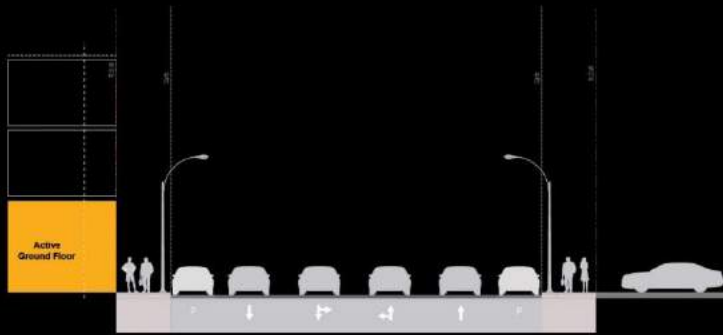


Indicative Growth Strategy



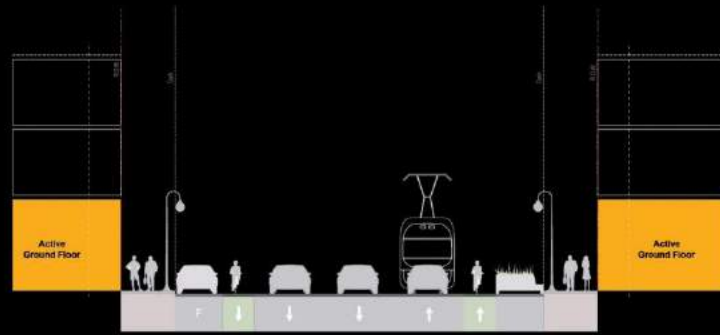
1st Street Improvements

EXISTING



- ROW: 75 feet
- Street width: 58 feet (narrower at RR bridge)
- Daily Traffic: 16,900 (2017)

ROAD DIET CONCEPT



- One way streetcar
- Reduce to 2 lanes of shared travel lanes w/ dedicated left turn lanes
- Maintain existing on-street parking
- Add bike lanes

WIDER SIDEWALKS CONCEPT



- Two way streetcar
- Reduce to 2 lanes of shared travel lanes
- Maintain existing on-street parking
- Wider sidewalks
- No bike lanes

Existing 1st Street



Proposed 1st Street: Street Character

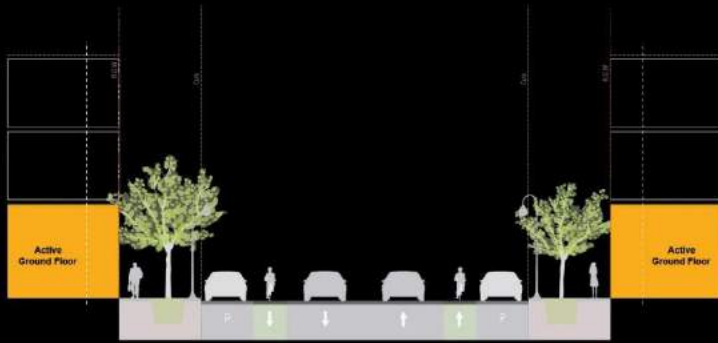


Proposed 1st Street: Street Character and Development



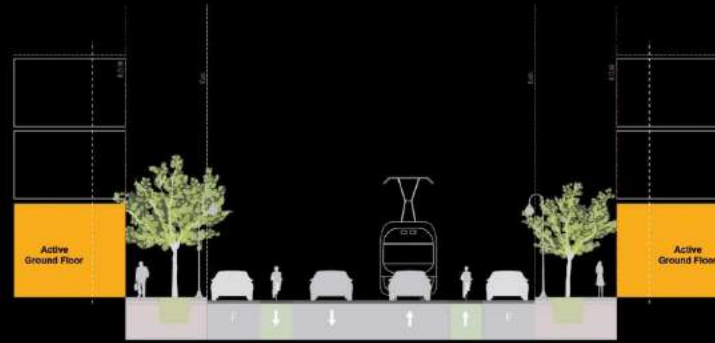
2nd Street Improvements

EXISTING



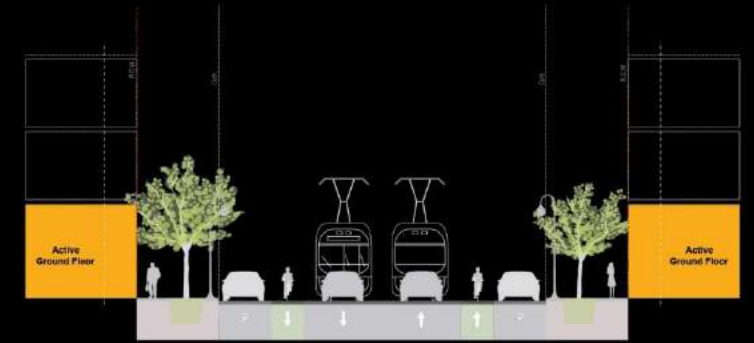
- ROW: 75 feet
- Street width: 50 feet (narrower at RR bridge)
- Daily Traffic: 6,900-8,000 (2014/15)

ROAD DIET CONCEPT



- One way streetcar
- Maintain existing on-street parking
- Maintain bike lanes

WIDER SIDEWALKS CONCEPT



- Two way streetcar
- Maintain existing on-street parking
- Maintain bike lanes

Existing 2nd Street



Proposed 2nd Street: Street Character



Proposed 2nd Street: Street Character and Development



Washington Street Existing



Washington Street Proposed Greenway



T	O	D	C	O	N	N	E	C	T	S
B	R	O	N	Z	E	V	I	L	L	E






Transit Focal Points

1,500-2,000 new homes

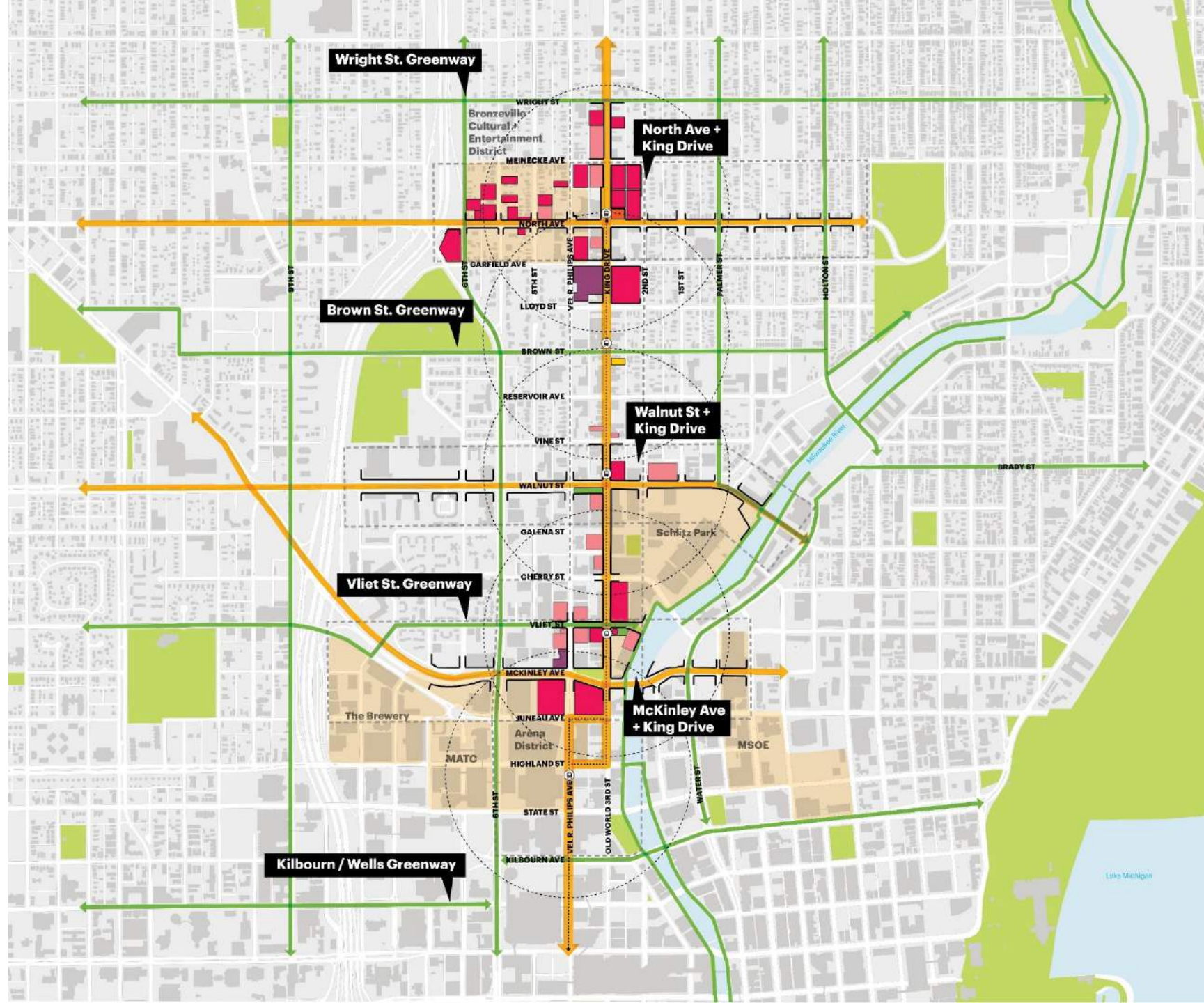
20-30 new storefronts

1,500-2,500 new jobs

3-4 new community facilities

-  Primary sites
-  Secondary / Longer Term sites
-  Potential Reuse
-  Active Proposal
-  Potential Greenspace

TODCONNECTS

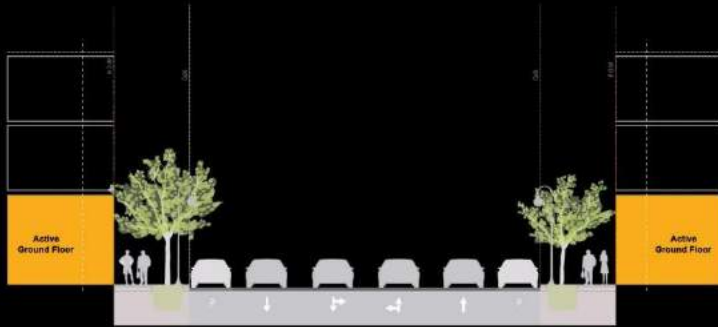


Indicative Growth Strategy



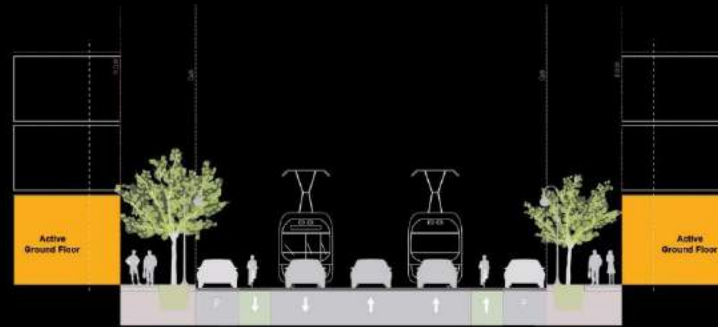
- Residential
- Retail
- Office / Workspace
- Civic / Institutional
- Reuse / Renovation
- Parking
- Plaza
- Greenspace

EXISTING



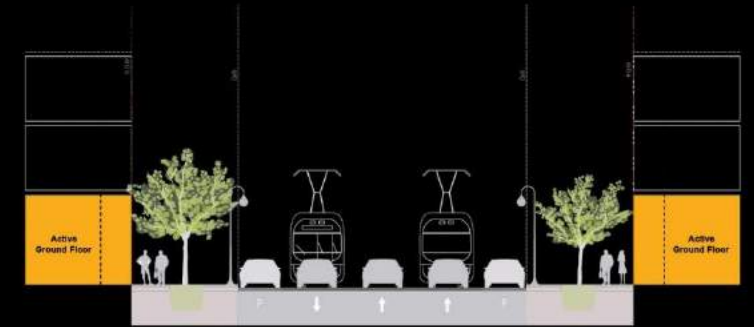
- ROW: 80 feet
- Street width: 56 feet
- Daily Traffic: 7300-10,300 (2015/16)

ROAD DIET CONCEPT



- Reduce to 2 lanes of shared travel lanes w/ dedicated left turn lanes
- Maintain existing street width
- Add bike lanes
- Maintain on-street parking
- Can be done in shorter term, including before construction of potential Streetcar extension

WIDER SIDEWALKS CONCEPT



- Reduce to 2 lanes of shared travel lanes w/ dedicated left turn lanes
- Wider sidewalks
- Maintain on-street parking
- No bike lanes
- Would require full street reconstruction narrowing curbs
- Longer term option

Existing King Drive



Proposed King Drive: Street Character



Proposed King Drive: Street Character and Development



B
BRONZEVILLE

B
BRONZEVILLE

B
BRONZEVILLE

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BRONZEVILLE

Brown Street Existing



Brown Street Proposed Greenway



ACHIEVING

IMPLEMENTATION

ZONING

DEVELOPMENT

FEASIBILITY

Potential TOD Zoning

SUMMARY:

- **New base zoning will replace select districts near proposed transit lines**
- **New zoning based on existing regulations, modified to be more transit-friendly and walkable**
- **Retain existing building form, increase potential density – units per lot area**
- **Remove future motor vehicle and outdoor storage use**
- **Possible protection of existing lower facades using height bonus**
- **Districts could be used in other areas of the City in the future**

ANTI -
DISPLACEMENT
STUDY

ANTI-DISPLACEMENT STRATEGIES

PRIORITIZE CHOICE & EQUITY ALONG SIDE
TRADITIONAL DEVELOPMENT GOALS

PRIORITIZING CHOICE



PRIORITIZING CHOICE means recognizing that as development occurs, policies and programs should be crafted to minimize the potential of displacement for existing residents and businesses that want to remain in their communities.

PRIORITIZING EQUITY



PRIORITIZING EQUITY means that anti-displacement and related policies and programs should be intentionally designed to ensure that historically disadvantaged groups are able to benefit from and gain access to the wealth-building opportunities provided by development occurring in city neighborhoods.

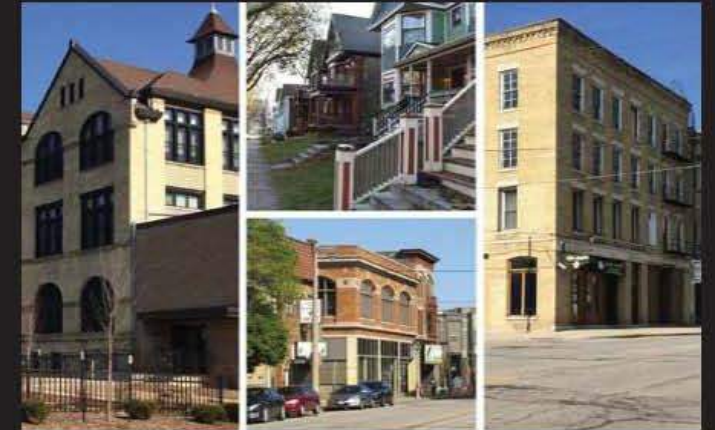
RECOMMENDATIONS

- 01 Educate and engage residents on displacement and related issues
- 02 Monitor local market conditions and adapt strategies as needed
- 03 Assist existing home owners to retain their homes
- 04 Help existing neighborhood renters become home owners
- 05 Preserve existing affordable rental housing and protect tenants at risk of displacement
- 06 Prioritize affordable and mixed-income housing in neighborhoods at risk of displacement
- 07 Preserve neighborhood character and build community wealth

ANTI-DISPLACEMENT PLAN

A Place in the Neighborhood

An Anti-Displacement Plan for Neighborhoods
Surrounding Downtown Milwaukee

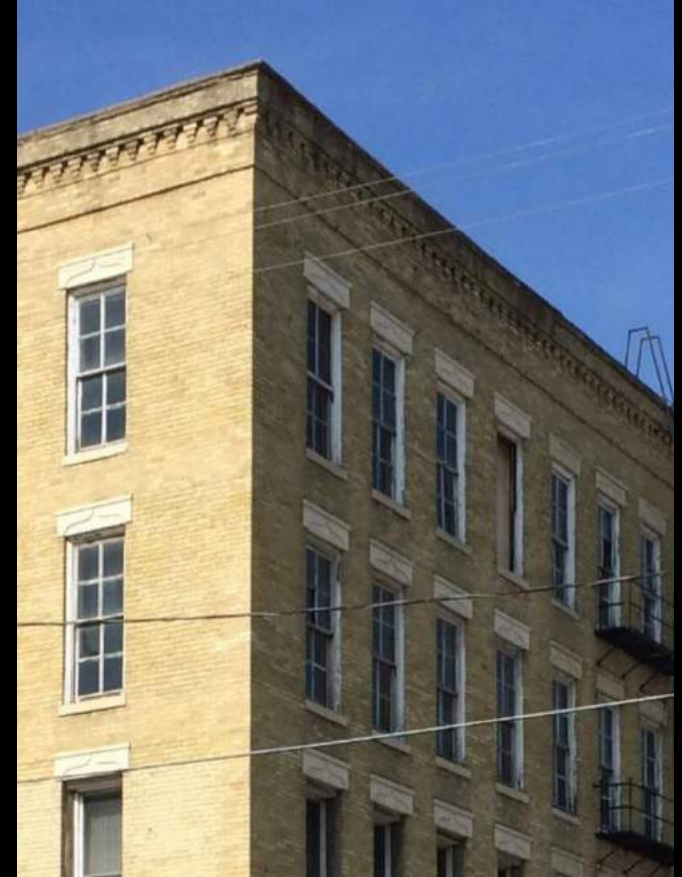
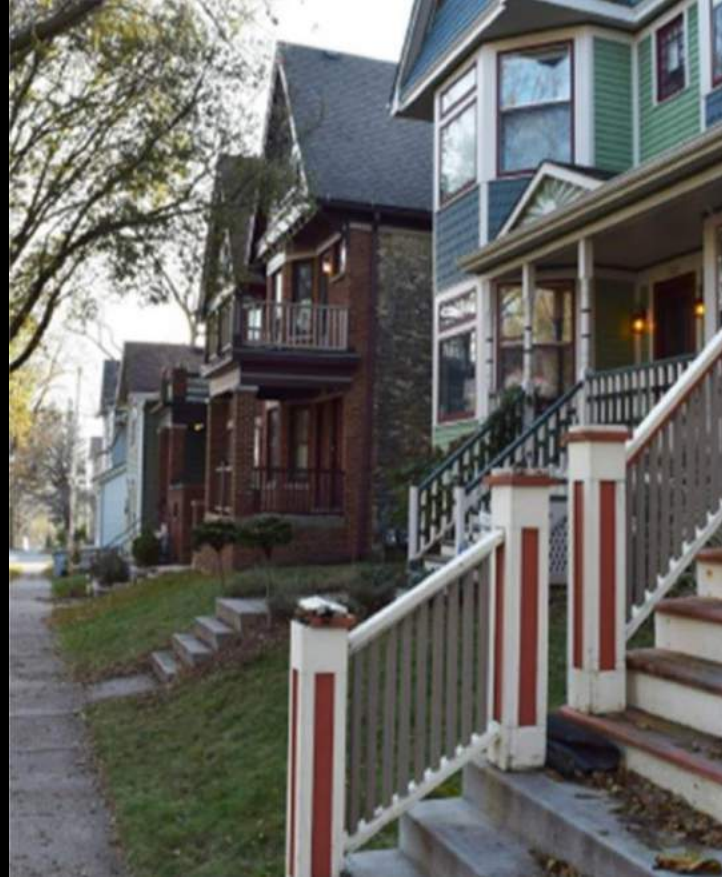


City of Milwaukee
Department of City Development

February 2018



Conclusions





- ✓ This session has been approved for 1 AICP CM Hour.
- ✓ The Reference Number is 9212003.
- ✓ Attendance is automatically recorded.