

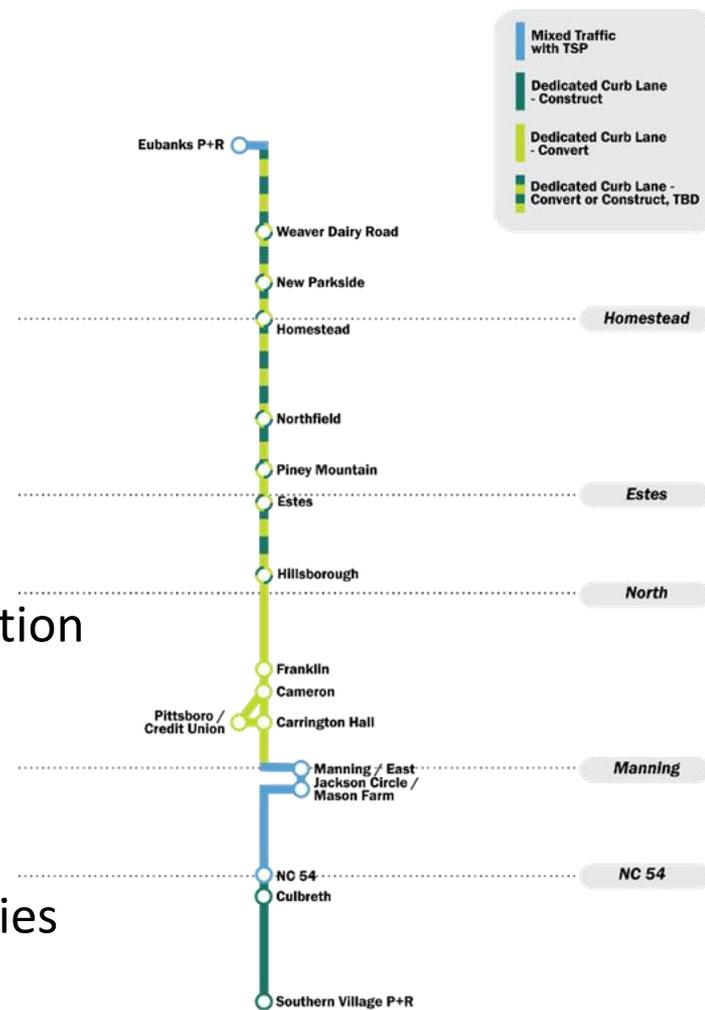


Today's Agenda:

- Welcome
- Project Overview
- Recap: Station Design Workshops
- **DRAFT:** Station Area Concepts
- Discussion: [Questions, Comments](#)

Current Status

- Currently in FTA Project Development
 - Includes 30% Design & Environmental
- 30% Design
 - Further defining alignment and specific station locations from the initial Locally Preferred Alternative (LPA)
 - Traffic analysis
 - Integration of bicycle and pedestrian facilities
 - Station area analysis





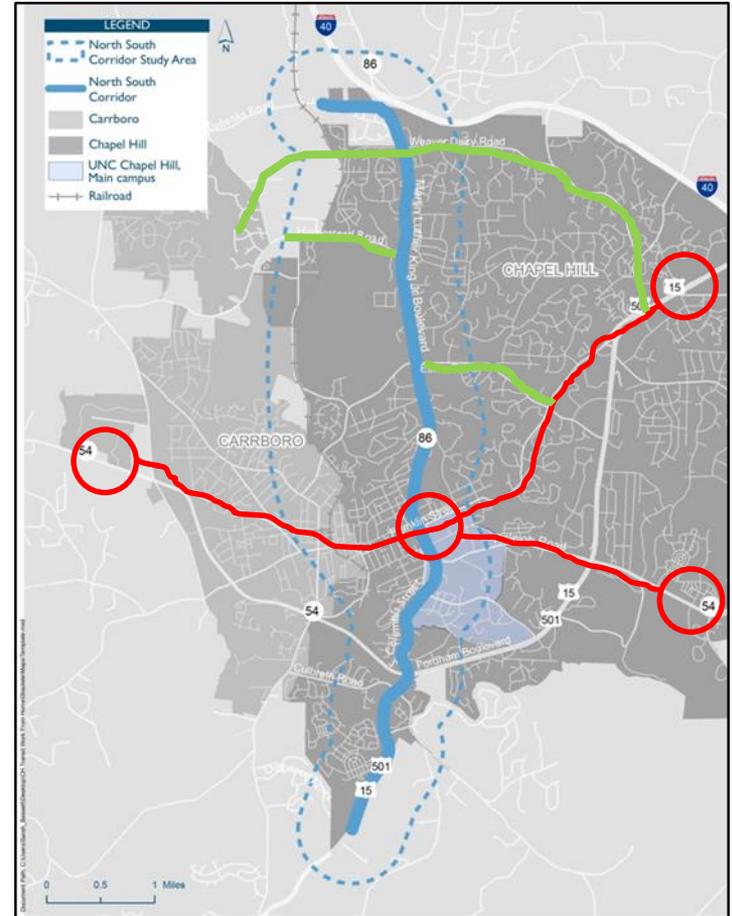
Technical and Policy Committees



BRT Context and Goals

Prepares the Town and funding partners to meet mobility demand as the region continues to grow:

- Current system close to maximum capacity
- Proposed system provides a long-term, scalable solution for residents and visitors
- Connects to regional transit options
- Supports current and planned development in the corridor with a multi-modal system that serves cyclists, pedestrians and other users
- Contribute to regional equity, sustainability and quality of life.



- Potential examples of future local bus connections
- Potential future BRT corridors



8.5K Daily Ridership - Scale of Magnitude

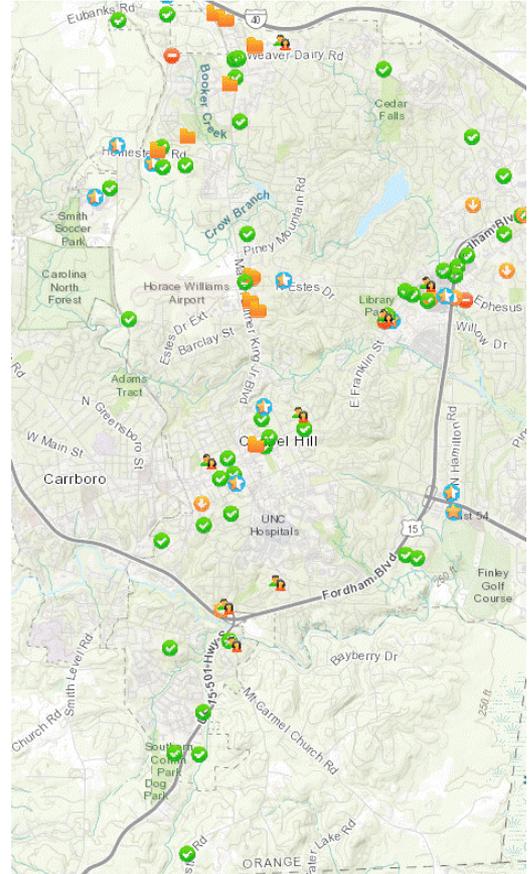


Dean Smith Center
Capacity 21,750

Cameron Stadium
Capacity 9,314



Town of Chapel Hill Development Activity Map





Purpose of the Engagement Events

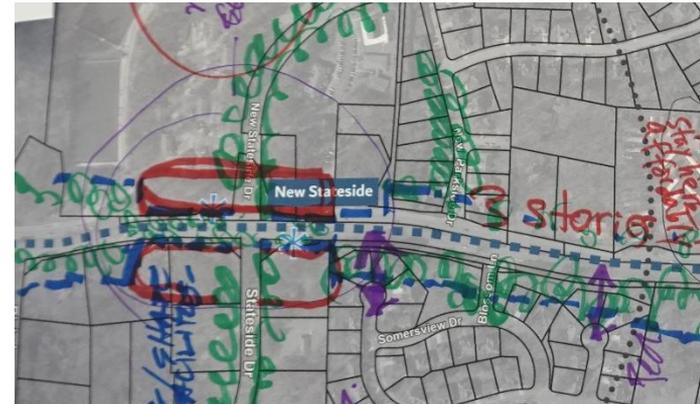
- Lay the framework for station and station-area design and inform Transit Supportive Design (TSD) study.
- Engage stakeholders in the development of a TSD framework plan, including Town Council, Funding Partners, neighborhood interest groups, and the general public
- Input will inform development of station areas and TSD planning principles for consideration.
- Input will inform TSD and 30% design work





Next Steps

- Finalize Traffic Analysis – Summer 2019
- Develop construct vs convert recommendation for northern portion – Late Summer 2019
- Market Study and TSD Study Drafts – Fall 2019
- Draft 30% design – Late Fall 2019
- Ongoing Community Engagement
 - Festifall, Cyclicious, UNC Fall Fest, Northside Neighborhood Night Out, etc.
 - Station Design and draft 30% design input sessions (TBD)
- Complete Environmental Analysis – Late Spring 2020



Chapel Hill
transit

 NORTHBUS RAPID TRANSIT

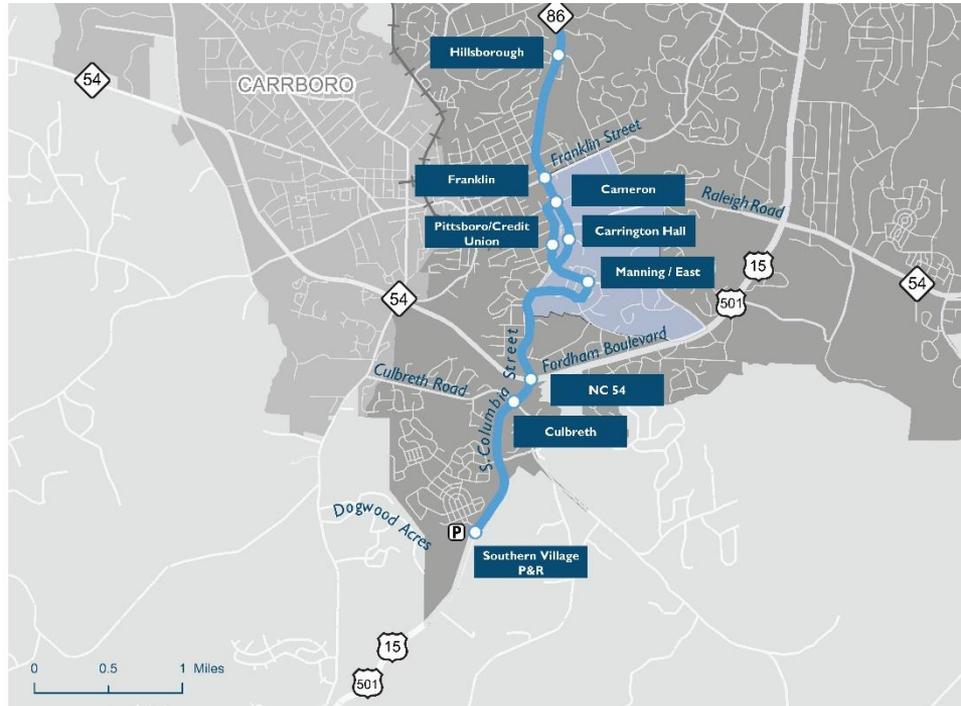
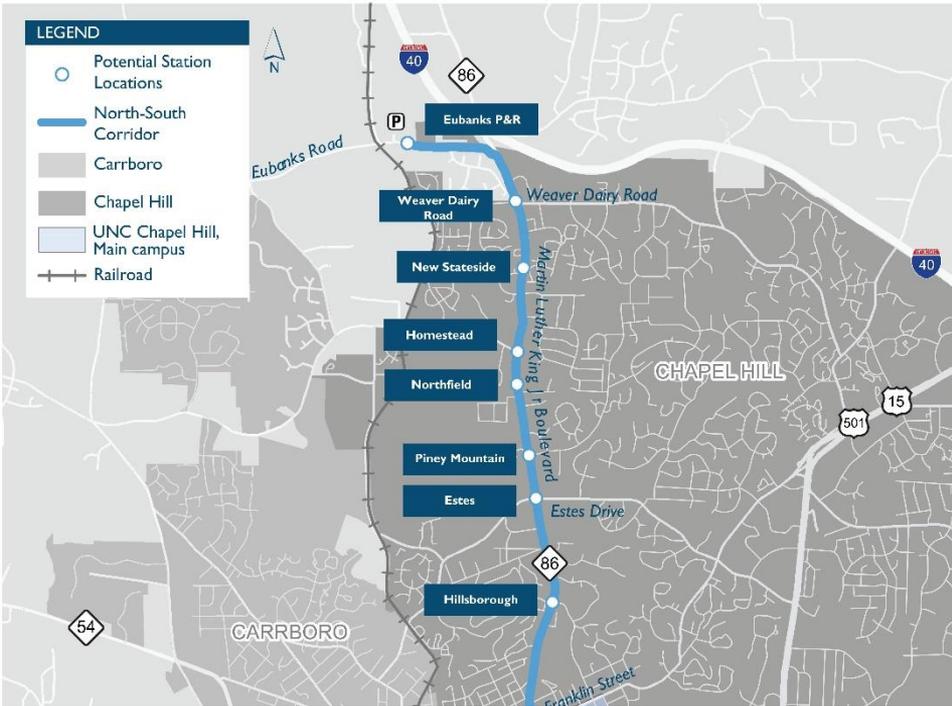
www.nsbrrt.org

Get on Board!

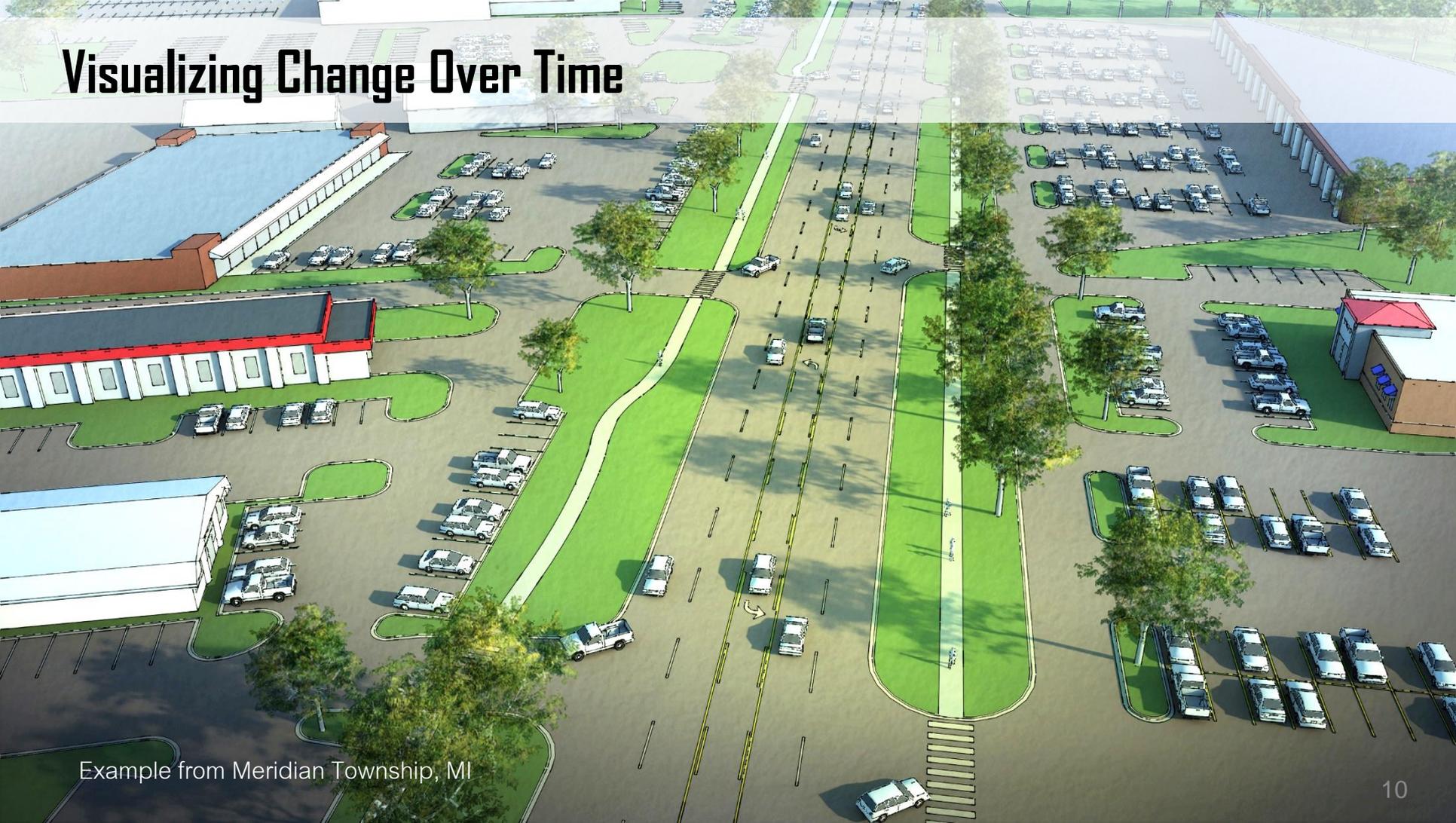
**RECAP:
STATION AREA DESIGN WORKSHOPS**



N-S BRT Station Areas

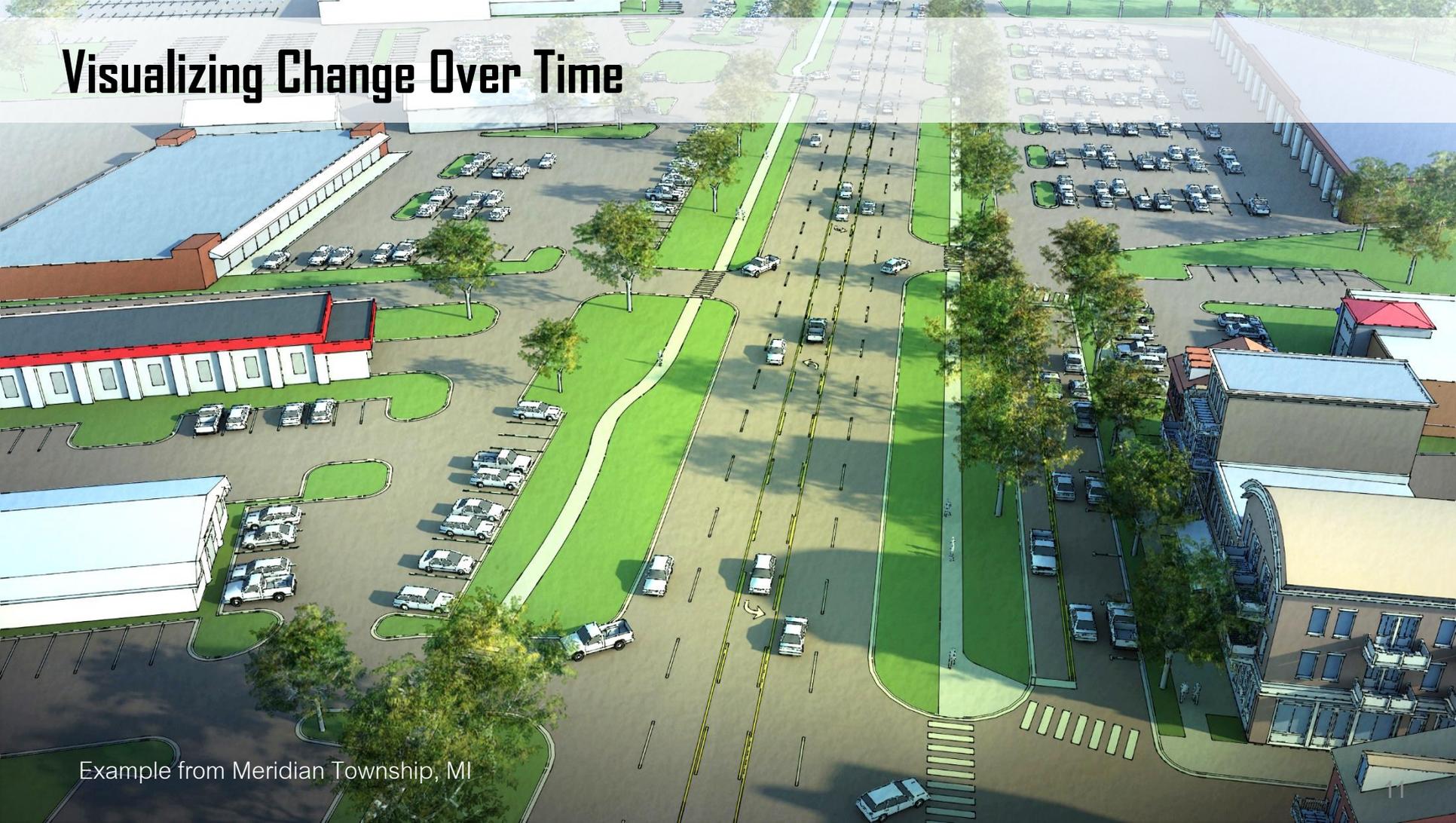


Visualizing Change Over Time



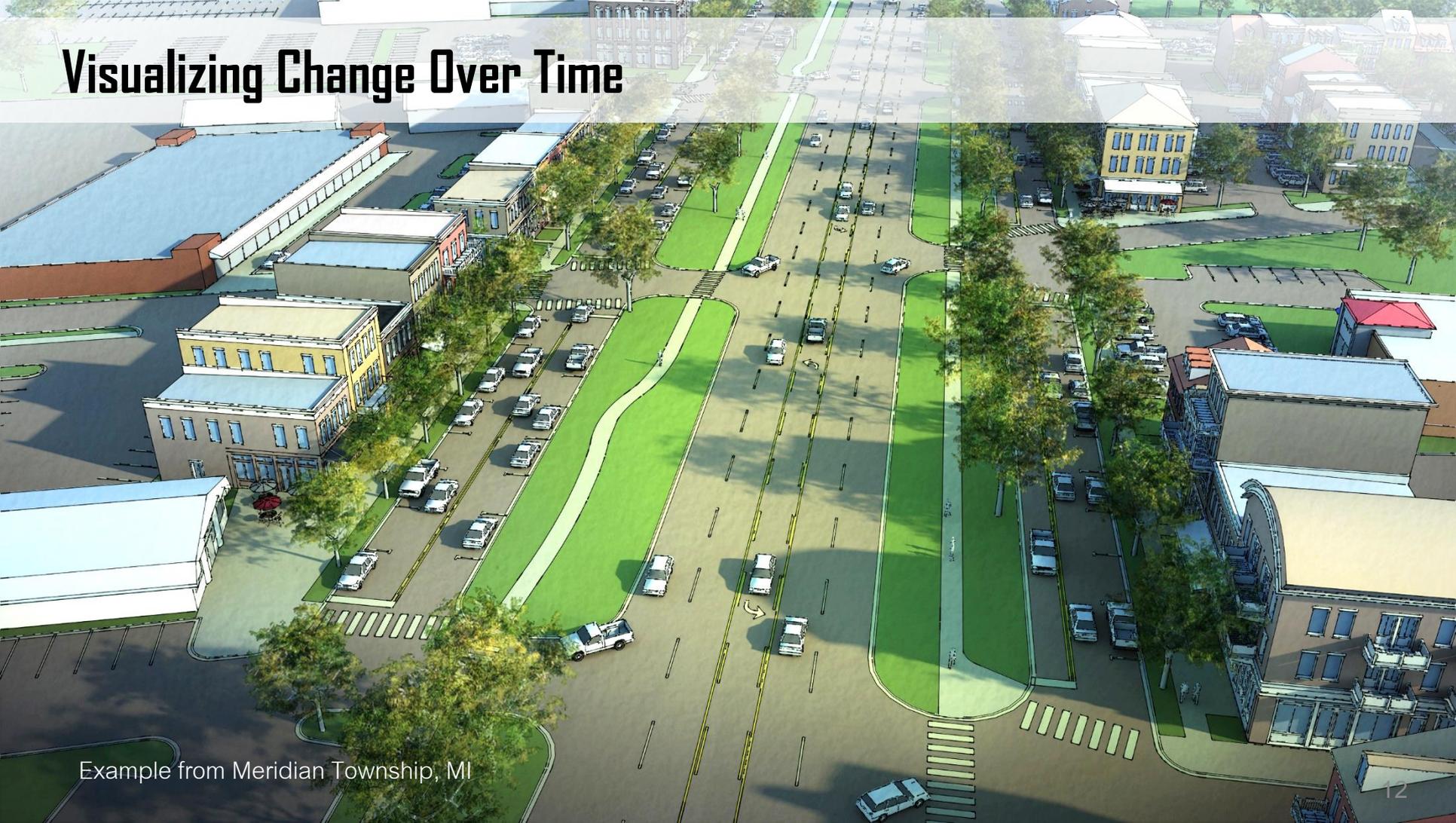
Example from Meridian Township, MI

Visualizing Change Over Time



Example from Meridian Township, MI

Visualizing Change Over Time



Example from Meridian Township, MI

Visualizing Change Over Time



Example from Meridian Township, MI

Downtown Station Areas (Franklin / Cameron)



North Corridor Station Areas (Weaver Dairy Rd / New Stateside)





CHAPEL HILL
ChartingOurFuture.info
A Land Use Initiative

Revised Future Land Use Map

NORTHBUS RAPID TRANSIT
SOUTHBUS RAPID TRANSIT 
TOD Study

Rewritten LUMO

30,000 feet

20,000 feet

10,000 feet



Friday July 12: Council Work Session



Chapel Hill transit

NORTH BUS RAPID TRANSIT SOUTH
www.nsbrrt.org

→ DESTINATIONS TO WALK TO!
→ REMARKET TRANSIT (REINTRODUCE)
→ CONNECT TO OTHER ROUTES, MODES

What opportunities are you most excited about?

[WHO ARE WE BUILDING FOR?]

↓

What are your concerns?

MLK: BIG WALL OF TREES
MAKE PLACES TO PAUSE
→ MAJOR EMPLOYERS DO NOT USE REMOTE WORKERS

NCDOT

SLOPES + HEAT

65

Saturday, July 13: Community Input Session



Saturday, July 13: Community Input Session



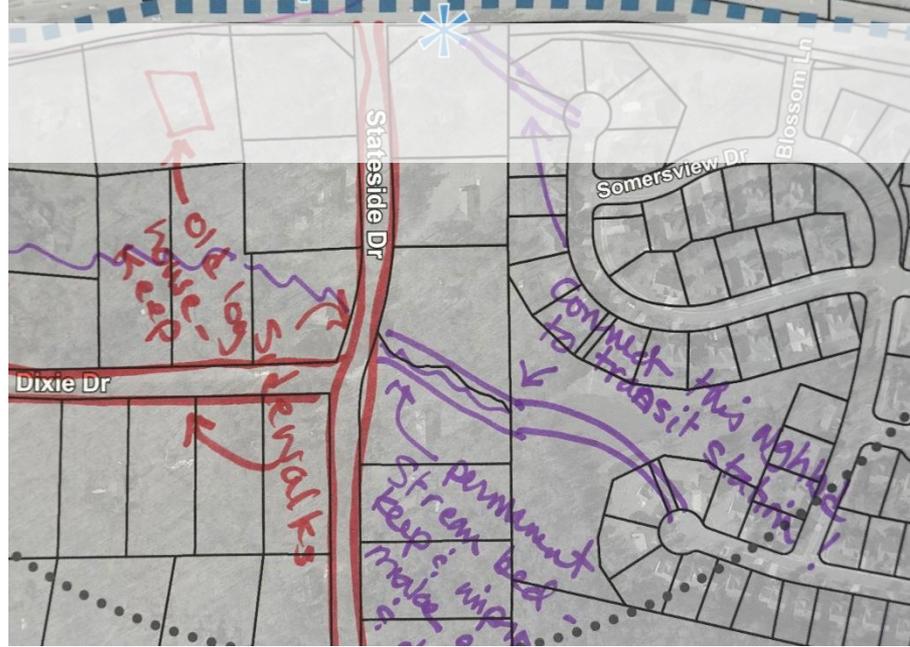
**What kinds of buildings?
What kinds of public spaces
(squares, parks, plazas)?**

**What existing public realm features
(buildings, infrastructure, natural
features) should remain in the long
term future?**

What uses are missing?

**Is it easy to walk or bike? Where are
better (ped, bike, vehicular)
connections needed near proposed
stations?**

Examples of Community Drawings



Fri, Sat, Sun: Open House & Focus Group Discussions

- Business
- Institutions and Local Government
- Seniors
- Developers and Property Managers
- Cyclists, Pedestrians, Commuters
- Accessibility



Building Form & Urban Design Preferences

EXAMPLES OF MIXED-USE BUILDINGS

EXAMPLES OF RESIDENTIAL BUILDINGS

EXAMPLES OF STREETS AND PUBLIC SPACES



Building Form & Urban Design Preferences



Mixed-use Buildings



Residential Buildings



Public Spaces

Preliminary Sketches at the Studio



Station Area Design: COMMON THEMES TO EXPLORE

1. Different stations have different character (urban/suburban); trees between station areas
2. A pleasant, safe, and inviting walking and biking experience is needed along the entire corridor
3. Access to and from stations, and connections to neighborhoods & community facilities (walking, cycling, other) is a priority

Station Area Design: COMMON THEMES TO EXPLORE

1. Different stations have different character (urban/suburban); trees between station areas
 - Some north corridor stations can evolve with greater mix of uses, density/intensity and a more urban character; but development character need not be the same along entire corridor.
 - Trees and natural buffers can separate north station areas along Martin Luther King, Jr Blvd.
 - Creating new destinations and public spaces, more green (trees and green stormwater solutions) are priorities.

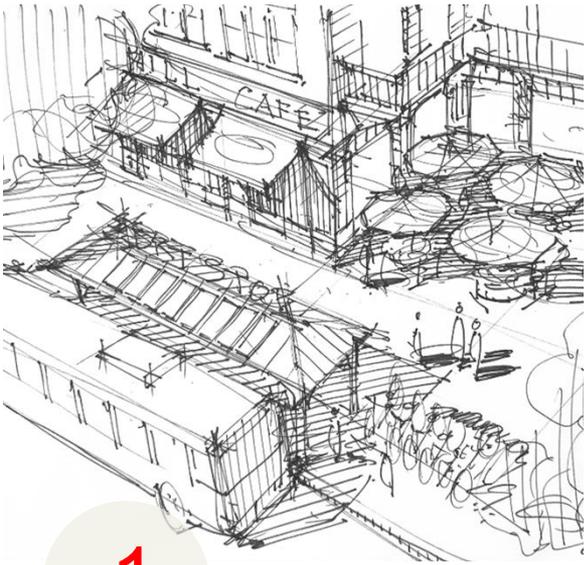
Station Area Design: COMMON THEMES TO EXPLORE

2. A pleasant, safe, and inviting walking and biking experience is needed along the entire corridor
 - Downtown and Park-and-Ride locations: Bikeshare/rental, bike racks should be at stations; repair sidewalks.
 - North Corridor: multi-use trail and improved crosswalks on the BRT corridor; connect sidewalks and safe bike routes to/from the corridor, area services, and neighborhood culs-de-sac.
 - Trees needed to shade sidewalks, and visually unite the corridor.
 - Implement the Mobility Plan, Complete Streets policies.

Station Area Design: COMMON THEMES TO EXPLORE

3. Access to and from stations, and connections to neighborhoods & community facilities (walking, cycling, other) is a priority
 - Topography, existing auto-oriented design is challenging for pedestrians in the north corridor area, especially for seniors.
 - In north corridor, doctors, grocery, services, homes are set away from stations; need to create better access for all. Designing for pedestrians, cyclists, circulator shuttles, and micro-mobility can all be part of the solution.

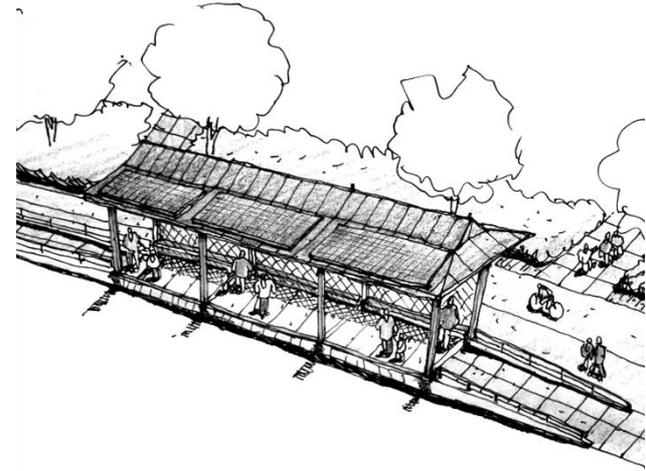
TODAY'S REVIEW: DRAFT Area Studies & Station Details



1



2



3

Transit Supportive Environment



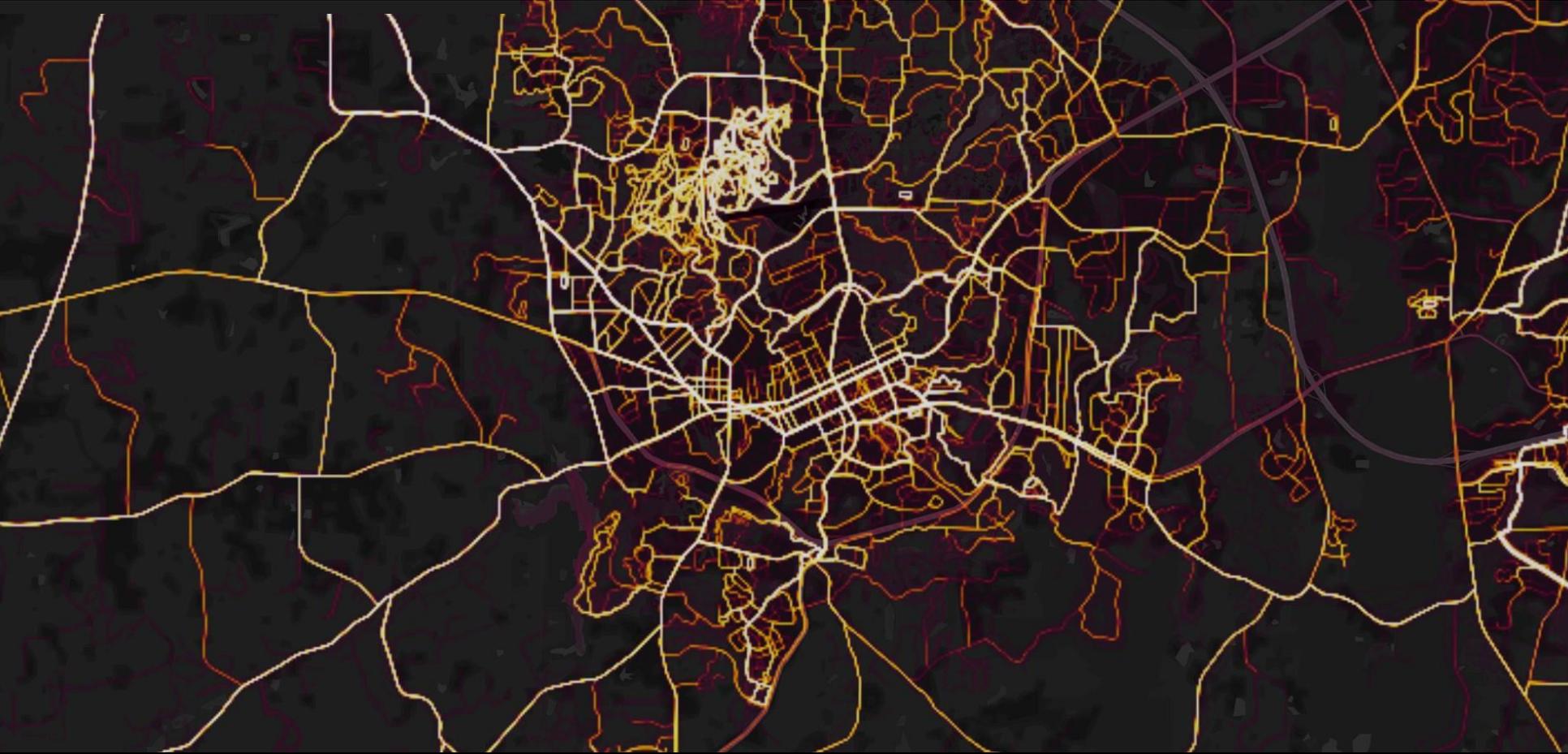
Cleveland, OH



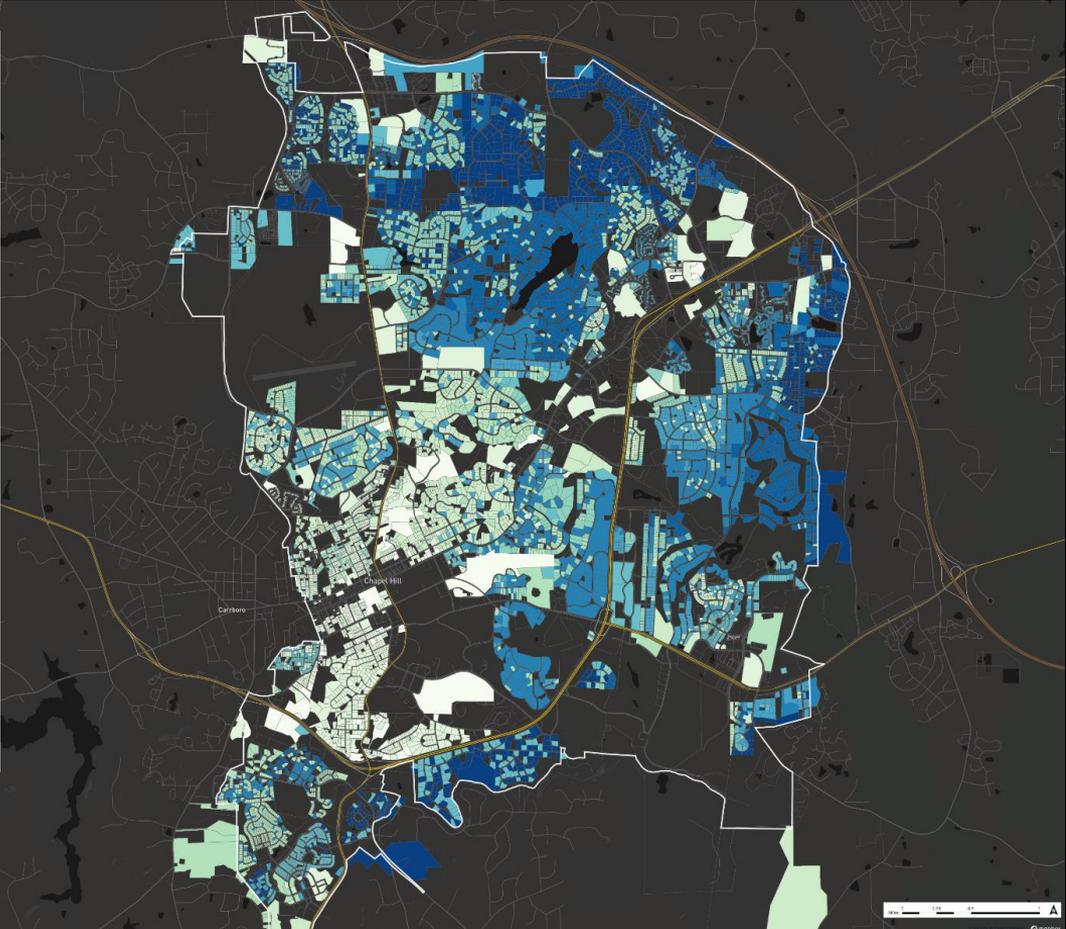
SPEED
LIMIT
25

Biking Trips

Chapel Hill, North Carolina, U



Vehicle Miles Traveled (VMT)





Draft Flood Resiliency Assessment

(from chartingourfuture.info)

This map depicts areas where assets are vulnerable to flooding. The purpose of this map is to inform the development of policies and strategies to adjust to or mitigate flood risk. Examples of strategies to improve the Town's adaptive capacity for flooding include: conserving and enhancing green infrastructure, flood proofing buildings, and stormwater retention and storage.

Flood Vulnerability and Risk Matrix

Vulnerability		Degree of Adaptive Capacity
Potential Impact		
High	Structure is built-out of floodplain or existing structure 2 feet above base flood elevation.	Structure is built-out of floodplain or existing structure 2 feet above base flood elevation.
Medium	No structure in floodplain	Structure is floodplain and building elevation at or 1 foot above base flood elevation
Low	Structure in floodplain built before floodable development ordinance.	Structure in floodplain built before floodable development ordinance.
Risk		Consequence of Threat Event
Probability of Threat Event		
High	In Floodway	Structure exposed and above median value
Medium	In 100-year floodplain	Structure exposed and below median value
Low	In 500-year floodplain	No structure exposed

Flood Risk Parcels

- 0 - None (not exposed) - 15,300 Parcels
- 1 - Low - 828 Parcels
- 2 - Medium - 16 Parcels
- 3 - High - 255 Parcels

Floodplain Zone

- Floodway and 100-yr
- 500-yr.

Social Vulnerability Index (CDC)

Rating

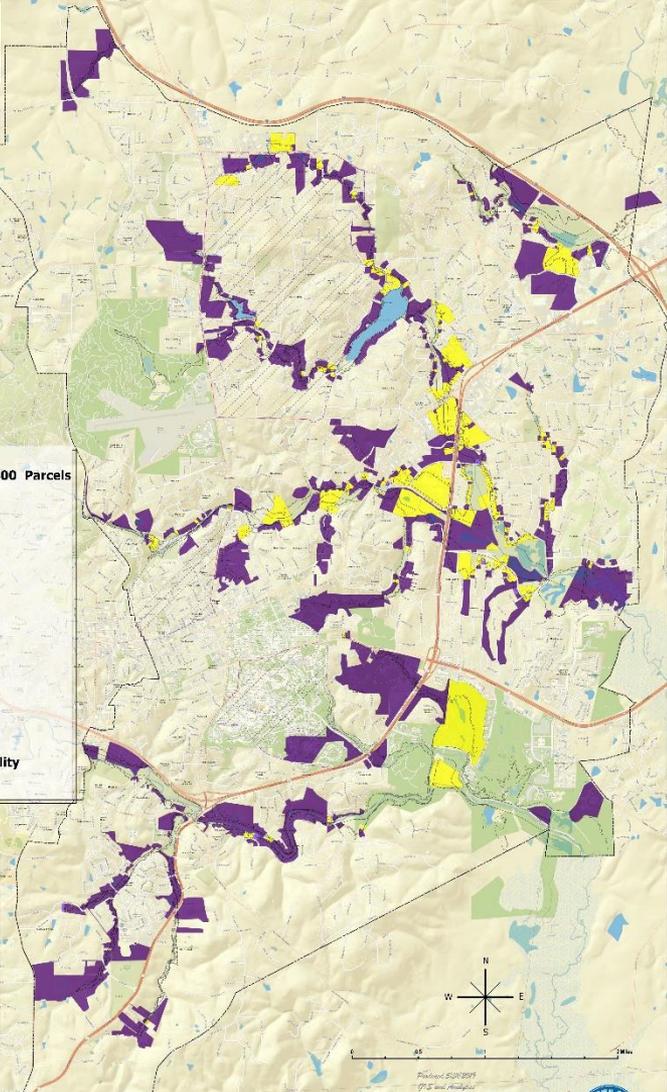
- 0 - 0.25 | Lowest Vulnerability
- 0.2501 - 0.5
- 0.5001 - 0.75
- 0.7501 - 1 | Highest Vulnerability

Zoning Jurisdiction Boundary

What is the Centers for Disease Control's Social Vulnerability Index?

The CDC created databases to help emergency response planners and public health officials identify and map communities that will most likely need support before, during, and after a hazardous event.

CDC's SVI uses U.S. Census data to determine the social vulnerability of every census tract. The SVI ranks each census tract on 15 social factors, including poverty, lack of vehicle access, advanced age, English as a second language, and crowded housing, and groups them into four related themes. Each tract receives a separate ranking for each of the four themes, as well as an overall ranking.





Draft Extreme Heat Resiliency Assessment

(from chartingourfuture.info)

This map depicts vulnerable populations and areas in Town impacted by impervious surfaces and the lack of tree canopy. The purpose of the map is to inform the development of strategies and options to help mitigate the effects of extreme heat events. The Tree Canopy map and Impervious Surfaces map are supplementary to this document. Some examples of strategies to improve the Town's adaptive capacity for extreme heat events include tree planting, green roofs, solar carports, and canopy conservation.

Extreme Heat Vulnerability Matrix

Vulnerability	Degree of Adaptive Capacity
Potential Impact High Highest number of sensitive populations and high percentage of developed land cover (>85%)	Degree of Adaptive Capacity High amount of tree canopy coverage (>62.2%)
Medium Lower number of sensitive populations or lower percentage of developed land cover (62.5%-85%)	Moderate amount of tree canopy coverage (33%-62.2%)
Low Lower number of sensitive populations and low percentage of developed land cover (<62.5%)	Low amount of tree canopy coverage (<33%)

Extreme Heat Parcels

Vulnerability

- Low
- Medium
- High

Social Vulnerability Index (CDC)

Rating

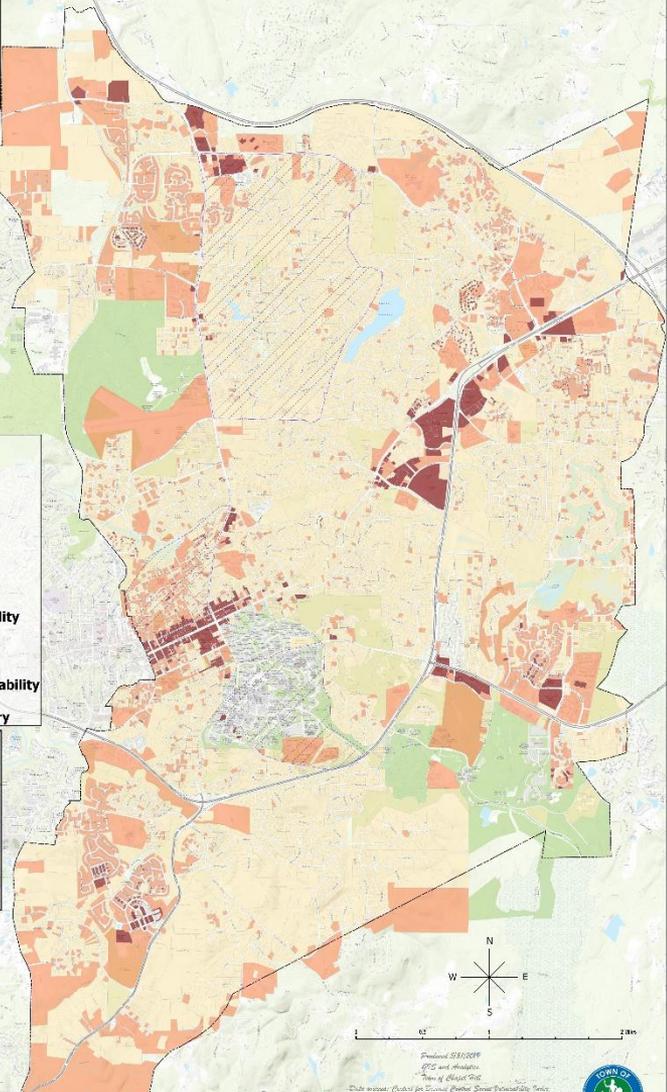
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Green Infrastructure



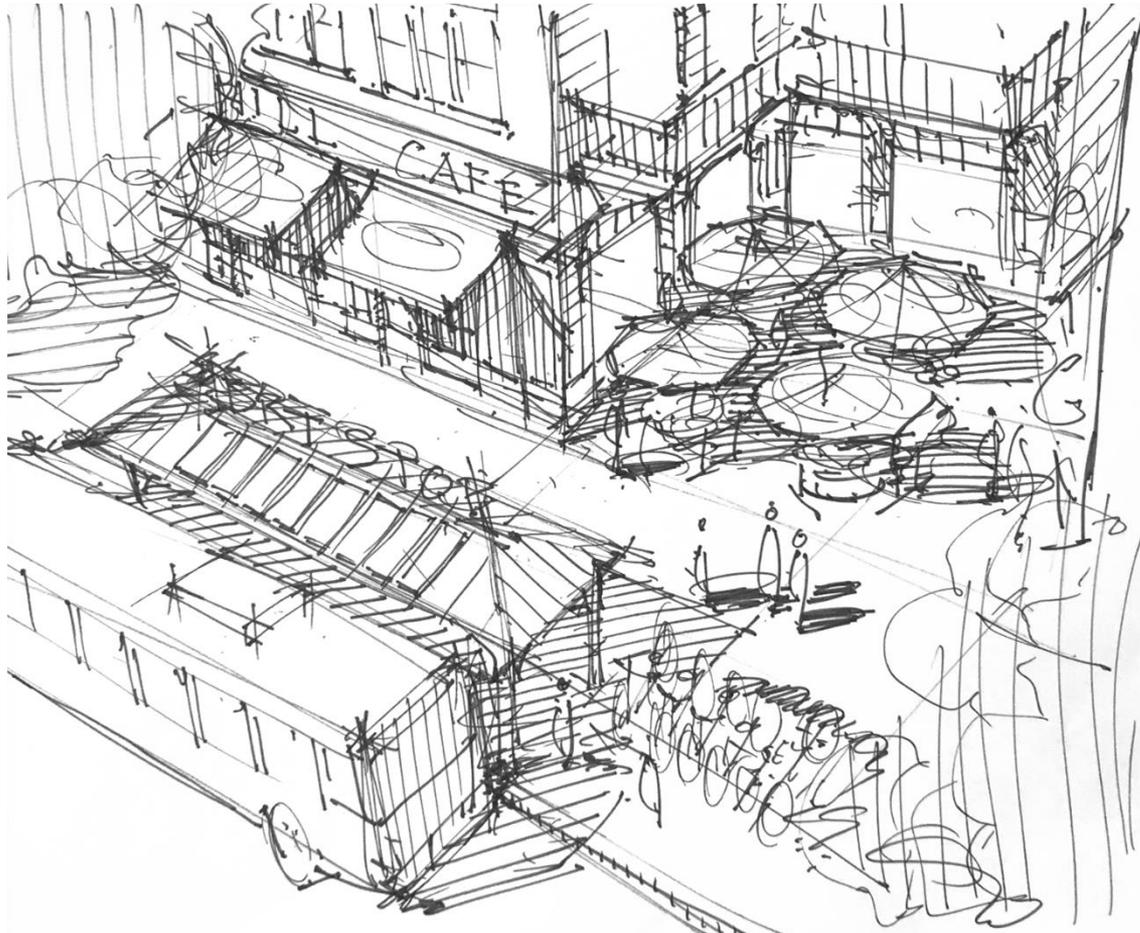
The public realm gets its shape



**The public realm gets its
shape
mainly from private
buildings.**



Downtown Station Areas



Franklin St & Columbia St



Existing Conditions on Franklin Street

Franklin St & Columbia St

DRAFT



Franklin Street Station

Franklin St & Columbia St

DRAFT



Potential future infill near Franklin Street Station



Franklin Street & Columbia Street: Existing Conditions

DRAFT



Franklin Street & Columbia Street: BRT Station

DRAFT



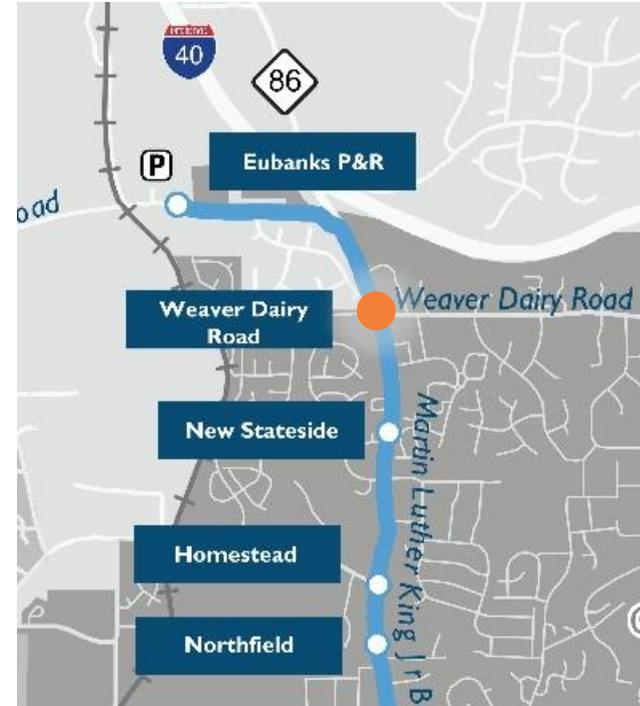
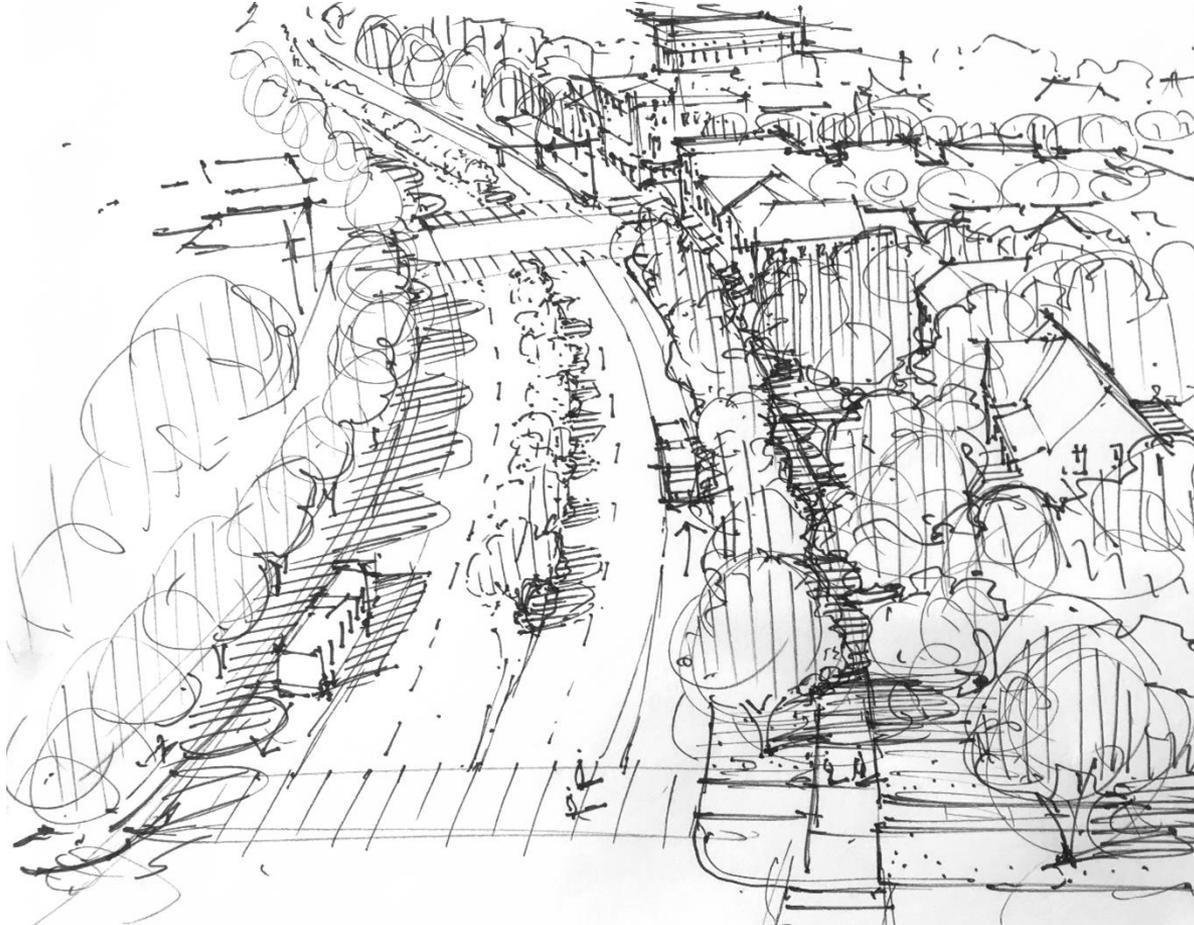
Franklin Street & Columbia Street: Incremental Uses at Station

DRAFT



Franklin Street & Columbia Street: Potential Infill, Public Space at the Station

North Corridor Station Areas







SHARE
THE ROAD



Martin Luther King, Jr Blvd & Weaver Dairy Road: Existing Conditions

DRAFT



Martin Luther King, Jr Blvd & Weaver Dairy Road: Street Improvements, New Activity

DRAFT



A CLOSER LOOK: Street Improvements, New Activity

DRAFT



Martin Luther King, Jr Blvd & Weaver Dairy Road: Street Improvements, New Activity

DRAFT



Martin Luther King, Jr Blvd & Weaver Dairy Road: Potential Change Over Time

DRAFT



Martin Luther King, Jr Blvd & Weaver Dairy Road: Potential Change Over Time

DRAFT



Martin Luther King, Jr Blvd & Weaver Dairy Road: Potential Change Over Time

DRAFT



Martin Luther King, Jr Blvd & Weaver Dairy Road: Potential Change Over Time

Station Design Examples



Station Design Examples



Station Design Examples



St Paul, MN

Station Design: FEATURES TO EXPLORE

Amenities:

- Bench
- Solar Panel
- Speaker (Bus Arrival)
- Countdown Bus Arrival
- Public Art
- High Contrast Paving
- Drinking Fountain / Quick Coupler
- Street Trees
- Information Kiosk
- Bike Rack / Repair Station

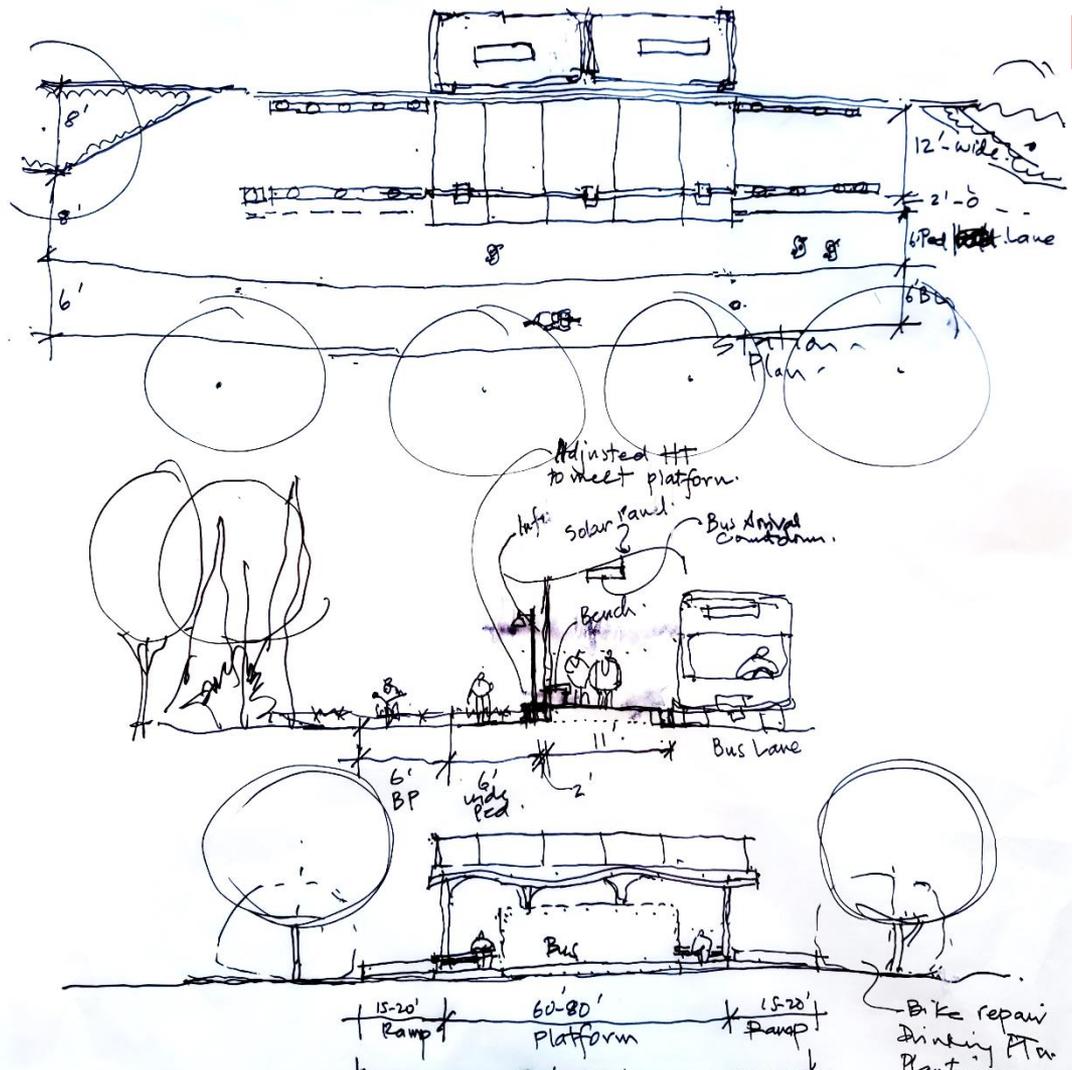
Accessibility:

- “Rumble” Strip
- “Lit” Pavement (door indicator)
- Ramp with Railing
- Bike Path
- Sidewalk

Safety:

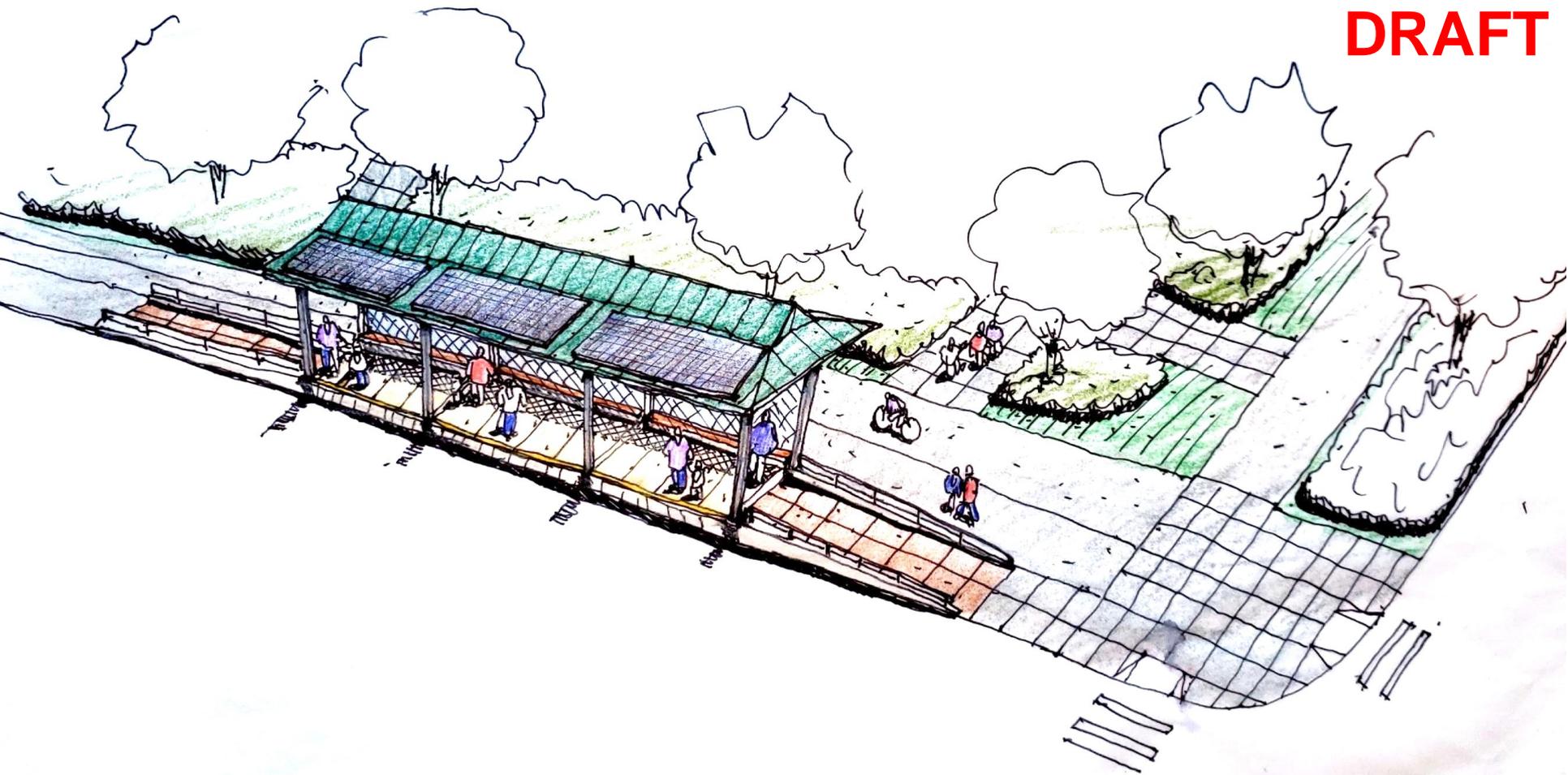
- Lighting
- Emergency Call Button
- Camera
- Raised Crosswalk

DRAFT

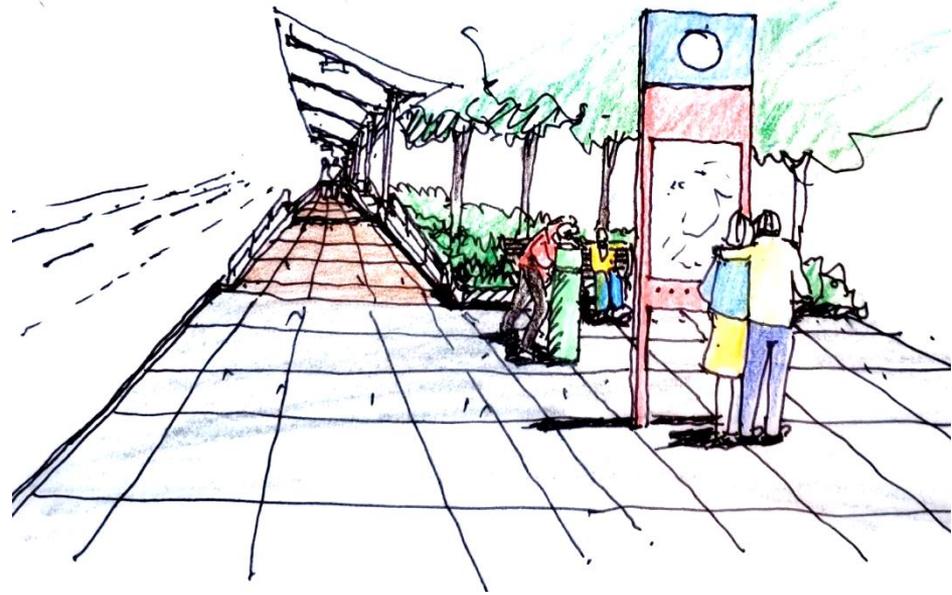
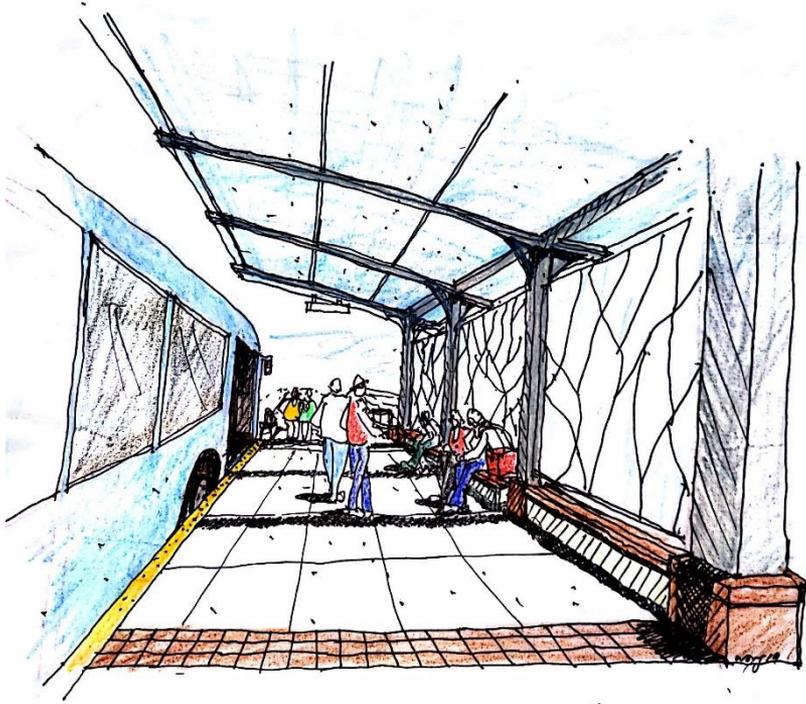


Preliminary Sketches

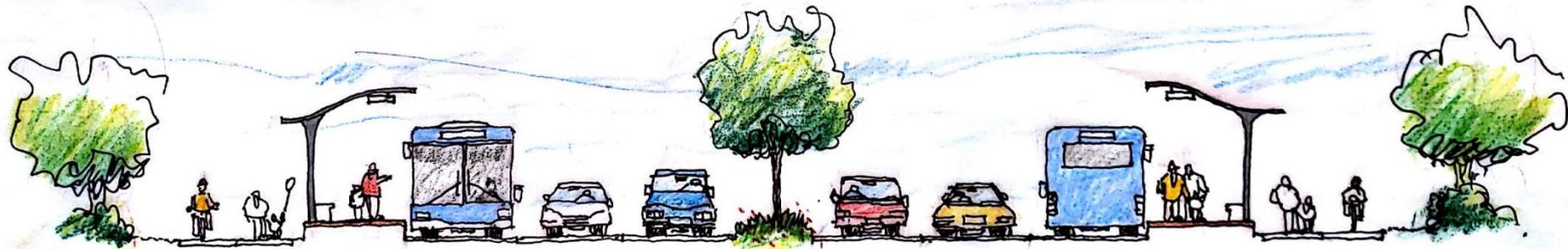
DRAFT



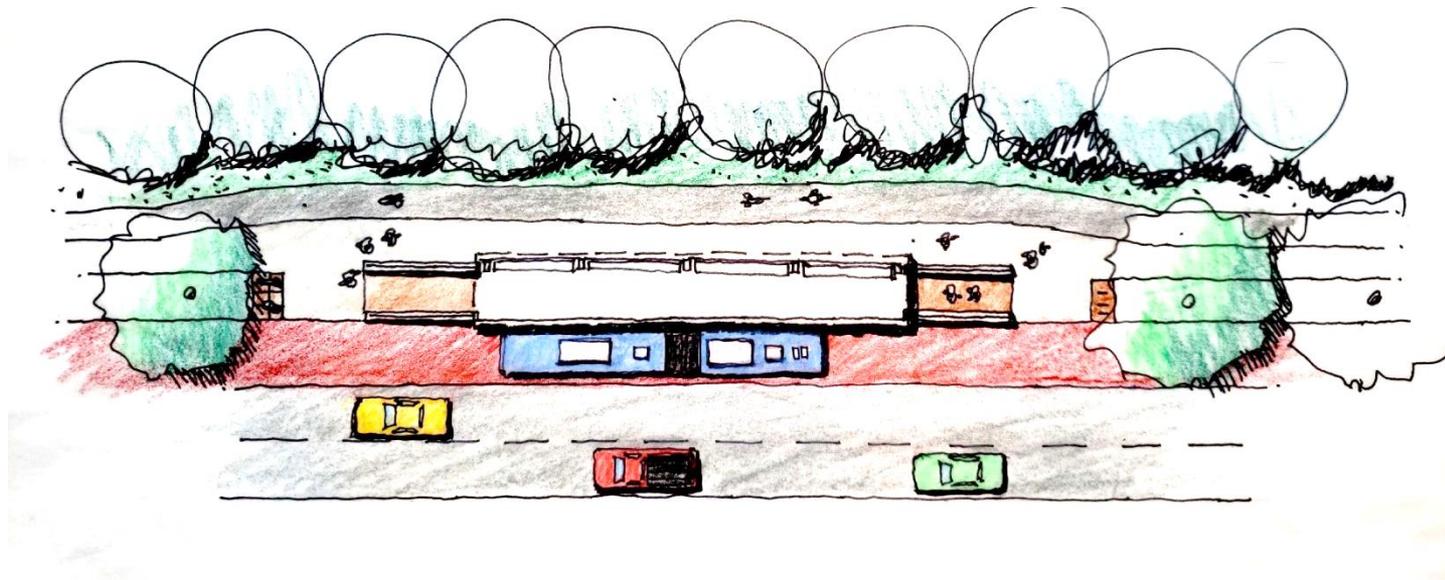
Station Design Details



Station Design Details



Station Design Details: North Corridor



Station Design Details:

North Corridor



**Chapel Hill
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NORTHBUS RAPID TRANSIT 
SOUTH

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Get on Board!

DISCUSSION: QUESTIONS? COMMENTS?

**Chapel Hill
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SOUTH BUS RAPID TRANSIT** 

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THANK YOU!