



Uptown CRA *DRAFT* Transportation Assessment

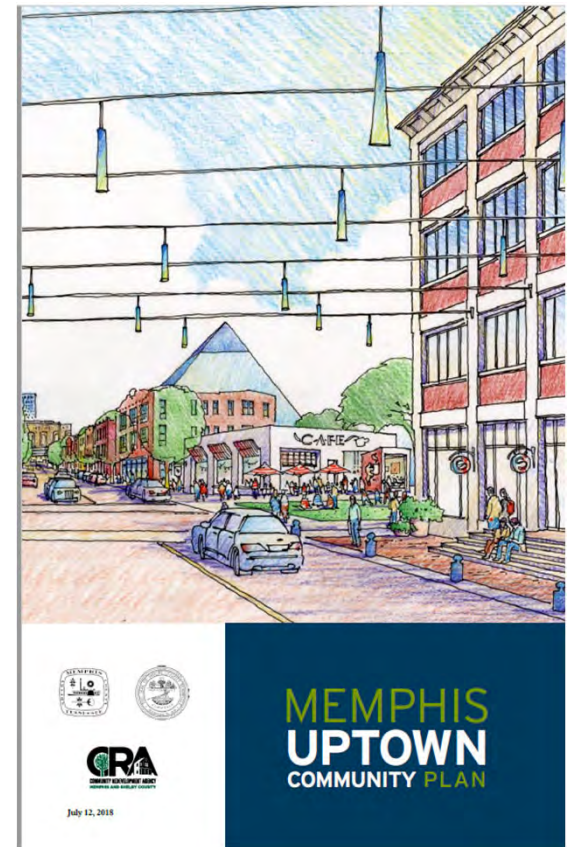
May 2022



RENAISSANCE
PLANNING

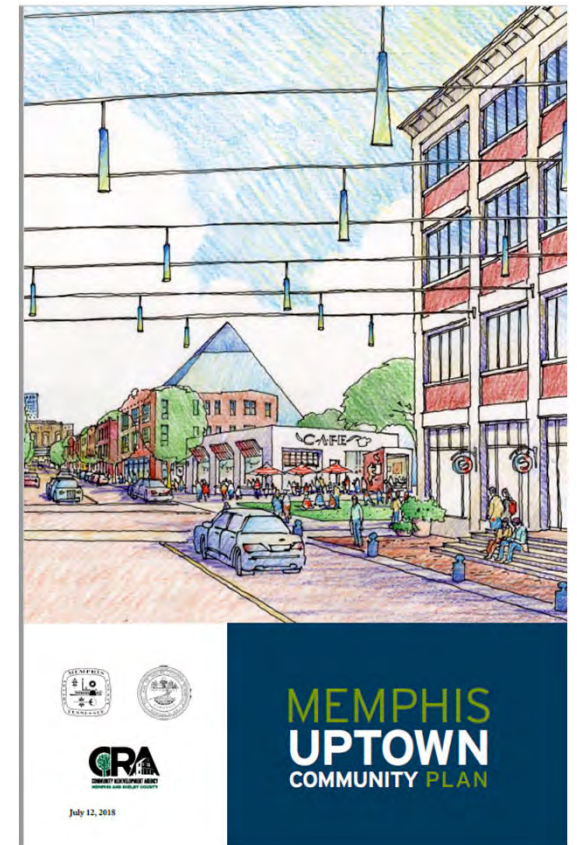
TABLE OF CONTENTS

1. Study Purpose and Scope
2. Existing Conditions
3. Plans for Change
4. Peer Locations
5. Next Steps



STUDY PURPOSE AND SCHEDULE

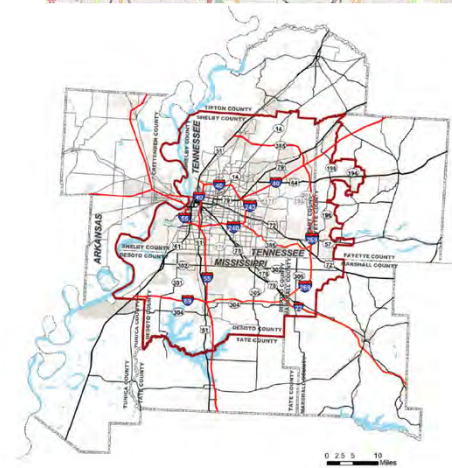
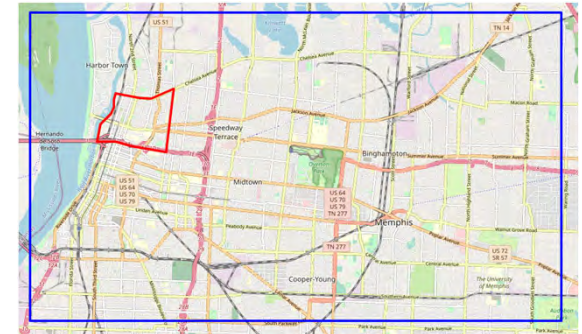
- Phase 1. Assessment (spring 2022)
 - Describe existing and planned transportation system performance
 - Assess implementation status of adopted plans for transportation elements
 - Suggest opportunities and challenges for stakeholder action
- Phase 2 – Engagement (spring / summer 2022)
 - Synthesize assessment with stakeholder perspectives
 - Refine assessment
 - Develop strategy for next steps



STUDY GEOGRAPHY

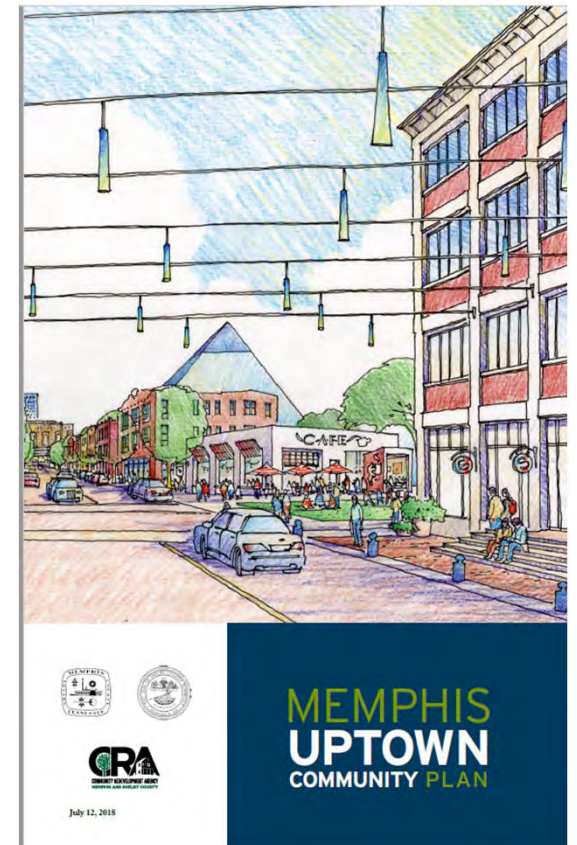
A. Study geography: focus on elements of Uptown Community Plan in vicinity of St. Jude hospital, with scalable areas of focus and comparison:

- Pinch/Uptown communities (from Wolf River Harbor to Manassas Street)
- Localized travelshed (focused on Memphis Innovation Corridor relationship to downtown and Pinch District)
- Citywide and regional assessments for context to peer communities nationwide



EMERGING THEMES

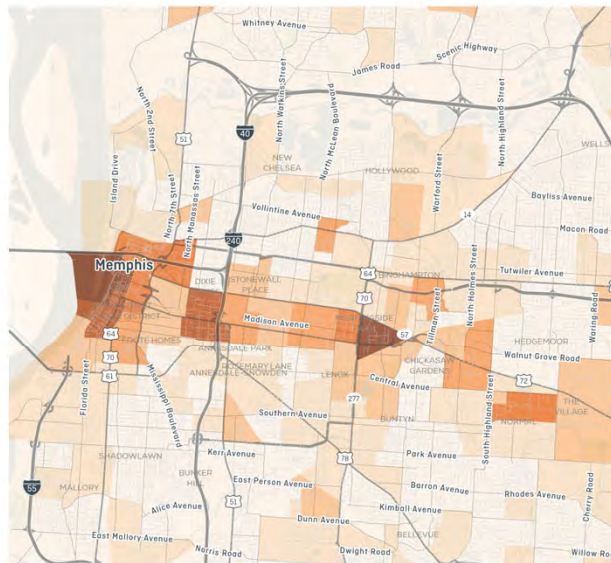
- A. The Pinch District and Uptown community are anchored by transportation systems that are generally well connected from a motor-vehicle perspective (both cars and transit) but more can be done to shift focus to local needs for walking and biking.
- B. St. Jude is an important economic anchor for the area.
- C. Other private sector land development is underway, with both interest and concerns about community effects.
- D. Adopted city/community plans provide comprehensive guidance; budgetary concerns may be an implementation challenge.
- E. Further focus on policy and design solutions may help synchronize adopted community/city master plans with St. Jude's interests in continued growth.



WHERE PEOPLE LIVE AND WORK

- Downtown Memphis is the employment anchor for the region with the Memphis Innovation Corridor (MIC) bus rapid transit (BRT) project connecting several activity centers to the east.
- St. Jude is the one notable employment center north of I-40.
- Residential density is more spread out with Downtown and the riverfront as (relatively newer) housing resources.

DENSITY | EMPLOYMENT

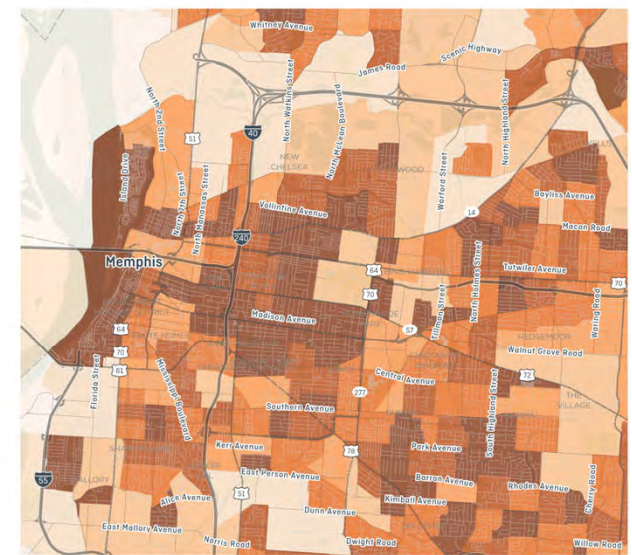


0 0.5 1 2 Miles

LEGEND

Jobs per Acre	Color
< 0.92	Lightest Orange
0.93 - 2.72	Light Orange
2.73 - 6.05	Orange
6.06 - 11.08	Dark Orange
11.09 - 16.46	Orange-Brown
16.47 - 69.18	Dark Orange-Brown
< 69.19	Dark Brown

DENSITY | RESIDENTIAL



0 0.5 1 2 Miles

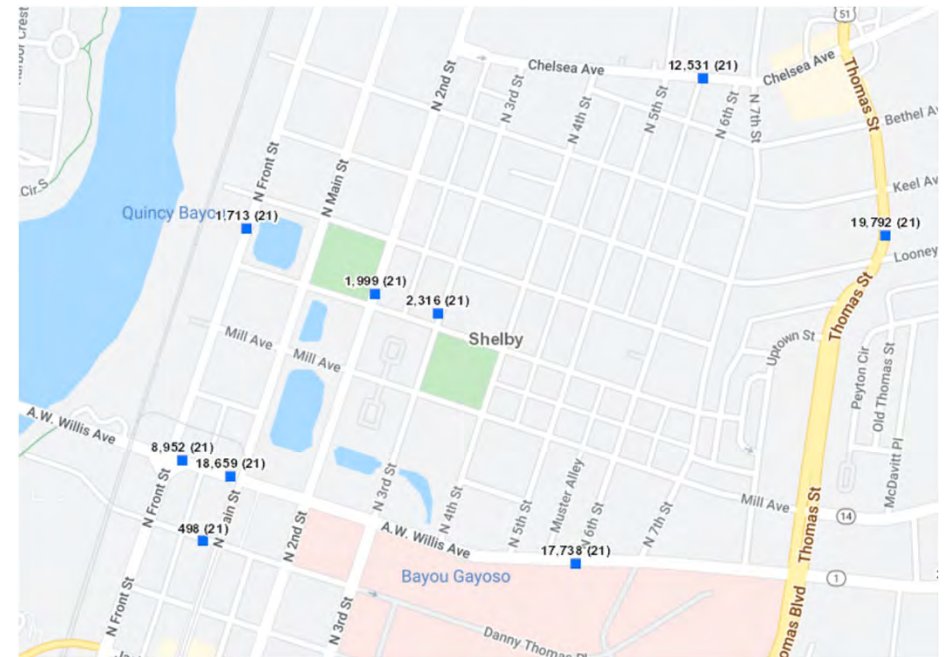
LEGEND

Housing Units Per Acre	Color
< 0.11	Lightest Orange
0.12 - 0.80	Light Orange
0.81 - 1.56	Orange
1.57 - 2.19	Dark Orange
2.20 - 2.92	Orange-Brown
2.93 - 3.82	Dark Orange-Brown
< 3.83	Dark Brown

Source: EPA Smart Location Database

TRAVEL PATTERNS

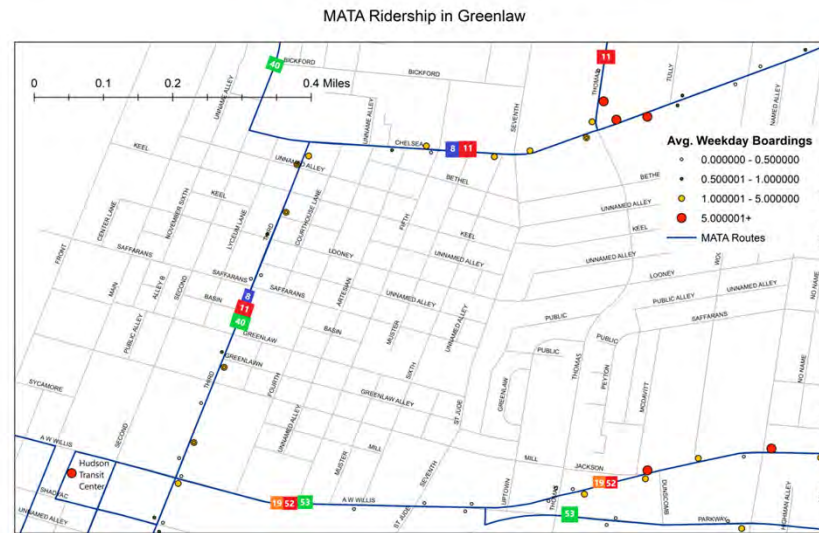
- Traffic volumes on arterial roads generally under 20,000 per day on two-way arterials based on TDOT count stations:
 - Chelsea Avenue: 12K
 - A W Willis Avenue: 17K – 19K
 - Thomas Street: 20K
- In many jurisdictions, these levels of traffic volumes are handled with one through lane per direction (plus left turning lanes).
- Slight dip in 2020 volumes noted (presumably due to COVID-19 effects).



Source: [Transportation Data Management System \(ms2soft.com\)](https://www.ms2soft.com)

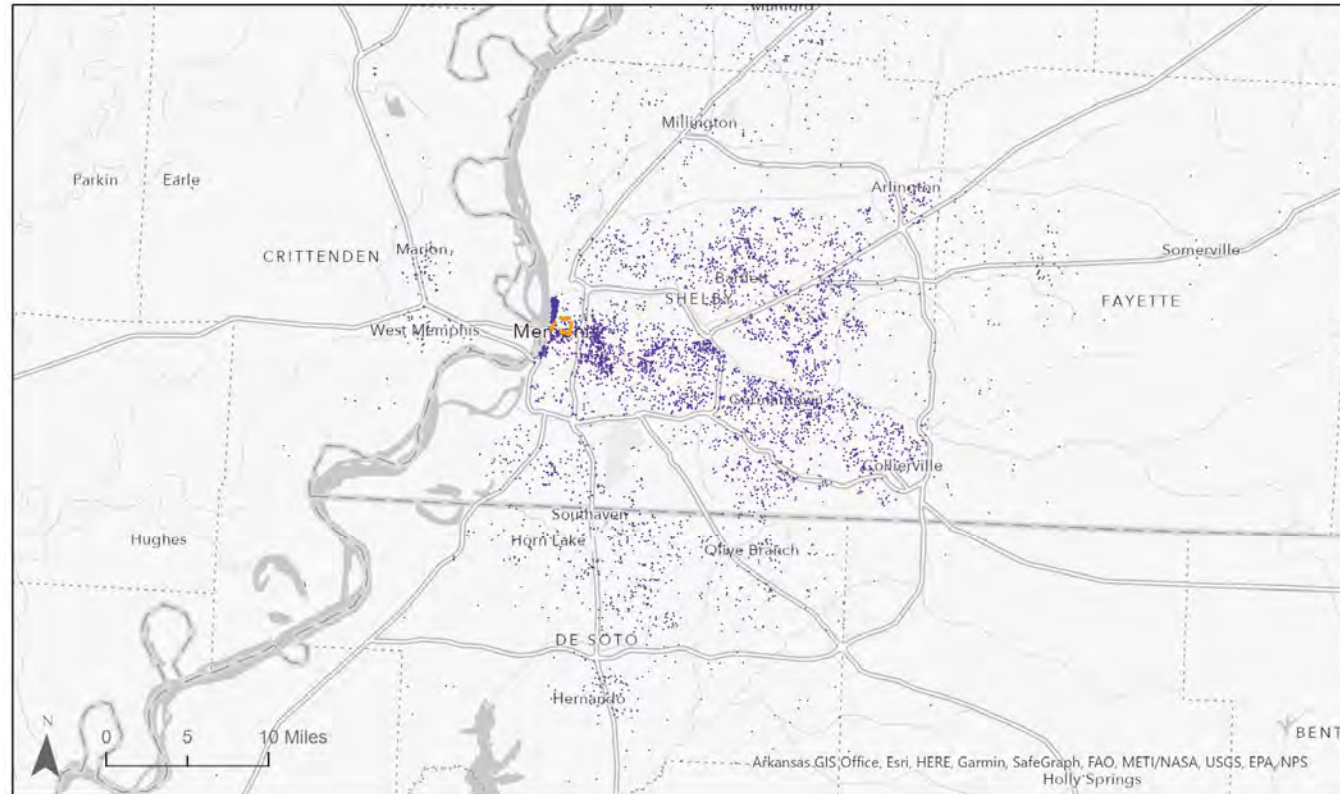
TRAVEL PATTERNS

- Excellent transit connections between Pinch District and downtown.
- ~1,200 daily Main Street Trolley riders.
- ~ 2,800 daily riders on routes serving the Greenlaw community, including ~800 at the William Hudson Transit Center.



WHERE ST. JUDE EMPLOYEES LIVE

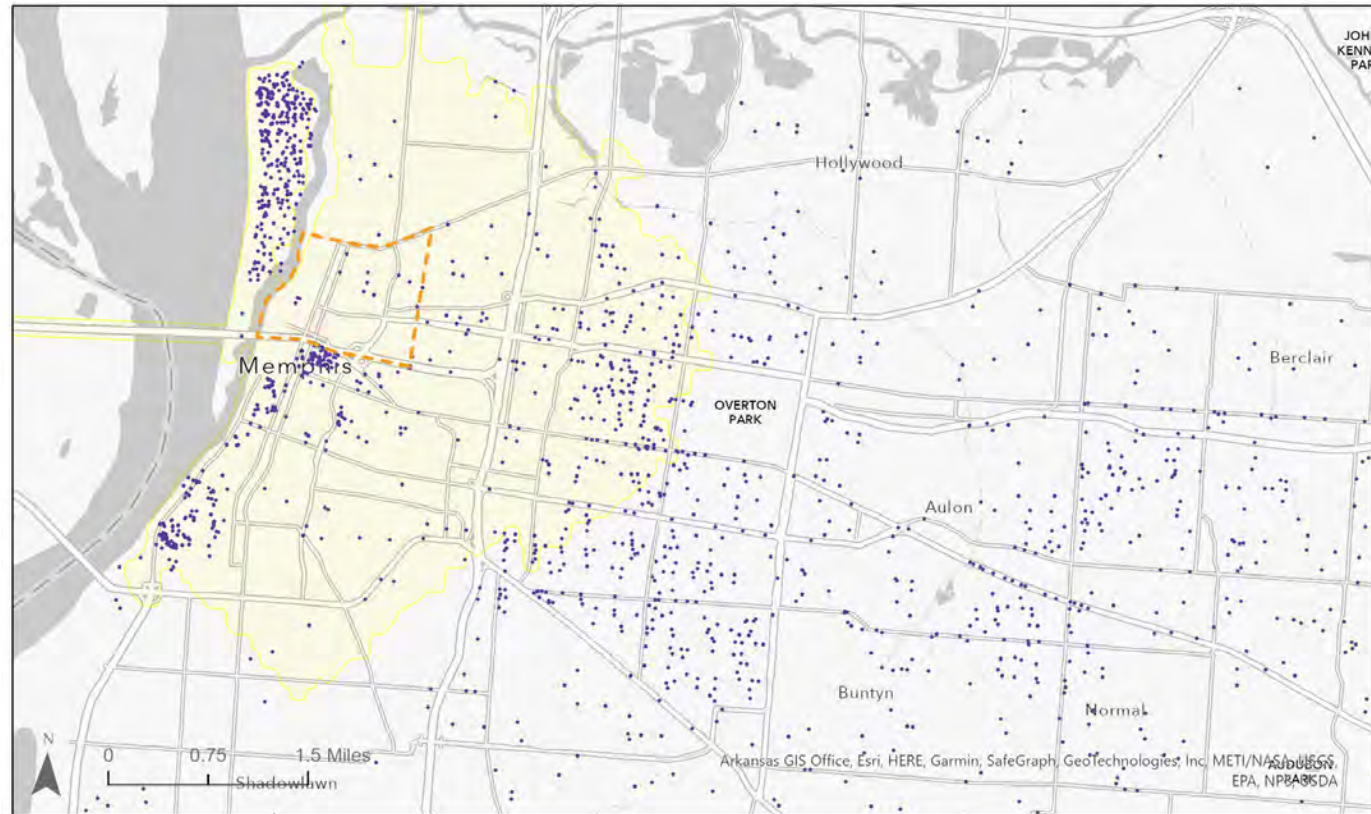
- Workers in medical industry in the study area (largely, but not exclusively St. Jude employees) have an expected distribution of home residential locations throughout the region.
- From a regional perspective, employees are dispersed along regional radial corridors with a typical distribution of travel distances/times.
- Clustering reflects localized choices for both access to work and other quality of life objectives (shopping, recreation, etc.).



Source: US Census Bureau

WHERE ST. JUDE EMPLOYEES LIVE

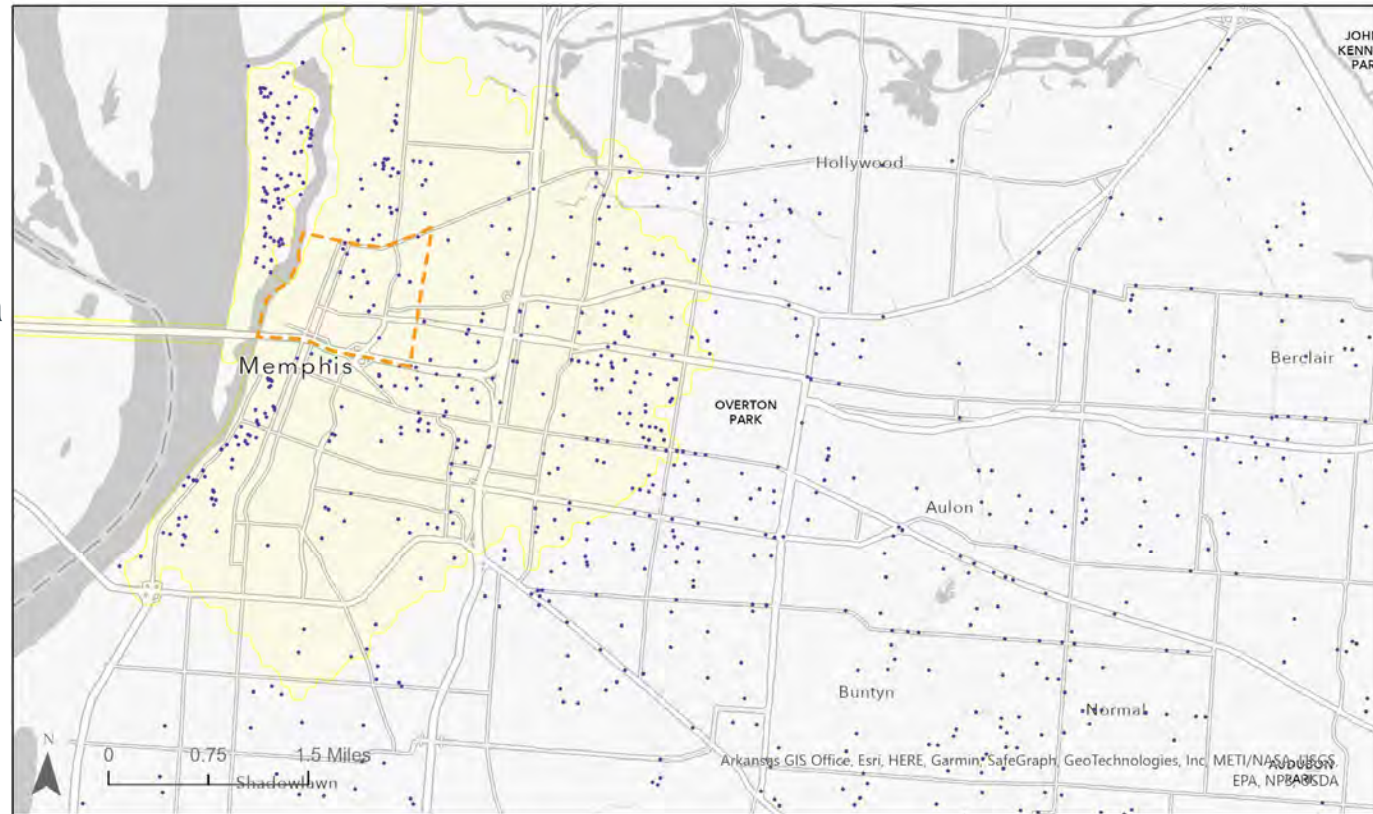
- Workers (largely, but not exclusively St. Jude employees) have an expected distribution of home residential locations throughout the region.
- About a quarter of employees live in the localized travelshed shown in the map at right, with about 14% within a 3-mile bikeable distance from the center of the St. Jude campus shaded in yellow.
- Opportunities may exist for targeted live-where-you-work and “shop local” initiatives.



WHERE ST. JUDE EMPLOYEES USED TO LIVE – TRENDLINE PERSPECTIVE

Contrasting 2002 (earliest data available) with current data:

- Employment at St. Jude has roughly doubled in the past two decades.
- The percentage of employees in a 3-mile biking distance has also increased slightly from 13% to 14%.



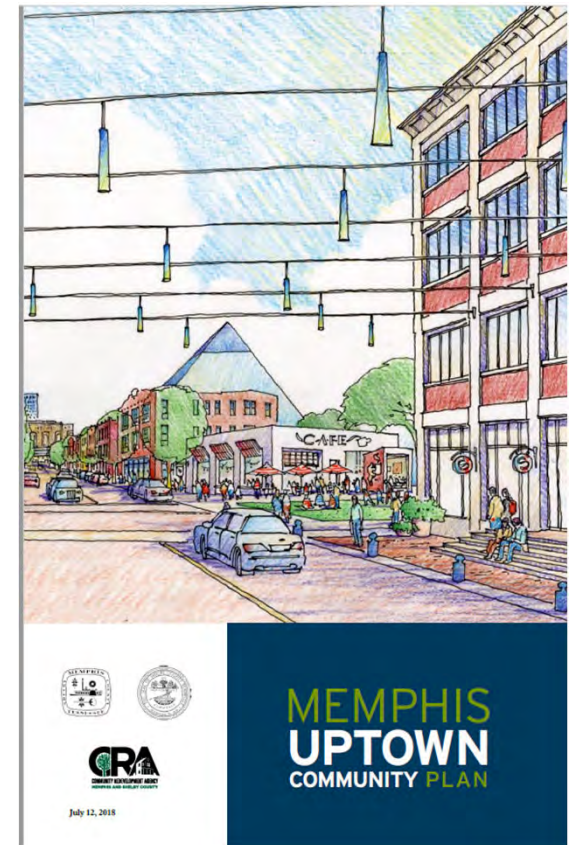
PLANS FOR CHANGE

A. Key guidance in adopted plans

- Memphis Uptown Community Plan (2018)
- Livability 2050 Plan (2019)
- Memphis 3.0
 - Comprehensive Plan (2019)
 - Complete Streets Plan Update (2020)
 - Amendments (2021)

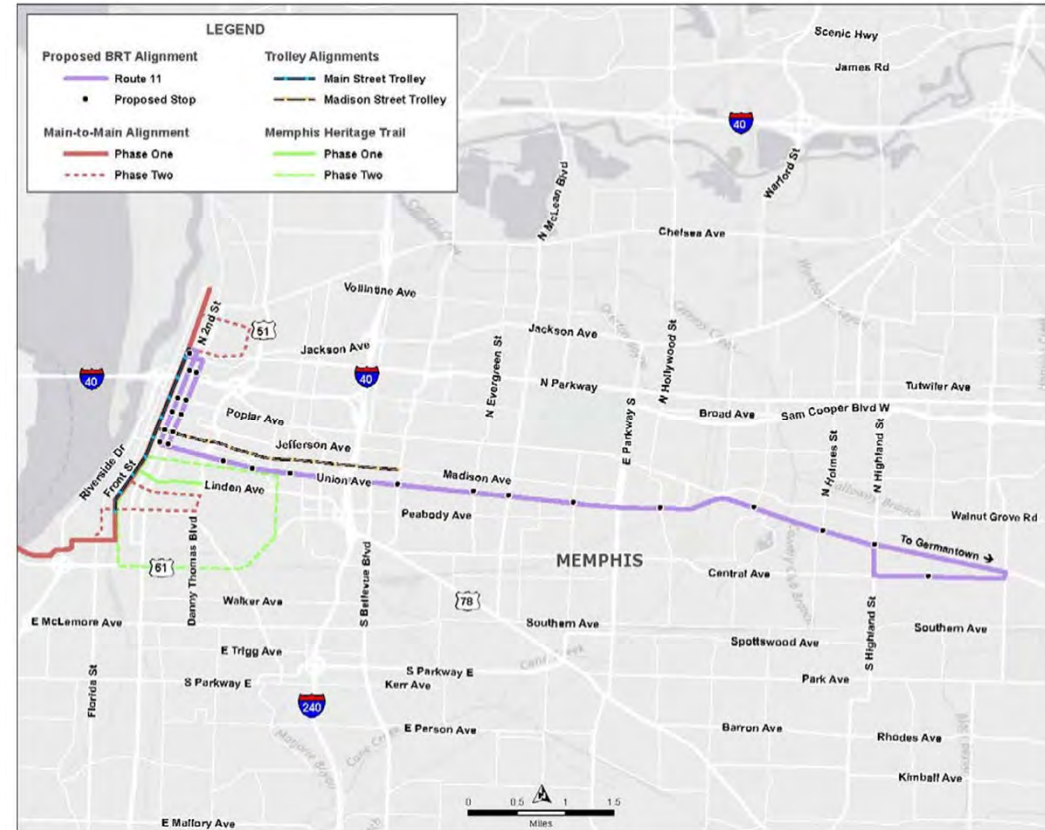
B. Additional Resources

- St. Jude Hospital Strategic Plan FY 22-27
- Memphis Innovation Corridor TOD Plan (2021)
- Notable development sites



MEMPHIS INNOVATION CORRIDOR

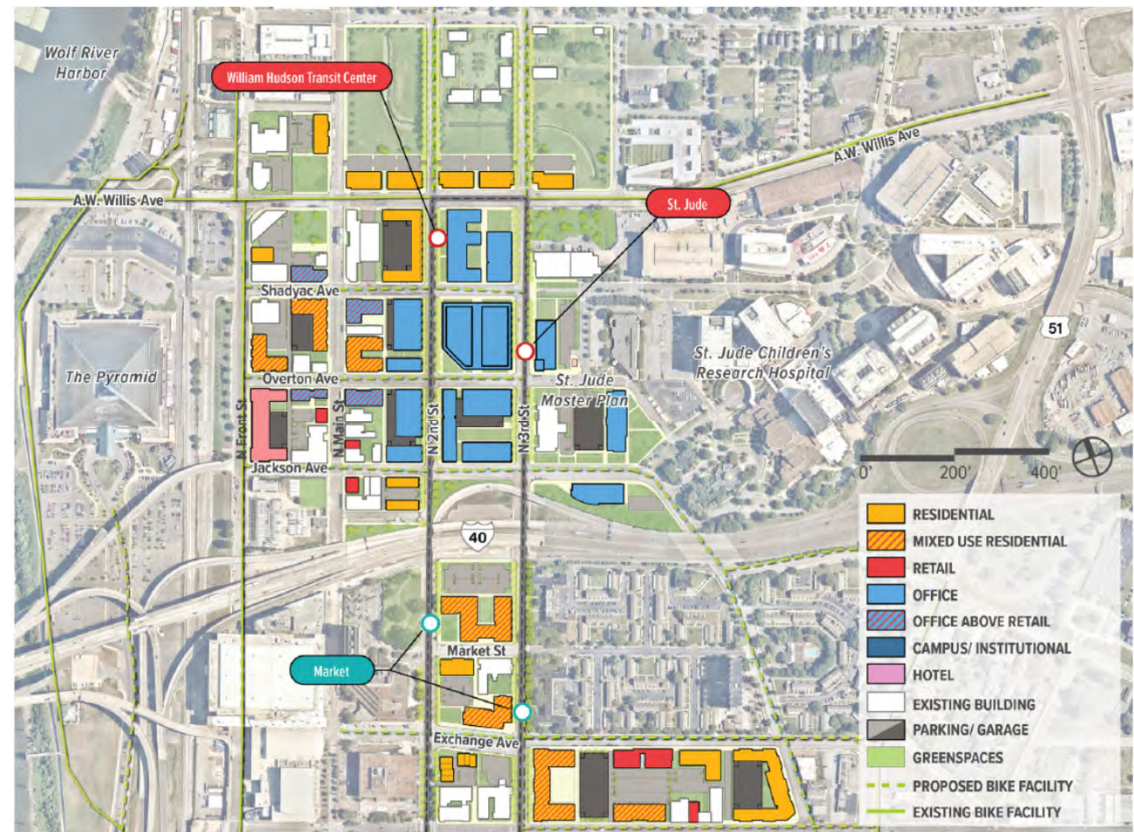
- Key transportation system investment.
- Terminus at William Hudson Transit Center.
- First phase underway with forecast for 5,600 daily riders; with focus on better service for transit patrons and supporting Transit Oriented Development.



MEMPHIS INNOVATION CORRIDOR - TOD PLAN

The Memphis Innovation Corridor Transit-Oriented Development (TOD) plan includes concepts for the William Hudson Transit Center and St. Jude station areas that:

- Includes activating uses along A W Willis Avenue.
- Otherwise retains Gayoso Bayou as open space.
- Suggests a less formal boundary between St. Jude and adjacent communities.



ST. JUDE STRATEGIC PLAN

Phase 2 Objective: Seek compatibility between the St. Jude strategic plan and adopted agency plans.

Consider how a less formal boundary between the hospital and the Pinch District / Uptown communities be mutually beneficial, considering:

- Land uses,
- Facility design / aesthetics,
- Civic / cultural connections,
- Expectations of residents, employees, customers, and other visitors.

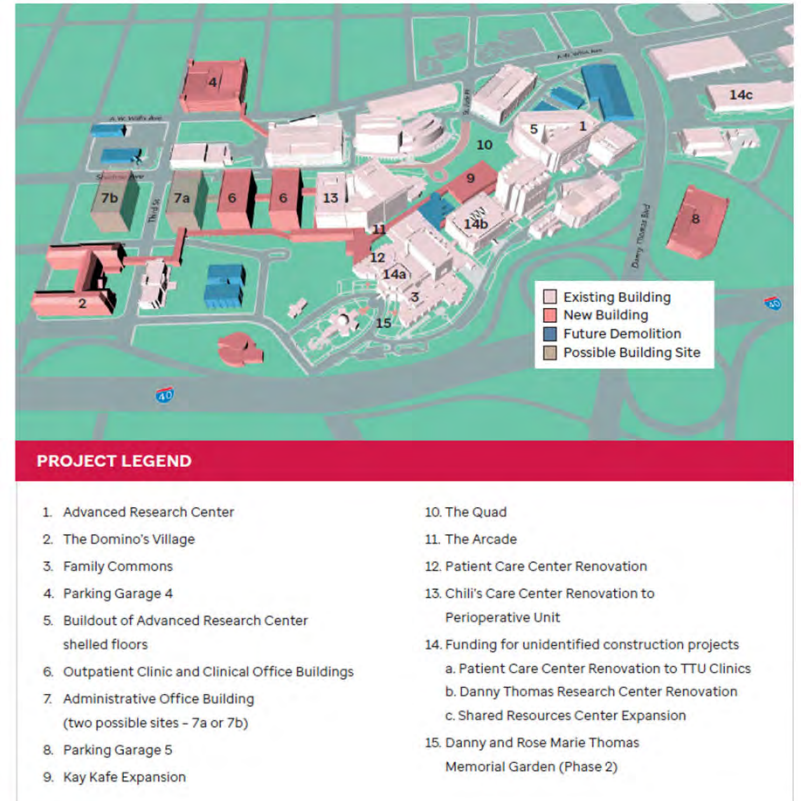


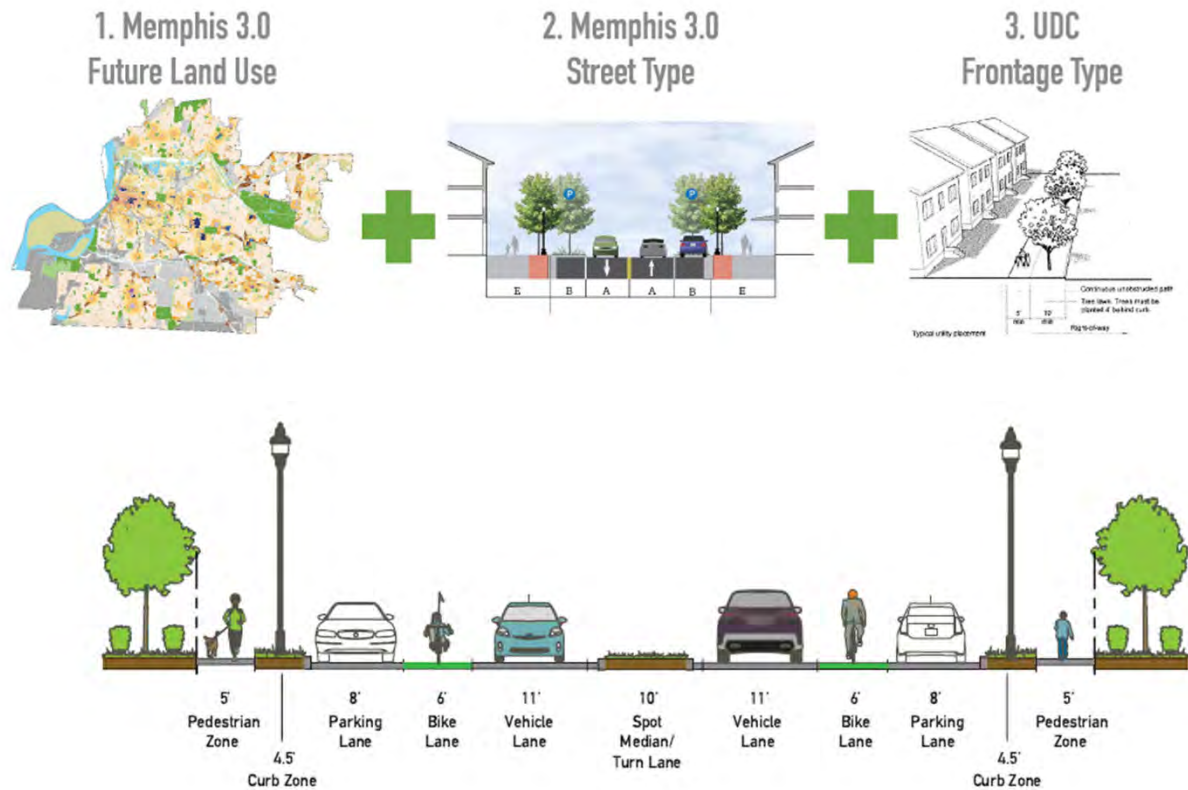
FIGURE 6. FY22-27 Planned project locations on the St. Jude campus

NEAR-TERM EXPECTATIONS: COMPLETE STREETS

The Complete Streets Plan identifies approaches and strategies for more multimodal streets.

The plan recognizes the importance of integrating land use and transportation.

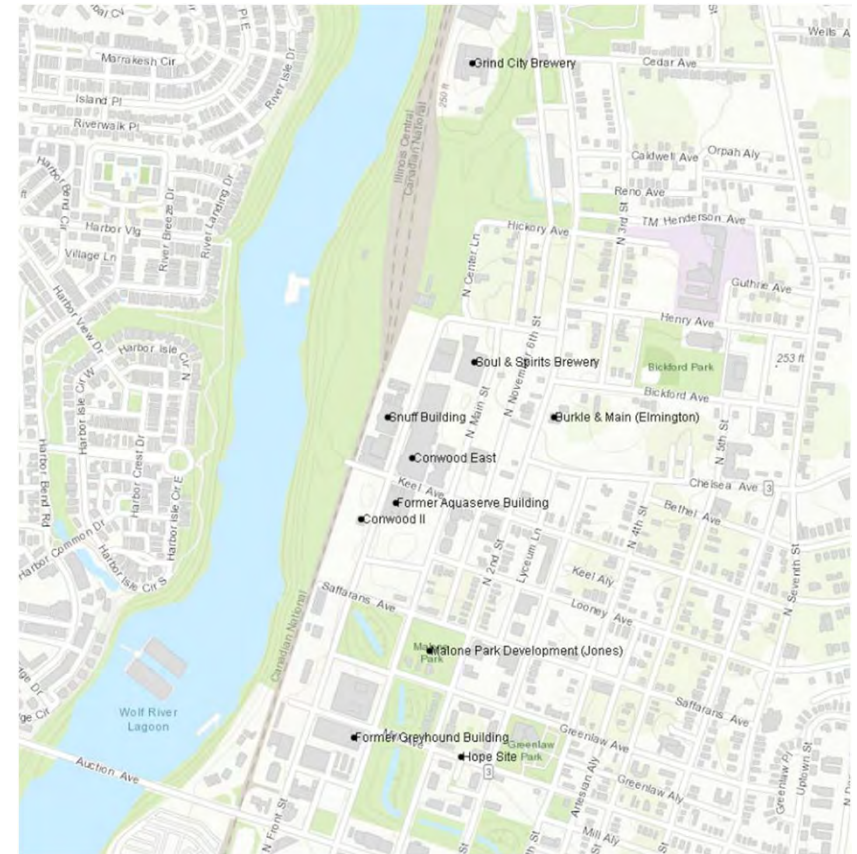
Within the Pinch District and Uptown community, most major streets are identified as “Avenues” with a typical cross-section shown at right.



NEAR-TERM EXPECTATIONS: NOTED DEVELOPMENT SITES

The Pinch District TIF has identified several key development sites.

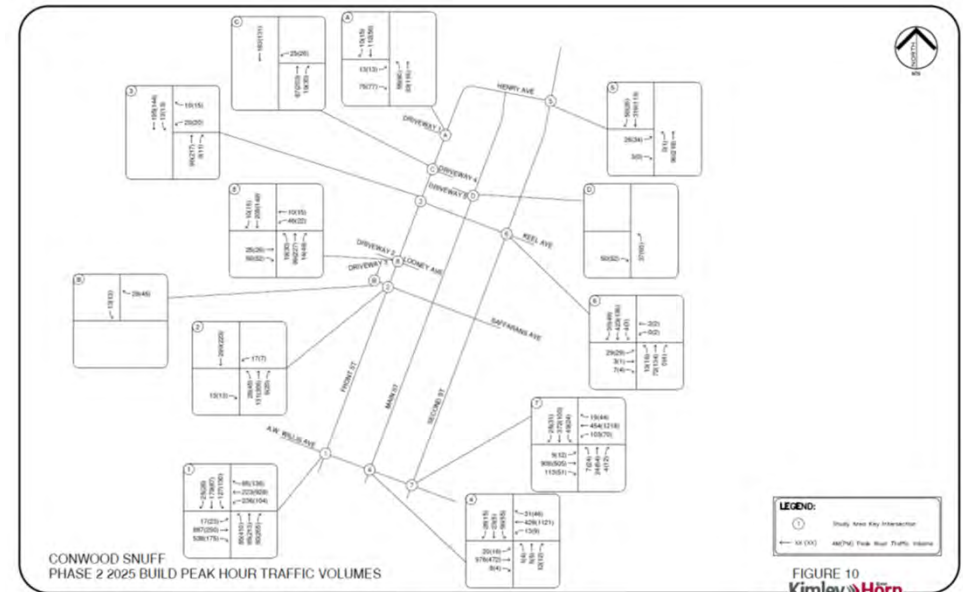
These key development sites comprise about 1,300 housing units and 200K square feet of non-residential space.



NEAR-TERM EXPECTATIONS: LEVELS OF CONGESTION

Conwood Snuff development traffic impact study provides one example of focus on conditions for autos, following currently adopted analysis guidelines:

- Auto Level of Service (LOS) demonstrates room for growth;
 - All intersections at LOS C or better (an indication of congestion-free conditions; LOS E indicates some congestion, but most optimal use of transportation system investments),
 - Signal timing changes only improvements recommended.
- LOS or other evaluation criteria for other modes not evaluated.
- Effects on safety not evaluated.



LONG-RANGE PLAN EXPECTATIONS

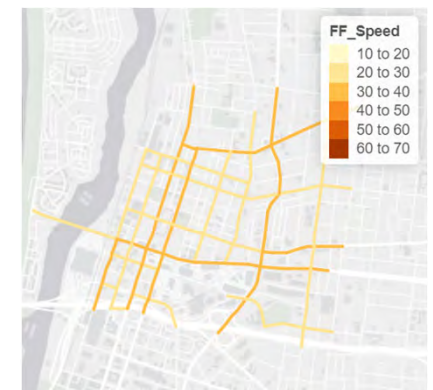
- Within the study area economic forecasts show growth increasing by 35% to 45%:
 - 2,700 residents today increasing to 3,700 by 2050,
 - 9,000 employees today increasing to 12,800 by 2050.
- These growth rates are slightly higher than the 20% to 35% growth regionally, reflecting the strategic location.
- The street grid system will see a similar increase in total vehicle-miles of travel.
- The street system can handle these levels of growth:
 - Currently, traveling a mile by car in the study area takes about 2 minutes with no traffic, and about 40 seconds longer in the afternoon rush hour – this equates to LOS B,
 - In 2050, traveling a mile by car during the afternoon rush hour will take about 3 minutes, or 20 seconds longer than today – this equates to LOS C.

Table 4.2 Socioeconomic Data from Travel Demand Model

Memphis Travel Demand Model Region	Total Employment	Total Households	Total Population
2020	736,971	526,369	1,412,115
2030	849,890	564,872	1,517,389
2040	973,918	606,419	1,631,200
2050	1,109,097	655,469	1,765,774
Percent Change 2020 to 2050	33.55%	19.70%	20.03%

Source Data: ² http://www.memphismpo.org/sites/default/files/public/01%20-%20Memphis_LUM_MDR_03-23-2015.pdf

Memphis MPO Travel Demand Model



EXPECTATIONS CONSIDERING PEER LOCATIONS

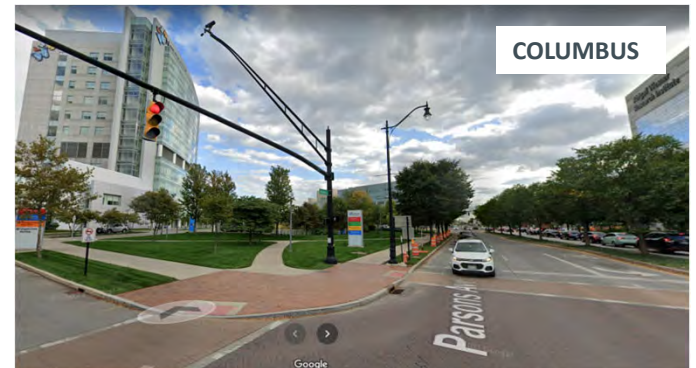
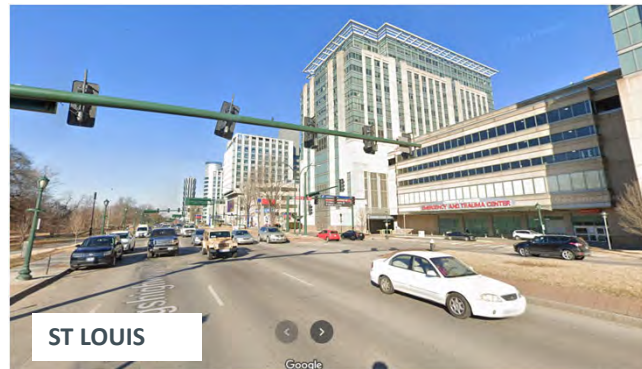
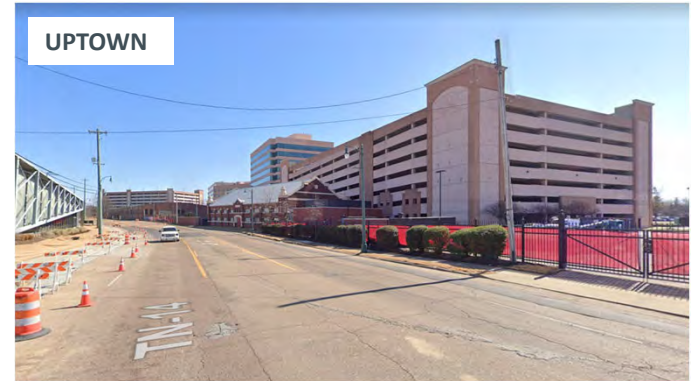
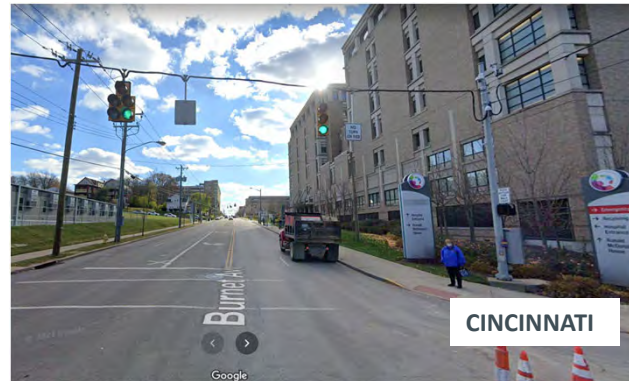
Similarity ranking by average conditions within 1 mile of hospital site

Hospital	Location	US News Pediatric Cancer Ranking**	Population (2020 MSA)	Access to population by transit (45-minute)	Intersection density (per square mile)	EJ Screen Demographic Index (percentile)	Similarity rank (equal weights)
St. Jude Children's Hospital	Memphis, TN	10	1,337,779	46,608	260	85	-
Cincinnati Children's Hospital	Cincinnati, OH	3	2,256,884	78,081	209	82	1
Nationwide Children's Hospital	Columbus, OH	8	2,138,926	86,175	325	66	2
Cleveland Clinic Children's	Cleveland, OH	18	2,088,251	53,175	134	87	3
Children's Mercy	Kansas City, MO	28	2,192,035	51,553	226	67	4
Children's Hospital of Philadelphia*	Philadelphia, PA	1	6,245,051	293,321	270	65	5
St. Louis Children's Hospital	St Louis, MO	25	2,820,253	109,407	127	58	6
Vanderbilt Children's Hospital*	Nashville, TN	21	1,989,519	36,904	444	48	7
Texas Children's Hospital*	Houston, TX	4	7,122,240	141,864	199	48	8

*Recommended to be dropped from future peer analysis comparisons.

**2021 Pediatric Cancer nationwide ranking selected as comparative metric as it is St. Jude's highest scoring specialty in national rankings.

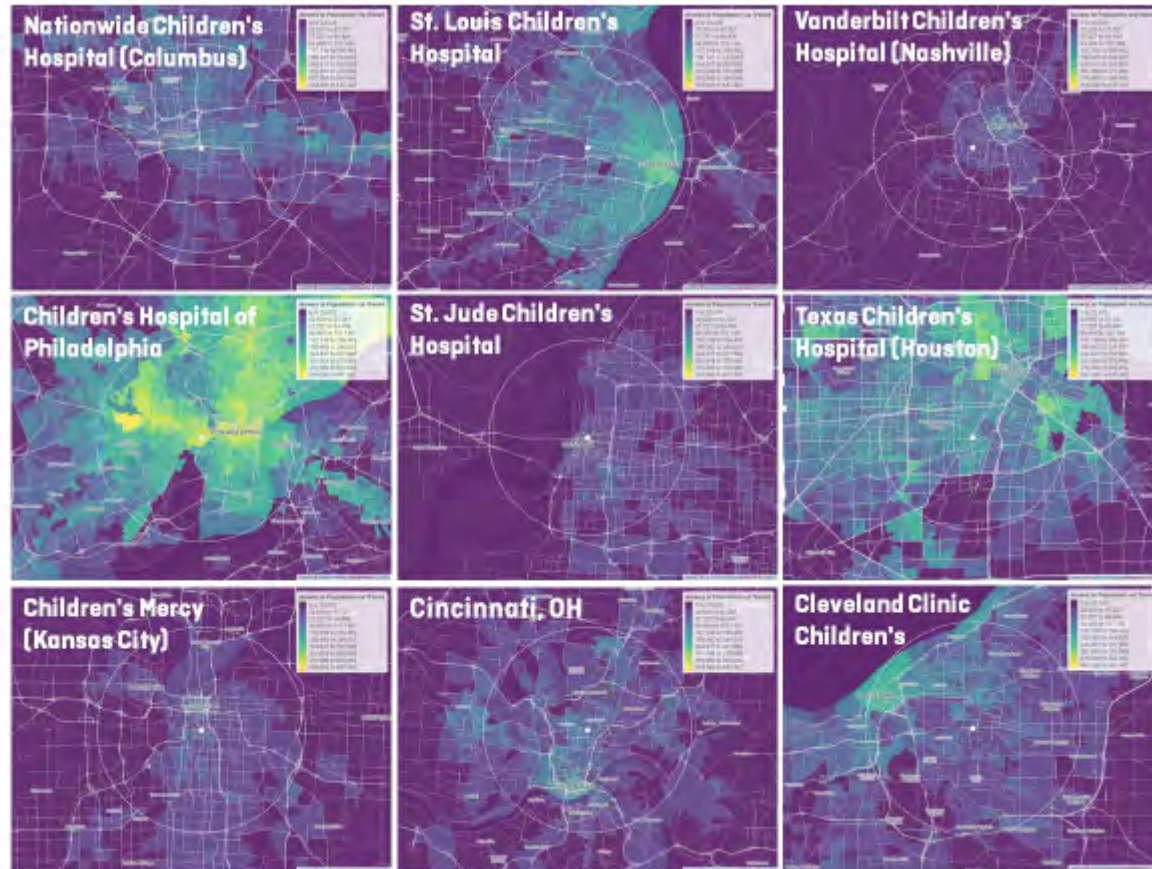
PEER LOCATIONS – SITE POROSITY AT COMMUNITY EDGE



EXPECTATIONS CONSIDERING PEER LOCATIONS

Access to People by Transit

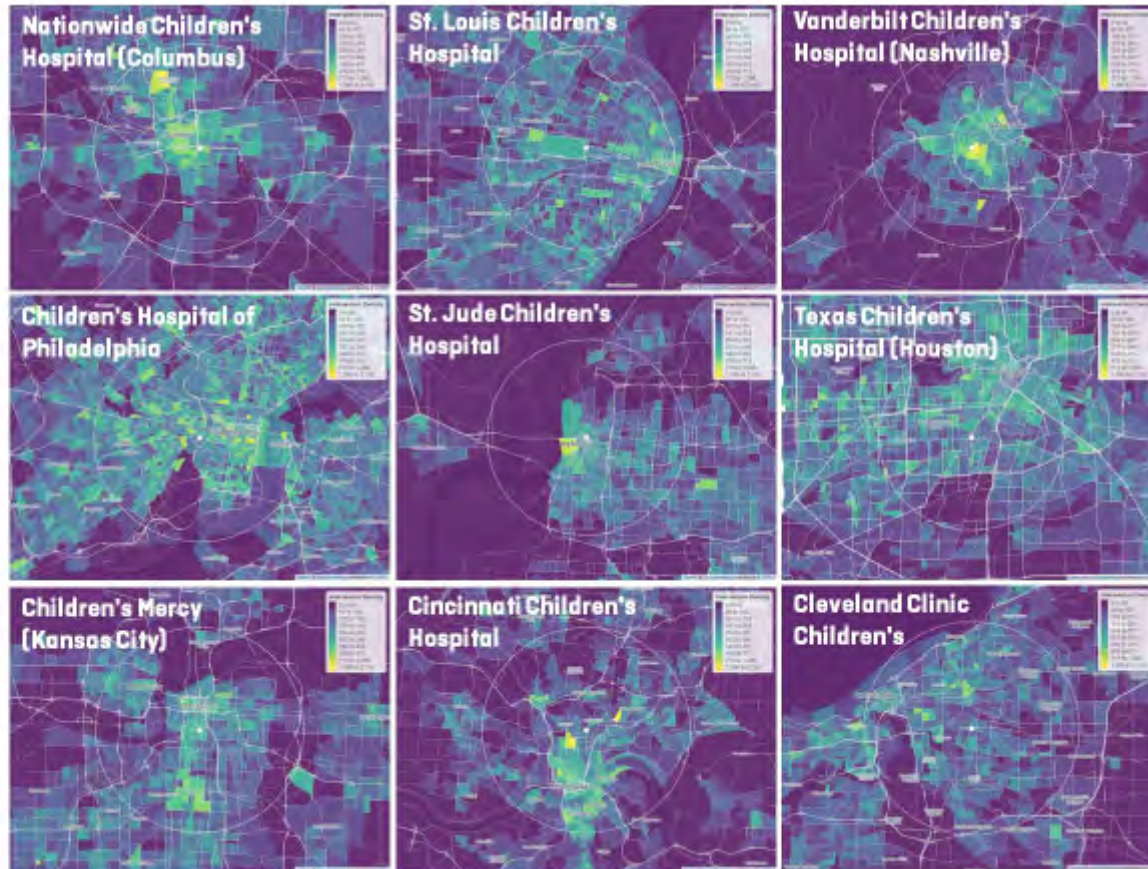
Working age population within 45-minute transit commute with travel time decay.



EXPECTATIONS CONSIDERING PEER LOCATIONS

Intersection Density

Intersection density per mile for all intersection types (EPA SLD 2021)

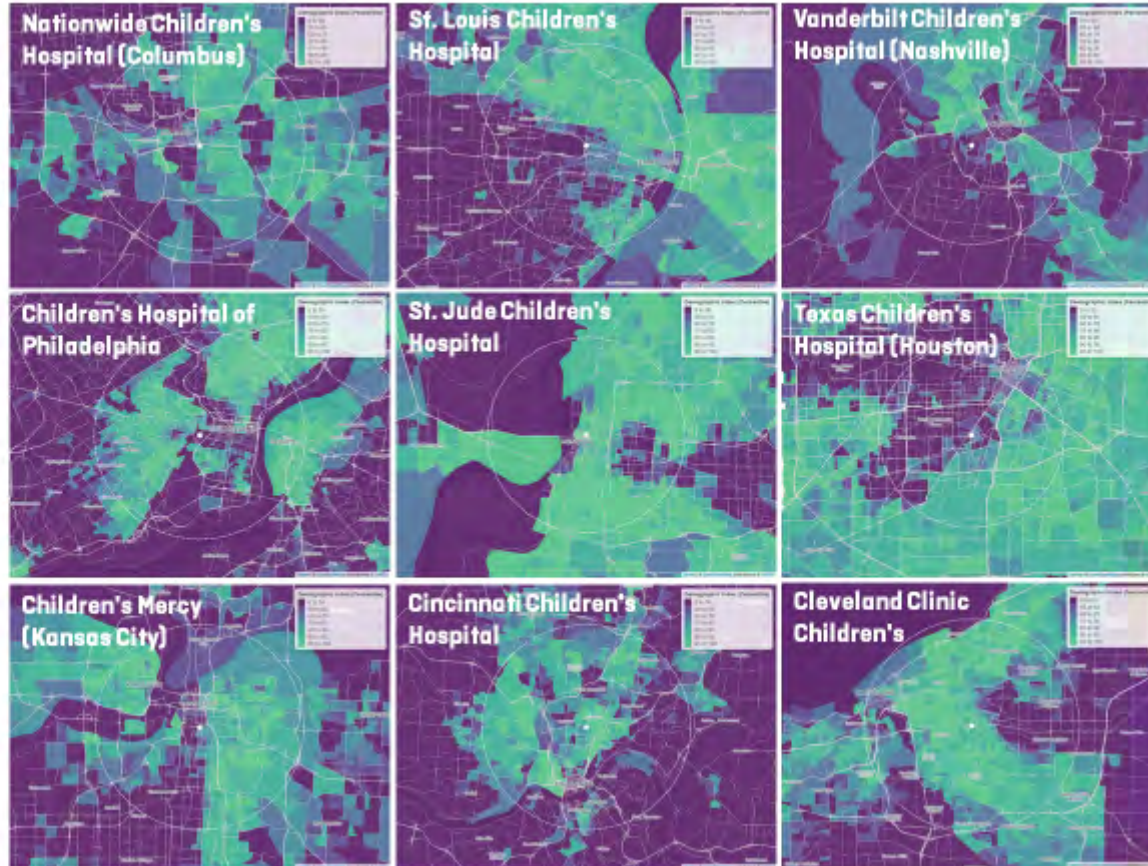


EXPECTATIONS CONSIDERING PEER LOCATIONS

Demographic Index

Demographic Index (EPA EJ Screen 2021) by national percentiles.

Index comprised of low income and minority population portions.



EXPECTATIONS CONSIDERING PEER LOCATIONS

Hospital Site Context

Satellite imagery of 1-mile context around hospital site.



PEER COMMONALITIES

- All peer sites have forms that reflect institutional function:
 - Large building footprints without much street activation,
 - Skybridges for patient/visitor comfort (including to parking),
 - Parking “spillover” into neighborhoods is common....
-yet parkland edges offer a respite from institutional environment to serve as complementary healing spaces
- Edges can be softened by:
 - Landscaping rather than fencing,
 - Building edges close to the street,
 - Windows and doors (even when secondary to function),
 - Ancillary uses (i.e., chapels, housing) adjacent to streets,
 - Linkages (physical, functional, branding) to related supporting services in the community, from food service to eds/meds.



NEXT STEPS

1. Engage with key stakeholders:
 - What resonates with you?
 - What causes concern?
 - What did we miss?
2. Assess detailed elements of implementation for adopted plans:
 - Policy elements,
 - Design elements.
3. Develop updated strategic approach for CRA Plan implementation.

