

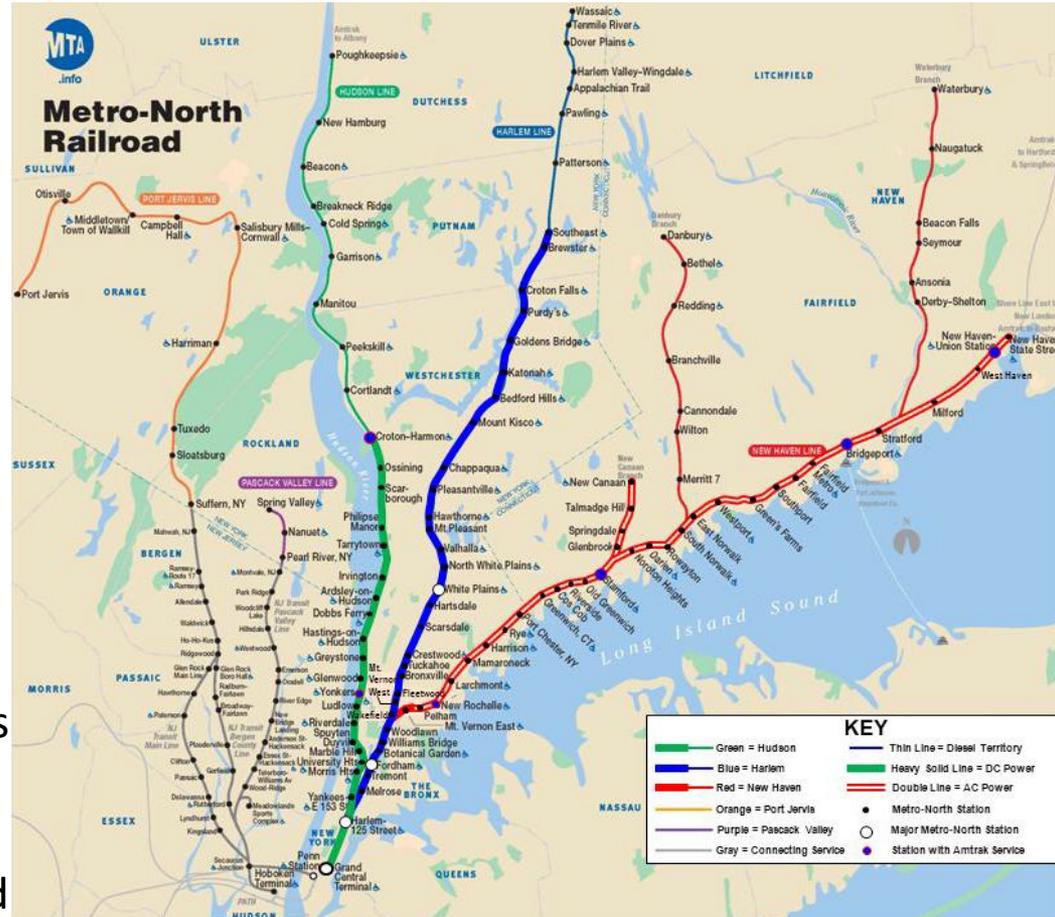
Metro-North Presentation to MAP Forum



June 2022

Metro-North's Network

- Metro-North serves 124 stations in seven counties with 384 route miles and 775 miles of track across a territory of approximately 2,700 square miles
- This territory includes two different power systems which were installed by Metro-North's predecessors the New York Central and the New Haven respectively
 - DC third rail power serves the Harlem and Lower Hudson Lines
 - AC catenary provides power for the New Haven Line and New Canaan Branch
 - Trains from all other sections of the railroad to Grand Central must be hauled by diesel locomotives with third rail power



Metro-North's History

- **Metro-North was founded in 1983 when the MTA assumed control of Conrail's commuter operations – but it represents nearly two centuries of railroading in the New York metropolitan area**
 - Its eight predecessor railroads reach back to the founding in 1832 of the New York and Harlem Railroad and New York and Erie Railroads
 - The New York and Harlem Railroad and the Hudson River Railroad eventually merged into the New York Central System
 - These are our Harlem and Hudson Lines, respectively
 - The New York and Erie Railroad and the New Jersey and New York Railroads became the Erie Lackawanna, and are our Port Jervis and Pascack Valley Lines
 - The New York and New Haven, New Canaan, Danbury and Norwalk, and Naugatuck Railroads merged one by one into the New York, New Haven and Hartford Railroad which extended east to Boston and crossed the Hudson at Poughkeepsie
 - The New Haven Main Line from Woodlawn to New Haven and the three branches are Metro-North's portion of this network
 - **The Waterbury Branch is the passenger section of the Naugatuck Railroad from Waterbury south to Devon**



Service Growth since 1983

- Supported by a series of multi-year capital programs to bring the railroad into a state of good repair after decades of disinvestment by its predecessors, Metro-North has been able to maximize its ability to improve service throughout the day and the week through fleet modernization, cyclical track programs, and major investments in Grand Central Terminal and our maintenance shops at Harmon and New Haven
- These capital programs also included major projects to improve capacity such as the Upper Harlem Electrification, the Wassaic Extension and the Fleetwood-Crestwood Third Track
- By 2019 total service across the week had increased by almost 50%, driven by increases in off-peak and weekend service to make better use throughout the weekday and over the weekend of equipment, crews, and Metro-North's improved and expanded infrastructure and fleets

	1983	2019	% Change
<i>Service Increase by Line</i>			
Hudson Line	125	175	40%
Harlem Line	188	232	23%
New Haven Line	212	299	41%
Port Jervis	10	27	170%
Pascack Valley	14	37	164%
<i>Service Increase by time period</i>			
<i>AM Peak</i>	131	160	22%
<i>PM Peak</i>	104	151	45%
<i>AM Reverse Peak</i>	37	53	43%
<i>Off-Peak</i>	278	406	46%
Weekday Total	549	770	40%
Weekend Total	517	966	87%
WEEKLY TOTAL	3,262	4,816	48%

Metro-North Railroad



Ridership growth since 1983

Overall ridership outpaced this substantial growth in service

- While service grew approximately 50%, annual ridership grew over 80%, with significant growth outside the traditional NYC commutation market due to improved off-peak and reverse-peak service

- Frequency builds ridership!

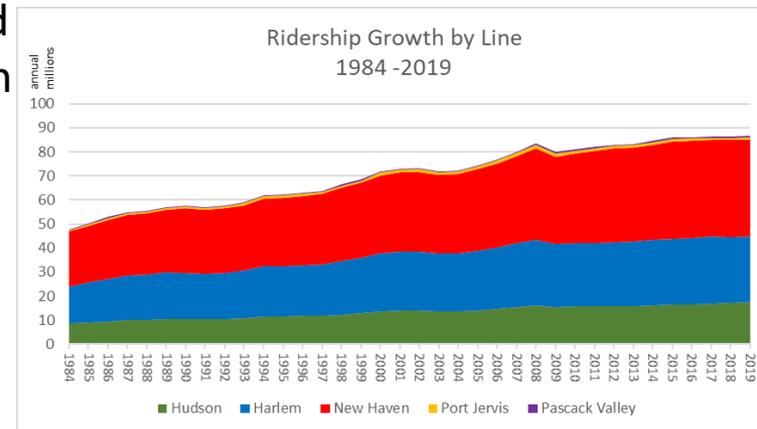
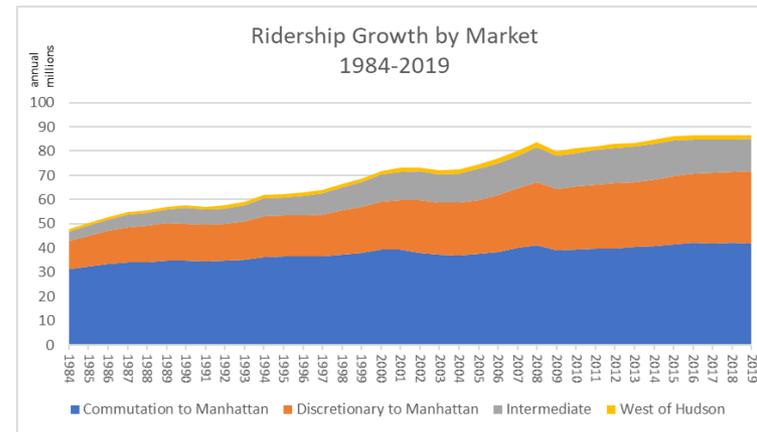
- The mature commutation market grew 34%, but discretionary ridership to and from NYC – occasional commuters and day-trippers – more than doubled

- The reverse-peak market traveling away from NYC grew to around 10% of peak ridership

- Intermediate ridership – Harlem, Hudson, and New Haven Line trips not touching Manhattan – more than tripled

- By 2019 the traditional commutation market – while still growing – represented less than half of total weekday ridership

- The New Haven Line has consistently represented just under half of Metro-North's total ridership and its growth



Metro-North Railroad



Metro-North's Role in the Region

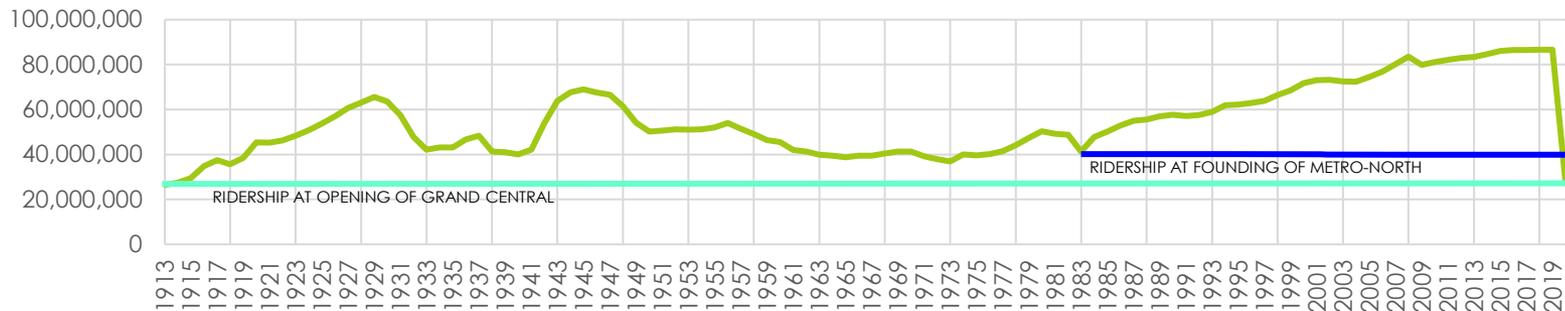
- On an average weekday in 2019, approximately 94,000 riders boarded AM peak Metro-North trains headed towards New York City
 - This includes riders headed to intermediate destinations such as Stamford and White Plains as well as riders bound for New York City
 - Another 54,000 boarded inbound trains during the rest of the day
 - This includes riders on reverse peak trains who headed outbound from New York City and other origins during the AM peak
 - This represents almost 150,000 riders who did not drive to work, did not worsen traffic, and did not contribute to global warming
- To put this in perspective, Metro-North's approximate share in 2019 of the transportation market to the Manhattan Central Business District (CBD) was as follows
 - 86% of all commuters = six out of seven trips
 - 72% of all discretionary weekday travel = three out of four trips
 - 67% of all weekend travel = two out of three trips

Without Metro-North, automobile and other travel to the CBD would have overwhelmed the regional transportation network and brought I-95 to a standstill



The Impact of COVID

- The onset of COVID in March 2020 turned off the power to this long period of growth, with ridership plummeting to 5% of normal in April 2020
- Annual ridership for 2020 matched ridership when Grand Central Terminal was opened over a century ago

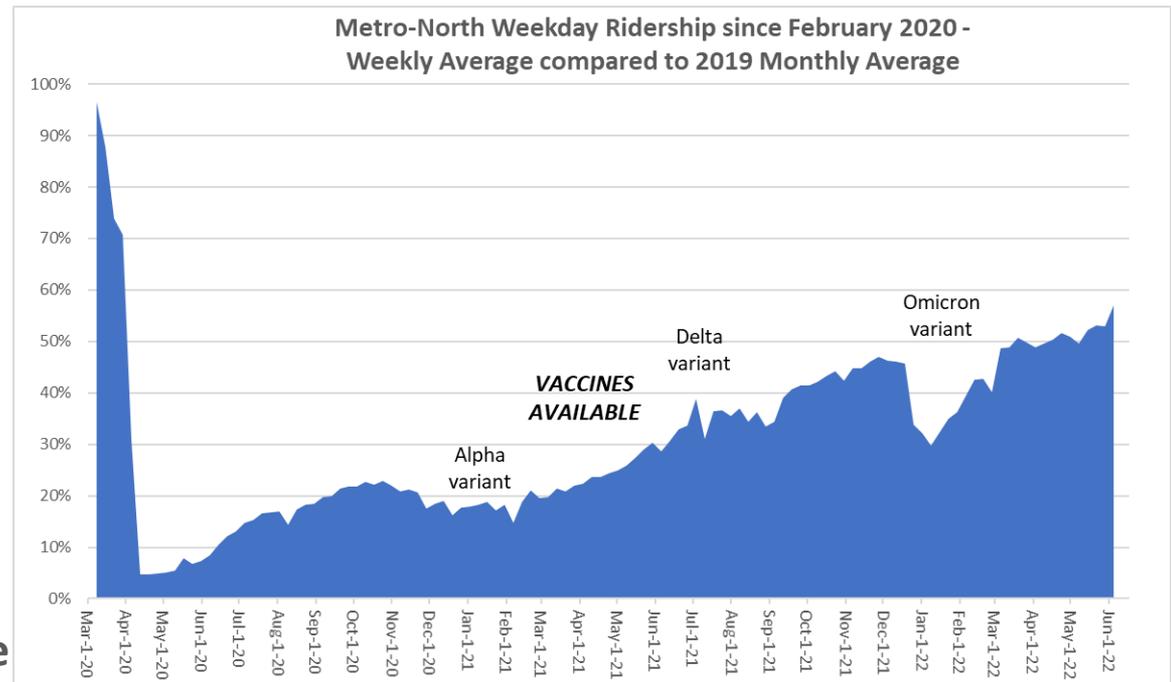


- Metro-North had to react quickly to a completely new set of requirements
 - Service was cut drastically – first to weekend service, then hourly service – in order to minimize financial losses, but hourly service had to be maintained to serve essential workers, avoiding the further cuts taken by some other agencies
 - An aggressive car-cleaning and disinfection program was initiated
 - At the same time, we tried wherever possible to make sure that trains had enough seating to provide space between customers with a target of 60% loading
 - Metro-North quickly developed a system which would use the weight of the train to calculate how full it was, and then transmit that information to our TrainTime app to show customers which cars were emptiest



Recovery from COVID

- ▣ Ridership hovered around 20% for the first year of the pandemic, with the traditional rush hour peak-of-the-peak crowding largely wiped away
 - ▣ Essential workers were the core of this steady base of our ridership
 - ▣ Markets such as the Waterbury Branch which had a larger share of this market did not see the substantial declines in ridership experienced elsewhere on the railroad
- ▣ Ridership recovery from COVID did not really begin in earnest until vaccines became readily available in the spring of 2021 and companies began to require at least partial return to their offices
 - ▣ **Although steady growth has been repeatedly hobbled by new variants, when each variant fades, ridership appears to come back stronger**



Current Status

- **At the end of March, Metro-North introduced an “89% schedule”**
 - This schedule provides almost all the service of the 2019 timetable
 - Only a handful of peak trains from 2019 remain to be reinstated
- Ridership has risen to over 50% of pre-pandemic levels in the past several months as Omicron faded, and has risen in recent weeks to approximately 55%
 - There may be other factors besides service pushing our ridership higher, in tandem with or as a result of corporate return-to-work policies
 - Higher gas prices typically drive higher ridership as motorists do the math
 - Coinciding with the decline of the Omicron variant, traffic at the MTA Bridges now appears to be equaling or exceeding pre-COVID volumes
- We have reinstated peak fares on non-commutation tickets as normal commuting patterns have begun to reassert themselves, but now also offer a discounted 20-trip ticket aimed specifically at hybrid workers
- Despite much discussion in the press early in the pandemic of the “end of traditional commuting”, we are seeing traditional patterns re-emerging
 - The 7:30 to 9:00 peak-of-the-peak and Tuesday-Thursday peak-of-the-week curves have reappeared, with hybrid workers who use the 20-trip tickets clearly working at home on Fridays



What's Next

- Metro-North and CTDOT are always reviewing the schedule for potential improvements
- Ridership recovery over the longer term is harder to gauge, and we will be eager to see just how close we get to pre-pandemic levels in the coming years
 - We will need to continue to make sure our service and infrastructure plans maintain the flexibility we have achieved thus far in the pandemic
- Further down the line, the MTA has contracted the final design and construction of the Penn Station Access project
 - This project furthers Metro-North's work to make the most of the regional infrastructure by constructing four new stations in the East Bronx on the Hell Gate Line to Penn Station
 - These new stations will allow Metro-North to significantly improve access from this historically underserved portion of the city to Manhattan and the significant job markets along the New Haven Line in Westchester and Fairfield Counties
 - The project is expected to begin service in 2027
- **As it happens, the Naugatuck Valley Council of Governments also has some ideas ...**





DataHaven

The Twenty Fifth Year

DataHaven 25th Anniversary Event (Photo: Harold Shapiro)



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Email: info@ctdatahaven.org

Tel: 203-500-7059

Website: ctdatahaven.org

 [ctdata](https://www.instagram.com/ctdata)

 [ctdata](https://twitter.com/ctdata)

 [connecticutdata](https://www.facebook.com/connecticutdata)



About DataHaven

- Non-profit with a 25-year history of public service to Connecticut
- Mission is to empower people to create thriving communities by collecting and ensuring access to data on well-being, equity, and quality of life
- Free technical assistance to 200 agencies per year on use of federal, state, and local data
- DataHaven is a formal affiliate of the National Neighborhood Indicators Partnership of the Urban Institute (Washington, DC)



**NATIONAL NEIGHBORHOOD
INDICATORS PARTNERSHIP**

Measuring Our Impact

In 2017-19, DataHaven is collaborating with **149** invested partners (Invested partners in 2008-10: 25)

“The Fairfield County Community Wellbeing Index 2016 has helped to identify and develop priorities for collective action to build a stronger, healthier, and more equitable Fairfield County.”
Juanita T. James
 President & CEO
 Fairfield County’s Community Foundation

“DataHaven and the Institution for Social and Policy Studies share the same DNA; we’re proud to support a sibling institution that defines what it means to deploy social science analysis for the common good.”
Jacob Hacker, PhD
 Institution for Social and Policy Studies
 Yale University

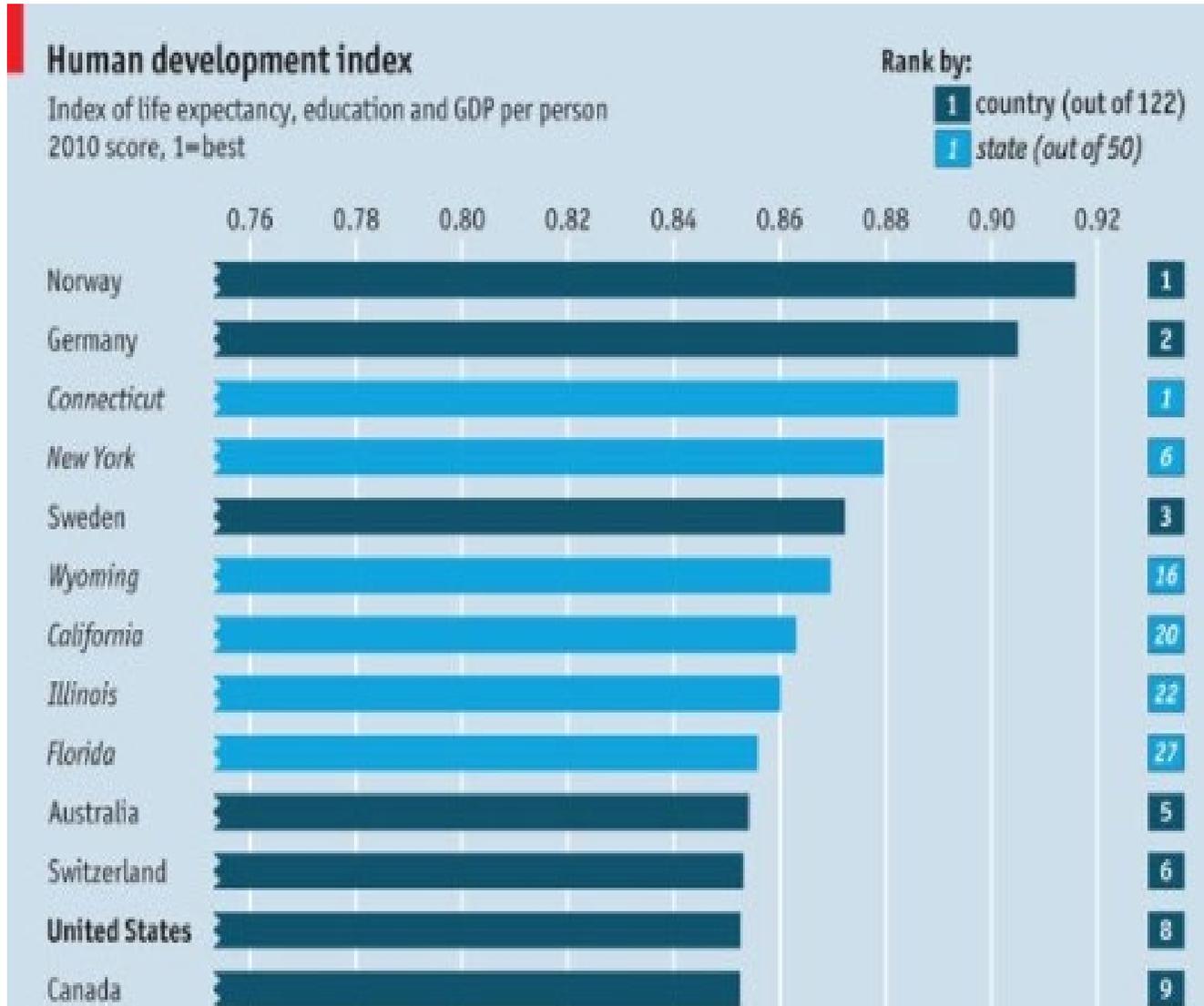
“I’ve had the great pleasure of working with Mark and DataHaven for the last five years—working to prepare our 2016 Valley Community Index and now moving on to the 2019 report. We’ve had rave reviews because of the work that DataHaven has done with us.”
Sharon Closius
 President & CEO
 Valley Community Foundation

“Having access to DataHaven is invaluable. They provide comprehensive analysis of public and self-collected data, which supports our ability to make decisions that best serve the community.”
Merle Berke-Schlessel, Esq.
 President & CEO
 United Way of Coastal Fairfield County

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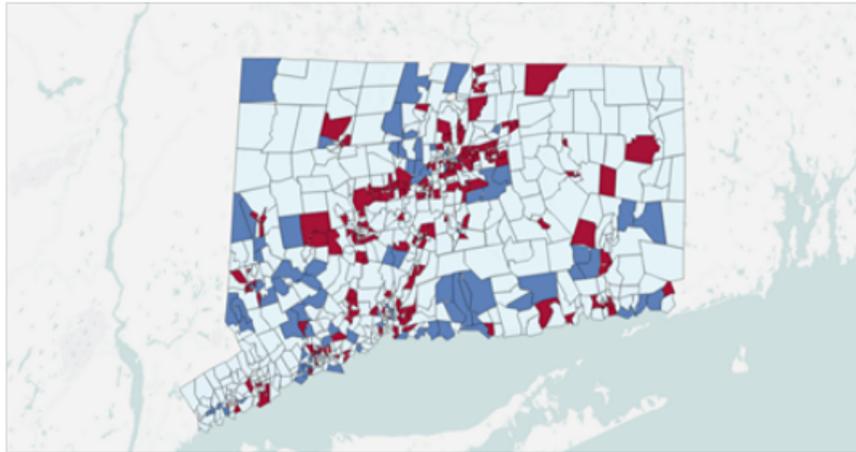
Context of the COVID-19 Pandemic



Human Development Index (The Economist, 2010)



Read our new article and explore the map of disappearing middle class neighborhoods since 1980, posted in today's Connecticut Mirror:
<http://trendct.org/.../in-last-35-years-a-significant-drop-i.../>



In last 35 years, a significant drop in middle-income neighborhoods

A new analysis from DataHaven shows that from 1980 to 2013, the percentage of Connecticut residents living in neighborhoods of concentrated wealth or poverty...

TRENDCT.ORG

63,704 people reached

Like Comment Share

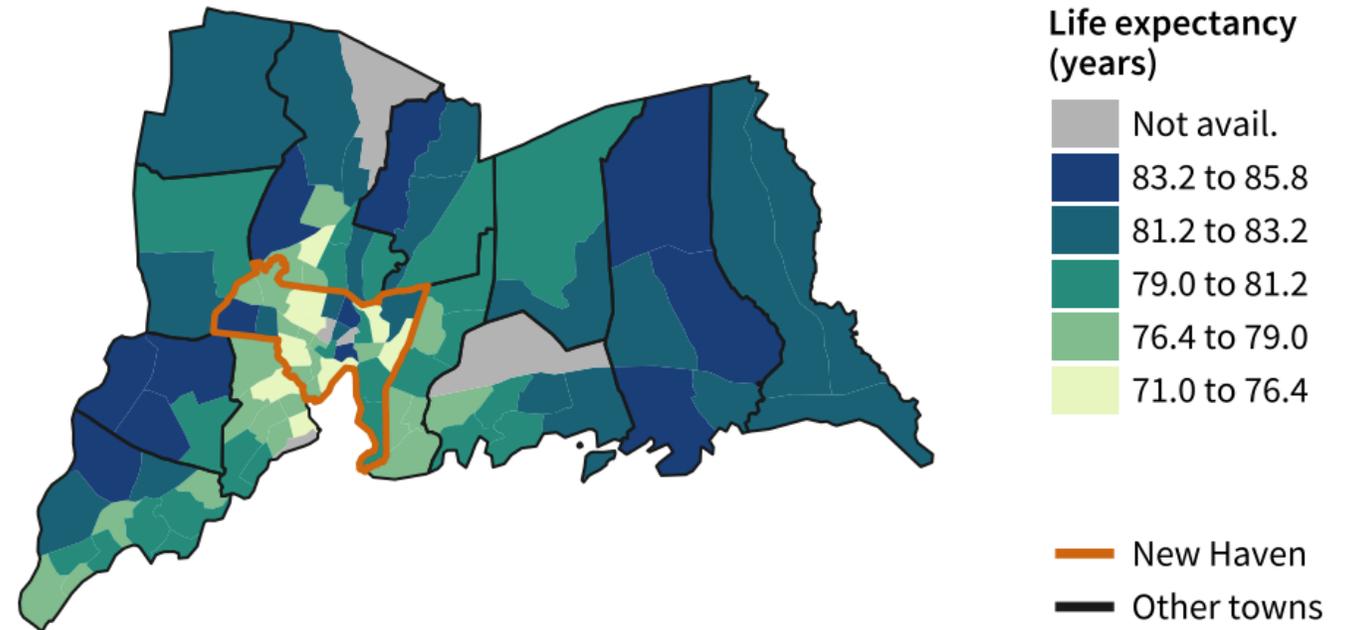
378

Chronological

234 Shares

88 Comments

FIGURE 14: LIFE EXPECTANCY, GREATER NEW HAVEN BY CENSUS TRACT, 2015



New Haven Town Equity Report (2021), ctdatahaven.org



Context of the COVID-19 Pandemic

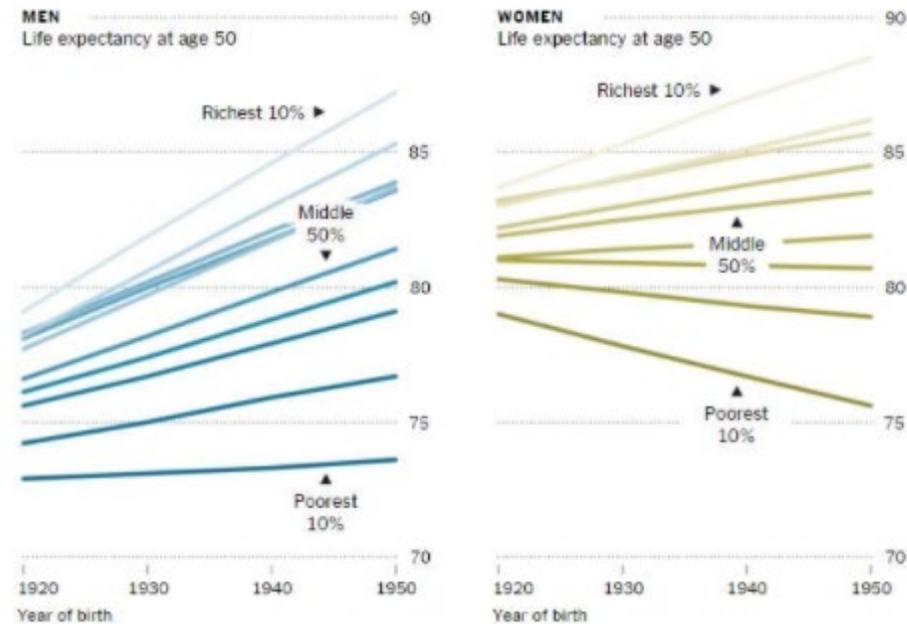


Mark Abraham @urbandata · 12 Feb 2016

Gap in **life expectancy** between US rich & poor has more than doubled: [nytimes.com/2016/02/13/hea...](https://www.nytimes.com/2016/02/13/health/inequality.html) #inequality #phealth

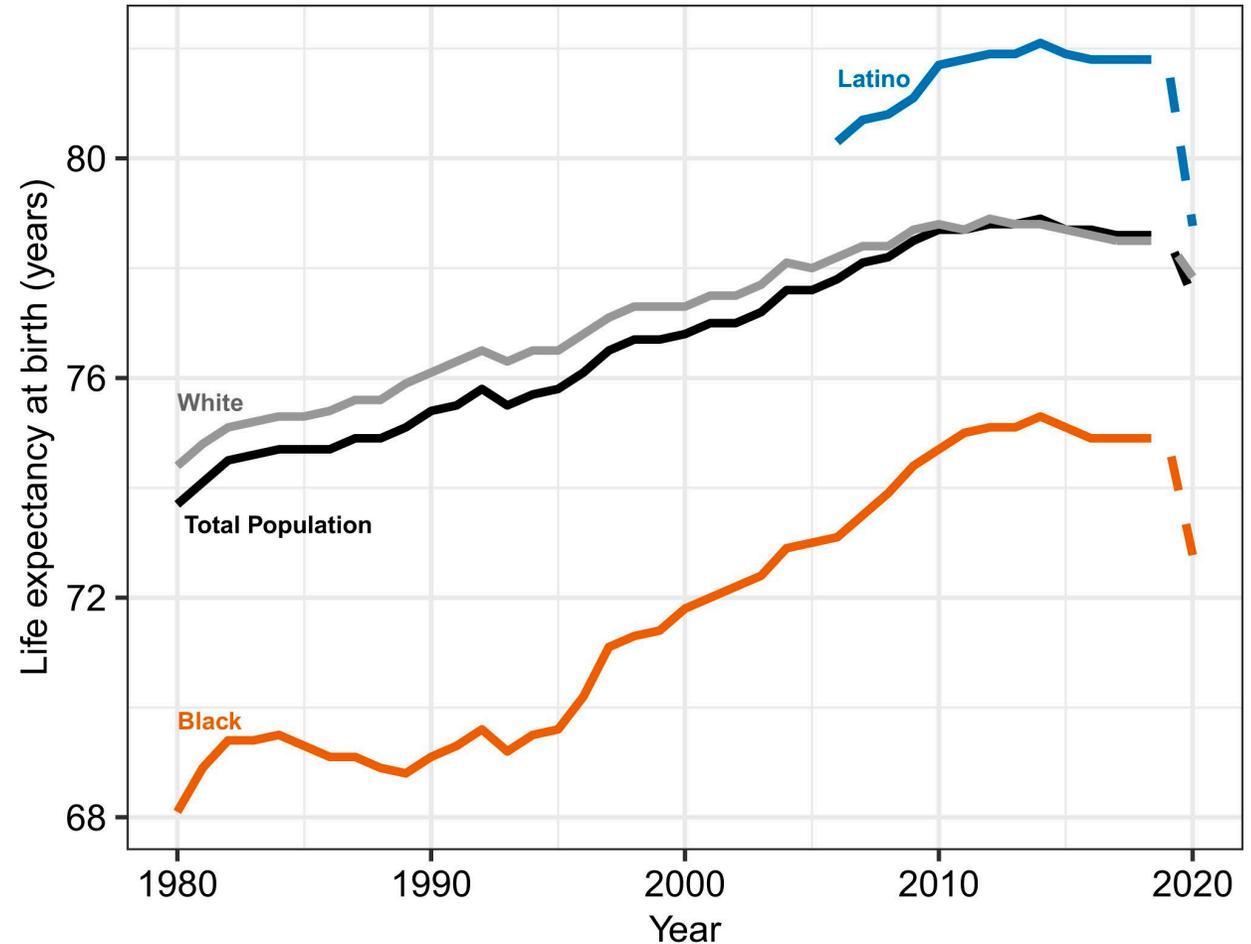
An Expanding Longevity Gap

Wealthier Americans tend to live longer than poorer Americans. Despite advances in medicine and education, the difference in life span between the richest and the poorest has more than doubled since the 1970s.



Sources: Brookings Institution; U. of Michigan Health and Retirement Study
By The New York Times

6 204 103



— Total Population — Latino — White — Black

— Observed - - - Projected

Context of the COVID-19 Pandemic

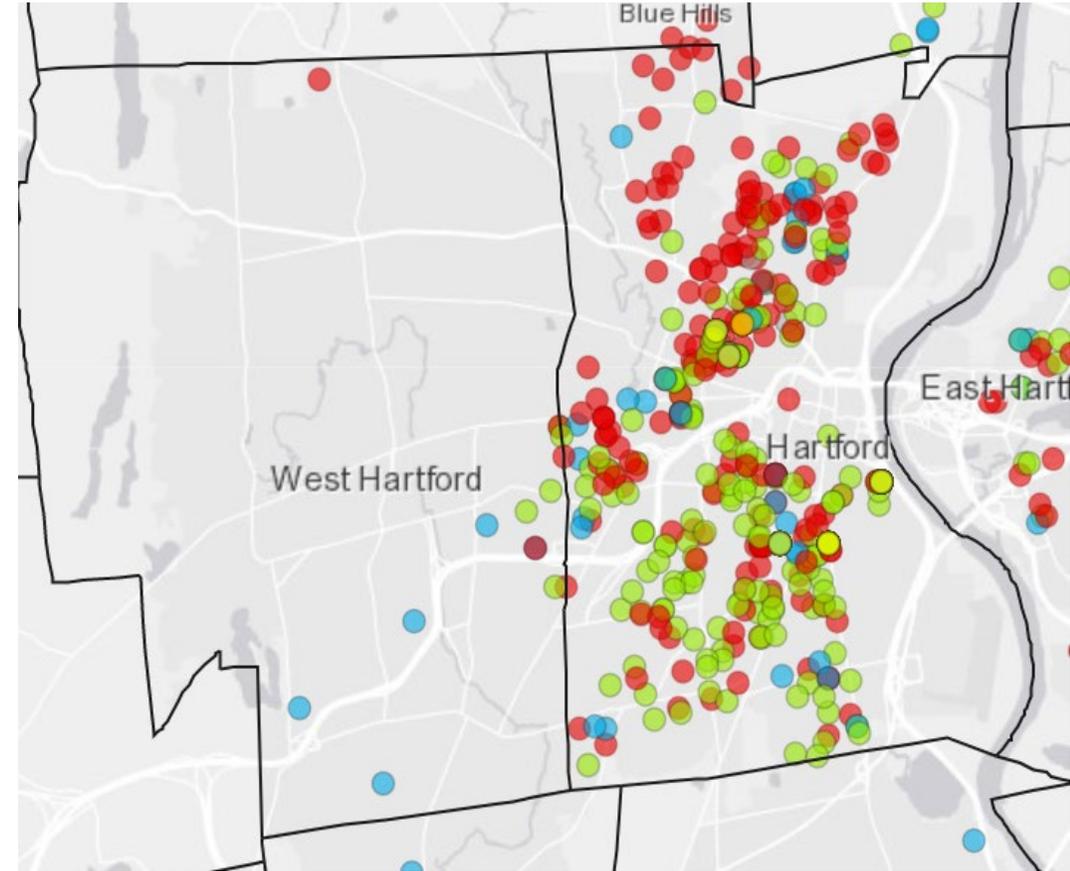
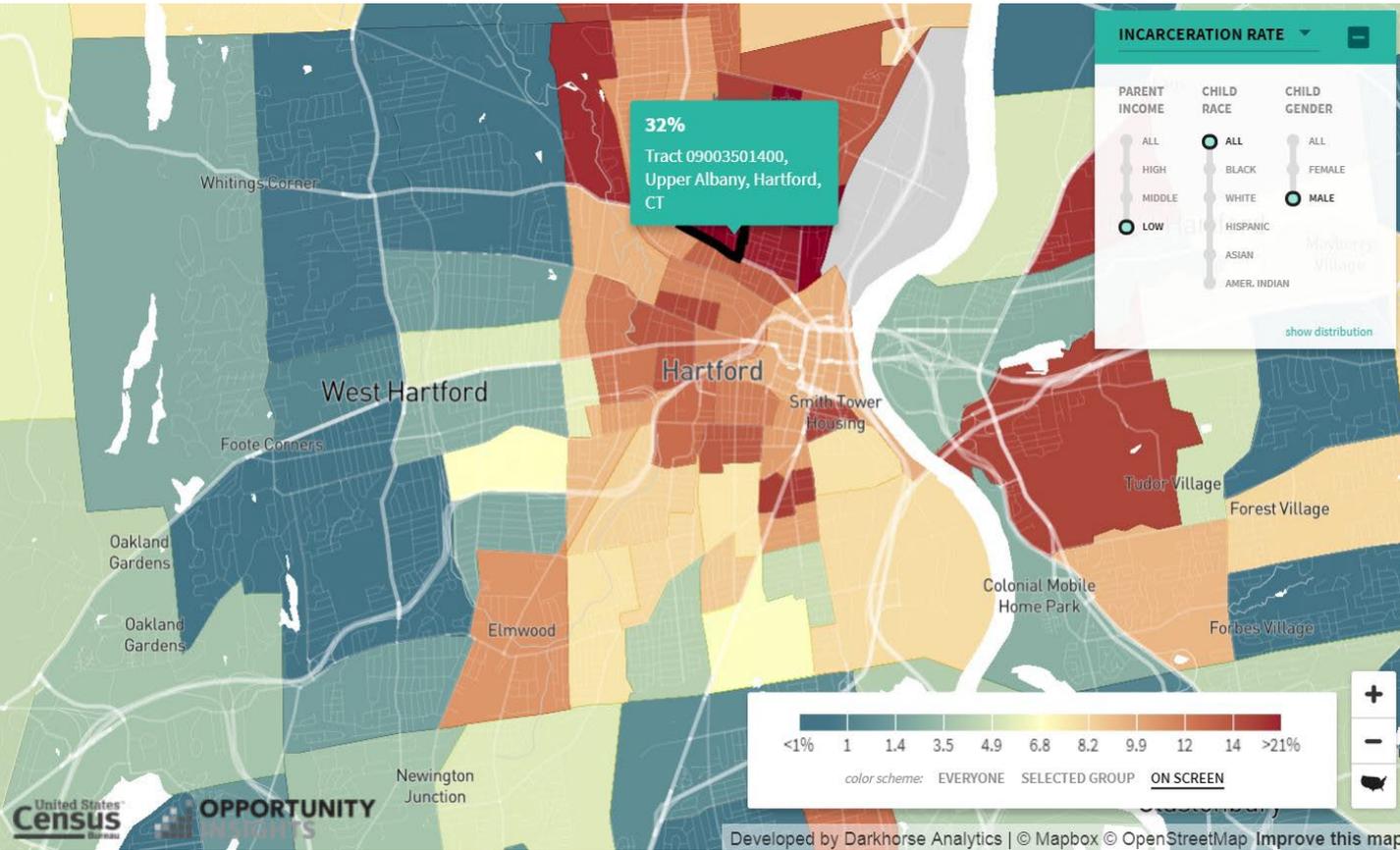
All-cause mortality spiked in 2020, moreso in the state's largest cities

Age adjusted, all-cause mortality rates (per million), 2015-2021



DataHaven

Context of the COVID-19 Pandemic

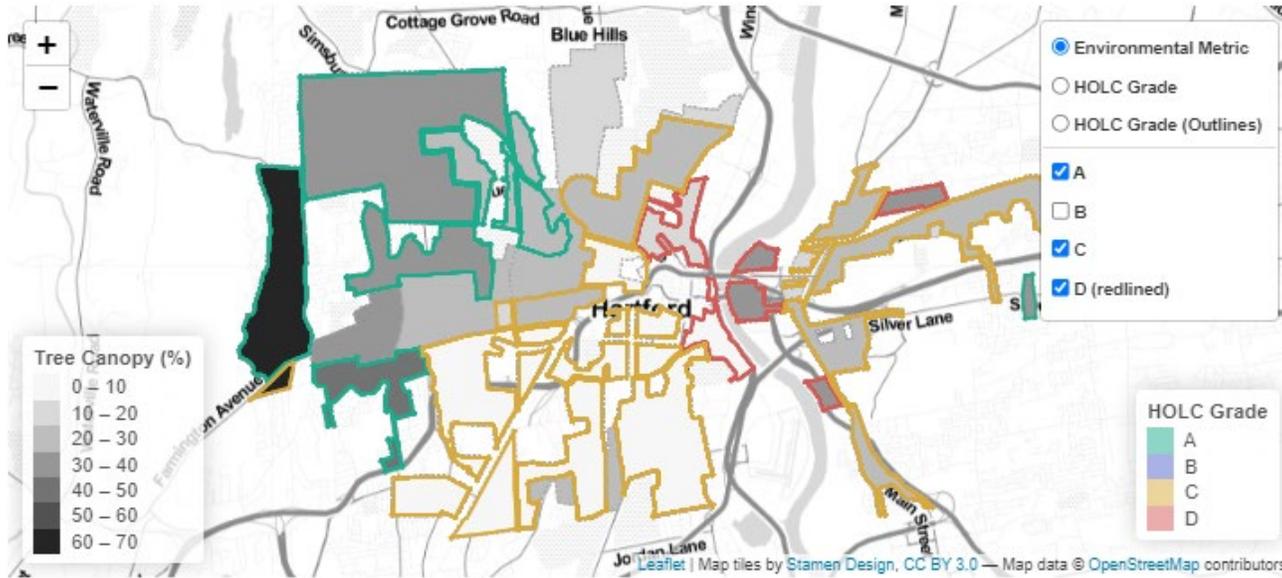


Opportunity Atlas: Estimated 32% of boys who grew up in low-income families in parts of North Hartford are currently incarcerated; vs. <1% in West Hartford

CTDOC Community Supervision Population: Race/Ethnicity

Source: CTOPM CJPPD Research Unit

Context of the COVID-19 Pandemic



RAND Environmental Racism Data Tool (2022), Hartford, CT

Tree Canopy Coverage in 2016:

- **37% in A-Grade areas**
- **11% in D-Grade areas**

Percent Tree Canopy Coverage by HOLC grade in Hartford, CT (2016)

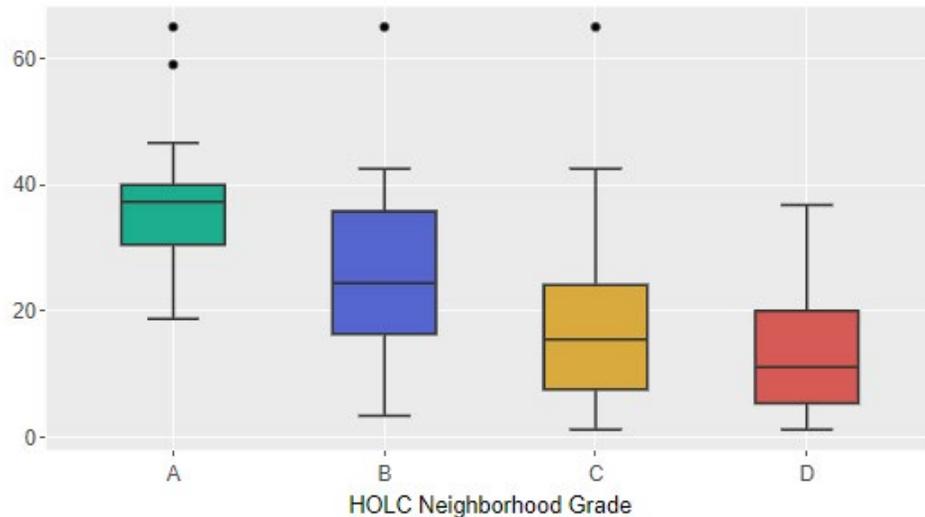
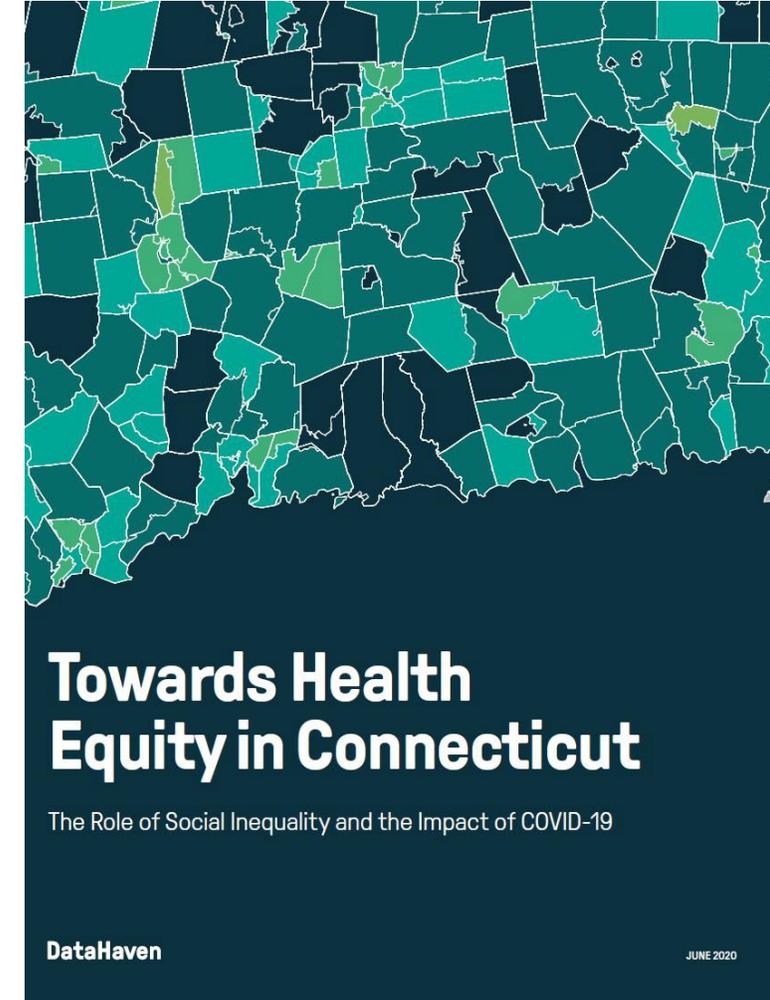
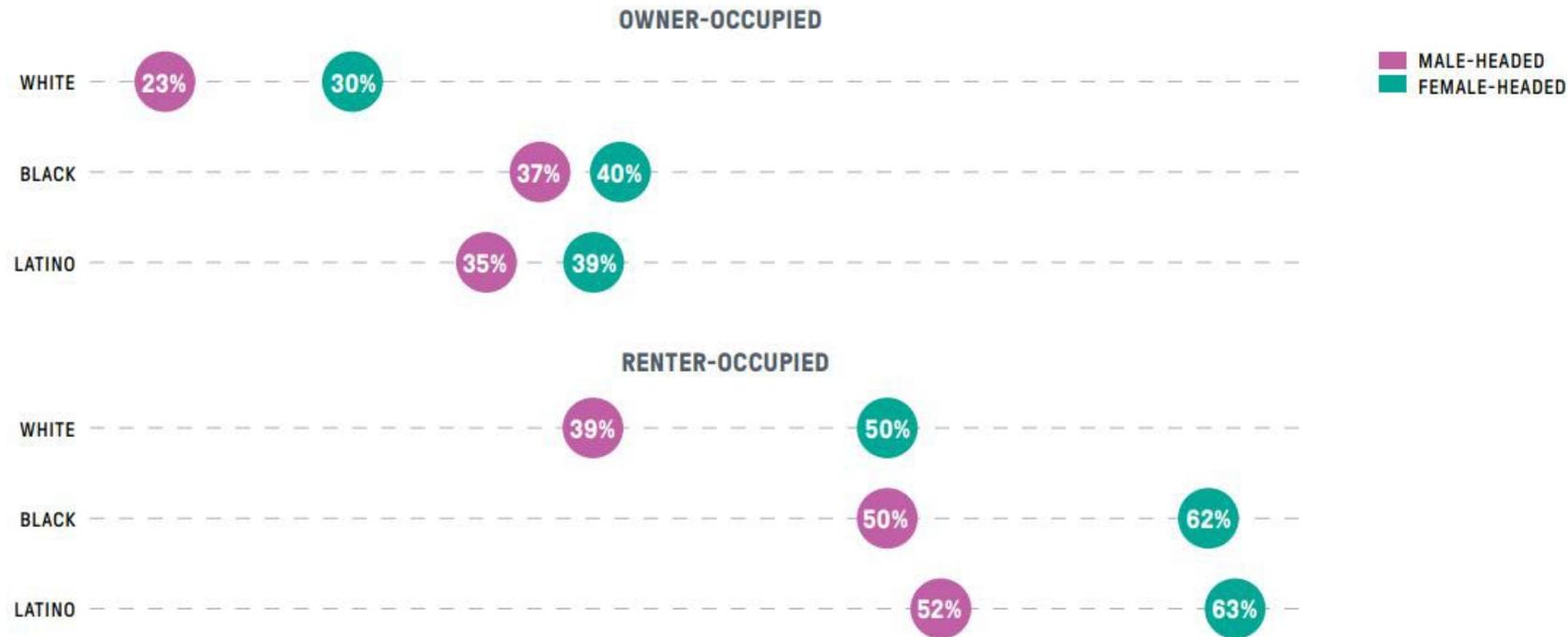


FIG 10
Black and Latino households—especially those headed by women—are more often cost-burdened
SHARE OF COST-BURDENED HOUSEHOLDS BY RACE/ETHNICITY AND GENDER OF HEAD OF HOUSEHOLD, CONNECTICUT, 2018



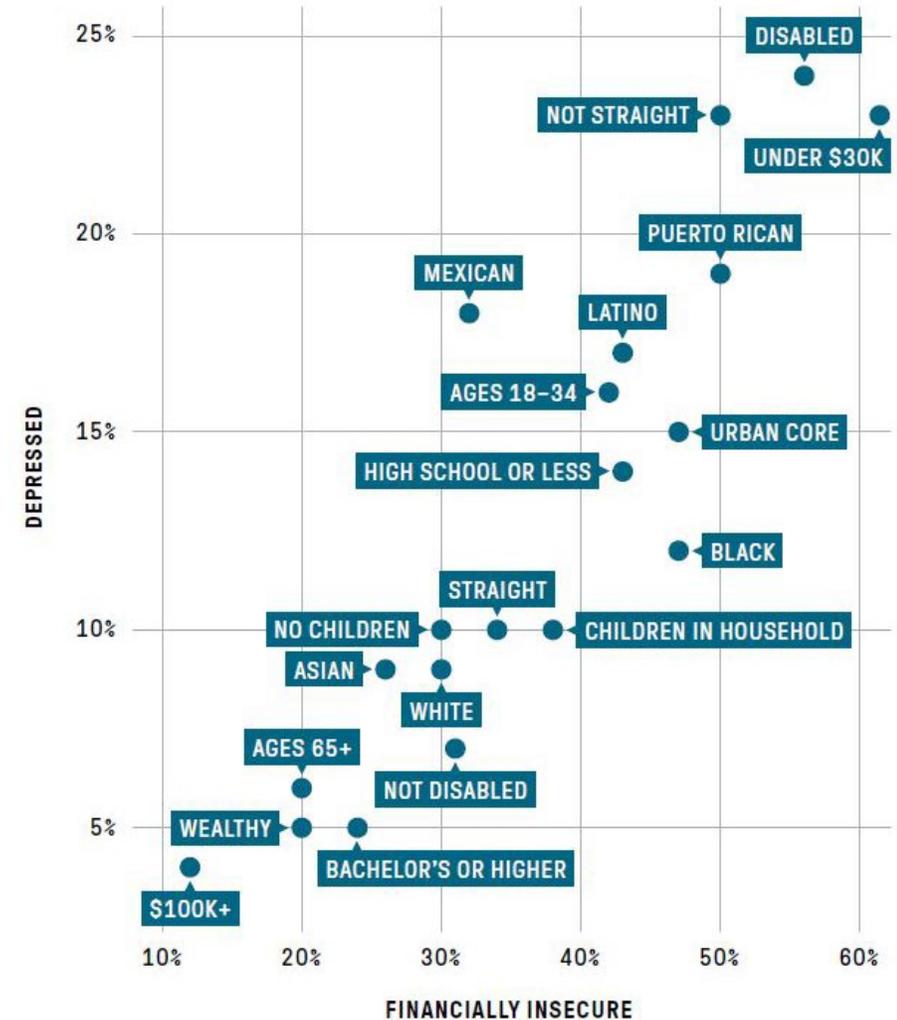
DataHaven Community Wellbeing Index

- Investors include nearly every hospital, community foundation, city, and large public health district in CT, plus other agencies
- Project involves 300 Advisory Council and Research Advisory Committee members, and 25 co-authors of the report
- Data sources include:
 - Federal, state, local public data sources, and raw data provided by special request
 - For community health assessments, data from CT Hospital Association (records from all CT residents served by hospitals)
 - DataHaven Community Wellbeing Survey



<https://www.ctdatahaven.org/reports/>

- Completed 45,000 live, in-depth interviews with randomly-selected adults in every Connecticut zip code (2012, 2015, 2018, 2020, 2021), including over 10,000 in the five largest cities
- About 9,000 interviews were conducted from June to December 2021
- Interviews conducted by contacting randomly-selected landline and cell phone numbers, with additional testing and benchmarking using other methods (in-person, postcard mail, electronic)
- Interviews are weighted using 2020 Census data to create reliable estimates that are representative of populations in each area



Example of Survey Questions: Experiences of Discrimination

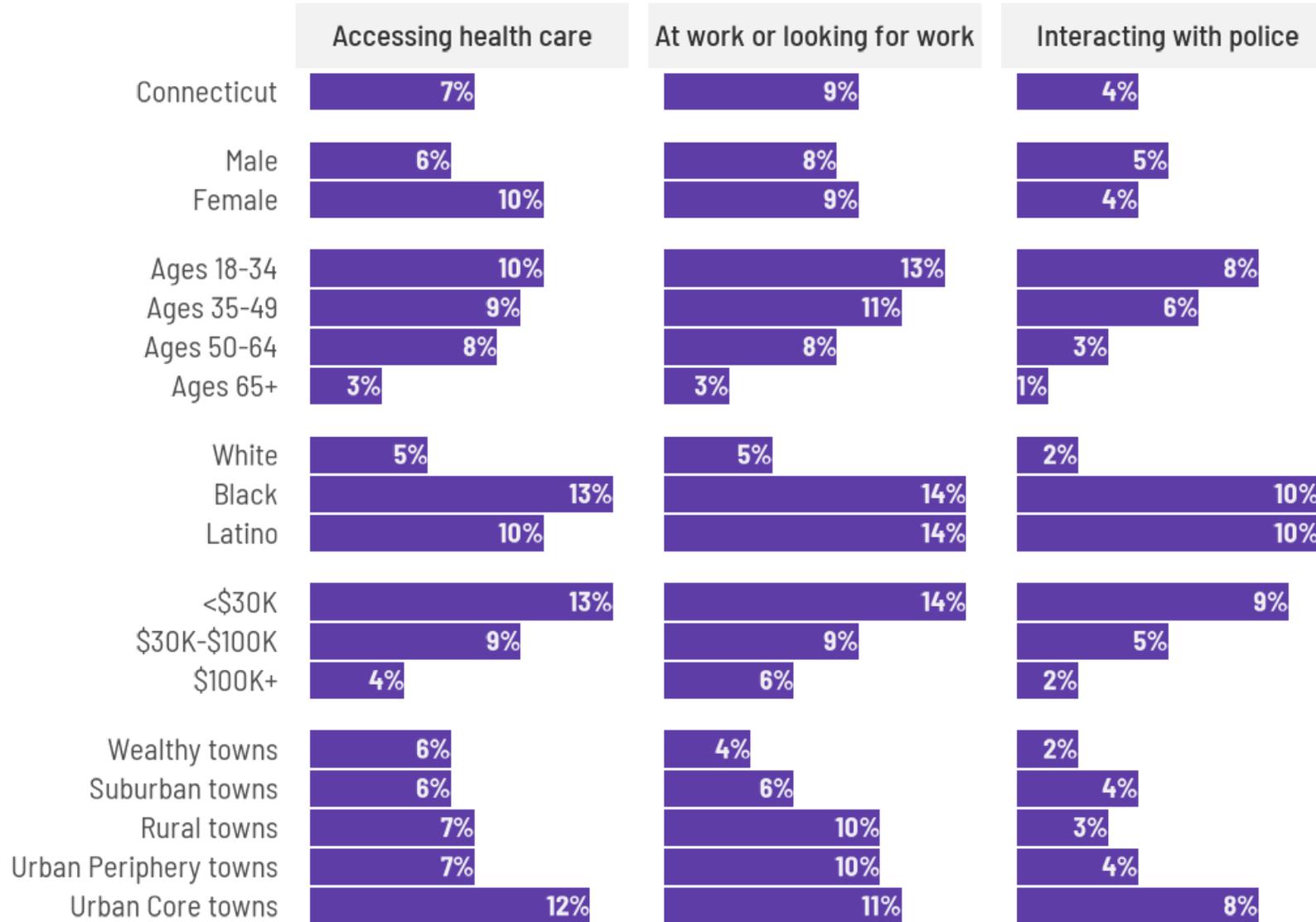
At any time in your life, have you ever been unfairly fired, unfairly denied a promotion or raise, or not hired for a job for unfair reasons? [If yes, how many times did this happen and for what reasons?]

Percent of adults who say it has happened to them within the past 3 years:

- **20% of young adults, 6% of seniors**
- **15% of men, 17% of women**
- **11% of White, 23% of Black, 20% of Latino adults**
- Most common reasons given for why it happened: Race or Ancestry, Gender, Age

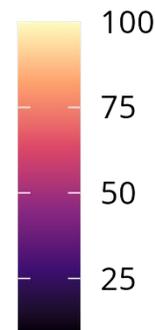
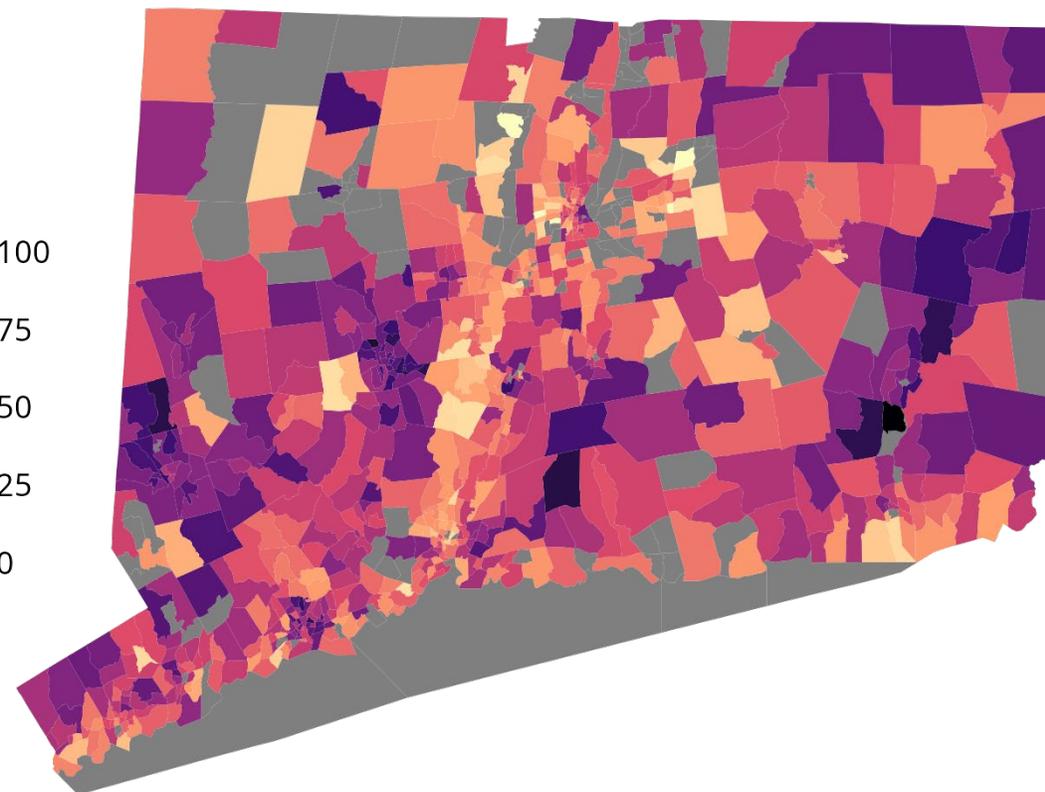
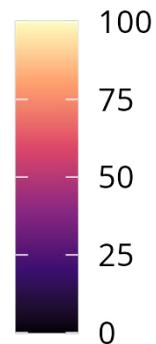
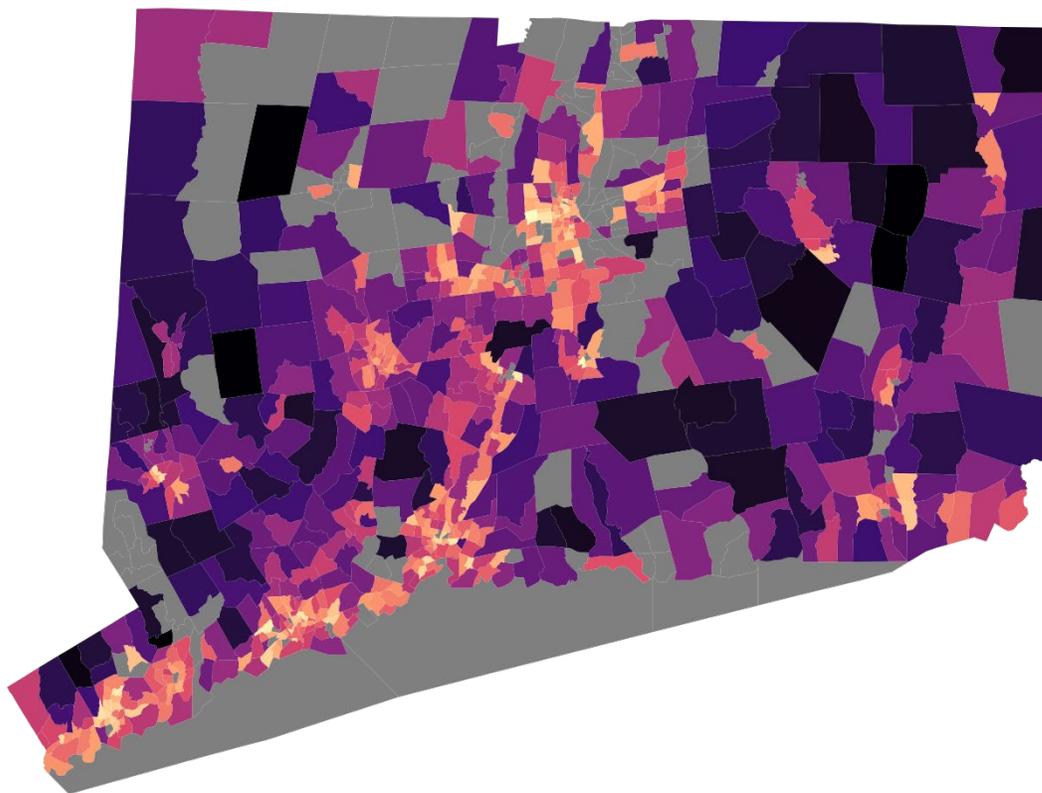
Young adults, Black and Latino adults, and low-income adults report more experiences of discrimination

Share of adults who reported experiencing being treated unfairly in the past 3 years, by scenario, 2021



Example of Survey Questions: Quality of Built Environment

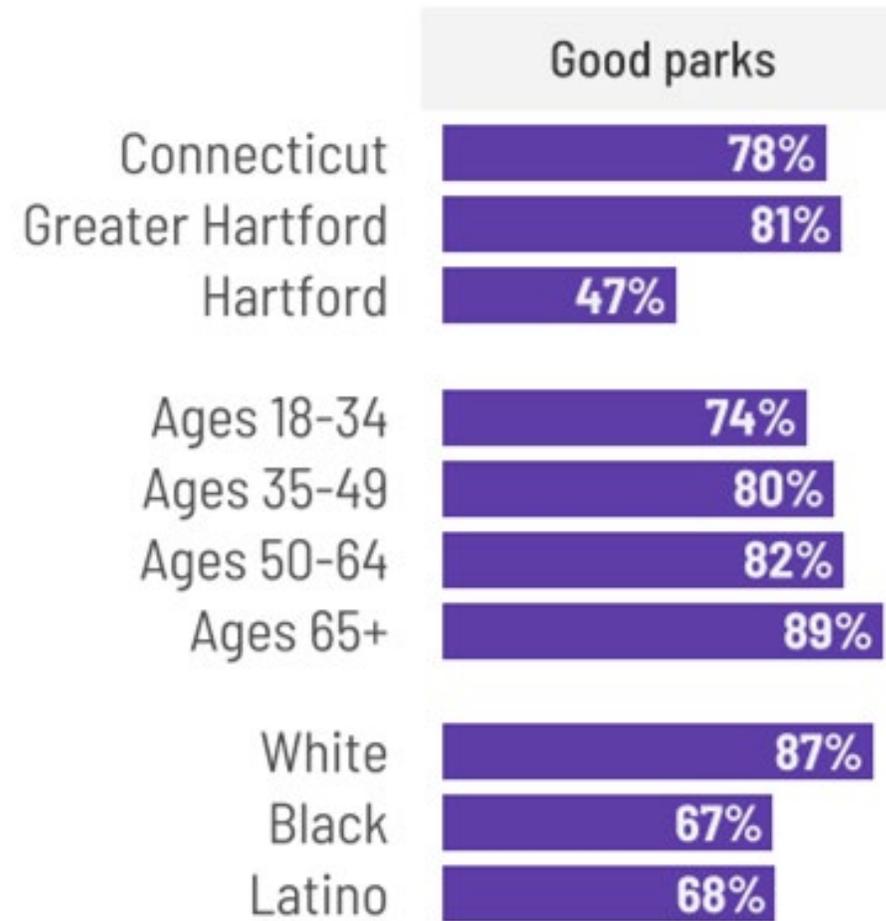
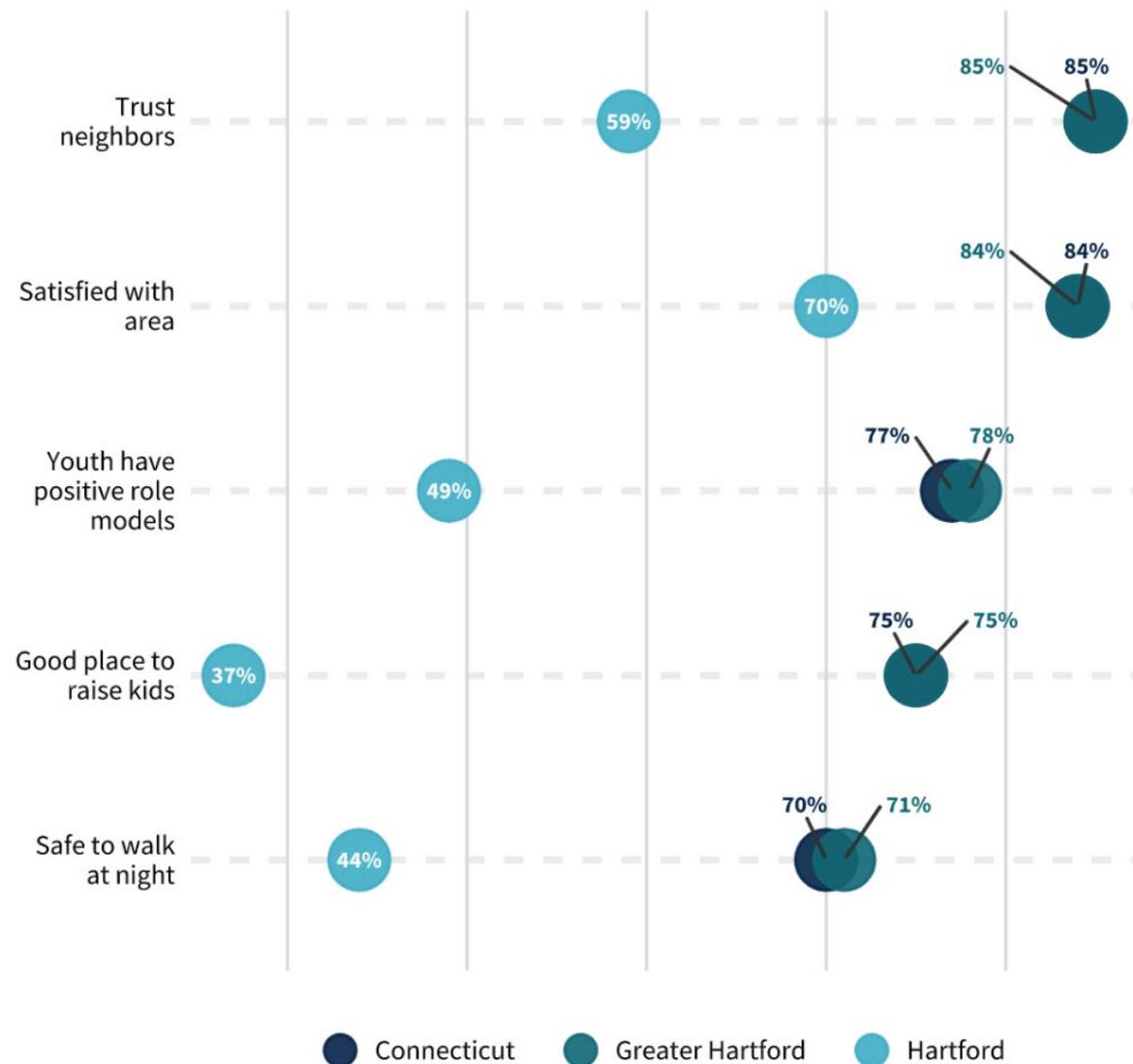
Percent of adults who agree there are safe places to walk (map at left) and ride a bicycle (map at right)



Source: Analysis of 2015-2021 DataHaven Community Wellbeing Survey data (Draft maps, not for use)

Example of Survey Questions: Quality of Built Environment

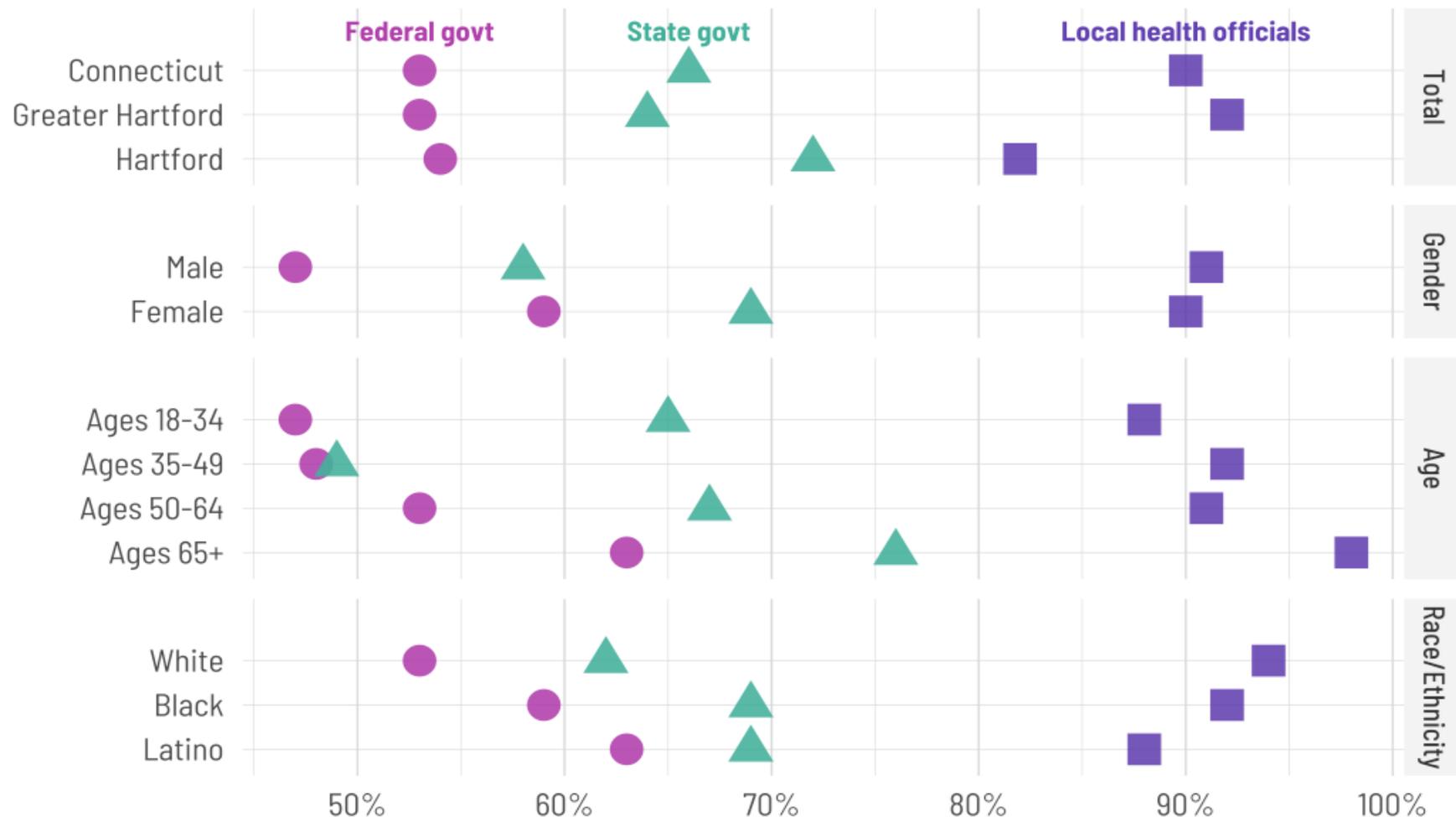
FIGURE 25: RESIDENTS' RATINGS OF COMMUNITY COHESION MEASURES, SHARE OF ADULTS, 2015-2021



Example of Survey Questions: Institutional Trust

Local health officials and healthcare workers are generally well-trusted

Share of Greater Hartford adults reporting great or fair amount of trust in institutions, with Hartford and Connecticut for reference, 2021



Pandemic Impacts: Financial Security

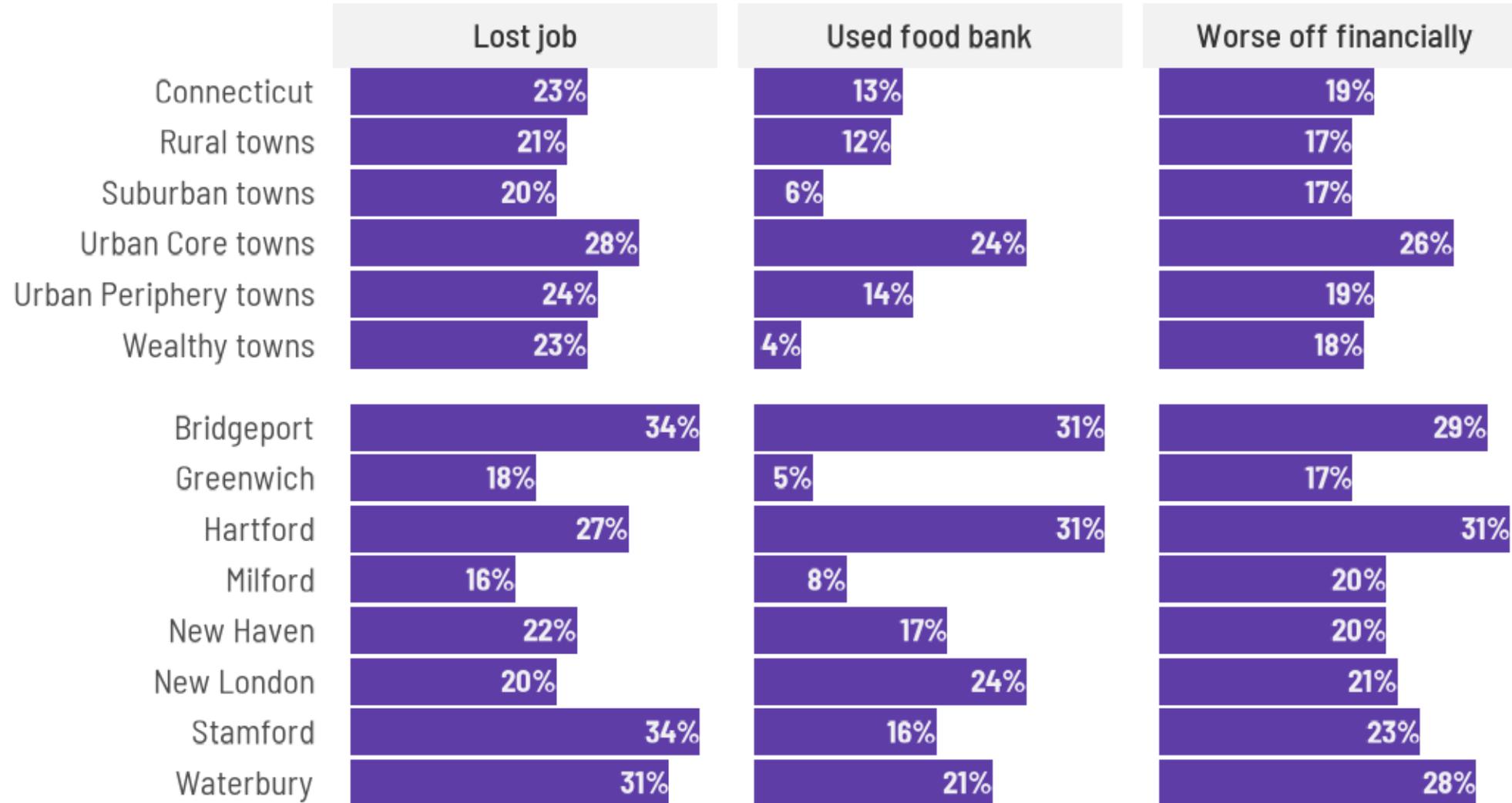
How has your financial situation changed in the past 12 months?

Income	Better off financially	About the same	Worse off financially
Less than \$30K	17%	48%	34%
More than \$100K	36%	53%	11%

Pandemic Impacts: Financial Security

More adults in urban areas experienced pandemic-related hardships

Share of adults who experienced select hardships since February 2020



Pandemic Impacts: Financial Security

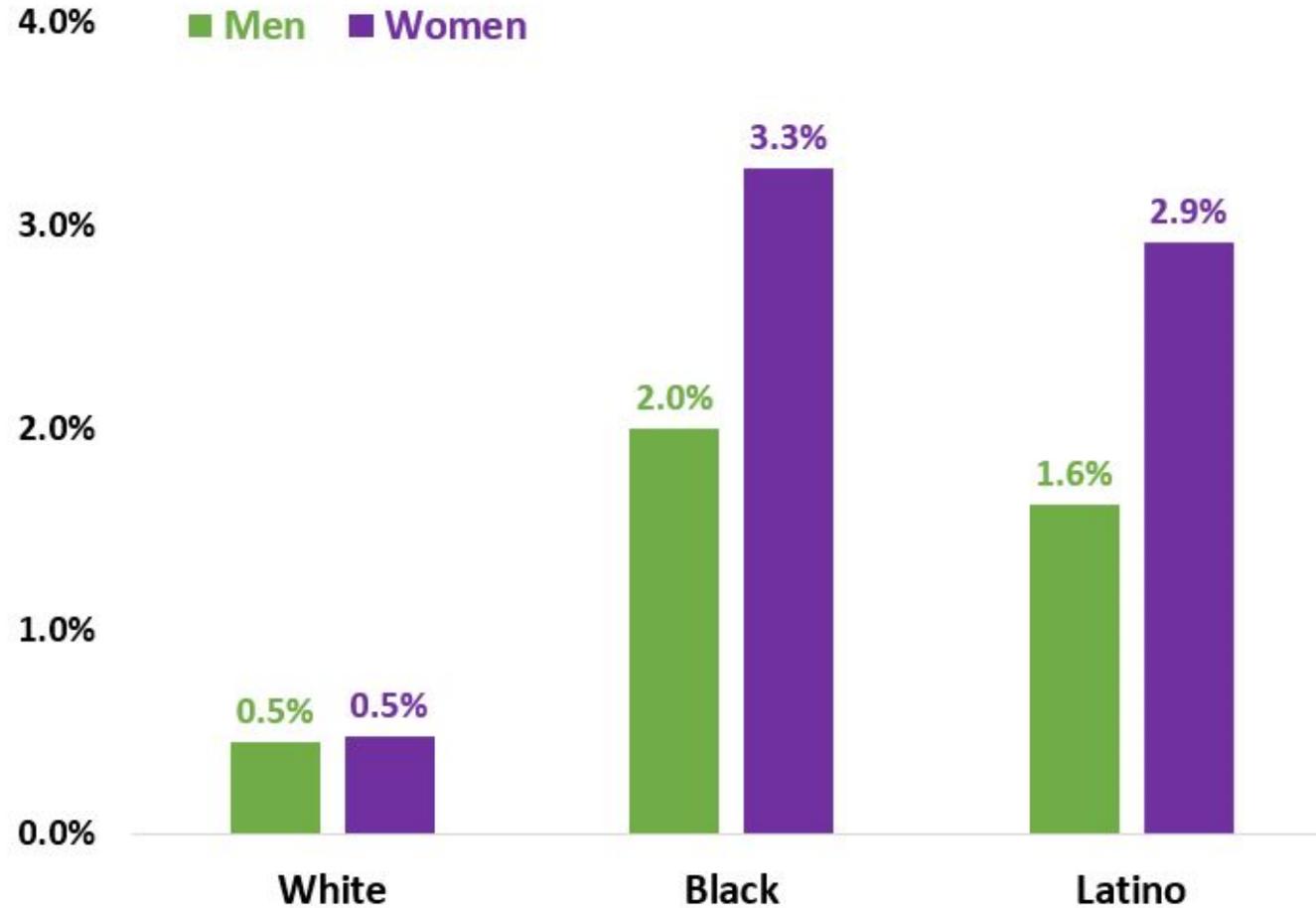
Black, Latino, and Low-Income Adults Face More Hurdles To Meet Basic Needs

Share of Connecticut adults, Aug. 2021



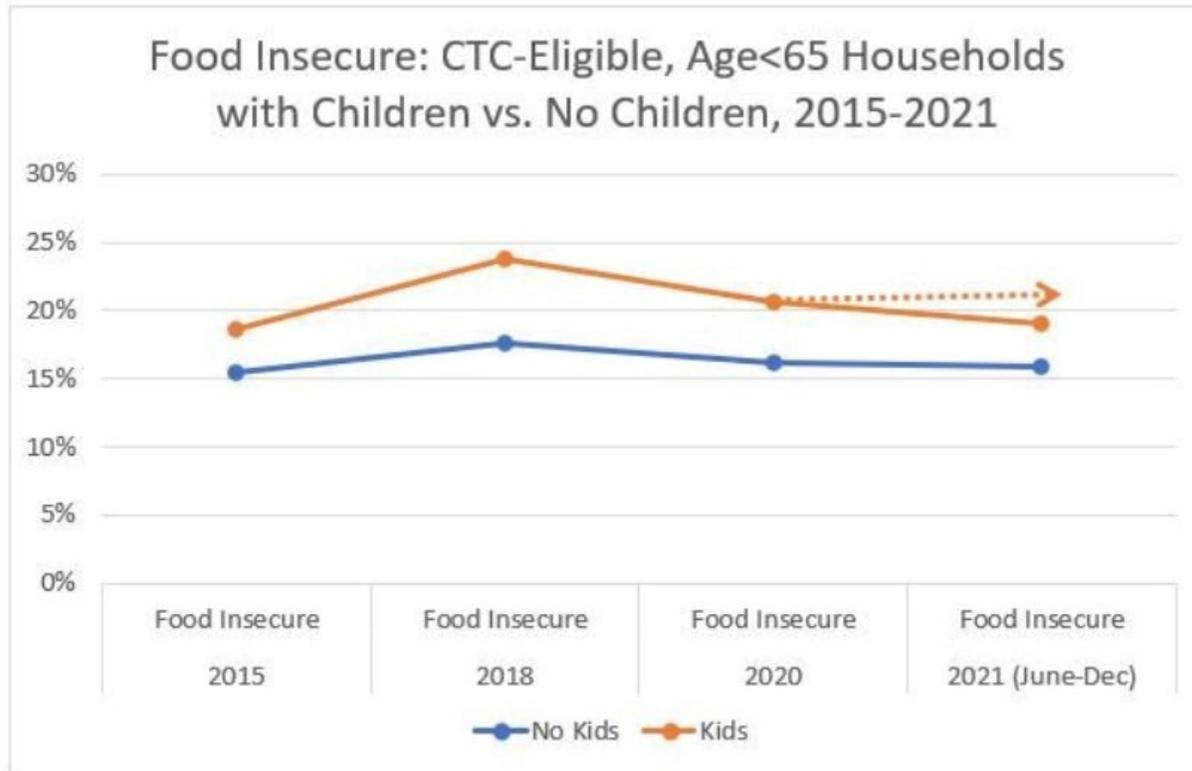
Pandemic Impacts: Financial Security

Percent of Connecticut men and women, by race/ethnicity, who say it is likely they will have to leave their home in the next 2 months because they are behind on rent or mortgage



Source: 2021 DataHaven Community Wellbeing Survey (n=9,139 statewide, June to December 2021)

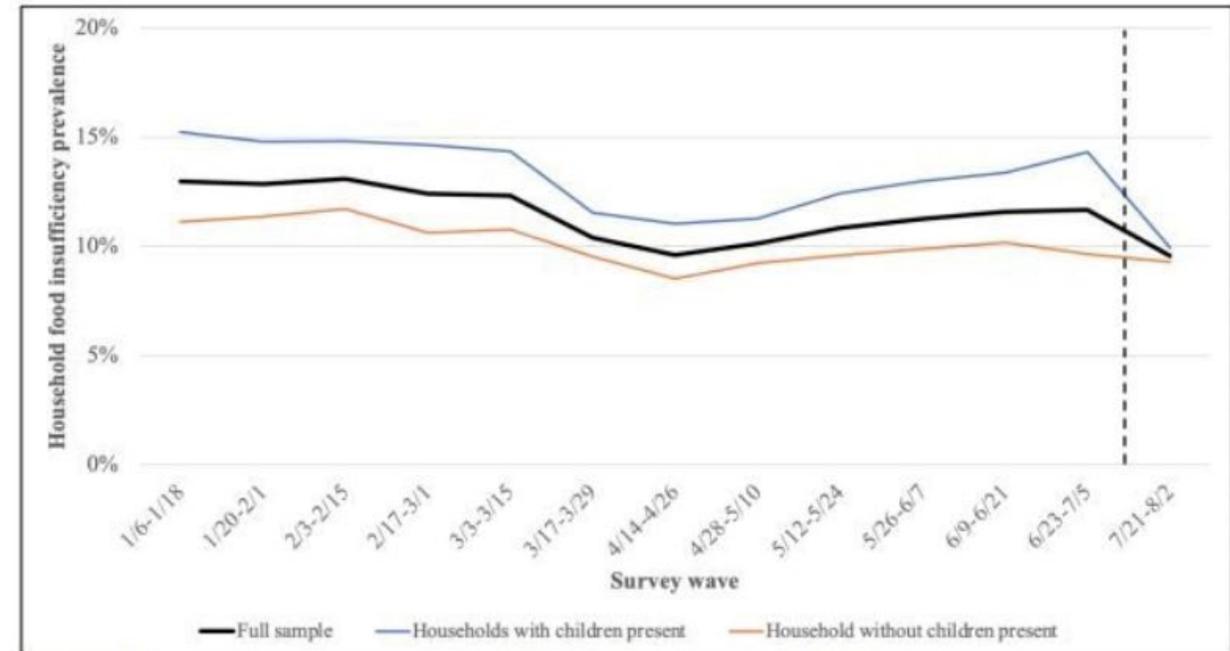
Pandemic Impacts: ARPA 1-year expansion of Child Tax Credit



.....> Expected trend without tax credit based on trends in the non-treatment group and during prior years

Graphic from analysis of DataHaven Community Wellbeing Survey (unpublished)

eFigure 1. Assessment of Outcome Pre-trends for Difference-in-Differences



Weighted using household survey weights divided by number of waves.

Source: Authors' analysis of Household Pulse Survey data from the Census Bureau, July to August 2021 (final wave of Phase 3.2).

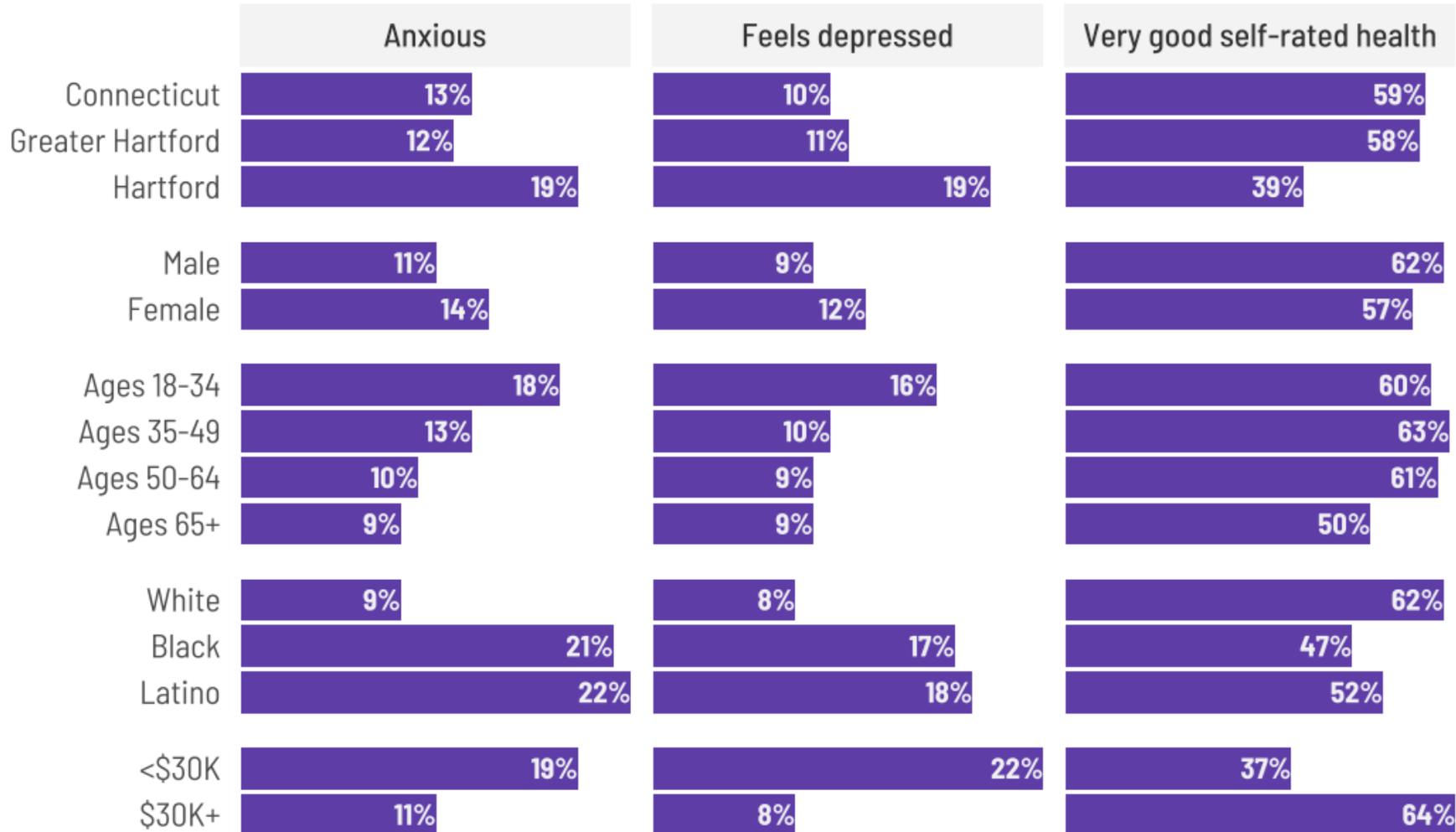
Graphic from Shafer et al., 2022

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2788110>

Pandemic Impacts: Mental Health and Substance Use Disorder

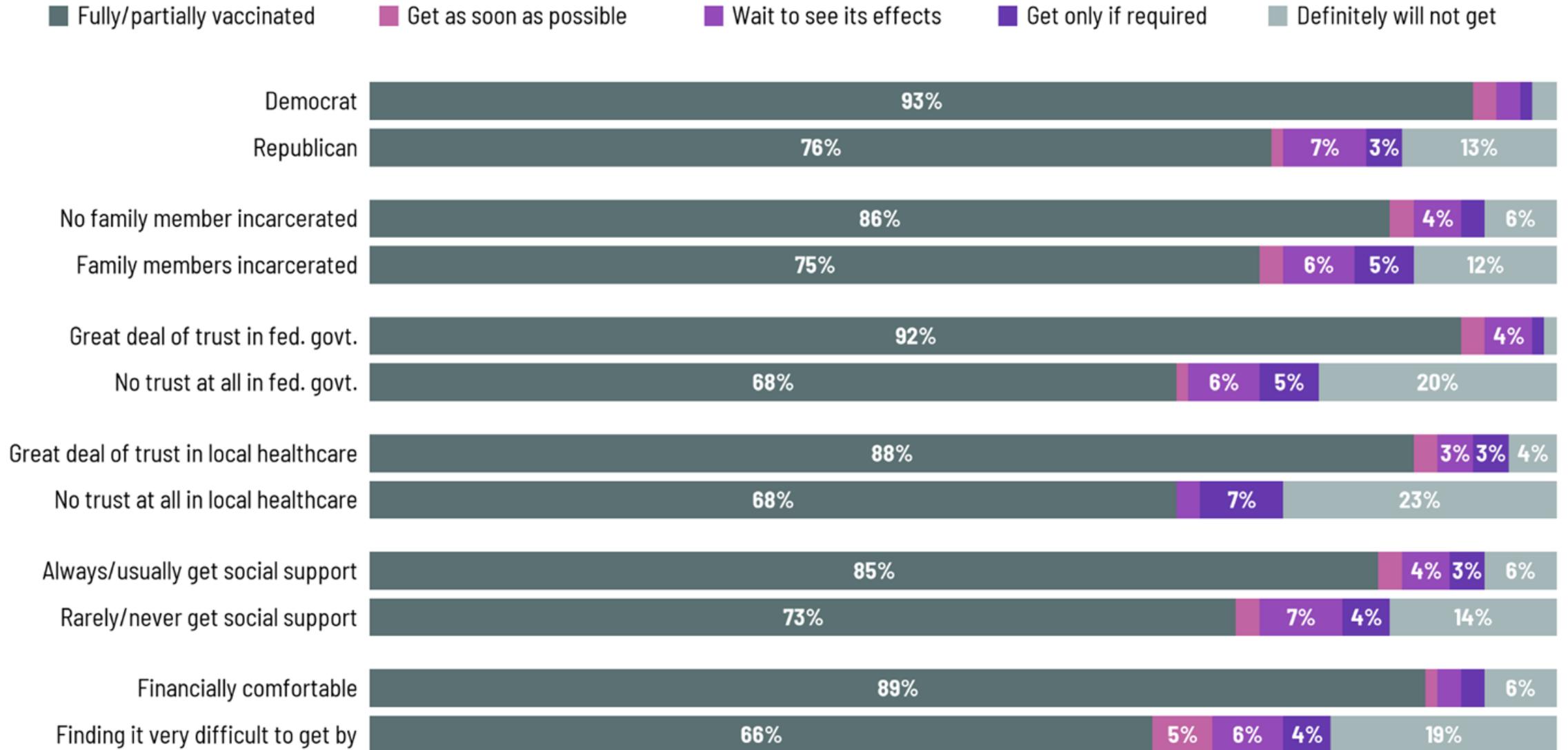
Adults who feel more anxious and depressed are less likely to say they're in very good health

Share of Greater Hartford adults, with Hartford and Connecticut for reference, 2021



Pandemic Impacts: Vaccine Equity

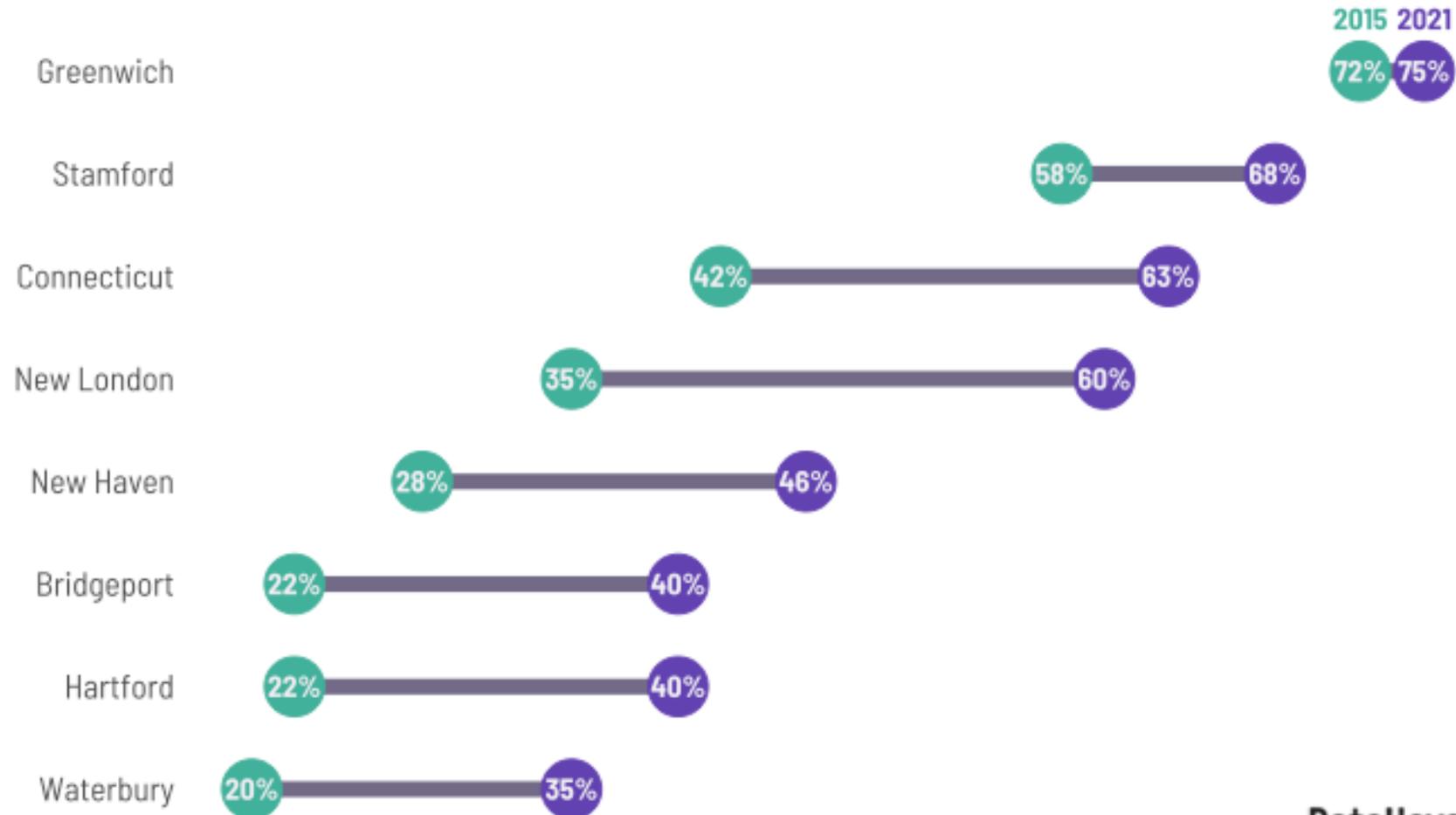
Share of adults who are vaccinated, and reported plans of unvaccinated Connecticut adults, Aug. 2021



Pandemic Impacts: Economic Outlook

Perceptions of suitable employment have improved but remain lower in urban areas

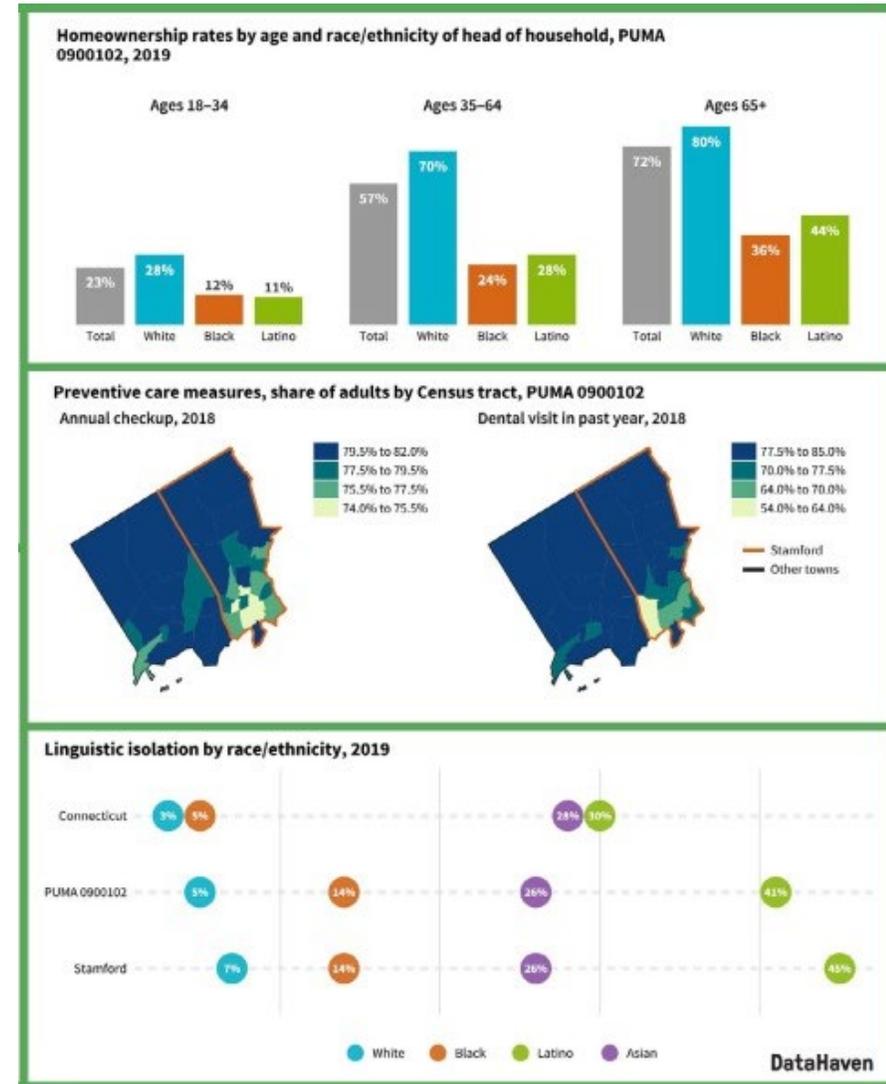
Share of adults who agree that there are suitable employment options in their area, 2015–2021



Town Equity Reports: New for all 169 towns

Reports use new approaches to analyze data from:

- 2020 Census
- American Community Survey (2020 is most current)
- State and federal agencies
- 2015-2021 DataHaven Community Wellbeing Survey (45,000 live, in-depth interviews of randomly selected adults)
- More 2020/2021 data and new indicators to be added for version 2.0 (send suggestions)



Town Equity Reports: New for all 169 towns

Audiences:

- Residents
- Town-level committees on inclusion, anti-racism, declaring racism a public health crisis, equity and sustainability
- Town-level elected officials and candidates
- Non-profit organizations, and other programs that serve residents in defined geographic areas
- K-12 schools and higher education (ctdatahaven.org/classroom)
- State legislators (DataHaven has also produced legislative district profiles), state or regional advocacy groups

EMILY TANG-LEE

Empowering community through data

I grew up in Brooklyn in a scrappy refugee family, one that didn't have much money but that valued education. My experience is one I see reflected in the Stamford community, in families across the city.

My mom worked as an admin at a large company and my dad was a taxi driver. We were a family eligible for free lunch. My parents tried to keep worries about money to themselves, but even in elementary school I knew that to ask for a school trip was to ask my parents to pay for something we might not be able to afford. Mom and dad's engagement with teachers was through report cards and parent-teacher conferences. No one told them to join a parent-teacher organization and, besides, they didn't have time or energy to spare. My parents' English was good enough but not their first language and as I got older, I often found myself at the computer, inputting data on my parents' behalf.

Through my parents' encouragement and my own hard work, I forged a path to higher education, going through New York City's specialized public schools, then to the Top 25 liberal arts college Hamilton, and finally to Johns Hopkins for my master's degree.



Contributed photo
Emily Tang-Lee

My parents are wonderful parents who set me and my brother up for success, despite their income. But it took an inordinate amount of effort to get us to where we are today, and I wonder what would have happened to us if we didn't have the good fortune of having my parents, who were at least armed with information they could use to guide us on our education journey. What happens to the other children, who are equally bright?

This is where a quality education, nonprofit organizations and local government come in.

I feel so lucky to call Stamford my home. There is a vibrant community of do-gooders, philanthropists, and political activists here, all working toward a brighter future for our neighbors. But even as I'm buoyed by optimism, the data shows a lack of equity and opportunity. If we are to be responsible to our neighbors, we ought to

address these issues.

A recent report by DataHaven, a Connecticut-based nonprofit that empowers people to create thriving communities through data, points to a few indicators of well-being that should sound the alarm bells for us all.

This is what the report found for Stamford:

▶ **43 percent of all households are cost-burdened**, meaning they spend 30 percent or more of their total income on housing costs. After keeping a roof over your head and food on the table, this leaves little else, or nothing at all, for low-income families to invest in their futures.

▶ **There is a gulf in median household income between groups.** While median household income for white households is \$124,000, for Black families in Stamford it's less than half that — \$49,000. Similarly, the median household income of a Latino household is

\$55,000. Racial disparities in employment, pay and education are the through line.

In a high-cost area such as our own, we must find ways to grow the earning potential of our neighbors through "tried and true" solutions such as workforce development, wage growth, and high-quality public education, while keeping our

hearts and minds open to innovative solutions offered through public-private partnerships, nonprofit organizations, and community leaders.

▶ **Nearly 1 in 5 people age 5 and older is "linguistically isolated,"** meaning they speak English less than "very well," making it more challenging to take advantage of essential services such as health care, social services or school. With limited access to even basic needs, the path to success narrows.

It is my hope that this data will drive us to action — to volunteer or contribute to your neighborhood association or local nonprofits, to support your candidate of choice in local elections, or simply to share this article for greater awareness. Through collective action we can ensure a thriving community that offers equitable opportunity for all.

Emily Tang-Lee serves on the board of directors of Inspirica, a Stamford-based nonprofit organization serving individuals and families experiencing homelessness and housing insecurity. She is married to Ben Lee, a member of Stamford's Board of Representatives running for the Board of Education, and mother of two children.

Contact Us



Send us your questions /
comments / criticism / feedback

✉ info@ctdatahaven.org

🐦 [@ctdata](https://twitter.com/ctdata)

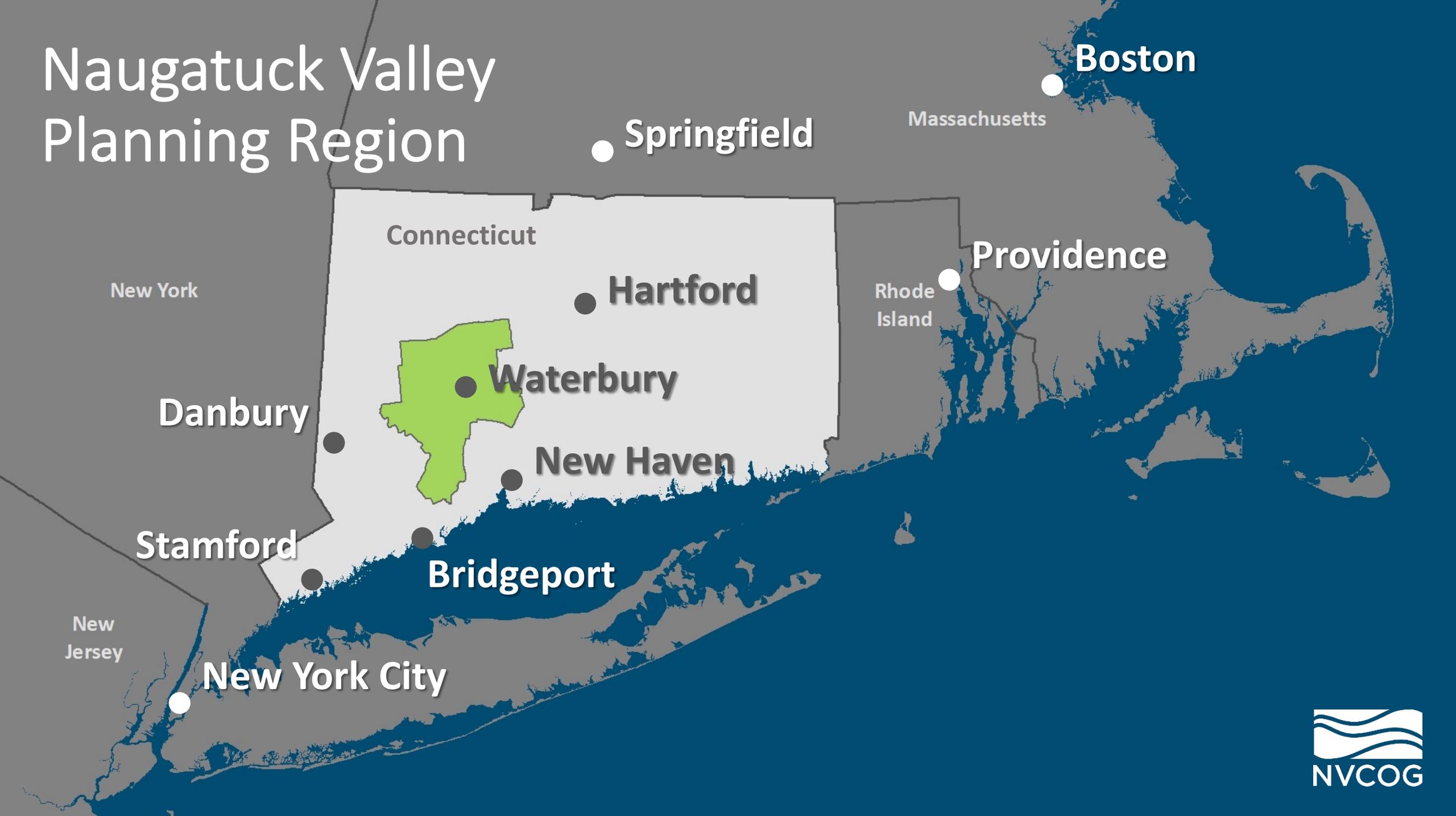
🌐 ctdatahaven.org



Route 8 & Waterbury Rail Line Alternative Modes Assessment Study MAP Forum Spring Meeting – June 3, 2022 Naugatuck Valley Council of Governments



Naugatuck Valley Planning Region



Boston

Springfield

Massachusetts

Connecticut

Hartford

New York

Providence

Rhode
Island

Waterbury

Danbury

New Haven

Stamford

Bridgeport

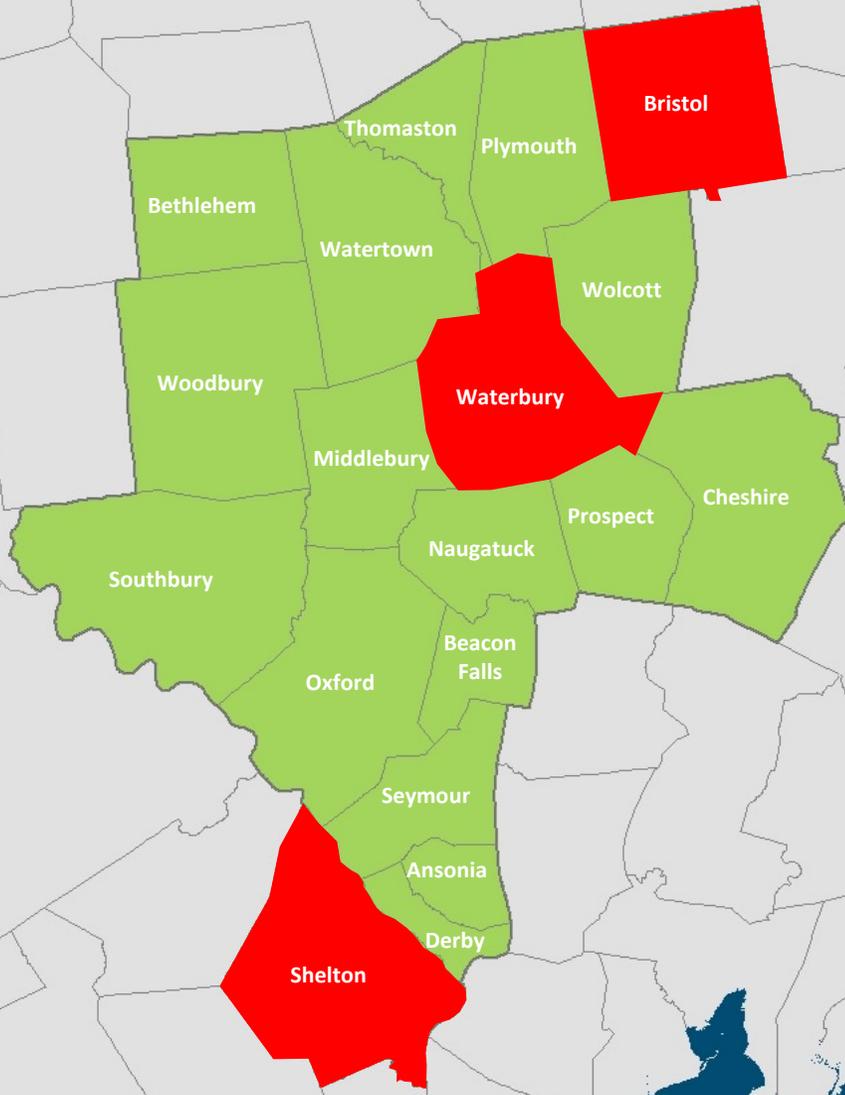
New
Jersey

New York City

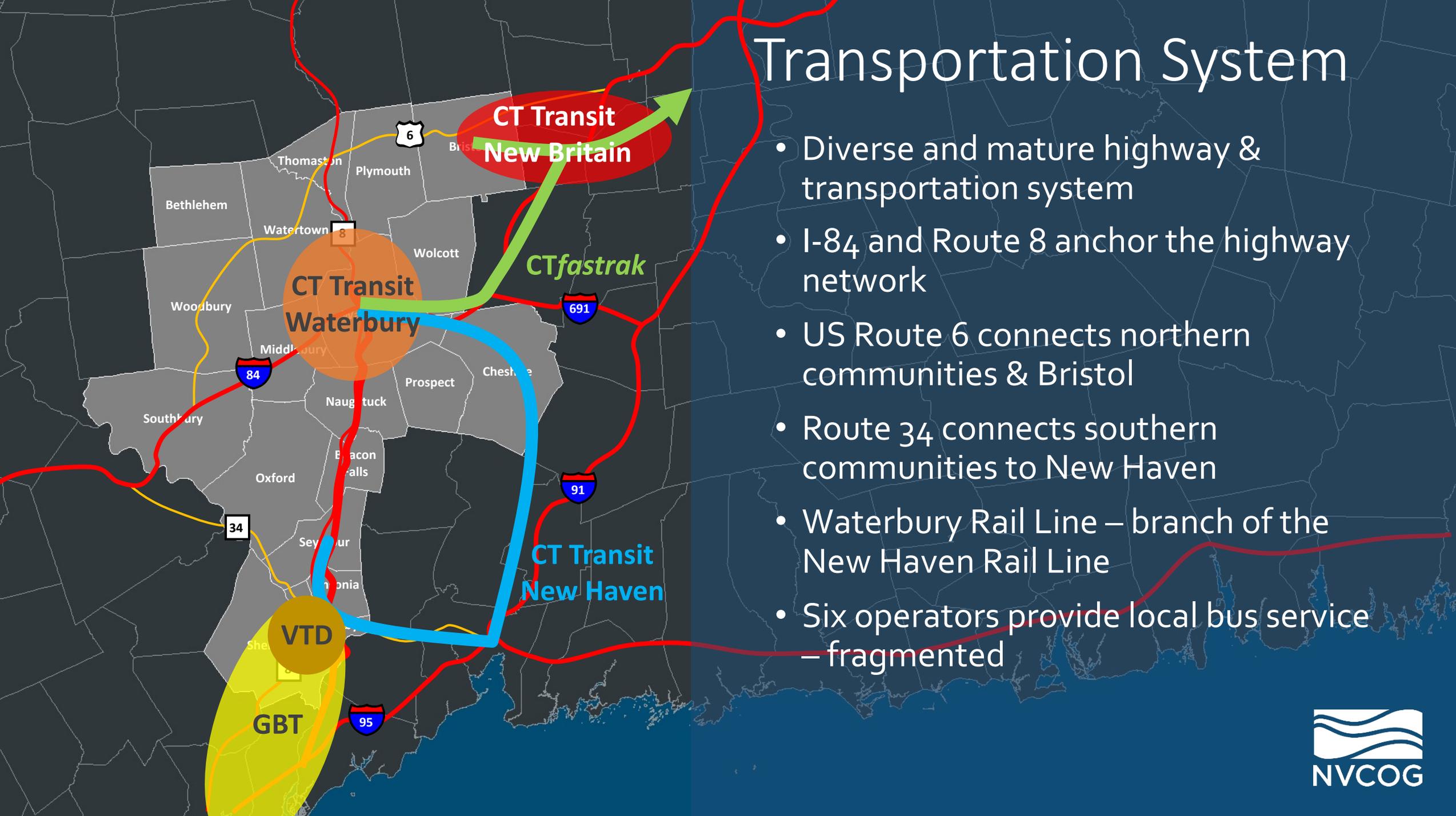


Naugatuck Valley Council of Governments

- Located in West-Central CT
- 19 Cities and Towns
- Centered around Waterbury
- Bristol to the North
- Shelton to the South
- 450,400 Residents (2020 Census)



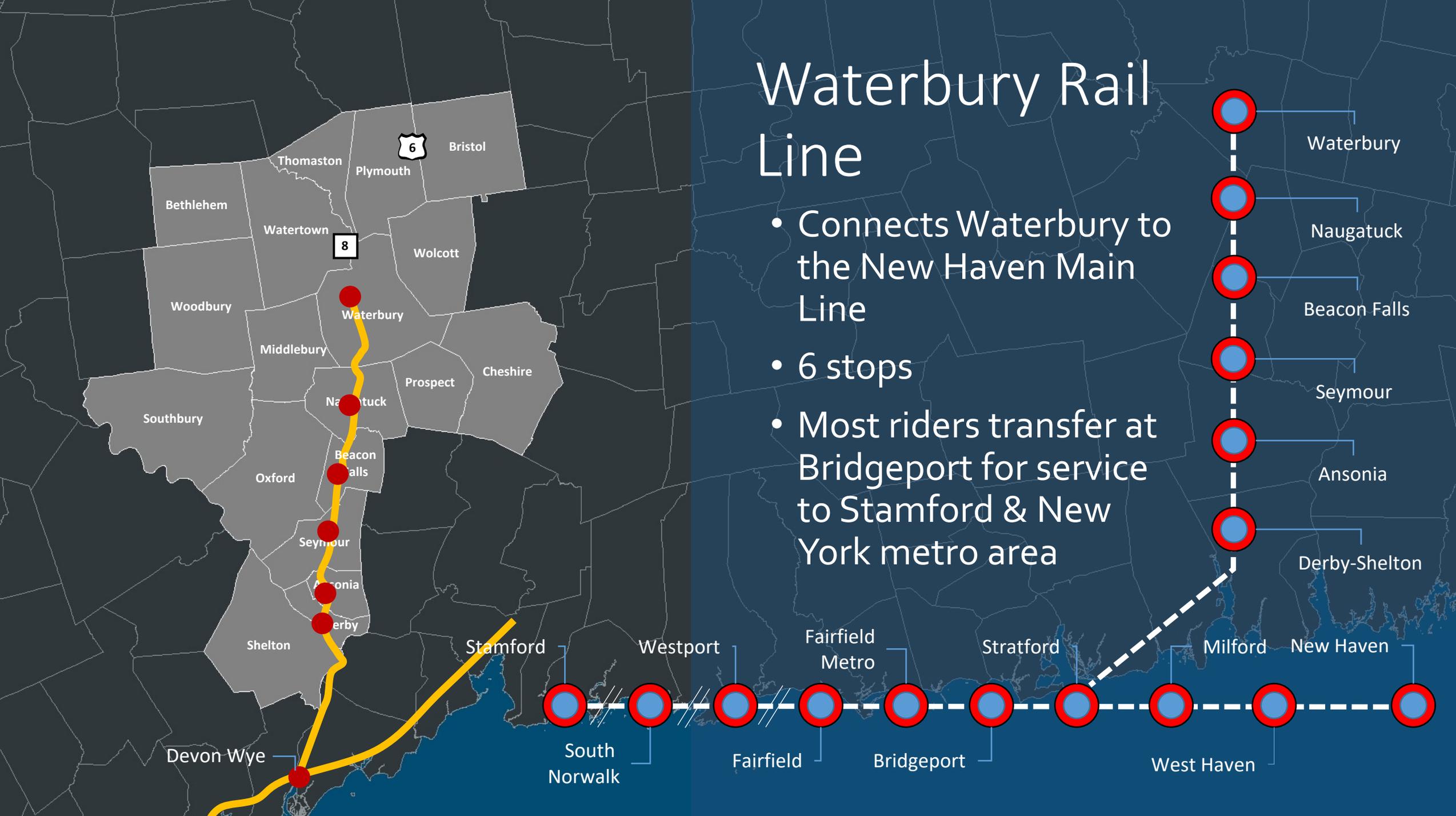
Transportation System



- Diverse and mature highway & transportation system
- I-84 and Route 8 anchor the highway network
- US Route 6 connects northern communities & Bristol
- Route 34 connects southern communities to New Haven
- Waterbury Rail Line – branch of the New Haven Rail Line
- Six operators provide local bus service – fragmented

Waterbury Rail Line

- Connects Waterbury to the New Haven Main Line
- 6 stops
- Most riders transfer at Bridgeport for service to Stamford & New York metro area



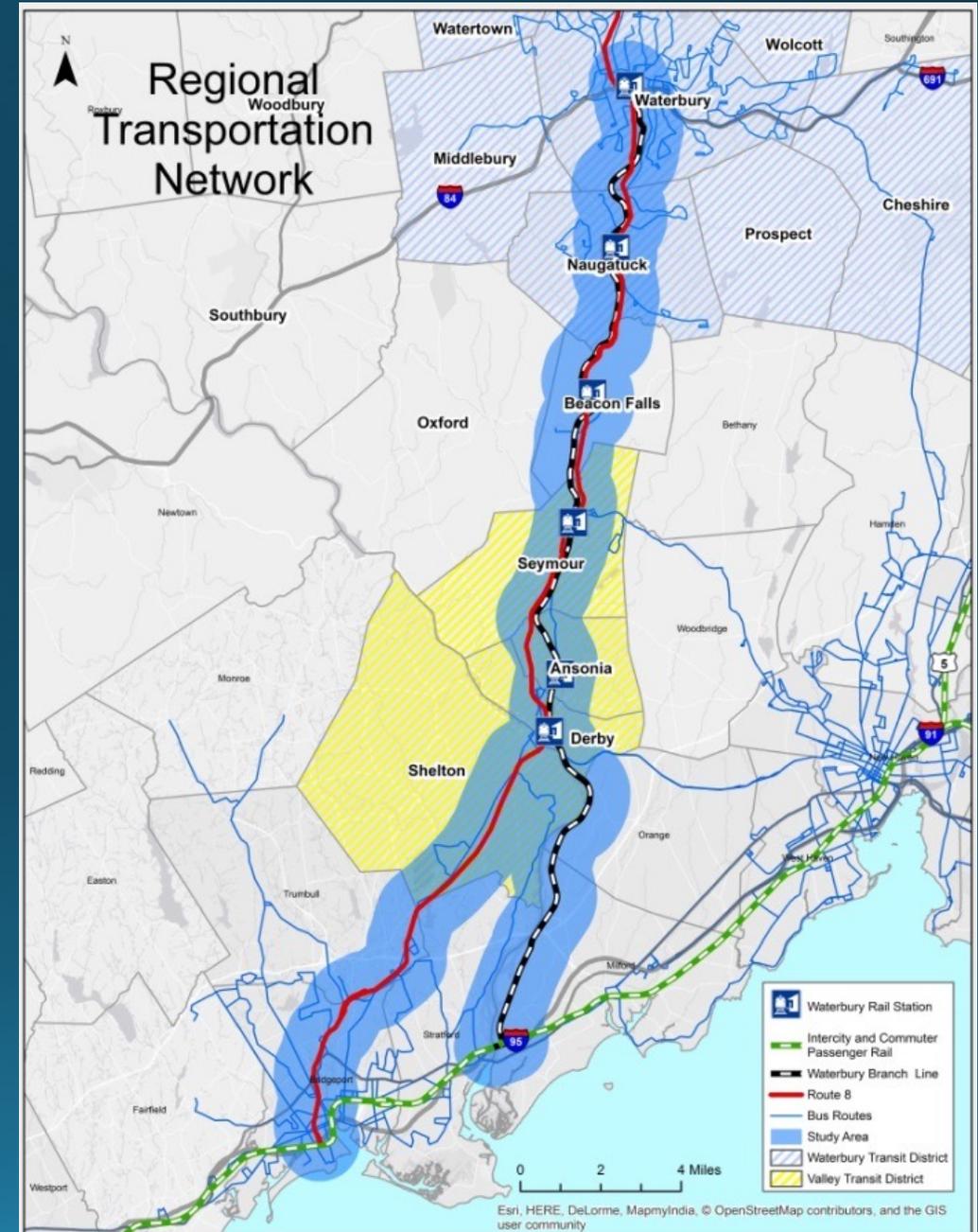
Project Background

Project Study Team:

- AECOM & CDM Smith

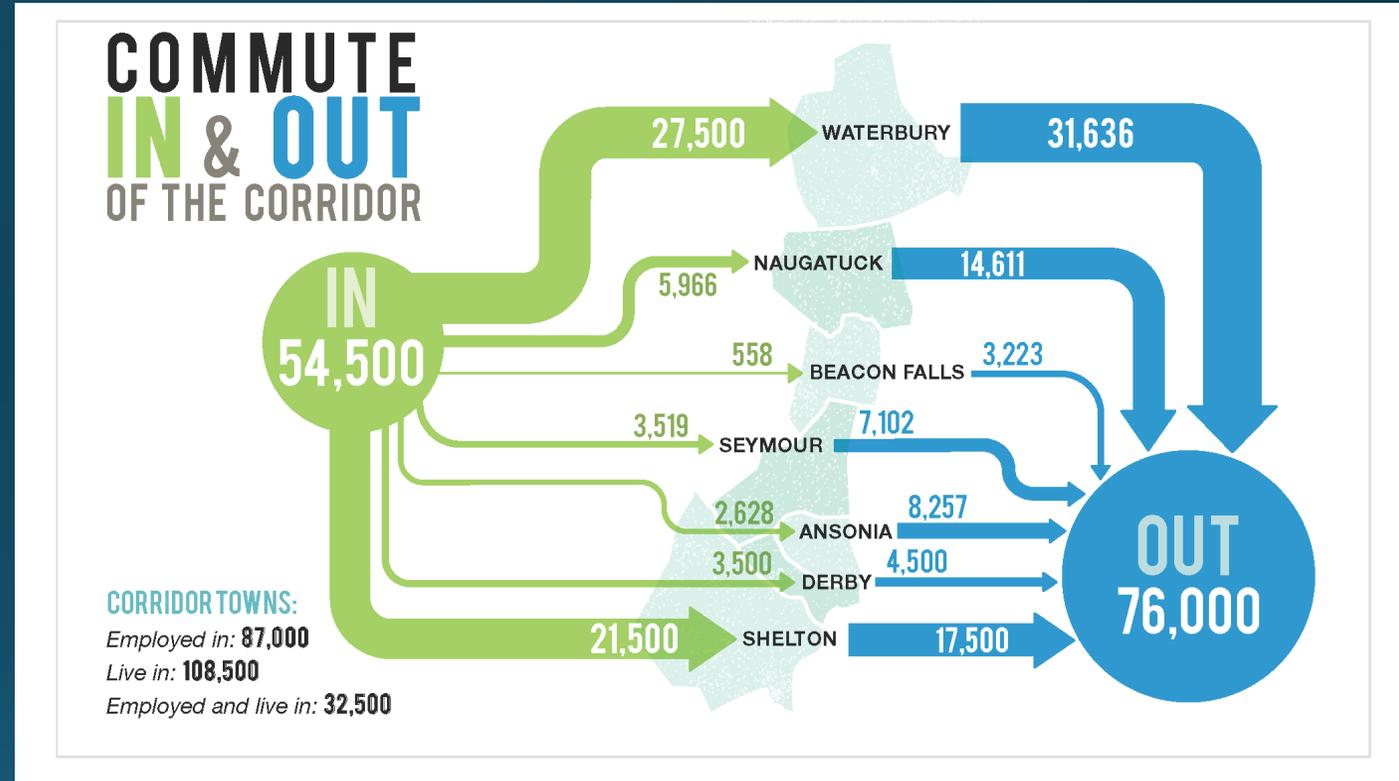
Multi-task planning study/project

- Assess feasibility of alternative transportation options
- TOD opportunities: Naugatuck, Beacon Falls, Seymour, Ansonia and Derby
- Invest in rail line to be catalyst for economic revitalization
- Route 8 Expressway – Waterbury to Bridgeport
- Bridgeport Avenue (Shelton) Corporate Office District



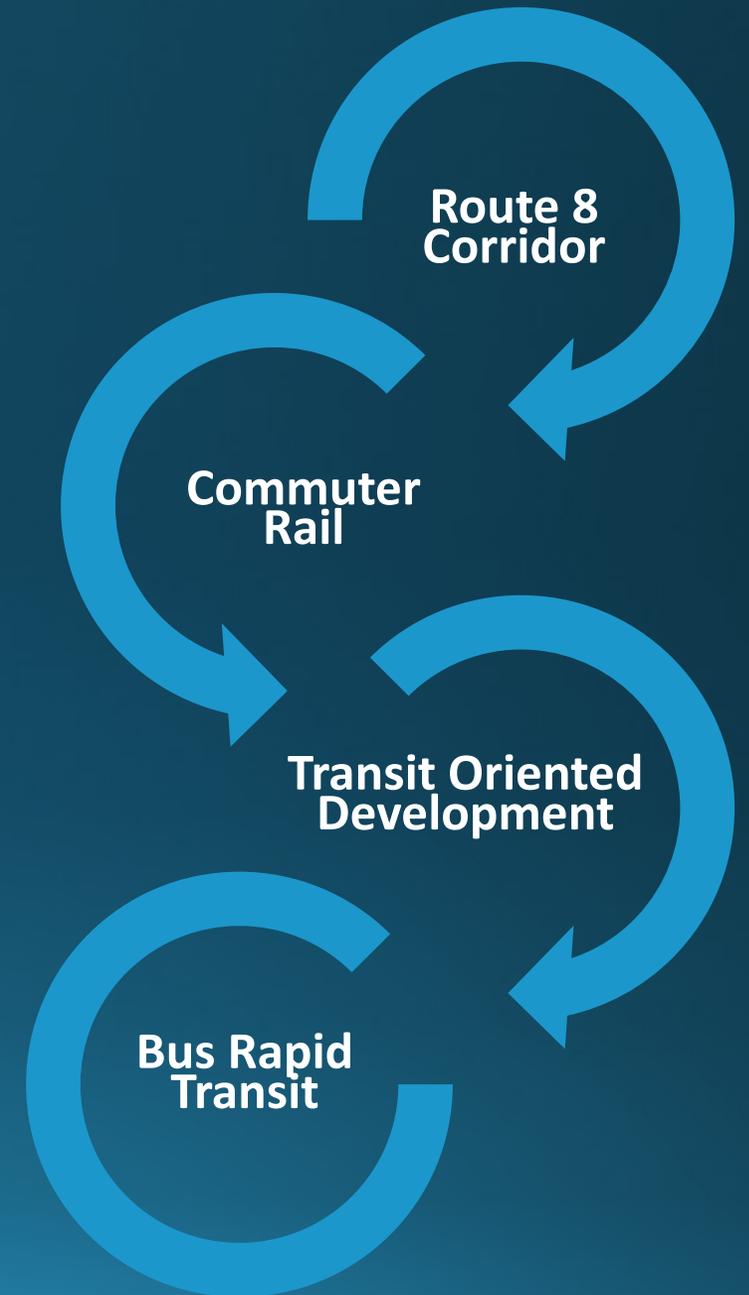
Current Travel Patterns

- Over 2 Million daily trips – overwhelmingly auto & drive alone
- Route 8 ADT = 77,600
- Daily back-ups occur on Route 8 – main bottleneck at the Derby-Shelton town line
- Daily ridership on WRL = 1,100
- About 12,500 commuters travel to the Bridgeport Avenue corridor – limited transit option



Project Goals & Objectives

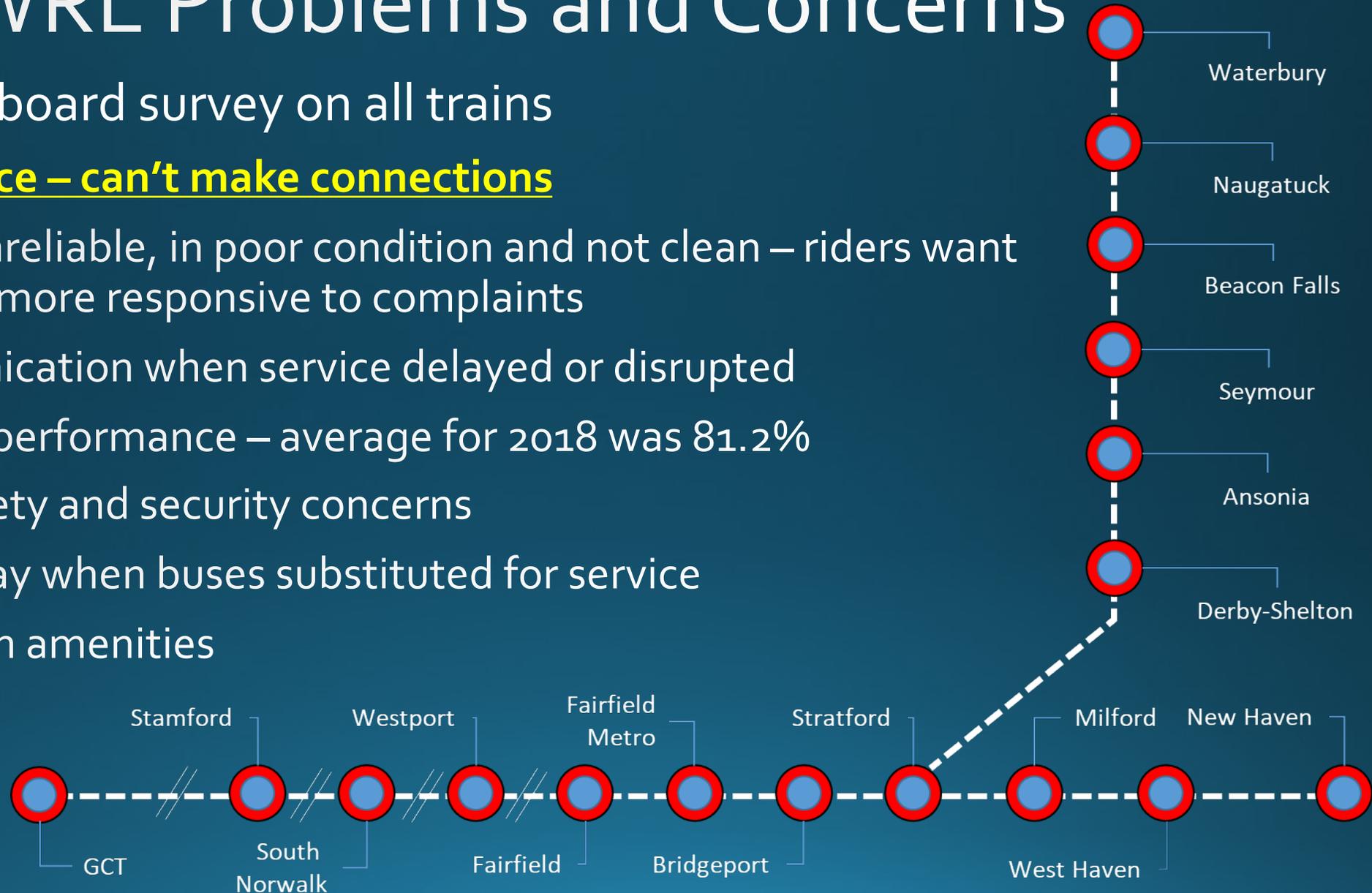
- Reduce congestion on Route 8
 - Avoid expensive highway expansion costs
- Upgrade & modernize Waterbury Rail Line:
 - Capitalize on recent infrastructure improvements
 - Expand service
 - Replace & modernize equipment
 - Enhance station areas
- Incentivize Transit Oriented Development
 - Revitalize old, urban centers
 - Support developments with ½ mile of a station
- Explore feasibility of a Bus Rapid Transit system
 - Expanded express bus service
 - Median running busway



Current WRL Problems and Concerns

Conducted on-board survey on all trains

- **Limited service – can't make connections**
- Equipment unreliable, in poor condition and not clean – riders want CTDOT to be more responsive to complaints
- Poor communication when service delayed or disrupted
- Poor on time performance – average for 2018 was 81.2%
- On-board safety and security concerns
- Excessive delay when buses substituted for service
- Lack of station amenities



CTDOT WRL Capital Projects

- Invested \$115 million in infrastructure upgrades
- Completed installation of Signal System & PTC
- Passing sidings:
 - Derby siding track completed: August 2019
 - Beacon Falls siding track expected to be completed: April 2020
 - Other sidings to be worked on during outages scheduled in 2020 and 2021
 - Passing sidings can't be put into service until signal system operational
- Signal & PTC systems operational – multiple trains can be permitted to operate on WBL
- Looking at leasing rail equipment from other states
- Plans to add 7 additional trips each day: Summer 2022

Proposed WRL Action Plan

2020-2022

- WRL Working Group recommended increase in service at January 13, 2020 event
- State adding 7 trips – Summer 2022

2025-2030

- Acquire new, modern rail equipment for WRL – coaches & dual-powered locomotives
- Expand service: 30-min. headways (peak); 60-min. headways (off-peak)
- Develop and construct new rail maintenance & storage yard for WRL

2025 - 2035

- Construct new rail stations with full amenities

Long Term Vision

- Develop & construct a transfer station
- Operate shuttle services; connect with NHML service

Short-term Actions – 2022-2024

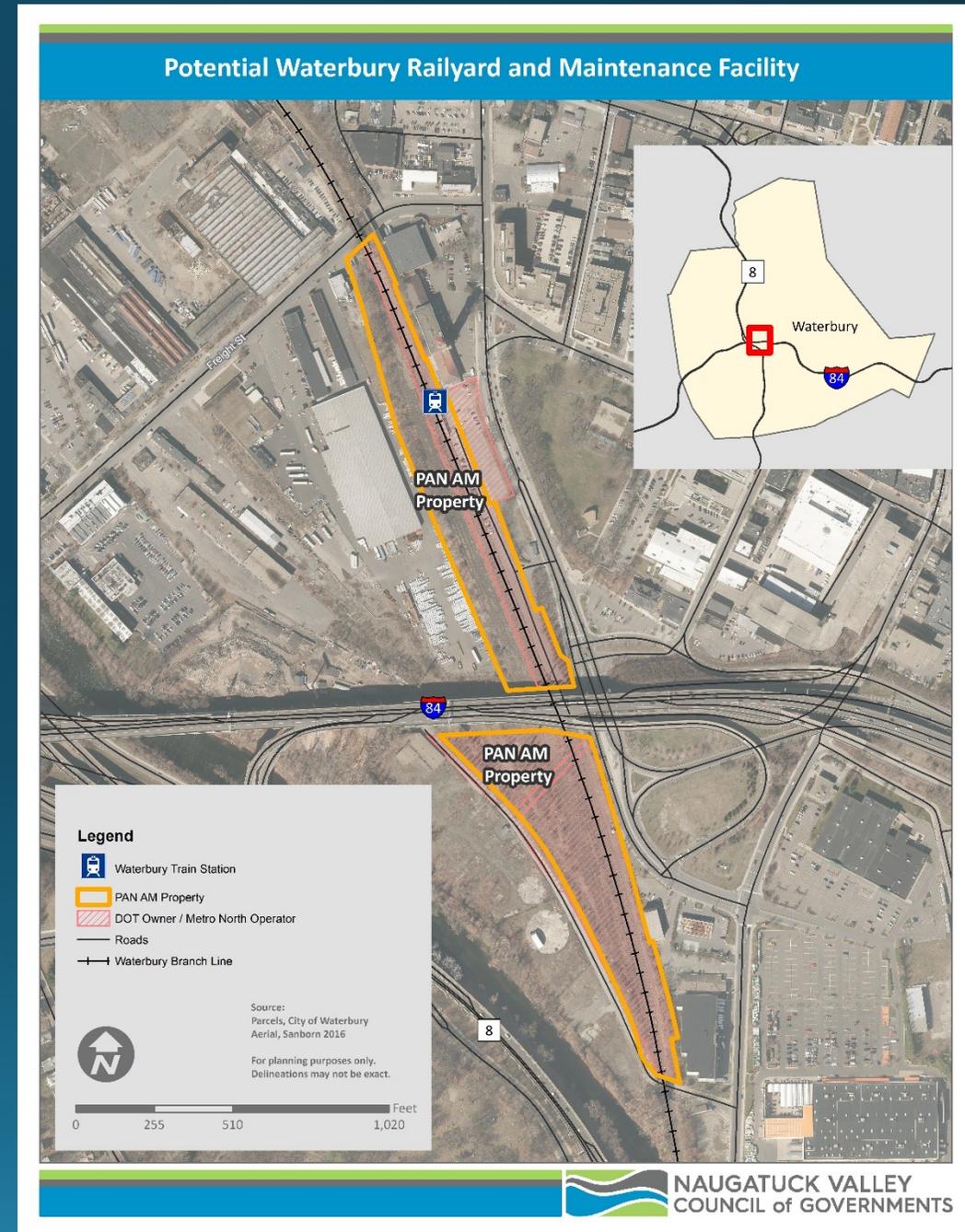
Commit to acquiring new rail coaches and dual-powered locomotives dedicated to the Waterbury Branch Line: place in service by 2025

- At least 4 sets to replace existing equipment
- At least 4 sets to expand service



Mid-Term Actions – 2025

- Expand service to provide 30-minute headways during peak periods & 60-minute headways during off-peak periods:
- Develop new rail maintenance shop, storage yard and fueling at Waterbury:



Mid-to-Long Term Actions – 2025-2030

New and rehabilitated stations:

- New building at Ansonia
- Consolidate Beacon Falls & Seymour stations; relocate at planned TOD site
- Relocate Naugatuck
- Rehabilitate Derby/Shelton station (RAISE project – 2021 Award)
- Include Full Station Amenities:
 - High level platforms
 - Platform canopies
 - Landscaping and parking
 - Real-time information systems
 - Ticketing kiosks
 - Full accessibility
 - Connections to downtown areas



Long-Term Vision – Beyond 2030

Design and construct new permanent transfer station

- Install interconnected platforms between WRL & NHML
- Connection to Track 4
- Operate “shuttle” type service on WRL to meet NHML trains
- Avoids adding trains to NHML
- Connect to New Haven
- Maintain / retain through service



Why Invest in Alternative Modes?

- Avoid highway expansion costs
- Less congestion: reduces out of pocket expenses, less time spent in traffic
- Spurs economic development
- Incentivizes TOD – mixed-use, higher density
- Helps revitalizes town centers
- Increases property & land values
- More reliable freight & goods movement
- Improves health & safety



Assessed Potential for TOD

Naugatuck Valley cities & towns are prime TOD candidates:

- Compact downtowns
- Historic/interesting architecture
- Infrastructure in place
- Rail service in place – stations in Downtowns
- Opportunity sites near train stations
- Affordable land & housing

What is needed?

- Reliable, convenient & frequent train service
- Good access to job centers – Stamford, Norwalk, New York City
- Public-private investments – need to incentivize TOD



Opportunities for TOD

- Conducted a series of workshops/Charrettes in each of the host communities
- Explained what TOD is
- Conducted TOD Visual preference survey
 - Building density & scale
 - Site layout
 - Architectural character
- Identified type & intensity of the TOD that each community preferred
- Developed “Model Block” concept
- Identified opportunity sites near train stations



Assessed Potential for BRT

- BRT would provide better travel options to corporate campuses along Bridgeport Avenue – limited public transit services
- Complement current bus and commuter rail services
- Direct, fast connection between Derby-Shelton station & Bridgeport Transportation Center
- Transit hub along Bridgeport Avenue with feeder service
- Future stops at other corporate & office parks in the corridor



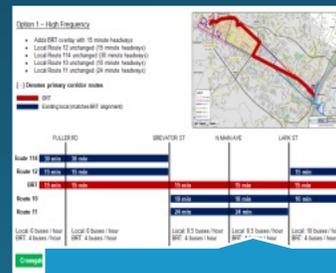
Running Ways



Stations



Vehicles



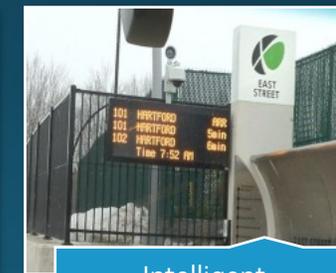
Improved Service



Fare Collection



Branding



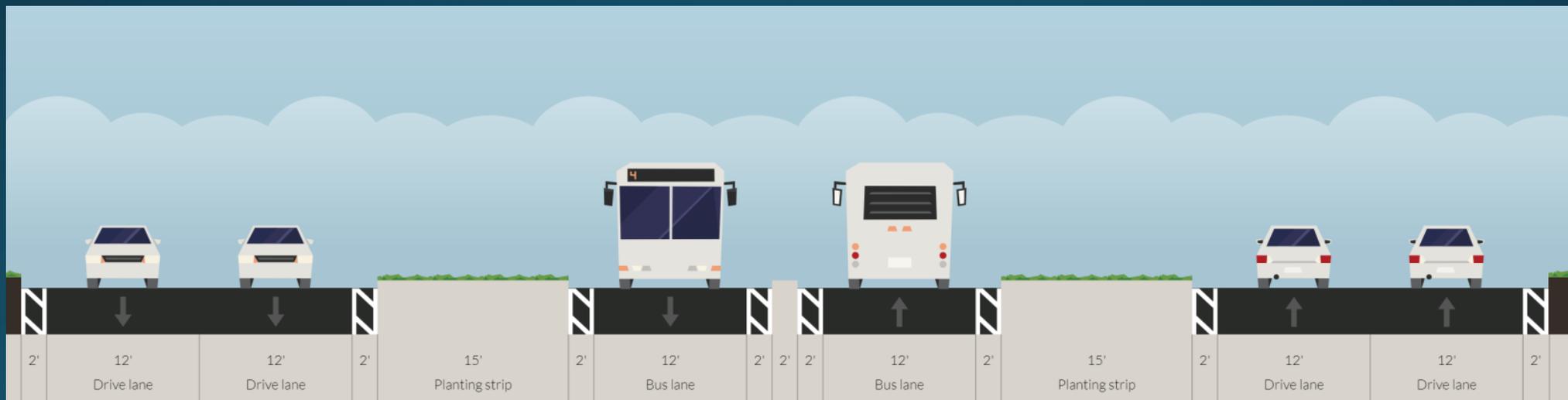
Intelligent Transportation System

Assessed Five Possible BRT Systems

Alternatives assessed:

- Median Running on Route 8
- Shoulder Running on Route 8 – Outside Shoulder
- Enhanced GBT Route 22X – Along Bridgeport Ave to Derby
- New Express Bus Route along Route 8 – Bridgeport to Waterbury
- Full BRT on Bridgeport Avenue

Need to fully assess feasibility & cost





For more information:

Project website: www.Rt8corridorstudy.com

NVCOG website: www.NVCOGCT.gov

