

Social Infrastructure Case Study: Elements of a Thriving Downtown Brockton

March 9, 2023

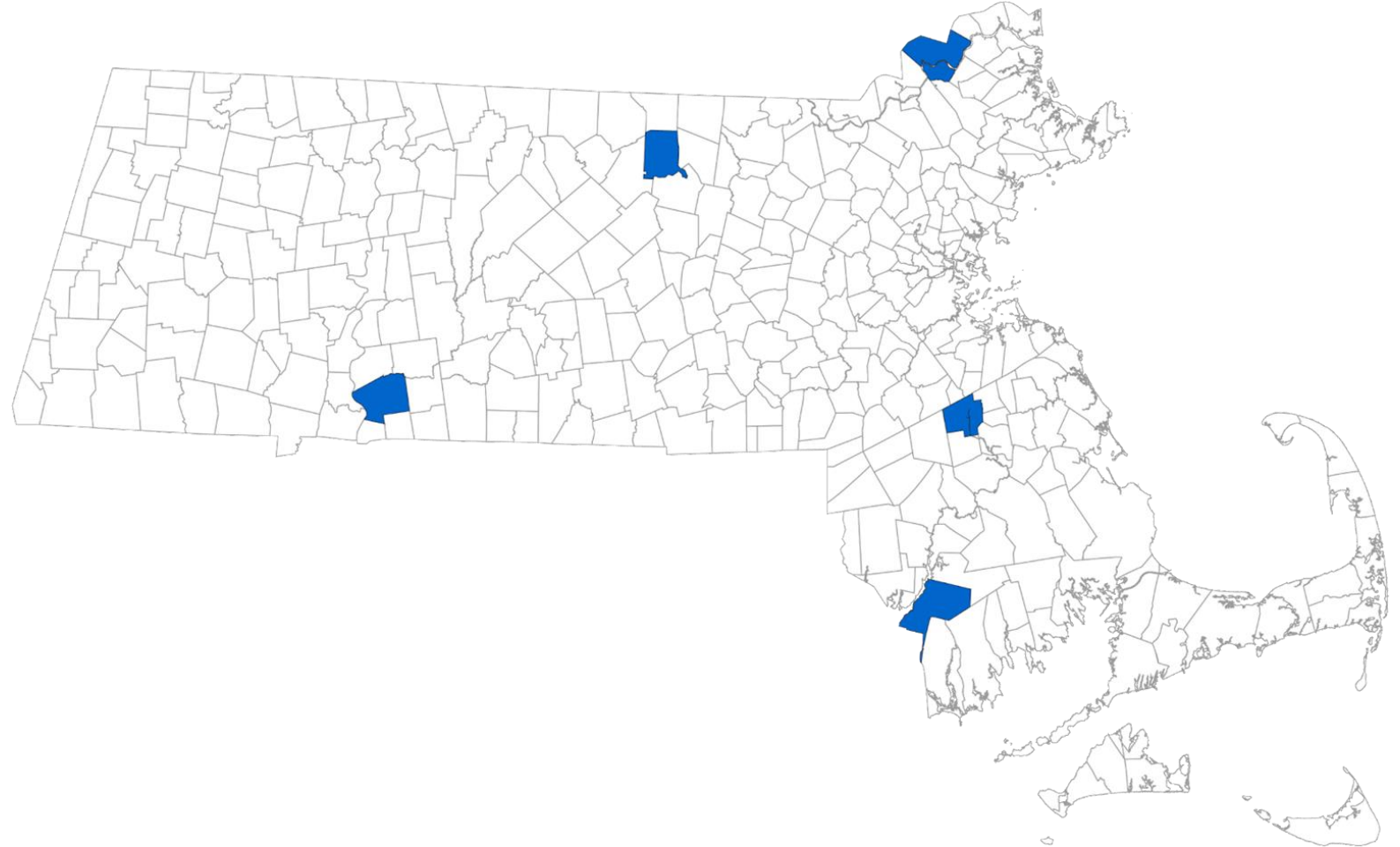
Research by André Leroux, Sidney Kuesters & Marc Leroux-Parra



MassINC

Five Gateway Cities

- Brockton
- Haverhill
- Fitchburg
- Springfield
- Fall River





Social Infrastructure = Connected Communities

Refers to aspects of the built environment that support meaningful social interaction, from sidewalks and storefronts, to cafes and barbershops, to libraries, parks, and public transit.

Examples of Social Infrastructure



“Third Spaces”



The Future of Small Downtowns

- Is your downtown a “complete neighborhood?” In other words, can you access your basic needs within a short distance?
- Can your city sustain a hybrid work force with the amenities it currently offers?
- Does downtown feel welcoming to all ages, cultures, and incomes?



“The Stroll Test”

Can you spend an enjoyable hour or two without having anything particular to do?



Methodology

What makes a downtown vibrant and walkable?

1. Land-use: Oriented toward people or cars?
2. Streetscape: Active or inactive?
3. Amenities: Quality of life
4. Civic Spaces: Generative or defensive?



Land-Use Analysis

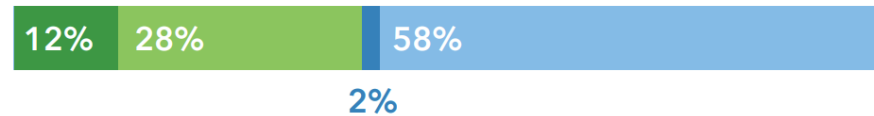
REGIONAL LAND

Share of Regional Land by Land Use Type:



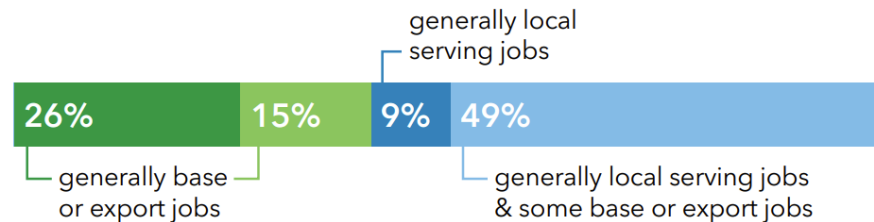
POPULATION

Share Residing in Each Land Use Type:



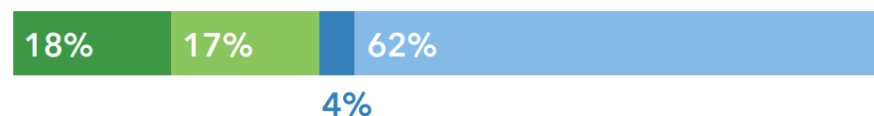
EMPLOYMENT

Share of Employment in Each Land Use Type:




ASSESSED VALUE


Share of Region's Total Assessed Value & Property Tax Revenue by Each Land Use Type



Downtown Brockton is a "WalkUP" like much of Boston and Cambridge

 WALKUP ("Walkable Urban Place")

 WALKABLE NEIGHBORHOOD

 DRIVABLE EDGE CITY

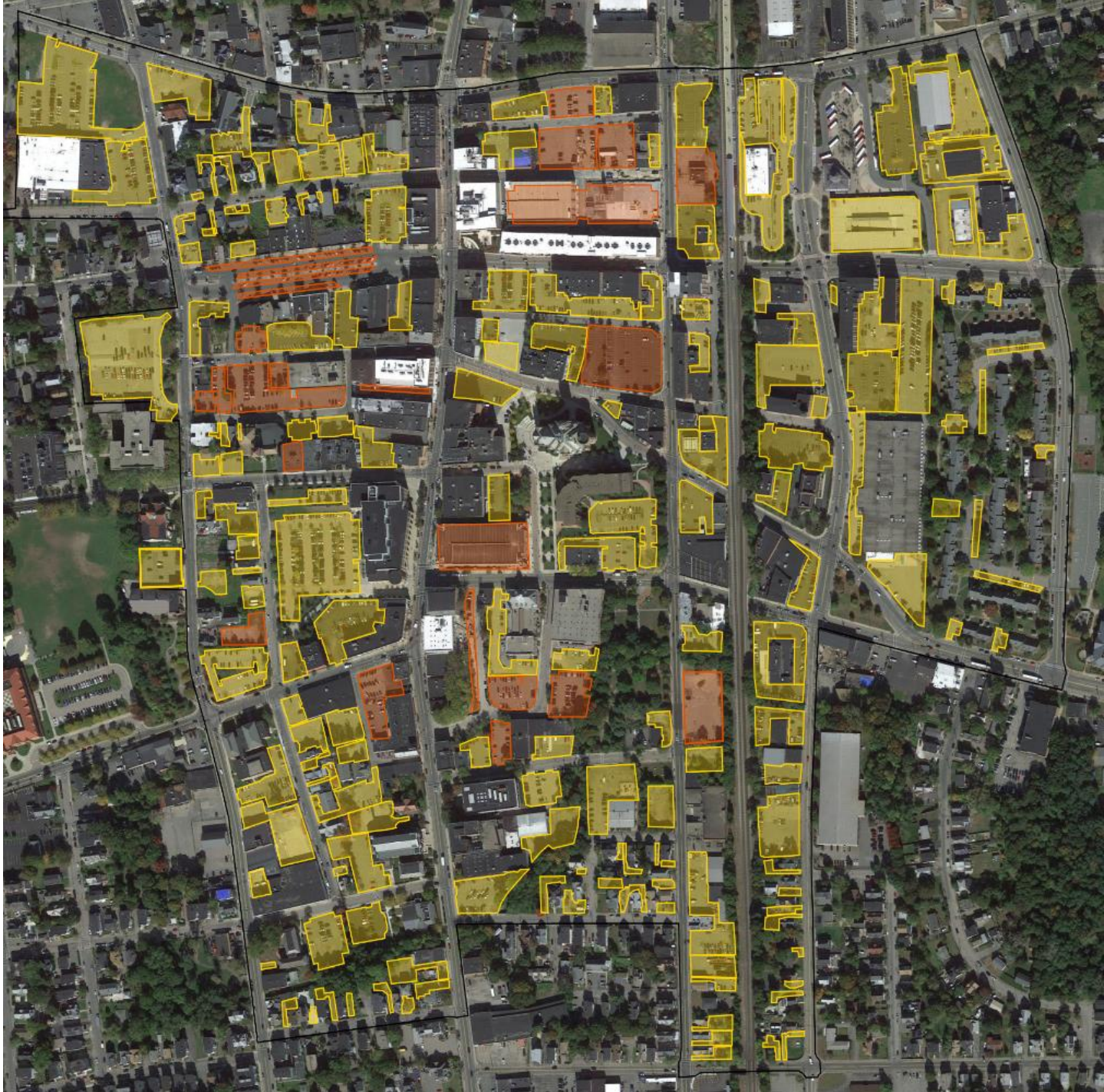
 DRIVABLE SUB-DIVISION

From "The WalkUP Wake-Up Call: Boston" by Christopher Leinberger and Patrick Lynch, 2016, LOCUS

Downtown Off-Street Parking

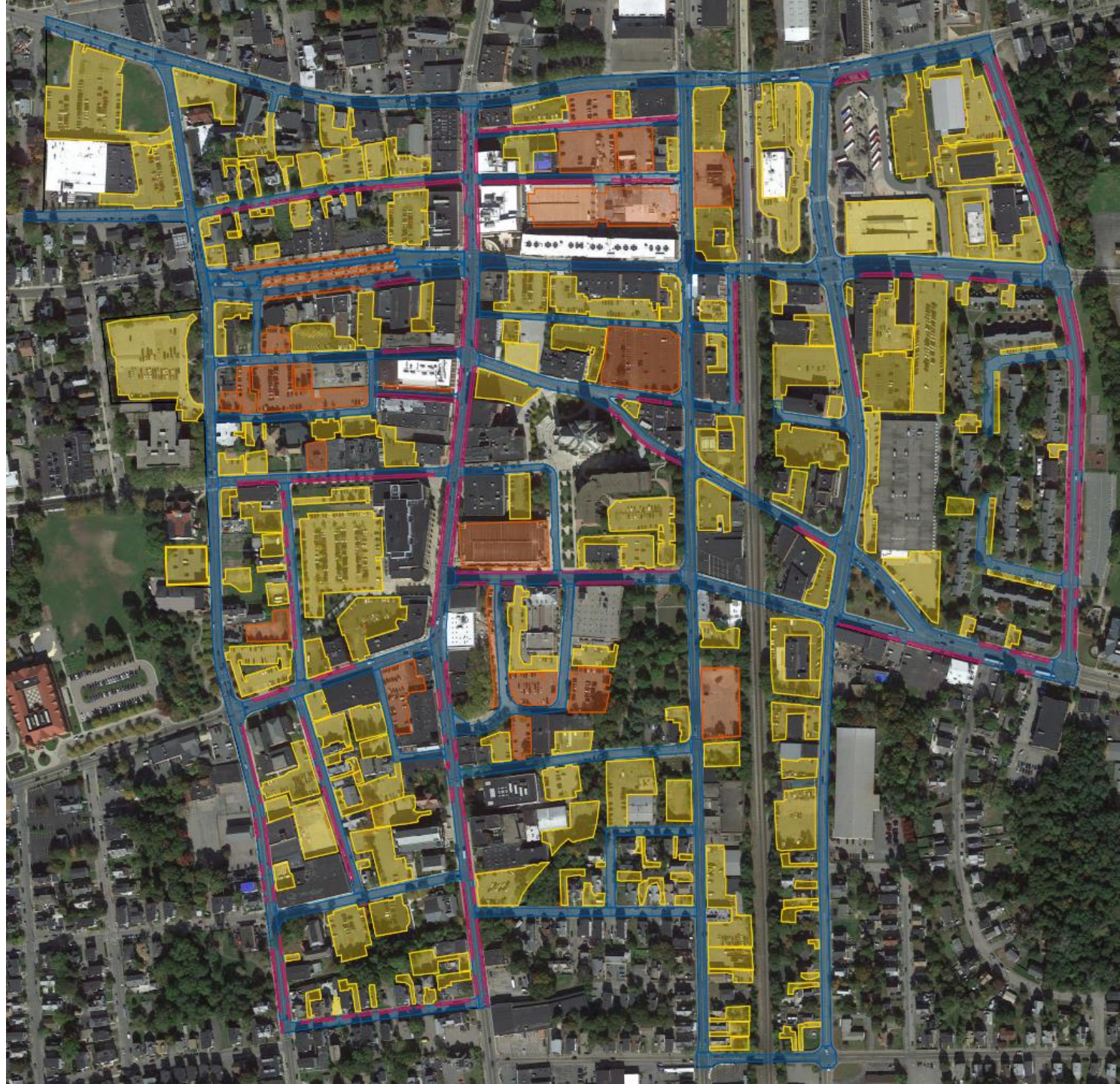
Off-street parking:

- **28%** of Brockton's downtown land-use
- **36%** of all developable land in Brockton (Land excluding current streets, railroads, and parks)



Combined Car Infrastructure

46% of land in
downtown
Brockton is
dedicated to car
infrastructure



Implications for Land Use

- Disconnected activity zones—points of interest are scattered
- Large swaths of parking = fewer eyes on the street, perception that area is less safe
- More curb cuts and car-pedestrian conflicts
- More parking leads to more cars until over-supply is reached (“induced demand”). Sets expectation that every destination should be surrounded by ample low-cost parking, which reduces overall attractiveness and foot traffic for businesses
- Overbuilt parking gradually replaces the community uses that people are driving to reach
- Higher costs for utility construction and maintenance
- Lower property tax revenue per square foot

Development Example Fitchburg, MA

Main Street

Total Value:
\$325,000

Acres: ~ 0.41

Value Per Acre:
\$784,000



Chris Zimmerman, Smart Growth America, 2017

Development Example Fitchburg, MA

Main Street

Total Value: \$194,000

Acres: ~ 0.11

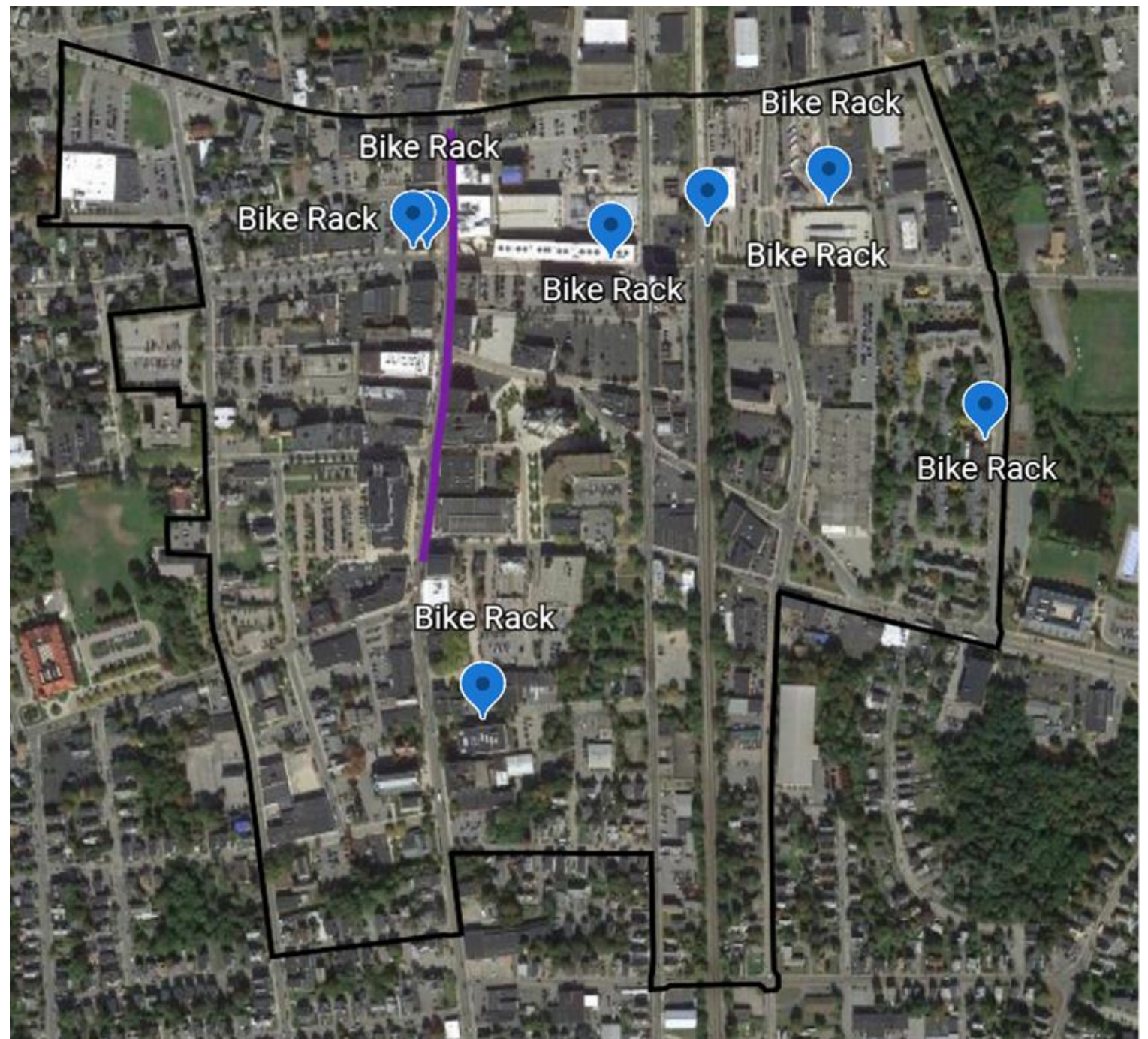
Value Per Acre:
\$1,700,000



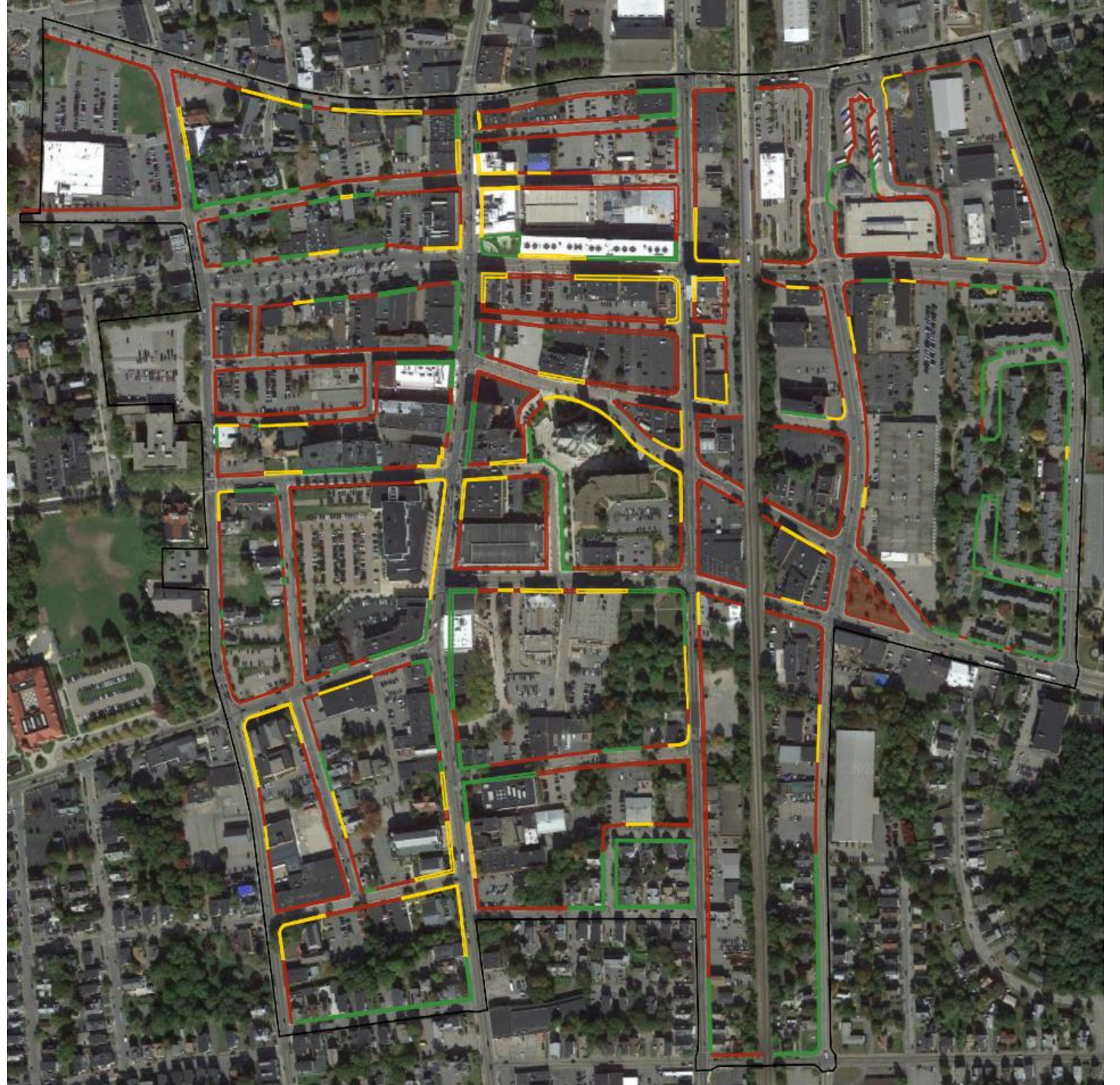


Streetscape Analysis

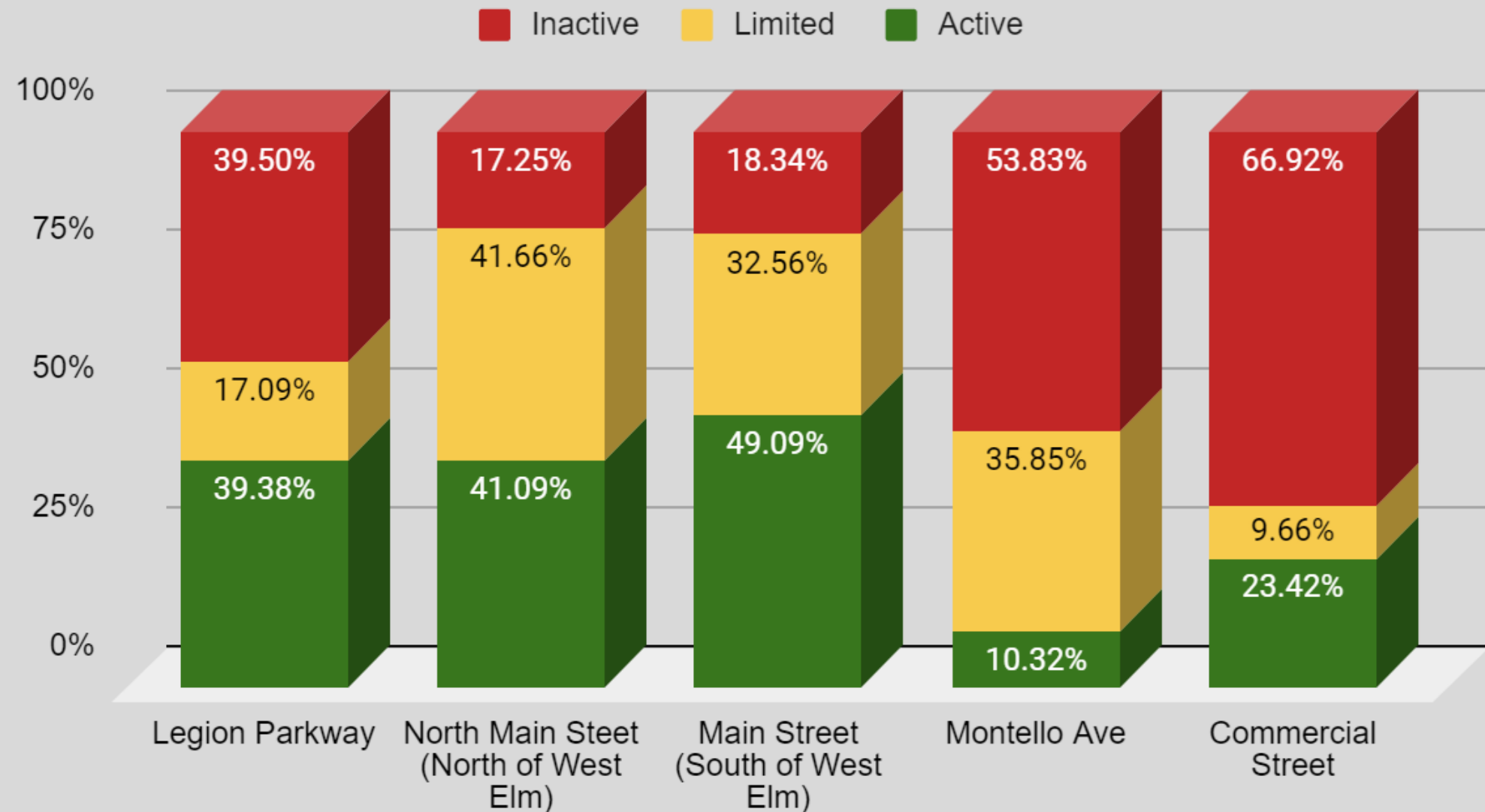
Bicycle Paths and Parking



Brockton Streetscape Activity



Streetscape Activity Summary



Implications for Streetscapes

- During permitting process, require frequent entryways and transparent facades
- Enhance “limited activity” parcels such as institutional uses with public art, lighting and other opportunities to pull more eyes to the site
- Prioritize filling in inactive storefronts in the northwest quadrant to build a few blocks that invite walking
- Reduce curb cuts and convert surface parking to uses with active streetscape
- Improve pedestrian environment along main corridors by reducing speeds and protecting pedestrian safety at intersections
- In the short term, use programming, pop-ups and food trucks to connect gaps in the active streetscape in key areas

Amenities



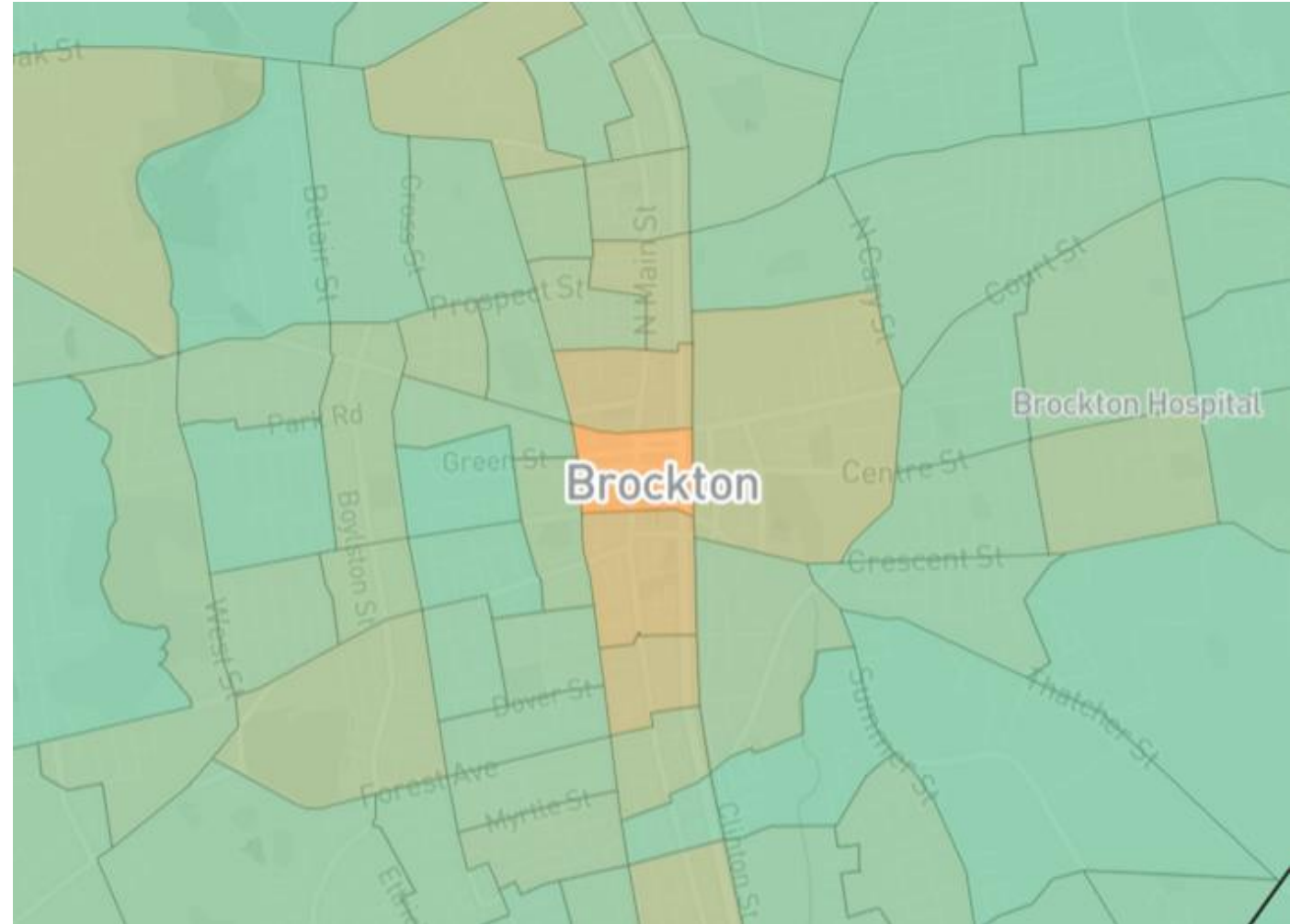
Tree Equity Score

What does the tree equity score measure?

"TES calculates scores based on how much tree canopy and surface temperature align with income, employment, race, age and health factors in the U.S."

What's the score?

The tree equity score in the center of downtown Brockton is 27. The score increases to the mid 50s and subsequently 80s when looking at the surrounding zones.

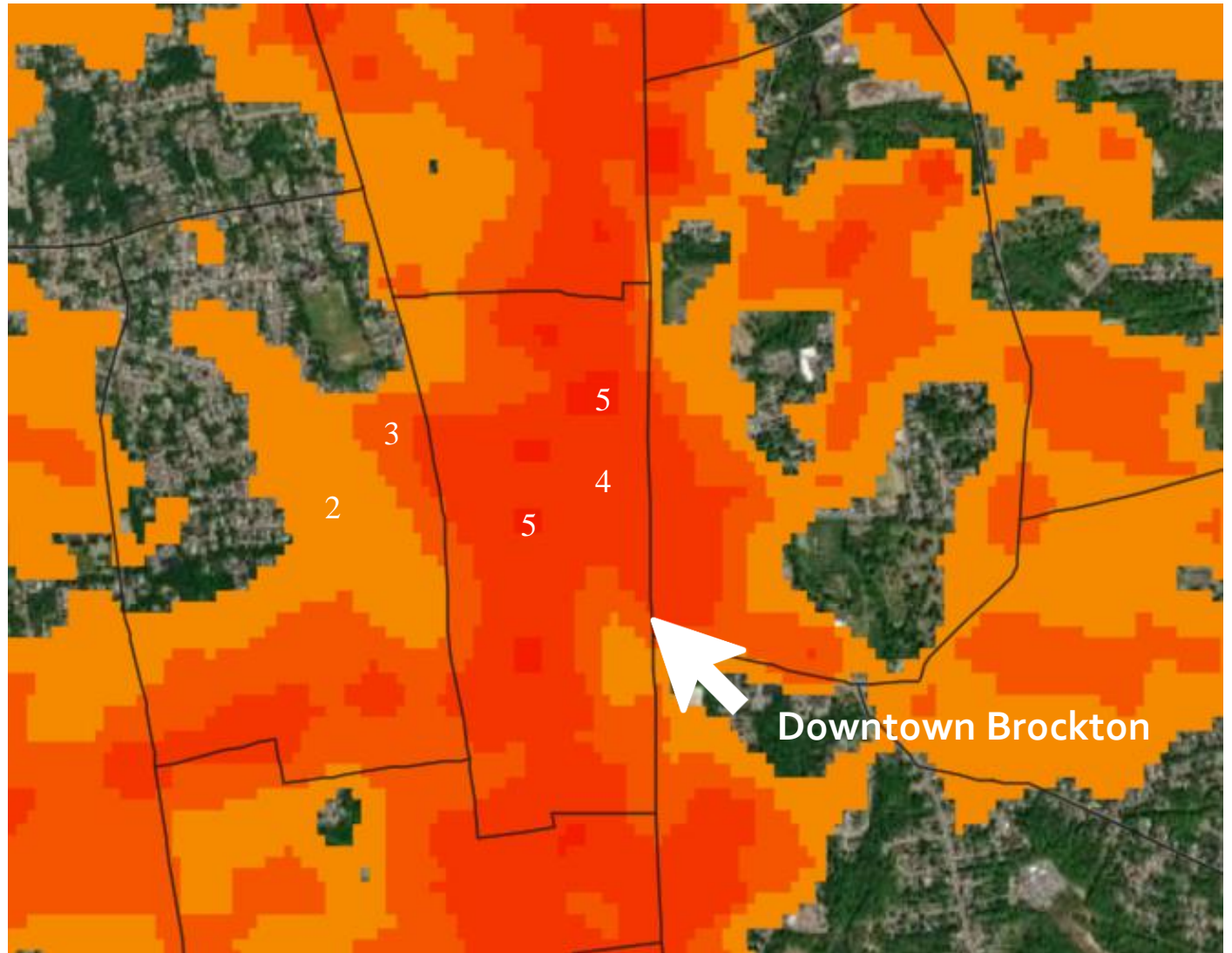


Urban Heat Island

What is the Urban Heat Island Effect?

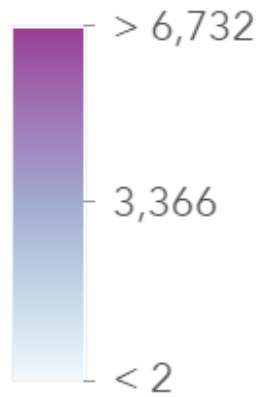
""Urban heat islands" occur when cities replace natural land cover with dense concentrations of pavement, buildings, and other surfaces that absorb and retain heat. This effect increases energy costs (e.g., for air conditioning), air pollution levels, and heat-related illness and mortality."- EPA

The Trust for Public Land,
Descartes Labs, USGS



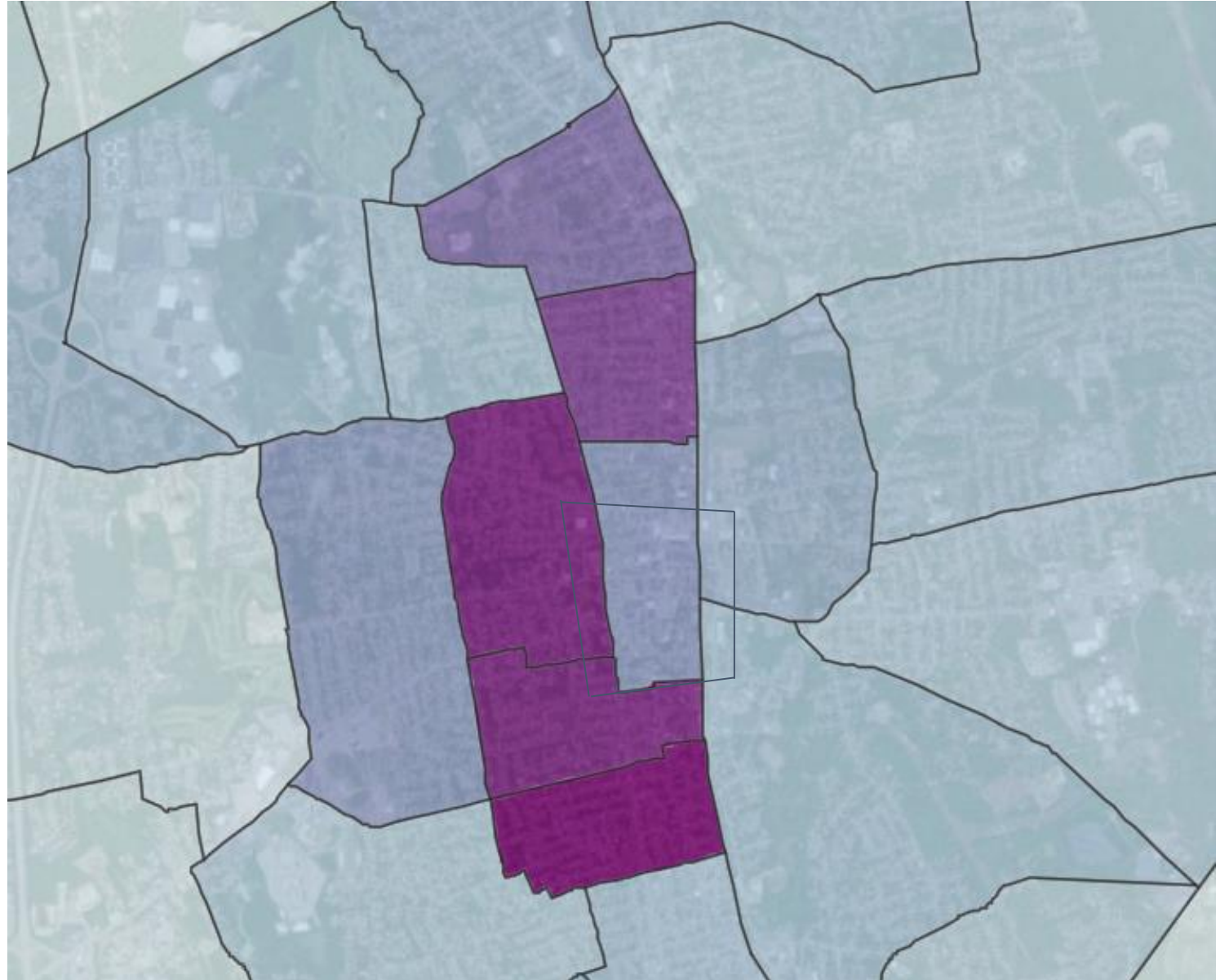
Density Analysis

Population Density (people per square kilometer)

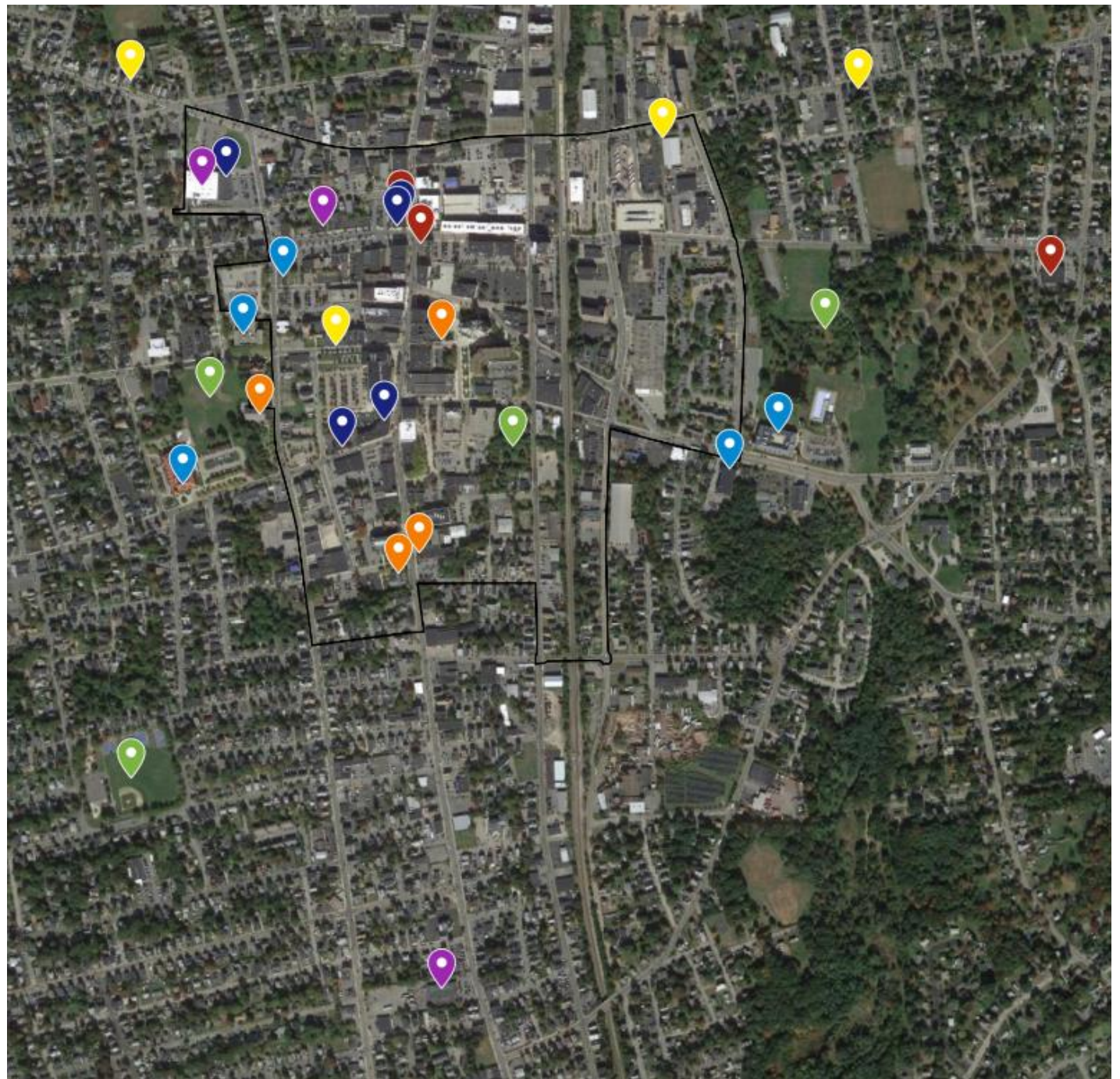
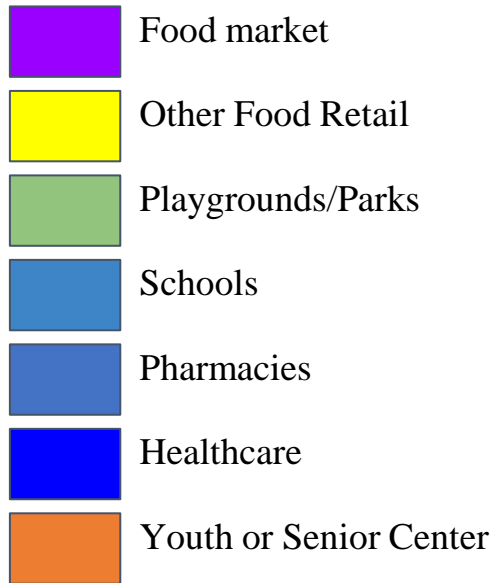


Downtown Brockton is not as dense as adjacent neighborhoods.

U.S. Census Bureau's 2014-2018 American Community Survey's 5-year estimates, Tables B01001 and B25010.



Essential Goods & Services: “15-Minute Neighborhoods”



Implications for Amenities

- Consider recruiting to the downtown businesses and institutions that serve children, teenagers, and families
- Introduce street trees and landscaping to improve aesthetics and reduce noise and air pollution while moderating the effects of extreme weather on residents and visitors
- Try to connect and enhance existing uses by building organically on the existing cluster of activities in the northwest quadrant
- Continue the evolution of the downtown into a mixed-use neighborhood that can support small businesses by continuing to attract new housing development
- Recruit an additional mid-sized market and pharmacy to the southern end of downtown.

Civic Spaces



Active & Inclusive Civic Spaces



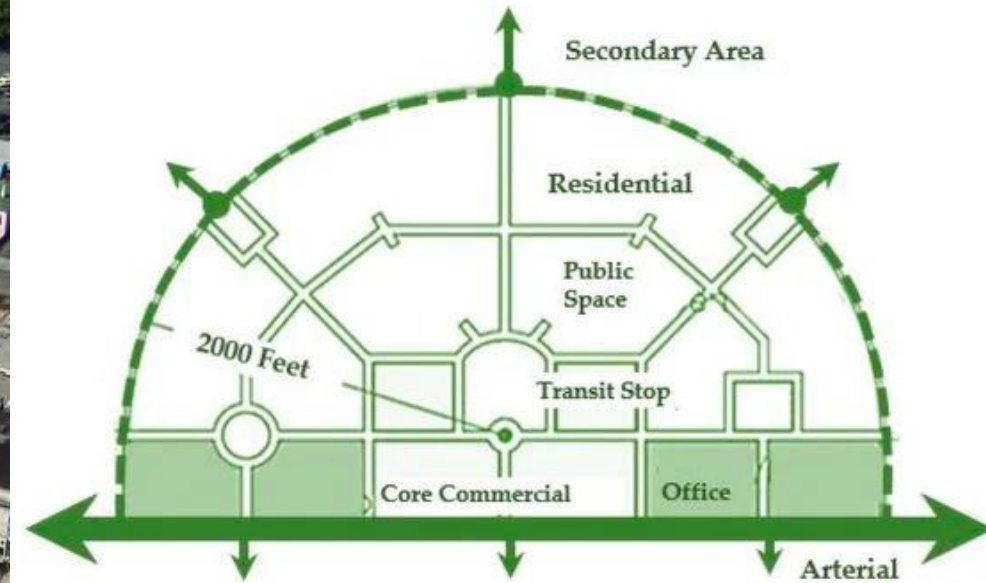
Zocalo, Coyoacan, Mexico City (Photo: Viator, TripAdvisor)

Brockton Commuter Rail Station



A Major Commuter Rail Station Redevelopment Could Bridge to Montello Avenue and Activate Commercial Street

[The City is Already in Early-Stage Planning]



Opportunity to Create a New Commercial and Civic Space

- “Green Steps” Concept: Utilize the gradient for public terraces where residents can sit and drink/eat with restaurants and retail frontage
 - In process: Green Links and New Parklet Policy
- Redevelop both sides of the commuter rail station, incorporating housing, office space, and retail space into the design
 - In process: City developing concept for RFP next year
- Establish a common civic space anchoring a major TOD district along Commercial Street
 - Such as a public plaza in the development that will replace the current police station once they move



Brockton City Hall Plaza

- 2 active entrances fronting on plaza
- 4 adjacent parking lots
- 33,193 ft²





Marc Vasconcellos
The Enterprise

City Hall Plaza Land Use

Key:

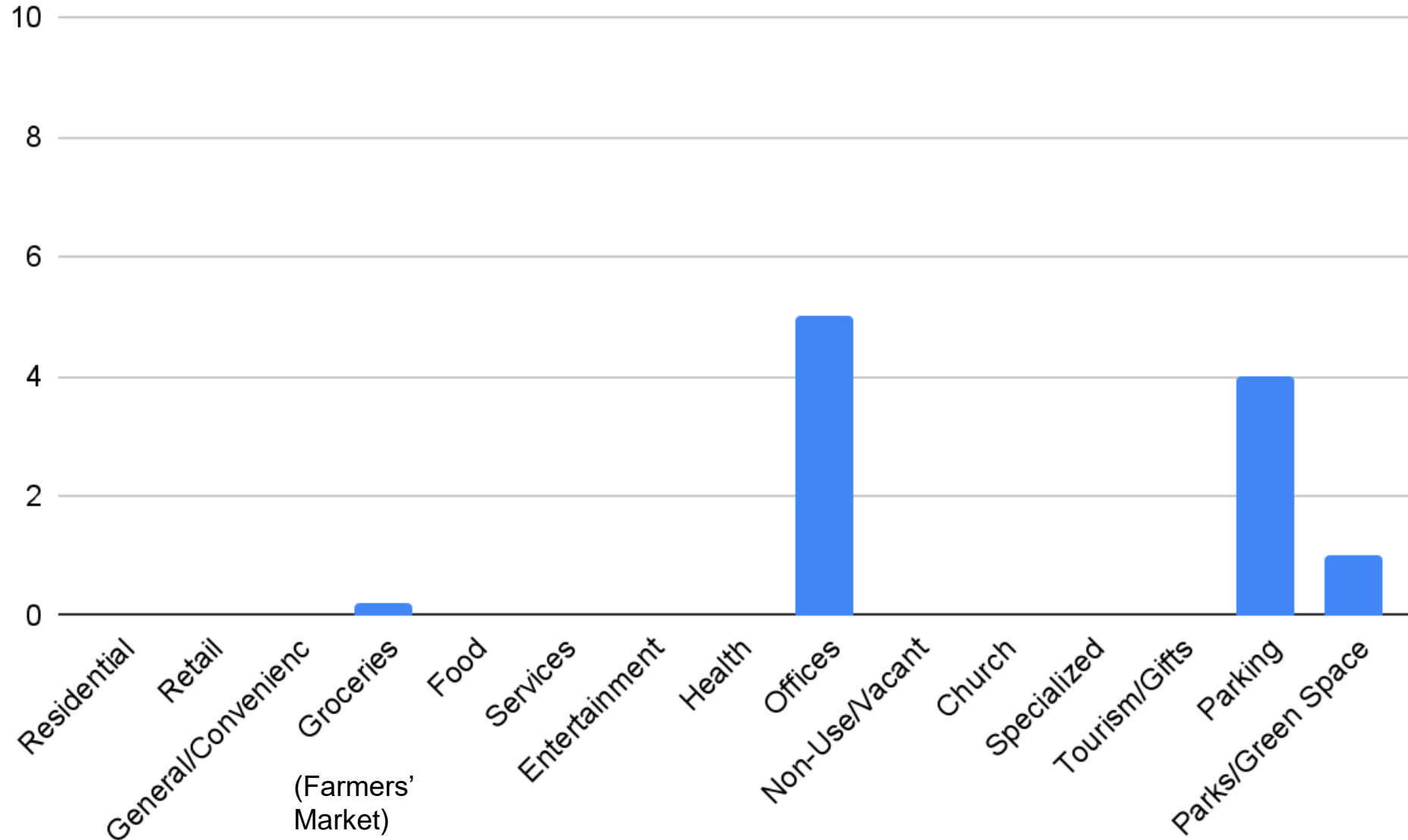
Parking

Plaza

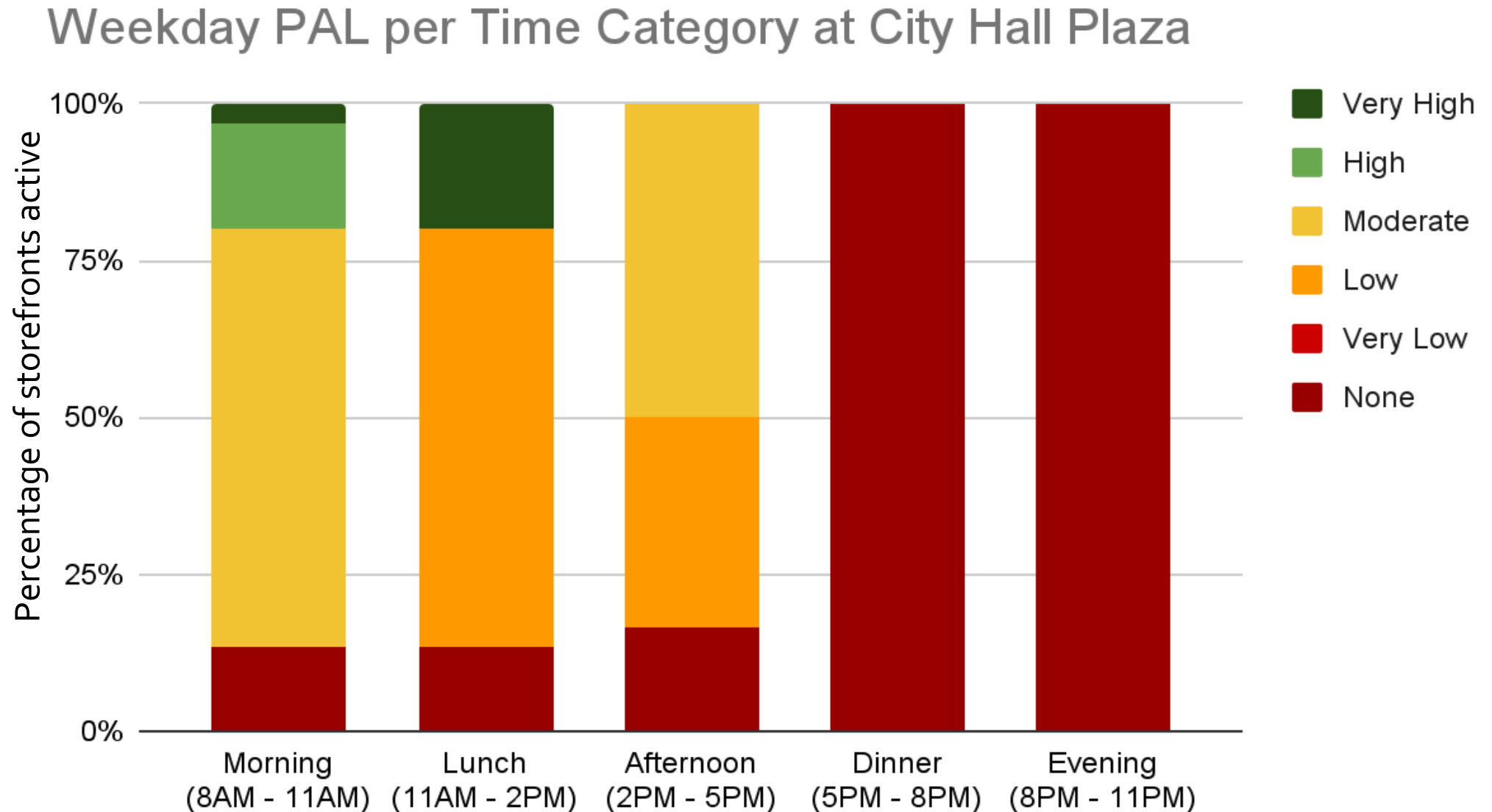




City Hall Plaza: Contextual Activities

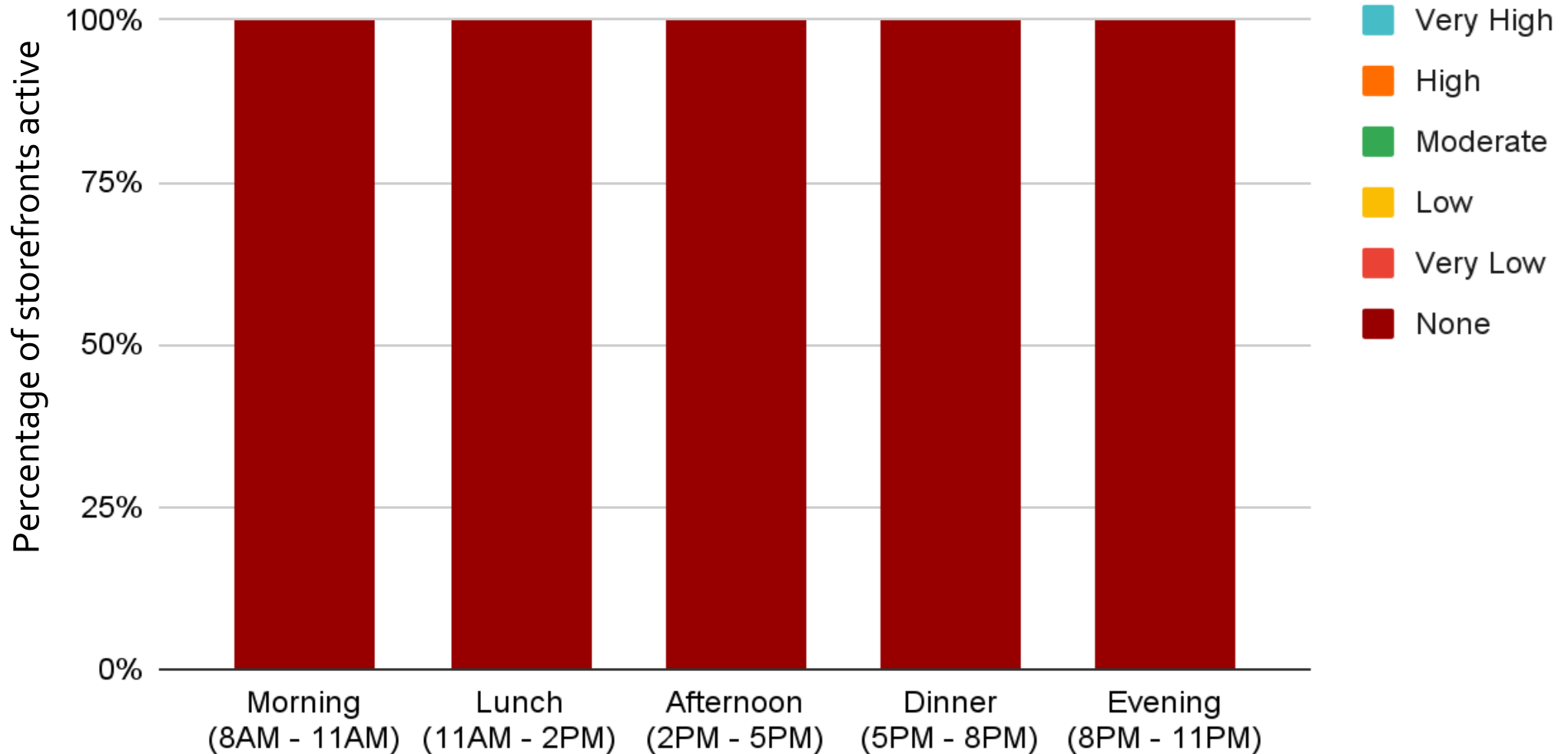


Weekday Pedestrian Activity Level - City Hall Plaza



Weekend Pedestrian Activity Level - City Hall Plaza

Weekend PAL per Time Category at City Hall Plaza



Pioneer Square Portland OR



Implications for City Hall Plaza

- Encourage surrounding buildings to orient themselves toward the plaza and activate closed entrances where feasible
- Bring food trucks and pop-up businesses to the edge of the plaza on a regular basis (potentially even an after-hours/weekend staffed municipal kiosk)
- Streamline temporary permits for City Hall Plaza to encourage more frequent programming for community uses; partner with housing complexes and community groups to bring games and family activities
- Short-term, improve School Street pedestrian crossing and consider narrowing the street with a protected bike lane
- Long-term, convert City Hall surface parking into mixed-use development with active street frontage

Legion Parkway

- 23 Active Entrances
- 9 Empty Storefronts
- 4 Parking Lots
- 63,308 ft²



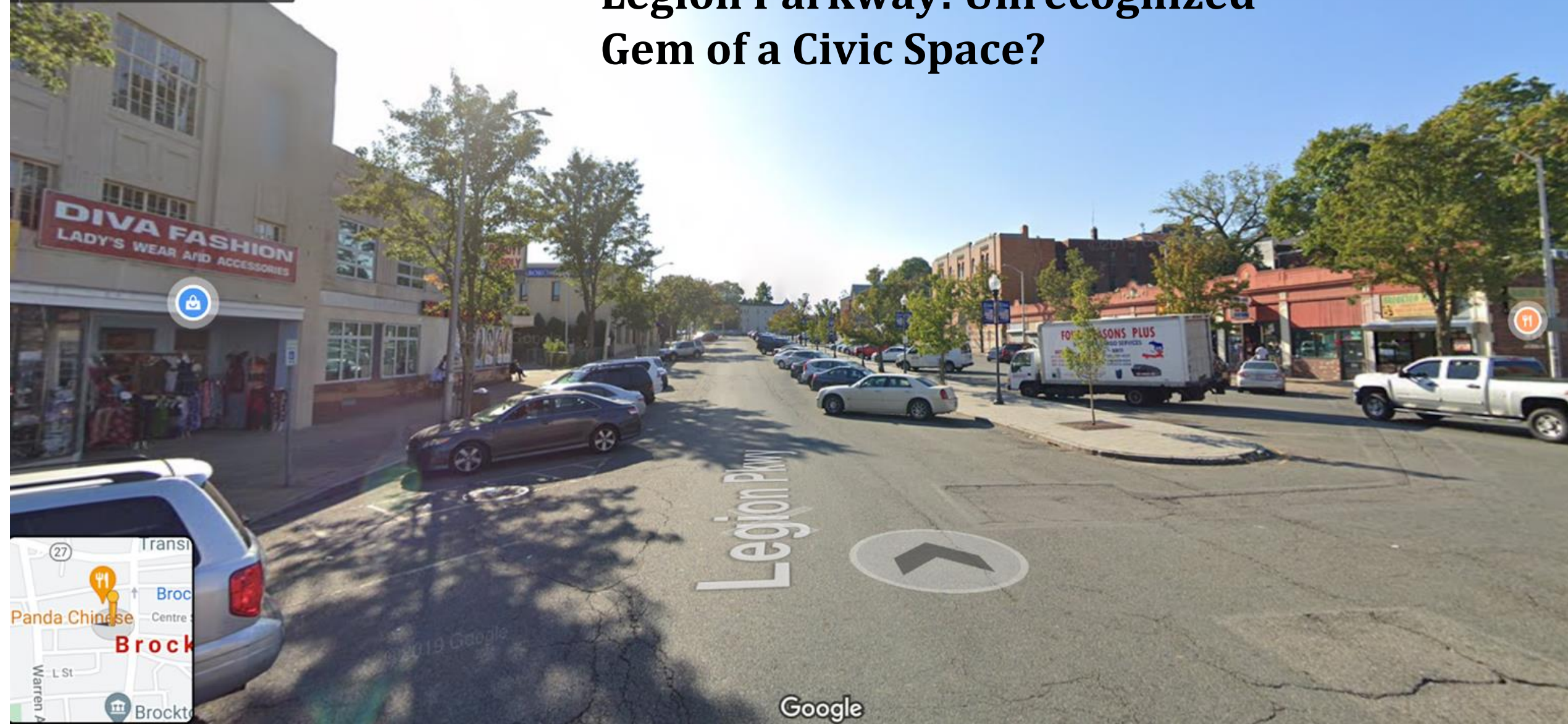


Google

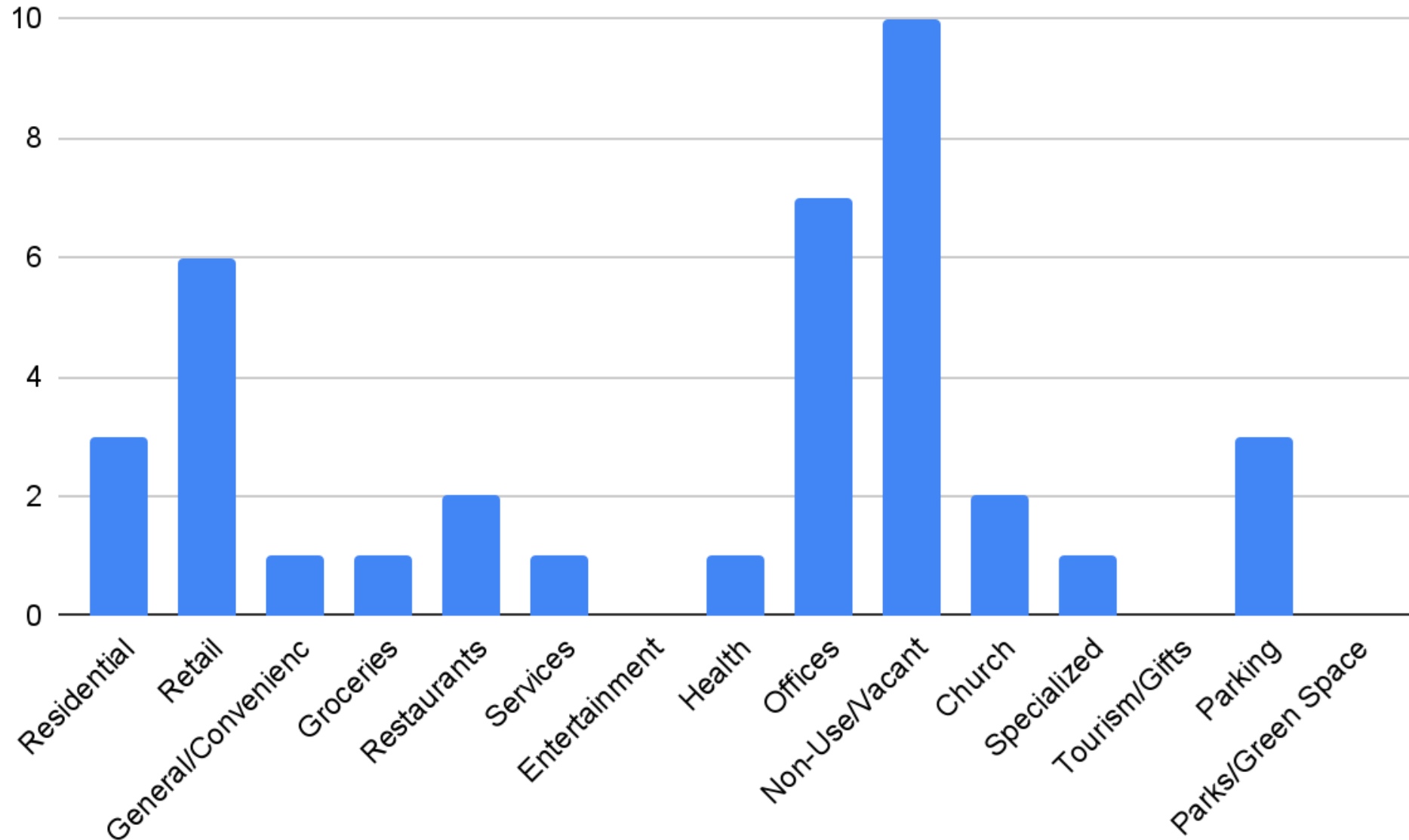


Street View

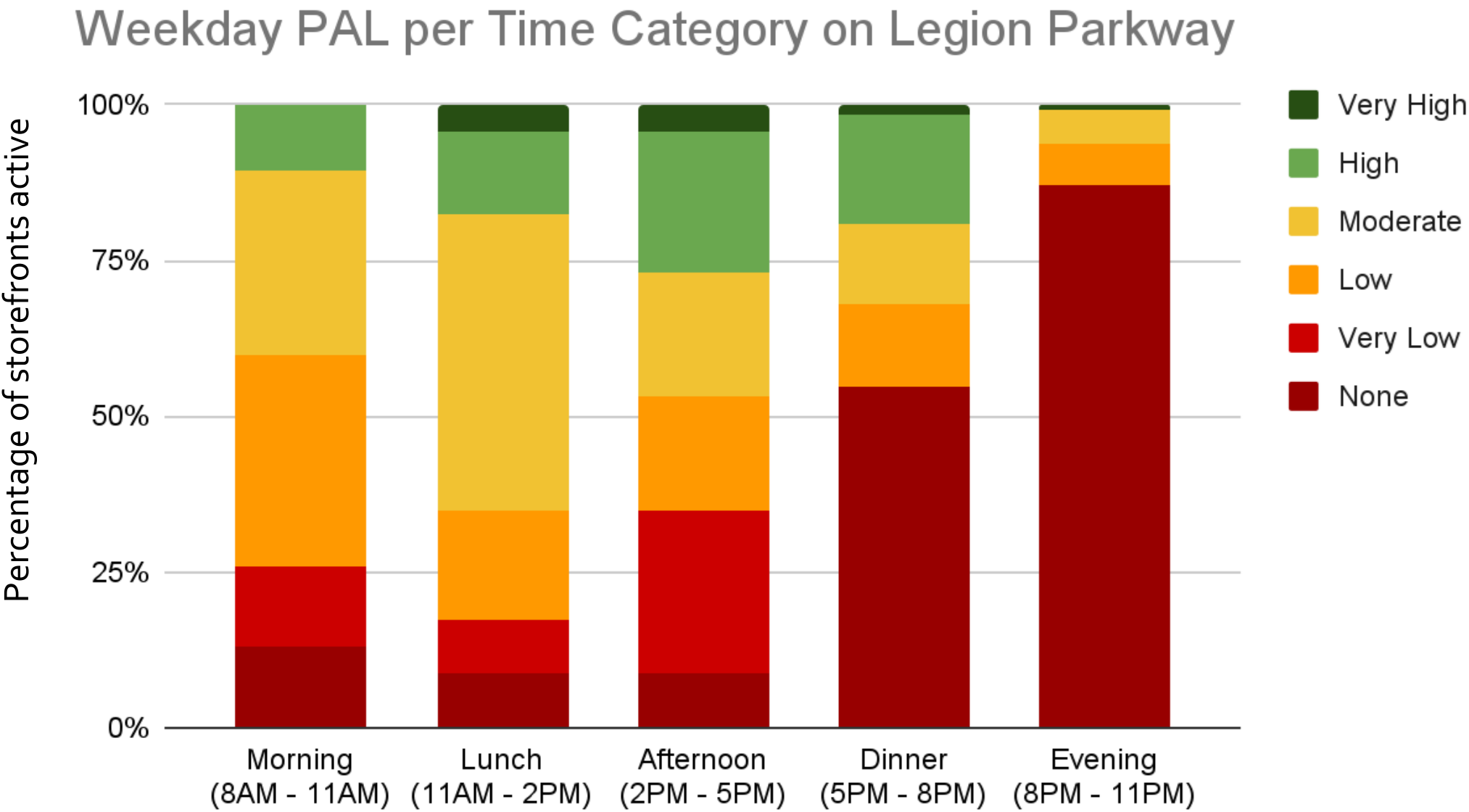
Legion Parkway: Unrecognized Gem of a Civic Space?



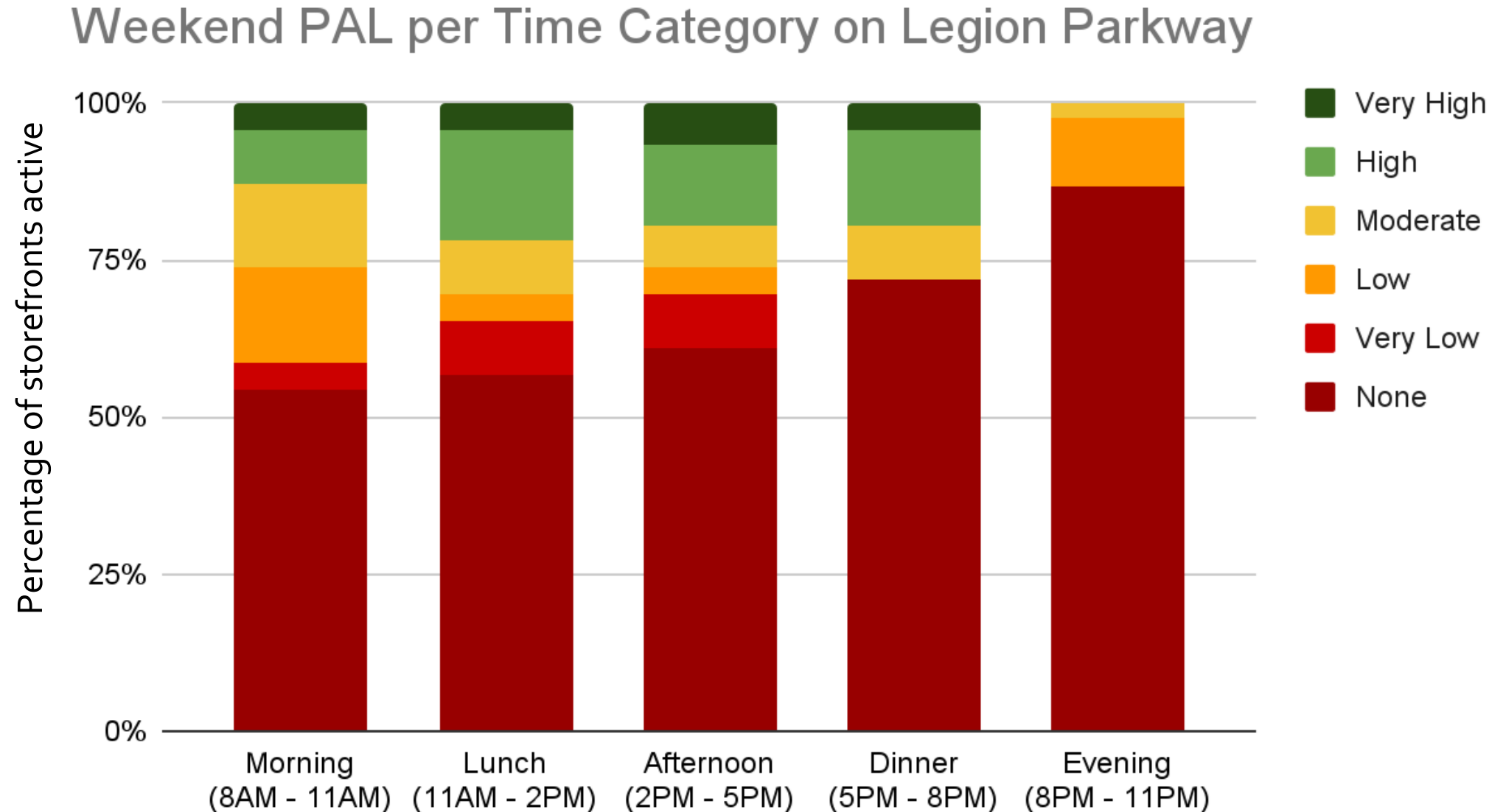
Legion Parkway: Contextual Activities



Weekday Pedestrian Activity Level - Legion Parkway



Weekend Pedestrian Activity Level - Legion Parkway



Inspirations for Placemaking



<https://chicagoyimby.com/2022/01/city-council-approves-new-pedestrian-streets-in-west-loop.html>

Inspirations for Placemaking



<https://www.bizjournals.com/phoenix/news/2021/03/09/redevelopment-plans-outlined-for-christown.html>

Inspirations for Placemaking

<https://www.planetizen.com/news/2019/10/106451-past-and-future-pedestrian-malls>



Implications for Legion Parkway

- Activate vacant storefronts on the western side of the Parkway and long-term seek infill development to create a contiguous active streetscape
- Work with property owners of car-oriented businesses to consider redevelopment and help establish a stronger pedestrian connection to Vicente's Market
- Using "lighter, quicker, cheaper" tactics, experiment with placemaking and programming in the Parkway, temporarily using the central two lanes of on-street parking to create a plaza or promenade
- Work with Black Owned Brockton and other local groups to support inclusive entrepreneurship and build a larger cluster of diverse local businesses around the Parkway
- Try to attract uses that will extend foot traffic into the evenings and on weekends
- The center island could be a location for permanent commercial pop-up stands, art installations, or service kiosks
- Develop clear wayfinding to encourage drivers to park in central locations and walk

Local Policy Recommendations (Slide 1 of 2)

- 1. Parking:** Centralize downtown parking in structured parking facilities that also makes electric vehicle (EV) infrastructure accessible to downtown residents. Improve wayfinding that encourages visitors to park and walk. *[Status: Carpenter Garage open, new garage proposed for Site AC]*
- 2. Infill Development:** Convert surface parking into mixed-use developments that activate the streetscape and grow foot traffic with additional residents and workers. Lay the groundwork for a large-scale TOD project along Commercial Street adjacent to the commuter rail station. *[Status: City is working on moving key parcels to RFP]*
- 3. Place Governance:** Consider forming a Business Improvement District (BID) centered on Legion Parkway and North Main Street with the participation of the Downtown Business Association and Black-Owned Brockton, among others. *[Status: Planning underway]*

Local Policy Recommendations (Slide 2 of 2)

4. **Biking:** Improve street safety by extending bicycle infrastructure throughout the downtown. Explore how micromobility options like shared bikes or scooters can connect residents effectively to bus and rail hubs. *[Status: Not underway yet]*
5. **Walking:** Develop clusters of activities, activate streetscapes where there are gaps between active uses, and improve pedestrian safety and aesthetics. *[Status: City developing Green Links, promoting redevelopment of vacant properties]*
6. **Civic Spaces:** Focus on cultivating a small number of civic spaces to function as the beating heart of the downtown, providing a front porch for businesses along with places to rest and people-watch as pedestrians circulate through the downtown. *[Status: Working on City Hall expansion]*

State Policy Recommendations

- 1. Infill Development:** Support effective financing tools for small and mid-sized infill development in Gateway Cities—replace surface parking, generate more activities, entrances, and engagement with public space.
- 2. Parking:** Centralize downtown parking in structured parking facilities designed to introduce electric vehicle (EV) infrastructure to Gateway City downtowns.
- 3. Place Governance:** Dedicate a portion of state online sales tax revenue for reinvestment in downtowns to support district management, placemaking strategies, and improvements to civic space.
- 4. Public Transit:** Fully implement the MBTA's Rail Vision strategy and increase access by supporting low-income fares for commuter rail and fare-free programs for RTAs.

Thank You!

We welcome your feedback and suggestions

Contact: André Leroux at (617) 251-3861 or aleroux@massinc.org

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