

Shoreline Drive Traffic Study Pilot Project

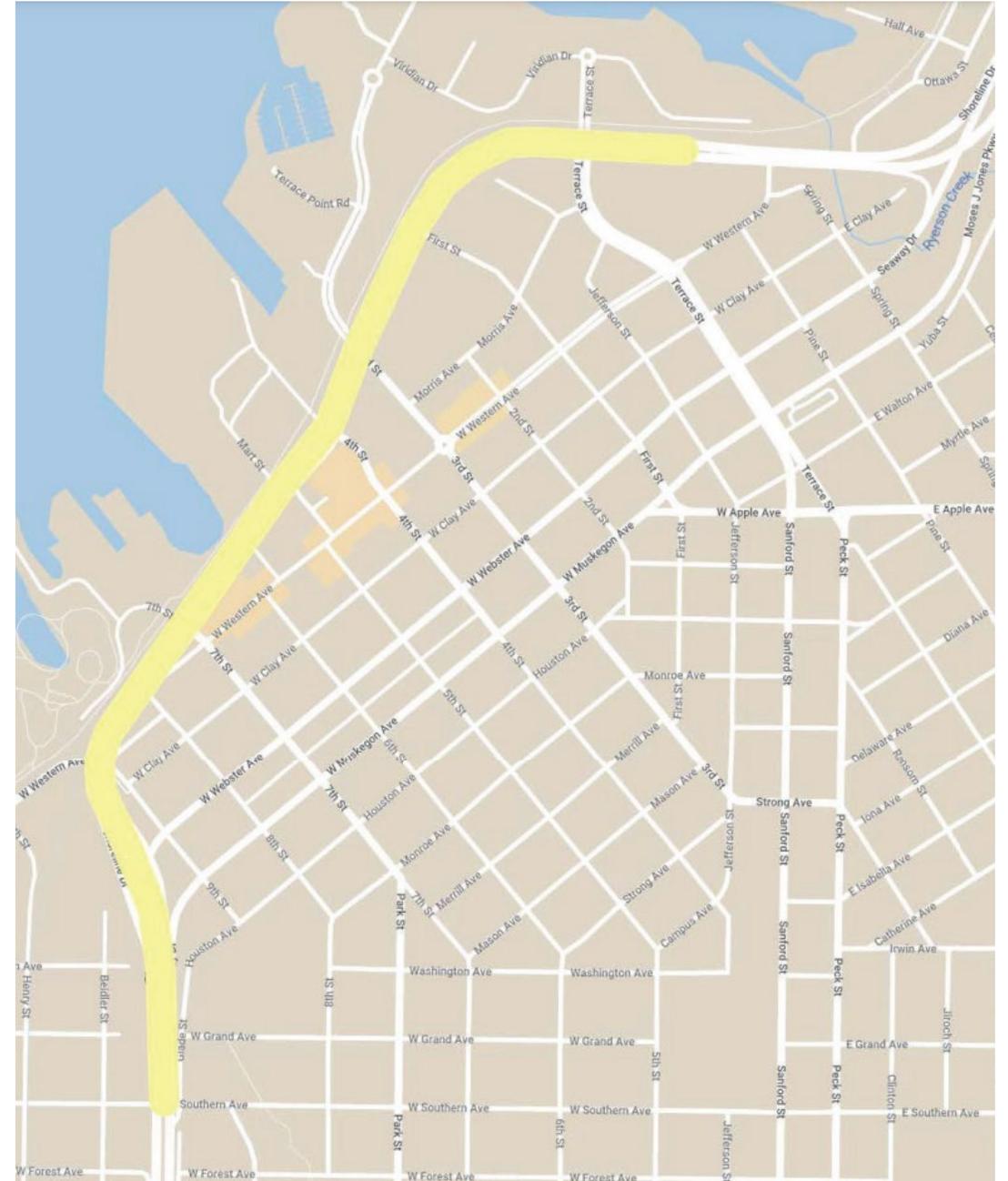
City Commission Worksession

May 9, 2022

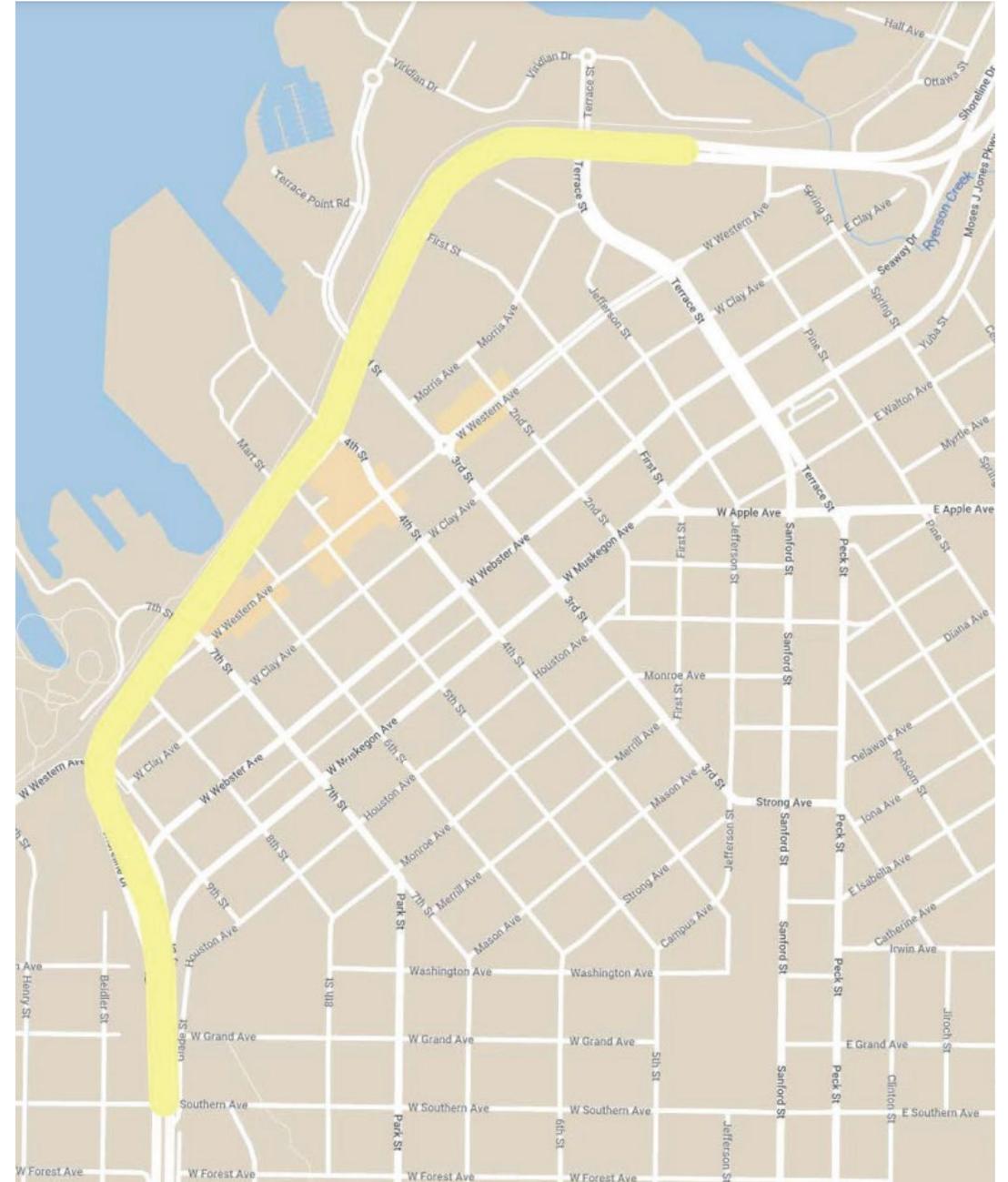
Shoreline Drive Traffic Study Timeline

- May 2022 – Data Review/Kickoff Meeting
- June 2022 – Conceptual Planning
- Late June 2022 – Open House Meeting
- July 2022 – Bidding
- August-October 2022 – Implementation
- December 2022 – Summary Report

- This pilot project calls for closure of one northbound lane and one southbound lane of Shoreline Drive from Southern to Terrace using cones, pavement markings, barriers, and planters.
- Data collected during and after the project will measure vehicle traffic counts, speeds, and crashes. This data will be compared to existing data to help quantify the project's impact and cite areas of concern. The results of the study will be presented to the City Commission in December.



- Any eventual permanent change to the roadway would entail a multi-year, master planning process and extensive public engagement. Actual reconstruction of Shoreline Drive would be years away.
- The City is first choosing to rely on the relatively low-cost traffic study to evaluate the project's necessity and feasibility before undertaking the potential of a larger reconstruction project.
- The traffic study could be shortened if it causes severe traffic issues.



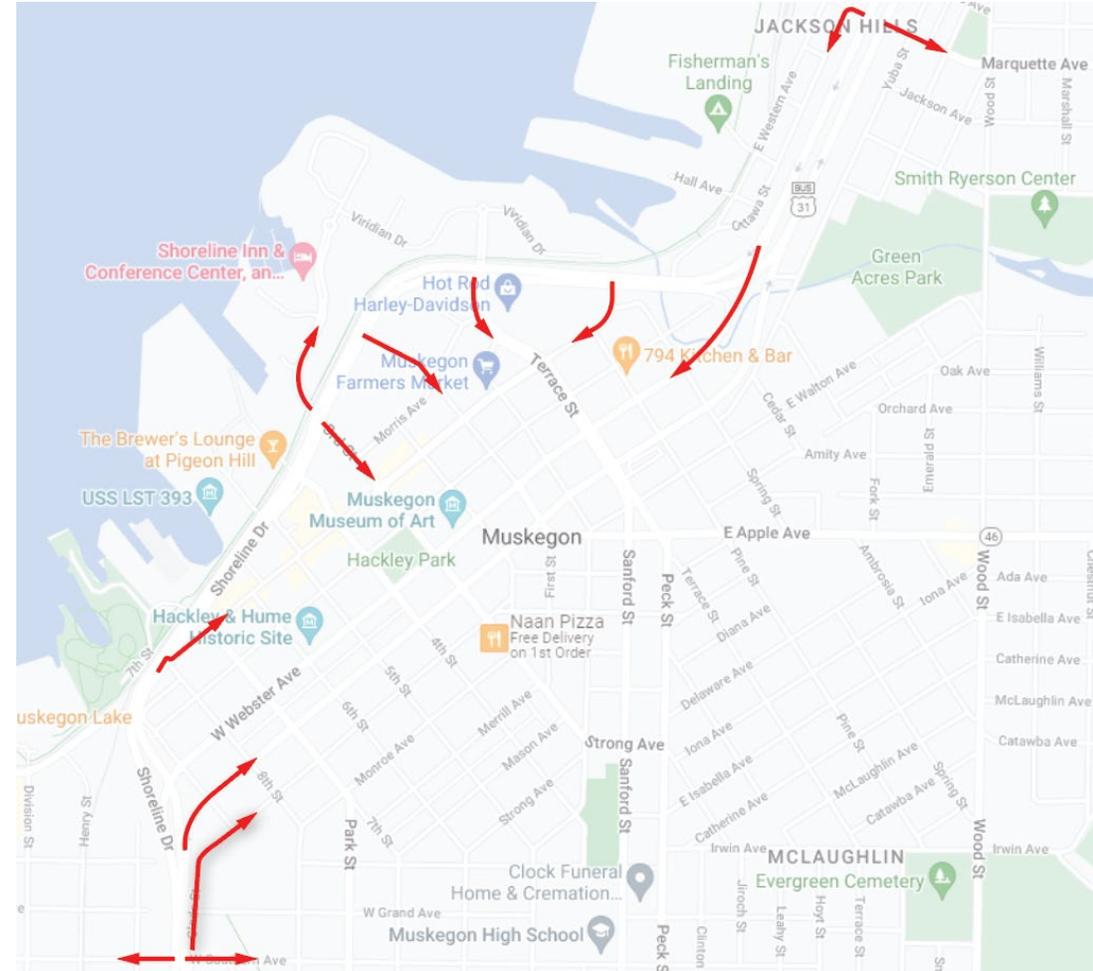
Traffic Delays and Congestion

- The existing section of Shoreline Drive has, in recent history, operated **between 12,000 ADT (Average Daily Traffic) up to 20,000 ADT.**
- **The existing roadway operates at a LOS (Level of Service) A with a posted speed limit of 40-45 MPH** through the project area. LOS A is a traffic engineering classification which means the roadway operates at anywhere from 0-10 seconds of delay per intersection. Given the route has 6 signalized intersections within the corridor, that could mean **anywhere from 0-60 seconds of delay for the average vehicle using the route.**
- In comparison, it is estimated that a **2-lane/2-way roadway with 22,200-25,000 ADT would operate at a LOS B with a posted speed limit of 35 MPH.** LOS B equates to 10-15 seconds of delay per intersection for the average vehicle. Overall, **the average delay on this corridor is expected to range from 60-90 seconds per vehicle.**

Concerning Increased Traffic on Side Streets

There is potential that traffic increases on side streets, but it is not expected that the pilot will substantially divert traffic onto alternate routes.

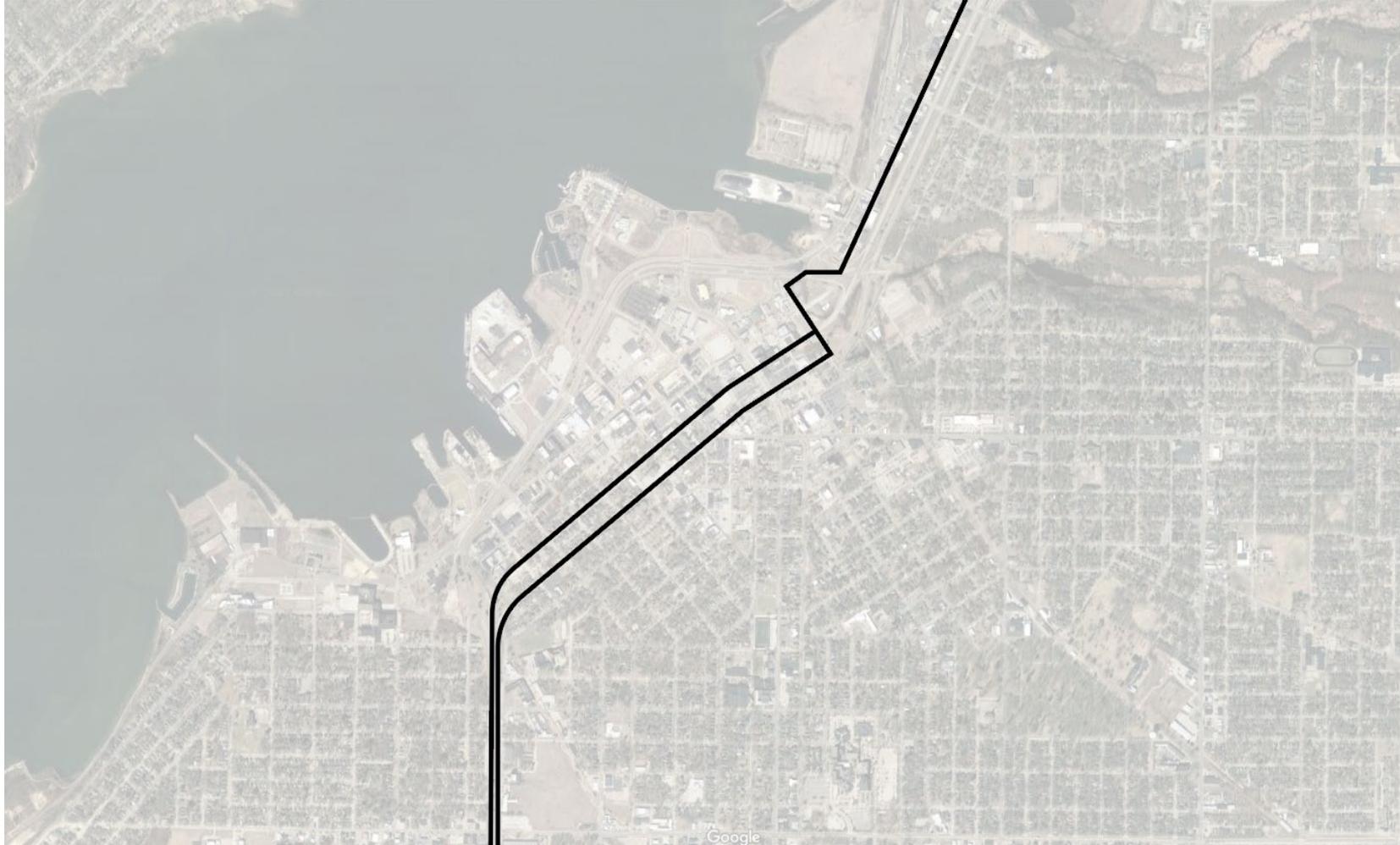
Preliminary traffic modeling shows that Shoreline Drive will likely stay the most efficient route for traffic, but the pilot project will also monitor and measure impacts on adjacent streets. The results of the project will prepare us for the areas that will be impacted if permanent implementation is pursued.



History of Business US-31

- Construction on Seaway Drive began in the 1950s to serve as the US-31 business route through Muskegon. The highway, as it stands today, was completed in the mid-2000s and also includes Shoreline Drive and Moses J. Jones Parkway.
- The highway was introduced as a means of serving downtown businesses and industrial uses along the waterfront. Aligning with national trends, post-WWII Muskegon saw a surge in the popularity of private automobiles alongside the mid-century era of highway building.
- The construction of Shoreline/Seaway did not come without causing considerable damage to Muskegon neighborhoods.

The Business Route: 1950s



Seaway Drive is completed and designated as the business route. It includes a new one-way street pair on Muskegon and Webster, utilizing Terrace, Western, and Ottawa to connect with M-120 to the north.

1960s



Skyline Drive
(renamed in
honor of Rev.
Moses J. Jones in
1989) opens and
is incorporated
into the business
route.

1970s



An expanded Terrace Street is constructed as part of a downtown urban renewal project. Terrace is seen as a “grand boulevard”, curving into Morris Avenue as part of a traffic loop around downtown.

1980s



The Terrace Street Connector begins to take shape as the downtown traffic loop expands into formerly industrial sites, but ends at 4th Street.

1990s



Funding is secured for Phase 1 of Shoreline Drive from 9th to 4th Street. Phase 2 would complete Shoreline's connection with the existing business route to the east.

2000s



The official “turn back” of Muskegon and Webster Avenues to local control, and transfer of the business route designation to Shoreline Drive occurs in 2007. Terrace Street remains, but is effectively removed from the downtown traffic loop.

Long-Term Planning

Since construction of Shoreline Drive began almost 30 years ago, city plans – especially those with a focus on downtown – have addressed the highway. The following plans called for efforts to lessen Shoreline’s impact, and all have been officially adopted into the City’s Master Plan:

- 1997 City of Muskegon Master Land Use Plan
- 1999 Waterfront Redevelopment Plan
- 2003 Imagine Muskegon! Community Design Workshop
- 2008 Downtown and Lakeshore Redevelopment Plan
- 2017 Imagine Muskegon Lake Plan

Safety

“If Shoreline Drive is to have high traffic volumes it may frustrate easy and safe access between uses on both sides of the street. If high volumes do occur on new Shoreline Drive, design alternatives for creating safe pedestrian crossings may become more complex and result in higher costs.”

City of Muskegon Master Land Use Plan, 1997

Safety

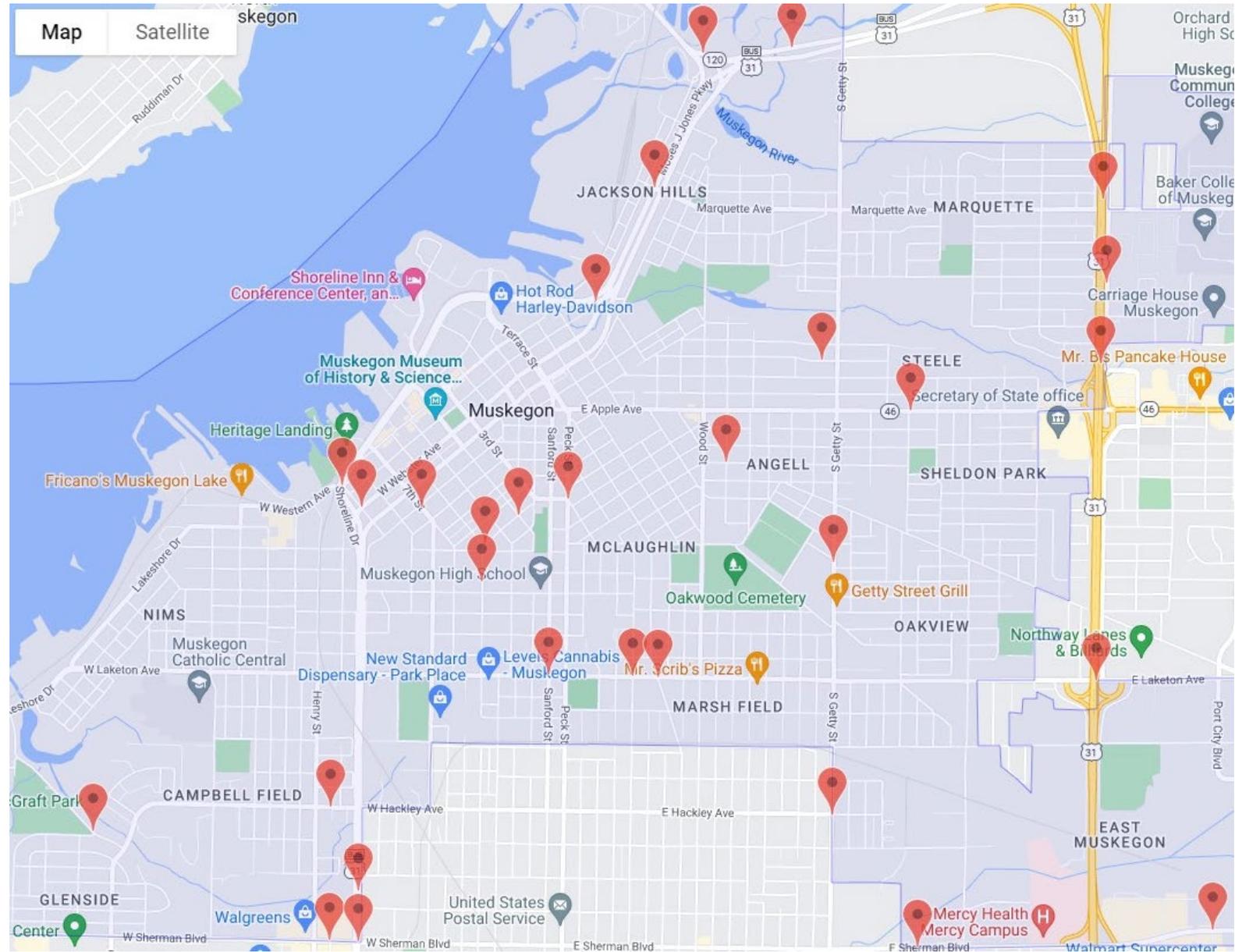
- Shoreline Drive is one of the most dangerous roads in the city. In the last 5 years, 22% of crashes within the city involving a pedestrian where the result was either a fatality or a serious injury occurred in this area.
- In the last decade, 8 of 30 total traffic fatalities within the city occurred on BUS US-31.
- Reduced vehicle traffic speeds make streets safer for everyone. Street design, not enforcement, is key to making streets slower and safer for all users.



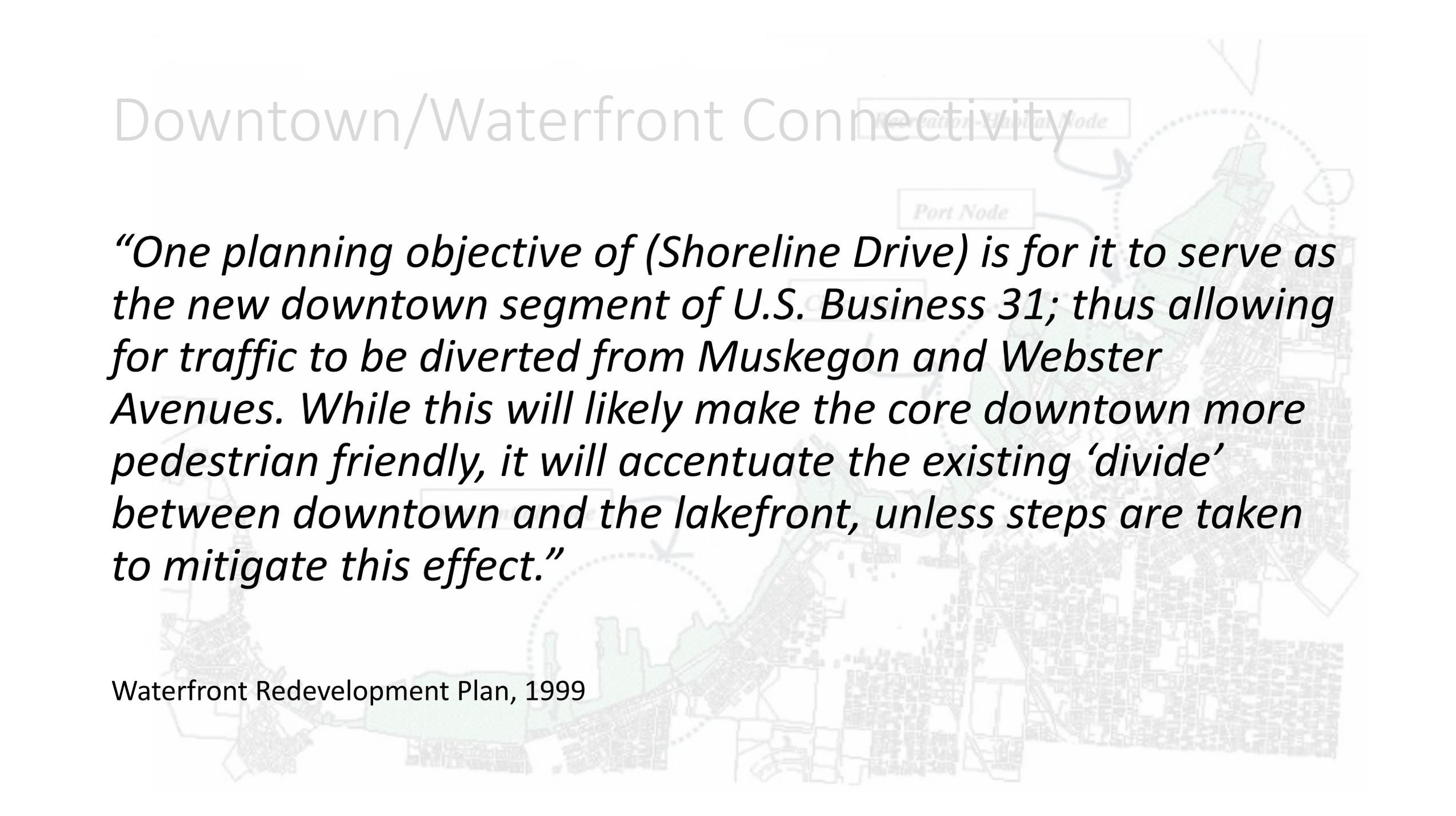
Image Credit: San Francisco MTA Vision Zero Action Plan

Data Source: US DOT, Literature Reviewed on Vehicle Travel Speeds and Pedestrian Injuries. March 2000.

Safety



Downtown/Waterfront Connectivity



“One planning objective of (Shoreline Drive) is for it to serve as the new downtown segment of U.S. Business 31; thus allowing for traffic to be diverted from Muskegon and Webster Avenues. While this will likely make the core downtown more pedestrian friendly, it will accentuate the existing ‘divide’ between downtown and the lakefront, unless steps are taken to mitigate this effect.”

Waterfront Redevelopment Plan, 1999

Downtown/Waterfront Connectivity

- Maintaining highway speeds requires limiting intersections and cross streets, making it difficult to reconnect the street grid near Shoreline.
- Plans have cited a lack of pedestrian amenities (sidewalks, crosswalks, refuge islands, pedestrian signals, etc.) and called for traffic calming measures to slow cars and ease crossings.
- Going a step further, this pilot project seeks to right-size the roadway by giving equal consideration to all users of the space rather than placing too heavy an emphasis only on vehicular traffic.





FACTS

NEEDS

GOALS

CONCEPTS

“Provide for alternative transportation (that) can safely share the road with cars. While cars are accommodated downtown, they should not dominate the environment.”

- * ACCESS TO WATERFRONT
- * MARINA DEVELOPMENT

- * WEAVE DOWNTOWN/WATERFRONT
- * RECLAIM WATERFRONT

- * SAFE STREETS
- * VARIETY OF TRANSPORTATION
- * RESPECT PEDESTRIAN MOVEMENT

- * TRANSPORTATION ALTERNATIVES
- * ACCOMMODATE AUTO
- * LOGICAL CONNECTION TO WATER

Imagine Muskegon!, 2003

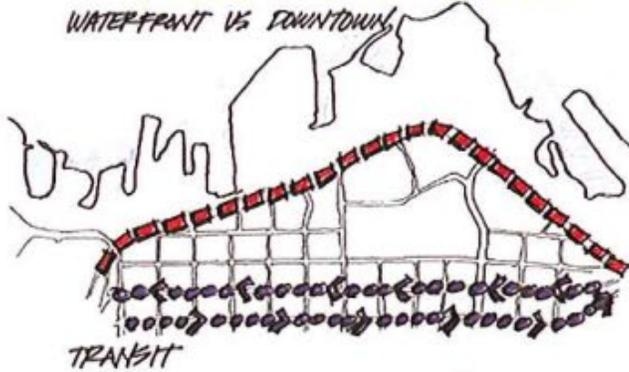
WEAVING

CONNECTIONS

FACTS



WATERFRONT VS DOWNTOWN



NEEDS

- * ACCESS TO WATERFRONT
- * RESTORE NATURAL RESOURCES
- * MARINA DEVELOPMENT

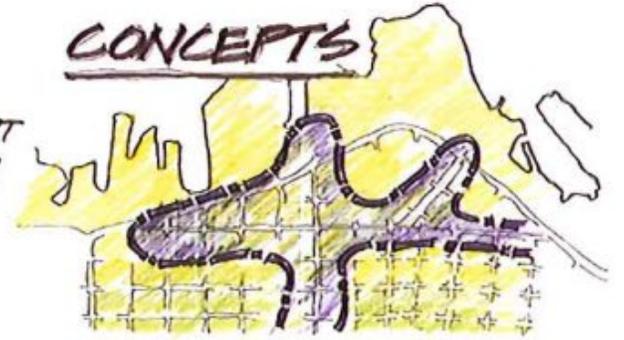
- * SAFE STREETS
- * VARIETY OF TRANSPORTATION
- * RESPECT PEDESTRIAN MOVEMENT

GOALS

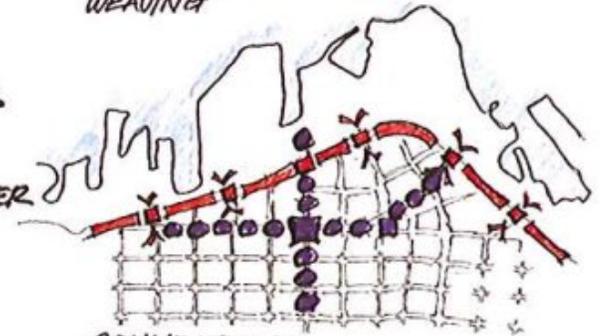
- * WEAVE DOWNTOWN/WATERFRONT
- * ENCOURAGE WATERFRONT DEV.
- * RECLAIM WATERFRONT

- * WALKABLE DOWNTOWN
- * TRANSPORTATION ALTERNATIVES
- * ACCOMMODATE AUTO
- * LOGICAL CONNECTION TO WATER

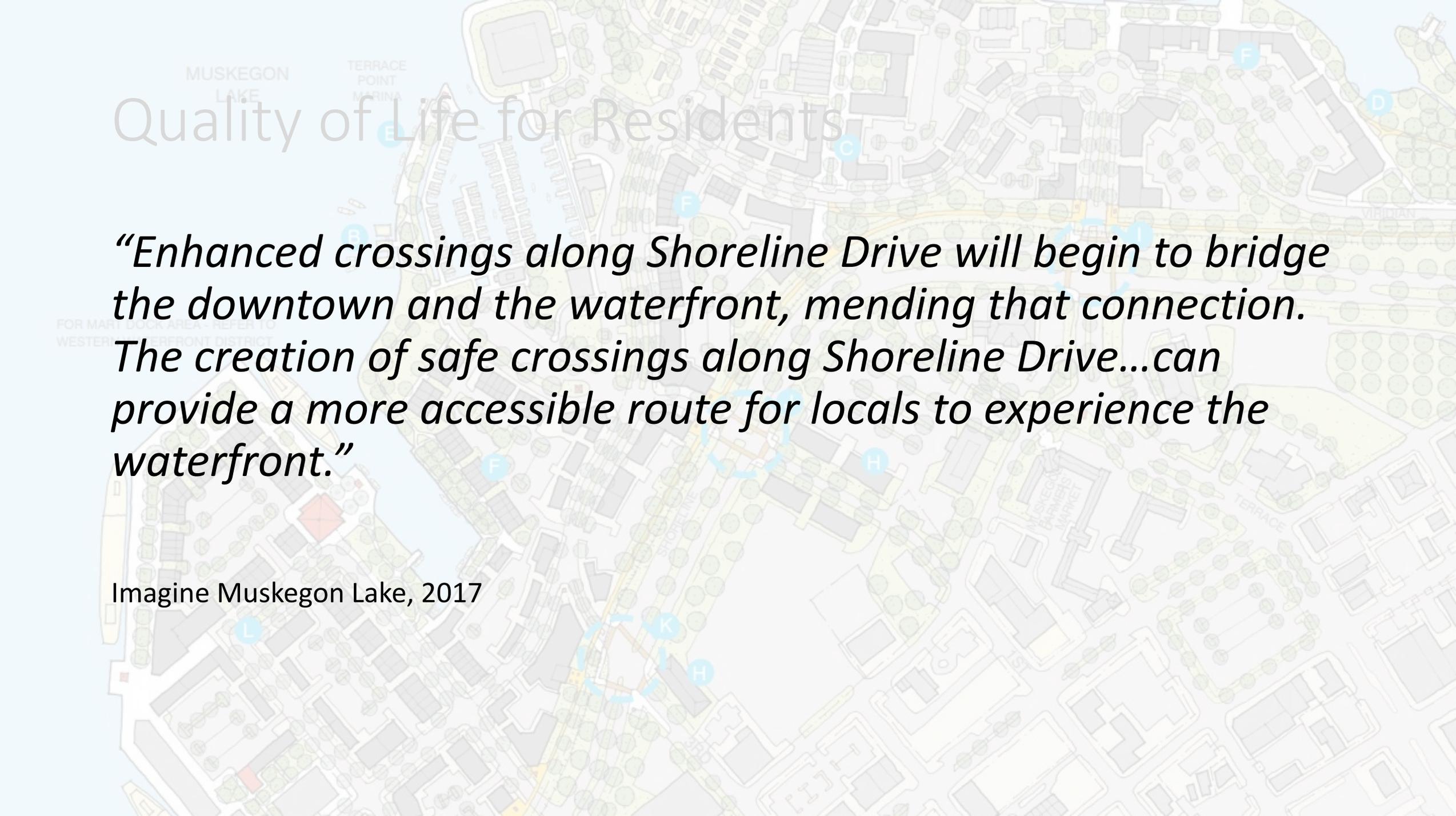
CONCEPTS



WEAVING



CONNECTIONS

A detailed map of the Muskegon Lake waterfront area. The map shows various streets, buildings, and green spaces. Key locations labeled include Muskegon Lake, Terrace Point Marina, and the Muskegon Farmers Market. Several blue circular markers with letters (A through L) are placed across the map, likely indicating specific points of interest or project locations. The map is overlaid with a semi-transparent text box containing a quote and a caption.

Quality of Life for Residents

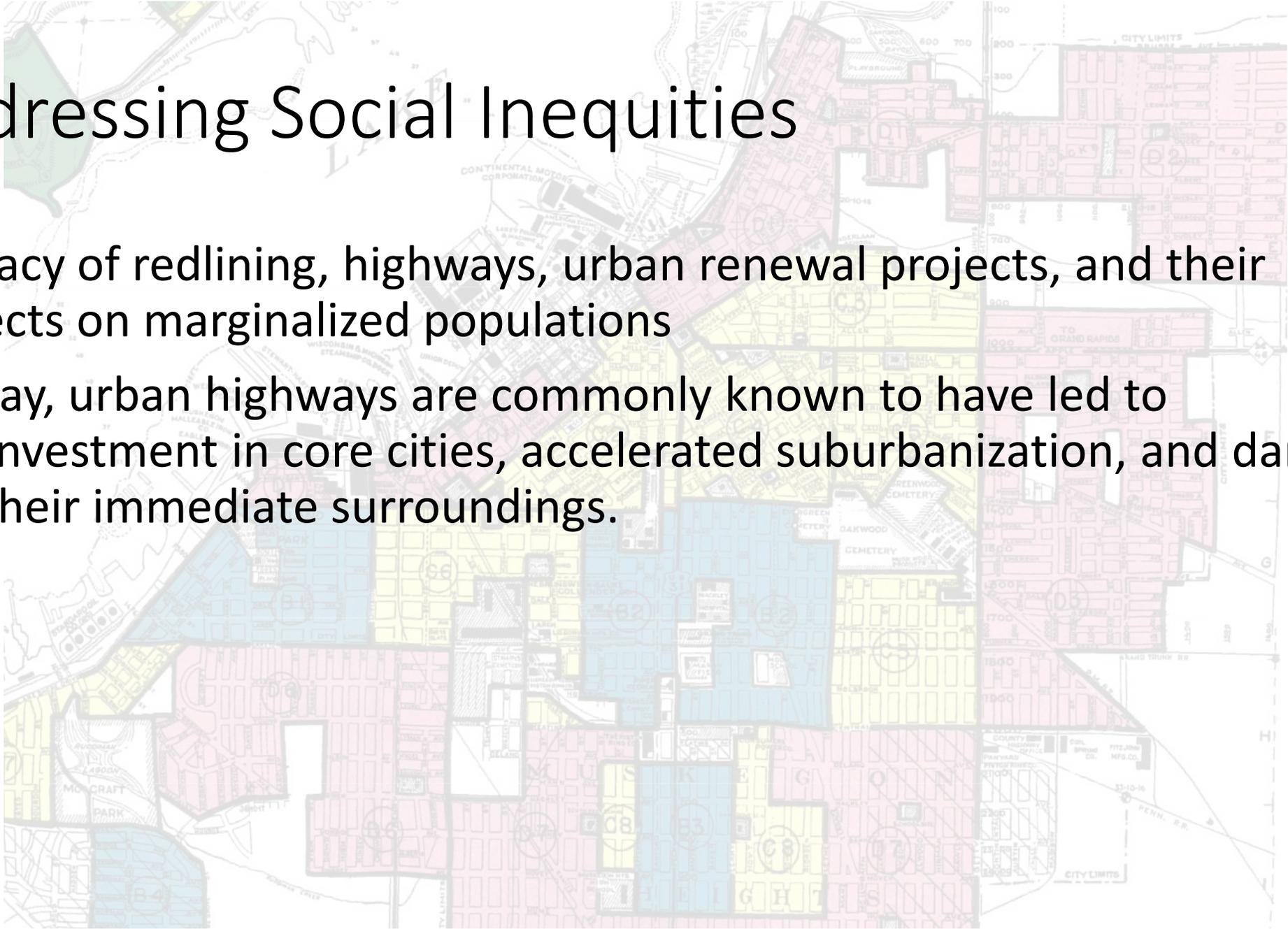
“Enhanced crossings along Shoreline Drive will begin to bridge the downtown and the waterfront, mending that connection. The creation of safe crossings along Shoreline Drive...can provide a more accessible route for locals to experience the waterfront.”

Imagine Muskegon Lake, 2017

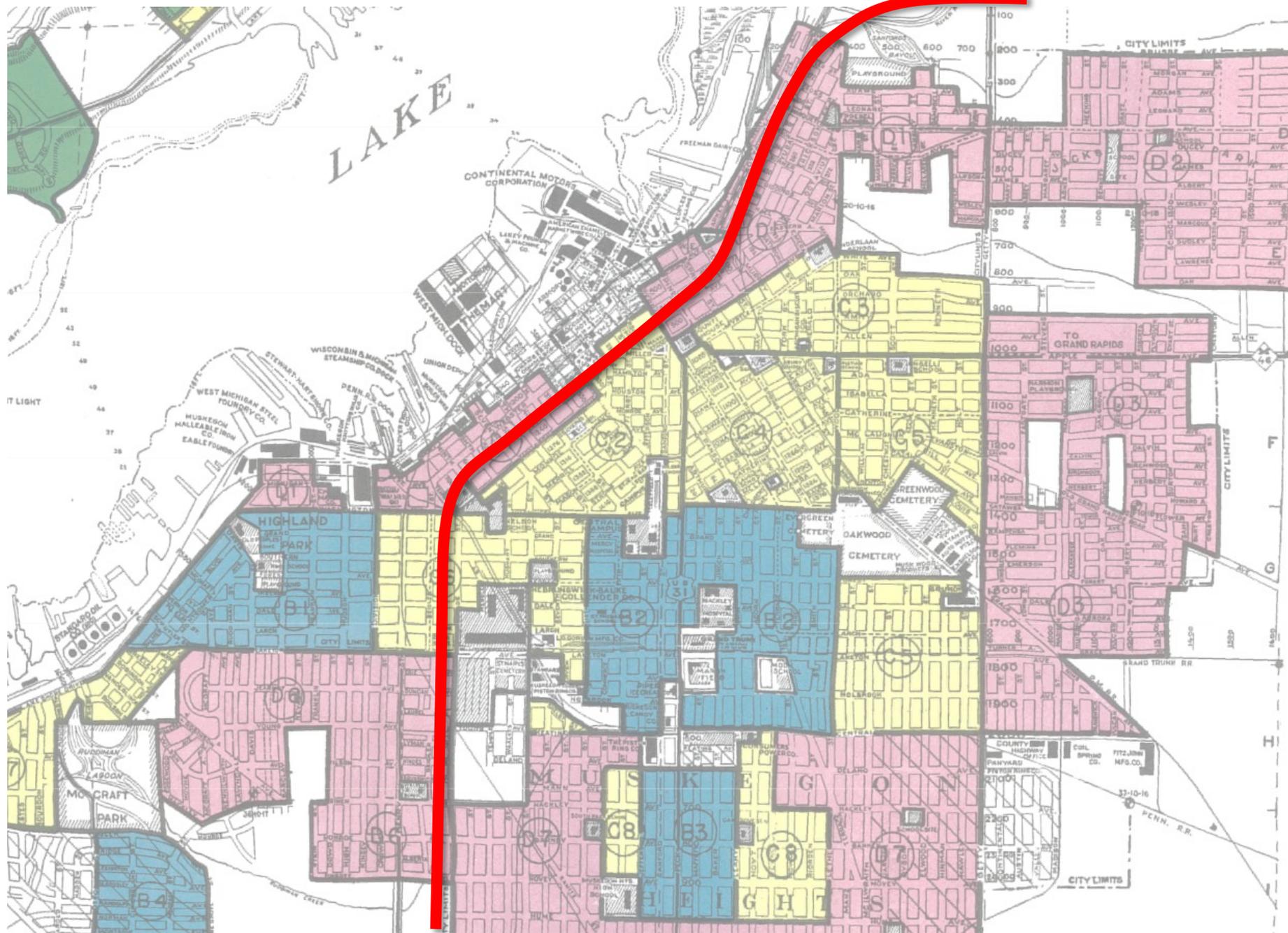
Quality of Life for Residents

- Effect of a highway on surrounding properties.
- Ongoing downtown and waterfront development (Terrace Point, Harbor 31, Hartshorn Village, Adelaide Pointe, etc.).
- A growing number of residents near Shoreline Drive leads to additional demand for parks and open space.
- Shoreline Drive puts event attendees – specifically those crossing Shoreline to get to Heritage Landing – in danger, while limiting pedestrian cross traffic between downtown attractions and the waterfront.

Addressing Social Inequities



- Legacy of redlining, highways, urban renewal projects, and their effects on marginalized populations
- Today, urban highways are commonly known to have led to disinvestment in core cities, accelerated suburbanization, and damage to their immediate surroundings.



Fiscal Responsibility

Larger streets are more expensive to maintain in many aspects:

- Pavement repair and replacement
- Stormwater management (underground infrastructure)
- Snow removal
- Traffic signal operation
- Policing

Project Precedent: La Jolla Boulevard San Diego, CA

Before



After



Before



After



Project Precedent: La Jolla Boulevard

San Diego, CA

- Road diet taking a 5-lane roadway down to a 2-lane roadway, along with converting several intersections to roundabouts
- Traffic volume before: 23,000 / traffic volume after: 22,000
- Speeds before: 40-45 MPH / Speed after: 19 MPH
- Traffic Crashes reduced by 90% as a result of the road diet
- Noise levels reduced by 77% as a result of the road diet
- City took action to identify and address concerns on parallel streets
- Planning began in 2000 and construction began in 2007

Potential Future Shoreline Drive Timeline

- 2022 – Pilot Project and Traffic Study
- 2023 - 2025 – Review of study results, public engagement
- 2026 - 2028 – Completion of a Corridor Master Plan and refinement/selection of potential redesigns
- 2029 – Target finalization of Corridor Master Plan
- 2030 – Identify funding and begin construction

References and Resources

- [City of Muskegon Request for Proposals – Shoreline Drive Traffic Reconfiguration](#)
- [Institute of Traffic Engineers \(ITE\) – Technical Resources – Speed as a Safety Problem](#)
- [Congress for the New Urbanism \(CNU\) Freeways Without Futures](#)
- [Mapping Inequality – Redlining in New Deal America](#)
- [Road Diet Bridges a Barrier, Boosts Safety \(La Jolla Blvd. Article\)](#)
- [City of Muskegon Planning Documents](#)
- [Michigan Traffic Crash Facts](#)