



Economic Impact Analysis of Illustrative Alternatives on I-375 District

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Executive Summary

Through a macro-level analysis of the demographic and economic conditions of the study area, the local real estate market, existing policy frameworks, and benchmarks illustrating economic benefits of various alternative features, this report provides an economic assessment of the various I-375 alternatives under consideration.

Major takeaways from this analysis include:

- **Demographics:** The high residential density within Lafayette Park and proximity to the Central Business District (CBD), proportion of zero-car households, and high proportion of residents working in the CBD, all point to the value of improved transit and non-motorized connectivity in the area in general, and specifically between Lafayette Park and the CBD.
- **Land Use and Characteristics:** This corridor sits at an interface between the CBD and adjacent residential neighborhood. The CBD side of the corridor is a mix of uses, many of which use the corridor as their parking and service entrances, making commercial development along this edge awkward. Based on the land use recommendations from the Future City framework, development along the eastern edge of the corridor should emphasize green infrastructure, open space, neighborhood connectivity, complete streets, and minimizing the potential addition of vacant parcels to the city's land inventory.
- **Real Estate Market Conditions:** While the general narrative of recent development in the greater downtown area is positive, data and developer feedback provided insight into the general characteristics of these market and development trends:
 - **Commercial:** While there has been growth in the commercial market, it has been more constrained than the residential market, with vacancy rates still below the national average. While occupancy is steadily increasing, it is largely occurring in existing underutilized buildings, and resulting in very little new commercial construction occurring.
 - **Residential:** Residential occupancy has skyrocketed in recent years, with occupancy around 97% in Downtown and Midtown, and rental rates rising steadily, pointing to significant supply issues. However, the constraint to supply is largely due to issues financing residential construction (either new or renovation) due to lender reluctance and complex tax credit packages typically necessary to close financing gaps. In addition, occupancy rates in the Greater Downtown area, which includes Lafayette Park, are a more modest 76%.
- **Economic Impact of Alternative Features:** The potential economic impact of features associated with several alternatives were examined:
 - **Freeway Transformation/Removal:** The results of several benchmark examples were cited, illustrating that real positive economic impact was experienced in each location where the freeway corridor was removed or re-scaled to improve conditions for other users. These impacts were experienced as a result of improved multi-modal connectivity and surrounding environment, and residual land development.
 - **Multi-Modal Connectivity:** The interrelationship between connectivity/transportation options and real estate market impacts has been found to be direct in several of the

- benchmark studies, with positive walking and biking conditions having a measurable positive impact on real estate values. This includes a recent study done in Michigan examining this correlation at a neighborhood level, including in Detroit neighborhoods.
- **Residual Land Development:** Given the current market conditions, availability of vacant/underutilized land in the immediate area, and potential parcel sizes, adjacencies and development impediments, this study finds there to be a low likelihood of immediate development on potential residual property, and therefore a low likelihood of significant near-term value. Further, if sold immediately, long-term vacancy of the property or uses such as surface parking could have a negative impact on surrounding real estate values. It is therefore recommended that a viable transitional or permanent public space use be employed until such a time that development is viable. As such, the economic impact of those alternatives which would result in the creation of residual land is measured not based on long-term future development value, but rather on value of a transitional public space use to the adjacent properties and overall corridor.
 - **Public Park/Open Space:** The inter-relationship between public realm improvements and economic outcomes has been firmly established, with many studies illustrating tangible real estate value and business activity impacts due to investment in park or open spaces. However, poorly planned or maintained spaces may result in a negative overall impact. To be an effective creator of economic value, it is essential that a plan be developed for ownership and an entity be designated to maintain and program the space for the long-term until such a time that the property is deemed viable for development.

Applying these major takeaways to the various I-375 alternatives, the overall economic assessment of each alternative (based on a Low, Medium, High rating) are as follows:

- Alternative #1: NONE. While there may be some very limited benefits from new infrastructure and minimally improved aesthetic conditions, Alternative 1 would not appreciably change conditions with regards to development properties, nor impact conditions of adjacent properties. No new connectivity is provided for any mode of travel.
- Alternative #2: LOW. Alternative 2 would increase the development potential of the riverfront by providing new connectivity, although the connection would be an indirect one from I-375. It would have marginal potential impact on adjacent real estate values, due only to refreshed infrastructure and added non-motorized amenities.
- Alternative #3: MEDIUM. Alternative 3 would improve riverfront access over Alternative 2 by making it a direct movement from the I-375 roadway, and improve gateway potential to the area. The greenway buffer with non-motorized trail, along with conversion of the northbound service drive to a two-way local roadway, could all have a positive impact on properties to the east.
- Alternative #4: MEDIUM. Alternative 4 would create new direct riverfront access and improve access to the north end of the corridor via new direct connections to Clinton and Macomb Streets. However, the residual property created along the western edge of the corridor has significant development impediments, and is not a desirable location for public space. Without a viable desirable use, vacancy or underuse of this property could have a negative impact on

corridor real estate values. Further, shifting of the primary thoroughfare closer to the residential area could have a negative impact on adjacent residential properties.

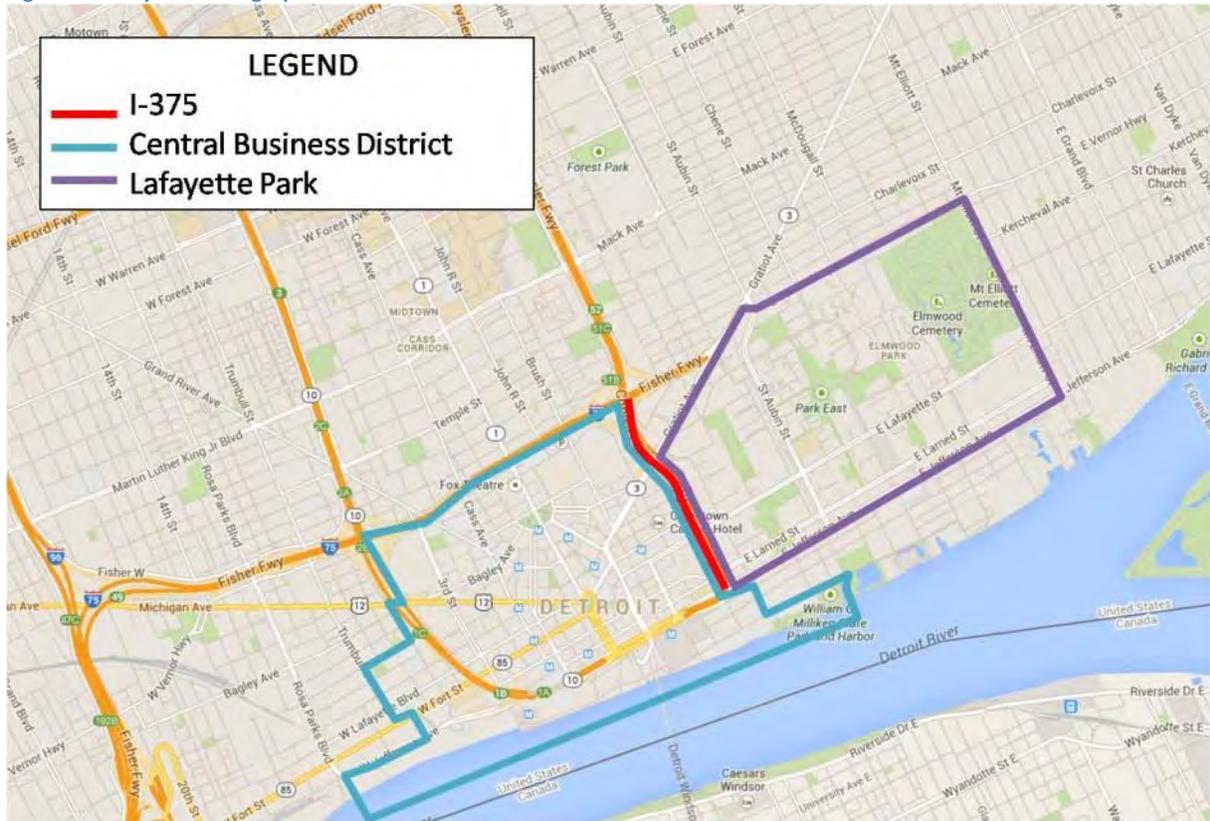
- Alternative #5: HIGH. Alternative 5 would create new direct riverfront access and improve access to the north end of the corridor via new direct connections to Clinton and Macomb. The residual property created on the east side of the corridor would be more suitable for a public space as an interim use given its adjacency to the residential area, and its function as a buffer and amenity could positively impact property values to the east. In addition, this land has better adjacency and fewer development impediments than Alternative 4, and could be more viable for long-term development, particularly as residential/mixed-use.
- Alternative #6: MEDIUM. Alternative 6 would create new direct riverfront access and improve access to the north end of the corridor via new direct connections to Clinton and Macomb. The residual space between the two one-way roadways is proposed as a below-grade greenway/public space, which may have questionable usage in this context given lack of connectivity to the north. In addition, the principal northbound roadway is pushed closer to the eastern edge of the corridor, which may have a negative impact on real estate values of the adjacent residential properties.

1 Introduction

This report presents a macro-level economic analysis examining existing conditions in the study area and applies key findings, along with findings from the case study analysis (under separate cover), to assessing the various I-375 alternatives from an economic perspective. Areas covered in this study include: demographic and economic conditions, the real estate market, commute patterns, existing policy frameworks, and a park space analysis.

For the purposes of data collection and analysis, the study area geographies, including the Central Business District to the west of I-375 and residential neighborhoods to the east of I-375, conform to aggregated Census Tracts that approximate these neighborhoods. **Error! Reference source not found.** shows the boundaries for the study areas, with the Central Business District defined as Census Tracts 5207, 5172, and 5208, and with the neighborhoods to the east of I-375, including the Lafayette neighborhoods and Elmwood park (collectively referred to herein as “Lafayette Park”) defined as Census Tracts 5170, 5171, 5169, 5166, and 5167.

Figure 1: Study Area Geographies

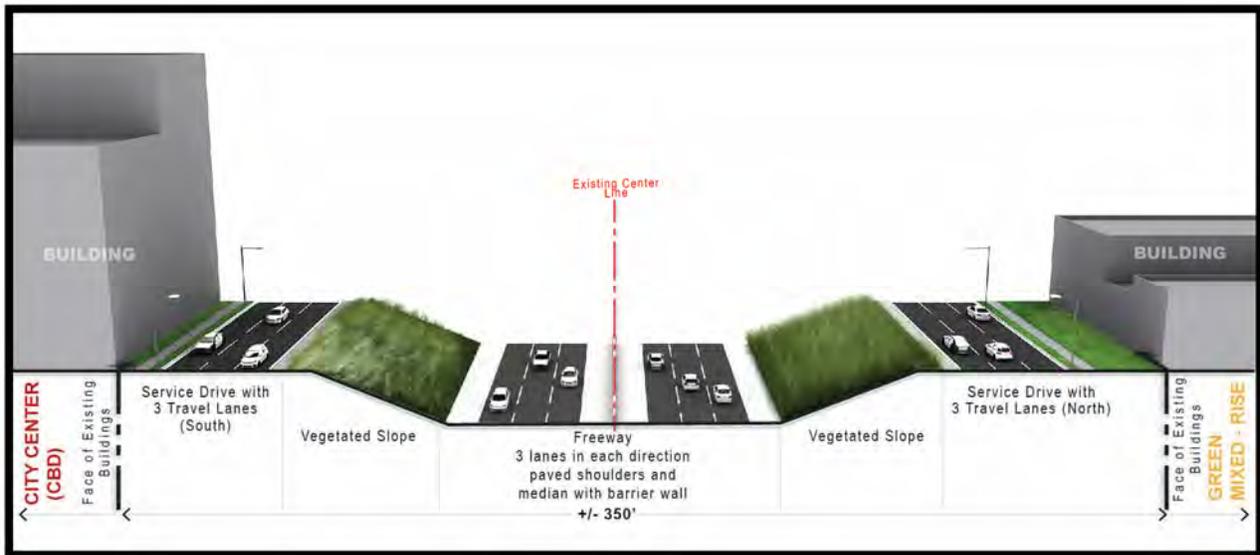


2 Alternatives Overview

Six illustrative alternatives were identified for the I-375 corridor itself (primary study area). The following is a brief summary of the alternatives:

Alternative 1: Alternative 1 is equivalent to the No-Build Condition in terms of roadway configuration, with the exception of proposed ramp improvements/widening to the southbound off-ramps at Lafayette and Larned/E. Jefferson. No other significant changes are proposed under Alternative 1 beyond standard improvements associated with any reconstruction project.

Figure 2: I-375 Alternative 1 Cross-Section



Alternative 2: Alternative 2 is identical to Alternative 1, with the addition of a roadway extension from the Jefferson Avenue surface-level extending to Atwater Street to serve the East Riverfront area. No changes to the freeway or service drives are proposed. Under this alternative, the embankment slopes are proposed to be reconstructed to serve as a terraced stormwater management zone. Bike lanes are proposed along the I-375 service drives, along with improved street trees and pedestrian amenities.

Alternative 3: Under Alternative 3, the I-375 freeway would transition to a surface street south of Lafayette Avenue, and include signalized intersections at Larned Street and Jefferson Avenue. The surface roadway was assumed to be four lanes in each direction between Lafayette and Jefferson. The surface roadway would continue through Jefferson Avenue to Atwater, with two lanes in each direction. The freeway portion would be shifted to the west. The alternative includes a landscaped buffer/greenway between the new two-way local roadway and the freeway.

Figure 3: I-375 Alternative 2 Cross-Section



Figure 4: I-375 Alternative 3 Cross-Section



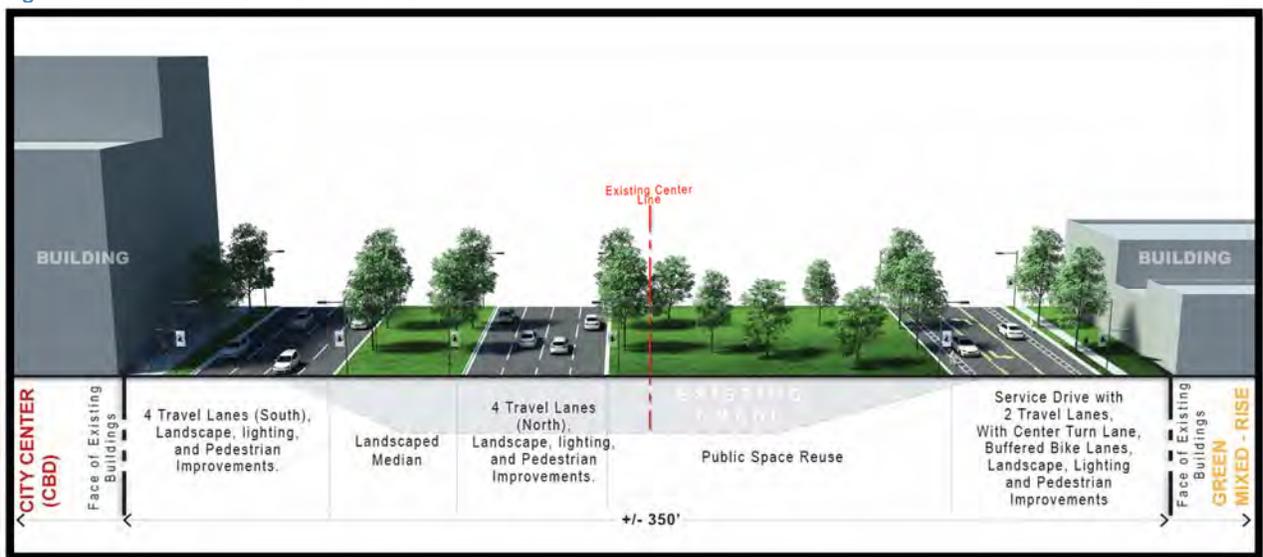
Alternative 4: Under Alternative 4, the I-375 freeway would transition to a surface street, with four lanes in each direction, south of Gratiot Avenue, coming to a surface intersection near Clinton Street. The roadway would be aligned on the east side of the corridor. Both service drives would be eliminated under this scenario. The roadway would continue south of Jefferson Avenue to Atwater Street with two lanes in each direction. This alternative could result in residual land available for development along the west (central business district) side of the corridor. A greenway buffer is proposed alongside of the northbound roadway to buffer the roadway from the adjacent residential properties.

Figure 5: I-375 Alternative 4 Cross-Section



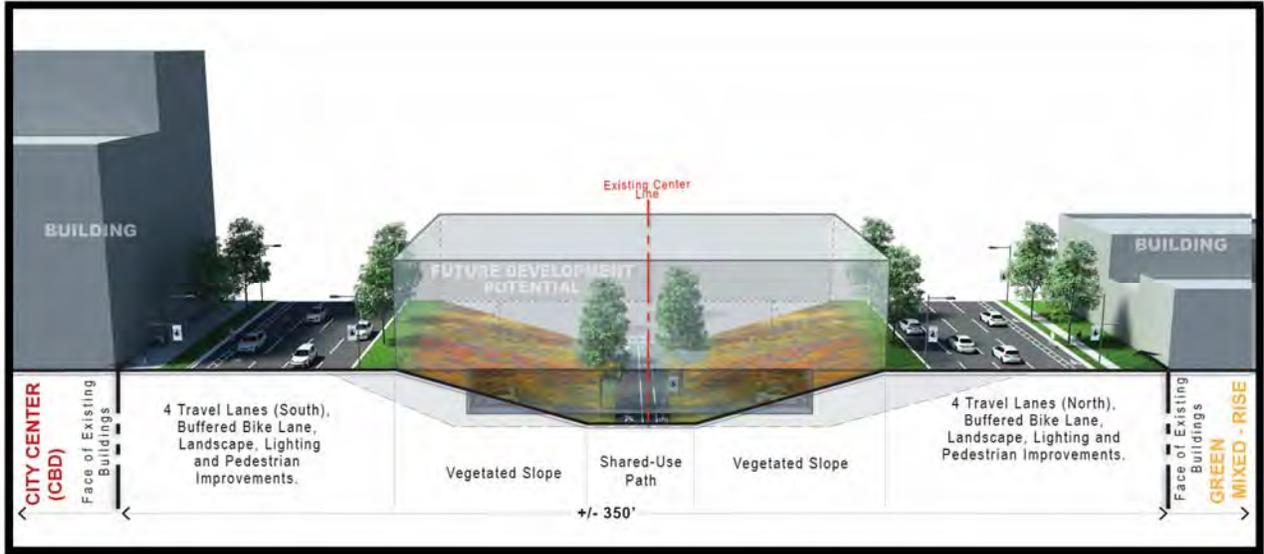
Alternative 5: Similar to Alternative 4, Alternative 5 would include a surface roadway with four lanes in each direction from south of Gratiot Avenue. However, under this alternative, the surface roadway would be aligned along the west (central business district) side of the corridor. The roadway would continue south of Jefferson Avenue to Atwater Street with two lanes in each direction. In addition, the northbound service drive would be maintained as a two-way local access roadway. Residual property between the major arterial roadway and the new two-way local access roadway is envisioned to be reused for public space and landscape buffer.

Figure 6: I-375 Alternative 5 Cross-Section



Alternative 6: Under Alternative 6, the surface roadway south of Gratiot Avenue would take the form of two one-way roadways, aligned with the existing services drives, with four lanes in each direction. The roadway would continue south of Jefferson Avenue to Atwater Street with two lanes in each direction. The space in between the roadways is initially envisioned to be developed as a below-grade shared-use path, similar to the Dequindre Cut, although future development of this space may be possible.

Figure 7: I-375 Alternative 6 Cross-Section



3 Demographic and Market Conditions

3.1 Local Demographics

This following outlines the residential demographics of Lafayette Park. Understanding the residential population of the study area will help put the I-375 corridor in context to the wider area it is meant to serve.

Lafayette Park is a historic neighborhood in proximity to the Central Business District that consists of low-rise townhomes, high-rise apartments, and cooperatively owned multi-family housing options. Lafayette Park is ethnically and socioeconomically diverse, and the area has a high concentration of college-educated residents. Table 1 outlines demographic characteristics in Lafayette Park, as compared to the City of Detroit. The neighborhood is nearly double the density of that of the city overall, with a third of households being zero-car households, nearly 80 percent of housing being renter-occupied. Closer to I-375, households have a higher overall median income, with fewer zero-car households.

Table 1: Lafayette Park vs. Detroit Demographics

		<u>Lafayette Park (Overall*)</u>	<u>Lafayette Park (Bordering I-375 Only**)</u>	<u>City of Detroit</u>
Population Density (people/sq. mile)		9,537	11,650	5,048
Median Household Income		\$21,276	\$27,926	\$26,955
Zero Car Households		32%	25%	24%
Housing Tenure	Owner Occupied	21%	25%	53%
	Renter Occupied	79%	75%	47%

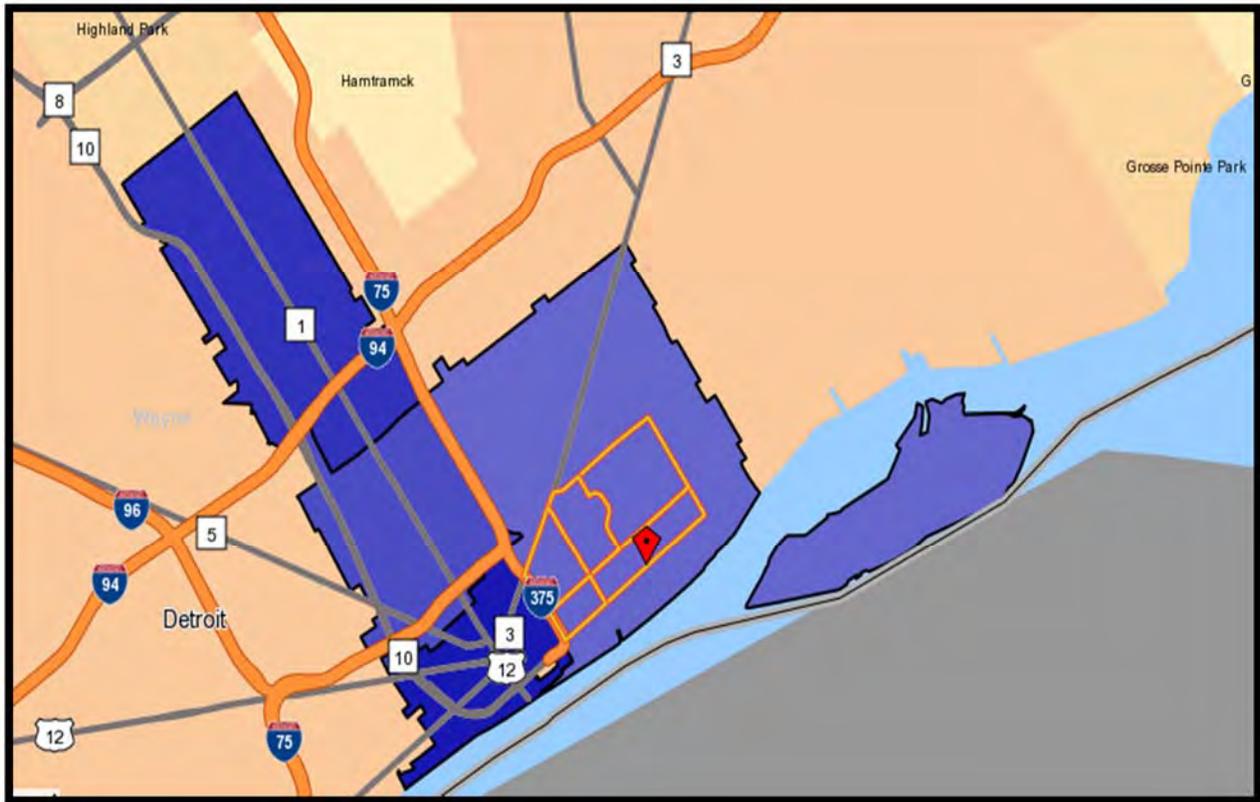
Source: 2012 American Community Survey 5-year Estimates

*Includes census tracts 5166, 5167, 5169, 5170 and 5171

**Includes census tracts 5170 and 5171 only

Figure 8 shows the top five zip codes of locations of employment for Lafayette Park residents, which are all located in the downtown area. This indicates that a considerable proportion of Lafayette Park residents work directly in the downtown area. Given this, commuting needs for Lafayette Park residents would be better met with additional consideration of cross-neighborhood connectivity and improvements to pedestrian and bicycling infrastructure.

Figure 8: Top Five Zip Codes Where Lafayette Park Residents Work



Note: Five Zip Codes overlaid to Detroit map with dark color shading representing area with highest employee concentration

SOURCE: Longitudinal Employer-Household Dynamics, US Census

3.2 Real Estate Market Conditions

While the predominant narrative around Detroit's overall real estate market over the past few decades has been gloomy, downtown Detroit has experienced a market shift in the past few years, increasing long-term potential for both the residential and commercial markets. A number of major corporations have moved downtown, which has led to an increase of jobs in the professional, finance and insurance industries, matched with a steady demand for housing. The influx of residents has also driven up demand for more amenities such as retail, grocery chains, and green space. While the commercial market is still soft in the CBD, there has been positive net absorption and increased interest from certain companies to move downtown, replacing a declining public sector employment base in the downtown area. A series of interviews with local brokers¹ was conducted to provide context regarding local real estate trends and market conditions. Based on this input, downtown Detroit stands to continue its stable market recovery over the next several years. The following will examine the current market conditions and demand in downtown Detroit in order to inform real estate and land development potential in proximity to I-375.

¹ Eisenshtadt, S. (2014, May 28). Vice President, Friedman Integrated Real Estate Solutions. (D. Lee, Interviewer); Mady, C. (2014, May 30). CEO, Executive Realty. (D. Lee, Interviewer)

3.2.1 Residential

Demand for the residential market in downtown Detroit has increased in the last five years and occupancy rates are high. In 2012, 97² percent of available rental units were occupied in downtown Detroit, which is more indicative of continued limited supply rather than high latent demand. There have been at least six new residential projects in the last five years, and at least three of those projects are construction projects that already up and operating in the Midtown area. There are a handful of other renovations to smaller buildings and several residential projects in the pipeline, including Capitol Park. Karp and Associates, a building firm based in Lansing, recently won a bidding process to redevelop three historic buildings in Capitol Park: the Farwell, Capitol Park, and the former United Way building; for apartments with commercial uses on the ground floor. Other residential project plans are emerging in the riverfront district and new arena district immediately north of downtown.

Residential growth has been driven by changes in the downtown employment market. Wayne State University, Detroit Medical Center, and General Motors are all major employers in the greater downtown area, but over the past few years, Compuware, Strategic Staffing Solutions, Quicken Loans, and Blue Cross Blue Shield have also moved operations and significant additional numbers of employees into downtown. With a younger workforce, these companies have attracted new residents to the downtown area, with Quicken and Blue Cross providing incentives for employees who move downtown. As residential demand has grown, conversions in the downtown area has increased, with warehouses and some office buildings being converted into apartments (since the office building market is still soft) and out of state residential developers are increasingly interested in the local market. In the next several years, there is estimated to be a 5,000 residential unit shortage. However, the shortage is not for lack of available properties for residential use (either land availability or existing vacant buildings for use/conversion), but due in large part to reluctance of lenders to bankroll residential projects in Detroit and the continued need for tax credits to make such projects viable³. While demand is driving residential occupancy higher, market rental rates have yet to reach levels which make projects financially viable for development without incentive programs. These factors have slowed the pipeline of new residential units to the market.

While the residential community has grown considerably recently, a number of barriers exist that could limit future growth unless addressed. Residents of downtown Detroit are underserved by retail and grocery stores. While the greater downtown area has various restaurants and retailers, these amenities are not located in contiguous blocks but scattered across a large area of land which makes walkability and accessibility an issue. In addition, although security is improving, it still remains a concern, especially in residential neighborhoods. Heightening security patrol and increasing density in the downtown region will help increase walkability, which in turn, will attract more residents to the area. It should also be noted that the high rates of residential occupancy are still somewhat localized in the Downtown and Midtown areas. The occupancy rates in the greater downtown Detroit area, which includes Lafayette Park, Rivertown and Corktown, are a more modest 76%², indicating much softer residential demand outside of the immediate Downtown and Midtown neighborhoods.

3.2.2 Commercial

The commercial market in downtown Detroit has seen some activity in the past few years, but the market has not experienced the same pace of growth as the residential market. The vacancy rate in the

² Hudson-Webber Foundation, the Detroit Economic Growth Corporation, the Downtown Detroit Partnership, Midtown Detroit, Inc., D:hive, and Data Driven Detroit. *7.2 SQ MI: A Report on Greater Downtown Detroit*.

³ Retrieved September 7, 2014 from <http://www.freep.com/article/20140126/BUSINESS04/301260081/Rents-rising-Detroit-downtown-Midtown-Corktown>

Central Business District³ has improved modestly recently but still stands at approximately 22 percent, which is higher than the national average of 17 percent, and considerably higher than other major US cities. The CBD has had positive absorption of office space each quarter over the past 3 years, which has been driven largely by Quicken Loans, Blue Cross Blue Shield, and Lowe Campbell Ewald, a major advertising company, moving downtown (or shifting additional operations) from suburban sub-markets. The CBD has benefited from the “Dan Gilbert effect.” Dan Gilbert, the founder of Quicken Loans and Rock Ventures, has invested over \$1.3 billion in the purchase and renovation of buildings, most of which are located in the CBD. Gilbert has managed to attract many high profile tenants from the suburbs to downtown Detroit. In the last two years, Quicken Loans has not only moved downtown, but has also purchased 55 percent of available office space in the CBD for its various business units to occupy. This has somewhat tightened the market in certain space classes and has led to increased rent prices, which are up approximately 20 percent from three years ago. However, this trend is focused on certain space types and still remains at lower levels than what would justify new development. Despite this activity, the commercial market is still soft by national standards.

The commercial development strategy taken on by Quicken Loans has been focused on restoration and re-occupancy of the numerous vacant existing properties in downtown. Since 2000, only two new construction commercial buildings have been completed in the CBD: the owner-occupied Compuware headquarters building, and the multi-tenant One Kennedy Square building, both centered on Campus Martius. A third building, a headquarters for Meridian Healthcare, is currently in the planning stages at the corner of Woodward and Monroe.

Lease rates in the Central Business District⁴ range between \$12 per square feet for the low end of Class C up to \$22 per square feet for the higher end of Class A, as seen in Table 2.

Table 2: Downtown Detroit Average Office Lease Rates

Class	Price (per square foot on a modified gross basis)
A	\$19.50-\$22.00
B	\$15.00-\$19.00
C	\$12.00-\$15.00

A number of downtown properties face space rehabilitations requirements, particularly Class B buildings, many of which were built nearly a century ago. As the cost of rehabilitation for these buildings are quite high, many landlords are unwilling to bear these costs without guarantees that the improved space would see occupancy at a higher rent to cover these costs.

The four major commercial space occupiers within the Central Business District are Quicken Loans, Blue Cross Blue Shield, General Motors, and Compuware. Other major occupants include law offices, accountants, and non-profit and institutional users. The Class A market, which currently stands at \$20 to \$22 per square foot, is still soft because few prospective tenants are willing to commit given the uncertainties of the market, such as whether or not the residential development boom will persist. The Class B market is stable in part due to the presence of some key companies that are space-intensive, and the Class C market is also stable due to relatively inexpensive rental rates.

⁴ Colliers International. (2013). *Metro Detroit and Washtenaw County Market Trends*. Detroit.

3.3 Development Activity

Between 2010 and 2012, there has been \$880 million in planned and new construction in the greater downtown area, which includes the Central Business District, Lafayette Park, and Rivertown. This includes 59 projects—36 projects which are completed, 13 projects which are under construction, and 10 projects which are in the pipeline.

In addition to smaller individual building projects described in the previous sections, there are several significant development activities underway or in the advanced planning stages around the study area⁵:

- **Cobo Center.** Renovation of the Cobo Center is nearly complete. The \$279 million project includes the Grand Riverview Ballroom, the Atrium, meeting rooms, a service kitchen, and a food court. Improvements to the Cobo Center are expected to attract new convention business to Detroit.
- **Meridian Health.** Meridian Health gained plan approval to build a brownfield site for a 16-story headquarters building on the site adjacent to the Campus Martius Park. The new headquarters building will include 320,000 square feet of office space and a parking deck that will be able to accommodate 1,000 cars.
- **Catalyst Development Project.** The Catalyst Development Project is a planned \$650 million sports and entertainment district spanning 45 blocks of Downtown and Midtown. Included in this development is a \$450 million sports and entertainment arena which will be a 650,000 square foot facility with 18,000 seats that can accommodate Red Wings hockey games and other sports and entertainment events. The district is expected to include significant residential mixed-use development immediately north of the CBD.
- **Wayne County Jail Site Redevelopment.** In 2013, the Wayne County Commission approved a memorandum of understanding to sell the 15.5 acre site of the unfinished county jail to Rock Ventures, after the construction for the jail was halted because it was millions of dollars over budget. Plans for the site, although preliminary, are anticipated to represent a significant investment in new residential, hotel and retail/entertainment uses.
- **East Riverfront Development District.** The East Riverfront Development District is a large district extending east of the Renaissance Center between Jefferson Avenue and the Detroit River, which is slated for residential mixed-use development. This district is centered around the 3.5 mile Riverwalk, a public space amenity extending between Joe Louis Arena and the McArthur Bridge. There are four residential projects that are planned currently for the East Riverfront.

These significant development projects represent years of planning and are each complex development deals heavily supported by tax credits and other subsidies. The complexity of financing and pace of development reflects a certain degree of market saturation.

⁵ Detroit Economic Growth Corporation. (2013). *2013: \$1 Billion Strong, A Progress Report of Detroit Economic Growth Corporation.*; Shea, B., & Halcom, C. (2013, December 5). County Commission takes next step in selling jail site to Rock Ventures. *Crain's Detroit Business.*; (n.d.). Retrieved June 30, 2014, from Detroit Riverfront: <http://detroitriverfront.org/riverfront>

4 Local Policy Context

The economic viability of a physically altered I-375 is contingent on the local policy context, which provides broad institutional support, creates local opportunities, and informs local development. In 2012, Detroit Future City developed a strategic framework that outlines a set of policy directions and actions to transform the city into a more sustainable and desirable place to live. The framework explores how to best use the abundance of vacant land, promote job growth and economic prosperity, ensure vibrant neighborhoods, build cost-effective infrastructure that serves the needs of residents, and maintain strong community engagement.

The framework recognizes Detroit's land as one of its greatest assets and as a critical component to transforming the city's urban form into a more socially and economically vibrant city where residents are connected to jobs, services, and an abundance of open green space and natural landscapes with varying uses for recreation, agriculture, ecology and land use buffering. However, there are several challenges facing the city's land use. Detroit is facing a challenging market as the overall city population continues to decline and disinvestment has led to approximately 20 square miles of vacant parcels, which can quickly become blight. The current infrastructure, which was built to accommodate more than twice the size of the current population, is expensive to maintain and does not promote a sustainable environment.

In order to move towards a more economically vibrant city, the plan⁶ recommends six implementation strategies to improve land use:

1. Create a citywide framework for growth and investment. Understanding the city's current physical and market conditions can help inform the city's future decision-making and enable the city to target investment to the areas that need it the most. Categorizing the city's residential, industrial, and commercial land as low-vacancy, moderate-vacancy, high-vacancy, and greater downtown will enable the city to develop strategies to align and maximize its resource to have the greatest impacts.
2. Support a network of new and existing neighborhood types. Framework zones can be analyzed in greater detail using three major land use typologies, neighborhoods, industrial, and landscape. These typologies provide a vision to help create better neighborhoods for residents to live, work, and play by setting parameters for densities and allowable development types.
3. Introduce new forms of development. Land use development types (i.e., residential, commercial/retail, industrial, and landscape) consist of the physical development within a land use typology and are meant to guide investment and development. The strategic framework also encourages an innovative approach to development, such as integrating blue and green infrastructure and urban forms to revive vacant parcels.
4. Create a new and diverse open space system for the city. Healthy neighborhoods need open space to improve air quality, provide areas for recreation, and mitigate stormwater. However, the city is cost-constrained and needs to identify strategies to provide green spaces that are cost-effective to maintain.

⁶ Detroit Future City, 2012 *Detroit Strategic Framework Plan*

5. Redefine corridors and create complete streets. Since the city's infrastructure was built for a population that is twice than it is now, there is opportunity to transform the excess space into a network of multimodal corridors that will improve connectivity and access between residential areas and employment centers. The city currently has four road types: highways, arterials, major thoroughfares, and local roads. To transform these roads into corridors, they must serve as part of the overall transportation network, promote adjacent development, and have the capacity for blue or green infrastructure in excess right of way.
6. Develop an innovative regulatory reform. Formalizing the framework zones, land use typologies, and development types and integrating the strategic framework with the City of Detroit Mater Plan will provide the city with a strong regulatory framework for regional and state decision making for land use and public investment. This framework is a critical tool to help guide change and steer the vision for a revitalized Detroit.

Implications for I-375

In the context of I-375, applying the land use recommendations from the Future City framework would favor alternatives that emphasize green infrastructure, open space, neighborhood connectivity, complete streets, and minimizing the potential addition of vacant parcels to the city's land inventory. The framework also highlights the use of open space for buffering between incompatible land uses, some of which is reflective on the east and west sides of the I-375 corridor.

5 Economic Value of Alternative Features

The Illustrative Alternatives developed for the I-375 corridor include features which may change the economic profile of the corridor adjacencies and create additional economic value to the surrounding area. This section examines the general value of such features based on benchmarks from other locations and some specific local conditions. These findings are then applied to each of the specific alternatives to assess the potential economic impact in Section 6.

5.1 Economic Value of Freeway Transformation/Removal

An earlier study for this project, the Case Study Analysis, examined the economic-related impacts from urban freeway transformation and removal by evaluating comparable project across the country. The following briefly summarizes these findings which acted as a basis for the alternatives assessment. The three benchmarks chosen for the purposes of the study included: **Fort Washington Way** in Cincinnati, Ohio; **Central Freeway** in San Francisco, California; and **Park East Freeway** in Milwaukee, Wisconsin.

Fort Washington Way

Fort Washington Way was initially built in the 1950s to connect I-75 with I-71 in order to provide direct access to downtown Cincinnati. However, over time, traffic volumes began to exceed capacity and the freeway was seen as a physical barrier for pedestrian and cars to access the riverfront from the Central Business District. Fort Washington Way was reconstructed into a narrower highway, of approximately 1.3 miles. There was broad community support for the project not only because of the significant benefits that were anticipated, but also because of the extensive outreach that was conducted for the project

The reconstructed Fort Washington Way now carries 100,000 vehicles daily, compared to 120,000 vehicles in 1998. In addition to traffic impacts, the project was a catalyst for a larger riverfront revitalization effort, including:

- The Banks mixed-use development, the first phase of which resulted in 300 apartments, 76,000 square feet of commercial space, and 6,000 structured parking spaces to service commuters, sports fans, and festival attendees. The second phase, when complete, will include 300 residential units and more than 60,000 square feet of commercial space.
- The National Underground Railroad Freedom Center, a museum dedicated to the history of the Underground Railroad, opened in 2004 and is located above a two-deck parking garage that is intended to lift the development out of the flood plain and replenish the supply of parking that was removed with the demolition of the Riverfront Stadium.
- The Paul Brown Stadium and the Great American Ballpark collectively represent more than \$800 million of public and private investment.
- Phase 1 of the Smale Riverfront Park has been completed and includes a number of amenities, including an event lawn and a meditative labyrinth.

Central Freeway

The Central Freeway was converted into an at-grade boulevard after Hayes Valley activists rallied enough support to pass Proposition E, which authorized Caltrans to replace the Central Freeway with an at-grade boulevard from Market Street along Octavia Street. The freeway was seen as a physical barrier that divided the Hayes Valley community. Octavia Boulevard replaces what was formally the terminal portion of the Central Freeway, stretching approximately 0.6 miles from Market Street to Hayes Street.

The objective of the Octavia Boulevard project was to increase capacity and connectivity to east-west Oak and Fell Streets and north-south Franklin and Gough Streets, without negatively impacting the surrounding neighborhood.

There were many positive impacts that resulted from the conversion of Central Freeway into Octavia Boulevard. In 2006, the number of vehicles measured on the boulevard was approximately 45,000 cars per day (compared to almost 95,000 cars per day along the freeway in 1995). Other impacts include:

- Approximately half of the 7 acres of the land reclaimed from the freeway removal will be designated for affordable housing, and there are several market rate housing developments underway.
- The City is working to install a number of ancillary projects that will enhance the urban fabric of the neighborhood and improve transportation safety.
- There were several temporary uses of the parcels to act as placeholders until construction for permanent developments began. These temporary uses include the Hayes Valley Farm, the Growing Home Community Garden, and the Proxy Project, a two-block installation constructed from modified shipping containers, of retail, food vendors, art galleries, and gardens.

Park East Freeway

The Park East Freeway was originally planned as a 3.5 mile freeway connecting to the I-794 freeway. However, the project faced strong opposition from local residents and only a one mile, elevated segment of the freeway spur was completed, extending from I-43 to North Milwaukee Street in downtown Milwaukee. The freeway was severely underutilized and created a physical barrier between the northern part of downtown and the rest of the central city, and the surrounding land was primarily used for surface parking. Mayor John Norquist championed the idea of converting the freeway to an at-grade boulevard and started a community-based campaign to gain support. The one-mile freeway spur was removed from 6th Street to Jefferson Street and replaced with McKinley Avenue, a six-lane, at-grade tree-line boulevard with granite pavers and wide sidewalks, that connects to the existing and reconstructed street grid.

McKinley Avenue carries 15,800 cars per day, which is less than half of the 40,000 cars per day that Park East Freeway carried in 1999 prior to construction. Removal of Park East Freeway also resulted in 26 acres of residual land, which was officially established by the City as the Park East Corridor development area. Much of the development in the Park East Corridor was guided by the Park East Redevelopment Plan. Impacts of the project include:

- The Fortune-500 Manpower Corporation moved its headquarters a block from the former highway and two new residential developments, the A-Loft hotel and the Flat Iron were recently completed.
- Viets Field, formerly known as the Milwaukee School of Engineering (MSOE) soccer field, opened in late August 2013, which sits on top of a parking structure that replaces parking spaces that were removed as part of the construction of McKinley Avenue. There is also a small ground-level park on the northern end of the soccer field site and 12,000 square feet of storefront space for retail development.
- The first two phases of the North End Development, an extensive mixed-use development which sits at the northeast end of the Park East Corridor on the site of a former tannery, have also been completed. The development includes residential units, indoor parking, retail space, and

Denim Park, a public plaza. The project will also extend the Riverwalk pedestrian pathway along the Milwaukee River.

5.2 Economic Value of Multi-Modal Connectivity

A number of alternatives proposed for I-375 redevelopment include the potential for corridor enhancements allowing for multi-modal transportation options, the following highlights the potential for these improvements to create economic value, primarily through real estate value premiums, increased business activity, and job creation. This inter-relationship has been examined in a number of examples and academic studies, a summary of which is presented below. This research is a basis for how the alternatives are assessed on the economic metric of transportation improvements.

5.2.1 Real Estate Market Impacts

A number of studies have established a relationship between improving and enhancing multi-modal transportation infrastructure along a corridor and real estate values.

- A study recently completed by the BBC Research & Consulting for the Michigan Department of Transportation found that in a focus area of two Detroit neighborhoods, 48 percent of residents placed a value of at least \$100 on the ability to use bicycle infrastructure, and that 28 percent of bicyclists commuted by bike at least twice a week. The total annual economic impact of bicycling on these two neighborhoods alone was estimated at \$20.7 million
- Using hedonic regression, one study estimated the market value homebuyers implicitly attach to houses with higher Walk Scores by looking at data for more than 90,000 recent home sales in 15 different markets around the nation. The statistical approach controlled for key characteristics of individual housing units (their size, number of bedrooms and bathrooms, age and other factors), as well as for the neighborhoods in which they were located (including the neighborhood's income level, proximity to the urban center and relative accessibility to employment opportunities). After controlling for all of these other factors that are known to influence housing value, the study showed a positive correlation between walkability and housing prices in 13 of the 15 housing markets studied. **In the typical market, an additional one point increase in Walk Score was associated with between a \$500 and \$3,000 increase in home values.**⁷
- Using a national walkability index that considers the proximity of a home to urban amenities and activities, the closing price and other statistics for 18,500 home sales in Vermont were evaluated. The conclusion was that **being located in a walkable neighborhood with high-quality pedestrian infrastructure adds \$6,500 to the value of a home compared to one in a car-dependent area**, suggesting a statewide increase of approximately \$350 million to home values attributable to walkability.⁸
- Two University of Cincinnati researchers examined how the Little Miami Trail – a 12-mile southern stretch of the multi-use trail that runs through the Cincinnati metropolitan region –

⁷ Walking the Walk: How Walkability Raises Home Values in U.S. Cities. GEOs for Cities. Aug. 2009
http://blog.walkscore.com/wp-content/uploads/2009/08/WalkingTheWalk_CEOsforCities.pdf

⁸ Economic Impact of Walking and Biking in Vermont (2012)
http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/ltf/BikePedFinalpercent20Reportpercent20Econpercent20Impactpercent20Walkingpercent20andpercent20Biking2012.pdf

impacted residential property values in Hamilton County, Ohio. The study looked at 1,762 houses, worth an average of \$263,517, that were located within 10,000 feet of the multi-use trail. **Housing prices went up by nine dollars for every foot closer to the trail entrance. Ultimately, the study concluded that for the average home, homeowners were willing to pay a \$9,000 premium to be located one thousand feet closer to the trail.**⁹

- According to the National Association of Home Builders, **multi-modal trails and pathways are the No. 1 amenity potential homeowners cite when asked what they would like to see in a new community**, being cited by 57 percent of prospective buyers in a survey by the association.¹⁰

5.2.2 Business activities

Enhanced multi-modal corridors also have the potential to significantly increase business and retail activity.

- The New York City Department of Transportation includes indicators of economic vitality (sales tax receipts, commercial vacancies, number of visitors) when evaluating street redesigns that add walking, cycling and public transit facilities, change traffic speeds or change vehicle parking conditions (NYCDOT 2013). **In several examples, walking, cycling and public transit improvements have improved economic performance.**¹¹ Establishing bike paths on 8th and 9th Avenues in Manhattan increased local business retail sales up to 49 percent compared with 3 percent borough-wide.¹² Expanding walking facilities in Union Square reduced commercial vacancies 49 percent, compared to a 5 percent increase borough-wide. Establishing a bus lane and other bus transit improvements on Fordham Road in the Bronx increased nearby retail sales 71 percent compared to 23 percent borough-wide. Developing bus- and bike-lanes on First and Second Avenue reduced commercial vacancy rates 47 percent, compared with 2 percent borough-wide.¹³
- One study examined the impacts of multi-modal transportation improvements along Toronto's Bloor Street for businesses. The analysis indicated that **expanding sidewalks, and adding bicycle and bus lanes tends to support local economic development, even if it reduces on-street parking and driving speeds.**¹⁴ It found that, after implementation, 90 percent of customers walk, bike or travel by public transit to shops, and customers who arrive by foot and bicycle visit the most often and spend most per month on average.
- In 2008, the four-lane Magnolia Street in Fort Worth was re-striped to include one lane in each direction for bicycles. **After the road was rearranged, restaurant revenues along the street went up a combined total of 179 percent.**¹⁵

⁹ <http://www.uc.edu/news/NR.aspx?id=14300>

¹⁰ Melekian, B., *From Kitchen to the Wild in 30 Seconds*. The New York Times, September 7, 2006.

¹¹ <http://www.vtpi.org/walkability.pdf>

¹² NYCDOT Measuring the Street: New Metrics for 21st Century Streets.

<https://d3n8a8pro7vmtx.cloudfront.net/americanbikes/pages/211/attachments/original/1351785187/2012-10-measuring-the-street.pdf?1351785187>

¹³ NYCDOT Measuring the Street: New Metrics for 21st Century Streets.

¹⁴ Sztabinski 2009

¹⁵ <http://www.triplepundit.com/2013/12/bike-lanes-increase-small-business-revenue/>

- One year after San Francisco reconfigured Valencia Street with bike lanes, the city found that bicycle volume had increased by over 140 percent during the afternoon peak period while collisions involving pedestrians had decreased by 36 percent. **Nearby businesses reported an increase in sales of 60 percent, which they attributed to higher levels of pedestrian and bicycle activity, reduced travel time, and greater convenience for shoppers.** The city has since widened sidewalks and re-timed signals to further increase the efficiency of the street for bicyclists.¹⁶

5.2.3 Job Creation

Beyond long-term economic development benefits from the creation of enhanced multi-modal transportation infrastructure, research shows that these projects also yield greater immediate employment impacts from construction.

- One study gathered detailed data from departments of transportation and public works departments from 11 cities in the United States. Using detailed cost estimates on a variety of projects, an input-output model was used to study the direct, indirect, and induced employment that is created through the design, construction, and materials procurement of bicycle, pedestrian, and road infrastructure. Evaluating 58 separate projects, the study found **that bicycling, pedestrian, and multi-use trail infrastructure created more jobs for a given level of spending than road-only projects.** For each \$1 million, the cycling projects in the study created a total of 11.4 jobs within the state, pedestrian projects created an average of about 10 jobs per \$1 million, and multi-use trails created 9.6 jobs per \$1 million. Meanwhile, road-only projects created a total of 7.8 jobs per \$1 million.¹⁷
- A similar study that examined infrastructure projects in Baltimore, Maryland came up with similar results: **pedestrian and bike infrastructure projects create 11 to 14 jobs per \$1 million of spending while road infrastructure initiatives create just seven jobs per \$1 million of spending.**¹⁸

5.3 Economic Value of Residual Property for Development

Value of residual property for development is influenced by local conditions and adjacencies. As such, rather than examining value based on benchmarks from other locations or regions, this section explores the potential value of the properties which may be created by the I-375 alternatives based on local market conditions and specific property characteristics.

Three key factors affecting property value - availability of developable property, site characteristics and adjacencies, and development trends and activity - are discussed below.

¹⁶ National Complete Street Coalition Local Government Commission. Complete Streets in California. 2012 <http://www.smartgrowthamerica.org/documents/cs/resources/cs-in-california.pdf>

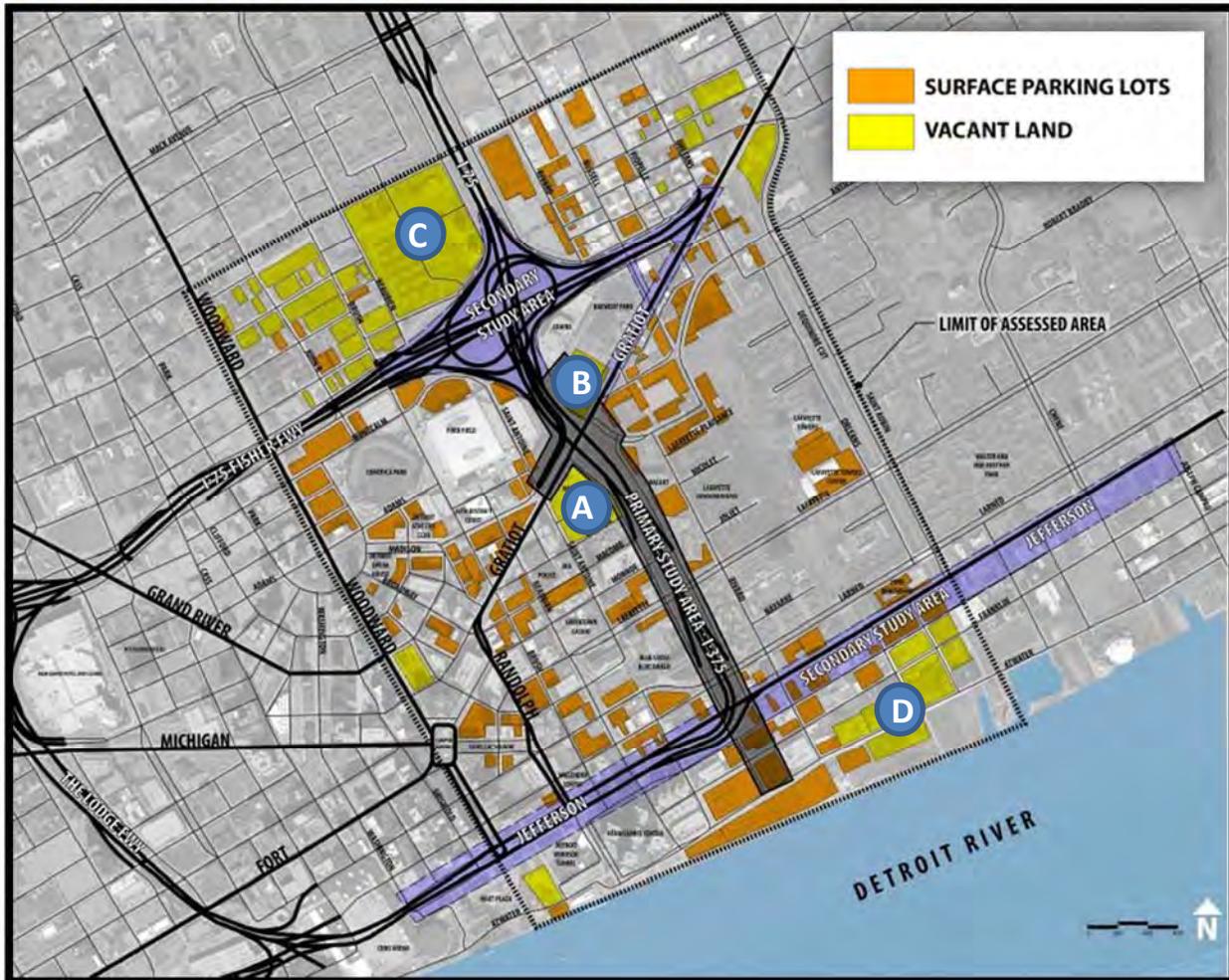
¹⁷ Garrett-Peltier, Heidi. Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts. *Political Economy Research Institute, University of Massachusetts Amherst*. 2011. http://www.peri.umass.edu/fileadmin/pdf/published_study/PERI_ABikes_October2011.pdf

¹⁸ Garrett-Peltier, Heidi. Estimating the Employment Impacts of Pedestrian, Bicycle, and Road Infrastructure, Bicycle, and Road Infrastructure: Case study: Baltimore. *Political Economy Research Institute, University of Massachusetts Amherst*. 2010. https://www.downtowndevelopment.com/pdf/baltimore_Dec20.pdf

5.3.1 Availability of Developable Land

Although development activity has resulted in some large new developed areas within the downtown and an increase in occupied buildings, there remains a significant amount of vacant or underutilized land within the greater downtown area in general, the I-375 corridor specifically. Figure 9 illustrates the locations of vacant properties and surface parking lots within the corridor area.

Figure 9: Vacant and Underutilized Properties in I-375 Corridor Area



As shown in the figure, there are large vacant properties immediately adjacent to the corridor, including the Wayne County Jail Site (A), property adjacent to Brewery Park at Gratiot and I-375 (B), the former Brewster Projects site (C), and properties along the East Riverfront (D). In addition, numerous surface parking lots exist in the area, which typically are the first properties to become development sites in CBD areas where there is strong demand for property. Note that this figure does not show developed properties/buildings within this area which are vacant or underutilized. These properties further add to the overall inventory of available developable property within the area.

5.3.2 Site Characteristics and Adjacencies

Potential residual parcels which may be created by the various alternatives vary from alternative to alternative in size, dimensions and adjacencies. Among the factors which influence the value and developability of any such parcels are the size, dimensions and adjacencies to the properties.

Figures Figure 10, Figure 11, Figure 12 illustrate the potential residual parcels which may be generated by three of the Illustrative Alternatives for the I-375 corridor. Table 3 presents a summary of the characteristics of each parcel. The following is a summary of the key findings regarding these parcels:

Parcel Size

The size and narrowness of the residual parcels (ranging from 110' to 160' depending on the alternative) make development feasibility relatively low. Standalone smaller sites typically require unique development and construction approaches, and generally have higher costs of development on a per square footage basis. While these parcel types could see viability in more dense urban centers with high land values, this is not the current or foreseeable market dynamic in downtown Detroit. For context, a standard city block dimension in the CBD is approximately 300 x 300 feet.

Adjacencies

I-375 currently acts as the back street/"back of house" for a number of the buildings adjacent to the corridor, including major parking facilities and loading docks. As such, residual land made available next to the existing building stock, particularly on the CBD side, will have little development feasibility as standalone sites. Access must be maintained to many of the properties from the new roadway, bisecting the development parcels and making development of the space impractical. For parcels under Alternatives 5 and 6, these service-type adjacencies inhibit street activation and may make the parcels less desirable for incompatible uses such as residential or retail.

Other Development Factors

Under Alternative 4, the existing southbound service drive would be eliminated, the space for which would be part of the residual property parcels. In this instance, development of this space would require relocation of all utilities currently located under the service drive, which would add significant development expense.

Figure 10: Alternative 4 Potential Residual Parcels

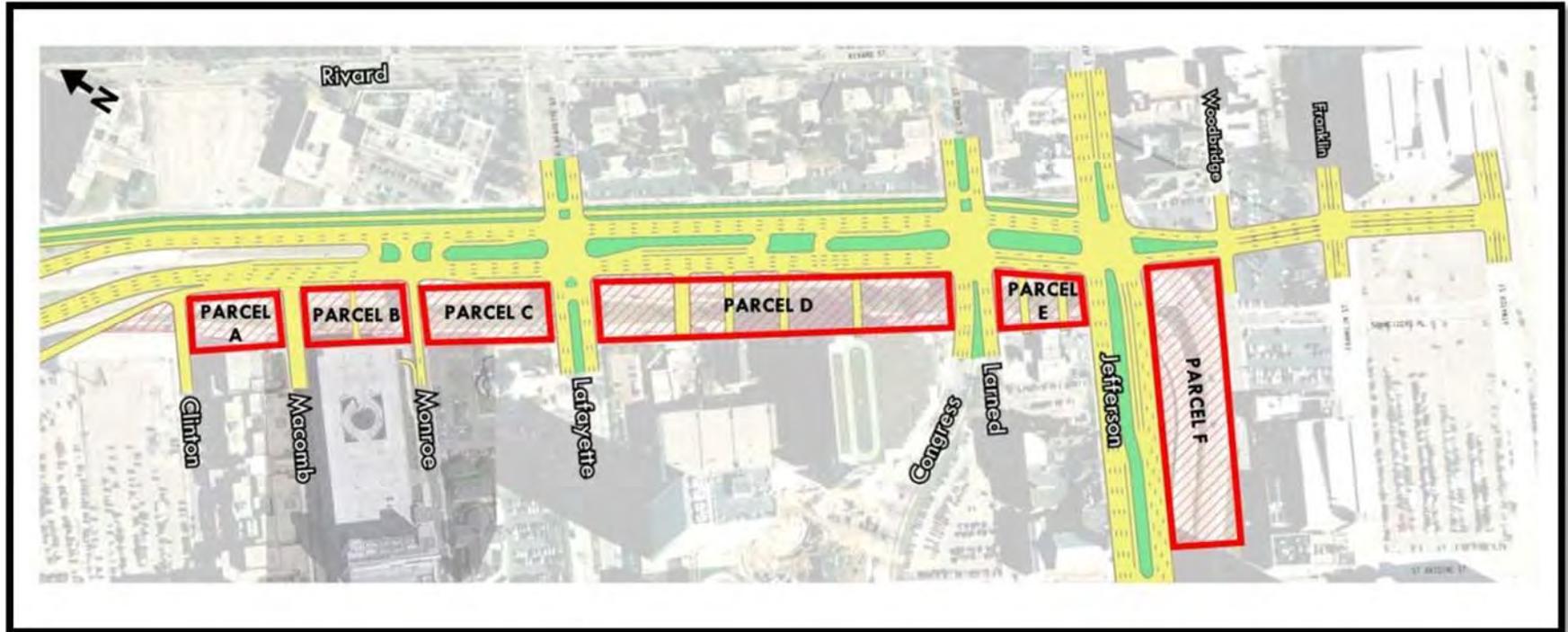


Figure 11: Alternative 5 Potential Residual Parcels

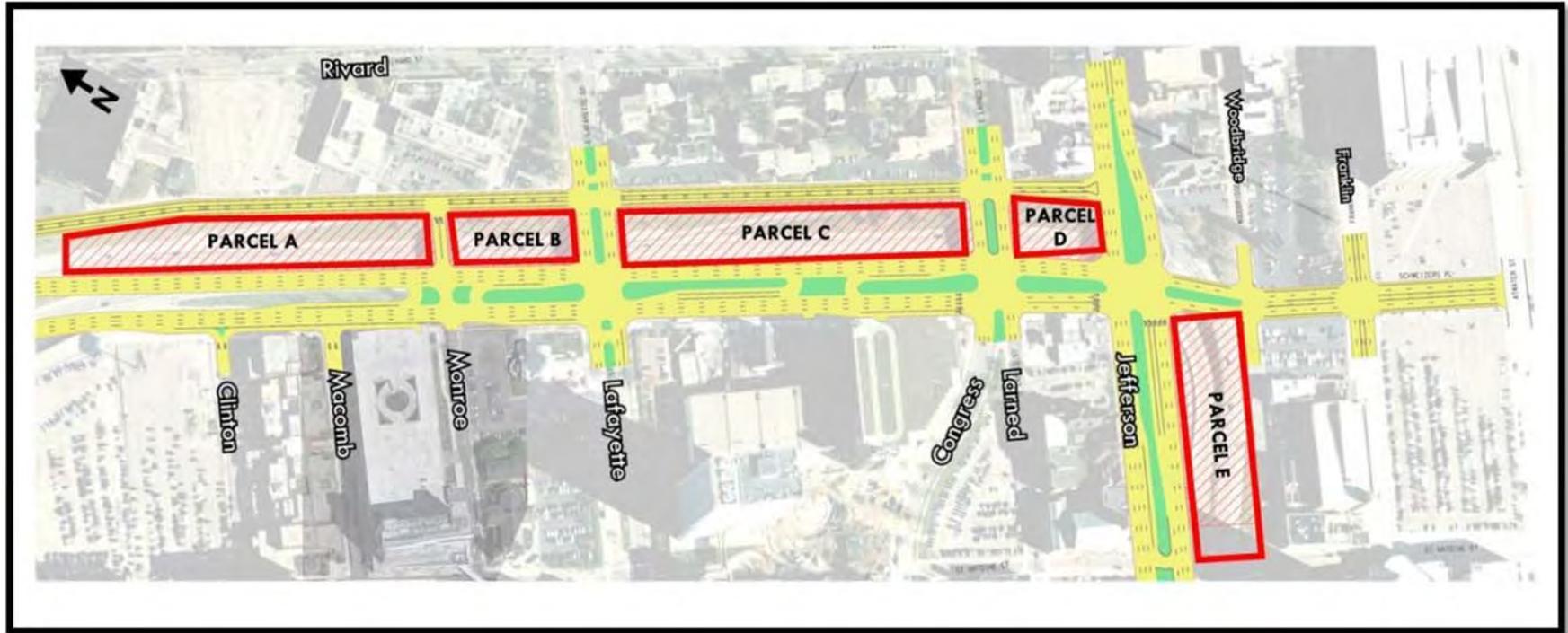


Figure 12: Alternative 6 Potential Residual Parcels

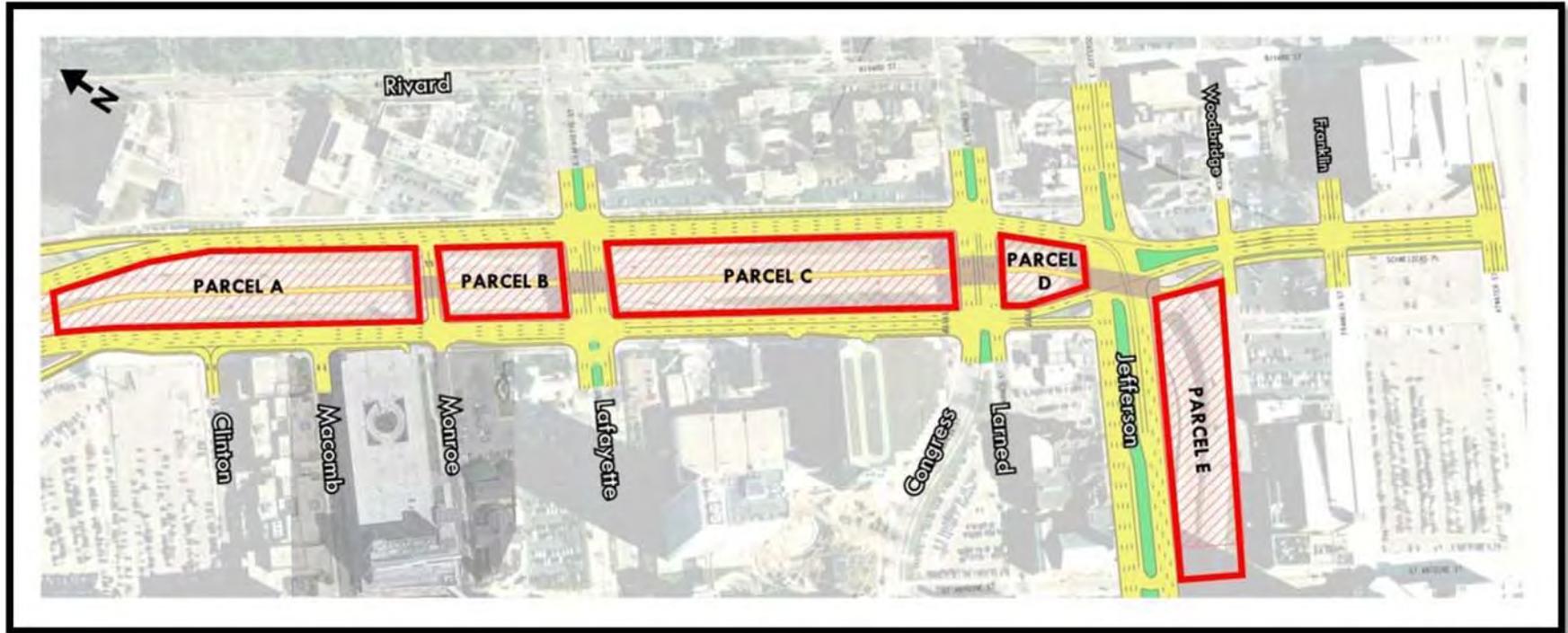


Table 3: Potential Residual Parcel Characteristics

Parcel	Approximate Developable Size	Adjacency	Other Development Factors
Alternative 4			
A	130' x 200'	Juvenile detention facility	Utility relocation from service drive
B	130' x 220'	Greektown Casino parking structure	Utility relocation from service drive; Must maintain access to Greektown Casino parking structure
C	120' x 290'	Surface parking lot; Annunciation Greek Orthodox Church	Utility relocation from service drive
D	120' x 830'	Surface parking lot; Holy Family Church; BCBSM loading dock; BCBSM parking structure	Utility relocation from service drive; Must maintain access to four driveways along site
E	110' x 200'	Gas station	Utility relocation from service drive; Must maintain access to gas station
F	150' x 730'	Woodbridge Street; small office buildings	Utility relocation from old Jefferson alignment
Alternative 5			
A	110' x 800'	New local roadway; Wayne State Pharmacy Building (vacant)	Narrow development parcel
B	110' x 290'	New local roadway; Woodward Academy	Narrow development parcel
C	110' x 820'	New local roadway; Rivard Apartments	Narrow development parcel
D	110' x 190'	New local roadway; small office buildings	Narrow/small development parcel
E	150' x 730'	Woodbridge Street; small office buildings	Utility relocation from old Jefferson alignment
Alternative 6			
A	160' x 600'	New surface roadways; Wayne State Pharmacy Building (vacant); Juvenile detention facility; Greektown Casino parking structure	
B	160' x 260'	New surface roadways; Woodward Academy; Annunciation Greek Orthodox Church	
C	160' x 730'	New surface roadways; Rivard Apartments; Holy Family Church; BCBSM parking structure	
D	130' x 170'	New surface roadways; Small office buildings; Gas station	Small development parcel
E	150' x 730'	Woodbridge Street; small office buildings	Utility relocation from old Jefferson alignment

5.3.3 Development Trends and Activity

As discussed in Section 3.2, while downtown Detroit has experienced a strong development surge in the past ten years, much of this has come in the form of redevelopment/reuse of existing properties, or significant one-time developments, such as new sports facilities. In addition, major development projects currently underway or in the advanced planning stages are consuming a significant amount of the development capacity in the area, and are leveraging strategic locations or assets/amenities, such as the Riverwalk or the proposed Detroit Event Center.

According to local broker interviews, despite the market potential and trends over the past ten years, it will take time for overall activity in the area to increase so as to drive demand for all land, not just properties strategically located or part of a significant contiguous development plan. During this growth period, new construction on individual parcels (i.e. not part of a larger development district plan) has been extremely limited in the area, and generally focused on existing nodes of density and walkability, such as Campus Martius. Given these market factors, along with the projected size, configuration, and adjacencies of the potential residual land, consensus from local broker discussions is that the residual land made available from the alternatives would see little interest in the near future from developers.

Although residual land may have limited immediate development value, the potential for downtown wide connectivity was cited by local brokers as a significant possible benefit to the overall real estate market from I-375 redevelopment, a benefit to be realized in the long-term for the wider area rather than an immediate benefit to the corridor. If the freeway is removed or connectivity otherwise significantly improved, it could provide the opportunity to connect the Riverfront, Greektown and Eastern Market, Lafayette Park, the Stadium area, and Central Business Districts.

5.3.4 Findings

Based on this analysis of general market conditions, availability of developable property, and site characteristics, it is unlikely that any potential residual property yielded by the alternatives would have significant value in terms of an immediate direct sale which could be leveraged to reduce the project capital cost. Further, if sold for future development, there is a high likelihood that the property could sit vacant for a substantial period of time until market conditions favor development, or be developed for surface parking, which would not encourage street activity or other project goals. Long-term vacancy of the parcels or uses such as surface parking could erode adjacent property values in the near-term, particularly on the east side of the corridor in the adjacent residential neighborhood.

Given these findings, it is recommended that any residual properties along the I-375 corridor be initially programmed for a transitional or permanent public use until such a time that market demand for development property warrants sale and immediate development.

5.4 Economic Value of Public Park/Open Space

Park and public open space are proposed elements in several alternatives as a transitional or permanent use of residual property, particularly given the findings related to the development value of residual sites. The following highlights the potential for improvements to the public realm in urban areas to create economic value, particularly through real estate development, land value premiums, and increased business activity. This inter-relationship between public realm improvements and economic outcomes has been firmly established through a wide range of national examples and academic studies,

a summary of which is presented below. This research is a basis for how the alternatives are assessed on the economic metric of public realm enhancements.

It should be noted, however, that the potential economic impact of park/open space must be weighed against the cost of developing and maintaining quality public spaces that would yield such benefits. Any alternatives advancing with newly created public spaces must consider the costs and entities for programming and maintenance of such spaces.

5.4.1 Real Estate Market Impacts

The following examines generally observed trends, as well as those specific to typology and location.

General Trends

- The Trust for Public Land Institute has recognized the hedonic value of green space on real estate property values, marked by the willingness of people to pay more for properties that are within close proximity to a park. Hedonic value is affected not only by distance from the park, but also by the quality of the park. Parks that are well maintained and provide recreational facilities are markedly more attractive than parks that are poorly maintained or perceived as safety threats. Based on research that quantifies park values, the Trust for Public Land Institute estimated that **parkland can add 5 percent of value, on average, to residential properties located within 500 feet of parks. Parks that are well maintained and provide a variety of amenities can add up to 15 percent of value to a property.**¹⁹
- One study examining valuation based on park size and property distance demonstrated that **the proximate effect is substantial up to 500-600 feet (typically three blocks). In the case of parks over 30 acres, the effect may be measurable out to 1500 feet, but 75 percent of the premium value generally occurs within the 500-600 foot zone.**²⁰
- A meta-analysis which aggregated results of approximately 30 studies empirically investigated the extent and legitimacy of the proximate principle reported, starting with Frederick Law Olmsted's study of the impact of New York's Central Park. As a point of departure, **the studies' results suggest that a positive impact of 20 percent on property values abutting or fronting a passive park area is a reasonable starting point.** If it is a heavily used park catering to large numbers of active recreation users, then the proximate value increment may be minimal on abutting properties, but may reach 10 percent on properties two or three blocks away.²¹
- One study examined the effect of greenbelt areas on property values in three different areas of Boulder, Colorado. The sample consisted of properties from each area that sold in a selected calendar year which were located within 3,200 feet of the greenbelt, with the regression results showing that, if other variables were held constant, **the average value of properties adjacent to**

¹⁹ "Measuring the Economic Value of a City Park System". The Trust for Public Land.

²⁰ Crompton, John. The Impact of Parks and Open Spaces On Property Values. Winter 2007. Volume 63, No.1 http://www.cprs.org/membersonly/winter07_propertyvalues.htm

²¹ Crompton, John. The Impact of Parks on Property Values: A Review of the Empirical Evidence. *Journal of Leisure Research*. 2001. Vol 33, No.1. (1-31)

the greenbelt was 32 percent higher than those located 3,200 walking feet away.²³ The presence of a greenbelt in a Boulder neighborhood was found to add approximately \$500,000 in property tax revenue annually.

- An important caveat is that, while there is a close relationship between housing prices and proximity to high-quality urban environmental amenities, **the opposite is true of properties near poorly maintained parks.**²⁴
- In the early 1980s Chattanooga was facing rising unemployment and crime, polluted air, and a deteriorating quality of life. To lure middle-class residents back, local government, businesses, and community groups decided to improve the quality of life by cleaning the air, acquiring open space, and creating parks and trails. **As a result, property values rose more than \$11 million, an increase of 127.5 percent.²⁷ Improvements in Chattanooga resulted in an increase in annual combined city and county property tax revenues of \$592,000, an increase of 99 percent.²⁸**

Trends by Park Typology

As the alternatives presented demonstrate a specific type of public realm enhancement, specifically smaller neighborhood-scale parks and/or greenways within the downtown core, the following highlights research that analyzes more specific real estate-based impacts of neighborhood-level and inner-city park space, respectively. Research on **neighborhood-level park space** includes:

- A study undertaken in Worcester, Massachusetts examined the relationship between four neighborhood parks and the values of all properties sold within a 4,000 foot radius of each park during the preceding five years. **The results showed that, on average, a house located 20 feet from a park sold for \$2,675 more than a house located 2,000 feet away.** However, 80 percent of the aggregate increase in value derived from properties located within 500 feet of the parks. Effects could not be traced beyond 2,000 feet from the parks. **Using these data, it was estimated that the aggregate property value increase attributable to these parks was \$3.5 million.³⁰**
- In Amherst, Massachusetts, **properties in proximity to small-scale open space was found to appreciate at an annual rate of 22 percent.³¹**
- A study of the impact of 14 neighborhood parks within the Dallas-Fort Worth metropolitan area (Miller, 2001) found that while large parks add more value to residents' property than small parks, the premium is small relative to that of proximity. **All else equal, then, more value will be**

²³ Crompton, John. The Impact of Parks on Property Values: A Review of the Empirical Evidence. *Journal of Leisure Research*. 2001. Vol 33, No.1. (1-31)

²⁴ Chicago Metropolitan Agency for Planning. <http://www.cmap.illinois.gov/about/2040/supporting-materials/process-archive/strategy-papers/parks-and-open-lands/economic-benefits>

²⁷ APA. How Cities use Parks for Economic Development.

²⁸ Lerner, Steve and William Poole. 1999. *The Economic Benefits of Parks and Open Space: How Land Conservation Helps Communities Grow and Protect the Bottom Line*. The Trust for Public Land.

³⁰ Crompton, John. The Impact of Parks on Property Values: A Review of the Empirical Evidence. *Journal of Leisure Research*. 2001. Vol 33, No.1. (1-31)

³¹ APA. How Cities use Parks for Economic Development.

created by a series of small parks, which permit more total houses in their vicinity, than by a single large park of equivalent area.³²

- It should be noted in the I-375 context that there is existing significant park/open space within the adjacent Lafayette neighborhood. Therefore, it is anticipated that green space created by alternatives would be more consistent with an open space use as a buffer, rather than a highly activated park space, particularly given long-term consideration of developing the property. Given these factors, economic value would be more consistent with the limited benchmarks available for open space which is not activated, and would have the greatest impact as an amenity to the properties immediately adjacent to the space, rather than a broader neighborhood impact.

5.4.2 Business Activity Impacts

Public realm improvements, particularly within an urban setting, has the ability to positively impact business and industry activity through both increasing retail sales and through attracting knowledge sector companies that increasingly factor in worker preferences in locational decisions.

Increased Retail Sales

In a number of instances, high-quality public space enhancements has led to increased retail sales:

- In Brooklyn, converting an underused parking lot into a public park **increased nearby retail sales volumes by 172 percent**, compared to 18 percent borough-wide.³⁸
- In Oakland, California, the presence of the East Bay Regional Park District is estimated to **stimulate about \$254 million annually in park-related purchases**, of which \$74 million is spent directly in the local East Bay economy.⁴¹
- The benefits of Chicago's Millennium Park over ten years, as calculated in the 2005 Millennium Park Economic Impact Study, has been estimated to be from **\$428.5 million – \$586.6 million for hotels, from \$672.1 million – \$867.1 million for restaurants, and from \$529.6 million – \$711.1 million for retailers.**⁴²
- In San Diego, it was estimated that **total park-derived spending in 2007 from tourists alone came to \$114.3 million.**⁴³

Attracting knowledge sector industries

A significant shift is underway in the US economy, with an increasing proportion of the value-added being derived from "knowledge sector" industries that employ workers that are utilizing their knowledge, as opposed to physical labor, as the main source of wealth creation and economic growth. These employees, referred to as "knowledge workers", increasingly work in companies that are not tied to specific sites in order to achieve a competitive advantage, and as such locational decisions are

³² Crompton, John. The Impact of Parks on Property Values: Empirical Evidence from Past Two Decades in the United States. *Managing Leisure*. 2005. (203-218)

³⁸ <http://www.vtpe.org/walkability.pdf>

⁴¹ APA. How Cities use Parks for Economic Development.

⁴² <http://economyleague.org/files/File/Millennium.pdf>

⁴³ Trust for Public Land. Measuring the Economic Value of a City Park System

increasingly based on worker preferences. A number of studies have found that knowledge workers have demonstrated preference for attractive urban environments with high-quality amenities and a multitude of transportation options.

- A survey of 1,200 high technology workers by KPMG found that **quality of life and urban environment in a community increases the attractiveness of a job by 33 percent.**⁴⁴
- The importance of park and open space amenities was reported in a study of key decision makers from 174 businesses that had relocated, expanded, or been launched in Colorado in the previous five years. Business decision makers were influenced particularly strongly because they reported that quality of life was their main reason for relocating there. **Among six elements that were used to measure quality of life, these business decision-makers ranked the element of park, recreation, and open space amenities as being most important.**⁴⁵

⁴⁴ APA. How Cities use Parks for Economic Development.

⁴⁵ Crompton, John (2007). "Competitiveness: Parks and Open Space as Factors Shaping a Location's Success in Attracting Companies, Labor Supplies, and Retirees." Chapter 5 in Trust for Public Land's *The Economic Benefit of Land Conservation Report*.

6 Comparison of Alternatives

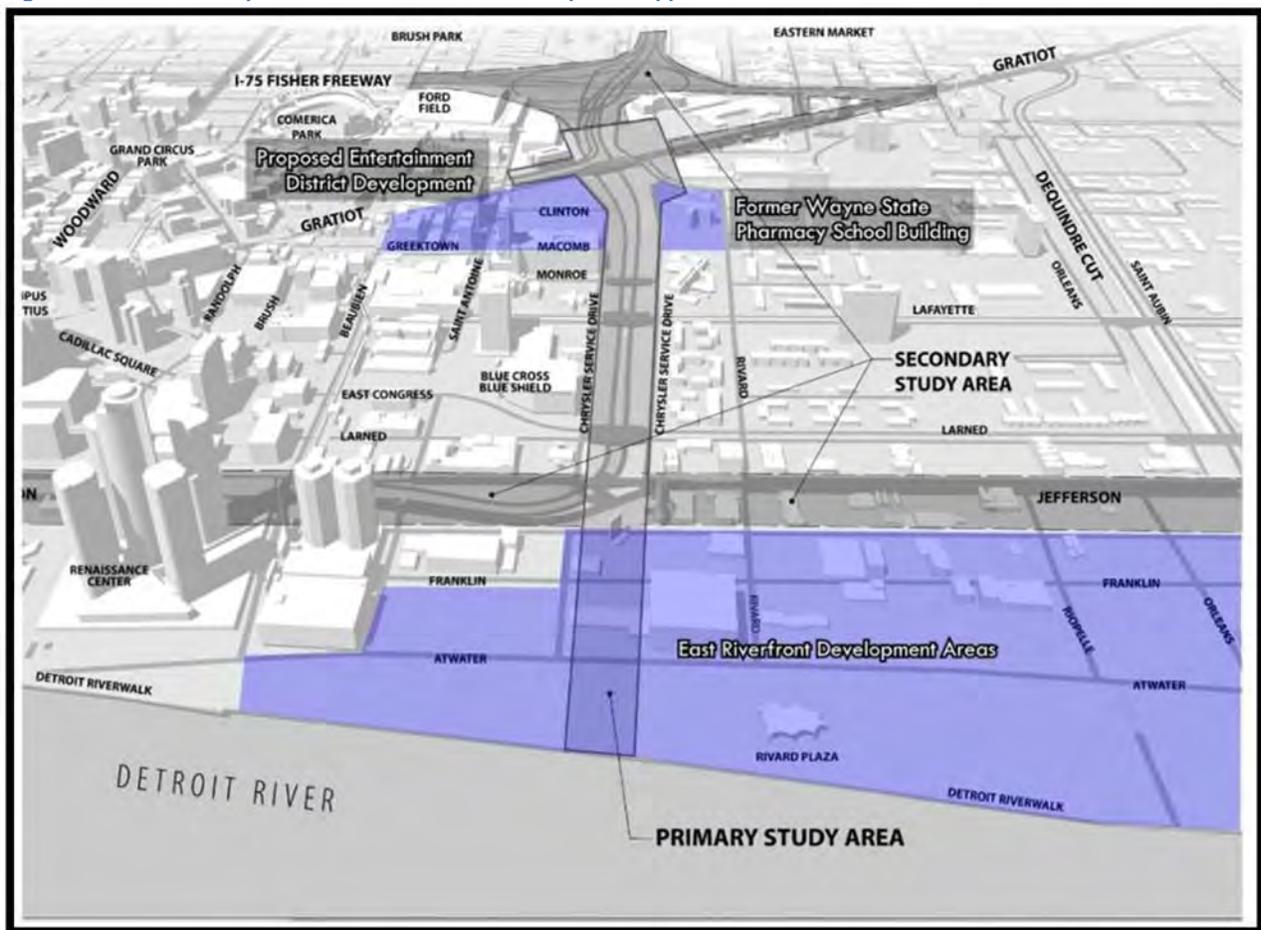
6.1 Evaluation Criteria

Four principal criteria were utilized to evaluate and compare the Illustrative Alternatives:

Land Development Facilitation

This criterion considers the potential for the alternative to support active development plans and potential opportunities in the general corridor area. This facilitation may be realized through improved connectivity or changes to the adjacencies of development properties, including physical uses, corridor aesthetics, character and activity, and user amenities. Figure 13 illustrates active development activities and opportunities in the immediate corridor area.

Figure 13: Active Development Sites and Corridor Development Opportunities



Impact to Real Estate Values

This criterion considers the potential for increases in real estate values (and associated increases in taxable value) of existing developed properties within the corridor influence area. These improvements may result from improved connectivity or changes to the adjacencies of development properties, including physical uses, corridor aesthetics, character and activity, and user amenities.

Urban Vitality/Enhancement

This criterion considers the likelihood for an alternative to enhance the quality of the public realm to create an area that is attractive, active and engaging. Primarily, this metric measures the corridor becoming a destination for activity rather than simply a utilitarian transportation route, and the resulting intangible economic value derived from the established relationship between street-level activation and economic development, via real estate premiums and increased business activity.

Benefits Concentration/Area of Impact

This criterion considers how localized the benefits are to the corridor, or in other words the potential area of impact. A highly localized concentration implies that benefits would be experienced directly along the I-375 corridor, which has more quantifiable value, whereas dispersed benefits are generated at a wider and more abstract level.

6.2 Alternative Analysis

The following sections present the analysis of each of the illustrative Alternatives based on the valuation criteria described above. Ratings (HIGH/MEDIUM/LOW/NONE) described for each category are meant to be comparative between the alternatives, and not to indicate a specific range of quantifiable value.

6.2.1 Alternative 1

The following is an assessment of Alternative 1 for each of the evaluation criterion. A depiction of the features and economic impact potential of Alternative 1 is shown in Figure 14.

Land Development Facilitation: *NONE*

Alternative 1 does not provide any new access or improvements to access in locations where new development opportunities exist.

Impact to Real Estate Values: *LOW/NONE*

This alternative is not anticipated to have any appreciable impact on value of surrounding property beyond the very limited value of refreshed infrastructure.

Urban Vitality/Enhancement: *NONE*

Alternative 1 includes no changes which would enhance the urban vitality or impact the overall corridor environment.

Benefits Concentration/Area of Impact: *LOW/NONE*

Benefits would be extremely limited and have no impact beyond the immediate corridor frontage.

OVERALL ECONOMIC IMPACT POTENTIAL: *NONE***6.2.2 Alternative 2**

The following is an assessment of Alternative 2 for each of the evaluation criterion. A depiction of the features and economic impact potential of Alternative 2 is shown in Figure 15.

Figure 14: Alternative 1 Economic Impact Factors

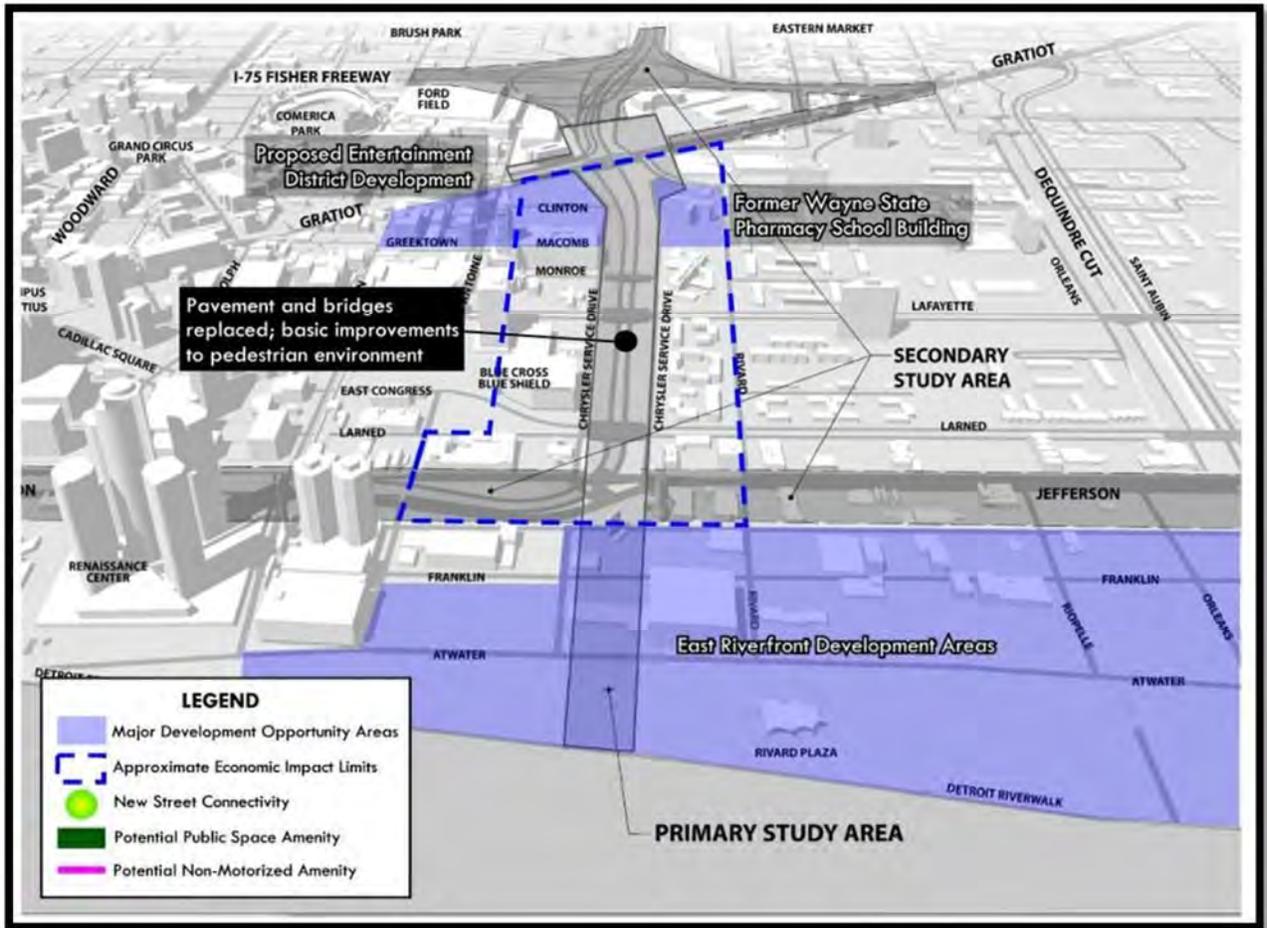
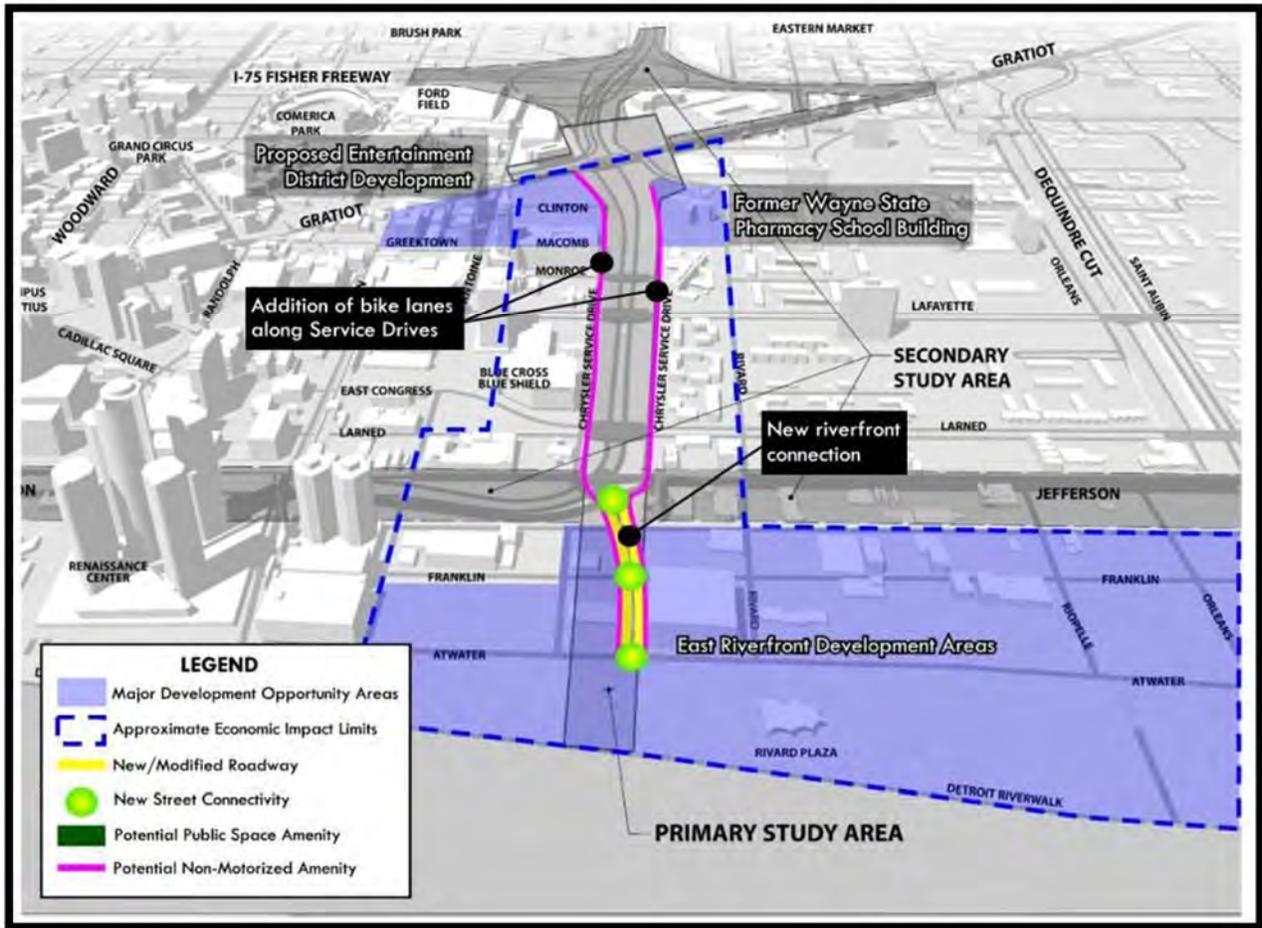


Figure 15: Alternative 2 Economic Impact Factors



Land Development Facilitation: *LOW/MEDIUM*

Alternative 2 would provide new direct access to the East Riverfront development area, which would improve connectivity to this area from Jefferson Avenue and may ultimately support development. However, this access would require an exit movement off of I-375 rather than a direct link to the corridor. The I-375 curve to Jefferson Avenue will continue to isolate this area from the downtown street grid.

Impact to Real Estate Values: *LOW*

This alternative is not anticipated to have any appreciable impact on value of surrounding property beyond the very limited value of refreshed infrastructure. Providing multi-modal options along the service drives, along with an improved aesthetic environment, may have a marginal impact on directly adjacent properties.

Urban Vitality/Enhancement: *NONE*

Alternative 2 includes no changes which would enhance the urban vitality or impact the overall corridor environment.

Benefits Concentration/Area of Impact: *LOW*

Benefits would be limited and largely isolated to the East Riverfront development area and the immediate corridor frontage.

OVERALL ECONOMIC IMPACT POTENTIAL: *LOW***6.2.3 Alternative 3**

The following is an assessment of Alternative 3 for each of the evaluation criterion. A depiction of the features and economic impact potential of Alternative 3 is shown in Figure 16.

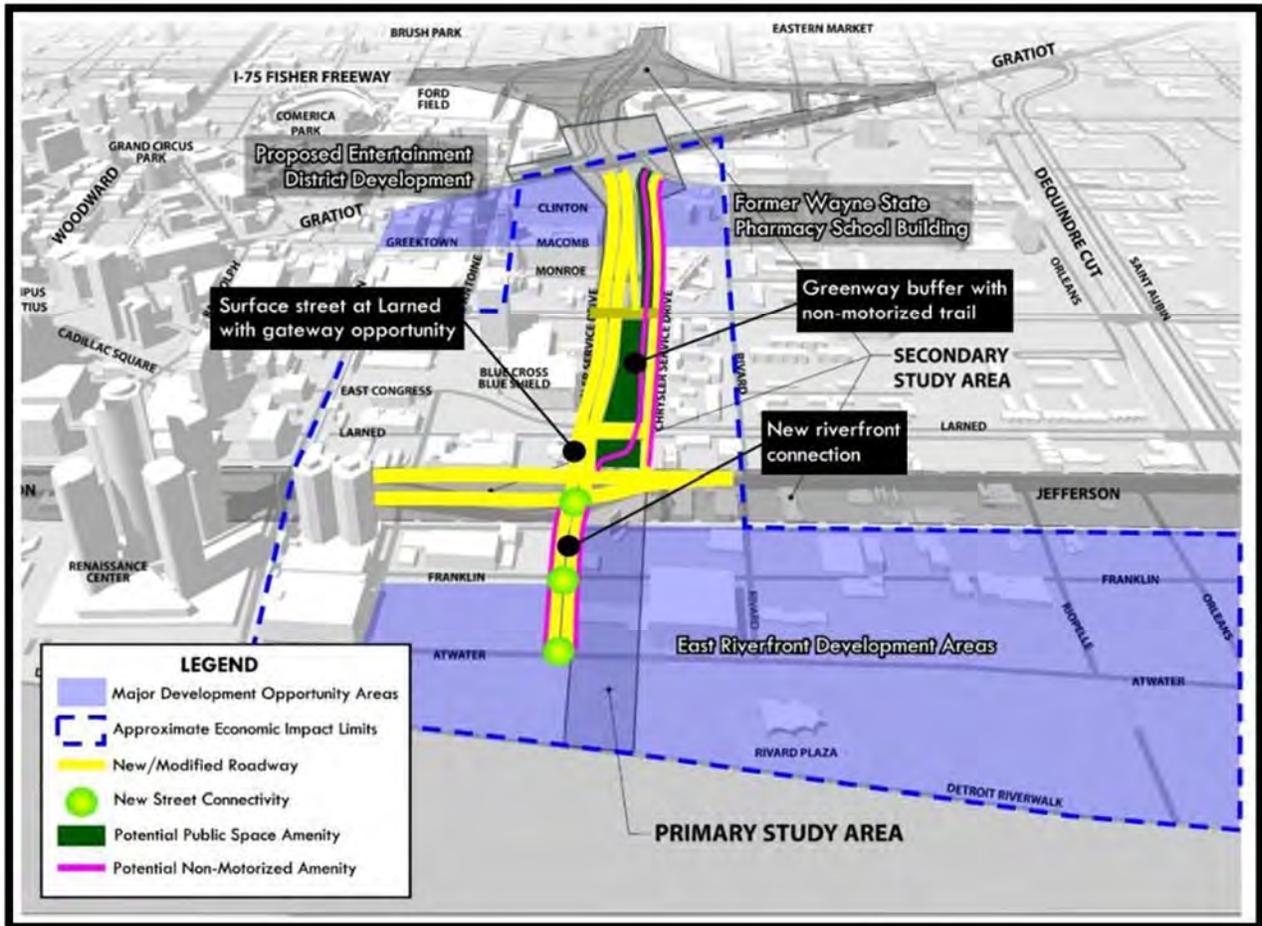
Land Development Facilitation: *MEDIUM*

Alternative 3 would provide a new point of direct access to the East Riverfront development area through surfacing the principal roadway and extending it to Atwater Street. This configuration not only provides a point of connection, but creates a view corridor and gateway opportunity from the end of the roadway to the riverfront. This alternative also includes removal of the I-375 curve to Jefferson Avenue, which eliminates a key barrier between the East Riverfront and the CBD. In addition, conversion of the northbound service drive to a two-way local access roadway and creation of a greenway buffer would improve the access to and adjacency of the Pharmacy Building site, potentially supporting its redevelopment.

Impact to Real Estate Values: *MEDIUM*

This alternative would shift the freeway towards the CBD side of the corridor and add a greenway buffer and non-motorized amenity along the east (residential) side of the corridor. In addition, the existing northbound service drive, which currently carries freeway-bound traffic from the major cross-streets, would be converted to a residential-scale two-way local roadway. These features are likely to have a positive impact on real estate values along the eastern edge of the corridor. In addition, new surface intersections at Larned and Jefferson provide opportunities to create a signature gateway to the greater downtown area, resulting in extension of positive impacts to real estate values.

Figure 16: Alternative 3 Economic Impact Factors



Urban Vitality/Enhancement: MEDIUM

Creation of a greenway buffer and local-scale roadway may improve the environment for street activity along the eastern edge of the corridor. In addition, surfacing the roadway at Larned and restoring the street grid will create an environment more consistent with a CBD, and may induce greater street activity in the gateway area.

Benefits Concentration/Area of Impact: MEDIUM

Benefits from Alternative 3 may extend further to the east as values of the corridor-fronting properties are improved. In addition, greater benefits are likely to be experienced along Jefferson Avenue west of I-375, where removal of the curve allows for improved accessibility and restoration of an urban street grid.

OVERALL ECONOMIC IMPACT POTENTIAL: MEDIUM**6.2.4 Alternative 4**

The following is an assessment of Alternative 4 for each of the evaluation criterion. A depiction of the features and economic impact potential of Alternative 4 is shown in Figure 17.

Land Development Facilitation: HIGH

In addition to the benefits described under Alternative 3, Alternative 4 would allow new connections from the I-375 roadway to Clinton and Macomb Streets. These new connections could significantly improve accessibility to the Wayne County Jail Site development area and may bolster overall feasibility and development densities able to be achieved.

Impact to Real Estate Values: LOW

As discussed in Section 5.3, it is not anticipated that the residual property generated along the CBD site of the corridor would be viable for street-activating development, and instead would mostly likely remain vacant or utilized for surface parking until such a time that land scarcity warrants development. Vacancy or an undesirable transitional use such as surface parking may have a neutral or negative impact on adjacent real estate values. A park or other public space would not be appropriate in this location, given its adjacency to mostly service uses (parking and loading docks) and the need to maintain access across the parcels at many locations to existing uses.

In addition, although this alternative includes a narrow greenway buffer along the east side of the corridor, the principal roadway would shift to the east, closer to the adjacent residential area. This factor may also negatively impact real estate values.

Urban Vitality/Enhancement: LOW/MEDIUM

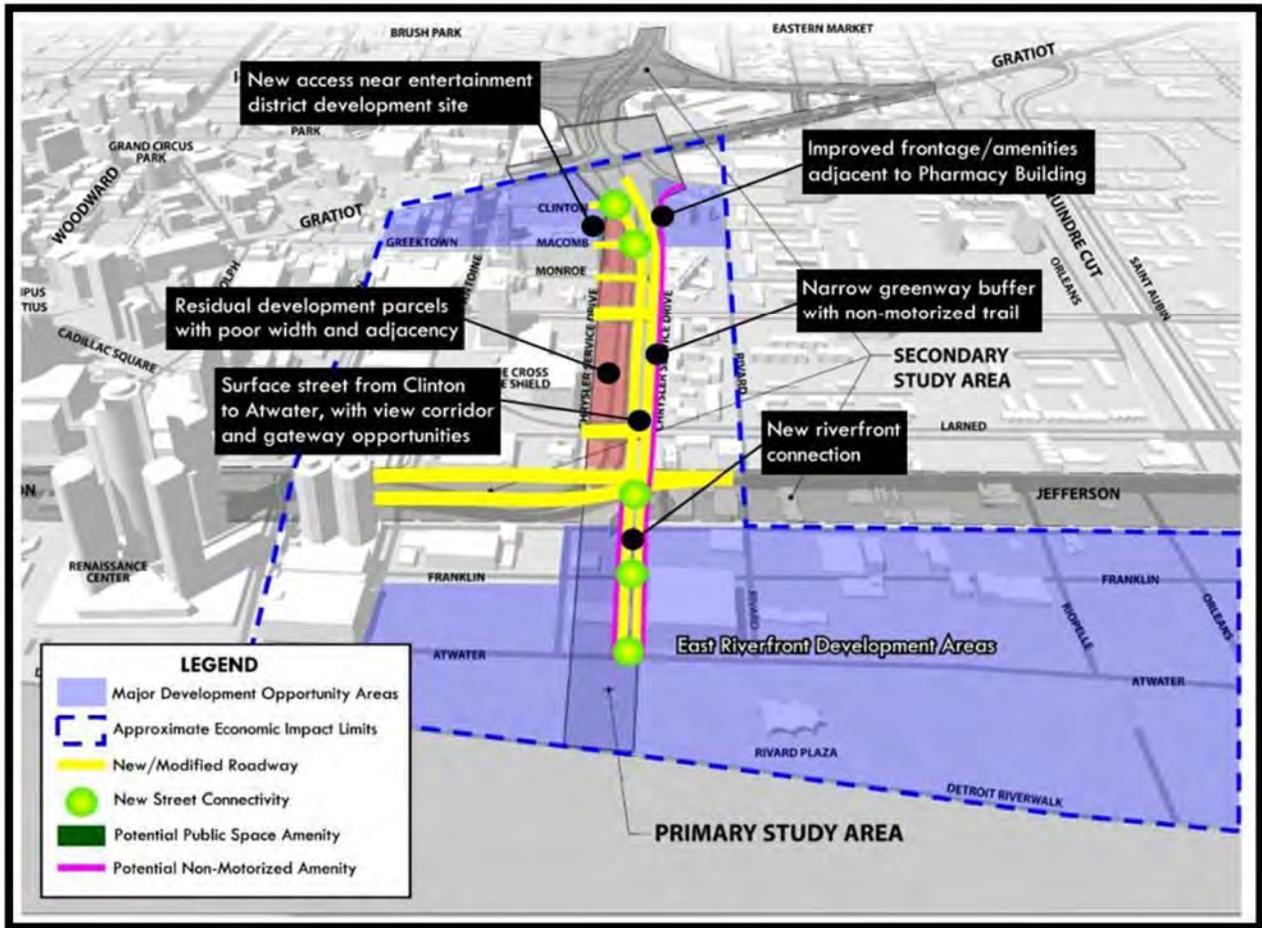
Given the lack of viable uses for the residual property, vacancy or surface parking use could have a neutral to negative impact on urban vitality and street activity, serving as a similar barrier to pedestrian activity across the corridor.

Benefits Concentration/Area of Impact: MEDIUM

Benefits concentration would be similar to that described under Alternative 3

OVERALL ECONOMIC IMPACT POTENTIAL: MEDIUM

Figure 17: Alternative 4 Economic Impact Factors



6.2.5 Alternative 5

The following is an assessment of Alternative 5 for each of the evaluation criterion. A depiction of the features and economic impact potential of Alternative 5 is shown in Figure 18.

Land Development Facilitation: HIGH

In addition to the benefits described under Alternative 3, Alternative 5 would allow new connections from the I-375 roadway to Clinton and Macomb Streets. These new connections could significantly improve accessibility to the Wayne County Jail Site development area and may bolster overall feasibility and development densities able to be achieved.

Impact to Real Estate Values: HIGH

As discussed in Section 5.3, it is not anticipated that the residual property generated under this alternative would be viable for immediate development. However, property in this location is suitable to serve as a “green” public space, buffering the adjacent residential area from the principal roadway to the west. In addition to some value as an amenity to the area, the effect of this space as a buffer could positively impact adjacent property values. There is also opportunity in this location for a creative transitional use, such as public art or other uses such as those employed along the former Central Freeway corridor in the San Francisco Bay Area.

Urban Vitality/Enhancement: MEDIUM

Alternative 5 would restore a pedestrian-scale street grid and remove a significant barrier between the east and west sides of the I-375 corridor. However, the impact of this alternative (and all alternatives explored) on urban vitality will be limited without the ability to create development density and street-activating uses along the corridor.

Benefits Concentration/Area of Impact: HIGH

Given the higher potential benefits on real estate values for adjacent properties along the corridor, there is greater potential for extension of those benefits, particularly further to the east into the Lafayette Park area, by stabilizing the transitional uses between Lafayette Park and the CBD.

OVERALL ECONOMIC IMPACT: HIGH

6.2.6 Alternative 6

The following is an assessment of Alternative 6 for each of the evaluation criterion. A depiction of the features and economic impact potential of Alternative 6 is shown in Figure 19.

Land Development Facilitation: HIGH

In addition to the benefits described under Alternative 3, Alternative 6 would allow new connections from the I-375 roadway to Clinton and Macomb Streets. These new connections could significantly improve accessibility to the Wayne County Jail Site development area and may bolster overall feasibility and development densities able to be achieved.

Impact to Real Estate Values: MEDIUM

The proposed below-grade greenway/public space under Alternative 6 would provide an amenity to the surrounding area, although the utility of the multi-use trail is questionable due to lack of connectivity further to the north. In addition, this alternative would place the principal northbound roadway immediately adjacent to the residential area to the east of the corridor, thereby potentially negatively impacting real estate values.

Figure 18: Alternative 5 Economic Impact Factors

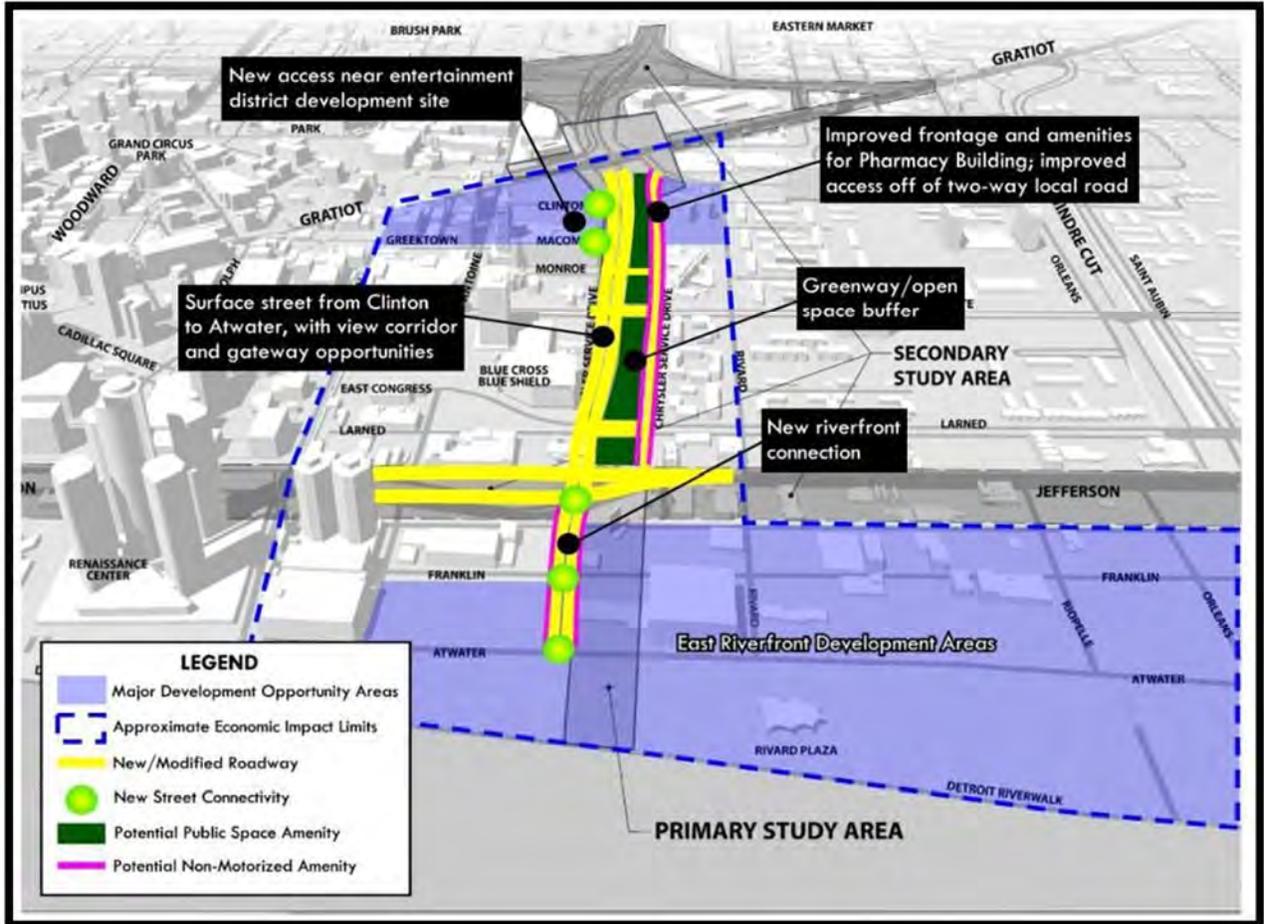
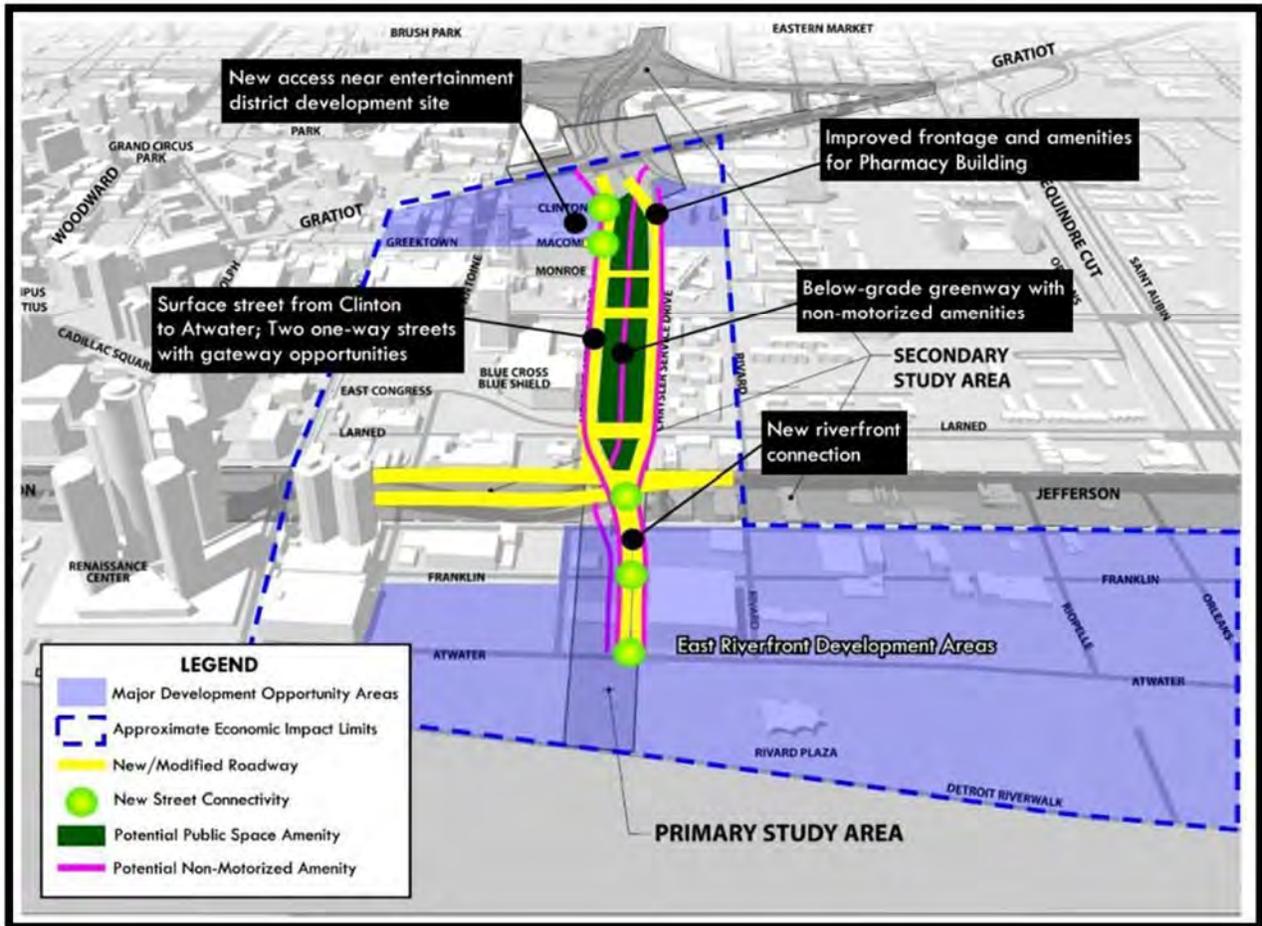


Figure 19: Alternative 6 Economic Impact Factors



It should be noted that should the residual property ultimately be viable for development, Alternative 6 would yield the largest parcel sizes which could be more readily developable than those yielded under Alternatives 4 or 5. Transitional use as a public space could allow the property to be held until such a time that there is sufficient demand for land to induce development.

Urban Vitality/Enhancement: *MEDIUM*

Alternative 6 would restore a pedestrian-scale street grid and remove a significant barrier between the east and west sides of the I-375 corridor. However, the impact of this alternative (and all alternatives explored) on urban vitality will be limited without the ability to create development density and street-activating uses along the corridor.

Benefits Concentration/Area of Impact: *MEDIUM*

The benefits concentration for this alternative is expected to be similar to that of Alternative 4.

OVERALL ECONOMIC IMPACT POTENTIAL: *MEDIUM*