Link Detroit! A New Paradigm for Detroit's Non-Motorized Community

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Introduction

Detroit is experiencing a watershed moment in its non-motorized connectivity. Despite the economic issues facing the city over the last several decades, an interest in revitalizing the riverfront has resulted in the Detroit RiverWalk, a major land reclamation along the Detroit River promoting highly desired public access. Another realized gem is the first phase of the Dequindre Cut greenway in an abandoned rail corridor. This corridor was known worldwide for its underground graffiti art and has become a popular destination for Detroit residents as well as visitors. In parallel with these efforts, and separate from the downtown core, Midtown Detroit, Inc., implemented the initial segments of a multiphase greenway, Midtown Loop, connecting local universities with a revitalized business core and numerous cultural destinations.

While substantial in their individual contributions, the Detroit RiverWalk, Dequindre Cut and Midtown Loop lacked a collective capacity for connectivity that could make them successful from a citywide network perspective. Master plans identified the potential to realize these connections but the funding required for implementation was far beyond any individual project budget. The Transportation Infrastructure to Generate Economic Recovery (TIGER) Discretionary Grant program offered a way for the City of Detroit (City), in collaboration with several non-profit organizations, to realize a true paradigm shift in establishing a collective vision.

Background

In 2011, the City and a dedicated group of non-profit leaders developed the concept of Link Detroit! Link Detroit! includes a series of multimodal infrastructure improvements that will create a non-motorized network through the Midtown area to Eastern Market, continuing on to the Detroit RiverWalk, extending into the heart of downtown and north to Hamtramck (Figure 1). Specifically, Link Detroit! includes construction of: (1) Dequindre Cut Phase II, (2) Midtown Loop Phase IV, (3) Eastern Market streetscape and pedestrian improvements including reconstruction of three critical bridges, and (4) the Hamtramck Connector. This represents a \$23 million infrastructure investment.

These improvements will link several of Detroit's wonderful assets—the Detroit RiverWalk, downtown Detroit, Eastern Market, Midtown and surrounding neighborhoods—creating improved access for residents and visitors. They will also generate opportunities for economic reinvestment, support the local and regional community, and provide convenient and cost-effective transportation options to residents who live and work in the city. These projects will extend and complete the substantial investments already made in the development of greenways, streetscapes, bicycle paths and associated infrastructure enhancements, enabling residents and visitors to better access the city's commercial, recreational, educational and cultural offerings.

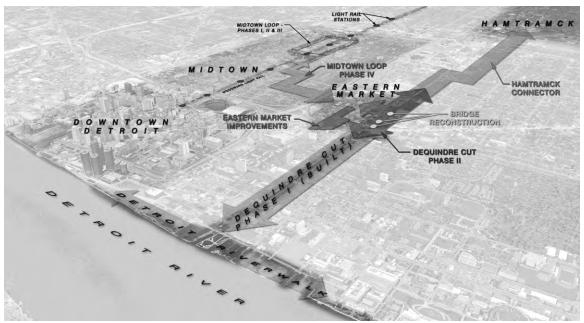


Figure 1: Link Detroit! project location

Guiding Principles

Link Detroit! includes greenway, streetscape, roadway and infrastructure improvements focused on the following guiding principles:

- A. Improve multimodal transportation options to major employment centers, universities and hospitals while providing increased access for surrounding neighborhood residents to strategic Detroit destinations.
- B. Improve non-motorized connections by linking the Detroit RiverWalk and Dequindre Cut greenway with the Midtown Loop and the Hamtramck Trail, creating a connected network for those who live, work and play in the city.
- C. Strengthen Eastern Market's identity as a district by enhancing the operations and functionality of the existing public market.
- D. Take advantage of the numerous economic development opportunities available throughout the Eastern Market district, Midtown and along the greenway connections while maintaining authenticity in the neighborhoods and using Link Detroit!'s image to attract people to live in, work in and visit Detroit.
- E. Incorporate sustainable strategies through the use of street tree plantings, landscaping, stormwater management and LED lighting.
- F. Promote mixed-use neighborhoods that improve the business climate and enliven streets and public spaces by carefully blending a variety of uses that support the identity of Eastern Market, Midtown and those districts located along the greenway connections.

Planning Approach

The City was the lead agency in executing Link Detroit! and the recipient of the TIGER Grant. The City provided their expertise developing transportation projects that included collaborating with the Federal Highway Administration, the Michigan Department of Transportation and three

non-profit organizations – the Eastern Market Corporation (EMC), Midtown Detroit, Inc. (MDI) and the Community Foundation for Southeast Michigan (CFSEM). Link Detroit! builds on a history of completed planning and project development tasks for each of the proposed improvements. These investments ensured that the projects were feasible, were planned to support each other, and had a solid foundation for implementation.

Eastern Market District Core Improvements

Detroit's Eastern Market is the largest historic public market district in the United States. Founded in 1891, it hosts both retail and wholesale markets. On any given Saturday, as many as 40,000 customers shop elbow-to-elbow for fruits, vegetables, breads, specialty foods, jams, honey, apple cider, cheeses, spices, herbs, plants and flowers—all from the marvelous bounty of farms from Michigan, Ohio and Ontario, Canada. The EMC is implementing a phased capital improvements program focusing on their building assets, food distribution network and training programs. This effort involved the preparation of the *Eastern Market 360° Capital Improvement Program for Eastern Market* (Eastern Market Corporation, 2011a) for the core area and a market-oriented development plan *Defining the Market Oriented Development District for Eastern Market Corporation* (SmithGroupJJR, 2011) for the entire 43-acre district. Link Detroit! provides streetscape enhancements, including sidewalk paving, improved bicycle and transit facilities, site amenities, stormwater management, landscaping and pedestrian lights. This will improve the circulation, access, safety and experience for patrons and vendors at Eastern Market, resulting in higher visitation, expanded job opportunities and reinvestment in the district.

Midtown Loop Phase IV Greenway

MDI is focusing on programs and initiatives helping to encourage and develop a positive environment within Detroit's Midtown district. One of these initiatives is to improve non-motorized connections and the pedestrian environment throughout the district. They have invested in the planning of the four-phase *Midtown Loop Greenway Master Plan* (SmithGroupJJR, 2009) to meet the goal of connecting Midtown with Eastern Market. Phase I is complete, Phase II is under construction, and Phase III is in design, representing an investment of approximately \$5.2 million. The Phase IV connection provides a critical 1.2-mile linkage from the Midtown area to key Detroit destinations and neighborhoods including Eastern Market, the Dequindre Cut, the Detroit RiverWalk and the downtown core. The project will provide a walkable, bikeable trail for residents and visitors within Midtown and connect the Midtown educational, cultural and medical institutions to the larger system of greenways. The Midtown Loop greenway will also help the community reclaim much needed green space and positively contribute to the community's quality of life.

Dequindre Cut Phase II Greenway/Hamtramck Connector

Approximately 8 years ago, the City took advantage of an opportunity to acquire 1.2 miles of an abandoned rail corridor depressed 25 feet below grade and developed the *Dequindre Cut Greenway Master Plan* (SmithGroupJJR, 2007; updated 2009). Phase I formally opened in 2009 to great acclaim and has been considered a model for revitalization of abandoned urban rail corridors. The severely deteriorated conditions, access requirements and safety features resulted in a project costing approximately \$4 million. Link Detroit! allows the extension of Phase I along the abandoned rail corridor, making a critical connection between Eastern Market, Midtown Loop and the Detroit RiverWalk.

It will also extend the trail north two miles through on- and off-street bike lanes connecting with the city of Hamtramck, one of the most demographically diverse populations in Southeast Michigan, and their greenway system.

Adelaide, Wilkins and Division Street Bridge Reconstruction

The City is responsible for maintaining a complex network of surface streets and bridges. As is common throughout the United States, the City is facing a budget crisis resulting in deteriorating infrastructure and unfunded projects. Detroit recently received a local bridge program award for the reconstruction of the Wilkins Street bridge. Link Detroit! allows the City to replace the deteriorating Adelaide Street and Division Street bridges over the Grand Trunk Railroad east of the Eastern Market core. This will maintain and enhance critical road linkages over the railroad, allowing adjacent neighborhoods to better access Eastern Market and facilitating more efficient truck traffic to vendors and local businesses. It will also provide improved non-motorized connections for residents and business owners.

Anticipated Results

It is important to note that the various elements of Link Detroit! have not been implemented. The project is currently in the engineering phase. Construction is scheduled to start in August 2013, with completion estimated in November 2014. Nevertheless, a discussion of the project's anticipated results provides valuable insight into the relationships and benefits it is expected to create in the urban network.

The City has experienced a series of financial setbacks over the past decade that reached its peak with the bank crisis and resulting impact to the industrial sector. This resulted in a serious rise in unemployment and related defaults on home and business loans. The City faced several challenges prior to this crisis, including a shrinking population still spread across a large geography, a market where the supply of housing exceeded the demand, a declining tax base, older housing stock and an old infrastructure system.

In the face of these challenges, Mayor Bing initiated the Detroit Works Project to redefine the physical, social and economic landscape of the city. Short-term strategies have been developed to align city services, resources and investments in neighborhoods based on existing market conditions. Link Detroit! was designed to support these short-term strategies.

Detroit has active and organized greenway planning throughout many of its neighborhoods, as well as an adopted non-motorized plan. However, of the over 400 miles of non-motorized facilities proposed in the City's plan, only 73 miles have been implemented. Many of the existing non-motorized facilities are disjointed and do not provide an interconnected network for bicyclists and pedestrians who live, work and recreate in the city. Link Detroit! represents a nexus of three central greenway projects designed around Eastern Market as a core of food security and economic revitalization.

Economic Competitiveness

This project will greatly improve the economic competitiveness of the city by providing transportation options, enhancing existing infrastructure, and facilitating investment and

redevelopment. Adaptive reuse and redevelopment are identified by the City and EMC as key ingredients in revitalizing Detroit's urban core.

Link Detroit! will connect three greenways in the existing greenway network, linking adjacent neighborhoods with important destinations such as Eastern Market (jobs and fresh food), the Detroit RiverWalk (recreation and access to downtown and the Detroit River), and Midtown (higher education, health care and jobs). This connected system will provide improved access to the existing Detroit Department of Transportation bus transit system as well as the proposed Woodward Light Rail system. This will greatly improve the multimodal capacity in the city by expanding the number of safe options for residents and covering a larger geographic area.

In addition to improved access, an active and connected greenway system can provide a dramatic boost to the economy. It is anticipated that the proposed improvements will stimulate economic reinvestment in the Eastern Market District. The EMC is poised to capture this benefit as documented in its *Eastern Market District Economic Development Strategy* (Chan Krieger Sieniewicz, 2008) and *Eastern Market 360° Capital Improvement Program for Eastern Market* (Eastern Market Corporation, 2011a). The latter study estimates that a revitalized Eastern Market district could result in:

- 58 new market vendors.
- 3-5 additional retail market days.
- 1,890 new or retained jobs.
- 15,000 additional weekly visitors.
- 20 new retail businesses.
- 20 new market-related businesses.
- 600 new housing units.

The market-oriented development plan for Eastern Market (SmithGroupJJR, 2011) estimates that there is currently 812,000 gross square feet of building reuse capacity and over 1.9 million gross square feet of proposed redevelopment capacity in the district, including both residential and non-residential uses. This excess capacity along with the projected growth could result in an increase of \$9.9 million in annual property tax revenue and an increase of \$5.8 million in income tax revenue.

Livability

Improving non-motorized transportation options, the pedestrian street environment and the surface transportation system will significantly improve livability and reinvestment in the city by providing more mobility options to residents and creating a more vital, energized urban environment. Nearly two in ten Detroit households, and nearly half within half a mile of Eastern Market are estimated to have no personal vehicle (Poole, 2011). This presents serious issues in getting to jobs, education and health care, which are problems that can be alleviated by an expanded non-motorized network connecting multiple transit options. For those with a vehicle, expanded non-motorized options can reduce costs of travel and allow a redistribution of household income from auto-related expenses to other purposes. This has been estimated to be between \$3,000 and \$6,000 per year for grocery store trips alone (Poole, 2011).

Link Detroit! has been developed considering the six livability principles identified by the U.S. Department of Transportation in conjunction with Department of Housing and Urban Development and the Environmental Protection Agency in their joint interagency Partnership for Sustainable Communities. These principles focus on helping communities improve access to affordable housing, expanding transportation options and lowering transportation costs while protecting the environment.

Sustainability

Link Detroit! will improve the environment by reducing vehicle miles travelled and consequently the use of fossil fuels and greenhouse gas emissions. Analysis of potential trip reductions in the Eastern Market district alone could lower CO₂ emissions from an estimated 90,000 metric tons per year to as low as an estimated 12,282 metric tons per year (Poole, 2011). It will also promote redevelopment of underutilized or vacant urban land, reducing pressure to build in surrounding areas. This project will connect various modes of transportation including bus and light rail transit, non-motorized transportation and passenger vehicles.

A majority of the work planned for Link Detroit! is located within city right-of-ways; the portion that is not (Dequindre Cut Phase II) is owned by the City. The City has a policy that all new lighting and all replacement lighting will utilize LED technology, resulting in reduced energy demand from the lighting grid.

Link Detroit! will include an increase in green, landscaped areas. This will provide opportunities for implementing Low Impact Development stormwater management strategies, which promote infiltration while improving air quality and the carbon sequestration capacity of the urban environment.

Link Detroit! will also spur mixed-use residential development in and around the Eastern Market district. Most importantly, it will improve social equity by providing residents of Detroit's greater downtown with better access to sustainably grown and transported food.

Job Creation and Near-Term Economic Activity

The public infrastructure proposed as part of Link Detroit! provides critical connections in the surface and non-motorized transportation network. This, in turn, will help to attract new residents and businesses to the city, stimulating job growth and redevelopment. Link Detroit! is projected to generate 289 additional jobs, largely in the construction and engineering fields, as well as a total of nearly \$40 million in economic output throughout Wayne County (Poole, 2011).

Innovation

Link Detroit! will serve to stimulate and expand the healthy metropolitan food hub that is currently under development at Eastern Market. Eastern Market is committed to helping rebuild the region's local food system. This large public market, with both wholesale and retail operations at its core and a cluster of smaller food processors and distributors in immediate proximity, provides an opportunity to jump-start a robust local food system. This will not only provide fresher, more nutritious food options, but will also reduce the environmental impact of food production. At the national level, Eastern Market is working closely with the United States Department of Agriculture to develop the local food hub concept needed to strengthen the performance of regional food economies. Energized by improvements to the multimodal transportation system, Eastern Market is positioned to become the most comprehensive food hub in the United States (Eastern Market Corporation, 2011b).

The close proximity of food production, processing, distribution, preparation, retailing and education will not only serve regional residents but will become a national laboratory to encourage other cities to weave local food districts back into the urban fabric, as they were before food systems became more global in scale. The goal is not only to provide fresher, more nutritious food, but also to reduce the energy consumption of food production, processing and distribution.

Further, local food system development can foster employment opportunities to reduce the structural unemployment of central cities. The Initiative for a Competitive Inner City (ICIC), a national think tank, spent the summer of 2011 investigating Detroit and Boston to understand the potential contribution of local food system development to overall area economic development. While the results have not yet been released, an earlier study by EMC (2011a) estimated that the economic impact of Detroit obtaining 20 percent of food from local sources could result in 4,700 new jobs and earnings over \$124 million. Link Detroit! will be an active element in this local system.

Discussion and Conclusion

Link Detroit! focuses on critical infrastructure investments in an economically distressed city. A series of multimodal infrastructure improvements are being implemented to create a fully

functional transportation system through the Midtown area to Eastern Market, continuing on to the Detroit RiverWalk, then extending into the heart of downtown and north to Hamtramck. The improvements will link several of Detroit's key assets—the Detroit RiverWalk, downtown Detroit, Eastern Market, Midtown and surrounding neighborhoods—increasing access for residents and visitors. These improvements will also generate opportunities for economic reinvestment, support the local and regional community, and provide convenient and cost-effective transportation options to residents who live and work in the city. These projects will infill, extend and complete the substantial investments already made in bridge reconstruction and the development of greenways, streetscapes, bicycle paths and associated infrastructure enhancements. The unified approach facilitates the completion of proposed phases of ongoing projects that currently have limited probability of being implemented in the near future due to funding shortages. In addition, it will leverage other key local infrastructure projects, such as the proposed Woodward Light Rail and regional bus rapid transit, by improving the functionality of Detroit's multimodal system, enabling visitors and residents to better access the city's commercial, recreational, educational and cultural offerings.

As part of the City's commitment to this effort, the City has developed a set of performance measures that will be used to evaluate the success of the project. These measures include documenting and reporting bicycle and pedestrian usage and annual rates of visitor traffic on the various greenway segments, as well as job growth and parcel occupancy in the Eastern Market district over a 5-year period.

Link Detroit! will enhance Eastern Market, one of the oldest and most successful public markets in the country. In addition, it will connect the market district to an existing non-motorized network and the Detroit RiverWalk while providing access to employment opportunities, educational facilities and enhanced recreational experiences. Improved economic vitality and non-motorized connectivity in Detroit are key contributors to the city's long-term sustainability and viability. Link Detroit! provides another great step towards a more sustainable and livable Detroit—a renaissance that will be walked, biked and bussed as much as it is driven.

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