


GOING GREEN FOR GROWTH

Economic Development Strategies for

Joy-Southfield Community Development Corporation

MASTER OF URBAN PLANNING
CAPSTONE 2013

WAYNE STATE UNIVERSITY

GOING GREEN FOR GROWTH

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Wayne State University
Department of Urban Studies and Planning

Faculty/Administration Building 3198
W. Kirby 656
Detroit, MI 48202
577-2701 (313)
dusp@wayne.edu

Authors

Carsten Applegate
Dennis Arca
Justin Dloski
Katie Johnson
Daniel Klinkert
David Mangum
Robert Mehregan
Brittany Moore
Sarah Moyer
Sareen Papakhian
Joshua Pike
Martha Potere
Zachary Rable
Nathan Ross
Paul Strom
Joseph Tangari
Matthew Wisotsky
Karen Zarowny

Advisors

Avis C. Vidal, PhD, Professor, DUSP
Rayman Mohamed, PhD, Associate Professor, DUSP
Robin Boyle, PhD, Chair and Professor, DUSP

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EXECUTIVE SUMMARY

Going Green for Growth: Economic Development Strategies for **Joy-Southfield Community Development Corporation**

The Joy-Southfield community aspires to be a healthy community, and the greenest neighborhood in Detroit. This report provides strategies intended to help Joy-Southfield Community Development Corporation achieve its economic development goals for it service area on the west side of Detroit. The specific goals of the CDC that shaped the content of this report are:

- Develop a downtown on Joy Road
  - Diverse retailing that meets residents' needs
  - Reduce vacancy and increase density
  - Promote walkability, safety & health
    - Complete streets approach to improved physical environment
- Attract green industry to industrial area, provide employment opportunities

Catalysts for Economic Development

Under normal circumstances, pursuing economic development goals such as these would be unrealistic for a Detroit neighborhood. However, a confluence of recent developments provide Joy-Southfield with chance to seize the moment:

Gardenview Estates Development

- Largest new housing development in Detroit and an emerging anchor on Joy Road
- Influx of new mixed-income residents counters population loss and adds purchasing power; unique to this neighborhood

Planned Resurfacing of Joy Road is a Highly Visible Public Investment

- In 2014, Joy Road will be resurfaced between the Southfield Freeway and Rouge Park, and a new stormwater management system will be installed
- The project offers an opportunity to incorporate improvements that support JSCDC goals

Detroit Future City

- Highlights 'green' as a key theme in Detroit's future
- Encourages dense, mixed-use development in commercial centers
- Provides supportive city-wide context for the community's goals

Key Recommendations and Promising Approaches

Short-Term Economic Development: Downtown Development

- Organizational Framework
  - Foster the development of a business association on Joy Road that creates a flexible vehicle through which the business community can identify shared interests and develop a united voice with which to support revitalization
- Planning Framework
  - Joy-Southfield CDC and business association should consider two possible zoning changes that could support downtown development: rezoning to allow fewer new uses that undermine a downtown feel, and an overlay district that establishes design standards for new private development
- Physical Changes to Joy Road
  - An implementation strategy for Complete Streets on Joy Road that responds to emerging development opportunities and limited road reconstruction funding by establishing focal points for improvements and development, supported by designs
- Marketing Strategy
  - Leverage the assets of the Joy-Southfield neighborhood, including new purchasing power, unmet demand, and investments in improvements to attract business development and retail establishments to Joy Road

Long-Term Economic Development: Green Industry Development

- Identify Industries
  - Broad community commitment to being a green neighborhood gives Joy-Southfield an advantage in competing to attract green industries
  - Four industry sectors appear most likely to find Joy-Southfield's industrial district a good match for their needs, and to provide jobs that match the community's needs, in the near term: recycling & waste management, retrofitting & weatherization, deconstruction, and tire retreading
- Industry-specific near-term opportunities
  - Build partnerships with existing local green economy training programs
  - Establish connections to industry trade groups to gain industry knowledge and identify growing firms
- Broader near-term opportunities
  - Build capacity to connect prospective green businesses to information resources
  - Build partnerships with trade groups
  - Add information about most recent uses of vacant industrial buildings to new parcel database to better match prospective firms with existing buildings

CHAPTER 1.0
INTRODUCTION

Detroit's Joy-Southfield[1] community aspires to an economically vibrant future for all of its residents. This report, commissioned by Joy-Southfield Community Development Corporation (JSCDC), seeks to provide implementation strategies to help the community achieve its established economic development goals.

In support of that goal, the report offers two broad strategies. The first strives for short-term economic development via the redevelopment of the Joy Road commercial district into a downtown that well serves the needs of the neighborhood and surrounding areas. The second promotes long-term economic development via the attraction of new, job-creating industries that fit the community's vision of itself as a hub for the 21st century green economy. The elements of these complementary strategies can be seen in Fig. 1.1.

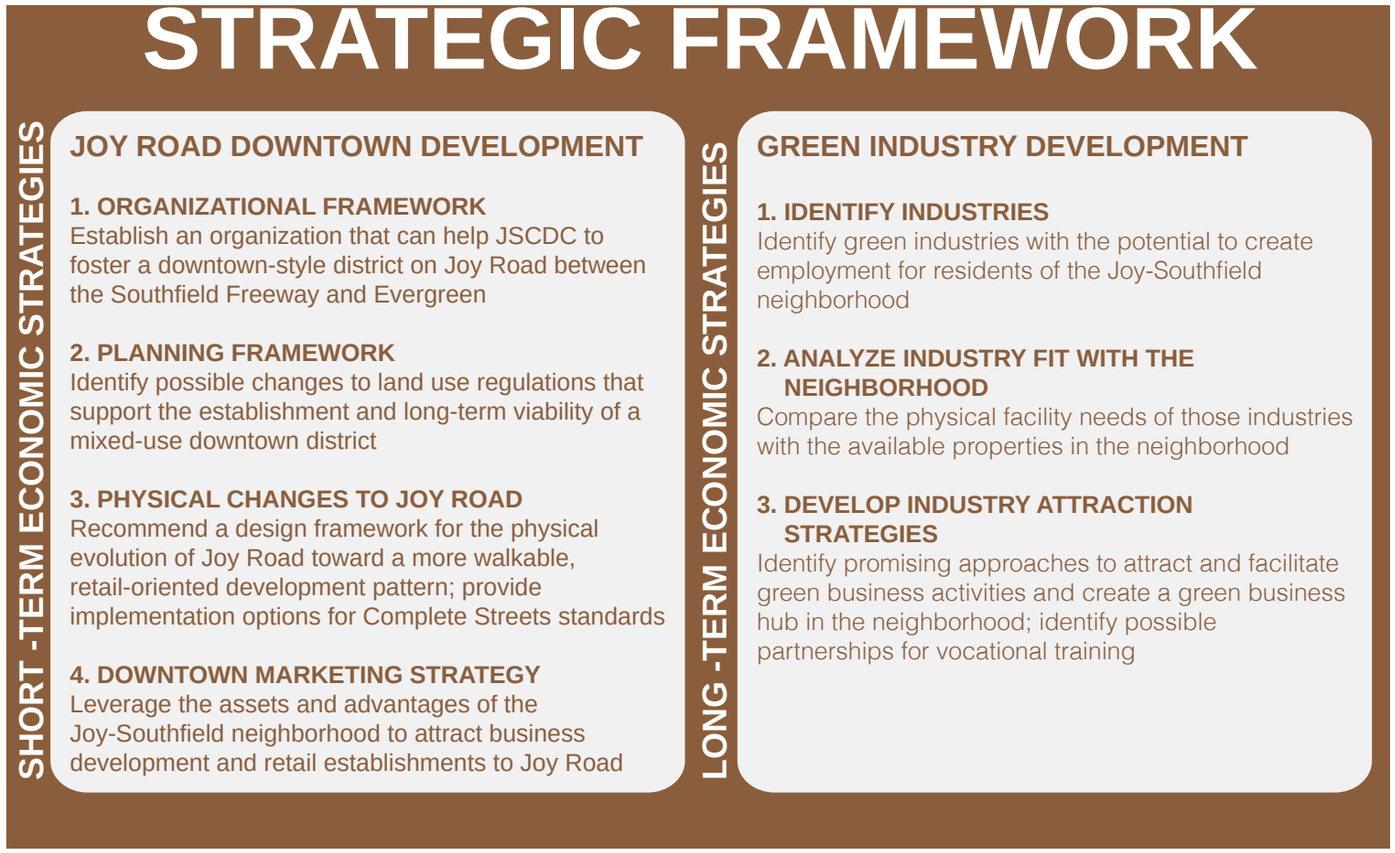

Figure 1.1: Short-Term and Long-Term Frameworks for Economic Development

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[1] This report refers to the community as Joy-Southfield, which is commonly called Cody-Rouge. The use of Joy-Southfield reflects the fact that the project's study area (defined in this chapter) is the service area of JSCDC, the project client. In addition, part of this project focuses on revitalizing Joy Road, an effort that began under the "Downtowns of Promise" program; it brought state funding from the Michigan State Housing Development Authority (MSHDA) to the community, and helped to leverage the funding now committed to rebuilding Joy Road. "Downtowns of Promise" called the neighborhood Joy-Southfield, and this project carries that name forward because it helps to extend that work.

This report was prepared for JSCDC by 18 graduate students enrolled in the capstone class of Wayne State University's (WSU) Master of Urban Planning program, a program administered by the Department of Urban Studies and Planning (DUSP). It seeks to build on previous planning efforts for the area and provide strategies that will help the neighborhood achieve its vision of a green future.

Joy-Southfield CDC and the Neighborhood

Joy-Southfield Community Development Corporation was founded by the Second Grace United Methodist Church in 2001 (JSCDC, 2013). Its primary mission is to improve the health of the Joy-Southfield neighborhood, and the CDC developed and now operates a health clinic and education center in the heart of the neighborhood (JSCDC, 2013). JSCDC considers economic well-being to be an aspect of community health. With its clinic in operation and serving residents, the CDC has broadened its economic development initiatives.

JSCDC serves a roughly five-square-mile are on the west side of Detroit, defined on the north by Plymouth Road, the east by Greenfield Road, the south by Warren Avenue, and the west by Rouge Park, Detroit's largest public park. Parts of the district fall within the traditionally recognized Warrendale, Grandale and Franklin Park neighborhoods[2].

From 2000 to 2010, the City of Detroit lost nearly a quarter of its population (US Census, 2000, 2010). Joy-Southfield experienced a slightly less severe loss, and large portions of the neighborhood remain stable relative to the city as a whole (US Census, 2000, 2010). However, certain parts of the neighborhood have experienced greater losses than others, and the overall housing vacancy rate is 24%, similar to Detroit's overall rate (US Census, 2010). The neighborhood has a higher rate of home ownership than Detroit as a whole, though that rate declined during the foreclosure crisis, as it did across the region, as shown in Fig. 1.3

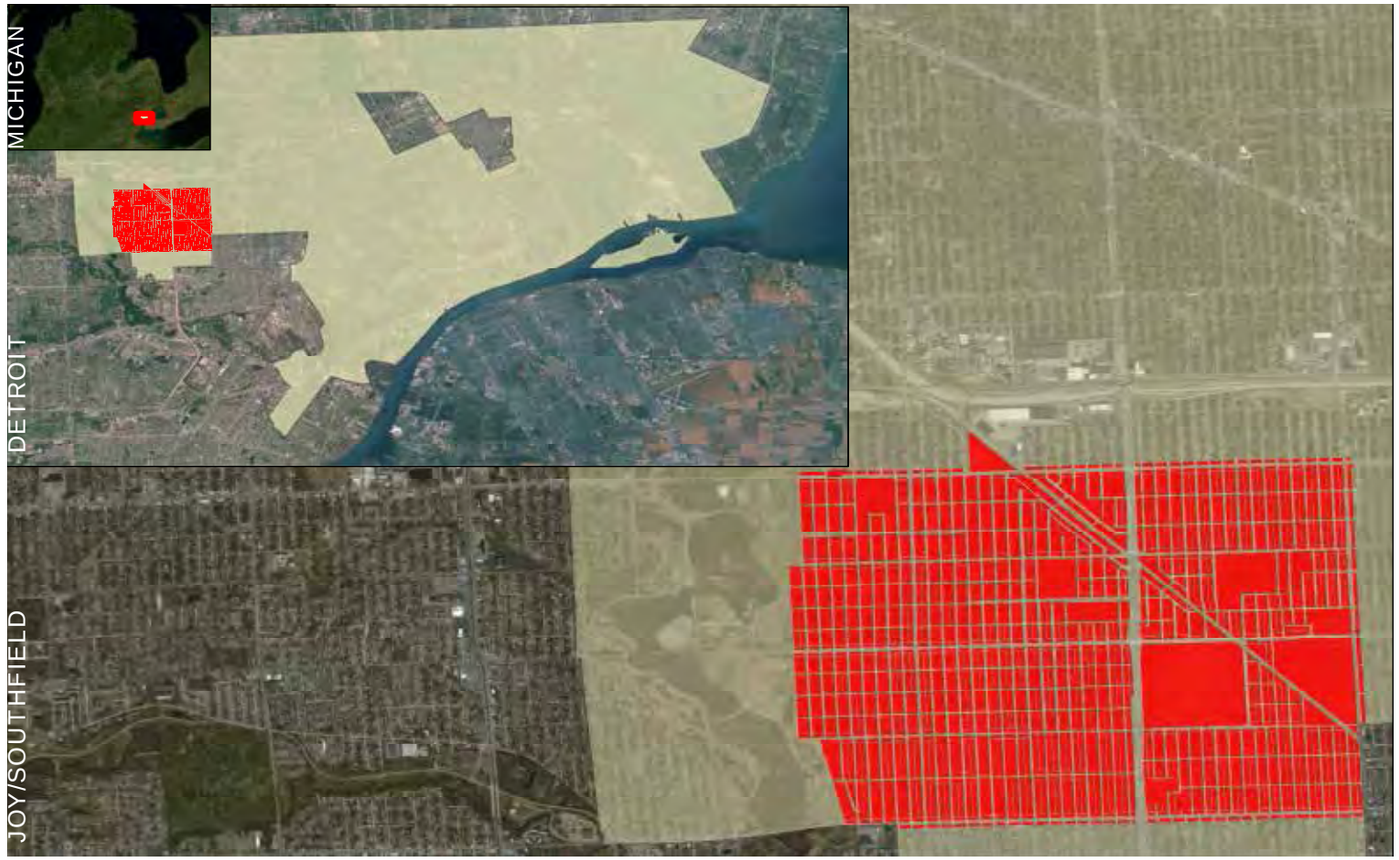

Figure 1.2: Joy/Southfield CDC Service Area

Most of the neighborhood's housing stock was built in the 1940s and 1950s, with a large concentration of homes built in the late 1930s in the neighborhood's northeast corner. Housing units are primarily single-family homes on narrow lots (US Census, 2010). Low-rise multifamily housing is concentrated on West Chicago, with a handful of other multifamily structures located elsewhere.

Commercial activity is mostly located on the mile roads (Plymouth, Joy and Warren) and Greenfield Road. There are clusters of industrial properties located along the railroad line that cuts diagonally across the neighborhood's northeastern portion, as well as along Greenfield Road south of Joy Road.

Neighborhood landmarks include St. Martha's Episcopal Church, where Henry Ford is buried, as well as the site of the former Herman Gardens housing project, which is currently being redeveloped into a mixed-income HOPE VI[3] project

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[2] The JSCDC service area consists of ten complete census tracts and parts of two others. For the purposes of this report, the two partial census tracts, 5468 and 5469, will be included in the analysis in their entirety, which moves the northern boundary of the analysis area to the Jeffries Freeway between Southfield and Evergreen. See Appendix 4.1 for a map of census tracts.

[3] HOPE VI is a program of the U.S. Department of Housing & Urban Development that seeks to replace old public housing projects with new housing that supports a greater sense of community and resident empowerment. It aims to reduce concentrations of poverty by allowing for mixed incomes and locating public housing in non-poverty neighborhoods (HUD, 2012).

known as Gardenview Estates (MSU Practicum Team, 2012). The neighborhood is also defined by its proximity to Rouge Park, the largest park in Detroit, which offers a wide range of recreational opportunities.

JSCDC considers the residents to be among the neighborhood's greatest strengths; the CDC works with a number of churches and small neighborhood groups in its neighborhood enrichment efforts. Like most of Detroit, the neighborhood has low racial diversity; its population is 87% black, and nearly all of the remainder is non-Hispanic whites (US Census, 2010).

Joy-Southfield
Demographic, Social & Housing Characteristics

Population

	2000	2010	% Change
Joy-Southfield	44,091	33,841	-23.25%
Detroit	951,270	713,777	-24.90%

Median Household Income

Detroit	Joy-Southfield
$27,050	$28,070

No Vehicle Access (Households)		Unemployment (2010)	
Joy-Southfield	17.0%	Joy-Southfield	41.8%
Detroit	22.4%	Detroit	57.3%

Educational Attainment (Population Over 25)

	High School/GED or higher	Bachelor's or higher	Graduate Degree
Joy-Southfield	78.9%	9.29%	3.27%
Detroit	77.2%	11.80%	4.80%

Housing Vacancy Rate

	2000	2010
Joy-Southfield	6.5%	24.3%
Detroit	10.3%	22.8%

Home Ownership Rate

	2000	2010
Joy-Southfield	60.0%	53.4%
Detroit	55.0%	51.0%

Sources:
United States Bureau of the Census, Decennial Census 2000, DP01, DP04, B19013
United States Bureau of the Census, Decennial Census 2010, DP01
United States Bureau of the Census, American Community Survey 2010, 3-Year Estimates, DP04, B19013

Figure 1.3: Neighborhood Characteristics

The area's residents have a higher median household income than Detroiters in general (see Fig. 1.3). Educational attainment is modest, with 78 % having completed high school or an equivalent, and fewer than ten percent holding a degree (US Census, 2010). However, nearly a third of adults over 25 have at some point attended college. Unemployment has reached a critical point, rising to 41.8% during the recent recession and slow recovery (US Census, 2010).. 17% of households in the area have no automobile; this lack of mobility can hinder the search for employment (US Census, 2010).

Why Downtown Development and Green Industry?

In order to achieve the overall goal of stabilizing the neighborhood and ultimately restoring the area's economic vitality, JSCDC and its partners will need to pursue multiple strategies simultaneously. Downtown development along Joy Road and attracting green industry serve this purpose in different ways, one by improving access to needed goods and services, the other by providing access to local employment.

Joy Road runs directly through the center of Joy-Southfield; no resident of the JSCDC service area lives further than a mile from it. However, the mix of businesses on the road is not well matched to the needs of residents, and the physical environment of Joy Road is oriented toward accommodating cars rather than residents who might walk to the commercial corridor for shopping, services, and access to transportation.

The development of a downtown with a mix of businesses that provide for the needs of residents could improve the quality of life in the neighborhood. Meanwhile, physical improvements to Joy Road that improve safety and access for pedestrians and bicyclists have the potential to accomplish two things: encourage non-motorized transportation and its attendant health benefits, and accommodate the large share of residents with limited or no automobile access.

The Joy-Southfield neighborhood is fortunate to be the location of new development in the form of Gardenview Estates. When completed, this housing development will include 833 new units (MSU Practicum Team, 2012). JSCDC hopes to leverage the influx of new residents expected in the neighborhood in the near future, many of whom have already moved in, into momentum for the development of the walkable downtown district along Joy Road. The hope is that such a downtown will help stabilize the neighborhood's population, provide local shopping for residents, attract people from outside the neighborhood, and promote healthy lifestyles.

The neighborhood's interest in green industry development stems in part from a desire to adapt to the loss of population and industry. The loss of the city's industrial economic base has left the Joy-Southfield area with its own stock of unutilized industrial property, which now has the potential to accommodate new firms. The potential for green infrastructure to make productive use of some vacant land in the absence of development pressure is already being realized through the collaborative efforts of several local agencies and non-profits, which have pursued lot greening projects on nine vacant residential parcels in the area.

During JSCDC's public comment sessions held to inform the planning firm Beckett & Raeder's Commercial Corridor Strategic Plan for Joy Road in 2010, a consensus emerged among neighborhood residents that the JSCDC community should seek to become the greenest neighborhood in the city, and that its economic development goals should be tied to that objective (Beckett & Raeder, 2010)[4]. This goal, coupled with green infrastructure efforts already under way, sets a tone that extends a welcome to firms pursuing environmentally responsible business practices.

The area's aspirations are supported by the Detroit Works Project's *Detroit Future City* framework, which designates much of the CDC's territory as "Green Residential." (DWP, 2013) This classification supports innovative uses for vacant land, and also embraces a mix of residential, commercial, and light industrial activity (DWP, 2013). Given that the area has a mix of commercial, residential, and industrial properties, it is likely that the neighborhood can physically accommodate an influx of new green industry, while also providing some of the workforce for new firms in the area.

[4] This plan can be downloaded at http://www.bria2.com/blog/images/uploads/DOP%20Joy%20Southfield%20FINAL%20COMPILED.pdf

Sources:

American Community Survey (ACS). U.S. Bureau of the Census. (2010). Detroit City, Michigan. -3year estimates. [DP01].

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CHAPTER 2.0
DOWNTOWN DEVELOPMENT

Joy-Southfield residents spend a significant portion of their retail dollars outside the area because local retail options are limited; many leave the city to do the bulk of their shopping (B&R, 2010). One of the goals of this report is to offer strategies that would lead more residents to patronize local retailers and attract a more diverse array of businesses. The Joy Road corridor, one of the busiest in the JSCDC target area, has a significant amount of vacant commercial property which, when coupled with unmet demand among residents, creates potential for business development.

This chapter outlines organizational, regulatory, design, and marketing frameworks that could strengthen the retail corridor along Joy Road and aid the creation of a downtown district that is accessible to all residents and visitors. Coupled with strengthened code enforcement on blight issues and improved security, the strategies proposed in this report could help instill community pride in both public and private property, attract new businesses, and better satisfy the needs of local residents. Under such circumstances the area's ability to attract new business would improve, as would its ability to satisfy the retail needs of local residents.

Figure 2.1: Joy Road and major intersections.

2.1 Joy Road Today

Joy Road runs through the heart of Cody Rouge, linking the Southfield Freeway in the east to Rouge Park in the west. The road continues on through the park and into the suburb of Dearborn Heights.

This report assesses the corridor from the freeway to Trinity Road, which runs along the edge of Rouge Park. Within this assessment area, the one-mile stretch between the freeway and Evergreen Road is designated as a Downtown of Promise by the Michigan State Housing Authority.

Current development in the proposed future downtown area varies considerably in character and condition. There is no signature architectural style, and vacant buildings are mixed with operational businesses throughout the corridor. Some lots are well-manicured and thoughtfully landscaped, while others are not. Visually, Joy Road is in search of a unifying theme.

Another challenge from the standpoint of downtown development is the lack of diversity among businesses, with large concentrations of businesses that do not cater to the everyday needs of residents. Among existing businesses,

diversity is limited. 17 of business activities in the corridor are automotive related, such as repair shops, car washes and gas stations, while a further 11% are salons or barbershops. A typical downtown environment features a diversity of retail offerings and services, including businesses such as full-service restaurants and specialty shops that draw clientele from outside the area. Grocery stores and pharmacies serve day-to-day needs of residents, and both are under-represented on Joy Road today. The development of a downtown district with clean, safe, walkable streets along which patrons can purchase needed items would change the quality of life in the surrounding neighborhoods for the better.

In spite of the challenges, Joy Road possesses assets that define the corridor and have significant bearing on its ability to become a retail destination. Well-maintained buildings, areas with high pedestrian traffic, the basic foundation of infrastructure that accommodates people on foot, and clear signs of investment, such as landscaping and façade improvements, all offer building blocks for future advancement. A parcel analysis of existing structures along Joy Road, conducted for this report, concluded that over half of commercial buildings were in good or fair condition, and more than half offered on site parking, a convenience for shoppers traveling by car (see Appendix 4.1 for more information).

Figure 2.2: Detroit Fire Department Station on Joy Road.

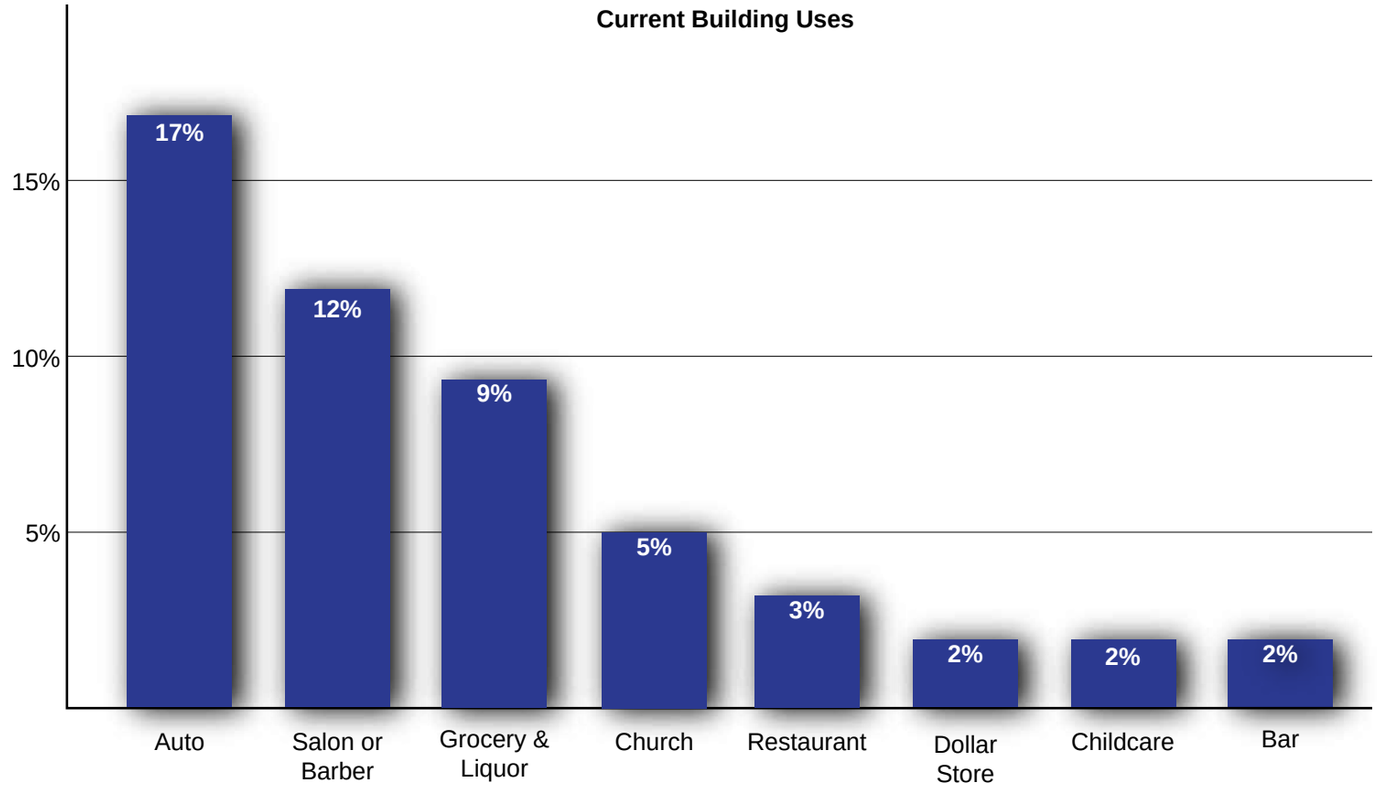


Figure 2.3: Current building usages on Joy Road. Numbers do not add up to 100% because rare uses have been omitted.

Joy Road is also home to historical and cultural anchors that shape the overall character of the neighborhood. The Edison Branch of the Detroit Public Library and Station #27 of the Detroit Fire Department are classic buildings that house valuable services for the neighborhood. The library attracts significant foot traffic, indicating that the community values the Edison Branch and regularly takes advantage of the services offered there. Word of Light Christian Center and the Joy-Southfield Health & Education Center, including the Juanita Reaves Free Clinic, offer community-building services. The Sowing Seeds, Growing Futures Farmers Market operates on Tuesdays throughout the summer in the parking lot of the free clinic on the corner of Joy Road and Artesian, drawing foot traffic and activity to the location.

The majority of Joy Road's existing anchors are clustered at intersections along the eastern two thirds of the corridor, between Evergreen and the Southfield Freeway. Even on this stretch, however, vacancy rates are high. The parcel analysis revealed that out of the 260 parcels surveyed along Joy Road, nearly half (43%) are not in use. Moreover, of the 113 parcels not in use, 36% are completely vacant, with no building at all. While this rate of vacancy compromises the ability of the corridor to function as a cohesive business district, it also provides opportunity. Land is available inexpensively for development, and many of the currently empty structures could be rehabilitated for new uses.

2.2 Organizational Framework

An organizational framework is a structure that allows a group to form and operate effectively to achieve a desired outcome. Many communities have adopted organizational frameworks in order to improve the vibrancy of their commercial districts. A community's ability to adopt a particular framework is often determined by the current economic strength of the community, as well as the capacity of the framework leadership. Common frameworks used in Michigan include: downtown development authorities, main street programs, Business Improvement Districts (BIDs) and Business Improvements Zones (BIZs), and business associations. While certain frameworks have been successfully implemented in the city and region, some of them would not be appropriate for Joy Road. The adoption of a business association framework would be the best option for JSCDC.

Possible Organizational Approaches

Downtown Development Authorities (DDAs) are developmental agencies established to oversee downtown improvements. They are typically in a city's central business district. Given that Detroit's central business district is already covered by a DDA and that Joy Road is not located in the central business district, this is not a feasible strategy for that area.

National and local Main Street programs specifically target regionally, culturally, historically, or architecturally significant areas with an established commercial environment. Areas eligible for these designations generally already have sizeable concentrations of activity, anchor institutions, multistory and mixed-use structures, and historical character (City of Detroit, 2006). Detroit currently has nine designated traditional main streets, and Joy Road is currently not eligible for this designation. However, many of the principles and guidelines followed by traditional main streets may be a good source of information for JSCDC and the organization created for Joy Road.

Business Improvement Districts (BIDs) and Business Improvement Zones (BIZs) are empowered districts where additional funding is made available to make improvements that will enhance the area. Funding eligible to BIDs and BIZs can come from taxes, grants, and abatements received by the city. Special assessments and bonds may be issued for the economic improvement of the district. A BID is established by the city. Alternatively, BIZs are areas that can petition for similar economic improvements, but the effort to establish a BIZ must be led by property owners within the specified zone. Upon receiving either designation, the area will hold the district or zone title for 7 years, during which it can begin to acquire, operate, maintain, and develop vacant and public property (MEDC, 2013).

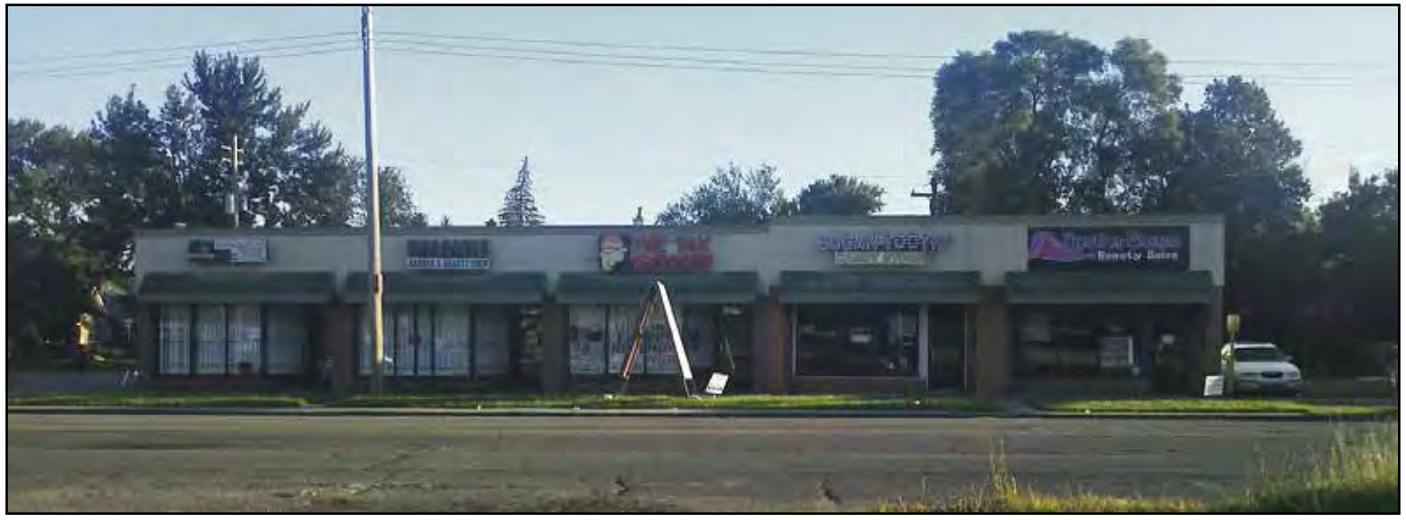


Figure 2.4: Buisness development on Joy Road near Piedmont.

If Joy Road were to obtain a BID or BIZ for Joy Road, it would afford the community more power and resources for its revitalization efforts. However, in order to even petition for such designation, the lead organization must collect the support of at least 30% of the property owners in the specified area, as well as be approved by the City Council. A strong community consensus for receiving this designation must be established, and visible progress must be demonstrated to prove the potential vigor of the area. Therefore, a foundational framework must be created before this becomes a viable option for Joy Road.

A business association could help position the business community to seek such a designation. There are several business associations within Detroit, most started by business owners or community organization groups. Descriptions of these associations are provided in Appendix 2.1. Some operate as independent organizations, while others function as part of a larger community organization. Some have been established for over 50 years while others have just gotten off the ground quite recently. All of these organizations offer façade improvement programs, blight prevention, and design guidelines, and conduct volunteer-led street clean ups within their areas. Some have been able to expand their services to include business, design, and financial consultation and workshops. Some receive funding from the city, state, and local foundations, as well as local sponsorship. The Southwest Detroit Business Association was able to successfully petition for and receive a designation as the first BID in Michigan in 2007.

The Best Option for Joy-Southfield: A Business Association

The option that best suits the needs and current conditions of Joy Road is a business association. Such an organization is flexible enough to be tailored to suit community needs and is within the ability of JSCDC to facilitate. These organizations have been able to successfully operate at a variety of capacities, and help strengthen the business district though inclusionary processes that involve the business owners who will be affected by any commercial and infrastructure improvements brought to the corridor.

Business associations in other communities offer many examples of the strategies that have helped foster healthy business districts that served the needs of their communities, while also benefitting business owners. Generally, these

organizations:

• Encourage, promote, and support the growth and development of existing and new businesses that are well planned, of high quality, and provide a balance of commercial, residential and industrial opportunities that enhances the quality of life for all businesses and residents in the area.

• Create membership directories that promote member businesses and establish connections between those businesses and nearby residents.

• Foster networking and cross-promotion among businesses.

• Create awards to present to businesses that make outstanding contributions to the community, financially, aesthetically, and from an operational standpoint. Awards and friendly competitions keep members actively involved and provide incentives for non-members to join.

• Institute fee structures that build capacity to:
  - Promote member businesses
  - Produce networking events for members
  - Support community and business development projects

While the formation of a business association can be very beneficial, a prior attempt to form such an organization along Joy Road was unproductive. The Beckett and Raeder report suggests that the formation of such a group is necessary to build a vibrant commercial district (B&R, 2010).1 This suggestion included creating a formal association, operating separately from the JSCDC as a 501(c)(3), which would have to raise revenues to cover staffing and operational costs.

An association that follows a less formal approach, however, may be more appropriate to Joy Road, given past difficulties and the area's current organizational capacity. Such an organization can offer small services and information inexpensively while remaining manageable, affordable, and less time consuming. Given past reluctance of businesses to participate, this approach, with support from JSCDC, could offer a way to build capacity slowly, while demonstrating the benefits of participation to other local businesses.

A new attempt at forming a business association has a timely advantage that past attempts did not: impending construction along Joy Road. These changes will cause major traffic and parking disruption. The construction also serve as a highly visible indicator that investment is coming to the area. Business owners are going to need an information and support system in order to be prepared and sustain operations through these changes. The business association can serve as a source of information to the business community about these major changes.

Core Business Association Functions

A business association on Joy Road could serve three core functions, which will be vital in short-term, intermediate, and long-term growth strategies. Maintaining these functions throughout each stage can build a strong foundation for commercial revitalization of the area.

CORE FUNCTIONS

1. Promoting the coordination of development along Joy Road and incorporating JSCDC's vision for the community. This includes setting quality standards for buildings and façades to improve the marketability of the area and promote a downtown atmosphere. Group effort can foster cohesion and ensure that benefits accrue to many stakeholders.

2. Supporting current entrepreneurs in developing their businesses, protecting the interests of the community. This helps businesses who are looking to learn what is available to them within their own community (i.e. façade improvement programs). Unity among businesses in the neighborhood will provide a stronger community voice during road construction and future developments.

3. Sharing resources and knowledge between JSCDC and business association members. Examples of these shared resources could be notices of the upcoming construction, façade improvement funding, and information about grants or tax credits. This may also promote member collaboration and create a greater sense of community, such as sharing tips about contractors, business management, or potential employees.

Individuals who join a business association may have different ideas about what they believe are priorities in the development of Joy Road. While it is important to acknowledge such ideas and encourage member input, it should be clear that the goals established by the association are aimed at helping the area as a whole and should serve as guidelines for decision-making.

2.3 Establishing the Joy-Southfield Business Association

Reaching Out to Business Who Have Already Benefited

In reaching out to potential members, it may be good to start When reaching out to potential members, it may be good to start with businesses who have taken part in the façade improvement program—JSCDC has helped them in the past, and they may understand that the endeavors supported by this group are to their benefit.

Reaching Out to Businesses at Points of Heightened Activity

The development of a downtown on Joy Road cannot occur along the entire one-mile stretch from the freeway to Evergreen at once. The Design Framework chapter of this report outlines a strategy that brings physical improvements to three specific intersections with unique mixes of high activity levels, community assets, existing businesses and redevelopment potential. If these intersections receive the extra investment recommended in this report, the physical improvements are likely to lead to increased activity at these intersections.

These intersection improvements are not guaranteed to happen. Community pressure will be required to achieve implementation. Businesses located near these intersections are likely to benefit from their proximity to the improvements. Therefore, targeting these businesses for participation in the association early in the process is likely to succeed, because the need to organize for mutual benefit will be clear.

Short-Term Strategy

During the initial set-up phase of the business association, the organization should establish clear goals for the area and articulate a mission statement that will serve as a guide to future decision-making. Members must experience tangible benefits in the initial stages, or they may turn away from the association.

Maintain small, achievable goals in the first few years. These may include:

• Keeping clear and consistent communication with members about upcoming and ongoing road construction.

• Maintaining and delivering a business association directory to the community. This will provide free advertising to business participants while informing the area of what is available in their community. The directory can be made available online and distributed at key locations within the area. These locations include Gardenview Estates, the Juanita Reaves Clinic, local churches, Don Bosco Hall, and JSCDC's Health & Education Center. An example of such a directory is included in Appendix 2.3.

• Pursuing funding for the façade improvement program and approaching members who may benefit from it.

• Hosting meetings for members that allow them to share their experience or express their concerns about the association and community as a whole.

• Maintaining a job board, where community residents can see who is hiring in their community.

During the initial stage, the business association should consider offering no-cost or low-cost membership in order to make joining as simple as possible for business owners. The association will, however, have to institute membership fees at some point in order to progress to the intermediate and long-term stages. The planned benefit increases to members will increase work for the association. Taking on an intern, volunteer, or employee to take on a strong leadership role must be considered during the first stage to ensure a stable future for this association.

Intermediate Strategy

The intermediate strategy will occur when the program feels it is ready to grow from the short-term strategy. This stage focuses on continuing the initial goals with the following additions:

• Expanding the façade improvement program

• Implementing of a set of agreed upon Joy-Southfield Business Association guidelines by members, such as to: clearly post

Figure 2.5: Industrial buildings along Weaver.

of operation hours; perform basic exterior maintenance or additions such as repairing peeling paint; place a flower pot or planter outside of their business; visibly display their membership in the association.

• Instituting membership fees.

• Building stronger ties between the community and businesses. This could be done with a publicized "shopping week" along Joy Road, which would encourage members to distribute coupons, have sidewalk sales, decorate windows, and engage in small beautification and outreach projects.

• Continuing outreach and business advertising within the community, as well as outreach to nearby communities.

• Keeping members aware of new businesses and developments in the area.

• Getting owner feedback about what could be done to enhance business safety.

• Working to establish a brand identity for the downtown area.

Long-Term Strategy

Once the Joy-Southfield Business Association has become established and recognized in the community as a leader for progress, both businesses and the community may have a clearer sense of the long-term goals that Joy Road can achieve.

The long-term growth strategy should be focused on how to build on progress made in the earlier stages. This includes maintaining intermediate stage initiatives while branching out to other possible options. The association must make sure there is enough internal support within the business association leadership before such actions can be attempted.

FUNDING SOURCES FOR SMALL BUSINESSES

US Small Business Loan Programs

The Small Business Administration (SBA) provides support to entrepreneurs and small businesses throughout the country and offers the widest range of federal funding loan options for small business development. SBA loan programs lend to small businesses unable to secure financing on reasonable terms through normal lending channels. The loan programs are operated through private-sector lenders (banks, credit unions) that provide loans, which are guaranteed by the SBA.

The ***7(a) Loan Program*** is SBA's primary program for helping start-up and established small businesses, with financing guaranteed for a variety of general business purposes. 7(a) Loans can be used for:

- Refinancing of current debt
- Furniture, fixtures, and equipment
- Working capital
- Soft/Closing costs
- Renovation, construction, or purchase of land and building
- Franchise fees
- Business acquisition

7(a) loans have a maximum loan amount of $5 million. SBA does not set a minimum loan amount. The average 7(a) loan amount in 2012 was $337,730.

The SBA ***504 Loan Program*** provides small and medium sized businesses with long-term fixed rate financing for the acquisition or construction of fixed assets. 504 loans can be used for:

- The purchase of land, including existing buildings
- The purchase of improvements, including grading, street improvements, utilities, parking lots and landscaping
- The construction of new facilities or modernizing, renovating or converting existing facilities

The loan is primarily designed to assist healthy, expanding businesses that have been in operation for more than two years but, in certain instances, it can be used to finance start-up businesses (those in operation less than two years). The SBA offers an up-front commitment to finance a project. The participating private lender provides interim financing, advancing the full amount of project funds during the construction/acquisition period. After the project is completed, the SBA reimburses the participating lender by the amount of the original loan commitment.

The SBA ***Microloan Program*** is designed to assist start-up and expansion of businesses. The Microloan program provides loans up to $50,000 to help small businesses open and expand. The average microloan is about $13,000. Microloans can be used for:

- Working capital
- Inventory or supplies
- Furniture or fixtures
- Machinery or equipment

While the other loan programs utilize private financial institutions, SBA provides funds to specially designated intermediary lenders, which are nonprofit community-based organizations with experience in lending as well as management and technical assistance. These intermediaries administer the Microloan program for eligible borrowers.

The Small Business Detroit Microloan Program provides financial support for new and existing small businesses that are currently located in or wanting to locate in the city of Detroit by supporting:businesses having trouble meeting collateral or credit rating requirements of lenders, or businesses needing assistance with payment terms due to short-term cash flow concerns.

Michigan Economic Development Corporation

To assist small businesses with capital needs, the Michigan Economic Development Corporation (MEDC) has established the ***Capital Access Program*** (CAP). The program uses small amounts of public resources to generate private bank financing, providing small businesses access to bank financing that might not otherwise be available.

While this program is more expensive than traditional bank lending because of higher fees and interest rates, it can be used to finance most types of business and there are no restrictions on loan size or terms.

Participating banks throughout Michigan offer the CAP directly to companies that need credit enhancement. The bank, the company, and the MEDC pay a small premium into a reserve that makes it possible for the company to receive fixed asset and working capital financing. Eligible borrowers must meet four standards:

- Michigan-based
- Satisfy the lender's criteria
- Less than 500 employees
- For Profit

• Implementing a program to enhance business and pedestrian safety and security along Joy Road.

• Gaining support to petition for a City of Detroit BID/BIZ.

• Continuing to bridge the gaps between businesses and the community.

• Continuing to keep businesses informed about upcoming developments.

• Having enough support to petition for possible zoning changes to the area.

• Supporting and welcoming new developments and growth, and making connections with target audiences to bring more businesses and density to the Joy-Southfield area.

Encouraging Business Development

Traditional financing for small businesses can be difficult to obtain in Detroit. Therefore, the CDC and the business association should be aware of economic and business development funding sources that they can help make available to current and new businesses in the area.

2.4 Planning & Zoning Framework

The successful formation of a business association is one ingredient of a potentially successful downtown development strategy. It is, however, not an approach likely to produce a cohesive downtown on its own. Changes to zoning in the prospective downtown area can support business development efforts by allowing types of businesses that help foster a downtown atmosphere to easily locate in the area, while restricting uses that are incompatible with a downtown district. They can also regulate the way buildings in the area are built, influencing the look and feel of the district.

The portion of Joy Road targeted for downtown development is zoned exclusively B-4, which is defined as a General Business District providing for business and commercial uses of a thoroughfare-oriented nature (City of Detroit, 2012).

The Detroit Zoning Ordinance (2012) divides uses into two categories: by-right and conditional. By-right uses may locate in a particular zone without additional approvals beyond required permits, while conditional uses may locate in the zone, but must first pass through an approval process that subjects them to heightened scrutiny. While the by-right uses identified by B-4 zoning are broad, it is in the conditional uses listed where the true potential for a retail corridor along Joy Road is compromised (City of Detroit, 2012). Current conditional uses include research or testing laboratories, small tool, die and gauge manufacturing, and drive-thru restaurants, all of which can disrupt the cohesiveness and pedestrian-accessible retail focus of a traditional downtown district (City of Detroit, 2012).

In a traditional downtown, buildings are typically placed up to the sidewalk, with direct access to businesses from the sidewalk. Parking is located on the street and behind buildings. The B4 zoning classification does not encourage this type of development, and Joy Road currently has a mix of downtown-style buildings and buildings with large parking lots in front (City of Detroit, 2012). Because of this, the street lacks the feel of a true district, and the large number of driveways that interrupts the sidewalk compromise pedestrian safety.

Alternative Zoning Frameworks

This report identifies two useful ways in which the zoning code could be used to help foster the development of a downtown on Joy Road. These zoning changes could be implemented individually or in combination. The first approach is a re-zoning to a classification that accommodates uses that fit in a downtown business mix while restricting some of the more disruptive uses. The second approach is to apply an overlay over the district that shapes the area's aesthetic and physical character.

Alternative: Rezoning Joy Rd from B4 to B2

The B2 classification restricts a number of land uses that are by right or conditional uses under the B4 zoning classification (City of Detroit, 2012). In general, the permitted uses under B2 accommodate business and real estate development that foster pedestrian-friendly corridors.

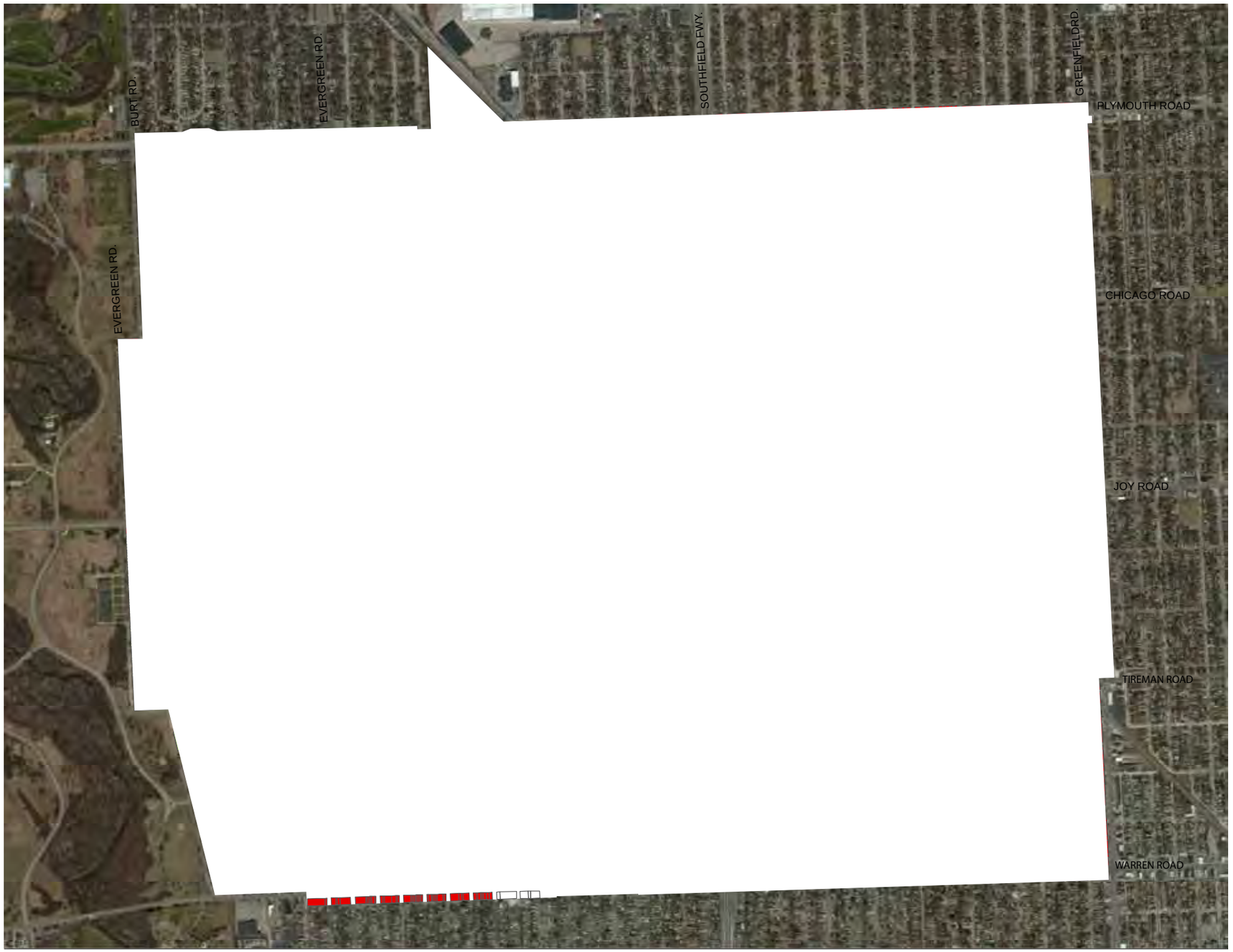
Specifically, some existing land uses in the Joy Road corridor that interrupt the formation of a shopping cluster that are allowed under B4 but would be restricted under B2 zoning are storage buildings, warehousing, drive-through restaurants, car sales lots, and gas stations. Table 2.6 offers a comparison of the two zones.

Use Category	Specific Use	B-2	B-4
FOOD & BEVERAGE SERVICE	Restaurant, carry-out or fast food, with drive-up or drive-through facilities		C/R
	Restaurant, carry-out or fast-food without drive-up or drive-through facilities	C	C/R
	Restaurant, standard, without drive-up or drive-through facilities	C	C/R
	Restaurant, standard, with drive-up or drive-through facilities.		C/R
RETAIL SALES & SERVICE: SALES - ORIENTED	Stores of a generally recognized retail nature whose primary business is the sale of new merchandise.	R	R
	Dry cleaning, laundry, or laundromat	R	R
	Pawn Shop		C
	Barber or beauty shop	R	R
	Retail sales and personal service in business and professional offices	R	R
	Motor Vehicles, new, salesroom or sales lots		R
	Motor Vehicles, used, salesroom or sales lots		C
	Motor vehicle filling station		C
	Motor vehicle services repair, major or minor.		C
	Motor vehicles, new, storage lot accessory to salesroom or sales lots for new motor vehicles		R
	Motor vehicles, used, storage lot accessory to salesroom or sales lots for used motor vehicles		C
WAREHOUSE & FREIGHT MOVEMENT	Wholesaling, warehousing, storage buildings, or public storage houses		C

Table 2.6: Comparison of B2 and B4 Zoning Districts
R = By Right Use, C = Conditional Use

FIGURE 2.7

ZONING MAP



R4 THROUGHFARE RESIDENTIAL

R5 MEDIUM DENSITY RESIDENTIAL

The uses in Table 2.6 that are restricted in the B2 zone are principally uses that require large amounts of land and multiple interruptions in the sidewalk for driveways, accommodating automobiles at the expense of people on foot. This is counterproductive when trying to create density of shopping and retail activities. Moreover, the land uses found in the table that are restricted under B2 zoning, are generally not land uses that facilitate mixed-use development, because they usually make poor neighbors for residential development New mixed-use development is an articulated goal of the JSCDC and the B2 zoning change will not restrict mixed-use development (City of Detroit, 2012).

Alternative: Zoning Overlay

The second approach to fostering downtown-style development on Joy Road is to impose a zoning overlay on the portion of the commercial corridor identified for downtown development. An overlay is a versatile zoning tool that can be used in many ways. Used in conjunction with a re-zoning to B2, an overlay could govern the way in which buildings can be built and their relationship with public spaces. For one possible example, an overlay can set minimum design standards requiring that a certain percentage of a building's front side be covered with windows.

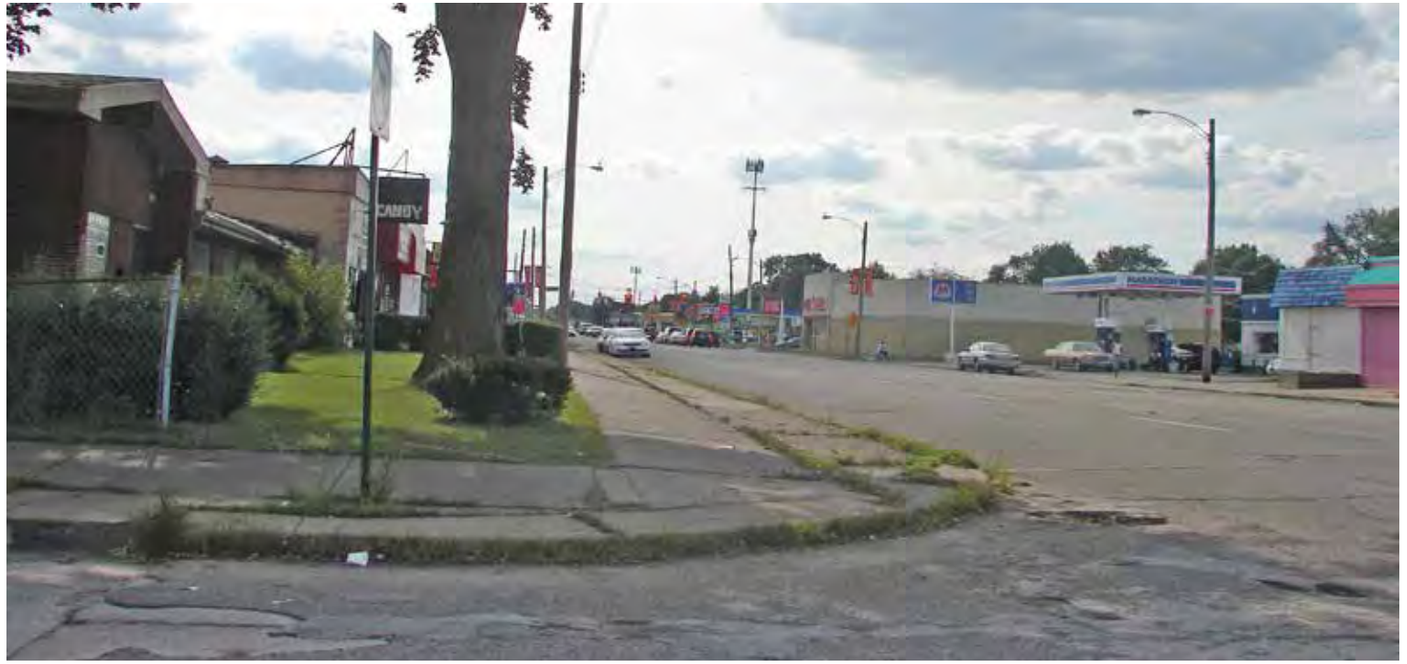


Figure 2.8: Joy Road at Auburn

Detroit's Zoning Ordinance already includes a Traditional Main Street Overlay, which is typically applied to commercial areas of the City that are, or have the potential to be, "high quality, pedestrian-scale, walkable areas with a traditional urban atmosphere" (City of Detroit, 2012) These areas typically have underlying zoning of B5 or B2 (City of Detroit, 2012). Joy Road would likely not qualify for this designation now; it could be pursued after some progress was made toward developing a downtown area.

The Traditional Main Street Overlay Area offers well-developed design standards and guidelines. The design standards and guidelines consider context, site layout, building design, landscaping, streetscape, signage & other communication, parking, and open space & public amenities (City of Detroit, 2012). The development of design standards is a time and resource consuming process, and adopting the Traditional Main Street Overlay would save considerable effort over attempting to design an overlay specific to the area. The Traditional Main Street Overlay covers nine specific areas of Detroit today (City of Detroit, 2012). Joy Road would be the tenth.

Implementation

Changing the zoning or introducing an overlay to Joy Road is likely to be controversial with local businesses and property owners. Those who operate businesses or own businesses not in compliance with the new zoning regulations will still be able to operate as non-conforming uses, but making major changes to their operations or selling their property could become more difficult. Some would-be nonconforming businesses may feel unwelcome or as though they are being singled out as part of the problem. They may also worry about the effect of these changes on their businesses' bottom line.

These concerns are legitimate. A prospective business association could be the best vehicle for pursuing these changes, because such an association would be able to work toward a consensus among members and take into account the concerns of the most-affected members. The business community must be convinced that a cluster of retail and service activity resembling a downtown is a positive outcome for business owners, landlords, and the community alike, and that it will not be achieved with the status quo. Affected businesses could also take some comfort from the fact that the proposed zoning changes strongly discourage new competition.

Zoning changes must be approved by the City of Detroit, and a case must be made to a review committee that the zoning change and/or introduction of the overlay will help the community meet the criteria set forth by the City for such changes (City of Detroit, 2012). A business association could collaborate with JSCDC to make a case that 1) showcases the strengths of Joy Road as a business location with the opportunity for growth, and 2) adds substance to why the rezoning and overlay could aid the community and economic development goals of Joy-Southfield residents.

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CHAPTER 3.0
DESIGN FRAMEWORK

Developing a downtown district is a challenge that must be taken on from several angles. The previous chapters an outline organizational framework that can help foster business development and a zoning framework that will help facilitate private development with a downtown character. This chapter addresses how changes to public infrastructure can contribute to the development of a downtown district.

Currently Planned Development

In 2014, Joy Road between the Southfield Freeway and Trinity Road, at the edge of Rouge Park, will be subject to a resurfacing project (SEMCOG, 2013). This project will resurface the roadway and replace the old sewer system from Trinity Road to the Southfield Freeway. This project will resurface the roadway and replace the old sewer system from Trinity Road to the Southfield Freeway.

Joy-Southfield is situated in the Upper Rouge Tributary, and storm water runoff currently enters the river when the existing sewer infrastructure is over capacity. As part of the upcoming project, the Michigan Department of Environmental Quality (MDEQ) has mandated the installation of green infrastructure along Joy Road to reduce waste water runoff by 50% (SEMCOG, 2013) [2]. This is a significant investment in the area on the part of the city, county and state, and it corresponds well with the area's stated desire to be the city's greenest neighborhood.

The resurfacing plans currently address only the street and do not offer improvements to the rest of the public right-of-way [3].

Proposed Development

The community, JSCDC, and several of the agencies involved in the project have expressed a desire to include work on the full public right-of-way in the work. A Complete Streets design will accomplish this goal.

Integrating Complete Streets with the existing plans will save money and time by accomplishing all of the work at once. To address limited funding this Complete Streets strategy accomplishes as much as possible with as little need for capital investment as possible. If implemented in their entirety, the following designs will help the area achieve its goals of increasing safety and becoming a green community.

[2] Please find more information in Appendix 3.1.
[3] The public right-of-way includes the street, planting strip, and sidewalk. Private rights-of-way will be addressed later.

JOY ROAD: EXISTING CONDITIONS

Road Width Average: 65 Feet
Current Speed Limit: 35 Miles per hour throughout.
Existing Vehicular Traffic Lanes:

- 5 Traffic Lanes from Trinity Road to Evergreen Road
- 4 Traffic Lanes from Evergreen Road to the Southfield Freeway
  - Include two on-street parking lanes[1]
  - Center turn lane from Trinity Road to Evergreen Road

Roadway: Fair condition - In need of resurfacing due to rapid deterioration
Sidewalks: Fair/Moderate and in some cases poor
Bike Lanes: N/A
Greenery: N/A

[1] Although on-street parking exists, it is not well labeled and can be misconstrued as a driving lane.

3.1 Complete Streets

What are Complete Streets?

> Complete Streets are those that adequately provide mobility for all types of users, including cyclists, pedestrians including persons with disabilities, transit riders, motorists and cargo freight, to the extent feasible for the context of the street. No two streets look alike (Smart Growth America, Best Practices, 2005).

As currently designed, Joy Road accommodates automobiles at the expense of all other road users. Wide, poorly marked roadways make it difficult for pedestrians and cyclists to access the street safely. Complete Streets are intended to alleviate these issues.

Some typical design components of a Complete Street include wide sidewalks, narrow streets and travel lanes, frequent and clear crosswalks, and use of mass transit. Although Complete Streets share many of the same elements, they can be as unique as the community in which they are located and serve the same purpose.

Why Complete Streets?

Complete Streets are a significant goal for JSCDC and the community for several reasons. The current street infrastructure is deteriorated and hazardous, with unclear pedestrian crossings, insufficient sidewalk space and not enough separation between automobile traffic and pedestrians. On a road such as this, Complete Streets can help transform the neighborhood by making the roadway safer for children trying to get to school, employees trying to get to work, and shoppers trying to get to stores.

Many area residents do not own an automobile and rely on walking, bicycling and mass transit to reach their destinations (Beckett & Raeder, 2010, pg. 21). These road users deserve a more accommodating environment, and Complete Streets can improve the pedestrian experience while still taking the automobile into account.

Recommendations

The main features of the recommended Complete Street design include:

- A road diet[4] that will reduce Joy Road to **three traffic lanes**[5]
- Dedicated bike lanes in both directions
- Dedicated on-street parking on both sides of the street
- Crosswalks at intersections for improved pedestrian safety
- Plantings to be installed in the space between the road and sidewalk (or parkway).

The following recommendations are split into subsections based on the likely timeframe for the work. Near-term items should, to the extent possible, be integrated into next year's planned work for maximum efficiency. Long-term items will reinforce the development of a downtown district and help create a sense of identity for the district. Additionally, some designs are meant to be applied to the full stretch of Joy Road between the freeway and the park, while others are targeted at particular intersections.

Targeted Intersections

Currently, there is not enough funding available to implement the designs that follow throughout the roadway. In order to address budget constraints and still support the development of a downtown with Complete Streets, this report designates specific intersections for special improvements. These improvements support the business development strategies elsewhere in this report, and from a long-term perspective, can be seen as models for future improvements at other locations.

Based on criteria that contribute to the development of a safe, walkable downtown, the targeted design recommendations address three intersections in the short-term, and two-intersections in the long-term. See figure 3.1 for the criteria used to select intersections.

Short-term/Promising Intersections:

- Joy Road and Auburn Road
- Joy Road and Artesian Road
- Joy Road and Faust Road

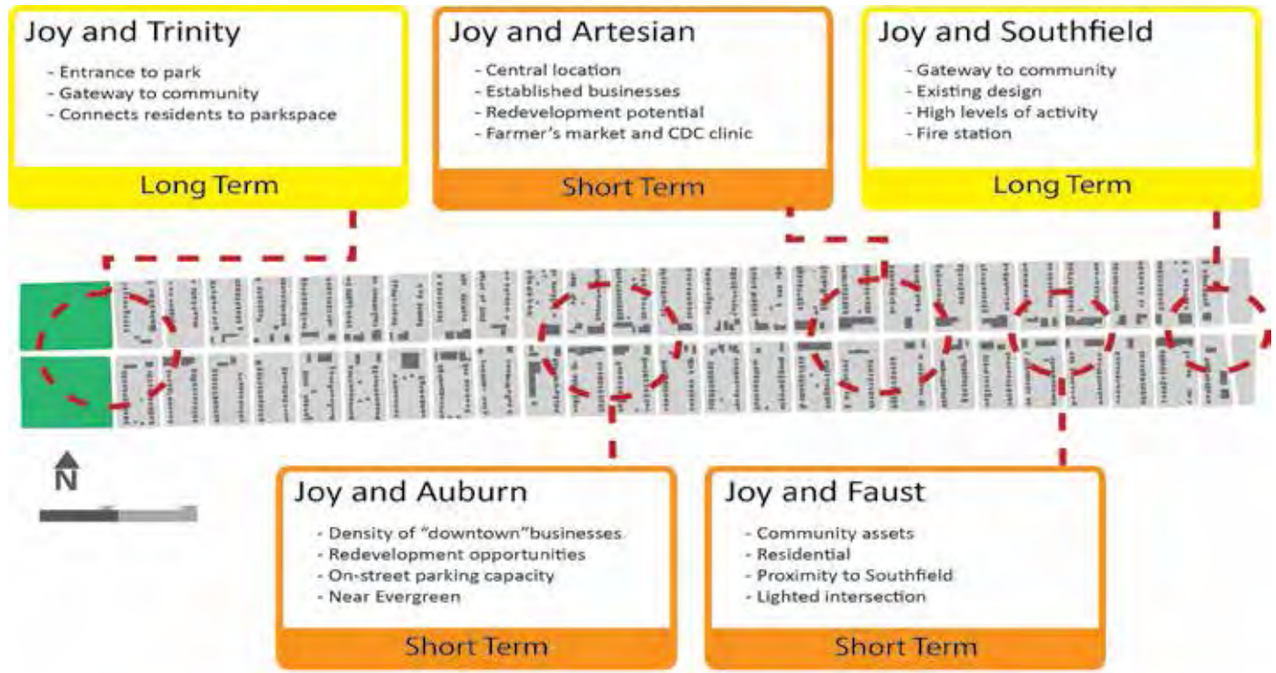

Figure 3.1: Targeted Intersections

Long-term/Gateways:
- Joy Road and Southfield Freeway
- Joy Road and Trinity Road.

The criteria for the selection of intersections was based upon:
- Existing development.
- Potential future development
- A gateway into the community
- Bus stops improvements
- Potential for safer flows of pedestrian activity
- Potential for on-street parking

3.2 Short-Term Design

These design elements would be most efficiently implemented if completed concurrent with next year's resurfacing project. They build on the currently planned work in ways that would require few changes to current plans.

All of Joy Road from Trinity Road to Southfield Freeway

For the first set of designs address the entire roadway from Trinity Road to the Southfield Freeway. The dimensions of the public right-of-way elements (shown in figure 3.4) exceed minimum street and bike lane design standards[6] (AASHTO, 1999). They facilitate safe use of the roadway for moving vehicles, cyclists, parked cars, and pedestrians, when they need to cross.

The design elements included in this chapter are split into two sections. The first set of elements requires only paint and is the simplest, most inexpensive to incorporate into the resurfacing of the road. The second set of elements is higher-cost and requires other resources.

The features of this section require only paint (as illustrated in figure 6.2) and are the simplest, most inexpensive to incorporate into the resurfacing of the road.

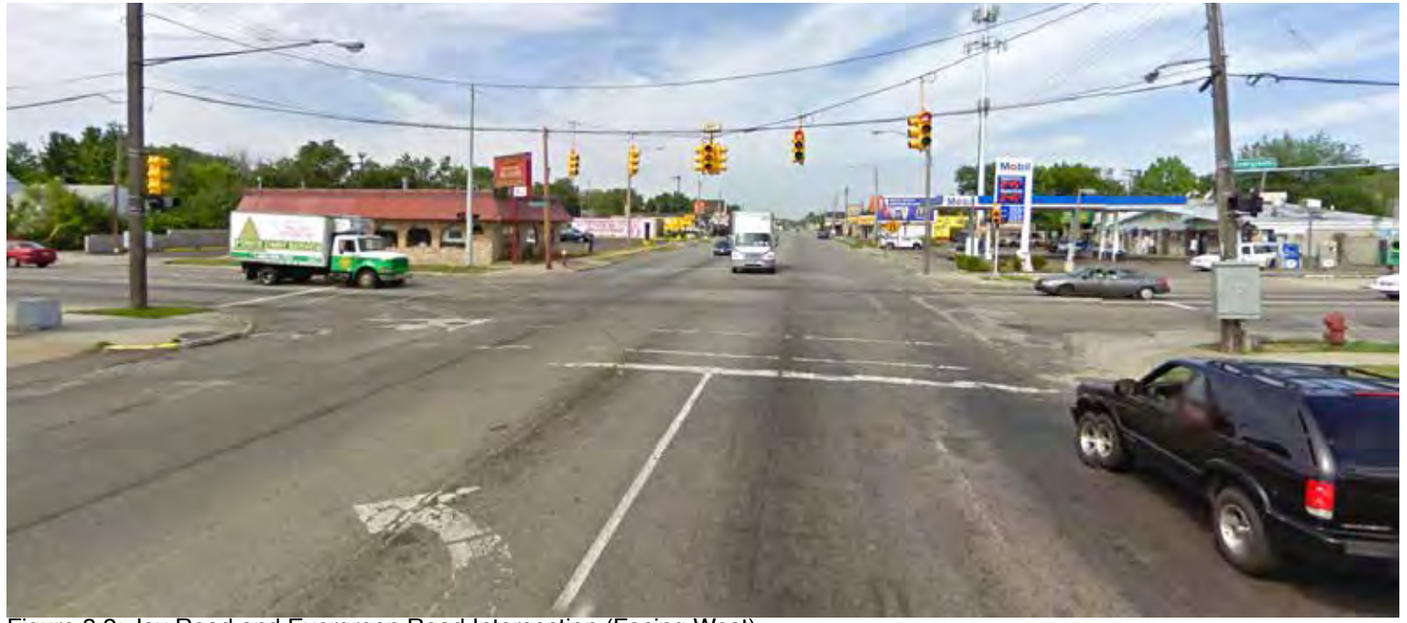

Figure 3.2: Joy Road and Evergreen Road Intersection (Facing West)

Figure 3.3: Joy Road and Evergreen Road Intersection: "Just Paint" Conceptual Design

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[4] A road diet is a reduction of the number of travel lanes or general width of the roadway.
[5] This road diet is set in place by SEMCOG and MDOT.
[6] National standards established by the Federal Highway Administration (FHWA) & American Association of State Highway and Transportation Officials (AASHTO).

SHORT-TERM STREETSCAPE DESIGN RECOMMENDATIONS

Major Proposed Street Elements

1. **"Just Paint" Elements:**
    a) Traffic lane striping and painting[7]
        i)Road Diet: Reduce to Three Traffic Lanes[8]
            1. Eliminate two driving lanes (Evergreen to Trinity) and one from (Evergreen to Southfield)
            2. Add one left-turn lane
            3. Add on-street parking to both sides of the street
        ii) Add dedicated bike lanes
            1. Add one bike lane on each side of the street
            2. Bike lanes provide a safe place for cyclists to use the street.
            3. SEMCOG has also recommended that bike lanes and on-street parking use porous concrete[9].
            4. Bike lane signage

2. Sidewalks

a) Sidewalks widened and repaved to provide a safe environment for all users including those with disabilities.

3. Driveway Reduction[10] (refer to Appendix 3.1)

a) Reduce the number of driveway entrances along Joy Road, to be discussed further in this section.

Intersection Recommendations

1. Curb Bulb-outs[11]

a) Add extended curbs (or 'bulb-outs') for pedestrian crossings.
    a) They decrease the distance to cross the street, increase the visibility of pedestrians and motorists, and reinforce the space for on-street parking that is put in with the paint.
    b) Intersections that have bus stops can utilize these bulb-outs. Allowing for the buses to stop for patrons behind the bulb-out shelter and not interrupt traffic.

2. Greenway Elements

a) Tree and shrub planting
    1. Planting trees enhances the façade; helps decrease rainwater run-off, and supports green infrastructure.

b) Sidewalks treatments
    1. Heightening and defining the curb, further creates a separation between the roadway and the sidewalk.

3. Crosswalk Signage

a) Place clear pedestrian signs at crosswalks so users know where to cross.

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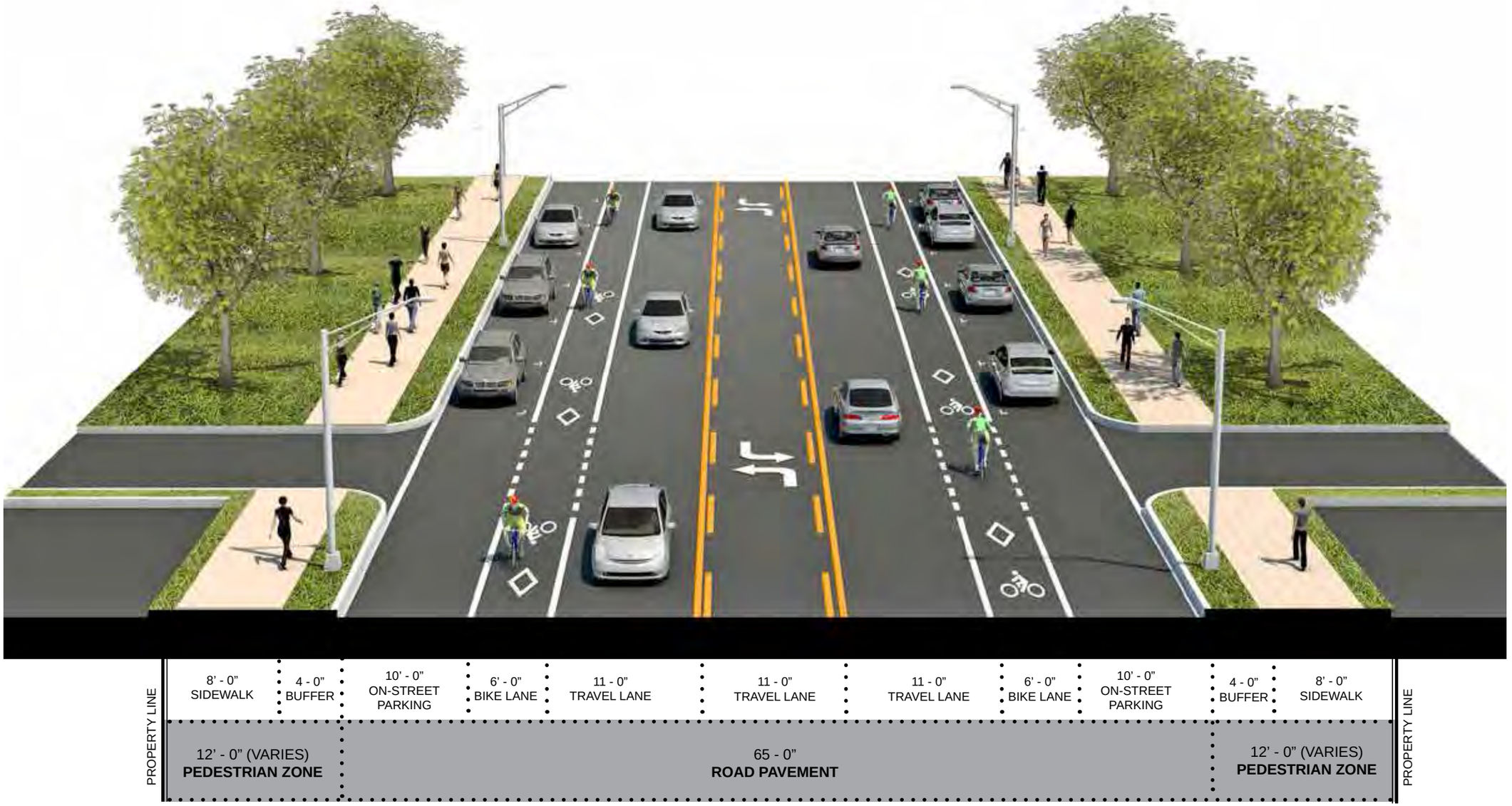
[7] The design of the entire roadway will coincide with the completion of the water main and resurfacing project. The design should not place any undue constraints on the water main project. The water mains will be inserted where determined by project developers and Detroit Water & Sewer.

[8] Study of the existing conditions along Joy Road, including SEMCOG's current traffic counts of around 17,000 cars each day, indicates that a road diet would help calm traffic, create a safe non-motorized transit experience, and improve the corridor's business visibility without significantly increasing traffic congestion.

[9] Permeable porous concrete surfaces allow the reduction of larger amounts of storm water from entering the Rouge River.

[10] Also referred to as rights-of-way.

[11] A bulb-out (or a curb extension) is a traffic calming measure at intersections that reduces crossing distance for pedestrians and shields on street parking from traffic.



JOY ROAD: TYPICAL COMPLETE STREETS CROSS-SECTION
SECTION 1-1

Figure 3.4: Joy Road Typical Complete Streets Cross-Section

Faust Road and Joy Road

This intersection also has a stoplight and marked crosswalks, and boasts a mix of uses similar to the mix sought for a future downtown, including an apartment building, child-care center, local businesses and the library at the other end of the block. The short-term design for the Complete Streets recommendation can serve the existing development by providing safety for the residents, children and library patrons crossing and using the roadway. It would also provide convenient parking. Finally, Faust Road was recently paved; this creates a network of visible investment.

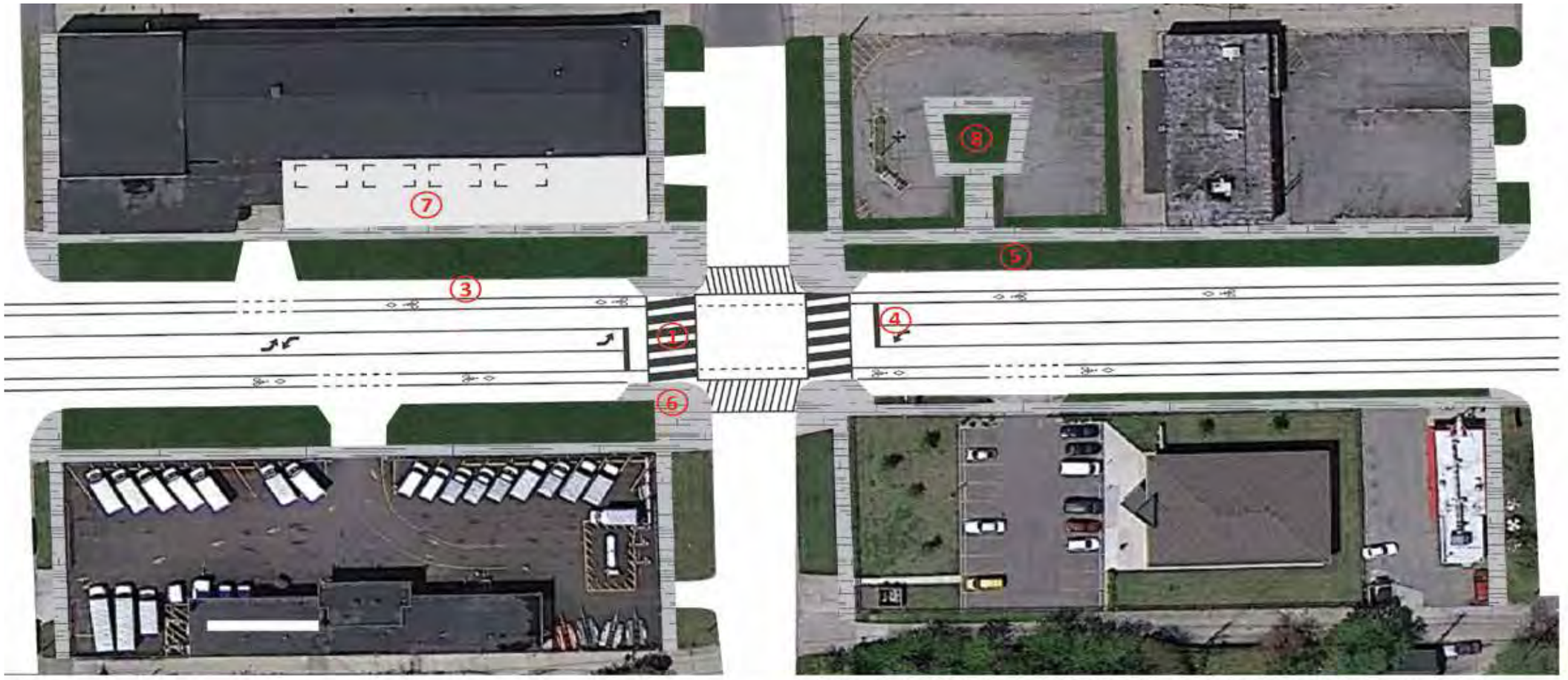
Figure 3.5: Joy Road and Faust Road Intersection (Facing East)

JOY ROAD @ FAUST (FACING EAST): TYPICAL COMPLETE STREETS CROSS-SECTION
SECTION 1-1

Artesian Road and Joy Road

The intersection with Artesian has a traffic light and marked crosswalks, and is the site of several community anchors, including JSCDC's Health & Education Center, the Juanita Reaves Free Clinic, and the farmer's market. The high activity level makes it a natural focal point for downtown development, and there is room for potential future development to the north side of the street. The short-term design can help keep the pedestrians at this intersection safe while crossing the road, create extra parking for the businesses and farmer's market visitors, and enhance existing development.

Figure 3.6: Joy Road and Artesian Road Intersection (Facing East)



PROPERTY LINE	8' - 0" SIDEWALK	20 - 0" LANDSCAPE BUFFER	10' - 0" ON-STREET PARKING	6' - 0" BIKE LANE	11 - 0" TRAVEL LANE	11 - 0" TRAVEL LANE	11 - 0" TRAVEL LANE	6' - 0" BIKE LANE	10' - 0" ON-STREET PARKING	20'- 0" LANDSCAPE BUFFER	8' - 0" SIDEWALK	PROPERTY LINE
	28' - 0" **PEDESTRIAN ZONE**		65 - 0" **ROAD PAVEMENT**							28' - 0" **PEDESTRIAN ZONE**		

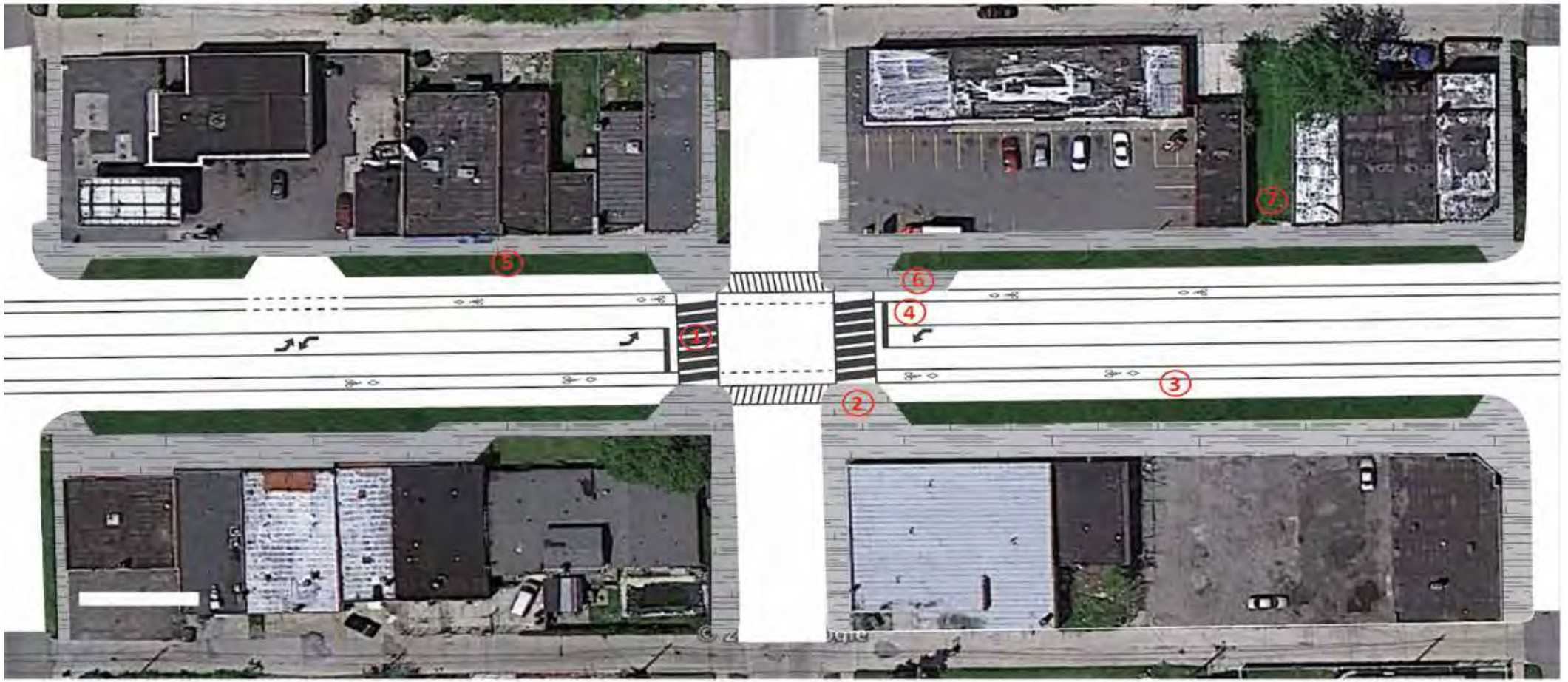
JOY ROAD @ ARTESIAN (FACING EAST): COMPLETE STREETS CROSS-SECTION

SECTION 1-2

Auburn Road and Joy Road

Some existing development at this intersection already has a downtown character. There are, however, also nearby vacancies with the potential for redevelopment, and there is ample room for significant amounts of on-street parking in this area.

Figure 3.7: Joy Road and Auburn Road Intersection (Facing West)



PROPERTY LINE	8’ - 0” SIDEWALK	20 - 0” LANDSCAPE BUFFER	10’ - 0” ON-STREET PARKING	6’ - 0” BIKE LANE	11 - 0” TRAVEL LANE	11 - 0” TRAVEL LANE	11 - 0” TRAVEL LANE	6’ - 0” BIKE LANE	10’ - 0” ON-STREET PARKING	10- 0” LANDSCAPE BUFFER	8’ - 0” SIDEWALK	PROPERTY LINE
	28’ - 0” (VARIES) **PEDESTRIAN ZONE**		65 - 0” **ROAD PAVEMENT**							28’ - 0” **PEDESTRIAN ZONE**		

JOY ROAD @ AUBURN (FACING WEST): COMPLETE STREETS CROSS-SECTION

SECTION 1-3

Joy Road Intersections	Existing Development	Potential for Future Development	Pedestrian Activity or Bus Stops	On-Street Parking Potential	Gateway to the Community
Auburn Road					
Artesian Road	O	O	O	O	
Faust Road					
Southfield Freeway	O		O		O
Trinity Road					

Table 3.8: Future Development Potential

3.3 Long-Term Design

The long-term designs that follow are meant to enhance the feel of a true downtown district as one develops over time. The long-term designs principally focus on the gateway intersections, which could be completed in phases. However, there are some elements that should be incorporated throughout the entire roadway.

All of Joy Road from Southfield Freeway to Trinity Road

Some of this work would require significant funding. It is likely not feasible to incorporate it into next year's planned work. Additionally, some of the branding work will be done effectively only after downtown development efforts gain traction.

Southfield Freeway and Joy Road

The Southfield Freeway is a major point of entry for visitors to the neighborhood. This intersection hosts a bus stop, a busy gas station and Detroit Fire Department engine house. The speed limit drops to 35 MPH on the west side of the freeway, encouraging traffic to slow down as it enters the business district. Future work on this interchange should improve connections to Gardenview Estates and create a visual gateway that informs visitors they are entering a downtown area.

Figure 3.9: Joy Road and Southfield Fwy (Facing West)

Figure 3.10: Joy Road and Trinity Road (Facing West)

LONG TERM DESIGN RECOMMENDATIONS

Major Proposed Street Elements

1. Design and façade standards implementation (See appendix 3.1, Fig. 5)

a) Implement a design and façade standards.

2. Street lighting update

a) Fixing and updating the light fixtures on the street will increase safety and security on the road at night, for drivers, pedestrians and cyclists.

3. Branding and Signage

a) Adding branded signage along the roadway.

1) It gives identity and recognition of landmarks.

b) The Cody-Rouge Community Action Alliance operates its "Safe Routes Home" campaign in the area. Build on this for Joy Road encouraging signage for the business community and for the entrance to Rouge Park.

Intersection Recommendations

1. Stamped crosswalks "texturing"

a) Stamping the crosswalk gives users the knowledge to be aware of potential pedestrians in the area.

b) Sidewalk texturing enhances the experience for pedestrians on the sidewalk.

2. Crosswalk lights

a) Adding timed crosswalk lights that give ample time for pedestrians to cross Joy Road provides optimum safety.

3. Gateway Elements

a) Branding and Signage: (Refer to Short-term Design)

4. Roundabout Concept Design Recommendation[12]

a) Please refer to section 3.15b) Roundabout Street Elements

I. Two traffic lanes
II. One bike lane
III. Center island
IV. Truck apron[13]
V. Splitter islands[14]

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[12] It has been recognized that this would need further community feedback before it would be implemented both in terms of design and financial feasibility.

[13] A large section of pavement around the center island that acts as another lane for large vehicles.

[14] A raised traffic island that separates opposing traffic.

Trinity Road and Joy Road

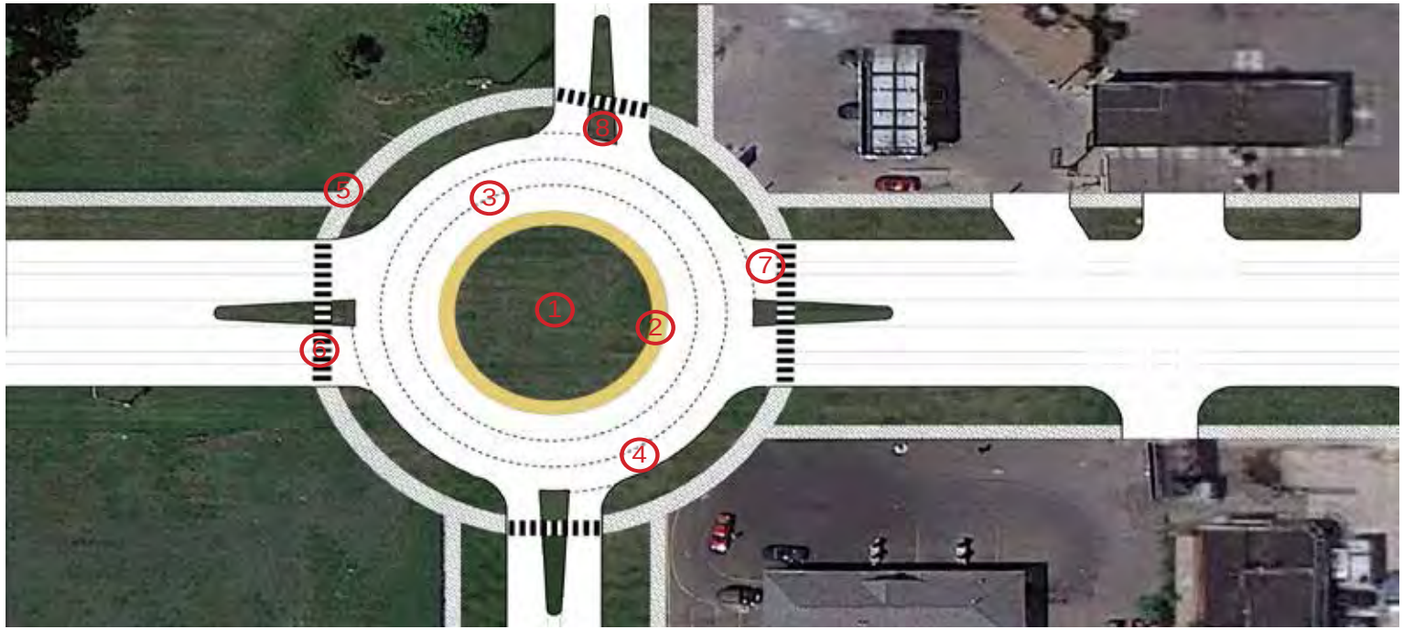
This intersection is a gateway to the Joy Road commercial corridor and to Rouge Park. Living in proximity to the largest park in Detroit, residents consider Rouge Park a defining feature, and a motivating factor for establishing themselves as a green community. Establishing a landmark or gateway and a pedestrian connection for the residents to the park reinforces this identity. Additionally, from a Complete Streets standpoint, Joy Road is essentially a highway as it transitions from the park to the corridor. Implementing traffic calming measures (discussed later) would slow automobiles down as they enter the business district, differentiate Joy Road before the park from Joy Road after the park, and provide a community landmark.

Trinity Road and Joy Road Conceptual Design

1. Build a roundabout at Trinity Road and Joy Road.
2. Implementing a roundabout can build a connection and establish an identity from Rouge Park to Joy Road.
3. This roundabout would calm traffic, create a safe crossing for pedestrians, smooth traffic flow, improve park identity and increase the visual aesthetics of the area's environment (MDOT).
4. It would eliminate the traffic light at Trinity Road and replace it with an ideal space for a sign marking 'Rouge Park' or a monument that the community would decide upon.

Figure 3.11: Current conditions at Trinity.

Figure 3.12: Trinity and Road Roundabout Conceptual Design - "Gateway to River Rouge Park"



N 50 feet

TRINITY AND JOY ROAD ROUNDABOUT
CONCEPTIAL DESIGN PLAN

/ 1 - CENTER ISLAND / 2 - TRUCK APRON (6'-0" WIDE) / 3 - Two Traffic Lanes (11'-0" Wide) /
/ 4 - Bike Lane (10'0" WIDE) / 5 - PEDESTRIAN WALKWAY (8'-0" WIDE) /
/ 6 - PEDESTRIAN CROSSING / 7 - YIELD AT ACCESS / 8 - SPLITTER ISLANDS /

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CHAPTER 4.0
MARKETING STRATEGY

Effectively marketing the Joy Road corridor is an essential complement to the revitalization efforts discussed in the preceding chapters of this report. Ultimately, JSCDC and the Joy-Southfield business association will likely share responsibility for marketing the corridor, although it may take some time for the business association to become sufficiently well organized to assume a significant role. Marketing efforts should focus primarily on attracting new businesses and developers to the corridor, and on marketing the businesses in the corridor to members of the surrounding community. This chapter will outline strategies for marketing the corridor to each of these groups based on their likely interests and priorities.

4.1: Attracting New Businesses and Developers

Attracting business owners to the corridor will help to grow the breadth of goods and services available along Joy Road and alleviate issues of vacancy and blight. In light of the current conditions and desired development patterns along the corridor, this effort should primarily focus on independently owned small businesses rather than national chains. Joy Road has the potential to attract established businesses that may be seeking to expand or relocate. Toward this end, JSCDC should cultivate relationships with local trade associations, which could improve the visibility of the corridor to member businesses in these associations.

One prominent local trade association is the Michigan Food and Beverage Association, which is made up of grocery stores, restaurants, processors, and other types of food establishments. This association also helps provide creative services, networking opportunities, employment resources, healthcare options, and technical assistance. Other associations include the Michigan Minority Contractors Association, made up of contractors in the building, electrical, mechanical, and plumbing trades, and the Michigan Green Industry Association, which focuses on landscape design and maintenance industries in Michigan.

Immigrant-focused and ethnic business associations are another potential source of business investors. Groups such as ACCESS offer entrepreneurial classes to immigrants interested in starting or expanding a business (AP, 2013). These include:

- The African Business Chamber of Commerce
- The African Caribbean Chamber of Commerce
  - *United African Market* is located on Joy Road, and a significant concentration of African grocery stores exists in the surrounding area
- The Arab American Chamber of Commerce
  - The Joy-Southfield area may benefit from its proximity to the city of Dearborn, which boasts the highest proportion of Arab Americans in the United States
- The Detroit Chinese Business Association
- The Indo-American Chamber of Commerce
- The Michigan Hispanic Chamber of Commerce
- The Philippine Chamber of Commerce
- The Taiwanese Chamber of Commerce of Greater Detroit

In addition to attracting existing businesses from outside the corridor, marketing efforts should focus on entrepreneurs

Figures 4.1 & 4.2: Don Bosco Hall and Juanita Reeves Clinic

seeking a physical location for a newly established company. Local and regional business incubators regularly graduate aspiring entrepreneurs in need of spaces in which to develop and grow their businesses. ProsperUs is already engaged efforts to develop entrepreneurial talent in the Joy-Southfield area (ProsperUs, 2013). Similar programs that could be targeted include TechTown at Wayne State University, OU INC, Oakland University's Smart Zone Incubator, and Paper Street in Ferndale.

One significant challenge to bringing new businesses into the Joy Rd. corridor is the small number of turnkey ready commercial spaces. New development will improve the viability of the corridor for local businesses and entrepreneurial start-ups that may lack the resources to build to suit. However, real estate developers will be hesitant to invest in the area if demand from the business community is weak or if recent real estate developments have been unsuccessful. It will therefore likely be more productive in the initial phases of the marketing effort to focus primarily on attracting business investment to the corridor, with an increased focus on developers once a track record of successful business investment can be shown.

JSCDC should cultivate or strengthen relationships with entities that can access networks of prospective developers for the corridor. The organization has existing relationships with Community Development Advocates of Detroit and the Detroit Economic Growth Corporation that provide a base on which to build. Attending real estate conventions such as "Detroit: Forged by Innovation" or the conference of the Detroit Chapter of the Urban Land Institute can help JSCDC connect with developers, brokers, and marketers of commercial real estate, and refine strategies for continuing to make such connections.

Marketing efforts should tout the proximity of a significant customer base with the potential for future growth. The Joy-Southfield neighborhood has a total population of 33,841 (U.S. Census, 2010). Recent population declines in the area have been offset to some extent by Gardenview Estates, and as the rest of the development is completed, new residents will continue to arrive. The 833 total units to be included in the full Gardenview Estates development will significantly impact the market for local businesses, and the mix of subsidized

Figure 4.3: Gardenview Estates.

and market-rate as well as rental and owner-occupied units will broaden the customer base of the neighborhood (MSU Practicum Team, 2012). The neighborhood's relatively low rate of car ownership suggests that many residents would find it convenient to patronize business establishments within the neighborhood rather than traveling elsewhere, particularly in light of the low frequency of transit service to retail destinations outside the neighborhood.

Currently, the neighborhood exhibits significant retail leakage in nearly every category, with millions or tens of millions of retail dollars leaving the neighborhood in 12 of the 13 retail classifications analyzed by Beckett & Raeder (2010, page 36). There is significant potential for new retail establishments in this area to capture some of this leakage by appealing to residents' unmet needs while touting the convenience of their locations along Joy Road. Beckett & Raeder (2010) estimated that the neighborhood had the capacity to support 19,500 square feet of new retail at the time of the report's release in 2010, and projected that an additional 27,300 square feet would be supportable by 2014 if existing trends continued, with further growth potential pending the completion and full occupancy of Gardenview Estates and the implementation of a successful economic revitalization program in the neighborhood. In marketing the neighborhood to potential new businesses, it will likely be useful to highlight these statistics, citing recent and upcoming investments by businesses such as Spartan Foods, Family Dollar and True Value Hardware as evidence that these numbers are not purely theoretical or speculative, but are borne out in practice.

When marketing the corridor to business owners or developers, it may be useful to refer to the intersection development strategy outlined in the previous chapter. Many business owners will gravitate toward areas where they know special investments have been made. Given that each intersection has a unique mix of existing development and redevelopment potential, different businesses will benefit most from locating at or near different targeted design areas.

The Joy Road business district interchanges with the Southfield Freeway at its eastern edge, acting as a conduit to the freeway for commuter traffic from within the Joy-Southfield neighborhood as well as points west. Annual average daily traffic volumes (AADT) on Joy Road between Southfield and Evergreen were calculated at 5,840 heading west and 5,550 heading east as of 2012 (SEMCOG, 2013). However, this is a dramatic decline from the last recorded count, in 2006, where AADT was 12,470 westbound and 9,060 eastbound. (SEMCOG, 2013). This suggests that traffic volumes in this area are somewhat volatile and could increase as the economy continues to recover. The interchange itself carries large traffic volumes exiting the southbound Southfield Freeway to Joy Road (AADT 10,814 in 2010) and entering the northbound Southfield Freeway from Joy Road (AADT 11,651 in 2010) (SEMCOG, 2013).

The proximity of this source of pass-through traffic presents an opportunity for businesses in the Joy Road corridor to market themselves using signage near the freeway exit or billboards along the freeway itself. Businesses could implement façade and signage improvements to help them attract a larger share of the commuter traffic on Joy Road. Meanwhile, the CDC or business association could work to have freeway signage installed that points drivers toward the business district.

JSCDC's efforts to improve the quality of life in its service area are part of a complex mix of planning and community development efforts. A great deal of energy has been directed toward the neighborhood in recent years, and the strategies in this report should help build on the improvements that have already been seen. As momentum behind the mix of community and economic development projects in the area grows, it is likely to help stabilize the neighborhood's population.

The free clinic and farmers' market are examples of successful inititatives that have brought renewed strength and activity to Joy Road. Community Development Advocates of Detroit has targeted Joy-Southfield as one of the focus neighborhoods for its ProsperUs microenterprise training program (CDAD, 2013), working directly to cultivate local business development.

Businesses considering locating in Joy-Southfield may also benefit from the neighborhood's proximity to Rouge Park, the largest park in Metro Detroit. Efforts are underway to develop a master plan for the park's future development as a regional destination. Improvements to the park have the potential to increase traffic to the surrounding area as well. As the park lacks amenities such as restaurants, banquet facilities, and quick-stop shops to buy food and recreation gear, Joy Road is well-positioned to host businesses that could serve teh unmet needs of park visitors.

4.2: Marketing to The Community

JSCDC can serve as a bridge between the community and existing businesses, developing a two-way dialog that improves sales and strengthens neighborhood development. The Beckett & Raeder report (2010) highlights strong community involvement in block clubs and churches and the integral role that these organizations play in engaging the local community. There is a concerted effort to build a stronger neighborhood through these organizations, with emphasis on improving the physical environment, reducing crime, and increasing social interaction between community members and businesses. These community-based, collaborative neighborhood revitalization efforts are a particular strength of the Joy-Southfield area.

The prospective business association would be a good vehicle for building bridges between the business community and local residents. Business association activities such as shopping days and other initiatives outlined in this report can help increase community awareness of businesses operating in the heart of their neighborhood.

The streetscape improvements and zoning changes recommended elsewhere in this report could significantly improve the appeal of the Joy Road business district to residents of the neighborhood. Transforming Joy Road into a complete street will make it a more inviting place for neighborhood residents to spend time, which will encourage them to patronize local businesses more frequently. Reducing the prevalence of less-inviting land uses while encouraging the construction of multistory mixed-use structures will similarly help transform the district into a place where residents are likely to linger and feel comfortable.

It is in the interest of local business owners, independently and through the Joy-Southfield business association, to capitalize on the strength of the community in their marketing efforts. Business owners along the Joy Road corridor could directly market themselves to area residents by distributing flyers highlighting various neighborhood businesses, and offering discounts or hosting sidewalk sales to entice new residents to explore the business district and learn what it has to offer. The sustainability of new and existing businesses depends on the support of customers. By cross promoting what each can offer, and creating a stronger communication network between the two groups, the Joy Road corridor can create a more sustainable area for residents and businesses alike.

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CHAPTER 5.0
GREEN INDUSTRY DEVELOPMENT

Bringing employment opportunities back to the Joy-Southfield community is a main goal of JSCDC and the community. Like many communities in the City of Detroit, deindustrialization and recent challenges in the auto industry have negatively impacted employment in the manufacturing sector. The unemployment rate in the Joy-Southfield neighborhood (41.8% in 2010) is a critical issue for community members (ACS, 2010). The education level and skill set of many in the Joy-Southfield community seems to be well matched with blue collar jobs, which at the present time are scarce. Community discussions sparked an interest among residents in becoming a green neighborhood, influencing JSCDC's determination to attract and develop green industries to the area. These green industries will not only promote Joy-Southfield's goal of being the greenest neighborhood in Detroit, but will additionally bring employment to community members.

The New Green Economy

In the past decade, concerns about the environment have begun to affect the way many companies do business in a profound way. Rising environmental consciousness has led to speculation that a new "green economy" will develop in the near future, bringing with it a new set of business and employment opportunities. The development of a green economy will create new industries or transform existing industries to reduce the overall environmental impact of business activities.

Plans and initiatives to grow and promote green businesses have been developed at all levels of government and private industry. Two recent pieces of legislation, The Green Jobs Act of 2007, and the American Reinvestment and Recovery Act of 2009 contained significant levels of funding for green jobs training and related energy projects (Sommers, 2013). Momentum continues to build for the creation of a new green economy that will play a significant role in shaping the economic future of the United States.

The green economy is still evolving as interest and investment in environmentally sound business practices grow, and. Gaining a thorough understanding of this economic sector is challenging, because it is still in what could be considered a formative stage, but it is a sector that is ripe with opportunity. Despite recent economic challenges, modest growth has occurred within the green economy at the national, state, and local level (Sommers, 2013).

Green Industry at the National Level

Total national employment Green Goods and Services sector is estimated to be 2.6% of overall employment in the United States (Sommers, 2013). In 2011, the private sector had 2,515,200 jobs, which represents 2.3% of private sector employment, and the public sector had 886,080 jobs accounting for 4.2% of public sector employment (BLS, 2013). Manufacturing accounted for the largest number at 507,168, or 4.3% of all manufacturing employment (BLS, 2013). 487,709 green-related construction jobs comprise 8.9% of overall construction employment (Sommers, 2013). Many other green industries produced substantial national employment figures, including Professional, Scientific, and Technical Services, Administrative and Waste Services, and Transportation and Warehousing (Sommers, 2013).

The Bureau of Labor Statistics (BLS) divides green industries into the following five categories:

1. Energy from renewable sources. This includes electricity, fuel, and heat that is generated from an environmentally friendly source. This may include solar, wind, hydropower, biomass, and municipal solid waste.

2. Energy efficiency. This includes methods and materials that increase energy efficiency. This may include the development of energy-efficient appliances, vehicles, buildings, and other equipment, along with products and services that make buildings more efficient, such as retrofitting.

3. Pollution reduction and removal, greenhouse gas reduction, and recycling and reuse. This includes products and services that reduce, remove, or eliminate toxic compounds from the environment, reduce greenhouse gas emissions, and reduce, eliminate, or recycle waste products and wastewater.

4. Natural resources conservation. This includes goods and services that conserve natural resources, which may include storm water management, sustainable forestry, organic agriculture, and wildlife conservation.

5. Environmental compliance, education and training, and public awareness. This includes goods and services that increase public knowledge on environmental issues, enforcement of environmental regulations, and facilitating training and education regarding green technologies and practices.

BLS defines green jobs as “jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources”, and “jobs in which workers’ duties involve making their establishment’s production processes more environmentally friendly or use fewer natural resources”. These jobs produce goods and services that are purchased in the marketplace to generate business revenue (Sommers, 2013).

There are indications that green jobs are more accessible for lower-skilled or semi-skilled workers and are offering better wages than traditional employment. For example, around half of all workers in the green economy have only a high school diploma, compared to 37% for the non-green economy (DiRamio & Coxen, 2012). There are some indications that green jobs pay up to 13% more than industry averages (DiRamio & Coxen, 2012). Additionally, it would be difficult to impossible to outsource many of the services provided by green industry such as brownfield redevelopment and retrofitting buildings (DiRamio & Coxen, 2012). These and other factors are spurring interest among governments and other economic development entities to grow and attract green industries to their jurisdictions.

Figure 5.1: Joy-Southfield Farmer’s Market

Core Area	Total Direct Green Jobs	% Share of Direct Green Jobs
Clean Transportation and Fuels	39,317	40.6%
Increasing Energy Efficacy	22,236	23.0%
Pollution Prevention and Environmental Cleanup	12,345	12.8%
Agriculture and Natural Resource Conservation	11,986	12.4%
Renewable Energy Production	8,843	9.1%
Green Jobs not Assigned	2,040	2.1%
Total Direct Green Jobs	**96,767**	**100.0%**

Table 5.1 Green Industry: Jobs in Core Employment Areas, Michigan, 2009 (DELEG, 2009)

Green Jobs at the State Level

As of 2009, The State of Michigan had 96,767 jobs that were categorized as “direct green jobs”, and green goods and services accounted for 3% of private sector employment in the state (MDELEG, 2009). Much of the green economic activity in Michigan reflects the predominance of the automotive and construction industries. Work associated with clean transportation and fuels comprises 40.6% of green jobs in Michigan (MDELEG, 2009). 23% of the state’s green jobs were in energy efficiency, most of which were related to the construction industry (MDELEG, 2009). A breakdown of jobs in core employment areas is outlined in Table 3.1

Michigan has been at the forefront of green economic activity across multiple categories in the past decade. Sub-industries with the most notable growth include green transportation and green technology patent registrations, green building design and materials, research and advocacy, recycling and waste management, and energy storage (Collaborative Economics, 2007). Green industry is currently a small component of Michigan’s overall economy, but it has grown at a rate of about 4.7% annually (DiRamio & Coxen, 2012).

Green Jobs at the Local Level

Locally, Southeast Michigan has approximately 60,000 green jobs, which accounts for roughly 65% of the green jobs in Michigan (DiRamio & Coxen, 2012). In Detroit, the average green economy wage is $45,642, compared to an overall average of $41,437(DiRamio & Coxen, 2012). Detroit’s’ green economy currently ranks 25th among the 100 largest metropolitan areas in the nation (DiRamio & Coxen, 2012). Detroit has many qualities that make it ripe for green business attraction and development. The city’s large, underutilized industrial infrastructure and building stock both offer opportunities for green industry development. Decades of decline in industrial activity has led to significant unemployment, which may benefit industries that rely on a lower-skilled workforce to operate. A green industry development strategy can offer multiple benefits, including reviving vacant industrial buildings, offering potential career paths to workers of all skill levels, reducing environmental impacts of economic activity, and reestablishing the tax base.

Green Industry Development in the Joy-Southfield Community

The Joy-Southfield neighborhood can improve its employment outlook and reinforce its image as a green neighborhood by attracting environmentally conscious industries to the area and pursuing greening activities across the neighborhood. Numerous industries within the green sector provide job opportunities for individuals without degrees, although commonly with some training needed.Vacant light industrial buildings in the rail corridor and elsewhere are in relatively good condition and are located near robust transportation infrastructure (see Appendix 4.1). Many of these buildings could be repurposed by green industry companies.

Identifying Green Industry with the Greatest Economic Development Potential for Joy-Southfield

JSCDC's green industry agenda is relatively new, and it can use a variety of strategies to address the long term green industry goal. Development of detailed strategies should be informed by what is learned as its early work on the agenda proceeds. Broadly speaking, it can use two approaches, singly or in combination: target industry recruitment to specific industries,and cast a broader net to reach many types of green industries. Pursuing referrals from DEGC, as it does now, is an example of the latter. This chapter provides guidance about the former – adopting a sector-specific approach.

Prioritizing green industries based on the assets and needs of a particular neighborhood is challenging because of the formative nature of the green economy. Data about the employment potential and other aspects of many of these industries is limited at this time, but should become more readily available in the future as the green economy becomes a more significant part of the overall US economy.

This chapter discusses eight green industry sectors. JSCDC provided an initial list of green industry sectors that might have an interest in this location. The industry assessment used this as a point of departure, and refined and expanded it in light of an early scan of the literature on the green economy and local business and job training activity The industry analysis shows that if JSCDC decides to target specific green sectors as part of its long term economic development strategy, some of those assessed are more promising targets than others; this is reflected in the clusters below. Key factors that influence their likely promise are expected growth in the sector, especially in Michigan and locally, and the fit between their needs and the industrial properties available in Joy Southfield's industrial area, Most sectors include many types of firms that may offer different types of job opportunities, but all seem likely to bring jobs that are a good fit for neighborhood residents, so this factor does not affect the composition of the clusters.

The analysis also considered the industries' compatibility with the predominately residential character of the neighborhood; two (recycling and waste management and renewable energy) might produce noise or other pollution, but the discussion focuses on sub-sectors that typically do not, and their placement in the categories below reflect those sub-sectors.

Most Promising:
- Recycling and Waste Management
- Deconstruction
- Retrofitting and Weatherization
- Tire Retreading

Promising, but with More Uncertainty:
- Food Processing and Production
- Renewable Energy: Solar

Prospects Uncertain:
- Urban Forestry
- Green Battery Manufacturing

This chapter examines each of these industries and presents information about the key factors above.. It also incorporates two categories of recommended actions: industry-specific recommendations and cross-cutting recommendations that pertain to the larger goal of creating a green industry hub in the neighborhood.

Industries

5.1 Recycling and Waste Management

Recycling is the process of reusing materials in existing products to create new products. Recycling helps to conserve resources and offers many benefits to the local economy and the natural environment (Liming, 2011). The reuse of existing materials allows less need for production and resource extraction, which in turn lowers industrial greenhouse gas emissions (Liming, 2011). Lower rates of GHG emissions have positive effects on air quality and help to mitigate climate change.

Recycling involves the collection of recyclable materials and the subsequent sale of recyclable materials to markets for use in making new products (Material Recovery Facility Handbook, 2003). Collection methods include curbside pickup, and drop off centers (Liming 2011). Recyclables are then taken to collection centers, also known as a Materials Recovery Facilities (MRFs) (Material Recovery Facility Handbook, 2003). Non-profit organizations, private companies and municipalities can operate MRFs. Small-scale MRFs require less than 15,000 square feet of building space (Material Recovery Facility Handbook, 2003). MRFs require manual labor alongside sorting equipment. (Material Recovery Facility Handbook, 2003).

United States		
Year	**Materials Recovery Facility**	**Waste Management**
2010	11,219	305,688
2011	12,474	314,977
Percent Change	**+ 11.18 %**	**+ 3.03 %**

Source: U.S. Census, Quarterly Census of Employment and Wages, County Employment and Wages by State from BLS Regional Offices

Table 5.2: Materials Recovery & Waste Management Employment

Recycling and waste reduction are increasingly important as both the global population and the amount of waste produced continues to grow (Liming, 2011). As demand grows, so does the need for labor. Communities have the unique opportunity to offer these services as a tool for economic development, workforce development and environmental stewardship (APA, 2007). Benefits include reducing pollutants, combating climate change by reducing GHG emissions and stimulating the local economy (Recycling, 2011).

National Overview

According to the Bureau of Labor Statistics Green Goods and Services (GGS) private sector employment average, waste management employment increased from 305,688 in 2010, to 314,977 in 2011. MRFs specifically saw an increase in

State of Michigan	
Year	**Number of Materials Recovery Facility Employees**
2010	158
2011	207
2012	349
Percent Change	**+ 120.89 %**

Source: Piece By Piece Construction, 2013

Table 5.3: MRF Employment Growth 2010-2012

employment from 11,210 in 2010 to 12,474 in 2011 (BLS, 2011). Economic activity in waste management and recycling generates further activity in other sectors that provide goods and services as suppliers to processing. Workers that are employed in processing activities spend their money on other goods and services that continue to support more economic activity and jobs (Kreiger, 2011). Recycling and waste reduction can have indirect and induced economic impacts to other local sectors (Kreiger, 2001).

The number of people employed in Michigan at MRFs is rapidly growing, as well. In 2010, 158 workers were employed in MRFs. In just two years, the number of employees working at an MRF doubled.

Occupations and Training

Waste management and recycling are both large industries that offer job opportunities to people with a wide range of skill levels. These occupations include drivers, sorters, plant managers, mechanics and technicians (Liming, 2011). There are also high skilled positions including Logistics and Sales. Sorters require no educational background but must be physically capable of manual labor (Liming, 2011). Drivers, mechanics, technicians and maintenance workers require a G.E.D. and specialized skills acquired through on site training. Managers of MRF's are required to have a master's degree in business administration or industrial engineering (Material Recovery Facility Handbook, 2003). Sales representatives and logistics require an associate's degree or higher (Material Recovery Facility Handbook, 2003).

Recommendation

The Joy-Southfield neighborhood contains one existing vacant industrial site that is between 10,000-15,000 square feet in size. The JSCDC service area has several industrial buildings fitting this description, one of which is vacant as of this report's publication (see Fig. 5.3 for a photograph and Appendix 4.2 for an inventory of industrial properties). This site has the potential for small-scale MRF development. Developing a MRF could potentially provide residents with local employment opportunities, while also infilling industrial vacancy in the neighborhood.

5.2 Deconstruction

Deconstruction is a process of removing valuable building materials from a structure and selling or reusing these materials. It is often defined as construction in reverse. Although this process can take more time and resources than demolition, it possesses both environmental and workforce development benefits. Deconstruction benefits the environment because it involves recycling older building materials, as opposed to disposing of them in landfills and then having to extract new materials from the environment. The workforce development benefits include a means to learn valuable construction and home building skills that could be marketable in other areas of construction.

The deconstruction process has numerous benefits, especially in urban areas. One reason for this is that many urban centers that have lost population have an abundance of vacant homes and buildings. Many of these structures were built during a period of time when more valuable building materials were used than are today. Another reason is that many of these older urban areas, especially former industrial centers, are experiencing high rates of unemployment and the existing local workforce may be low to semi-skilled. Deconstruction can be a means to turn blight into an asset, because revenue can be generated from deconstructed building materials, and employment and job skills training can be offered in locations where employment opportunities for workers are scarce.

The Great Lakes region is a national leader in deconstruction activities. This is primarily due to the amount of vacant, blighted properties left behind by industrial decline and the recent housing crisis. For example, in 2010 the percentage of vacant properties is estimated to be 35% in Detroit, Michigan, 44% in Youngstown, Ohio (Delta Institute, 2011). Foreclosures rose 45% between 2009 and 2010 in Chicago, Illinois (Delta Institute, 2011). Increasing abandonment and the spike in foreclosures have led to the creation of numerous policies and practices at the federal, state, and local levels in an attempt to build an economy around vacant land and buildings, and deconstruction is one of the few activities that can accomplish that (Delta Institute, 2011).

	Deconstruction	Demolition
Labor Costs	- $16,875	- $10,000
Disposal Costs	- $1,667	- $6,250
Salvage Value	+ $7,500	+ $0
Total Cost	**$11,042**	**$16,250**

Source: Piece By Piece Construction, 2013

Table 5.4: Deconstruction versus Demolition Cost Comparison

Deconstruction is a more expensive process than traditional demolition, but these costs can be offset by reduced disposal costs and revenue generated from salvaged materials. A cost comparison between deconstruction and demolition is outlined in the chart below, which was obtained from Piece by Piece Deconstruction in Massachusetts. The State of Massachusetts has outlawed the disposal of most building materials in its landfills (State of Massachusetts, 2013), so this process has received more attention in that state than in most other places.

The City of Detroit is a viable location for deconstruction. The vast majority of Detroit's housing stock was built during the 1920's through the 1950's (ACS, 2010), a time period during which much construction used very high-quality materials. A high rate of vacancy and abandonment has left many structures impractical or uneconomical to renovate and market to homebuyers or businesses. Additionally, Detroit Future City's land use plan has implications for future densities in certain areas, which has the potential to leave more structures without a use or purpose (DFC, 2013). The city's industrial infrastructure and building stock, high unemployment, low high school graduation rates, and lack of marketable skills within the labor force, position deconstruction as one possible way to mitigate blight and spur employment in the city.

Job Creation and Training

Deconstruction creates six to eight jobs for every job created by demolition (Delta Institute, 2013). Even if deconstruction activities are done intermittently or on a smaller scale, valuable construction skills can be developed, and workers trained in deconstruction may have an advantage in finding employment in other construction related fields.

Deconstruction is similar to other construction fields in that it has the potential to employ low- to semi-skilled workers, and no standard educational requirements have been identified. Reclaim Detroit currently works with the WARM Training Center (Weatherization and Retrofit Maintenance Training Center) to prepare employees for deconstruction activities (Reclaim

LOCAL CASE STUDY

Reclaim Detroit, an organization affiliated with Focus Hope, began deconstructing homes in 2011 and offers deconstruction services at the same price as demolition. The organization's goal is to deconstruct 15-20 houses per month, and they hope to be an integral part of the commitment made by current mayor Dave Bing to take down 10,000 structures by the end of his term in 2013. The reclaimed wood and materials obtained by Reclaim Detroit are sold out of their training center at Focus Hope's facility on Oakman Blvd. Sales of the reclaimed materials generate revenues needed to keep the business operating. The market for reclaimed goods is currently in a formative stage, but many homebuilders, furniture manufacturers, and other industries are utilizing more reclaimed wood in their products. (Reclaim Detroit, 2013).

Detroit, 2013). Potential may exist for JSCDC to collaborate with Reclaim Detroit and the WARM Training Center to bring training and employment opportunities to Joy-Southfield Residents.

Fit Within Joy-Southfield

Deconstruction companies can operate out of any open-plan or warehouse-style building. Generally speaking, larger buildings better accommodate a greater volume of building materials and have more space for displaying them for customers. Smaller warehouses create a need to move materials out more quickly, which can decrease their price and reduce revenues for the business (Haines, 2013). 10,000 to 20,000 square feet may best fit the needs of this industry, and currently there are several available buildings in the Joy-Southfield area of this size.

Deconstruction Recommendations

1. Have Reclaim Detroit assess buildings that are not marketable and are not cost-effective to restore.
2. Explore developing a relationship with the WARM training center to provide residents with training in deconstruction.
3. Advocate that selected buildings in the Joy-Southfield area be deconstructed, preferably by Joy-Southfield residents.

5.3 Retrofitting & Weatherization

Retrofitting and weatherization are both processes that involve modifications to existing buildings to improve energy efficiency and reduce a building's environmental impact. These two processes are often implemented in tandem. Retrofitting and weatherizing the existing building stock would have a major effect on total energy consumption and greenhouse gas emissions. Buildings currently account for 39% of energy use, 12% of water consumption, 68% of electricity consumption, and 38% of carbon dioxide emissions (Sharma, 2010).

Residential weatherization is a form of energy optimization that can help residents of a community become more aware of their energy usage and reduces their energy bills and carbon emissions. A basic weatherization package that includes an energy audit, customer education, and installation of more efficient compact appliances costs between $1000 and $1,300 for a home (Michigan Suburbs Alliance, 2012). A household saves between $300 and $450 annually after basic house weatherization (Michigan Suburbs Alliance, 2012).

After completing a weatherization project, average fuel consumption in the home is reduced by about 23% (Michigan Suburbs Alliance, 2012). Weatherization has the potential to reduce a household's CO2 emissions by about 1,300 pounds per year (Michigan Suburbs Alliance, 2012). Weatherization programs can also increase property values, reduce fire risks and provide jobs. Every dollar spent on weatherization returns $1.40 in energy savings and $2.73 in total benefits (Michigan Suburbs Alliance, 2012).

There are several types of weatherization projects for cities and homeowners to consider. Municipalities can conduct weatherization projects for an entire neighborhood. A partnership with the local utility company would be beneficial for this type of project. After hiring or contracting the necessary services and supplies, outreach teams are dispatched to targeted neighborhoods to educate residents and offer weatherization services for free or at a discount. The Department of Energy provides grants for weatherization projects, and utility companies such as DTE Energy also provide and support weatherization assistance.

Employment and Training

Employment data specific to weatherization is difficult to obtain, but according to the Bureau of Labor Statistics, construction had 487,709 green goods and services jobs in 2011, comprising 8.9 percent of the sector's employment. The sector had the largest increase in green goods and services employment from 2010 to 2011, up 26.4 percent (BLS, 2011). For every $1 million invested in weatherization, 52 direct jobs and 23 indirect jobs are created (Richards, 2012).

Even as construction activity slackened during the recent economic downturn, building retrofits remained a growing sector (Sharma, 2010). 21.5 new jobs are created nationally for every $1 million in energy efficiency investment (Richards, 2012). Green retrofits supported 2 million jobs nationally in 2012, and the number is expected to quadruple over the next four years (Green Building News, 2012). As the importance of green construction as a job creator grows, employment opportunities in the retrofitting and weatherization industry grow as well.

One local weatherization job training program is the non-profit, Detroit-based WARM Training Center (Weatherization and Retrofit Maintenance Training Center). Henry Ford Community College and the WARM Training Center offer the 10-week Weatherization Specialist Training Program, which provides participants with 320 hours of hands-on instruction in a range of weatherization occupations, including insulation, window installation, and energy efficiency basics (WARM Training, 2013).

Participants who complete this training program are prepared for a future in weatherization and may also be able to move into other energy sectors, including renewables and construction. Following the training, Southwest Solutions will provide additional services to participants such as employment assistance, transportation and housing assistance. The WARM training program has led to 180 jobs and 2,400 completed weatherization projects in Metro Detroit (Detroit Greenworks Solutions, 2013).

Fit with Joy-Southfield's Industrial Building Stock

Retrofitting and installation building operations need warehouse space and enclosed storage yards. JSCDC's service area has a substantial stock of industrial buildings with security fences that could be adapted to serve the needs of the retrofitting and weatherization business.

Recommendations

1. Collaborate with organizations conducting weatherization/ retrofitting training programs in order to develop a strong workforce that may be attractive to prospective companies and current employers.

Company Size (# of Employees)	Number of Retreading Establishments
1 to 5	219
5 to 9	110
10 to 19	140
20 to 49	110
50 to 99	13
100 to 249	5
TOTAL	597

Source: MIT, 2010

Table 5.5: Employment in Tire Retreading Establishments, 2010

5.4 Tire Retreading

Tire retreading is a combination of recycling and manufacturing. It involves a worn tire (called a casing) without much tread left being used again by applying a new tread to the old casing. Reusing the casing uses fewer raw resources and costs less than the manufacture of a completely new tire. Retreads save "hundreds of millions of gallons of oil in production, reducing carbon emissions, and reducing landfill" (Tire Retread and Repair Information Bureau, 2013). Most of the material used in tire manufacturing goes into the casing, and manufacturing a new tire uses much more oil than retreading. New passenger vehicle tires require 7 to 8 gallons of oil to make, while a retread uses 3 gallons (Tire Retread and Repair Information Bureau, 2013). A new truck tire uses 22 gallons of oil, while a retread requires only 7. Furthermore, discarded tire casings increase landfill volume (Tire Retread and Repair Information Bureau, 2013). Retreading saves consumers and companies nearly $3 billion annually in North America (Tire Retread and Repair Information Bureau, 2013).

LOCAL CASE STUDY

Union Truck Tire Service is a retreading factory in Ann Arbor. According to the company, tires are the third most costly line item in the operating budgets of the companies they serve, after labor and fuel, so money saved on tires has a significant effect on the bottom line. Retreads cost 30% to 50% less than new tires. (Union Truck Tire Service, 2013)

Employment

The Massachusetts Institute of Technology tracks tire retreading employment. See Table 5.5 for details.

In 2011 tire retreading employed 62 people at 3 total establishments in the Detroit-Warren-Livonia metropolitan statistical area (US Census, 2011). This number is small, but growing, and as the industry and market for retreads mature, it is possible that established tire businesses will diversify into retreading, joining new firms in the field.

A retread tech can earn $27,000 – $30,000, or $12 - $14/hour (Glass Door, 2013). A retread inspector can earn over $50,000 a year (Salary Expert, 2013). Some tire companies provide in-house training in retreading to entry-level employees, but there also may be a training gap hindering growth in this field.

Fit with Joy-Southfield's Industrial Building Stock

Tire retreading operations range in size from small shops to factories. The use of oil in the process generates odors that make a retread facility an undesirable neighbor for a home. The JSCDC service area does have a concentration of industrial property located away from housing in its southeast corner. The sector's scalability means that a large number of industrial buildings in the area could potentially host a tire retreading facility.

LOCAL CASE STUDY

Verndale Products Inc. is a milk powder manufacturer based in Detroit, Michigan. Its factory has been located on Lyndon Street since 1958. As a result of the growing demand for milk powder, Verndale Products Inc. will expand to a second site in the Joy-Southfield neighborhood, located in an old dairy-manufacturing facility (Verndale Products, 2013). The previous use of the building was a deciding factor for the company choosing to locate in the neighborhood. Verndale Products Inc. offers local jobs for residents that are hardworking and have a G.E.D. Certain positions require the technical skills necessary for food processing. (Verndale, 2013)

Recommendation

1. The area currently is home to several tire sale and repair establishments. These companies may be in a position to diversify into retreading, but may be poorly informed about the process. Reaching out to these companies and providing information on the economic opportunity of retreading may help grow this industry in the area from within.

Figure 5.2: Verndale Products

5.5 Green Food Processing and Production

Food processing is the transformation of raw foods into different products for sale. Today, much of our nation's food processing is undergone primarily outside of the local community. Community-based food systems have the opportunity to serve local

communities and provide workforce development opportunities. They also increase the local economic base by retaining food spending within the community (APA, 2007). Increasing local food production can increase neighborhood employment. Local food also production promotes environmental sustainability by requiring less use of energy, resources and transportation. It also helps combat the effects of climate change on the food system (EPA, 2011).

More precise metrics are needed to guide community and regional food-related economic development planning (APA, 2007). Food planning, to the extent that it exists, often does not consider direct and indirect impacts on the local economy. This lack of awareness of the economic significance of the food sector is partially due to the sector's fragmentation and the absence of an overall food planning agency or food department in government (APA, 2007). However, there is an understanding that globalization of food processing has reduced local job and employment opportunities (Schroeder, 2013).
Figure 5.3: A potential site on Weaver.

There is a national trend of moving to local food production. By localizing the food system, communities are able to stimulate their economic base and provide for a sustainable business environment (APA, 2007). Food processing allows for new workforce development opportunities. Food becomes a center for economic viability (APA, 2007).

5.3 A potential site on Weaver

Interest in developing the local food system is high in Detroit, and many local efforts to do so are underway. The most visible ones focus on food production and distribution, although food processing is also receiving attention.

Potential for food processing business in Joy-Southfield is less clear. Nonprofit activities and public sector support are prominent, and the outlook for for-profit food processing is hard to assess. Food processors often require very specialized facilities that individual firms will need to assess, as in the case of Verndale Products, Inc.

Occupations and Training

The food industry offers many opportunities to workers of all skill levels. There are many local and regional entry-level food processing positions. These include light processing jobs and retail jobs (Schroeder, 2013). Basic mathematics testing often occurs for entry-level employment. Technical jobs often include on-site training requirements for heavy processing. (Schroeder, 2013).

Recommendations

1. The local farmer's market provides one possible platform for promoting and expanding local food production and processing in the Joy-Southfield neighborhood. There may be potential to match the operations of vendors to local buildings. Developing a stronger local food system provides residents with access to locally grown food, supports the regional food system, has the potential to provide local jobs in the area and can enhance Joy-Southfield's image as the greenest neighborhood in Detroit.

2. JSCDC can work in partnership with groups and other community organizations to provide transportation assistance for residents to the neighborhood farmer's market. This will support the overall success of the market by increasing attendance by nearby residents.

5.6 Renewable Energy

Renewable energy encompasses a diverse array of technologies, including solar (photovoltaic, thermal), wind, biogas, geothermal, biomass, municipal solid waste, low-impact hydroelectricity, and wave/tidal power.
Energy efficiency is an important component in any viable plan designed to develop an energy resource such as solar or biomass energy. Energy efficiency ensures that energy created from both traditional and alternative energy sources is not wasted. Renewable energy provides environmental and economic benefits including generating energy that produces no unwanted GHG emissions and reduction of certain types of air pollution, diversifying energy supply and a reduction of dependence on imported fuels, and creating economic development and jobs manufacturing, installation and more. Improved energy efficiency magnifies the benefits of using renewable energy sources.

Solar

Solar photovoltaic (PV) and solar water heating installation are renewable energy industries that have opened the door for job training and business development. According to the Bureau of Labor Statistics (BLS), employment in the solar industry will continue to grow, and solar energy projects will continue to require skilled workers to install, maintain, and service solar energy systems. Under the state's Renewable Energy Standard (RES), all of Michigan's utility companies must source at least 10 percent of their energy from renewable sources by 2015 (Southeast Michigan Regional Energy Office, 2013). As of late

LOCAL CASE STUDY

E-Three Labs in Detroit is a non-profit community development organization that equips young adults in developing communities with technical training and skills to use in supporting local businesses. E-Three labs has created a Detroit Solar Install class as part of their 21st century skill development. E-Three Labs is partnering with Detroiters Working for Environmental Justice (DWEJ) and Wayne County Community District (WCCD) to provide solar training. The training program will also develop "in-house" solar technicians that will be capable of designing, installing, and supervising future projects for E-Three Labs. With help from a grant from the Wedge Foundation, the class is designed to address the unemployment issue in Southeast Michigan by presenting 21st century technical job skills in the alternative energy field. Michigan Works! will provide tuition for students who qualify for training dollars allocated for unemployed workforce development initiatives throughout the state of Michigan (WARM Training Center, 2013).

2011, only 4 percent of the state's energy came from renewable sources, leaving a great deal of ground to cover (Southeast Michigan Regional Energy Office, 2013).

This is important because it paves the way for job development and training in the renewable energy sector, and specifically solar energy. Given the trend in government incentives, analysts expect the solar power industry to continue to grow rapidly (Southeast Michigan Regional Energy Office, 2013). The American Planning Association has published a comprehensive solar energy development report that concentrates on planning and zoning for solar energy, and the Michigan Workforce provides resources for solar projects in local Michigan communities. Both of these sources provide direction and guidance for attracting solar power business and workforce development.

Uncertainty about the prospects of this sector hinges on its reliance on the state mandate, since support for the mandate may erode if renewal sources' cost compares more unfavorably with the prices of alternative energy sources, especially natural gas, whose price has fallen sharply in recent years.

Employment

The U.S. Bureau of Labor Statistics does not publish employment data on Solar PV installers. However, industry sources suggest that there are roughly 7,000 solar PV installers, also known as solar photovoltaic technicians or solar installer roofers, in the United States (U.S. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2012-13). This is not a large number nationwide, however, according to the BLS this number is growing, and as solar permitting in Michigan allows for more solar projects, the workforce will certainly expand. As the use of solar power and solar projects expands, the job tasks of solar PV installers are evolving. Some workers will concentrate solely on installing the panels, and others will work on things such as sales, planning and wiring. Experienced installers may advance their careers to system designers, sales representatives, and other skilled positions.

Solar PV installers need mechanical skills and should be able to work with power and hand tools. Basic electrical and mathematical skills are helpful. Attention to detail is important, as often installers have to follow detailed diagrams and directions. Heavy lifting and climbing to high areas is also required of the job. Most solar PV installers have a high school diploma and mechanical, electrical, or related experience. Those with construction backgrounds are well suited for the work, and roofing experience is particularly useful. Voluntary certification is also available and is sometimes required. Industry analysts estimate that wages for entry-level solar PV installers are about $12 to $15 an hour (Occupational Outlook Quarterly, Fall 2009). A strong solar workforce education and training program is a critical component in developing a local solar energy industry and sustaining jobs, and this is the case within the Joy/Southfield Community as well. Training programs such as the E-Three Labs partnership with DWEJ and WCCD help ensure consistent solar installation consistency from workers, can help drive growth for further solar installations and projects, and create further opportunities for potential businesses and job development (E-Three Labs, 2013). In addition, solar energy training can jumpstart the careers of individuals formerly employed in the electronics, construction, and manufacturing industries and provide further employment and opportunities for residents of the Joy-Southfield community who receive training in this renewable energy sector.

Recommendation

1. Identify organizations in the region that conduct training and education in solar energy. Collaborate with these training programs to identify needs and barriers for the development of a strong solar workforce within the community.

5.7 Urban Forestry

Urban forestry is defined as "…managing trees and natural systems in and around urban areas for the health and wellbeing of communities." This involves managing parks, green spaces, tree lined streets, and private property (Sustainable Cities Institute, 2013).

The environmental benefits of urban forestry include improved air quality through mitigation of greenhouse gasses reduction of storm water runoff, improved water quality, and reduced heat island effect (where asphalt traps heat, contributing to smog and global warming). Forestry also reduces erosion, remediates toxins, and protects wildlife and biodiversity. The economic benefits include increased property values, businesses being more inviting to customers, and reduced heating and cooling costs (Sustainable Cities Institute, 2013).

Employment

Generally, cities of 500,000 to 1 million can support an average of 22 municipal jobs in urban forestry. Prospective employees in Urban Forestry require certain skills.

Fit with Joy-Southfield's Open Land and Industrial Building Stock

Urban forestry and landscaping businesses need open land for a nursery. There is no need for a security fence, as assets (trees) are fixed in place. Large vacant parcels and parcels with buildings surrounded by large tracts of vacant land are ideal. The JSCDC service area has 15 industrial parcels with some potential to house urban forestry operations.

However, JSCDC's initial interest in horticulture industries was linked to the presence of substantial vacant land outside the industrial area that also presents opportunities for green infrastructure and carbon forests. Firms in this industry might prefer that location if large enough parcels could be assembled, and JSCDC would like to assess the potential to assemble parcels suitable for horticultural uses.

5.8 Green Battery Manufacturing

The resurgence of interest in electric cars has increased demand for green battery manufacturing. Electric cars and their batteries are green assets because they do not generate pollution while they are in use. However, the manufacture of batteries causes green house gas emissions. A 2011 study in Switzerland compared emissions of electric cars to emissions of economic gas cars and found that electric cars still had a

Occupation	Education Required	Pay Range
Ground Worker	Diploma or GED	$21,000 - $32,000
Trimmer	Diploma or GED + 1 year experience & CDL	$23,500 - $36,000
Tree Crew Leader	Diploma or GED + 2 years experience & CDL	$28,000 - $43,700
Forestry Supervisor	Diploma or GED + 5 years experience, CDL & ISA certification	$30,000 - $46,000
Urban Forester	BA, driver's license, state certification in pesticide application, ISA certification	$40,000 - $65,000

Source: APWA, 2013

Table 5.6: Occupations in Urban Forestry

positive environmental affect compared to traditional vehicles. Electric car batteries are also 100% recyclable (Science Channel, 2013).

LG Chemical in Holland, MI is a green battery manufacturer specializing in car batteries. Production of these batteries will begin later this year. The company received 150 million dollars from the federal American Recovery and Investment Act (Crain's, 2013). Other battery companies have gone into bankruptcy because there has been too much production and not enough demand due to weak electric car sales (Dawid, 2012). According to some sources, battery prices could drop a great deal making electric cars competitive soon (Plumer, 2012).150 people are employed at LG Chemical (Harger, 2013).

However, green battery production has been more reliant than other industries considered on public subsidies, which is a source of vulnerability. Job growth in this field has been slow, and while the industry has great potential for the future, is it not a promising near-term prospect.

The typical green battery employee makes $31,000 annually in this field according to indeed.com. According to the Holland Sentinel, technical operators receive $11.50 to $14.00 per hour (Daining, 2011). A technical operator needs to have a high school diploma or GED. A 2 year technical degree is preferred but not necessary (LG Chem, 2013).

Green battery manufacturing uses a very large facility. LG Chemical uses a 600,000 square foot facility. Smaller battery manufacturing operations may still need significant space. The building also needs to be along transportation routes due to shipping and receiving. The parcel survey of properties showed that there are no buildings of adequate size for green battery manufacturing at present, suggesting that a firm in this field that is considering Joy-Southfield may have to restrict the size of its operations if it wishes to find suitable space or build a new factory on a large vacant parcel. There is, however, some potential for smaller battery operations, such as refilling/recharging stations to locate in the area as the market for electric cars matures.

5.9 Vocational Training Programs

From 2000 to 2010, the Joy-Southfield community huge increases in unemployment. Fewer than ten percent of area residents have degrees (ACS, 2010). Residents who have either a high school diploma or GED, or some college and no degree could benefit from being connected to green industry training programs available to Detroiters.

The Detroiters Working for Environmental Justice (DWEJ) is a notable example of vocational training that has been extremely successful. The program trains individuals for "green collar" jobs and is focused on turning the city's 50,000 Brownfield areas into green assets. The training allows participants to become certified in a number of green specific areas: HAZWOPER (Hazardous Waste Operations and Emergency Response), Lead Worker, Asbestos Worker, and OSHA 10 (Occupational Safety and Health Administration, US Department of Labor, safety and health hazard prevention). It also prepares participants for deconstruction and environmental assessment jobs (Detroiters Working For Environmental Justice, 2013).

Another training program is offered by WARM which has a weatherization specialist training program. It involves MIOSHA training (Michigan Department of Labor and Economic Growth Occupational Safety and Health Administration) as well as training in energy efficiency, insulation, window installation, construction basics, air sealing techniques, power tool use, and CPR. The training equips participants for jobs in weatherization with the skills and ability to advance (WARM Training, 2013).

Jobs for the Future focuses on providing economic opportunity for low skilled residents and facilitates employer-responsive green sector job training. Current efforts focus on meeting demand for workers in the fields of energy efficiency, deconstruction, and Brownfield remediation (Jobs for the Future, 2013).

In addition to these training sources, Detroit Greenworks Solutions gives free training in weatherization/deconstruction and landscaping/forestry, facilitated by Henry Ford Community College and WARM (Detroit Greenworks Solutions, 2013). The Greening of Detroit also offers training through its workforce development program which leads to certifications in agriculture and landscaping (Greening of Detroit, 2013).

Attracting and Promoting Green Industry

5.10 Short-Term Recommendations

The short-term recommendations presented below are actions that JSCDC can engage in to lay the groundwork for the growth of a green economy in the area. JSCDC may not have the capacity to engage in each of these actions on its own, and where possible, this report identifies potential partners with which the CDC may be able to share the work.

1. *Explore Partnerships with Established Green Industry Organization*s - As Joy-Southfield explores ways to bring green companies to the area, it will not be necessary to start from scratch. Potential partners that may be able to guide the area's initial efforts include :

A. Recycle Here! – A City of Detroit drop off recycling program
B. Reclaim Detroit – A deconstruction non-profit that can complete cost-benefit assessments of specific buildings in the Joy-Southfield area
C. Green Garage – This organization has served as a successful incubator for green businesses
D. Organizations with established green jobs training programs, including Detroiters Working for Environmental Justice, the Weatherization and Retrofit Maintenance Training Center E-Three Labs, Jobs for the Future, and Detroit Greenworks Solutions

2. *Host a Green Jobs Fair within the Community* – As the CDC and its partners build ties to green industry in the region, it may consider attempting to draw green industry to the neighborhood for an event that would expose these businesses to the local workforce and offer residents a chance to contend for open green jobs. The challenge here will be to build a case to employers that the workers drawn to the event will align well with their business needs.

3. *Connect Prospective Green Businesses to Information Resources* – While the CDC may not have the in-house capacity to serve as an information clearinghouse for green businesses, it can identify information sources and respond to the information needs of firms by connecting businesses with other organizations.

4. *Obtain and Organize Data Pertaining to the Most Recent Uses of Vacant Industrial Buildings* – Adding most recent uses to the land inventory database that accompanies this report may equip the CDC to answer questions from firms about the neighborhood's existing industrial building stock. One of the key reasons Verndale Products chose to expand to this

community was because they found a building that was a former dairy operation, and the building had many components that reduced the renovation and upgrade costs for the company. Knowing more about the previous uses of the buildings in the area could help the CDC and its partners to quickly answer questions about existing buildings. This could be accomplished by researching what companies are current or former owners of these properties.

5.11 Long-Term Recommendations

The long-term viability and growth potential of any concentration of green industry that develops in the area will require certain support systems. While it may fall outside the scope of the CDC's capacity to achieve any of these conditions on its own, these long-range issues should be considered. It may be possible to seek productive partnerships that will help meet these standards.

1. *Explore attracting local venture capital to invest in green start ups and expansions* – Significant start-up and expansion costs are common in many green industries, particularly renewable energy. Venture capital investment in clean technology has been substantial, particularly in biofuels, fuel cells, and wind and solar power (Delta Redevelopment Institute, 2009). Investor networks have formed in the Midwest, and it may be beneficial for JSCDC to serve as a partner in attempting to access these funds for green business development.

2. *Encourage Local Banks to Establish Green Business Loan Programs* – Several national banks such as bank of America and Citi-Group have set aside funds to invest in green specific businesses, and other locals have explored engaging local banks to establish similar practices (Delta Redevelopment Institute, 2009). There are many barriers green businesses face in financing, such as the nature of the business, the size, and investor perceptions (Ong, 2006). Advocacy in the local banking system may help in accessing capital for business to develop or relocate to the Joy-Southfield neighborhood.

3. *Draw on the Manufacturing Presence in Detroit to Support Small to Mid-Sized Green Manufacturers and Energy Producers* – Smaller scale manufacturers and energy producers struggle with several production aspects, such as retooling and manufacturing precision parts. Larger suppliers and manufacturers could be identified and courted in an attempt to provide business development assistance to smaller green start-ups (Delta Redevelopment Institute, 2009).

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APPENDIX

Appendix 1.1: Survey Protocol Flowchart

Certain portions of the analysis in the Downtown Development and Green Industry Development chapters of this report required a thorough knowledge of the conditions and occupancy status of commercial and industrial properties in the JSCDC service area. To facilitate that analysis, a commercial and industrial property inventory was created using a SmartPhone application developed by LocalData.

The app allowed the team to survey parcels on-site, assessing their occupancy status and other characteristics, such as whether the parcels had on-site parking, security fences and lighting. The condition of each building was assessed on a qualitative scale ranging from Good to Demolish.

Figure 1 shows the flowchart that was used to determine the order of questions for the surveyer.

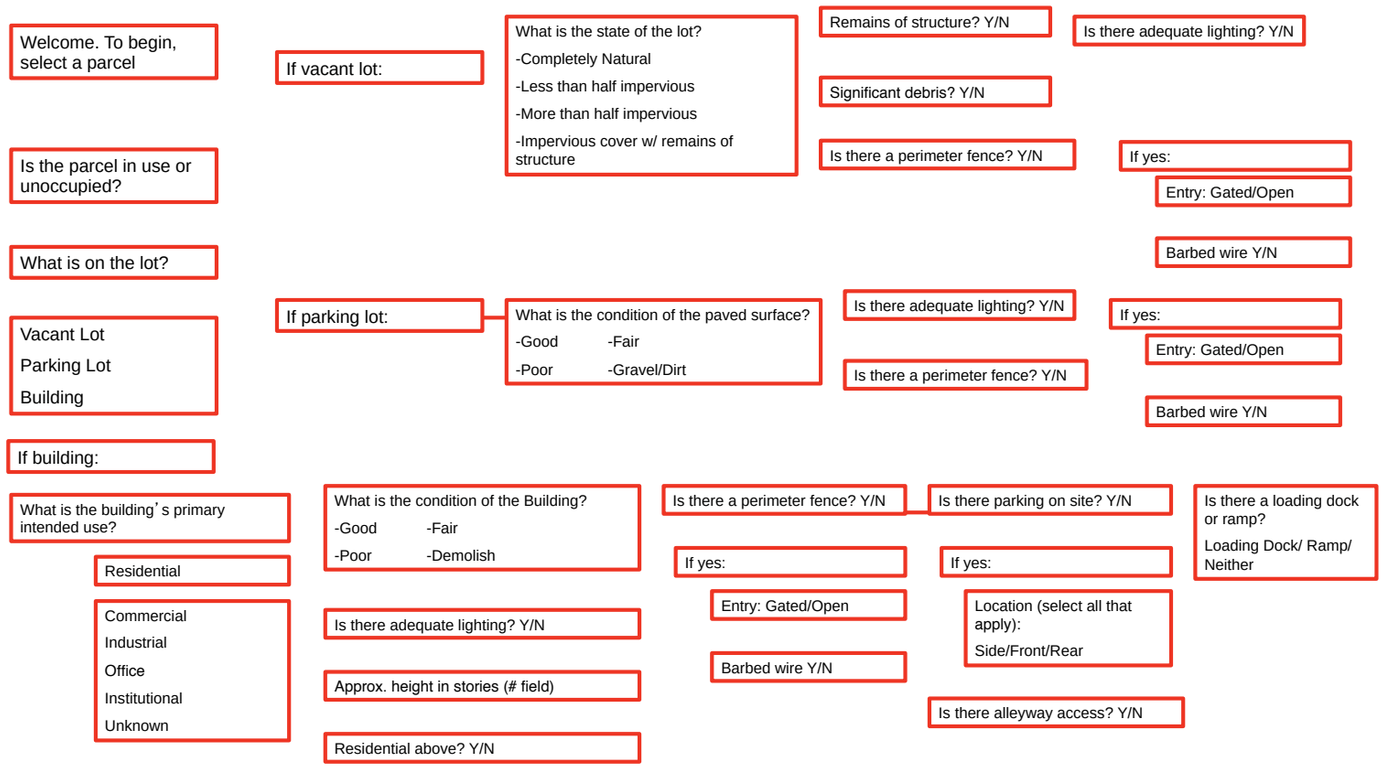


Figure 1: App Protocol Flowchart

Appendix 1.2: Survey Protocol Definitions and Examples

Pavement Condition

Pavement Condition: Good
• Surface is smooth with very little cracking. Parking lines still visible, curbs and parking blocks are in place and structurally sound. No visible drainage issues.

Pavement condition: fair
Surface has begun to break down but is still functional. Cracking and previously patched areas may be present but no major structural problems are present.

Pavement condition: poor
• Asphalt/concrete is severely deteriorated, surface is full of cracks, ruts, and potholes. Lot may also contain crumbling curbs or parking blocks as well as weeds growing up trough the surface.

Building Condition

Building condition: good
• Buildings are clean, structurally sound, well-kept, free of graffiti, and secured. No more than two minor repairs (some paint needed.) Lots are actively used and well maintained, grass cut low, and landscaping/gardens present.

Building condition: Fair
• Building requires three or more minor repairs (or one major repair.) Structurally sound and can still be rehabilitated fairly inexpensively (repair door, window, porch.) Lot is less well maintained, but still attended. Parking lot may have small amounts of debris or grass on it.

Building condition: Poor
• Only a few signs of maintenance. May not be structurally sound, major repairs needed (broken windows, missing door, broken façade, porch missing, poor roof condition.) Building needs major repairs. Lot has few signs of maintenance, tall grass. Parking lot may be significantly cracked or has debris or weeds on it.

Building condition: demolish
• Building needs to be demolished, may pose safety risks. Not structurally sound (major fire damage, roof caved in, leaning structure.) Dumping or large amounts of debris present.

In case of two buildings
• In the rare scenario that two buildings are present on the same parcel, the surveyor should only complete a single set of questions with answers representing the average conditions and characteristics of the two buildings.

- Types of surfaces
- Impermeable
- Permeable
- Lot Condition
- Good
- Fair
- Poor

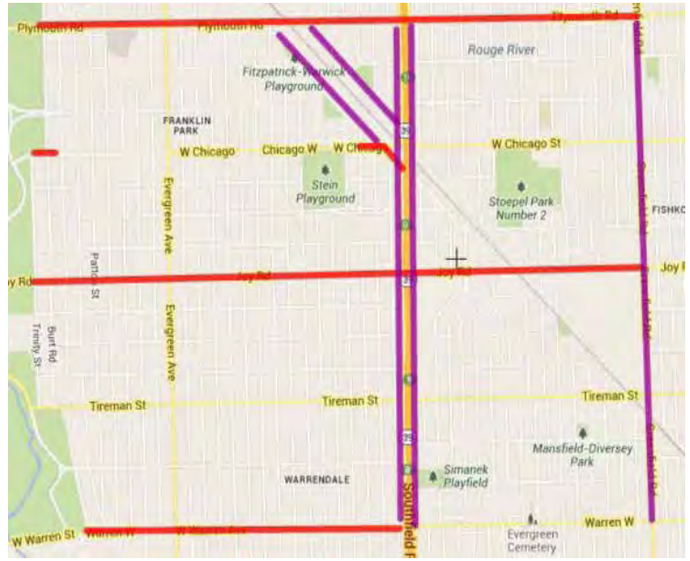


Figure 2: App Data Gathering Areas

Appendix 2.1: Local Business Association Examples

EIGHT MILE BOULEVARD ASSOCIATION (Eight Mile Boulevard Association N.p., n.d. Web. 27 May 2013. eightmile.org)	
Structure	Michigan non-profit corporation, 501©(3)
Area	8 Mile stretch from 1-94 to 1-275
Accomplishments	• Façade Improvements • Code compliance program • Corridor clean ups • Awarded nearly $4 million in grants since founding in 1993 • Planted and maintain 29 perennial gardens • Maintain 11 identification signs • Beautification Awards for businesses • Leadership Luncheon, in which invite several prominent Metro-Detroit leaders. • Annual public safety forum • Formation of a title holding company to acquire property for development • Quarterly newsletter, including membership recognition • Notifications about upcoming events in the area • Discounted rates for 8MBA services and events • Membership dues ranging $28 – $1,008 are tax deductible • Currently 216 members • 10+ sponsors

SOUTHWEST DETROIT BUSINESS ASSOCIATION ("Southwest Detroit Business Association." *Southwest Detroit Business Association*. N.p., 16 Apr. 2013. Web. 24 May 2013. Southwestdetroit.com)	
Structure	Independent non-profit
Area	Southwest Detroit
Accomplishments	• Façade Improvement program • Code compliance program • Corridor clean ups • Several networking events • Financial consultation • "Savor Southwest Detroit" campaign to promote area restaurant, bakeries, and grocery stores to visitors • Involvement in other issues affecting the community and Greater Detroit, such as transportation. • Membership dues are $105 annual base + $5 per each employee • Currently 146 members • 10+ sponsors

ARAB AMERICAN AND CHALDEAN COUNCIL – SEVEN MILE PROJECT ("The Seven Mile Project | MyACC.org." *The Seven Mile Project | MyACC.org*. N.p., n.d. Web. 26 May 2013. http://www.myacc.org/programs/seven-mile-project/)	
Structure	Program within the Arab American and Chaldean Council
Area	Seven Mile between John R and Woodward
Accomplishments	• Façade Improvement program • Corridor clean ups • Community meetings • Creation of youth and recreational center • Pocket park • Streetscape improvement initiative

MACK AVENUE BUSINESS ASSOCIATION ("Commercial Revitalization." *Warren/Conner Development Corporation*. N.p., 2013. Web. 19 June 2013. http://www.warrenconner.org/warrenconner/?page_id=155)	
Structure	Program within the Warren/Conner Development Coalition
Area	Mack Avenue from Cadieux to Conner
Accomplishments	• Façade Improvement program • Corridor clean ups • Technical Assistance • Vacant property board-up volunteers • Marketing efforts to draw attention to the corridor

Appendix 2.2: Small Business Funding Sources and Links

SBA 7(a) Loan Program
http://www.sba.gov/category/navigation-structure/loans-grants/small-business-loans/sba-loan-programs/7a-loan-program

The 7(a) Loan Program is SBA's primary program for helping start-up and established small businesses, with financing guaranteed for a variety of general business purposes.

SBA 504 Loan Program
http://www.sba.gov/category/navigation-structure/loans-grants/small-business-loans/sba-loan-programs/real-estate-and-eq

This program provides small and medium sized businesses with long-term fixed rate financing for the acquisition or construction of fixed assets.

Microloan Program
http://www.sba.gov/content/microloan-program

The Microloan program provides loans up to $50,000 to help small businesses and certain not-for-profit childcare centers start up and expand.

Capital Access Program
http://www.michiganadvantage.org/capital-access-program/
The Capital Access Program uses small amounts of public resources to generate private lender financing, providing small businesses in Michigan access to capital that might not otherwise be available. Similar to a loan loss reserve fund, the bank, the borrower, and the MEDC pay a small premium into a reserve that makes it possible for the borrower to receive financing.

Appendix 2.3 Business Association Directory Example

Joy-Southfield Business Association

18917 Joy Road Detroit, MI 48223 · (313) 581-7773 · contact@joysouthfield.org · joysouthfield.org

We're committed to your community, and joining is easy!

- Receive updates about the upcoming construction along Joy Road.
- Be eligible to receive funding for façade improvements.

Potential Members

Automotive

Am Paul Car Wash
19320 Joy Rd.

BP Gas Station
18137 Joy Rd. (313) 271-3264

Joy Auto Center Complete Care
18540 Joy Rd.

Look No Fault Auto Insurance
18639 Joy Rd. (313) 846-5600

Marathon Gas Station
19650 Joy Rd. (313) 272-6625

Mobil Gas Station
2000 Joy Rd. (313) 272-7165

Mock's Auto
18640 Joy Rd. (313) 273-5000

Moe's Auto Services
19349 Joy Rd. (313) 945-0272

Motor City Collision
18200 Joy Rd. (313) 653-8440

Sky Auto Sale
19439 Joy Rd. (313) 582-2222

Sunoco Gas Station
19839 Joy Rd. (3131) 582-1331

Tel Joy Auto Parts
19501 Joy Rd. (313) 582-2100

Tire Repair Shop
20110 Joy Rd.

Tony's Auto Tech
18743 Joy Rd. (313) 945-8537

Tony's Hand Carwash
20125 Joy Rd. (313)

V&F Collision
19101 Joy Rd. (313) 584-3960

Bars

Joy Club Longue
18434 Joy Rd. (313) 835-2200

Club Topaze
19618 Joy Rd. (313) 837-1240

Beauty & Grooming

Chic Finish Hair & Nail Salon
19625 Joy Rd. (313) 208-3289

Emani's Barber & Beauty Shop
19236 Joy Rd. (313) 270-3774

Flawless Cuts
18450 Joy Rd. (313) 683-4364

K&S Cuts and Stylez
19234 Joy Rd. (313) 838-8055

Linda's Palace Barber & Beauty Shop
19315 Joy Rd. (313) 581-1661

New Focus Hair Designs
18201 Joy Rd. (313) 336-8440

Principles Hair n Nail Salon
19320 Joy Rd.

Smitty's Unisex Barber & Beauty Shop
19629 Joy Rd. (313) 581-7133

Supreme Clientele
18444 Joy Rd. (313) 270-2727

Child Care

Care-Lot-Academy
18451 Joy Rd.

Little Stinkers Daycare and Learning
18637 Joy Rd. (313) 436-1204

Grocery & Beverage

ABD West End Liquor Store
19201 Joy Rd. (313) 846-1222

Big Daddy's Liquor Store
18549 Joy Rd. (313) 584-5088

Brooks Candy Store
19623 Joy Rd. (313) 582-5649

Da Hook Up
19316 Joy Rd. (313) 397-7153

J&S Liquor Store
18244 Joy Rd. (313) 838-0683

Liquor Palace
20110 Joy Rd. (313) 273-1300

Pine Lake Market
19300 Joy Rd. (313) 273-0670

Sweet Tooth Candy Store
19232 Joy Rd. (313) 838-8055

Three Brothers Party Store
19540 Joy Rd. (313) 272-2977

United African Market
20139 Joy Rd. (313) 945-5576

Restaurants

A&G Lunch
19214 Joy Rd. (313)

Bebe's Open Pit
19331 Joy Rd. (313) 581-0473

China Garden
19641 Joy Rd. (313) 584-0101

Exclusive BBQ
19522 Joy Rd. (313) 937-4451

KB's Corned Beef & Deli
18701 Joy Rd. (313) 581-8114

L. George's Coney Island
20003 Joy Rd. (313) 581-3136

McDonald's
18137 Joy Rd. (313) 336-2318

Mike's Coney Island
19241 Joy Rd. (313) 581-2844

Subway
18334 Joy Rd. (313) 493-8973

Retail

Dollar General
18209 Joy Rd. (313) 931-2566

Dollar Value Plus
18938 Joy Rd. (313) 653-4910

Family Dollar
19848 Joy Rd. (313) 835-5452

Specialty Services

All Cellular
18643 Joy Rd. (313) 846-3477

Andrew Party Rental
19114 Joy Rd. (313) 838-5551

Dog Training Place LLC
19327 Joy Rd. (313) 581-750

Piedmont Video
19147 Joy Rd. (313) 584-6666

Rent-A-Center
18310 Joy Rd. (313) 835-7600

Appendix 3.1: Design Appendix

Green Infrastructure Recommendations

To go completely green, Joy-Southfield will have to consider all aspects of the physical environment. This includes developing the entire public right-of-way with green infrastructure. This includes all elements that reduce stormwater run-off into the Rouge River. Proposed curb bulb-outs and curb cuts with bio-retention capabilities would greatly reduce the amount of rainwater overflows entering the Rouge River on an annual basis.

Green infrastructure features to include in the project:
• **Tree wells**, that will help green the area, reduce run-off and make it more aesthetically pleasing
• **Porous pavement**, which will help reduce run-off;
• **Bioswales**, which are filtering systems of vegetation and rip-rap that are put on a gentle slope to prevent pollution from going into waterways.

A suggestion for tree wells is to contact the Greening of Detroit for assistance in securing trees along the roadway. In 2013, the Greening of Detroit targeted the Joy-Southfield area for tree plantings on vacant residential lots; Joy Road would complement these efforts.

Pocket parks could be created on vacant parcels devoid of structures. Pocket parks, while adding to the beauty of the corridor and increasing the streetscape, would also help to keep rain water out of the sewer, especially when featuring a rain garden. Although pocket parks are not apart of a Complete Streets plan they can become an important aesthetic and community fixture and work with Complete Streets elements to improve the overall public space in an area.

Issue: Right of Way Access

Complete Streets design generally minimizes the disruption of the sidewalk. The biggest disruption comes in the form of right-of-way access, or driveways. Because there are many businesses on Joy Road and a large number of surface lots, there are many driveways. While most businesses do not require multiple driveways onto Joy Road and the surrounding roads, there are many parking lots that have multiple access

Figure 3:Right-of-way

points that have the potential to be reduced, including some access points that exist illegitimately.

Removing unnecessary rights-of-way will help further the Complete Streets design, improving pedestrian safety, leaving space for more on-street parking, and improving aesthetics.

The images above show driveways that could potentially be reduced in number. There was previously an access point off of the side road that still has the potential to be re-implemented.

Where feasible, it is recommenedd that businesses with multiple entry points into their parking lots eliminate the one or several access points off of Joy Road and utilize the points on side streets. Business could also use rear parking lots, alleyways, and utilize the on-street parking.

For those rights-of-way that cannot be eliminated the streetscape project should work to soften those points. Ensuring that the sidewalk is continuous while crossing driveways, stamping the pavement for the sidewalk user so they know they are going over a driveway , and making the angle of the entry sharper on access points to slow down drivers, are all options to keep the sidewalk continuous for the non-automobile user.

Businesses eliminating right-of-way access points in favor of Complete Street access have the potential to better utilize on-street parking that creates faster turn around of patrons and clients. Access to on-street parking may also improve property values for commercial properties.

Figure 4:Right-of-way

Façade Design Guidelines

A part of the long-term strategy would be to implement façade design standards for businesses as shown in figure 5. This would reinforce the Complete Streets work and develop a cohesive streetscape and ultimately brand the corridor. These façade guidelines would require recommendations and feedback from the business association to make it feasible to further the streetscape but also get buy-in from the businesses.

Community Education

A major part of the design process is to educate the community about the designs. The components of the Complete Streets project including bike lanes and pedestrian walkability increase safety, usage, and could potentially increase retail sales among the roadway. Educating the community is an important aspect of this project and should be integrated into the process. Much of the education could be done through the recommended business association.

Potential Design Phases

Figure 5 shows phases that JSCDC could use to move forward with the proposed Complete Streets development, should the recommended designs not work out. The designs are designated by “Good, Better, Best.” Meaning the first will be good for the community and begin to accomplish the goals that it has set out to do, and then the second and final options will expand upon that and advance the goals of the community.

Appendix 3.2: Example Facade Design Guidelines

Existing Building Neighborhood Design
Joy-Southfield Community Development Corporation

About This Document

This document is a part of an effort by the Joy-Southfield Community Development Corporation to a establish design guidelines that will present our neighborhood as a cohesive network of people, families, businesses and organizations. Given your cooperation we may foster an environment that is friendly, clean, safe and something for which we can all be proud.

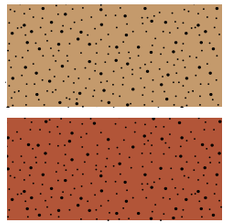
The following guidelines are specifically for businesses and organizations operating within an existing building in the Joy-Southfield Development Corridor.

Facades

To reinforce our image as a green corridor, facade materials and colors should be reflect natural tones. Please choose from the following:

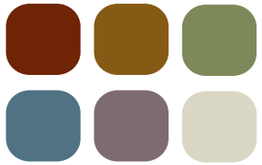
BRICK

Brick should be traditionally red or tan:



PAINT

Choose two of the following colors as a primary and accent pairing:



WOOD

Reclaimed wood is an excellent example of a renewable and recycled facade material.

[Appropriate examples would be compiled by buisness association and included in this document]

Lighting

Light should be evenly spaced every 8’ and at a height range of 12’ - 15’ from grade level. Please choose from the following:

Solar Lights

There are many solar powered options that can be cost effective and promote green products and infrastructure.

Goose-neck Lamps

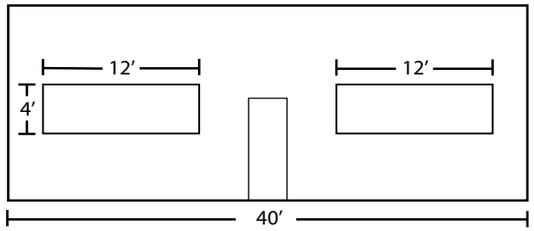
Goose-neck light is modest and reduces light pollution.

Creative Lighting

Certain building uses may benefit from creative light solutions that attract customers and provide safe street light. These designs are welcome and encouraged but are subjet to business associaiton review.

Windows

Windows are an important aspect of an inviting neighborhood street. For any building frontage facing a major road or arterial street, windows should comprise 60% of the length and be at least 4’ in height. Doors do not count towards the window requirement. Exceptions may be granted if windows are demonstrated to negatively impact operation of the business in question. See example below:

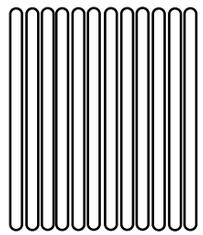


Total Window Length - 24’
÷
Total Building Length - 40’
=
0.6 or 60%

Fencing

Fencing is permitted, but limited to wood or metal line fencing. Maximum height is 8’. No minimum. Wood fencing should not exceed 50’ in length along a roadway. Exceptions may be made by allowing a mural or other approved street art. Chain-link and barbed wire is not permitted.

Wood



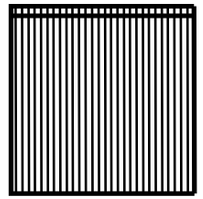
Should not exceed 50’ in length.

Should not exceed 8’ in height.

Natural color with weatherproofing is preferred.

Colors are permitted as long as chosen from facade paint section.

Metal Line



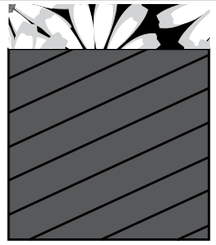
Should not exceed 8’ in height.

Black or white in color.

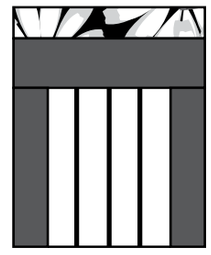
Planters

To add to the streetscape and reinforce the green corridor image, planters are recommended every 20’ starting 25’ from the block corner. Plantings will be seasonally selected by the Business Association. Planters may be self constructed or the Business Assocation will provide at a charge. Two designs are recommended and cut-plans and included in the appendix. [Design would be decided by Association members]

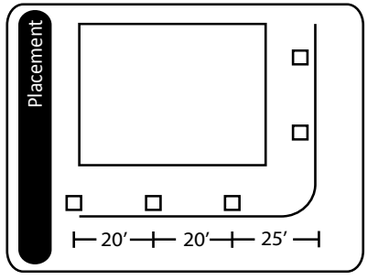
Box Planter



Bike Rack Planter

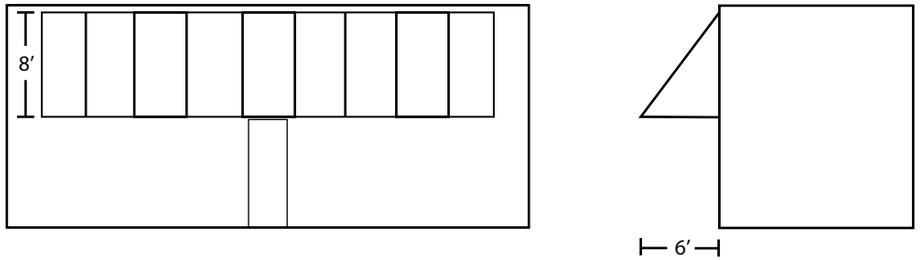


Placement



Awnings

Awnings are allowed, but not required. There are minimums or maximums for the length of the awnings, but the height it limited to 8′ and the overhang should not exceed 6′. Colors are limited to those in the facade color guidelines.

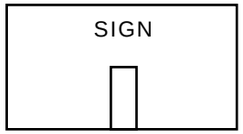


Signage

Wall, projecting and monument signs are all-permitted. There are no specific guidelines for sign design or dimensions, but are at the discretion of the business association.

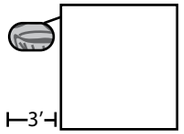
Wall Signs

Wall signs are preferred. Signs should **not:** be larger that 3′ in height, consume more than 40% of the length of the building, or project more than 16″ from the building facade.



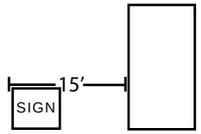
Projecting Signs

Projecting signs are allowed as long as they do not extend more than 3′ from the building.



Monument

For buildings setback more than 15′ from the sidewalk, a monument sign may be used. The body of the sign should meet the ground and not exceed 4′ in height.



Doors

Doors must comply with City of Detroit Building Codes. The entrance to any Joy Road business must be along Joy Road. Doors should include a window that allows shoppers to see into the business. Acceptible door designs:

Vacant Parcel Design Concept

Joy-Southfield Community Development Corporation

About This Document

This document is a part of an effort by the Joy-Southfield Community Development Corporation to a establish design guidelines that will present our neighborhood as a cohesive network of people, families, businesses and organizations. The following are a compilation of ideas that may be applied to vacant parcels along Joy Road in a effort to maintain the desirability and walkability of the corridor. Implementation of these ideas should be subject to the permission of the property owner.

Pocket Park

Pocket parks are small scale parks that vary in usage, permanance and cost. In the Joy Road corridor, pocket parks may be implemented with some lot maintenance and a few benches and then monitored for usage. Consistent usage may warrant more significant plantings or programed events. Due to cost, the location of a pocket park should be carefully considered and agreed upon by business association members.

Team Generated Concept

http://www.openideo.com/open/localfood/concepting/vacant-lot-farmer-s-market-community-pocket-park-for-the-perfect-picnic

http://www.pps.org/great_public_spaces/one?public_place_id=548

Food Truck Court

The farmer's market across from the CDC has demonstrated a productive use for an underutilized parking surface. A food truck court may work similar to the market, provide a variety of dining experiences for area residents and has the potential to demonstrate the feasibility of additional restauraunts succeeeding along the Joy Road corridor. There are many food trucks in the Detroit area that could help make a food truck event successful.

http://blog.pureandsimpleorganizing.com/2013/04/19/foodie-friday-food-truck-friday/

Community Garden

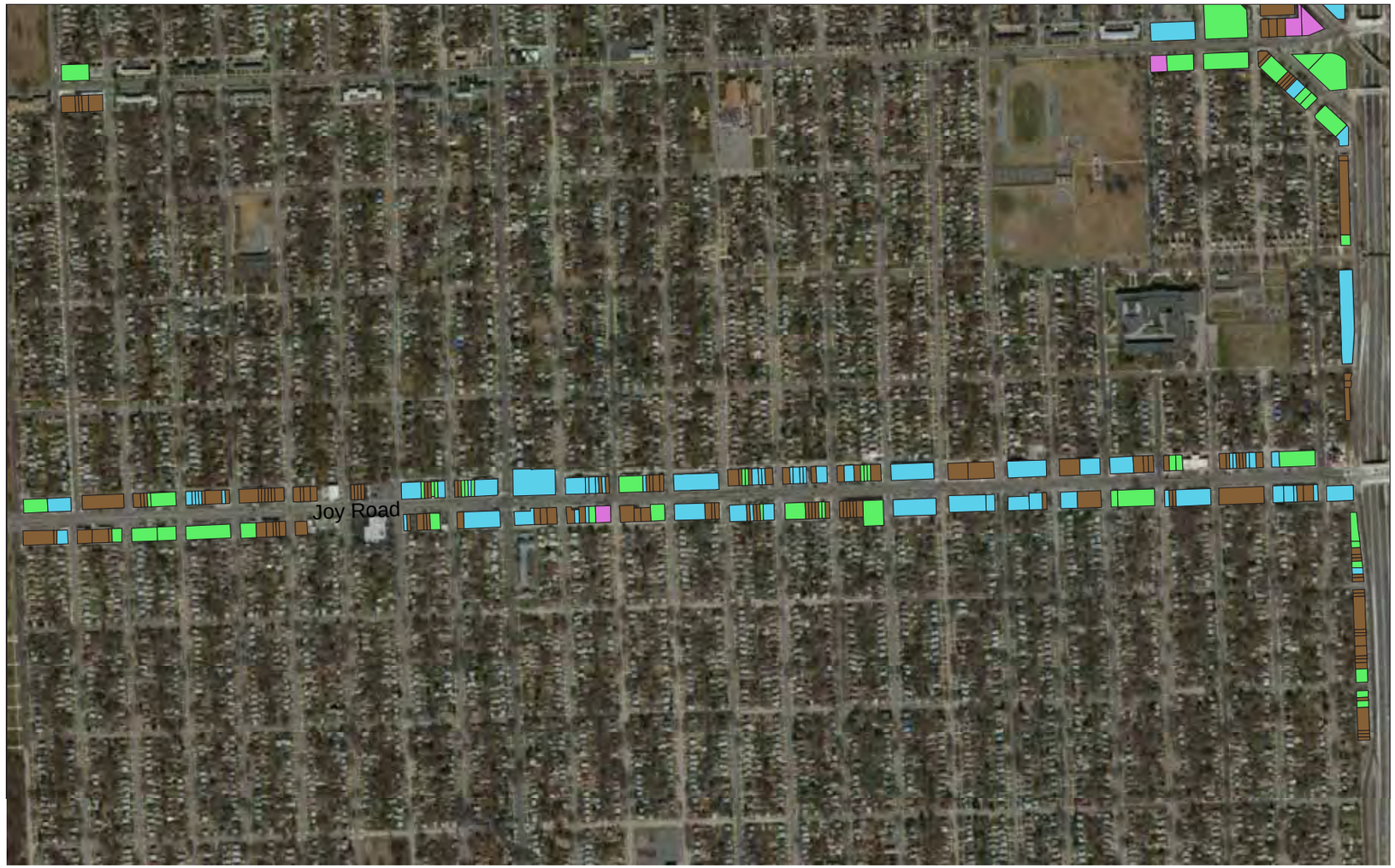
Certain vacant lots along Joy Road may be suitable for a small scale community garden that would compliment the farmer's markets, D-Town Farms, and the desired image of a green neighborhood. A community garden should start by finding a group willing to maintain the garden so the lot does not fall back into disrepair. Additionally, soil tests should be performed before assuming the edability of any products. Should the soil not be suitable, a flower garden may also contribute the a more beautiful streetscape.

http://tlc.howstuffworks.com/home/community-garden.htm

http://eastsidegardens.webs.com

Appendix 3.3: Complete Street Feature Suitability Matrix

Complete Streets	GOOD	BETTER	BEST
Bike Lane	**Sharrow** - Encourages cars to share road with cyclists -Signifies bikes should stay off sidewalk  http://bikepgh.org/2007/06/12/the-paint-is-to-the-pavement-on-liberty-ave/	**Continuous Bike Lane** - Consistent space for cyclists -Buffer between moving traffic and parked cars  http://bike.emory.edu/2008/12/01/new-bike-lane-on-briarcliff/	**Bike Lane with Dotted Intersections** - Dotted lines at curb cuts and intersections lets cyclists and motorist know where hazardous zones are  http://seattletransitblog.com/2011/09/15/more-bike-boulevards-please/seattle-bike-lane/
Bulb Out	X	**Painted Bulb Out** - Visual effects of a bulb out -Gives a buffer area for pedestrians  http://www.fhwa.dot.gov/publications/research/safety/09061/02.cfm	**Bulb Out** - Reduces distance to cross road -Narrows traffic lane to slow down vehicles  http://www.scvlife.net/category/business/
Bus Stop	**Bus Stop with Seats** - More substantial sign than current stops -Gives seats for waiting bus riders  http://www.metro-magazine.com/news/story/2013/03/sunline-transit-installs-new-bus-stop-seats.aspx	**Covered Bus Stop with Designated Loading Zone** - Gives protective space for waiting patrons -Keeps cars out of bus loading zone  http://bristolcars.blogspot.com/2009_03_01_archive.html	**Bulb Out for Bus Loading** - Keeps cars out of bus loading zone -Narrows roadway to slow down traffic  http://www.streetsblog.org/2012/04/26/after-delay-more-improvements-coming-for-east-side-select-bus-service/
Crosswalk	**Crosswalk Lanes**  http://www.triblocal.com/	**Painted Crosswalk** -More substantial crosswalk zone -Increased visibility to approaching cars  http://www.unlearning101.com/fuhgetaboutit_the_art_of_/2010/08/risky-is-the-new-safe.html	**Textured Crosswalk** -Most substantial crosswalk with increased visibility -Makes sound furthering sensory warnings for drivers  http://www.streetprint.com/content_categories/4386/concrete/streetprint-crosswalk-pa
Crosswalk Signage	X	**Crossing Sign** -Increases visibility of crosswalks  http://www.driveandstayalive.com/articles%20and%20topics/pedestrians/pedestrian-crossings-and-crosswalks.htm	**Yield Sign in the Intersection** -Signs is at eye level for vehicles -Appearance of narrower roadway to oncoming traffic  http://www.ci.galesburg.il.us/pedestrian_crosswalk_-signs_installed_on_south_street_/



Building Conditions

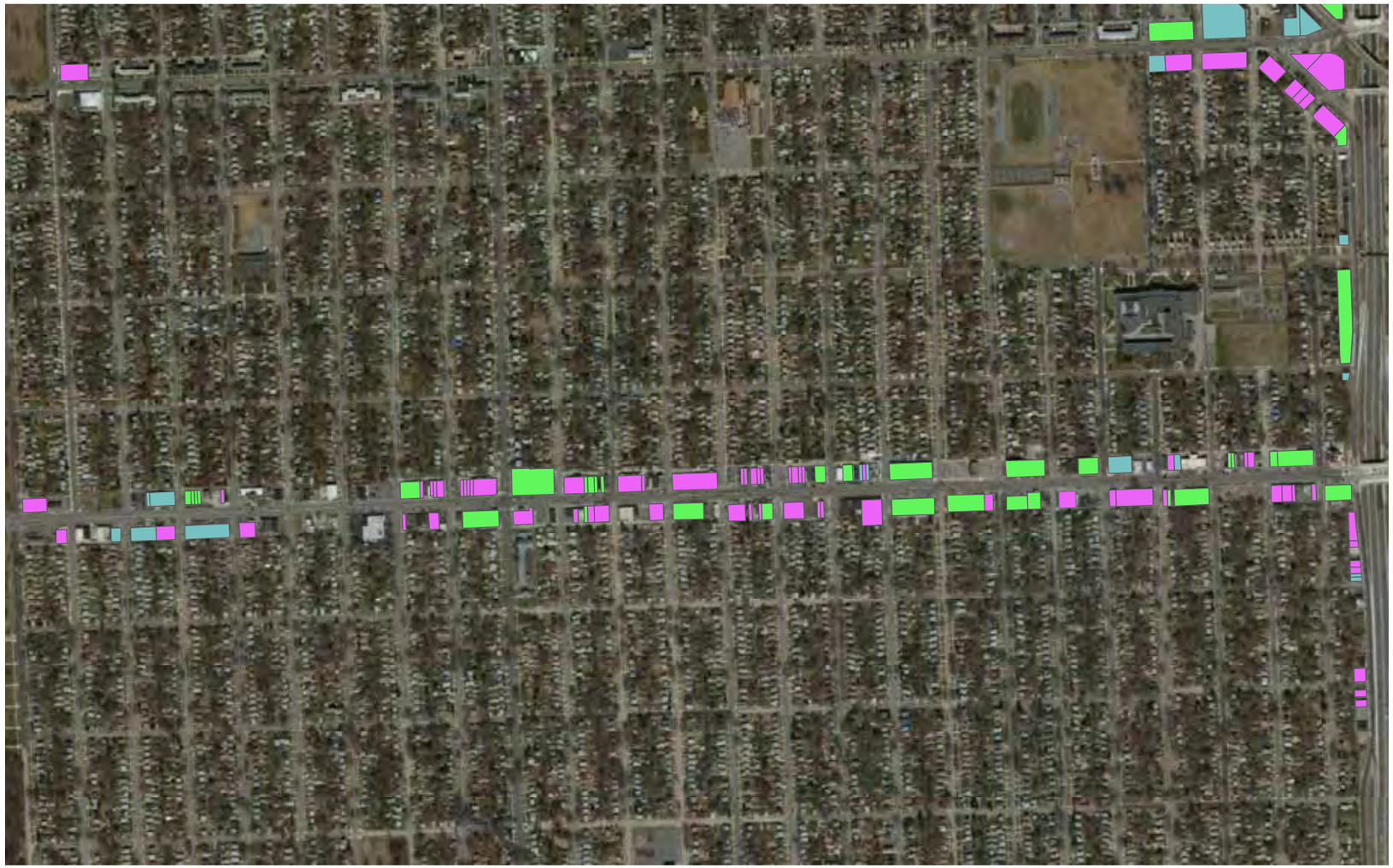
- No Building
- Fair
- Good
- Poor

N

0 385 770 1,540 2,310 3,080

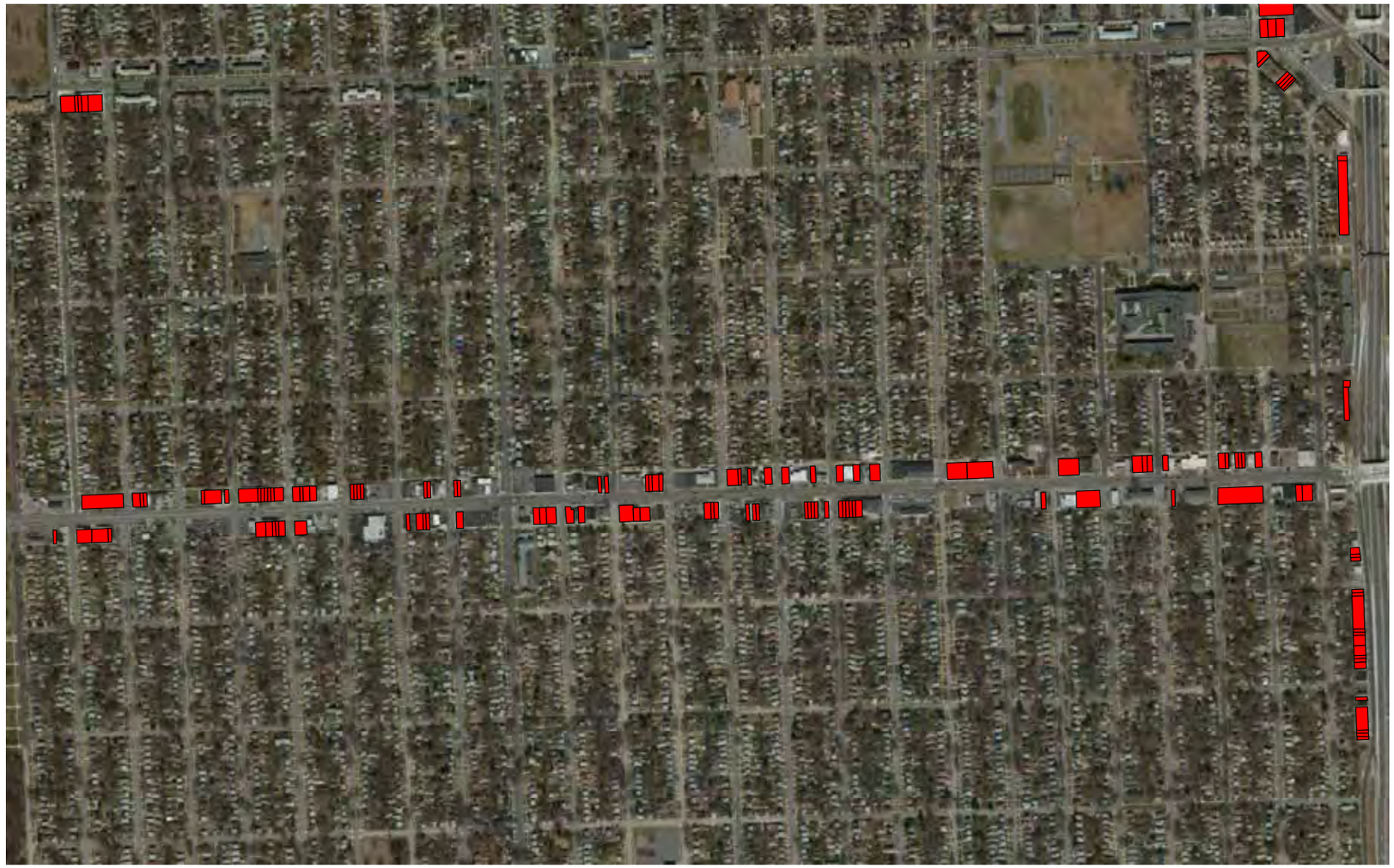
Feet

Appendix 4.1: Maps




Parcel Usage
Parcel In Use
Building
Parking-Lot
Vacant-Parcel
N
0 385 770 1,540 2,310 3,080
Feet

Appendix 4.1: Maps



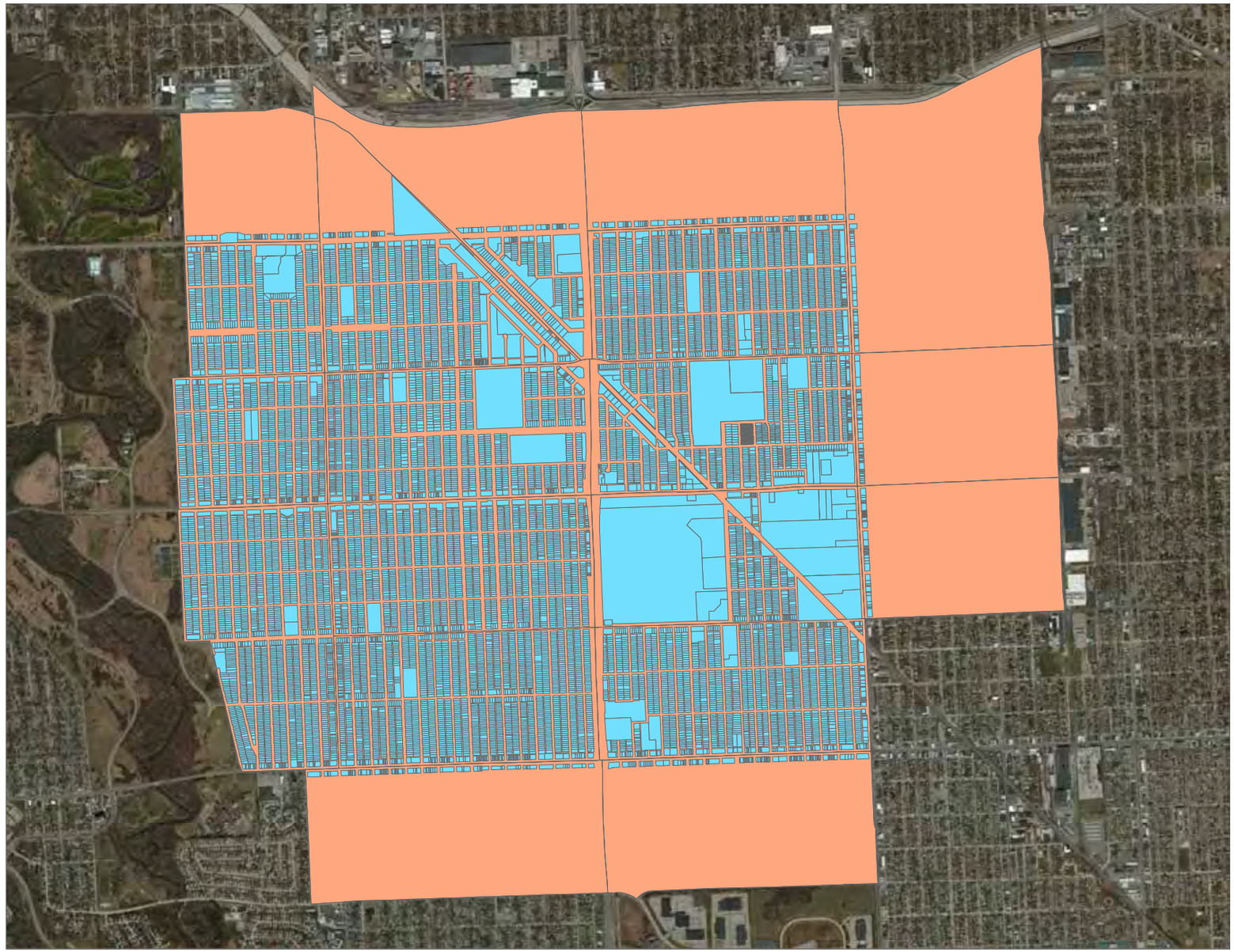
Vacant Parcel Map

Vacant-Parcel

N 0 385 770 1,540 2,310 3,080 Feet


Does the Parcel have a Perimeter Fence?
No
Yes
N
0 750 100 3,000 4,500 6,000
Feet

Appendix 4.1: Maps



Appendix 4.2: Vacant Parcels

Vacant Industrial Parcels Address	Yr Built	Sqft	Parcel Area (sq ft.)	Contents	Building Condition	Height	Fencing	Loading Dock	Parking
18320 FITZPATRICK	1958	19,576	30,181	Building	Good	2	No	Yes	Yes
18348 FITZPATRICK	1948	4,738	15,014	Building	Poor	2	Yes	No	No
18370 FITZPATRICK	1946	8,590	15,014	Building	Fair	1	No	No	No
18424 FITZPATRICK	1947	2,936	7,516	Building	Fair	1	Yes	No	Yes
18445 WEAVER	1956	10,000	20,258	Building	Good	1	Yes	No	No
18505 WEAVER	1956	4,155	7,504	Building	Fair	1	Yes	No	No
18515 WEAVER	1949	2,304	7,480	Building	Fair	1	Yes	No	No
18634 FITZPATRICK	1955	4,470	9,005	Building	Fair	1	Yes	No	No
18750 FITZPATRICK	1952	4,167	17,294	Building	Poor	1	Yes	Yes	No
18751 WEAVER	1966	2,630	7,405	Building	Fair	1	Yes	No	No
18518 FITZPATRICK	1954	8,898	11,986	Building	Good	1	No	No	No
18525 WEAVER	1947	2,304	7,492	Building	Good	1	Yes	No	No
18533 WEAVER	1952	4,567	7,492	Building	Good	1	Yes	No	No
18295 WEAVER	NA	NA	15,454	Vacant-Parcel	NA	NA	Yes	NA	NA
18605 WEAVER	NA	NA	7,480	Vacant-Parcel	NA	NA	Yes	NA	NA
18655 WEAVER	NA	NA	8,641	Vacant-Parcel	NA	NA	Yes	NA	NA
18625 WEAVER	1953	3,274	7,504	Building	Good	1	Yes	No	No
18633 WEAVER	1951	2,000	7,480	Building	Fair	1	Yes	No	No
18639 WEAVER	1950	2,322	7,492	Building	Fair	1	No	No	No
18663 WEAVER	1946	4,000	11,058	Building	Fair	1	No	No	No
18315 WEAVER	1959	2,880	8,231	Building	Fair	1	No	No	No
18541 WEAVER	1948	3,200	7,527	Building	Fair	1	Yes	No	No
19250 PLYMOUTH	NA	NA	661,164	Vacant-Parcel	NA	NA	Yes	NA	NA
18180 CHICAGO	NA	NA	5,637	Vacant-Parcel	NA	NA	No	NA	NA
18190 CHICAGO	NA	NA	5,373	Vacant-Parcel	NA	NA	No	NA	NA
18200 CHICAGO	1947	2,994	5,300	Building	Poor	2	No	Yes	Yes
8181 GREENFIELD	1957	70,000	757,278	Building	Fair	1	Yes	No	Yes
16121 JOY	NA	NA	958,495	Vacant-Parcel	NA	NA	No	NA	NA