



# ROUGE RIVER GREENWAY: ENGAGEMENT & CONNECTIVITY

Ayat Almanfi, Alyssa Atkinson, Caroline Hurteau, Jeremy Lewis, Michael McCain



<b>EXECUTIVE SUMMARY</b>	<b>5</b>
<b>INTRODUCTION</b>	<b>9</b>
<b>HISTORICAL CONDITIONS</b>	<b>17</b>
<b>CASE STUDIES</b>	<b>37</b>
<b>ASSET MAPPING</b>	<b>47</b>
<b>NEEDS ASSESSMENT</b>	<b>61</b>
<b>SURVEY RESULTS &amp; ANALYSIS</b>	<b>63</b>
<b>HOPE / SWOT ANALYSIS</b>	<b>69</b>
<b>ACTION PLAN PROPOSAL: ENGAGEMENT &amp; CONNECTIVITY</b>	<b>74</b>
<b>CONCEPTUAL CONNECTIVITY MAP</b>	<b>102</b>
<b>PROJECTED OUTCOMES &amp; ASSESSMENT METHODS</b>	<b>110</b>
<b>CONCLUSION</b>	<b>119</b>
<b>APPENDIX A</b>	<b>122</b>
<b>WORKS CITED</b>	<b>125</b>

# Acknowledgements

## *University of Detroit Mercy*

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## *Community Partner(s)*

The Executive Director of the Detroit Greenways Coalition, Todd Scott, was instrumental in the creation and completion of this Capstone project. The idea for the Rouge River Greenway came from Todd almost two decades ago. Since then he has committed his life to greenways and the cycling community in Detroit and this Capstone team believes the city is a better place for it. Todd allowed this team to join him at several engagement events, imparted much of his wisdom upon us, and introduced us to many people who are instrumental to this project and to similar ones. We cannot say thank you enough to Todd for his partnership and guidance throughout this project.

An unexpected secondary partner emerged throughout this process in the City of Detroit Planning and Development Department. Specifically, we would like to thank Michele Flournoy, Christina Peltier, and Juliana Fulton, for their valuable time and knowledge. These three were kind enough to meet with this team and to email with us several times throughout the 8 months of this project. In early 2018 the City of Detroit took an interest in making the Rouge River Greenway a reality and for this reason they became a necessary and welcomed secondary partner to this group. The completion of this project would not have been possible without their inside information on the progress of the greenway and for that we are very grateful.

## *Interviewees*

Throughout the eight months of this project several busy people took time out of their schedules to meet with this team and share information that helped to inform the final deliverable and recommendations for this project. Many sections of this final book would be incomplete if not for the information they were able and willing to share with us. Throughout these interviews we feel that we learned and grew as students and as supporters of this project. It was an added bonus that we also thoroughly enjoyed our time with them. These include:

- Bible Missionary Church of Brightmoor, Congregation Members
- Dustin Hagfors, SMART
- Fenkell Gospel Church, Congregation Members
- Garry Bulluck, City of Detroit Office of Mobility Innovation
- Jean, Cycling enthusiast, new friend, and volunteer at Tour de Troit
- Kenny Ferrell, City of Detroit Office of Mobility Innovation
- Kim Joesene, Murphy Academy
- Leonard Weber, Friends of Eliza Howell Park & Community Resident
- Libby Levy, ProSeeds, LLC
- Marie McCormick, Friends of the Rouge
- Neighbors Building Brightmoor
- Sally Petrella, Friends of Rouge Park
- Shavon Edwards, City of Detroit Office of Mobility Innovation
- Sophia Stockum, Sidewalk Detroit
- Stacey Matlen, City of Detroit Office of Mobility Innovation
- Tom Woiwode, the Community Foundation for Southeast Michigan



ROUGE RIVER  
GREENWAY STUDY  
12 Miles Multi-use Path  
7 City Parks  
10 Major Intersections  
550 Acres of Wetland



# Executive Summary

- LEGEND**
- Detroit City Boundary
  - Existing Streams
  - Rouge River
  - Historic Streams
  - 100-year Floodplain
  - Preferred Route
  - Critical Intersection
  - Connecting Bus Routes
  - Organizational Assets
  - Economic Assets
  - Human Assets
  - Physical Assets
  - Cultural Assets



## Executive Summary

The proposed Rouge River Greenway is an idea that was first discussed in 2000. Now 18 years later, the idea has gained traction. This Capstone team, comprised of five students from the University of Detroit Mercy's Master of Community Development program, has been working with community partner The Detroit Greenways Coalition (DGC) on this project since April of 2018. The vision for the Rouge River Greenway came from DGC's Executive Director, Todd Scott, who realized long ago the potential for connection along the City of Detroit's west side, an area abundant with city-owned parks, nature, and trails. When referring to greenways in this report the DGC definition will be used, which is: "a network of open space, trails, and bike lanes for walking, jogging, biking and rollerblading that links neighborhoods and destinations such as parks, schools, libraries and shopping areas."

The mission of DGC "is to create, conserve and promote greenways and green spaces in order to connect people, places and nature" (Detroit Greenways Coalition Mission). DGC was founded in 2007 after "various Detroit non-profits were convened by the Community Foundation of Southeastern Michigan and the Michigan Trails and Greenways Alliance to discuss common greenway operation issues that many organizations were facing" (Detroit Greenways Coalition History). Since that time various greenways in Detroit have opened including the Dequindre Cut in 2009 and the Southwest Detroit Greenlink in 2011. Given DGC's work with various greenways projects in the City of Detroit and their original vision for the Rouge River Greenway the Capstone team found it natural to select them as the community partner. DGC provides valuable insights on the biking landscape in the City of Detroit and across the metro Detroit region as well connections for the Capstone team to important bike and greenway advocates.

In 2018, under the direction of Detroit Mayor Mike Duggan and Maurice Cox, the Director of the City of Detroit's Planning and Development Department (PDD), the department hired an architectural firm to draw up two proposed route options for the Rouge River Greenway. Because of this PDD has come to be referred to by this Capstone team as a secondary community partner. In both of the proposed route options the greenway travels

from Warren Avenue to the south to 8 Mile Road to the north and loosely follows the path of the Rouge River. Through working closely with these two partners, utilizing an academic advisory team, and engaging with community members in multiple ways, this team has developed a thesis statement and identified a problem that we believe our Capstone team can help to solve through research and recommendations.

### *Thesis Statement*

The proposed Rouge River Greenway will become a valued community asset used by residents and visitors alike when the community is engaged at every step of the planning, development and implementation stages and when the greenway provides meaningful and useful connections between people and places.

### *Problem Identification*

Greenways that do not connect people to the places that they need and want to go to are not able to realize their full potential. Additionally, despite extensive research around the benefits of greenways, there are also some social justice issues related greenways. These include the potential for increased cost of living (displacement) and the fact that people can experience public spaces differently depending on their race, gender, ability, income, and age.

### *Recommendations*

After months of historical research, interviews and site visits this Capstone team determined that although there is a wealth of information and research into the many benefits of greenways there are still general and Detroit-specific issues that can keep them from being successful. This Capstone team proposes that the Detroit Greenways Coalition, in conjunction with the City of Detroit Planning and Development Department, do two things which the team believes will lead to success (maximum usership) for the Rouge River Greenway.

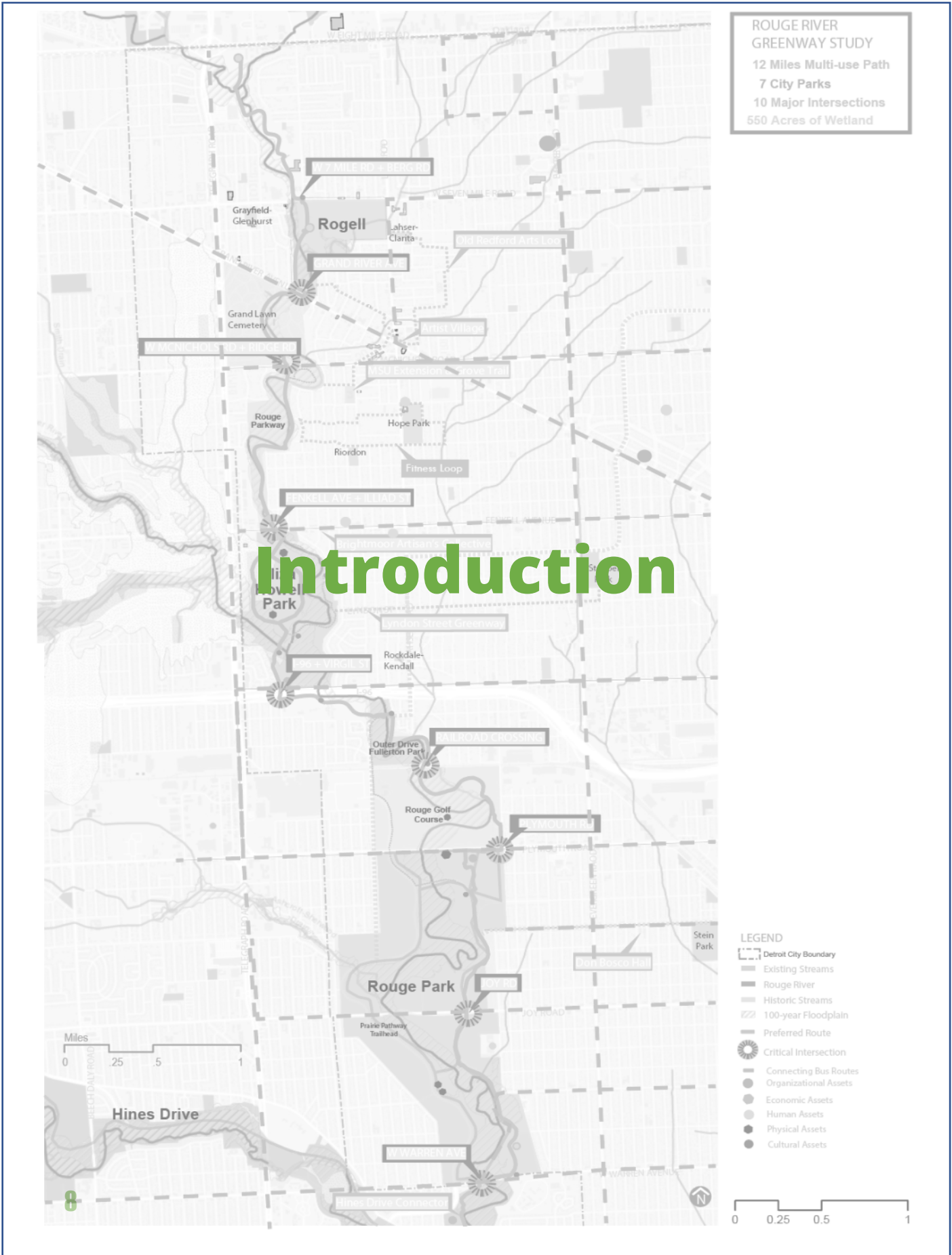
The first recommendation theme is all about engagement. In order for the greenway to both serve the needs of the community and attract visitors it must possess qualities the community has expressed interest in. The engagement process should be diverse and include

input from local residents and business owners, environmental groups, and the City of Detroit as a whole. The second set of recommendations revolve around the importance of connectivity. The idea behind this focus is simple: if the greenway takes people to the places they were already going to and creates additional connections then people will use it more. This Capstone team has already begun the engagement process by distributing a survey to over 100 people and analyzing the results. These results plus several community meetings should help to inform what assets need to be connected. These recommendations and survey results are reviewed in much greater detail later in the paper.

As a final piece to this Capstone project and this team's end goal of helping the creators of the Rouge River Greenway as much as possible potential funding sources have been identified and estimated and informed project budgets and timelines have been created.

### *Deliverable*

As a final deliverable for our community partners this Capstone team has created a small scale conceptual "Connectivity Map." This will serve as an example for how the team envisions the greenway being mapped when in order to help users make the most of their experience. This map details assets within six categories that the Rouge River Greenway can connect people to. These categories represent Human, Organizational, Physical, and Economic (HOPE Model) assets as well as cultural assets and bus routes. Due to the time limits and parameters of this project the group chose to focus the majority of this map on assets within and near Eliza Howell Park; from Telegraph on the west to Lahser on the east and from I-96 on the south to Fenkell on the north. This location was chosen after a detailed asset mapping process and mainly because it is rich in assets, community engagement processes, and is the geographical center of the proposed greenway route.

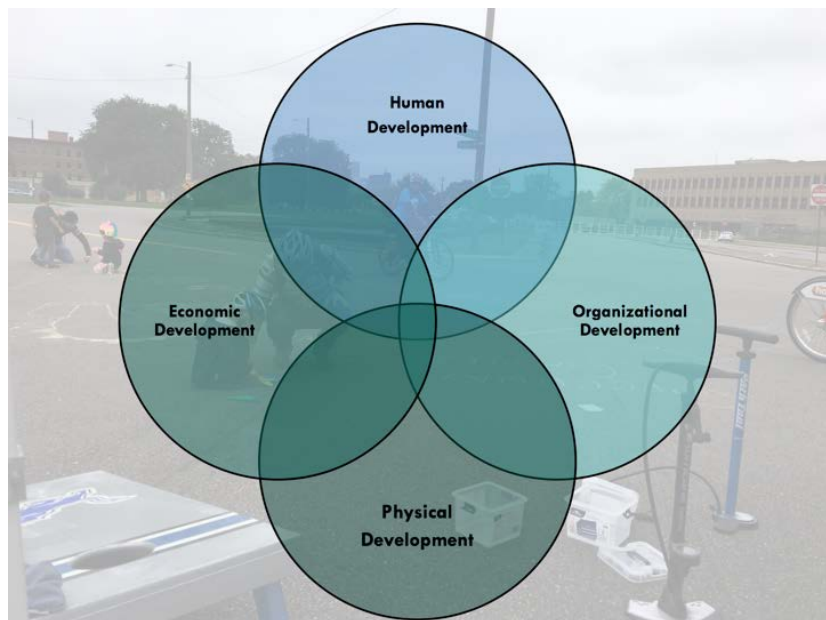


## Introduction

### *Masters in Community Development Program*

This Capstone project is the final culmination of the Master of Community Development (MCD) program at the University of Detroit Mercy. There are two pillars that the MCD program focuses on: The HOPE Model and the Three S's. HOPE stands for Human, Organizational, Physical, and Economic, the four types of development that need to be treated with equal importance if one is to do equitable community development work. The HOPE Model emphasizes a holistic

approach to the work of community development where all four focuses must work together to achieve the greatest outcome. In relation to this particular project we will be looking at human perceptions and usage of greenways, the organizational structures that exist both to make



*Figure 1: HOPE Model, University of Detroit Mercy Master of Community Development's approach to community development. Source: Author*

greenways happen but also to engage the community in greenway outcomes and solutions, the physical assets that greenways can connect people to and the idea that things like greenways, parks and rivers are themselves valuable physical assets. Lastly this project will take a look at what economic effects greenways can have on property values, commercial corridors, and jobs.



The second pillar in the MCD program, the Three S's, stands for social justice, sustainability, and service. When it comes to this project the Capstone team will focus on social justice by advocating for the greenway to be developed in an equitable way that properly engages local residents in the planning process and is accessible to all regardless of race, sex, ability, income, or age. The idea of sustainability will also briefly be discussed as greenways can lead to a sustainable mode of transportation but may themselves not be sustainable if maintenance is not a part of the long-term plan. Finally, this project has the potential to fill a mobility gap in an area that has historically lacked adequate public transportation infrastructure, a much-needed service.

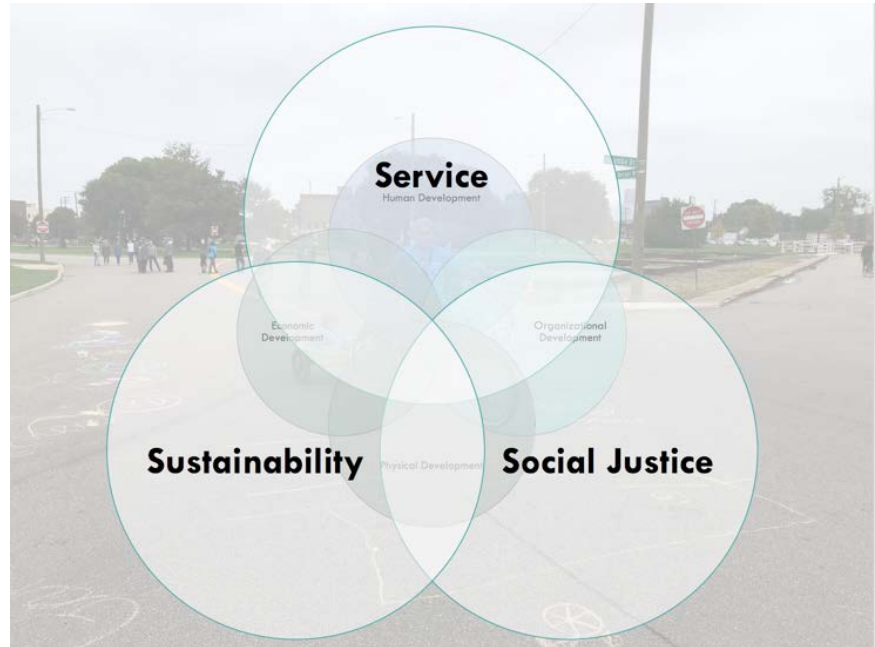


Figure 2: Three S model of the Master of Community Development program.  
Source: Author

### Capstone Project Overview

The Capstone project is a two-semester long assignment where students combine the knowledge that they have accumulated during the first five semesters of the MCD program with an area of interest for further study. In the MCD program the Capstone project is a group assignment where each section of the HOPE Model is expected to be represented based on the students' focus area. At the end of the eight-month project a comprehensive report in the form of a book is expected, along with an accompanying presentation and deliverable. The final presentation will be given twice, once academically and once publicly. The deliverable should

be something the community partner finds valuable in the continuation of their work. An academic advisory team assists with the achievement of this final assignment.

In April of 2018 this Capstone team selected the Detroit Greenways Coalition (DGC) as its community partner for an eight-month long Capstone project focused on the proposed Rouge River Greenway. The proposed Rouge River Greenway is an 8+ mile long bike trail that travels primarily through a series of parks on the City of Detroit's west side. The planned greenway would begin at the southernmost boundary of Rouge Park along Warren Avenue, near the city of Dearborn, and travel north to 8 Mile Road ending right where the city of Detroit borders Southfield. Since the City of Detroit Planning and Development Department has taken an interest in the Rouge River Greenway two routes have been proposed and shared with this team. Both proposed greenway routes loosely follow the path of the Rouge River and connect a series of parks and green spaces. Additionally, the greenway has the potential to connect people to each other, neighborhoods, municipalities, places of employment, and cultural institutions.

### *Project Overview and Goals*

The desired outcome of this project is to help the Rouge River Greenway be as successful as possible by realizing maximum usage. For the purpose of this project the Conner Creek Greenway definition of greenways was used, which was established in partnership with the Detroit Greenways Coalition as: "a network of open space, trails, and bike lanes for walking, jogging, biking and rollerblading that links neighborhoods and destinations such as parks, schools, libraries and shopping areas" (Conner Creek). This Capstone team set out to accomplish two main tasks. First, to create and begin an engagement campaign including handing out a survey to as many potential users of the greenway as possible. Other engagement methods included one-on-one interviews, mapping exercises, and attending community events like Open Streets Detroit. The final recommendations detail how exactly this Capstone team believes the community partner(s) should continue the engagement campaign.

Second, key assets were identified as places the greenway can potentially connect users to. These assets include, but are not limited to, parks, recreation centers, economic centers,



churches, schools, bus stops, and locations that are culturally significant like museums or theatres. At the end of this project these assets were used to create a conceptual example of a “Connectivity Map” many assets mapped, including proposed routes that lead to them. Because the route of the proposed greenway is so large, 8+ miles. The conceptual connectivity map is focused on Eliza Howell Park and the surrounding neighborhoods.

### *Research Methods*

Throughout the eight months of this project a large amount of research was conducted utilizing a variety of different methods. Most of the historical research was conducted online, although some of it did come from interviews. A very detailed asset mapping process took place and most of the research done for that was collected by the Capstone team through windshield surveys which included driving, walking, and biking through the study area. In addition to these windshield surveys, the team again utilized online resources and interviews to learn more information about individual assets that had been identified. Interviews were a very important piece of the research process and online research assisted the team in learning more about unique community assets as well as the diversity of greenways across the world. Another important piece of research was the distribution and analysis of a brief nine-question survey which helped to inform final recommendations. Lastly, six case studies related to greenways were identified and analyzed, with key insights and ways in which they are similar to the proposed Rouge River Greenway highlighted.

### *Interviews*

In total sixteen interviews were conducted with individuals from the City of Detroit, Planning and Development Department, the Community Foundation for Southeastern Michigan, Sidewalk Detroit, ProSeeds LLC, the Detroit Collaborative Design Center, and the team’s community partner, the Detroit Greenways Coalition. Each informational meeting provided unique insights into the study area and helped the team identify unique and meaningful information that has informed the project focus and final recommendations. These interviews are referenced throughout the paper in the appropriate sections, some in great detail and others as smaller synopses. Figure 3 represents all interviews conducted by the Capstone team.



Libby Levy,  
ProSeeds



Tom Woiwode, CFSEM



Leonard Weber,  
Eliza Howell Park



Christina Peltier,  
City of Detroit PDD



Todd Scott, Detroit  
Greenways Coalition



Charles Cross,  
DCDC



Michele Flournoy,  
City of Detroit PDD



Sophia Stockum,  
Sidewalk Detroit



Marie McCormick,  
Friends of the Rouge



Sally Patrella, Friends of  
Rouge Park



Garry Bulluck, City of  
Detroit Deputy Chief  
Mobility Innovations



Dustin Hagfors,  
SMART



Shavon Edwards, City of  
Detroit Mobility Team



Kenny Ferrell, City of  
Detroit Mobility Team



Juliana Fulton,  
City of Detroit General  
Services – Parks & Rec



Stacy Matlen, City of  
Detroit Mobility Team

Figure 3: Individuals and organizations interviewed by the Capstone team throughout the Capstone project.

Surveys

In June this Capstone team created and began distributing the following survey:

Introduction: This University of Detroit Mercy, Master of Community Development Capstone team is working in partnership with the Detroit Greenways Coalition to better understand how greenways can enhance the quality of life in Detroit and our region. Your answers will help us better understand the current perceptions of greenways and provide valuable insights as we continue our capstone project.

General Information *(optional)*

1. What is your home zip code? \_\_\_\_\_
  2. How old are you?
    - 18 or under
    - 18-25 years
    - 26-35 years
    - 36-45 years
    - 46-55 years
    - 56-65 years
    - 66-75 years
    - 75 years or older
- What is a Greenway: A greenway is typically a linear path used for walking and biking, that sometimes follows natural features and is not open to motorized traffic. Examples of greenways in Detroit include the Dequindre Cut and the Conner Creek Greenway.**
3. Have you heard of the term greenway before? (Y / N)
  4. Have you ever visited or used a greenway? (Y / N)
  5. If there was a greenway close to your home what might you use it for? (check all that apply)
    - Biking
    - Walking
    - Running
    - Other Recreational Activities
    - Transportation
    - I don't believe I would use it
    - Other: \_\_\_\_\_
  6. If there was a greenway close to your home how often do you think you would use it?
    - Daily
    - Weekly
    - Monthly
    - A few times a year
    - Never

7. Do you have any concerns about a greenway being near your home?  
 \_\_\_\_\_  
 \_\_\_\_\_
8. If you had access to a greenway where would you want it to take you?  
 \_\_\_\_\_  
 \_\_\_\_\_
9. Is there anything else you'd like to tell us about your experiences or thoughts about greenways?  
*(optional)*  
 \_\_\_\_\_  
 \_\_\_\_\_

**Thank you for your time!**

If you would like to be entered into a drawing for a \$25 Meijer gift card please share your name and phone number below. The drawing will be held Fall 2018.

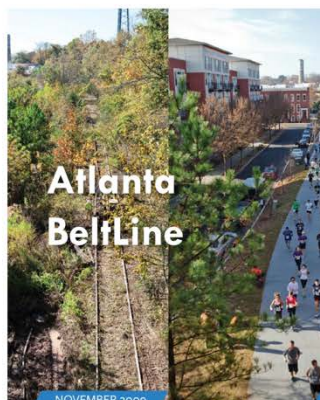
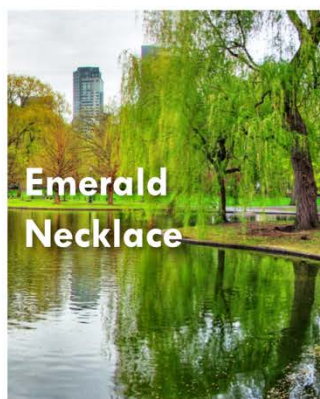
- Name: \_\_\_\_\_
- Phone Number (with area code): \_\_\_\_\_

In order to distribute this survey this Capstone team attended several events, including having a booth at Open Streets Rouge Park and Open Streets Southwest Detroit, attending a health fair at the Bible Missionary Church of Brightmoor, meeting with staff at a local school, and interacting with people at the Tour de Troit bike race. This survey was also sent out as an online version by our community partner, City of Detroit district managers, administrators, and others. An analysis of the final survey results can be found in the “Survey Results and Analysis” section starting on page fifty-six of this report.

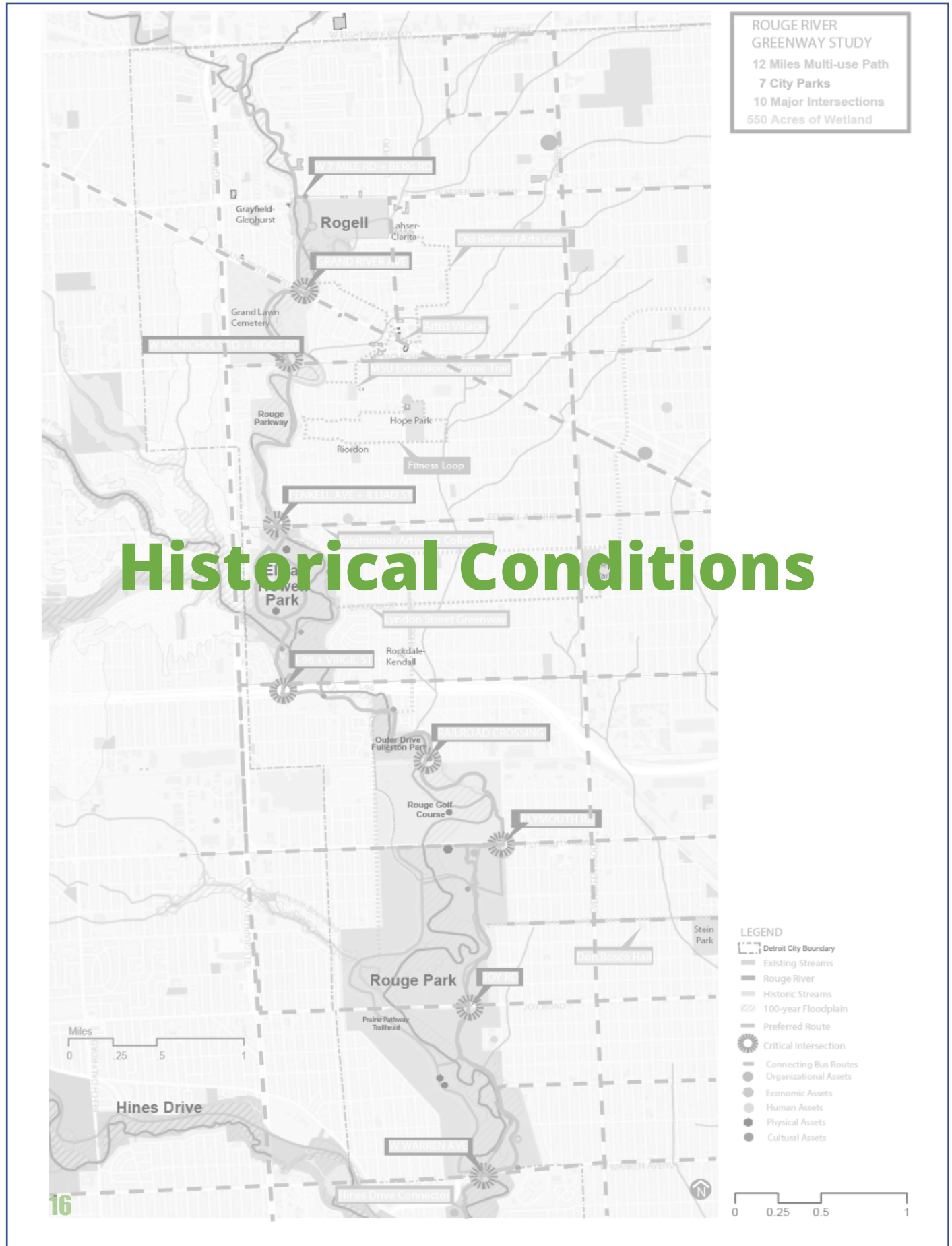
Case Studies

In addition to historical research, personal interviews and data collection the Capstone team examined six unique case studies that are both local and international. This method of collecting research was used in order to learn from examples of other greenways and gain valuable insights that will apply to the Rouge River Greenway. By learning and implementing best practices from others this Capstone team believes the Rouge River Greenway will be even more successful. The six case studies are:

- (1) The BeltLine in Atlanta, Georgia,
- (2) The Conner Creek Greenway in Detroit, Michigan,
- (3) The Green Cycle Routes in Copenhagen, Denmark,
- (4) The Emerald Necklace in Boston, Massachusetts,
- (5) The Red Fields to Green Fields project in Detroit, Michigan, and
- (6) The Wolf River Greenway in Memphis, Tennessee







## Historical Conditions

Given the broad scope of the proposed Rouge River Greenway Capstone project the Capstone team strategically identified six key areas to focus the historical research on:

1. Rouge River Greenway,
2. Rouge Park,
3. Greenways,
4. Greenways in Detroit,
5. Greenways and Workforce Development,
6. Transit and Cycling in Detroit
7. Detroit Bike Laws and Legislation, and
8. Eliza Howell Park Concept Plan

The short history of the Rouge River Greenway is important, however the team also wanted to research Rouge Park, greenways in Detroit and in general, transit and cycling in Detroit, and legislation related to biking. Rouge Park was researched because it is largest and most well-known part of the proposed greenway. Greenways in Detroit were important to look at so that we could learn what attributes can make a greenway in the city successful or not successful (success meaning realizing maximum usage). This research helped the team to understand the City of Detroit government and resident relationships with greenways. Looking at greenways in general and examples from around the world also helped to frame this understanding of what can make a greenway successful. Transit and cycling were researched because this team believes that the integration of cycling with greenways affords a viable mode of transit something this area is lacking in. Legislation dictated by the automobile industry had a lot to do with this transportation deficiency, which is why we chose to research this area as well (Detroit Transit History).

### *1. Rouge River Greenway*

Todd Scott, Executive Director of the Detroit Greenways Coalition (DGC), this team's primary community partner, first got involved in the idea of a trail along the Rouge River from Hines Drive to 8 Mile around the year 2000 (Scott). Todd shared with the team that when he

was the President of the local Michigan Mountain Biking chapter he would “bike along W. Outer Drive & Berg Roads and thought the green spaces along there would be ideal for an urban mountain biking trail.” In 2004, the first part of the mountain bike trail was completed in Rouge Park between Tireman and Joy roads (Scott). In 2006 the first section of the larger greenway idea was completed also between Tireman and Joy roads within Rouge Park. Todd stated that former State Representative and Warrendale resident Harvey Santana played a major role in this effort and although a loop on the trail was later completed it never extended further north.

In 2016, the DGC developed a Greenways Network Vision that included a conceptual route along the Rouge River corridor. In 2017, Juliana Fulton began working with the City of Detroit’s Planning and Development Department on a much better map of this greenway that was a part of the Rogell Golf Course Masterplan Design Contract. In January of 2018 the City of Detroit Planning and Development Department began officially planning the framework for the full 8+ mile proposed route. It is important to note that to date the city has hired an architectural firm that has drawn up two proposed routes for the RRG but additional plans for a project timeline and funding have not yet been developed.

## 2. Rouge Park

Rouge Park is located on Detroit’s far west side between Warren Avenue to the south and I-96 to the north. In total the park contains 1,184 acres of land and is “forty percent larger than New York City’s Central Park” (Farley). Figure 1 shows a current map of the park, which includes an 18-hole golf course, 12 playgrounds, 11 tennis courts, 8 miles of bicycle trails and 200 picnic tables (Rouge Park). In the 1920s, the City of Detroit paid \$1.3 million to purchase land from six farmers at the western edge of the city to be used for Rouge Park (Farley).

A brief history of how the park became what we know it to be today is illustrated in timeline in the Figure 6. Below in Figure 7 is a complete map of Rouge Park highlighting the unique amenities of this large urban park.

# ROUGE PARK TIMELINE

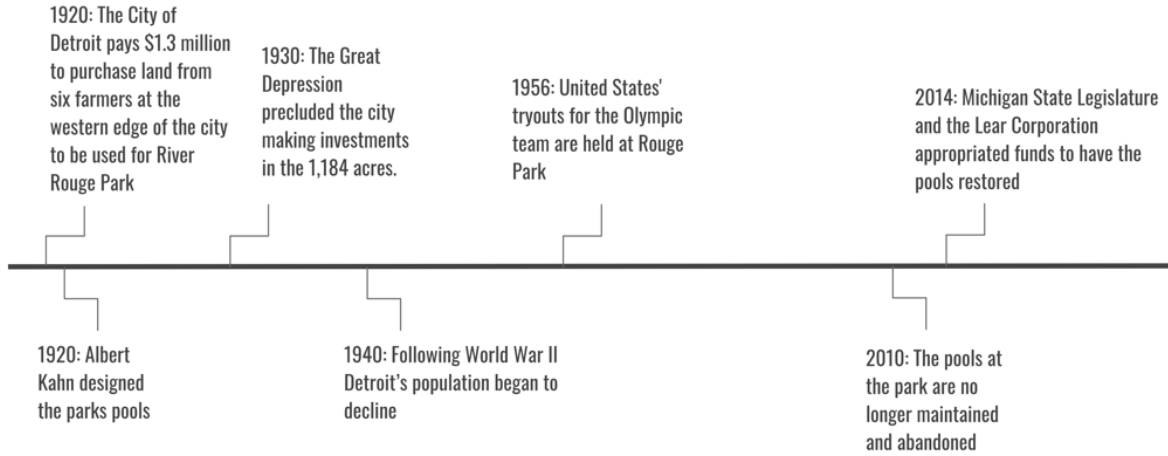


Figure 5: Brief History of Rouge Park. Source: Friends of the Rouge



Figure 6: Brennan Pool in the 1950's. Brennan Pool was renovated by Lear Corporation in 2014 Source: Detroit Park Watch



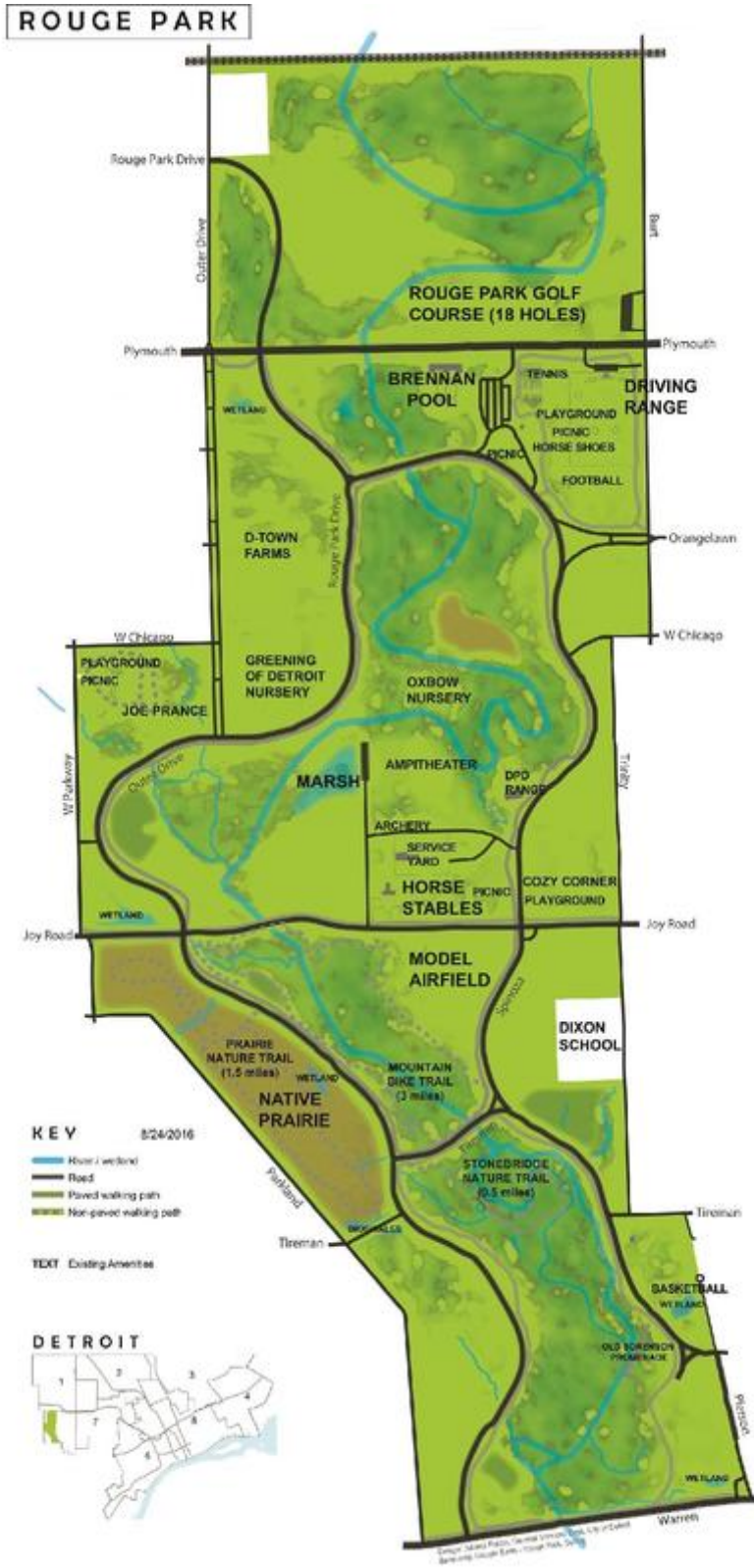


Figure 4: Map of Rouge Park. Source: Friends of Rouge Park

### 3. Greenways

Greenways are defined in a variety of ways. Jack Ahern, professor of Landscape Architecture at the University of Massachusetts Amherst and national leader in greenway planning, cites several definitions in his article “Greenways in the USA: theory, trends and prospects.” The article cites definitions from the report of the President’s Commission on American Outdoors in the USA (1987), as well as author Charles Little. The 1987 President's Commission “advocated a greenways network: to provide people with access to open spaces close to where they live, and to link together the rural and urban spaces in the American landscape threading through cities and countryside like a giant circulation system” (Ahern 34). In the book “Greenways for America” written Charles Little and published in 1990 a greenway is identified as:

1. A linear open space established along either a natural corridor, such as a riverfront, stream valley, or rideline, or overland along a railroad right-of-way converted to recreational use, a canal, scenic road, or other route. Any natural or landscaped course for pedestrian or bicycle passage.
2. An open-space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas.
3. Locally, certain strip or linear parks designated as parkway or greenbelt (Ahern 35).

Finally, Ahern offered his definition of a greenway used for the purposes of his article “Greenways in the USA: theory, trends and prospects” as well as in his book “Greenways: the Beginning of an International Movement.” “Greenways are networks of lands that are planned, designed and managed for multiple purposes including ecological, recreational, cultural, aesthetic, or other purposes compatible with the concept of sustainable land use” (Ahern 35). These three definitions help to realize the scope of what has been and is considered a greenway. They each share commonalities, including a linear design, natural resources and creating connections between people, places and nature.

The concept of a greenway is not something that is new to the urban design discussion. “Most of the literature on greenways points to their evolution from urban design concepts in

the nineteenth century” with the first example being created in Boston (Ahern 49). Landscape Architect Frederick Law Olmsted created a plan for the city of Boston which would come to be known as the “Emerald Necklace.” The plan is regarded as “a model of integration of existing protected lands, ecological corridors, and built linear elements” (Ahern 49). For years to come the work of Olmsted was used as an example and was embraced by other cities including Washington, D.C, Minneapolis, Kansas City, Buffalo and Cleveland (Ahern 49). The discussion of greenways added additional layers and considerations beginning in the 1970’s. “The greenline concept of the 1970’s introduced a new idea of land protection and management based on mixed public-private ownership” (Ahern 51). As this idea of public-private ownership shifted so did the emphasis of greenways. “As the concepts of greenlines reserves evolved, its emphasis shifted from large, park-like reserves to linear corridors including historic canals, railroads and rivers” (Ahern 51). Greenways have a long history in the United States and will likely continue to be a valuable component of urban design and sustainability as land resources become more valuable.

#### *4. Greenways in Detroit*

On Sunday, June 3, 2018, this Capstone team met with Tom Woiwode, Director of GreenWays Initiatives at the Community Foundation for Southeast Michigan (CFSEM). The very first conversations to happen around greenways in the City of Detroit began in Tom’s conference room in the mid-1990s.

Tom Woiwode’s employer, CFSEM, is a foundation that is committed to awarding grant money to organizations and ideas that can help to bridge divides between people and communities in Southeast Michigan. It makes sense then, that in the 1990s when no one in Detroit was talking about greenways, CFSEM decided to take the lead. Tom and CFSEM planned and hosted several “coffee conversations” around greenways to get experts on greenways and on the City of Detroit sitting down together, talking, and planning. Some of the first questions asked were: why do greenways exist and thrive in other communities? And why were greenways not being discussed at all in Detroit? The members of these coffee conversations began by looking at 23 other communities around the country, including Indianapolis,

Minneapolis, and Portland. Quickly the group convened by CFSEM came together to discuss and research this topic realized that these other examples did not translate to Detroit for two specific reasons. First, Detroit is a city that was built for cars and secondly there is no form of regional governmental institution in Southeast Michigan (except for SEMCOG, which does not focus on such topics) to take the lead on these types of projects.

Tom clarified that in this initial phase they were intentionally spelling greenways as “GreenWays” to communicate that these were more than just bike paths in parks but instead this initiative was to promote of all green ways of living. During this time Tom met with both Mayor Dennis Archer and Mayor Kwame Kilpatrick and their reasons for opposing bike lanes were always the same: “roads are for cars” and “they [bike lanes] are unsafe.” According to Tom “once the Dequindre Cut opened in 2009 the city realized its potential and how greenways can transform and connect communities. That prompted a significant interest within the City of Detroit’s Planning and Development Department as a planning and community development strategy.” It is worth noting that the success of this specific greenway is attributed in large part to its location and its connection to the popular Eastern Market and Riverwalk locations. In 2016 the New York Times featured the Dequindre Cut on the front page and proclaimed it the most important infrastructure project of the year.

Tom also shared with the team historical knowledge related to the perceptions of cycling not only in Detroit, but in all of Michigan and the country. He relayed that there are generally three objections to greenways: 1) they introduce the types of individuals deemed undesirable to neighborhoods (he tells us the story of opposition to a greenway in Sylvan Lake located in Oakland County, Michigan, where residents were quoted stating they were afraid people would ride up on their bikes and steal their big screens), 2) they lead to gentrification, creating economic changes that end up driving longtime residents out of neighborhoods, and 3) simply that they are physically unsafe. These perceptions however may be inaccurate, and Tom pointed to the Monday night Slow Roll rides as a great indicator that perceptions around cycling may be shifting. The last thing the team discussed with Tom was potential economic effects related to greenways. Tom shared that every study he has previously read that focused on the impacts of greenways in communities states that they are seen as an economic driver that lead

to increased property values and if connected to commercial corridors increased income for local businesses. Tom states however that studies like the ones he's described have not been done yet in Detroit.

As shared above the City of Detroit has not made planning for bike routes and greenways a priority for many years and community organizations have had to step in. The Detroit Greenways Coalition (DGC) was convened by the Community Foundation for Southeast Michigan (CFSEM) and the Michigan Trails and Greenways Alliance in 2007 with a mission to "create, conserve and promote greenways and green spaces in order to connect people, places and nature" (Detroit GreenWays Coalition). DGC was solely responsible for getting the Detroit City Council to pass a resolution supporting greenways and to approve the city's non-motorized plan in 2008. Since then, DGC has been a part of many instrumental cycling and greenway efforts in the city, most of which were made successful by private or foundational support.

It was not until 2015, when now Planning Director Maurice Cox came to the city, that conversations around greenways and their potential role in redeveloping parts of Detroit began being had by the planning department. This is evidenced by the fact that one of Cox's first public projects was the idea to use the many vacant lots in the Fitzgerald neighborhood to create a greenway that connects the University of Detroit Mercy and Marygrove College (Livengood). Cox also increased the size of this department from 6 to 25 and now has positions like park planners and landscape architects (Livengood). One thing that has not been made clear to this Capstone team is whether or not this revitalized Planning and Development Department has prioritized engagement in its planning processes.

### *5. Greenways and Workforce Development*

This Capstone team decided to research workforce development in relation to greenways for several reasons. Detroit's economy has historically been primarily based on industry, something that has continued to decline over the last several decades. Because of this there remains today a need for jobs and even more so, a need for job training in new fields. Not only can the Rouge River Greenway support and create jobs when it comes to planning, developing, and maintenance, but it can and should also work to support programs that train

Detroiters in these fields. This will help to improve the economy in the area and this Capstone team believes it will also help to earn support amongst those who may not initially want to see the greenway become a reality.

It is important to begin by clarifying what workforce development is. Essentially, workforce development is coming up with creative ways to prepare people for jobs that are expected to grow in demand. In the Detroit Greenways Coalition report “Envisioning Detroit As the World’s Greenway Capital” a vision for Detroit to become the greenways capital of the world in the next fifty years was shared. If this vision is to become a reality you must begin by preparing people to plan, design, construct, and maintain greenways. Being able to hire locally will keep the money spent in the local economy and will again bolster community support for such projects. Workforce development is not the same as training because it generally includes an additional step, recruiting people to want to learn about this field. Because of this the Detroit Greenways Coalition or the City of Detroit Planning and Development Department should engage with one or more of the many organizations within the city who are skilled in this area.

Some examples of organizations that work specifically in workforce development for Detroiters include: Detroit at Work, the United Way, and the Randolph Career Technical Center. One or many of these organizations should be engaged and collaborated with during all phases of the greenway project. Partnering with multiple organizations may actually be the best way to go. With the Atlanta BeltLine’s workforce development program, they have their partnerships split up dependent upon the type of training. Doing it this way allowed the BeltLine to connect people with jobs and boost the local economy in two ways: 1) by doing workforce development related to the greenway itself and 2) partnering with local businesses who needed employees and whose employees could use the greenway to commute to work. This was called “workforce partnerships” (Atlanta Beltline Workforce Partnerships).

Another important thing the Atlanta BeltLine did was prioritize including local residents in all workforce development. “In 2010, the Atlanta BeltLine and the Atlanta Workforce Development Agency collaborated on the implementation of a training program for local residents. The program focused on greenspace construction, and 100% of trainees from the

inaugural class were placed in jobs in construction and other industries. Through the support of Greenworks, the second class graduated in early 2013” (Atlanta Beltline, A Collaboration Focused on Progress).

There are many greenways being developed across the country that are incorporating workforce development and can be looked to as examples. In 2015 the Greenway Corridor Report was published; this report details plans for an 8.5 mile long paved greenway in the Corridor neighborhood of Milwaukee. This greenway travels through an area where employment is needed and where storm water flooding issues need to be mitigated. Due to these similarities and the greenway being only half a mile longer than the Rouge River Greenway this Capstone team feels the employment projections from this report translate well. All in all this report estimates that 1,300 jobs will be associated with the construction of the greenway and an additional 70 long-term jobs will be created to meet the operations and maintenance needs of the greenway (30<sup>th</sup> Street Industrial Corridor Greenway Corridor Report).

By making workforce development the first step in the engagement recommendations this Capstone team expects the following recommendations will all be able to incorporate this piece. When engaging with residents and businesses the programs that have been developed in conjunction with an organization like the United Way can be promoted. When engaging with environmental nonprofits intern and development opportunities may be able to be identified and incorporated into the workforce development. And finally, when launching the PR campaign for the greenway the workforce development program should be simultaneously being promoted.

### *6. Transit and Cycling in Detroit*

The City of Detroit has a long and sometimes tumultuous history with public transit. After the city’s founding in 1701, citizens spent more than 100 years moving themselves as well as their goods throughout the city by horse drawn wagons, an example is shown below in figure 6 (Early History). However, this was not an effective way to move a large number of people.





*Figure 5: Horse drawn street car a street in Detroit. Source: Early History*

The city's limits at that time were significantly smaller than the 142.9 square miles that we know today. According to Early History, "The city limits were roughly bounded by what today would be 25th Street on the west and Mt. Elliott Avenue on the east, while the northern boundaries followed the tracks of the Michigan Central and Grand Trunk Railroads, along with (and in the vicinity of) what today Milwaukee, Dubois, Leland, Elmwood and Gratiot streets would be. In total, the city's land area covered only 12.7 square miles." Despite the smaller city boundaries, citizens still needed a way to access jobs, goods, and services that were not within walking distance. The first iteration of Detroit's public transit system was "horse-drawn rail cars which began operation in 1863" (Early History). Over the next 20 years, additional horse-drawn rail car lines were built along major roads including Jefferson, Woodward, Gratiot and Michigan. During this time the population and city boundaries of Detroit were growing, and by 1880 the population had increased to 116,340 (Early History). By that time the border had expanded to a 22.2 square mile area (Early History). The 1890's gave way to the electrification of railcars to accommodate faster transit times and increase capacity on street cars (Early History). By the year 1915 Detroit United Railway operated twenty-one street car lines (Early History).



The city and the growing region began to think about regional transit efforts in 1920 with the creation of the first regional transit plan by the Detroit Rapid Transit Commission. At this time the City of Detroit had the largest municipally owned transit system in the country (Owens). Knowing the state of public transit in the city of Detroit in 2018, it is challenging to think of Detroit as a leader in transit, however, that was the case. The city continued to operate street cars and added traditional commuter rails as well as bus services through the 1930's, 40's and 50's (Owens). "The peak year of Detroit transit patronage was 1945 with 492 million rides" (Owens). As streetcars were being decommissioned across the city and replaced by diesel buses manufactured by General Motors the City of Detroit began seeking a buyer for its surplus cars. The entire fleet was liquidated during the spring of 1956 (Detroit Transit History). Detroit's role as a leader in public transportation began to falter starting in the 1960's when Detroit and the region struggled to find infrastructure funds, agree on transit plans and coordinate systems across municipal borders. Today Detroit and the metropolitan region still struggle to come to an agreement on a public transit plan and forty years have passed since the successful passage of a transit plan.

Bicycles traversed the streets of Detroit long before there was discussion of protected bike lanes and mass quantities of automobiles to share the streets with. The first pedal-powered bikes rolled down the streets of Detroit in the mid 1860s (Sands). However, the bicycle as we know it today, with rubber wheels, arrived in the 1880's (Sands). With more than 130 years of history, bicycles have become a mode of transportation and recreation in Detroit. Reporter Vivian Baulch of The Detroit News stated in her article titled "How the bicycle put Detroit on wheels" that by the 1890's bicycling was the craze in Detroit as enthusiasts formed small clubs. The small clubs eventually became the Wheelman Club that, as a collective group, advocated for safer streets including smooth pavement in place of cobblestone or wood plank streets (Baulch). Cycling clubs in Detroit have continued to grow, resulting in a burgeoning bicycle culture.



*Figure 6: Detroit police officers on bikes. Source: Early History*

The impact of the recent renewed interest in biking and cycling in the City of the Detroit is undeniable. However, there are two questions to consider, how much has the cycling changed in the city and what does the data reveal? Wheelhouse Detroit, a small bike rental business launched in 2008 by a pair who recalled the one-time accessibility of rental bikes at Belle Isle, saw a need to bring the opportunity for residents to enjoy biking back to Detroit. Wheelhouse has remained committed to supporting Detroit's bike culture and have documented riding opportunities and groups that are made up of individuals with varying aptitudes and backgrounds. On the Wheelhouse Detroit website, [www.wheelhousedetroit.com](http://www.wheelhousedetroit.com), a non-exhaustive list of seventeen cycling groups, clubs and rides has been published. This list can be found, with ride descriptions, as Appendix A of this paper.

Of these groups and events a few have become notable. On a city and even regional scale, Slow Roll Detroit has become most synonymous with Detroit biking culture. “When I started Slow Roll, it was really just about a bike ride. But through the past eight years, I’ve traveled the world and I’ve seen bicycling and bicycling advocacy and what that really means”, says Jason Hall. Jason is the co-founder of Slow Roll Detroit, an organization he fairly recently announced he is stepping away from after ten years of being the catalyst and face of the movement (Carrington). By stepping away his goal is to grow the opportunities as, “[the city of Detroit is] going through all these changes with bike lanes and we’re doing all this stuff in the neighborhoods” (Carrington). Jason goes on to ask, “are we really connecting the community to these bike lanes?” (Carrington). When Jason started Slow Roll, it began as a group of friends who took pleasure in biking and seeing the city from a new vantage point while enjoying each other’s company. “Unlike the first year, Slow Roll now has about five thousand loyal participants every Monday and it's still growing”, Jason shares in the same interview with online publication, The Beautiful Machine (Carrington). Slow Roll has done more than just provide a way for individuals to enjoy a bike ride through Detroit, it's given them a platform to lobby for bike culture in the city.

Writer Demetrius Carrington, who wrote the feature was drawn to capturing Jason’s Slow Roll journey because, “Slow Roll has become a catalyst for change. It has organically brought people of all walks of life together in a relaxed state of mind. There's black people, white people and every other kind of people all riding their bikes together and more importantly learning about each other and learning to love each other, and it's a beautiful thing.” Slow Roll has become synonymous with Detroit’s bicycling culture and still affords every day Detroiters (as well as Metro-Detroiters) an opportunity to enjoy bicycling in Detroit. This particular ride has had a significant impact on the City of Detroit. Other smaller community rides that regularly take place have begun because of the momentum and culture established by Slow Roll.

Larger civic and government entities have also adopted and contributed to growing Detroit’s bike culture. The vision of the Detroit Greenways Coalition (DGC), this Capstone team’s community partner is to, “promote and build a network of greenways and bike lanes

that will connect people and places, improve the quality of life, beautify neighborhoods, and stimulate neighborhood-level economic development in Detroit” (Detroit Greenways Coalition). Efforts to support their vision locally include organizing Detroit’s Bike to Work Day and other initiatives encouraging ridership. Bike to Work Day has grown over the years and has benefited from the support of universities and hospital systems including Wayne State University and Henry Ford Health System. Government and public leaders have also endorsed the one-day event. Councilman Scott Benson, who represents City of Detroit, District 3, is an avid bike rider and endorser of Bike to Work Day. City of Detroit Mayor Mike Duggan has also lent his support and the support of the city. Other supportive larger partners include the Downtown Detroit Partnership, whose mission is to “advance Detroit by driving engagement, development and programs that benefit businesses, residents and visitors throughout the Downtown’s urban core” (Downtown).

From the examples presented, one can begin to grasp the scale of opportunities to embrace and participate in cycling in the City of Detroit. A mix of sixteen one-day rides and organized group ride opportunities have been identified and shared via Wheelhouse (Appendix A), and another fourteen have been identified through additional research. From these numerous groups and organized rides that one can find and experience for themselves, the extent to which residents, community, civic and government stakeholders have joined in supporting and growing the culture is highlighted. This list is not all-inclusive but presents a look at what’s evolving in Detroit. Another way to understand the changing cycling culture in Detroit is to look at cycling statistics, something that the United States Census Bureau measures.

The impact of a civic and government supported surge in bike culture that has grown from grassroots groups of friends who enjoyed each other’s company, for example, have been significant in Detroit and across the country. To understand the bicycling culture shift and the growth connected to it, it is best to first understand ridership in the past. Overall, ridership is not high in the United States. A United States Census study from 2010 revealed that only .6% of individuals used bikes to commute to work. Research from the Census Bureau also states that, “the number of people who traveled to work by bike increased roughly 60 percent over the last decade, from about 488,000 in 2000 to about 786,000 during the 2008-2012.” Three takeaways

standout most from biking and cycling related Census data that has been studied. First, it was reported and highlighted that, “Those with a graduate or professional degree or higher and those with less than a high school degree had the highest rates of biking to work, at 0.9 and 0.7 percent, respectively” (US Census Bureau). Second, “1.5 percent of those with an income of \$10,000 or less commuted to work by bicycle, the highest rate of bicycle commuting by any income category” (US Census Bureau). Third, “African-Americans had the lowest rate of biking to work at 0.3 percent, compared with some other race or two or more races who had the highest rate at 0.8 percent” (US Census Bureau). These data points raised thoughts connected to Detroit specifically. 79.7% of Detroit’s population is African American and 39.4% of all residents fall beneath the poverty level. Specific to education, only 13.8% of Detroit residents have post high school education (US Census Bureau). In 2010 the number of commuters who commuted to work by bicycle in the City of Detroit was 655, according to US Census data. The data adds that this accounts for .3% of workers, which is half of the national average. It is important to note that the US Census Bureau only classifies bike commuters as those who share that biking is their primary mode of transportation to work. These numbers do not include those who bike occasional or primarily in good weather.

The “if you build it, they will come” debate persists. Does Detroit need to invest in bike infrastructure to encourage ridership? Or, do citizens need to display interest and express a need for bike infrastructure? Historically, Detroit’s investment in bicycle infrastructure, per square mile, is second to last out of all major cities, just ahead of El Paso Texas, based on 2008 data used for the 2014 AARP Bicycling and Walking in the U.S. Benchmarking Report. However, recent shifts in interest and correlating government announcements and initiatives speak to an increased commitment compared to Detroit’s past history. As cycling continues to grow there may also be changes in laws and legislation that regulate bikers, their use of roadways, and how cars and cyclists coexist on the road.

### *7. Detroit Bike Laws and Legislation*

Bike laws are generally created as a way to help bicyclists who are sharing the roads with motorized vehicles to travel safely and seamlessly. Additionally, laws improve conditions

for cyclists and conditions of bike paths, greenways, and parks taking shape. The need for protections for cyclists in Detroit and the metro area is becoming more apparent. “As the city launches the citywide MoGo bike-sharing service, and with an increase of new cyclists on the road, Kelli Kavanaugh (owner of the bike shop Wheelhouse Detroit and Detroit bicycling activist) says now is the time to prioritize non-motorized vehicle safety” (Hinojosa). Bike laws in Michigan range from riding on the right side of traffic, being allowed to ride on the sidewalk unless otherwise posted, requirements for signaling turns, and even a definition of a bicycle’s required equipment before selling a bicycle. It is important to note that Michigan state laws supersede Detroit laws.

According to the Detroit Greenways Coalition (DGC) website, as of May 2014, the laws about biking in Detroit are the same as most other Michigan cities. However, there are a few exceptions. The City of Detroit now has a law regarding voluntary bicycle registration. Registering bicycles can aid the Detroit Police Department to help identify stolen bicycles and return them to their rightful owner. Bicycle registration was at one time required by law, but DGC and Bike Riders United worked with the Detroit City Council to make registration optional. Todd Scott, Executive Director of DGC, stated that “many residents in Detroit would not purchase the required license therefore, many of the local cyclist were getting stopped and harassed by law enforcement agents.” It was also made clear that the cyclists who were getting stopped were primarily cyclists of color, creating a social justice issue. Many of the team’s case studies, to be discussed in the next section, have shown how equal access to greenways and green spaces is important. Greenways should be enjoyed and used by all and the advocacy work done by groups like DGC and Bike Riders United have assured this for future generations.

This Capstone holds the position that, while extensive, it was important and insightful to examine the history of so many topics. The proposed Rouge River Greenway covers a lot of ground, with both routes coming in at over eight miles for a total coverage area of almost fourteen square miles. Because of this large geography much of the historical research was kept broad. While it may not seem to affect much of the current work being done on the greenway researching things like the history of transit and cycling in Detroit and the history of greenways helps to shed light on how we got to where we are today. This research also highlights why

greenways are considered important infrastructure development. Diving into the history of Rouge Park is important because it serves as an example of why this area was chosen for a greenway - its many beautiful parks and connection to nature. Lastly, taking a look at cycling legislation was something this Capstone team felt was important as some stakeholders are opposed to greenways and more specifically to bike lanes because they feel they are unsafe. This Capstone team believes that in order to make adequate recommendations it was necessary to explore this variety topics and is confident that this research has helped to inform the recommendations.

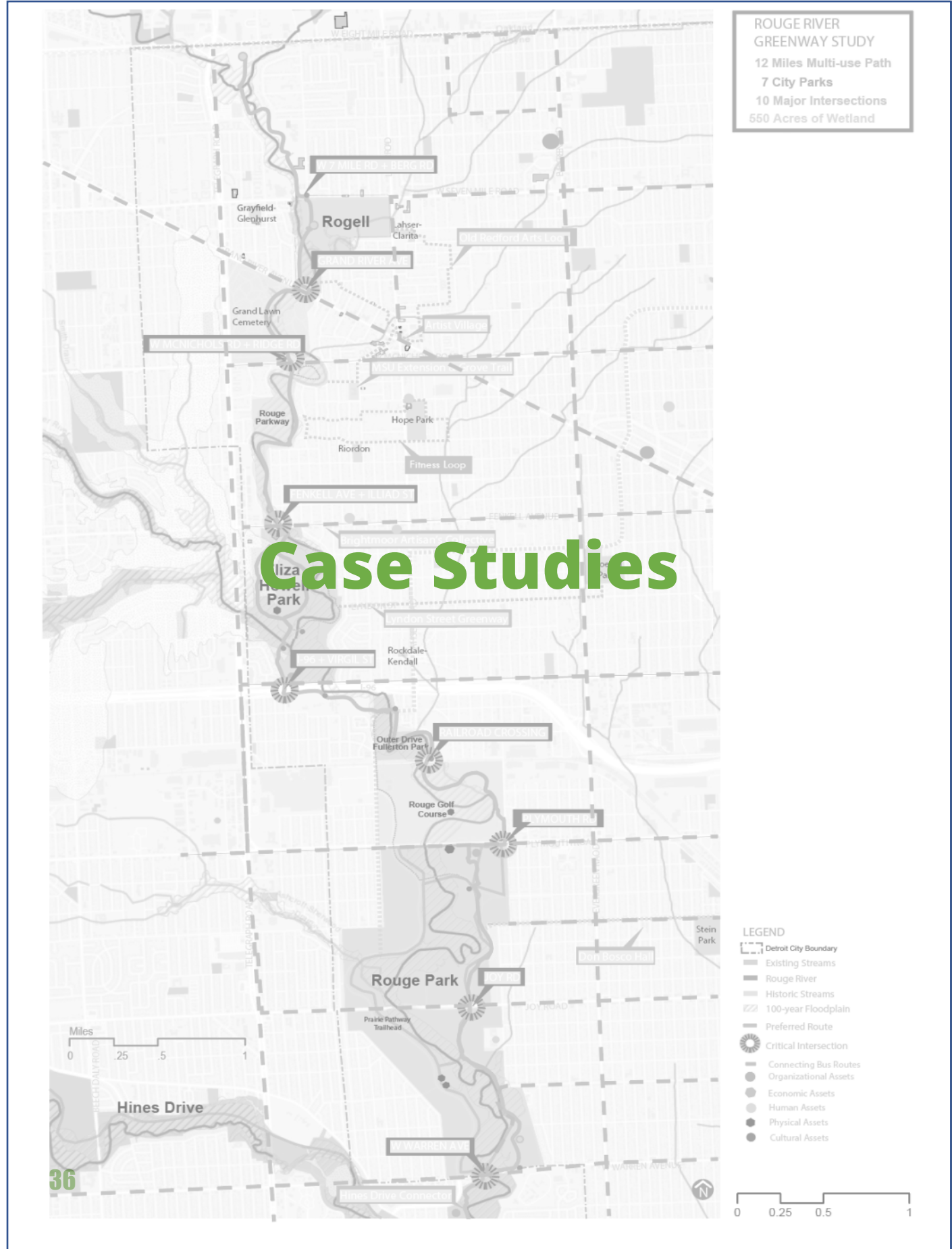
### *8. Eliza Howell Park Concept Plan*

During the research and interview phase this Capstone team learned from Sophia Stockum of Sidewalk Detroit about the planning process that her organization was helping to facilitate in Eliza Howell Park. Sidewalk Detroit has a short but meaningful history of working in Eliza Howell Park and with the residents of Brightmoor, the neighborhood nearest to the park. The team at Sidewalk Detroit, at the time of this paper, has spent about three years working in and around Eliza Howell Park. The first year of their work was strictly getting to know the community, how they interact with Eliza Howell Park and understanding what concerns, hopes, and dreams the residents have for their community. Following that year of engagement Sidewalk Detroit began to provide programming within Eliza Howell park, consistent with their organizational mission to “improve livability in Detroit neighborhoods and public spaces through the lens of creativity, arts and culture” (Sidewalk Detroit). In 2017 and 2018, Sidewalk Detroit provided a variety of programming in Eliza Howell Park including a Fall Harvest Festival, Sunset Yoga, Dance & Drum classes, outdoor Zumba classes, and guided nature walks (Sidewalk Detroit). As the park was being programmed and the community was engaged and excited about what was happening Sidewalk Detroit decided that there was a need to create a clearer vision for the future of the park.

In 2018, in partnership with livingLAB, staff at the City of Detroit Planning and Development Department, and most importantly their Community Leadership Team, Sidewalk Detroit started the process to create a concept plan. Sidewalk Detroit shared with this Capstone team the draft of the concept plan that was published in June of 2018. The draft concept plan

details the process that was undertaken including data collection, identification of community values, and engagement events. The information gathered helped to identify four key themes that will frame development of the park in the future: “habitat protection and restoration, connectivity, active recreation and wellness, and spaces to gather” (Eliza Howell Park Concept Plan). The proposed Rouge River Greenway is also a part of the Eliza Howell Concept Plan because it is likely that the proposed greenway route will travel through Eliza Howell Park. It is important to note that the City of Detroit Planning and Development Department (PDD) was involved in the Eliza Howell Park Concept Plan. This is important because it illustrates that there are existing working relationships between Sidewalk Detroit, residents of Brightmoor and PDD. These relationships will be vital as both projects move forward and continue to work together. At this time, there is not a public copy of the concept plan available.





## Case Studies

Case studies are opportunities to look at examples of similar projects in order to gain valuable insights. The Capstone team took time to examine six unique case studies, some from around the world and others from right here in Detroit. The six case studies that this Capstone team reviewed were the BeltLine in Atlanta, Georgia, the Conner Creek Greenway in Detroit, Michigan, GreenCycle Routes in Copenhagen, Denmark, the Emerald Necklace, in Boston Massachusetts, the Red Fields to Green Fields project that took place in Detroit and in eleven other cities around the country, and the Wolf River Greenway in Memphis, Tennessee. The following sections will discuss each case study in detail and provide valuable lessons for the proposed Rouge River Greenway project.

### *The BeltLine*

The BeltLine, located in Atlanta Georgia, will be “33 miles of multi-use trail and 2,000 acres of parks” (Atlanta Beltline Project). Beginning in 1999 this project brought together government stakeholders, residents, and private organizations to reach the project goals including connecting people and communities, improving transportation, creating jobs, preserving history and creating public art. Seventeen different stakeholders groups were identified through the Capstone team’s research including, residents of Atlanta, Georgia Department of Transportation (GDOT, Metropolitan Atlanta Rapid Transit Authority (MARTA), The United States Environmental Protection Agency, Trust for Public Land, and members of the Atlanta

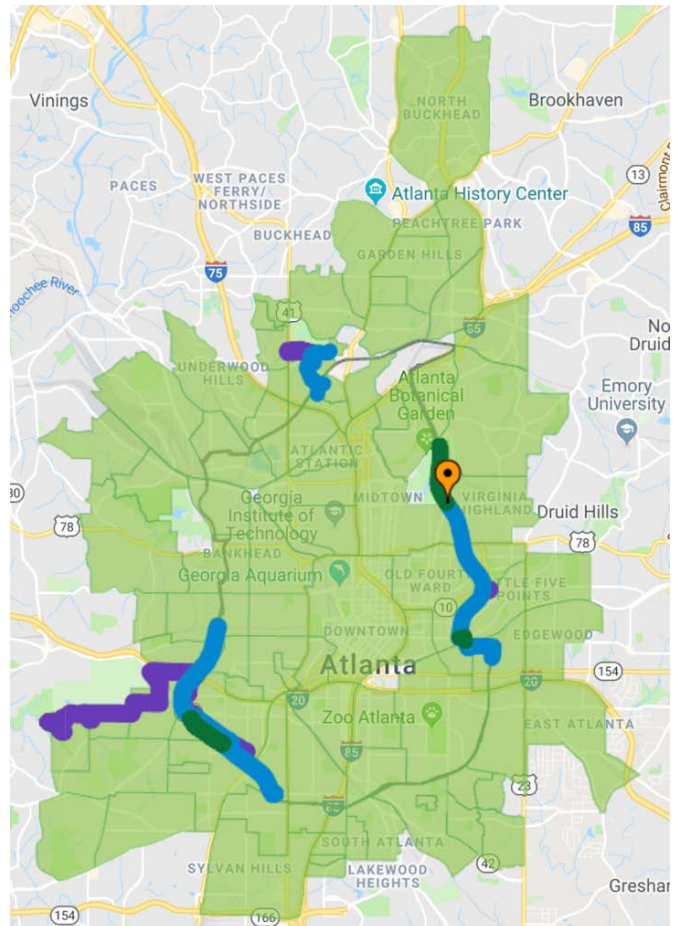


Figure 7: Map of the completed Atlanta BeltLine trails to date and the connected neighborhoods. Source: Atlanta BeltLine

BeltLine Tax Allocation District (TAD). The Atlanta BeltLine project is projected to be completed in 2030, however “now, almost 20 years later, a multitude of partners have created more than 12 miles of trails, seven parks and \$4.1 billion in new private development - representing more than 11,000 permanent jobs and more than 2,500 affordable housing units within walking distance of the corridor (Atlanta Beltline). Figure 8 shows a map of the completed Atlanta BeltLine trails to date, shown in blue, and the individual neighborhoods along the route. In total, currently the BeltLine connects over fifteen different neighborhoods. These community connections are an important component to the success of the BeltLine.

As it relates to the proposed Rouge River Greenway the Capstone team identified the Atlanta BeltLine as a useful case study because of its project scope and use of public-private partnerships to move the project towards completion. The proposed Rouge River Greenway, though small in comparison to the BeltLine, would be a large greenway project for the city of Detroit to complete. An eight-mile route connecting numerous neighborhoods and bridging communities calls for unique partnerships to be formed between city, county and state government as well as private entities with vested interests in the project's success.

### *The Conner Creek Greenway*

The Conner Creek Greenway, located in Detroit, Michigan is a nine-mile greenway on Detroit's far east side traveling from 8 Mile Road south to the Detroit River along Conner Street. The project was spearheaded by Detroit Eastside Community Collaborative (DECC) in partnership with the Greening of Detroit and the Community Foundation of Southeastern Michigan's GreenWays Initiative. At the project's inception in 2003 the goals of the project were to “reconnect [Detroit's Eastside] neighborhoods, physically and aesthetically link neighborhoods and destinations, improve health outcomes for area residents, slow stormwater runoff and decrease air pollution, and lay the groundwork for economic growth” (Conner Creek Greenway). Since 2003 nearly all of the planned 9-mile greenway has been built, “150 youth have been taught how to repair their bikes, a new conservancy was launched to lead the redevelopment of Chandler Park and a bike tour for nearly 700 cyclists was hosted” (Conner Creek Greenway).



*Figure 8: Residents using the Conner Creek Greenway. Source: Conner Creek Greenway*

This project is remarkably similar in scope to the proposed Rouge River Greenway making it a great case study to learn from. In addition to the Capstone team’s research the team also connected with Libby Levy, Principle at ProSeeds LLC, who played an integral role in the Conner Creek Greenway implementation. Levy cited two lessons learned from her work on this project (1) these types of projects are never completely done and, (2) creating a maintenance and continued funding plan at the start of the project is key to long-term success. The Capstone team believe these two lessons are also applicable to the proposed Rouge River Greenway project. If a continued funding and maintenance plan can be created and agreed upon now, prior to the project beginning, the stakeholders may be setting it up for greater success in the future.

### *Green Cycle Routes*

The Green Cycle Routes project is located in Copenhagen, Denmark. The project is designed as “green active travel routes... retrofitted and integrated within an existing dense urban setting, as part of a broader aspirational strategic urban planning effort” (Copenhagen Green Cycle Route). This project began in 2000 and is continuing to evolve still today. The goals



of the project include “positioning greenways as a choice for both commuters, tourists and recreational users alike to move around the city” and “connecting essential destinations and districts across Copenhagen; from the inner city to the outskirts, including major residential areas” (Copenhagen Green Cycle Route). Similar to the previous two case studies, the Green Cycle Routes project utilized phased implementation and public private partnerships to



Figure 9: Map of GreenCycle Routes in Copenhagen, Denmark. Source: Green Cycle Routes

realize the goal. In total the Green Cycle Routes includes 24 unique greenway routes totaling 58 Kilometers (36 miles) and has resulted in a 42% increase in cycling (Copenhagen Green Cycle Route).

A key lesson learned from this case study that is applicable to the proposed Rouge River Greenway centers on the idea that connectedness drives usage. The Green Cycle Routes project connected multiple municipalities and connected people to employment districts and cultural centers. This also spurred new development along the well-traveled portion of the greenway, making the greenway itself a destination. Practical access to destinations along the greenway increases the likelihood of individuals using it more as a transit option. In the city of Detroit where transit can be scarce and unreliable having an alternative to public transit is valuable.

### *Emerald Necklace*

The Emerald Necklace is located in Boston, Massachusetts and was created in the late 19th century by Frederick Law Olmsted. It is a “linear park system stretching from Back Bay

Fens to Franklin Park” in Boston. During a time of great urban sprawl and public health concerns the City of Boston recognized that by preserving natural spaces some of the challenges associated with growth could be combatted. In addition to the environmental benefits, reduced flooding as well as air and water pollution, positive psychological and physical impacts on Boston residents were results of the creation of the Emerald Necklace. “Parks were considered the lungs of the city, a major purpose was to provide fresh air and a healthful environment to the growing number of city dwellers, many of whom were crowded into tenements. Parks also came to be associated with the democratic ideal that people from all parts of society could mingle in the type of beautiful and soothing landscape that had previously been accessible only to the wealthy” (City of Boston). Through the creation and continued commitment to maintenance of the Emerald Necklace the lives of generations of Boston residents have been improved. Additionally, the creation of the Boston Metropolitan Park system, in 1875, is still the model used in Boston, the state of Massachusetts, and in many places around the country and world.

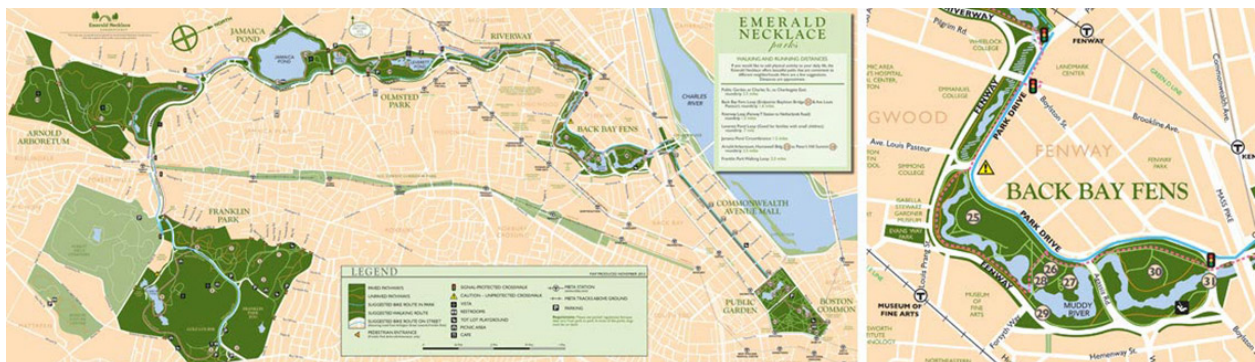


Figure 10: Map of the Emerald Necklace, the country's first designed greenway. Source: Emerald Necklace Conservancy

The most important lesson learned from the Emerald Necklace case study that can apply to the proposed Rouge River Greenway project is the lasting impacts of well-planned public parks and greenways. If the Rouge River Greenway is constructed, programmed and maintained with the well-being of the community and the residents in mind the positive impacts can last for generations.

### *Red Fields to Green Fields Project*

The Red Fields to Green Fields Detroit project was a hypothetical exercise facilitated by the Red Fields to Green Fields organization. The purpose of the project was to understand what municipalities, across the United States, would do if they were given four billion dollars to create green space, parks and conserve land (Red Fields to Green Fields). This project looks at both the environmental importance of converting “red fields” (properties that have negative value civically, environmentally, and economically because of being physically or financially distressed, or both) into green spaces and the economic benefits an undertaking like this would yield. At the time the Detroit version of this study was published it was one of eleven cities participating in this study. The Detroit version looks specifically at the Inner Circle Greenway (now known as the Joe Louis Greenway) and examines how greenways can be used as connectors that drive additional economic development. This version had a unique vision of using the Inner Circle Greenway as the focal point for these green space conversions. The vision for this particular part of the project was to create “high-identity gateway crossings at the intersections of greenways and arterial roads” (Red Fields to Green Fields). For example, a “beautiful public plaza park that can catalyze surrounding development” (Red Fields to Green Fields). In the Capstone team’s interview with Charles Cross he referred to these intersections as “nodes” capable of driving economic development as well as the usefulness of the greenway.

The Red Fields to Green Fields Detroit project provides valuable insights for the proposed Rouge River Greenway, specifically the capacity for a greenway to increase connectivity and stimulate economic development. Through the asset mapping process assets

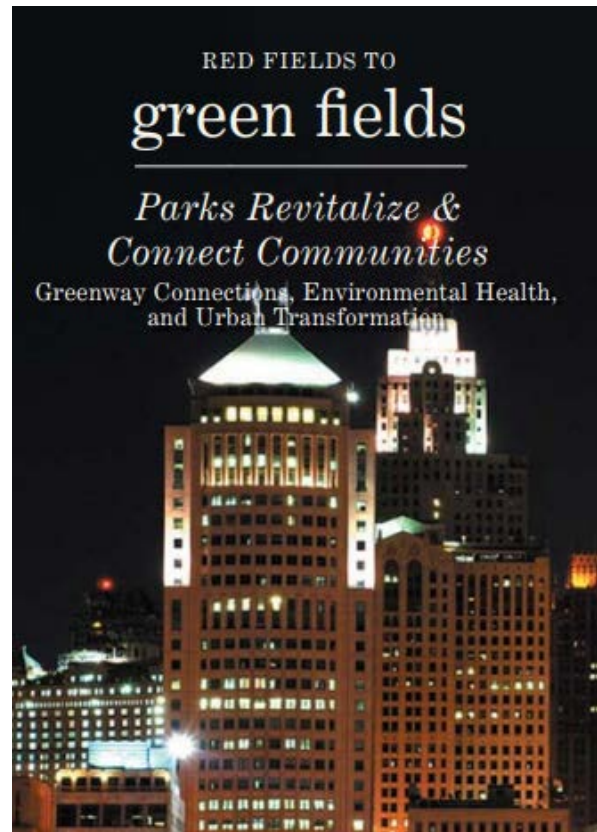


Figure 11: *Red Fields to Green Fields, Detroit Report*. Source: *Red Fields to Green Fields*



that could serve as community connection points as well as possible economic opportunities were identified. The proposed Rouge River Greenway routes cross many major thoroughfares that could become nodes of economic activity and connectivity.

### *Wolf River Greenway*

The final case study examined by the Capstone team is the Wolf River Greenway located in Memphis, Tennessee. “The Wolf River Greenway is a corridor of protected green space along the Wolf River that includes a paved pathway for non-motorized transportation. Built in phases, this 10-foot and 12-foot wide pathway will eventually extend a total of 36 miles to connect neighborhoods all the way from the north end of Mud Island, in downtown Memphis, through the neighborhoods of north central Memphis, connecting to Shelby Farms and then to the cities of Germantown and Collierville, Tennessee” (Wolf River Conservancy). The project goals of the Wolf River Greenway outlined by the Wolf River Conservancy included “connect people and communities, raise property values, reduce crime, encourage healthy lifestyles and improve general quality of life in adjacent neighborhoods” (Wolf River Conservancy). Started in 2003 this project, like many others previously discussed, is an ongoing project with many stakeholders including nonprofits, municipalities, residents and private entities. The initial phases of construction were completed in 2010 totaling 2.6 miles that connect into a neighboring municipalities’ greenway system. The Wolf River Greenway is an important example of strategic phased planning and construction, a strategy that would be useful for the proposed Rouge River Greenway. Additionally, the Wolf River Greenway has created a plan for continued construction and maintenance of the completed greenway a lesson that can be applied to the planning process of the Rouge River Greenway.

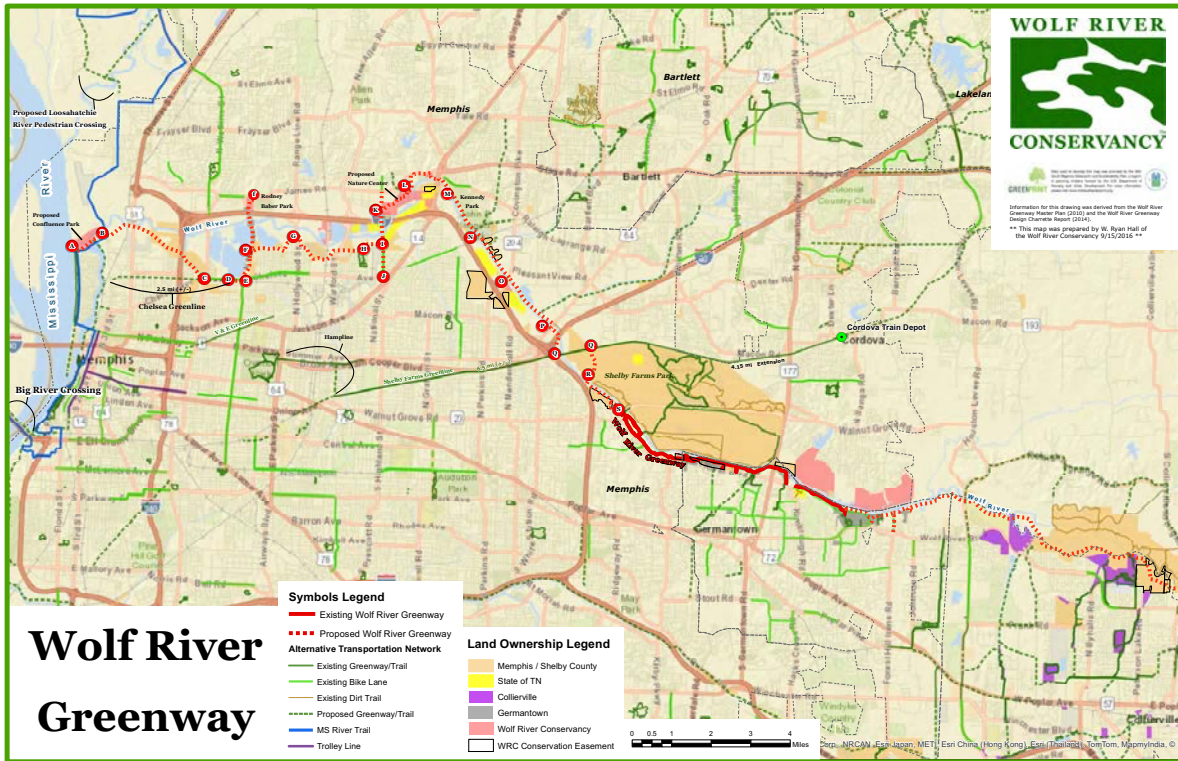


Figure 12: Map of constructed and proposed route of the Wolf River Greenway in Memphis, Tennessee. Source: Wolf River Conservancy

### Case Studies Analysis

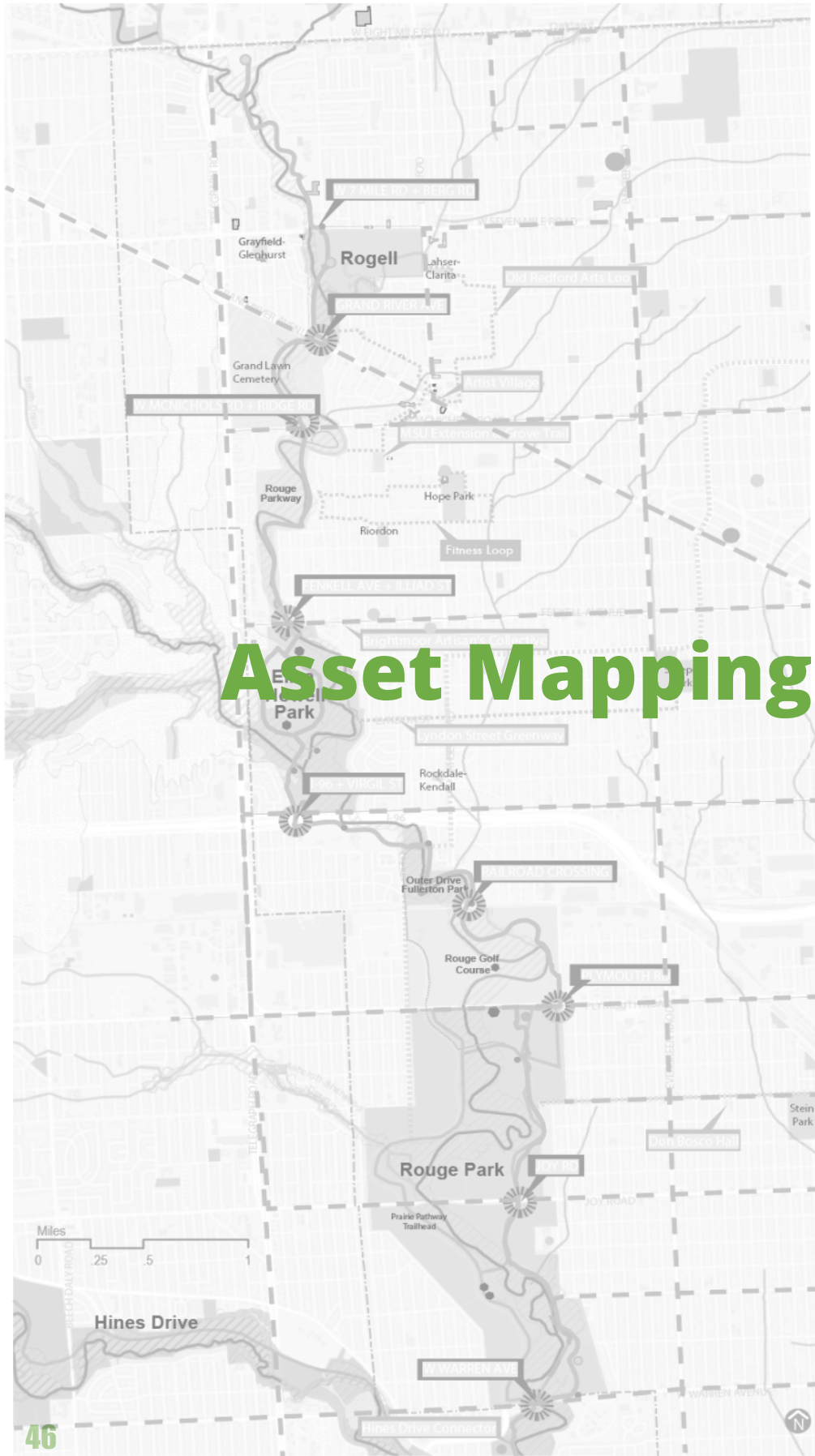
The Capstone team learned valuable lessons from each of the six case studies previously discussed that are applicable to the Rouge River Greenway project. The Atlanta BeltLine, Copenhagen Green Cycle Routes and the Wolf River Greenway all illustrate that connectivity drives usage of the greenway. As the routes of the Rouge River Greenway are planned it will be important to look at the connections that can be created along the route and help users understand the value of those connections. The Red Fields to Green Fields project illustrates that blighted or underused land can be transformed in order to support economic growth and health. By identifying underused land within and along the proposed route of the Rouge River Greenway it becomes an economic and human asset to the adjacent neighborhoods and the entire City of Detroit. Finally, the Wolf River Greenway, the Atlanta BeltLine, the Conner Creek Greenway, and Copenhagen Green Cycle Routes all illustrate that public-private partnerships support successful projects. Together, each of these key insights can help make the Rouge River

Greenway successful and sustainable. Below, in Figure 14 is a matrix that briefly compares each of the six case studies previously discussed to the proposed Rouge River Greenway. This comparison and analysis help the Capstone team consider the scope of the Rouge River Greenway project in relation to other greenways around the country and around the world.

Case Study	Location	Length when complete	Amenities
Green Cycle Routes	Copenhagen, Denmark	110 Kilometers (~68 miles)	Off road path, connects parks, small playgrounds
Emerald Necklace	Boston, Massachusetts	32.5 miles	Youth employment opportunities, walking & biking tours, visitors center
Conner Creek Greenway	Detroit, Michigan	9 miles	Mix of side paths and bike lanes, connects to Chandler Park and Detroit River (swimming, golf, walking groups)
Red Fields to Green Fields	Detroit, Michigan	n/a	Recommended: Economic nodes, repurposing vacant land
Atlanta BeltLine	Atlanta, Georgia	22 miles - pedestrian friendly trail transit & 33 miles – multi-use trails	Art exhibitions along the routes, official tours, fitness programming and clubs
Wolf River Greenway	Memphis, Tennessee	36 miles	Situated along the Wolf River, nature areas and hiking trails
<b>Rouge River Greenway</b>	<b>Detroit, Michigan</b>	<b>8 miles</b>	<b>Situated along the Rouge River, connects several public parks, swimming pools, many nature paths</b>

Figure 13: Case study matrix comparing the six case studies examined by the Capstone team

**ROUGE RIVER GREENWAY STUDY**  
 12 Miles Multi-use Path  
 7 City Parks  
 10 Major Intersections  
 550 Acres of Wetland



# Asset Mapping

**LEGEND**

- Detroit City Boundary
- Existing Streams
- Rouge River
- Historic Streams
- 100-year Floodplain
- Preferred Route
- Critical Intersection
- Connecting Bus Routes
- Organizational Assets
- Economic Assets
- Human Assets
- Physical Assets
- Cultural Assets

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## Asset Mapping

Asset mapping is an excellent way to begin a project and is a helpful exercise in many ways. An asset is defined as something that improves the quality of life for residents in a specific area and an asset map should essentially be a list of a community's resources. The asset mapping process is imperative when it comes to development because a community's strengths and resources need to be understood before they can be built upon. The Master of Community Development (MCD) program defines an asset map as a tool that "identifies the talents and resources already present in the community by creating an inventory of local skills, organizations and physical resources." In the MCD program assets are mapped through the lens of the HOPE Model and asset maps are used ultimately in the creation of needs assessments. It is important to note that assets do not need to be physical structures and also include things like the knowledge and skills of community members.

Initially this Capstone team created an asset map for the full 8+ mile proposed route, a study area that totaled 13.8 square miles on Detroit's far west side. Specifically, the boundaries are as follows: 8 Mile Road to the north, Evergreen Road to the east, Warren Avenue to the south and Telegraph Road to the west. This specific geographic area was selected because it encompasses the complete proposed route for the Rouge River Greenway set forth by the Detroit Greenways Coalition and the City of Detroit, Planning and Development Department. These assets were identified primarily through driving tours known as "windshield surveys," walking tours, and online research. The full asset map, seen in Figure 15, shows the identified assets as such: human assets in purple, organizational assets in yellow, physical assets in green, and economic assets in blue. These assets range from stores to restaurants to schools, parks, nature trails, recreation centers, and non-profits organizations. Given the large study area used for this asset map the Capstone team divided the area into five equal sections and individually inventoried assets in each of the five sections according to the HOPE Model.



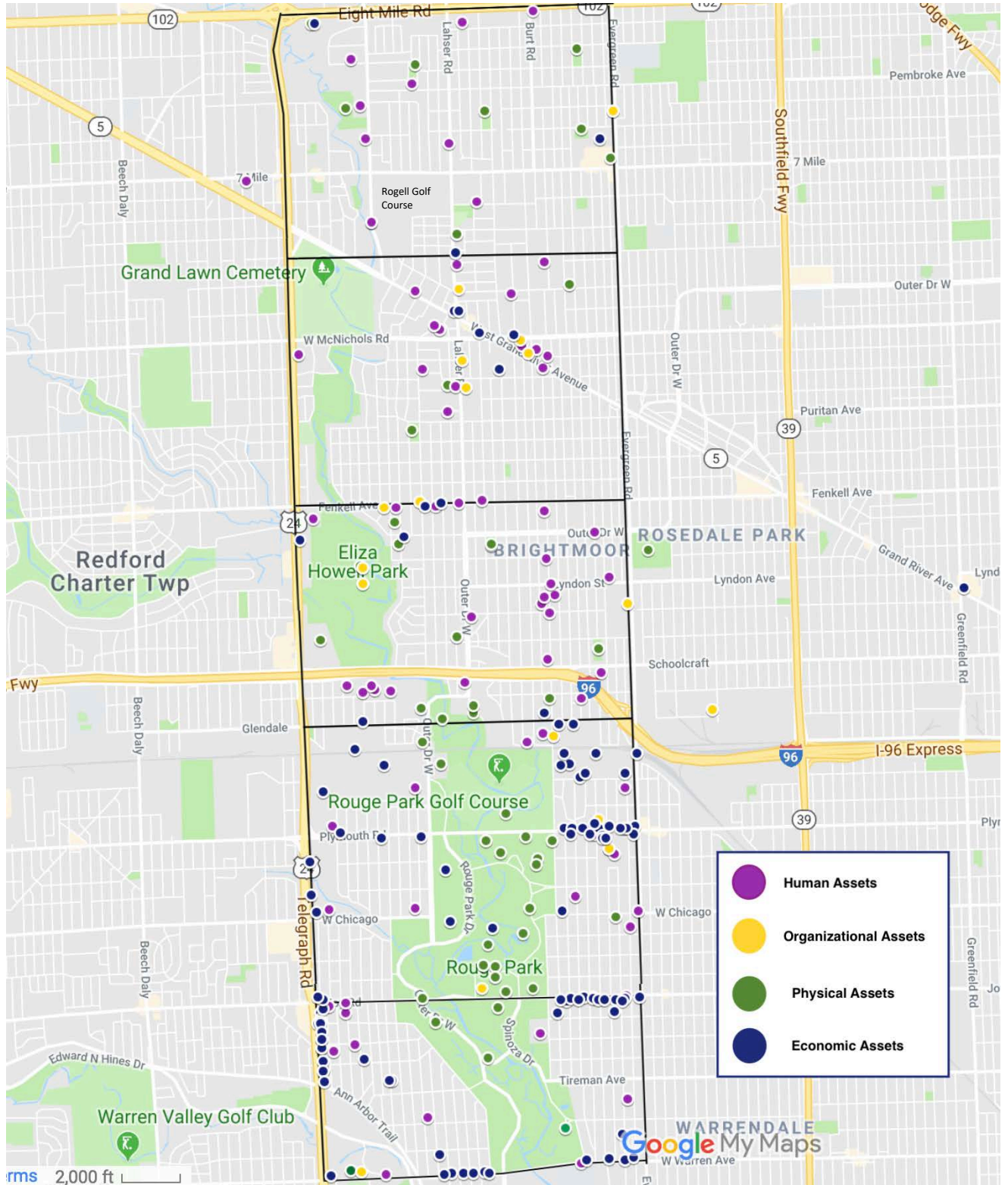


Figure 14: Initial asset map created by the Capstone team. The map shows the full project boundary, the five sub-sections examined by the team. It also shows assets in each of the four HOPE categories.

*8 Mile Road to Curtis Street*

The first of the five sections examined by the team is the area between 8 Mile Road to the north and Curtis Street to the south, between Telegraph Road to the west and Evergreen Road to the east. The amount of vacant land is noticeable as the team explored this section of the proposed greenway. These vacant parcels can be seen as an asset to the greenway project because they may be transformed into smaller neighborhood parks or provide an offshoot of the greenway to connect to other neighborhoods in Northwest Detroit. Though greenways have the ability to connect communities and address issues like flooding, vacant and abandoned properties and land use there are concerns as well. One concern that the Capstone team heard from residents and community stakeholders was that greenways may lead to rising housing prices and eventually displacement. A key asset to help address this concern is an organization like New Hope Community Development.

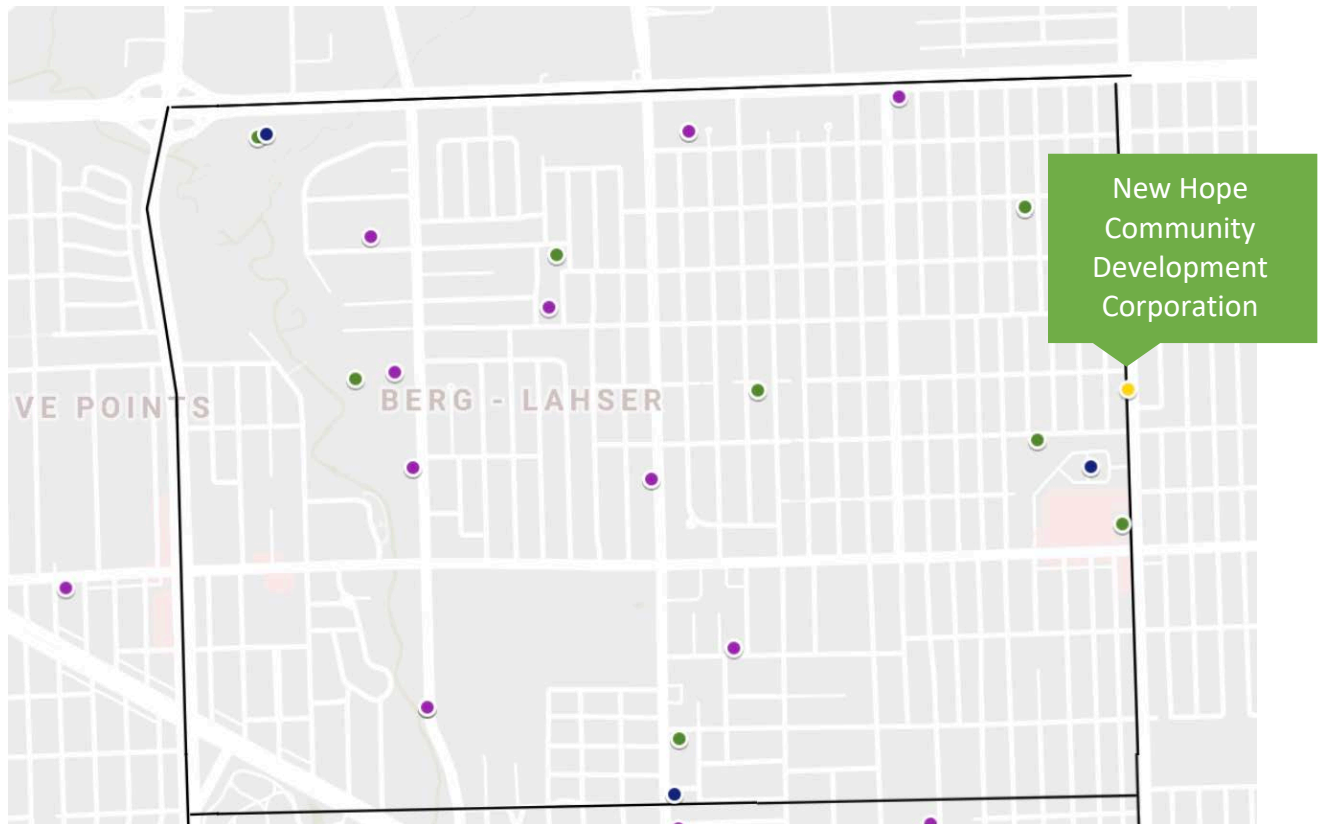


Figure 15: Asset map section 1, 8 Mile Road to Curtis Street. Source: Authors

The mission, as stated on their website, is to “improve the quality of life for residents, businesses, and institutions in [this community].” They accomplish this mission by building new



homes, rehabbing vacant homes, facilitating their home repair program and providing MHSDA counseling services in Northwest Detroit (Corpus Christi Detroit - New Hope Non-Profit Housing). New Hope Community Development and organizations who do similar work can play a vital role in combating gentrification along and near the proposed greenway.

Positive change can also come in the form of city government’s intervention. For example, the City of Detroit purchased Rogell Golf Course, which has sat vacant for years, in the fall of 2018 and plans to turn it into a public park. According to an article published by The Detroit Free Press in March 2018, the city was looking to purchase the neglected golf course for 1.94 million to further Mayor Mike Duggan’s goal of improving parks (Stafford). At the time of publishing this report final purchase details and park plans have not yet been made public by the City of Detroit.

The park could be used to alleviate flooding for local residents, along with becoming a beautiful park. Gary Brown, Director of the Detroit Water and Sewerage Department, stated that “The volume of stormwater we will manage on the Rogell site is like no other location in the city” (Stafford). He said the residents and businesses in northwest Detroit, who have experienced flooding, will find that it will be lessened immensely by installing green stormwater infrastructure that "Detroiters will see as beautifully landscaped bioretention gardens” (Stafford). Several city departments would be responsible for the plan to transform Rogell, which includes creating an open space with nature trails that would connect to the planned Rouge River Greenway (Stafford). These improvements can give some local residents anxiety because of the potential for increased local property values and skyrocketing rents which would be beyond some resident’s means. Previously mentioned, New Hope



Figure 16: Former Rogell Golf Course site, now owned by the City of Detroit. Source: Authors

Community Development Corporation is one key organization that can support neighbors as they work through anxiety of rising housing costs that may be associated with the greenway.

*Curtis Street to Fenkell Avenue*

The second of the five sections examined by the team is the area between Curtis Street to the north and Fenkell Avenue to the south, between Telegraph Road to the west and Evergreen Road to the east. The team continued to use the HOPE model to map assets in this specific geographic area. There is an abundance of human assets like churches in this area however there are very few community based non-profit or government agencies. This specific area is home to, a key physical and economic asset, the intersection of Lasher Road and Grand River Avenue.

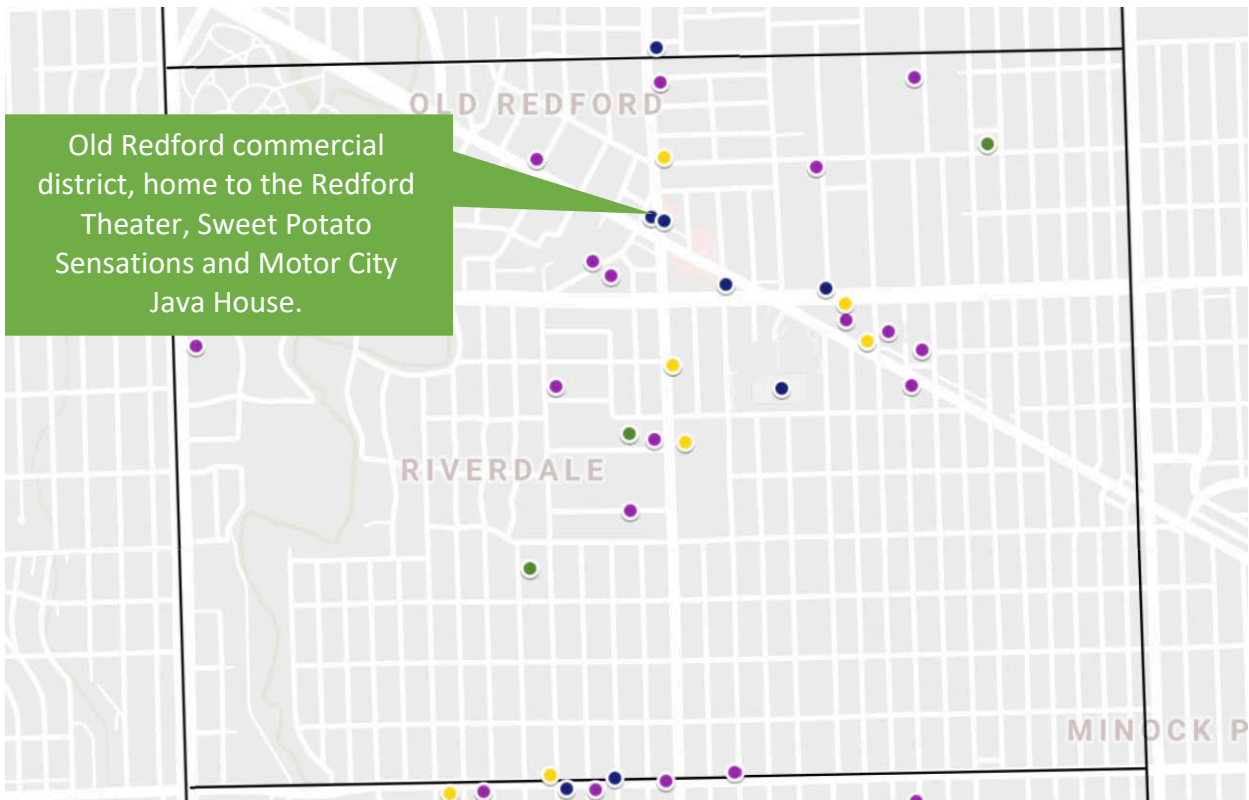


Figure 17: Asset map section 2, Curtis Street to Fenkell Avenue

The one block stretch is anchored by the Redford Theatre, Sweet Potato Sensations, Motor City Blight Busters, Motor City Java House and Artist Village. These small businesses represent some of the most viable community businesses in the City of Detroit. Together they

anchor this area of the team’s geographic region and serve as a destination for many in the city and Southeast Michigan. The sense of place that is created by the Old Redford commercial block connects residents throughout northwest Detroit. The Capstone team sees the intersection at Grand River Avenue and Lahser Road being an economic node, as described in the Red Fields to Green Fields case study analysis. Its proximity to the proposed greenway route makes this intersection and commercial corridor a key connector along the route. Users of the greenway may want to stop for lunch, visit a few shops or connect into other northwest Detroit neighborhoods and this node is the perfect place to do that.



*Figure 18: Old Redford commercial district located on Lahser Road just north of Grand River Avenue. The Old Redford Theater pictured above has been a neighborhood anchor for decades.*

*Fenkell Avenue to Glendale Street*

The third of the five sections examined by the team is the area between Fenkell Avenue to the north and Glendale Street to the south, between Telegraph Road to the west and Evergreen Road to the east. This area includes residential, primarily single family, homes as well as Eliza Howell Park, a large city managed park and most unique asset in this geographic location. During a drive through the park in mid-June 2018 the team observed a small play structure, overgrown tennis courts, and a few signs for walking paths through the wooded areas of the park.

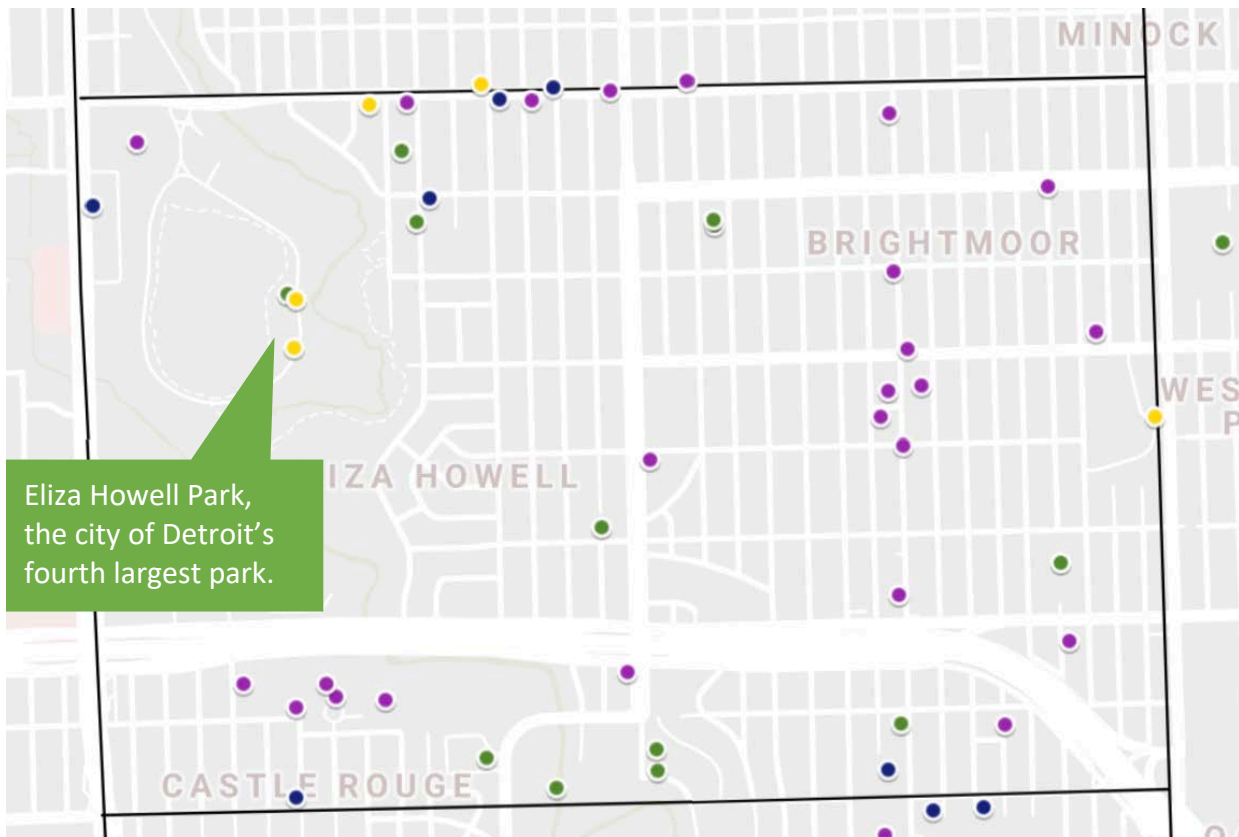


Figure 19: Asset map section 3, Fenkell Avenue to Glendale Street. Source: Authors

During the team’s interviews with Tom Woiwode of the Community Foundation for Southeastern Michigan, Libby Levy of ProSeeds LLC, and Todd Scott of the Detroit Greenways Coalition, Eliza Howell Park was identified as a key asset considering its proximity to a residential community, as well as its location along the Rouge River. To learn more about Eliza



Howell Park the team was connected to Sidewalk Detroit and Sophia Stockum, Side-trails Program Manager and Community Coordinator. “Founded in 2012, Sidewalk Detroit is a grass-roots, community arts presenting organization. Sidewalk Detroit celebrates the landscape and culture of Detroit through presentation of original place-based and traditional performance, installation art, and land art (The Sidewalk Story). The team has identified Eliza Howell Park in partnership with Sidewalk Detroit as a positive example of community engagement done well in conjunction with green space planning.

During a meeting with Sophia Stockum the team learned more about Sidewalk Detroit’s involvement in community engagement surrounding what the residents of the nearby neighborhood of Brightmoor want for Eliza Howell Park. Sidewalk Detroit has been working in Eliza Howell Park for the past two years and spent one year strictly talking to residents about their wants and needs for the space (Stockum). A unique aspect of the community engagement strategy is the Community Leadership Team that Sidewalk Detroit has helped to create. Sophia spoke to the effectiveness of the



Figure 20: Programming provided by Sidewalk Detroit happening in Eliza Howell Park. Source: Sidewalk Detroit

Community Leadership Team in making decisions about what programming is planned in the park and how residents of the Brightmoor neighborhood are communicated with regarding the events. Sidewalk Detroit has taken a thoughtful approach to its involvement with Eliza Howell Park and has set an example for meaningful community engagement.

*Glendale Street to Joy Road*

The fourth of the five sections examined by the Capstone team is the area between Glendale Street to the north and Joy Road to the south, between Telegraph Road to the west and Evergreen Road to the east. A large part of this section is Rouge Park, an 1,100 acre park owned and managed by the City of Detroit. This park is a great physical asset that is filled with other smaller physical assets. The City of Detroit has incorporated a variety of programmed spaces to encourage all types of people to come to Rouge Park including a fitness loop walking trail, nature trails, a swimming pool, basketball courts, tennis courts and a mountain biking trail. It is difficult to quantify the usages of these assets but when the team visited Rouge Park several times this summer many of these spaces were in use. In discussions with Michele Flournoy of the City of Detroit Planning and Development Department she shared that as the city plans for the Rouge River Greenway they are considering these existing park assets as they create the route (Flournoy).

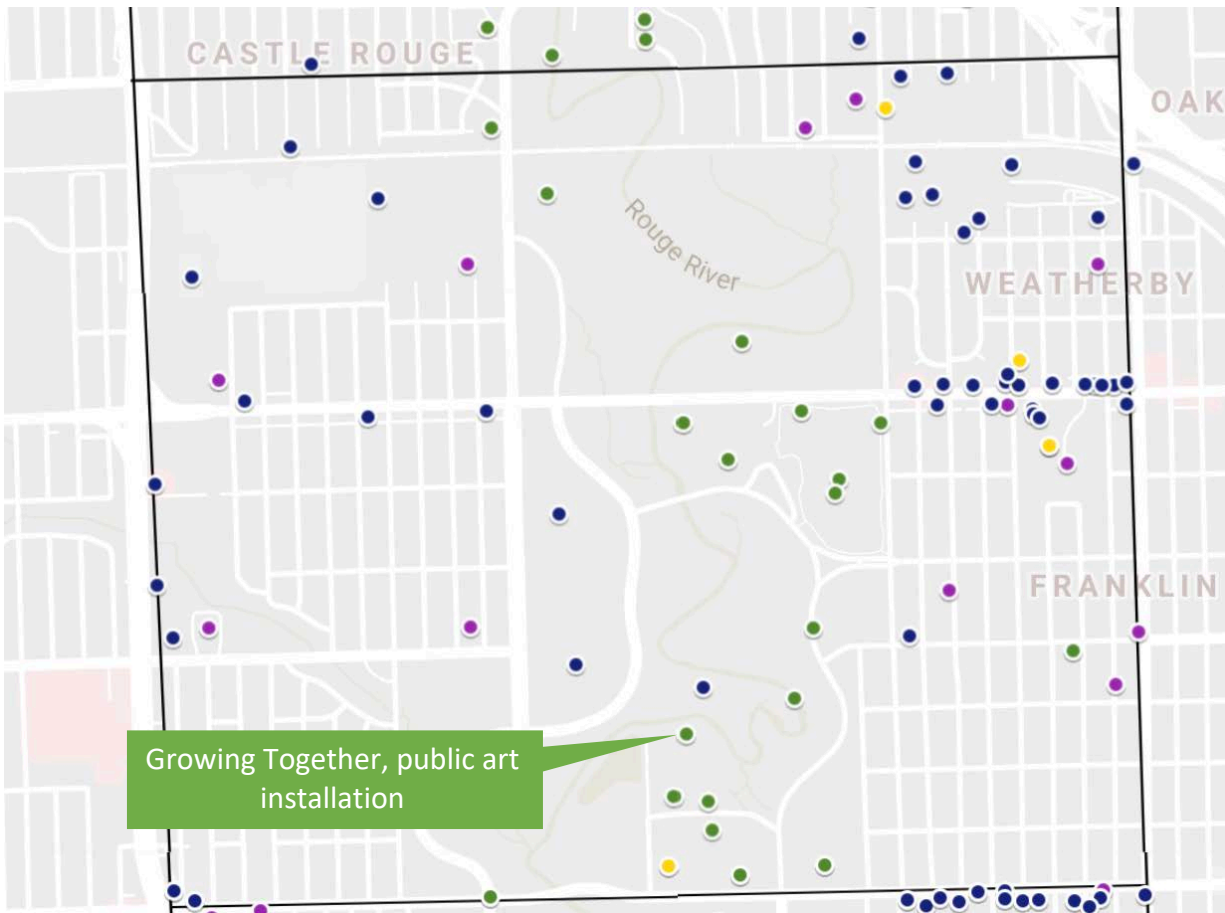


Figure 21: Asset map section 4, Glendale Street to Joy Road. Source: Authors

In addition to the physical assets identified within the park the team found public art and gathering spaces during a drive through the park. The Growing Together statue and Food Justice Amphitheater add art, culture, and history to the park and according to plaques at these sites were a collaboration between the residents of the Cody Rouge neighborhood, the community+public arts: Detroit Initiative, the Skillman Foundation, the Kresge Foundation, Chase Bank, and the College for Creative Studies. Many of the programmed spaces you will find in Rouge Park are much simpler than these two examples. The park is filled with approximately 200 picnic tables and often times you will find them clustered together forming picnic areas (Rouge Park). Rouge Park is also an attraction for anyone interested in fishing, kayaking, canoeing, or wildlife. One of the nature trails incorporates a butterfly garden and multiple spots throughout the park are marked as wetlands.



Figure 22: Growing Together, public art installation in Rouge Park.  
Source: Authors

These ecological assets are what make Rouge Park and proposed Rouge River Greenway unique. The connection to nature that the park and eventually the greenway can and will provide is what will set this greenway apart from others in the city of Detroit.



*Joy Road to Warren Avenue*

The fifth and final section examined by the team is the area between Joy Road to the north and Warren Avenue to the south, between Telegraph Road to the west and Evergreen Road to the east. The Capstone team identified organizations that are dedicated to the development of the youth in their community throughout this geographic section of the proposed greenway. The HYPE Athletic Center is just one organization that supports youth development in their neighborhoods.

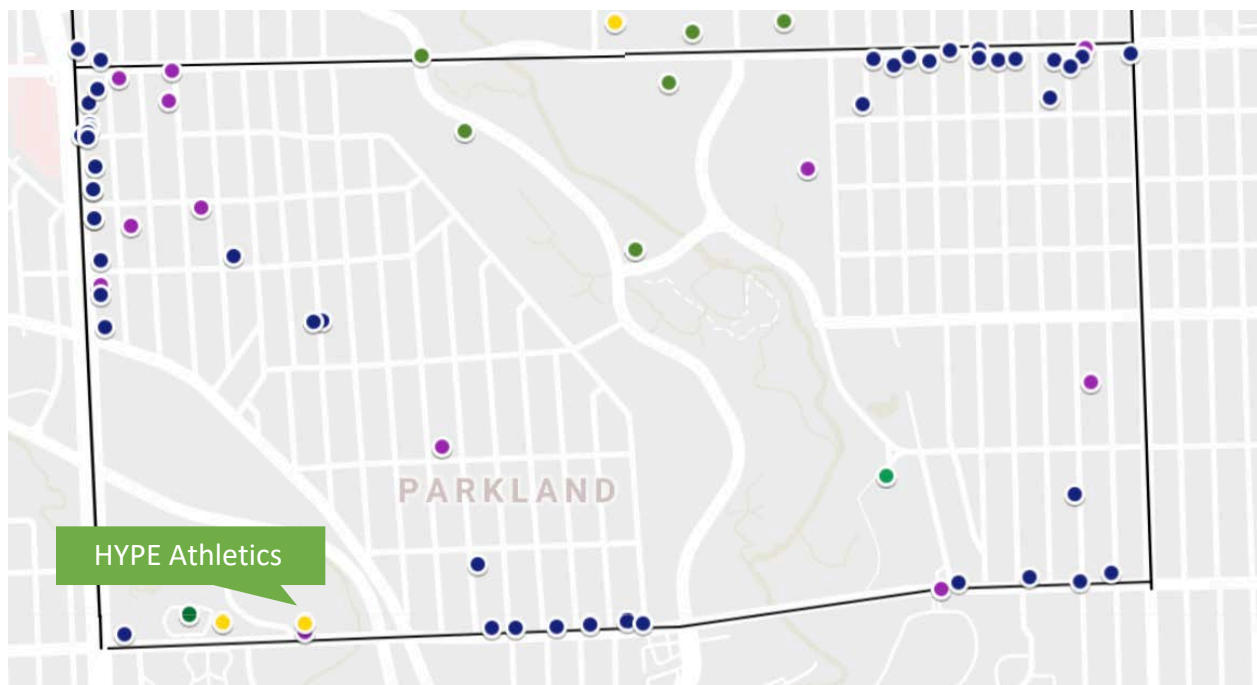


Figure 23: Asset map section 5, Joy Road to Warren Avenue. Source: Authors

According to the director of HYPE Athletics, located on Warren Avenue in Dearborn Heights, their mission is to create and strengthen infrastructures that support the positive development of Wayne County youth through athletic participation and competition, educational tutoring and literacy development, and social awareness including mentoring, counseling, life skills training and substance abuse education and prevention (HYPE Recreation Center). By supporting the youth in the community this organization is helping to support the next generation of community leaders. With a focus on community the HYPE Athletic Center offers access to a variety of sports, educational courses, and most importantly training for

youth around the importance of having a clean and sustainable environment. According to Sayed Ali, the founder of HYPE, every sport club has a community clean up park day twice a month, including Rouge Park. The HYPE Center and similar organizations near or along the proposed greenway route will be key assets as the project continues to development and engage with a diverse population of community residents. Community centers can be gathering spaces for public meetings as well as places where youth can be engaged in the planning and development process.

### *Asset Mapping Analysis*

After completing this extensive asset mapping process, the Capstone team identified key assets and resources that will guide the needs assessment and all work moving forward. In total the team identified over 240 assets that align with the HOPE model and pulled out the themes related to housing development, economic nodes, community engagement, programmed spaces and community gathering places. Focusing on these themes will support the Rouge River Greenway in its planning and development phases and help ensure long term success. These themes are explored in greater detail in the following paragraphs.

When it comes to rising cost of housing concerns community organizations committed to working with residents to keep them in their homes will be vital. New Hope Development Corporation is an example of an organization that can address the concern of rising property values and displacement along the greenway. Old Redford and the economic node at the corner of Lasher Road and Grand River Avenue serves as an example of what other economic centers along the greenway can look like. The greenway will cross many large intersections along the entirety of the eight-mile route; these intersections could become nodes that emulate Old Redford's model. Economic nodes will draw users to the greenway, provide job centers, and create valuable connections for community residents along the route.

Eliza Howell Park located at the geographic center of the proposed route serves as an example of the value of community engagement and the dedication of community members to their natural spaces. The Capstone team sees community engagement as a vital component of the long-term success of the greenway. The model used by Sidewalk Detroit in Eliza Howell Park

will be valuable for the Detroit Greenways Coalition, City of Detroit Planning and Development Department and anyone else involved with the planning and execution of the Rouge River Greenway project.

As demonstrated in Rouge Park, the team understands that programmed spaces along the greenway route will be important as they provide opportunities for people to connect to nature and with each other. A programmed space may be something as simple as a group of picnic tables or more permanent installations like public art or small splash pads for children to play at. Programmed spaces make the greenway more than just a paved path for walking or biking, therefore providing more opportunities and reasons for residents and visitors to use it. Finally, community gathering places like local community centers along the greenway will be key connection points for residents who live along the greenway. Connecting people to places they are already going to is an important component of success for the greenway. Providing alternate and arguably safer routes for residents to travel through their neighborhood will likely encourage residents to use the greenway in their daily lives.

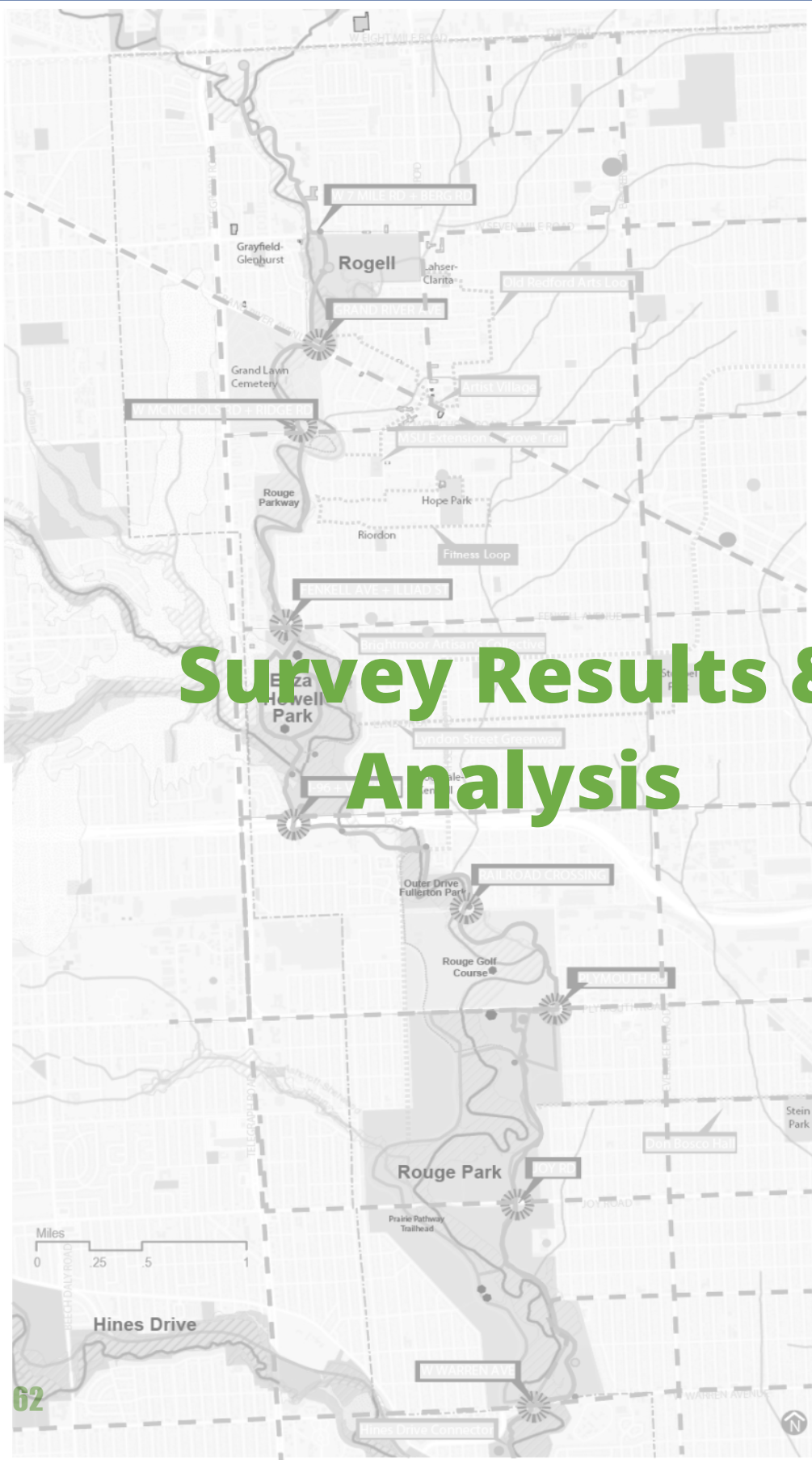
Moving forward, the team will consider the impacts surrounding housing, economic development, unique communities, natural spaces and community gathering spaces in relation to the development of the greenway. The Capstone team believes if these areas are focused on then the ultimate goal of the greenway achieving success through maximum usage will be achieved.



## Needs Assessment

In addition to the detailed asset mapping process, 150 of the previously mentioned surveys were taken during the course of this project. Based on the survey responses and the asset map several needs along the greenway have been identified. When it comes to the Rouge River Greenway itself the most obvious need is funding, both for development and for maintenance. When it comes to the needs of the residents, concern was expressed about a potential lack of cleanliness and long-term upkeep. Another concern for both residents and the greenway itself is safety: Will there be adequate lighting? Will large swaths of vacant homes along the route pose a threat? And will the busy intersections where cyclists and motor vehicles share the road be dangerous? Other residential needs that should be addressed before, during, and after the building of the greenway include mistrust of city government and increased taxes and housing costs.

ROUGE RIVER  
GREENWAY STUDY  
12 Miles Multi-use Path  
7 City Parks  
10 Major Intersections  
550 Acres of Wetland



# Survey Results & Analysis

- LEGEND**
- Detroit City Boundary
  - Existing Streams
  - Rouge River
  - Historic Streams
  - 100-year Floodplain
  - Preferred Route
  - Critical Intersection
  - Connecting Bus Routes
  - Organizational Assets
  - Economic Assets
  - Human Assets
  - Physical Assets
  - Cultural Assets



## Survey Results & Analysis

In June of 2018 this Capstone team developed and began distributing a nine-question survey both physically and electronically, throughout Detroit. The purpose of this survey, previously shown on page 14, was to begin to understand how familiar residents are with the idea of greenways and how they might use it if there was a greenway near their home. Additionally, the Capstone team was interested in learning about what concerns individuals had about greenways.

In order to collect responses, the Capstone team took a multi-pronged approach. Physical paper surveys were collected at community events such as Open Streets Rouge Park, Open Streets Southwest Detroit, Tour de Troit, and a community health fair held at Bible Missionary Church of Brightmoor. In order to reach an even wider audience, the Capstone team enlisted the help of our community partner, Detroit Greenways Coalition who shared the survey on their Facebook page. Finally, Sophia Stockum of Sidewalk Detroit shared the electronic survey with their Community Leadership Team. In total this Capstone team received 150 survey responses. The Capstone team must recognize that the following data may be slightly skewed due to the types of events the survey was distributed at, however this team believes that is representative of many of the neighborhoods that board the proposed greenway.

Figure 26 shows a map of Detroit and its zip codes. The zip codes shaded in green represent where at least one resident responded to the survey. In total 20 of 28 Detroit zip codes were represented. These responses also represented 90 of the total 150 response or a total of 60%. The team made a concentrated effort to only distribute the physical survey within the city of Detroit however to have 60% of the responses from Detroiters was a valuable outcome. If the survey continues to be distributed past the completion of this Capstone significant focus should be giving to the zip codes closest to the proposed greenway, 48219, 48223, 48228, 48227, and 48235.



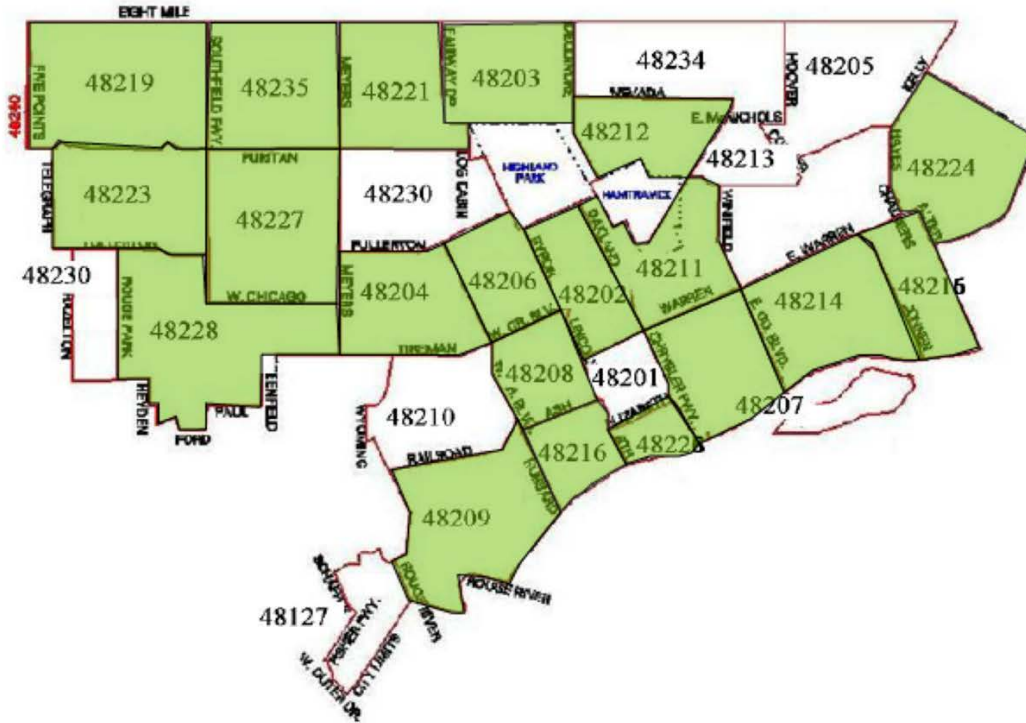


Figure 24: Map of Detroit and its zip codes. The green shaded zip codes represent those where the Capstone team had at least 1 survey response. In total 20 of the 28 Detroit zip codes are represented. Source: Authors

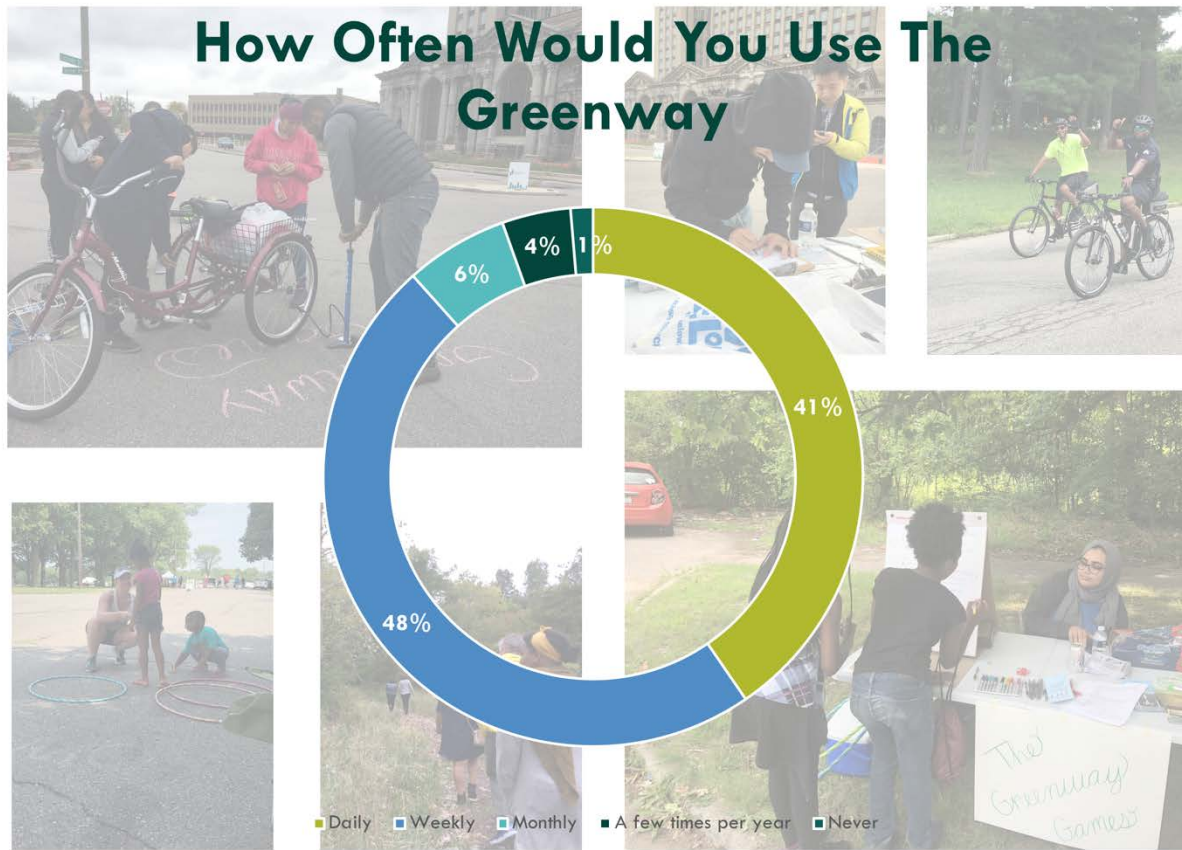
As the Capstone team analyzed the data, we learned that an overwhelming 87% of respondents had heard of or understood what a greenway was and 86% of respondents had also visited a greenway. The team was surprised that these numbers were so high but also pleased to know that residents of Detroit have at least some understanding and familiarity with the idea of a greenway. This information may be helpful when executing one of the recommendations provided by the team in the Action Plan Proposal section beginning on page 73. As a public education campaign is created to inform the public about the greenway it may not be necessary to spend much time on what a greenway is. Time may be better spent helping residents understand how the greenway can enhance their daily lives and addressing concerns that residents may have about the greenway.



Figure 25: Survey responses showed that 87% of people respondents had heard of a greenway and 86% of respondents have visited a greenway.

This Capstone team was curious about how often individuals imagine themselves using the greenway if it was near their home. The photos in Figure 28 show the breakdown of the 150 survey responses. In total 89% of respondents said that they would use the greenway on a daily or weekly basis. The Capstone team was encouraged by this result. If residents can imagine themselves using the greenway on a daily or weekly basis before it is even built, we believe that through meaningful community engagement these residents will actually use the greenway in their daily lives once it is constructed.

One modification that the Capstone team suggests making to the survey if Detroit Greenways Coalition or the City of Detroit Planning and Development Department wish to continue collecting data would be to ask those who say that they would never use the greenway why they responded that way. Though it is a small percentage of individuals in this data set if additional responses are collected it may be valuable to know why people cannot imagine themselves ever using the greenway. This data could be helpful in designing the most inclusive and accessible greenway possible.

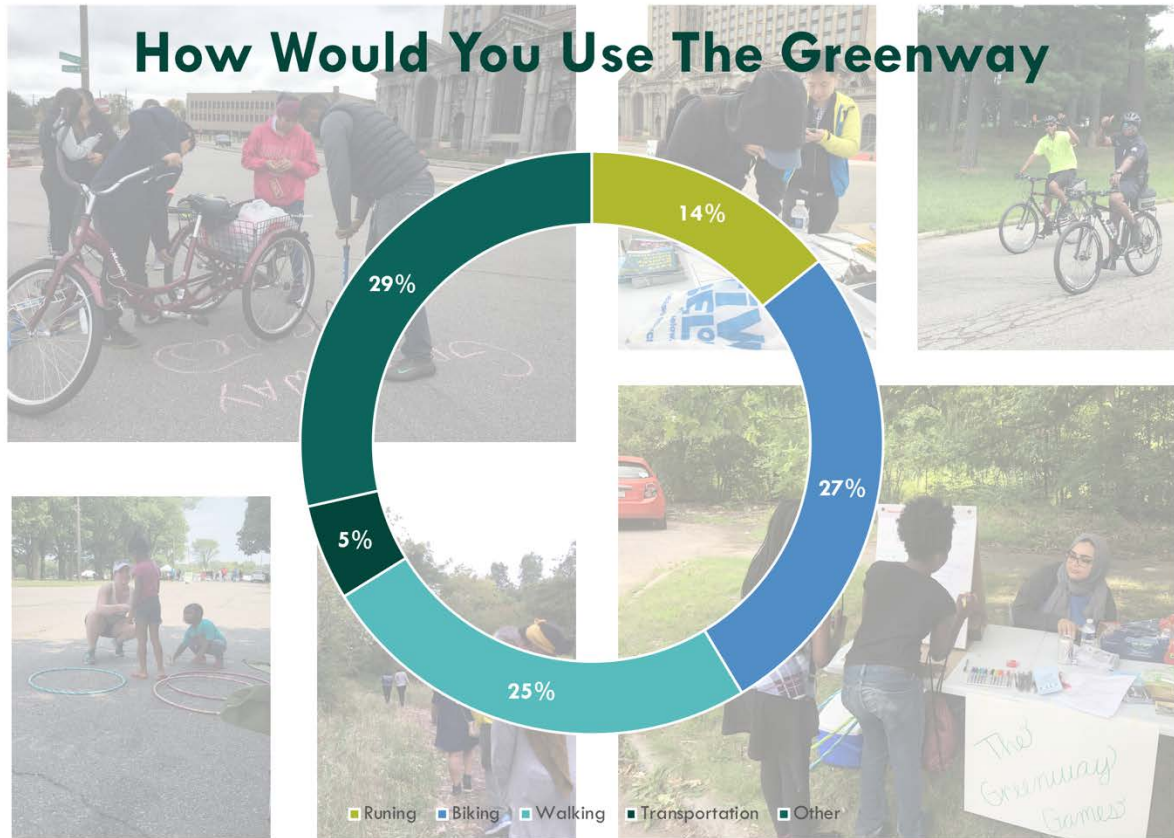


\* Data based on 150 responses

Figure 26: Graph representing the responses to the question "How often would you use the greenway" An overwhelming majority of responses indicated that they would use the greenway daily or weekly. Source: Authors

In addition to asking how frequently individuals imagined using the greenway the survey asked individual to select from a list how they would use the greenway. A combined 52% of respondents indicated that they would use the greenway to bike or walk. 29% selected other and shared that they would like to read, write or bird watch on the greenway. The team believes that those responses show that people are already thinking about the connections to nature that the greenway can provide them. This data will be valuable once the process of planning activities that will take place on the greenway begin. To ensure long-term success it will be important that the programming provided on the greenway is as diverse as those who are using the greenway. Finally, it is important to recognize that only 5% of respondents indicated that they would use the greenway for transit. This information may again be valuable, and the recommended public education campaign is shaped. Through our research we understand that the greenway has the potential to be a valuable component of the overall

transit system on Detroit’s west side however residents may need more information to persuade them.

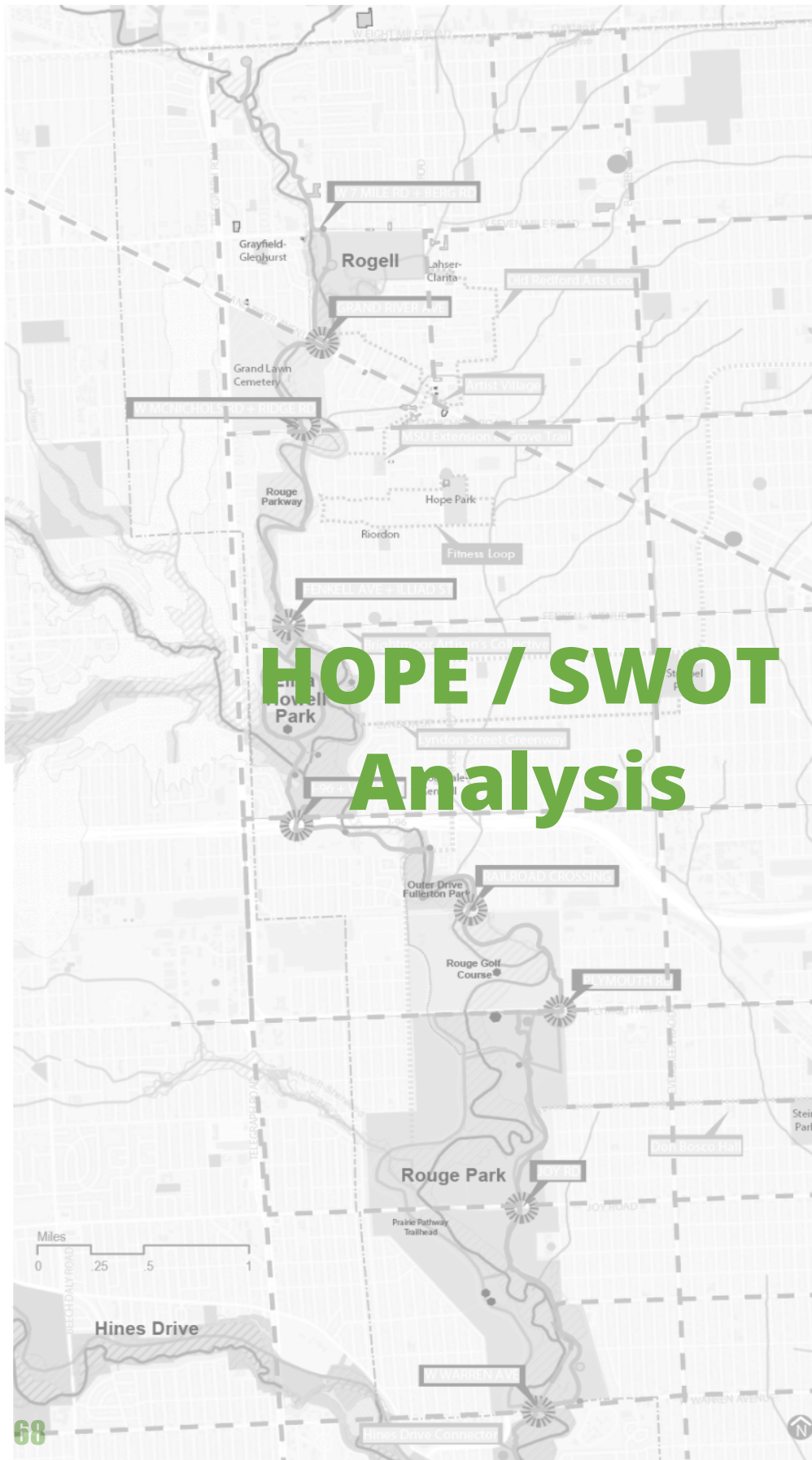


\* Data based on 150 responses

In addition to analysis the data from the survey this Capstone team used the comments provided in each of the survey responses to inform the HOPE/SWOT analysis and that themes that were uncovered in that process. Further discussion of the HOPE/SWOT process and findings are shared in the next section.



ROUGE RIVER  
GREENWAY STUDY  
12 Miles Multi-use Path  
7 City Parks  
10 Major Intersections  
550 Acres of Wetland



# HOPE / SWOT Analysis

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  - Physical Assets
  - Cultural Assets





## HOPE / SWOT Analysis

The extensive asset mapping process and the 150 completed surveys identified that there are many strengths, weaknesses, opportunities, and threats in relation to the development of the Rouge River Greenway. Online research and interviews also helped to inform this analysis, which looks at all of the possibilities of what this greenway can create through the lens of the HOPE Model. Essentially, strengths and opportunities are viewed as assets while weaknesses and threats are viewed as needs. Through this analysis four reoccurring themes have been identified: economic opportunities, possibilities for connections, an abundance of committed organizations, and the juxtaposition between skepticism and optimism.

	Strengths	Weaknesses	Opportunities	Threats
Human Development	<ul style="list-style-type: none"> <li>-Mode of transportation</li> <li>-Improving health &amp; wellness</li> <li>-Can improve the quality of life</li> </ul>	<ul style="list-style-type: none"> <li>-Safety &amp; Lighting</li> <li>-Community skepticism</li> <li>- lack of follow through</li> </ul>	<ul style="list-style-type: none"> <li>-Could lead to restaurants and shopping - an economic booster</li> <li>- Programmed for recreation</li> <li>-Used as daily transportation</li> <li>-Incorporate art and culture</li> </ul>	<ul style="list-style-type: none"> <li>-Safety</li> <li>-Users not respecting the greenway and those who live nearby</li> <li>-Another project that gets talked about but doesn't happen</li> </ul>
Organizational Development	<ul style="list-style-type: none"> <li>-Programming Possibilities</li> <li>-Many groups already doing community engagement work (ex: Sidewalk Detroit)</li> <li>-A large number of community groups to connect to</li> <li>-Existing non-profits groups that are stewards of the parks (ex: SD, FORP)</li> </ul>	<ul style="list-style-type: none"> <li>-Lack of funding for both building and maintaining</li> <li>-Lack of trust in city government</li> </ul>	<ul style="list-style-type: none"> <li>-Sustainability</li> <li>-Participatory Planning</li> <li>-Foundation money may be available</li> </ul>	<ul style="list-style-type: none"> <li>-Sustainability</li> <li>-City promotes but doesn't follow through</li> </ul>
Physical Development	<ul style="list-style-type: none"> <li>-Connections to nature</li> <li>-All of the needed parks are owned by the city</li> <li>-Not isolated - connects to main roads and bus routes</li> </ul>	<ul style="list-style-type: none"> <li>-Lighting concerns</li> <li>-Long-term maintenance</li> <li>-The potential for traffic, noise, and congestion</li> </ul>	<ul style="list-style-type: none"> <li>-Connect to downtown, work, buses, recreation</li> <li>-Connect from Allen Park, Dearborn, or Southfield to Detroit</li> <li>-Connect to nature - Rouge River, parks, the woods</li> <li>-Get to the grocery store, church</li> <li>-Have shaded areas</li> <li>-Connect vacant spaces</li> <li>-Wide enough to accommodate walkers and cyclists</li> </ul>	<ul style="list-style-type: none"> <li>-Will connecting routes be safe</li> <li>-Will there be protected bike lanes</li> <li>-Disruption of natural habitats</li> <li>-Some parts may not feel safe</li> <li>-The parts that are on major roads / at major intersections may not be safe</li> </ul>
Economic Development	<ul style="list-style-type: none"> <li>-Could lead to restaurants and shopping - an economic booster</li> <li>-Increased property values</li> <li>-Creation of jobs for building and maintaining</li> <li>-Can get people to their jobs</li> </ul>	<ul style="list-style-type: none"> <li>-Increased taxes</li> <li>-Increase the cost of living</li> </ul>	<ul style="list-style-type: none"> <li>-Bike rentals</li> <li>-Increased traffic for businesses that are on or near the route</li> <li>-Residual infrastructure updates could lead to improvements that also equal more traffic for stores</li> </ul>	<ul style="list-style-type: none"> <li>-Increased taxes</li> <li>-Increase the cost of living</li> </ul>

Figure 27: HOPE / SWOT Matrix detailing the Capstone team's findings related to the strengths, weaknesses, opportunities and threats associated with the Rouge River Greenway project. Source: Authors

Economic opportunities are seen as both an asset and a need because they can be both a strength and a threat. While the greenway can serve as both a job creator and an additional mode of transportation to get people to their jobs, it can also lead to rising property values and taxes. A number of survey respondents mentioned concerns over the greenway leading to increased costs of living and online research verifies that this is a legitimate concern. In its discussion of the benefits of Greenways, Greenways Inc., cited that in “Dayton, Ohio five percent of the selling price of homes near the Cox Arboretum and park was attributable to the proximity of that open space” (Greenways Inc.). That data is just one of the examples that property values can be impacted by the creation of greenways and access to open space. While homeowners may see increased property values as a positive, renters likely will not. In Detroit only 48.2% of the population are living in owner-occupied homes, meaning that over half of the population is at risk of being priced out of their neighborhoods as property values rise (United State Census Bureau).

Second, the Capstone team identified the potential for connectivity as a real strength of the greenway for each pillar of the HOPE model. Many survey respondents shared that they were excited for the possibility of a new way to connect to the places they already go to. The greenway has the ability to bridge communities of people, provide residents access to new jobs, and better connect residents to their natural physical assets like Eliza Howell Park, Rouge Park, and the Rouge River. Also, by creating a greenway that optimizes connections along the route to the assets that are most meaningful to potential users it helps to ensure that the greenway is useful. The Capstone team has identified usage as a measure of success therefore meaningful connections are key to the success of the Rouge River Greenway.

Third, this Capstone team identified several organizations during research that we believe could be a huge asset to the developers while planning this greenway. Friends of Rouge Park and Sidewalk Detroit have both already created master plans for the Rouge Park and Eliza Howell Park. Their processes for developing these plans show that they are committed to serving the residents and to engagement. Friends of the Rouge and the Detroit Audubon Society are environmental organizations that are committed to the health and wellness of the natural habitats in the nearby areas and could be excellent resources in many ways. These

include helping in the physical development of the greenway to make sure the natural habitats are not negatively affected and helping to develop interpretive signage that will help to connect greenway users with nature.

The last recurring theme that emerged mainly from the surveys was this feeling of optimism mixed with skepticism when it came to the development of greenways in general. Many people shared that they would like to see a greenway and that they would use it frequently as both a mode of transportation and for recreation, however this excitement was met with equal worry. Some survey respondents shared fears over it being something that was built but then never maintained or used while others shared skepticism that it would ever get built at all and was just “another thing the city is talking about but won’t do.” Other worries included it being too close to people’s backyards and users not respecting the neighbors, and the aforementioned concerns over increased costs of living.



Figure 28: A visual representation of the four recurring themes identified by the Capstone Team during the HOPE / SWOT analysis process. Source: Authors

After completing this HOPE/SWOT analysis this Capstone team believes that overall community members do want and would use a greenway, but that the way in which it is developed will be critical in resident's adoption and acceptance of it. The economic benefits can be well received if they work for everyone, a great way to ensure this is to include local businesses in the development conversations. The issues of skepticism and conversations around potential negatives this greenway can lead to can be addressed by including the residents in the development conversations through a meaningful engagement process. The many organizations doing work in the nearby neighborhoods and parks can be a huge asset when it comes to creating engagement opportunities. The one thing that was the clearest is that people want a greenway that can connect them to a wide variety of places. The survey responses that seem the most optimistic are the ones that mention all of the places they want to use a greenway to get to: restaurants, shopping, work, bus routes, parks, nature, and the river.





## Action Plan Proposal: Engagement & Connectivity

The culmination of this Capstone teams research, asset mapping, survey distribution and analysis and SWOT analysis was to create recommendations, a proposed project timeline and a conceptual budget. This proposed action plan focuses specifically on two themes identified by the Capstone team as vital to the greenway's success: engagement and connectivity. This Capstone team believes that the two best ways to ensure usership of the greenway are to make sure the local residents feel a sense of ownership and pride when it comes to the greenway, and that the greenway can take people to the places and things they were going to anyway. These two focus areas are incredibly intertwined as you cannot have one without the other - you will not know what assets need to be connected to without first doing engagement and connectivity equals people engaging with each other and their surroundings.

When this Capstone team began working on the Rouge River Greenway project it was with the preconceived notion that greenways are a good thing that can add a lot of positive qualities to a neighborhood. While there is a large amount of research that supports this general opinion (mental and physical health benefits, additional mode of transportation, economic improvements for home values and businesses) there were two opposing facts that became important for this Capstone team to keep in mind: greenways can be seen as a sign of impending gentrification, and greenways are public space and the way public space is experienced can be very different from one person to the next depending upon factors like race, gender, age, and ability. Madhavi Reddy, Strategic Framework Manager at Community Development Advocates of Detroit, and this team's Human Development advisor, was instrumental in keeping these realities in mind. While this Capstone team does still hold the belief that greenways are a positive our hope is that through meaningful engagement and intentional route planning members of the surrounding communities who may have negatives perceptions and expectations around greenways can begin to change their mind. If all of the residents and business owners are given an equal voice in the development of the greenway the negative difference in how public spaces are perceived should be mitigated, at least to the extent that physical space can have an effect. The city can also be strategic in alleviating fears

of gentrification and displacement by promoting existing options for low-income residents, such as nonprofit organizations and policies that help in this area.

*Engagement Recommendations*

This Capstone team feels it is imperative for the City of Detroit Planning and Development Department and the Detroit Greenways Coalition to engage with local residents and business owners both before and during the process of developing and building the Rouge River Greenway. By engaging with the local stakeholders, the city will be helping the greenway to be successful by ensuring a sense of ownership is felt by those who live nearest to the greenway. Below are step-by-step recommendations to help facilitate this engagement, which should be broad and diverse.

*Recommendation 1: Workforce Development*

Workforce Development is being recommended by this Capstone team as the first engagement recommendation for several reasons. Detroit’s economy has historically been primarily based on industry, something that has continued to decline over the last several decades. Because of this there remains today a need for jobs and even more so, a need for job training in new fields. Not only can the Rouge River Greenway support and create jobs when it comes to planning, developing, and maintenance, but it can and should also work to support programs that train Detroiters in these fields. This will help to improve the economy in the area and this Capstone team believes it will also help to earn support amongst those who may not initially want to see the greenway become a reality.

What	Why
Create workforce development plan that will support the building and maintenance of the Rouge River Greenway and any future similar projects.	Answers an immediate skill & training need while providing employment opportunities and it helps encourage support of the project.
Who	When
Examples: Area residents & community organizations, Greening of Detroit, Detroit at Work, United Way, Randolph Career Technical Center	Ongoing, during the planning and development of Rouge River Greenway

*Recommendation 2: Secure & Strengthen Resident Stakeholder Relationships*

To secure and strengthen resident and stakeholder relationships this Capstone team recommends the Detroit Greenways Coalition and City of Detroit Planning and Development Department initiate meetings with sixteen or more community organization. These organization should be diverse and include block clubs, resident-led alliances, churches, and nonprofits that focus on social justice issues such as affordable housing, displacement, and equity. These meetings may begin broadly (handing out the survey created by this Capstone team may be a great place to start) but they should eventually develop into more detailed meetings with mapping exercises where residents have the opportunity to decide what features they want the greenway to have and what places they want offshoots of the greenway to be able to take them to.

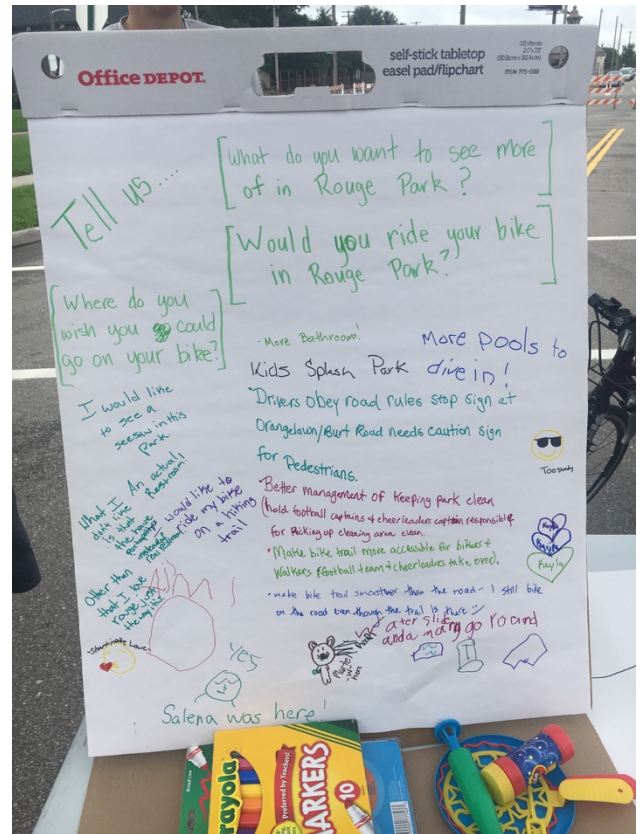


Figure 29: Example of community engagement conducted by the Capstone team at Open Streets Southwest in October 2018. Source: Authors

What	Why
Identify & engage sixteen area nonprofit and/or community development corporation (CDC) type organizations.	To understand from the residents the concerns and needs they may have related to the proposed greenway as well as to establish trust.
Who	When
Examples: The Cody Rouge Action Alliance, Friends of Rouge Park, New Hope Community Development, Sidewalk Detroit, Neighbors Building Brightmoor, the Sandhill Neighborhood Association and Brightmoor Alliance.	Ongoing, during the planning and development of Rouge River Greenway

*Recommendation 3: Secure & Strengthen Business Stakeholder Relationships*

To secure and strengthen business stakeholder relationships this Capstone team recommends the Detroit Greenways Coalition and City of Detroit Planning and Development Department identify and engage with sixteen or more businesses that are within the communities that border the greenway. Conversations should be had with these business owners to learn how much they believe the development of the Rouge River Greenway could positively or negatively affect them i.e. increasing traffic and income for their business. Collaborative efforts that could enhance this economic impact should also be discussed like the addition of bike racks, and advertising opportunities related to the greenway.

What	Why
Identify & engage sixteen area businesses	Gather insight into any concerns associated with the proposed greenway. Share strategies and benefits for achieving improved traffic.
Who	When
Examples: Scotty Simpson’s Fish & Chips, Sweet Potato Sensations, Motor City Java House, Brightmoor Artisans Collective, Brightmoor Flower Farm	Ongoing, during the planning and development of Rouge River Greenway



Figure 30: On the left, Scotty Simpson's Fish and Chips, an iconic neighborhood restaurant in Brightmoor and close to the proposed Rouge River Greenway. Source: Eater Detroit. On the right, Brightmoor Artisans Collective, a neighborhood gathering space, coffee shop and market located near Eliza Howell Park. Source: Authors



*Recommendation 4: Secure partnerships with environmental organizations*

To mitigate any damage to the natural habitats along the Rouge River Greenway this Capstone team recommends the Detroit Greenways Coalition and City of Detroit Planning and Development Department collaborate with local environmental organizations. The Rouge River Greenway is the only nature-based greenway in the city and with this comes unique challenges. Prior to the start of construction of the greenway DGC and the city together should consult with environmental and ecological experts to create a plan to ensure that the beauty of the Rouge River and its surround habits are preserved and protected. Once partnerships are solidified a combined plan for engagement between greenway users and nature should be created. This should include the creation of educational lessons centered around the greenway, creating ways to make sure the greenway does not lead to additional pollution in the Rouge River, and helping to create interpretive (ecological) signage that is both branded and educational.



*Figure 31: Leonard Weber, Eliza Howell Park enthusiasts and president of the Detroit Audubon Society. Leonard is a true advocate for the natural habitats that exist in Eliza Howell Park. Source: Authors*



What	Why
Engage and collaborate with local environmental nonprofits & organizations to proactively prevent residual environmental project damage	Proactively take steps to prevent residual environmental project damage
Who	When
Examples: Friends of the Rouge and the Detroit Audubon Society	Ongoing, during the planning and development of Rouge River Greenway

*Recommendation 5: Launch greenway public education campaign*

To educate and inform residents of the benefits of greenways, the Rouge River Greenway plan and to ensure transparency this Capstone team recommends the Detroit Greenways Coalition and City of Detroit Planning and Development Department launch a public education campaign. This simple and straightforward campaign should contain positive facts about the effects of greenways. A local advertising firm should be hired to work in partnership with DGC and City of Detroit PDD to create public presentations, publish articles in local papers and online, share social media content, provide interviews, and perhaps even post billboards. In addition to the pros of the greenway, areas of focus should also be contact information and solutions for residents who fear the greenway may lead to their neighborhood becoming unaffordable for them.

What	Why
<p>Multipronged branding, marketing and public relations strategy across various medium and platforms, both traditional and nontraditional</p>	<p>Introduce and educate the surrounding community on greenways (pros and cons) and specifically the proposed Rouge River Greenway project</p>
Who	When
<p>City of Detroit Planning and Development Department, Detroit Greenways Coalition, local Public Relations firm</p>	<p>Ongoing, during the planning and development of Rouge River Greenway</p>



Figure 32: Example of the Atlanta BeltLine website. Notice the link to an interactive map on the left-hand side of the photo and the notice of an upcoming quarterly briefing for 2018. Source: Atlanta BeltLine

*Engagement Recommendation Analysis*

Engagement is essential to the success of any project at the community level. When you are talking about a development that may be unpopular for a broad number of reasons the more engagement you do the better your odds are of the finished product being embraced by the community and being successful. A strong engagement campaign will always be seen as strength. However, that doesn't mean there are not downsides to engagement. When to begin engagement processes can be tricky - you do not want to begin so late as to seem disingenuous but if you begin too early you may not be able to answer important questions about things like timelines and budgets. This exact problem is currently the biggest weakness for the Rouge River Greenway project. This same concern can also manifest as a threat. If the engagement process begins too early some owners of formally vacant or abandoned land may exploit this situation and ask for exorbitant prices for land needed to realize the greenway. Even with the weaknesses and threats that are inherent in this proposed engagement plan the strengths and opportunities far outweigh them. Most important of all this plan presents the opportunity for the RRG to be developed in a way that incorporates and addresses wants and concerns. There is also a secondary opportunity for the local government to build trust with the residents, an invaluable potential outcome with far reaching benefits.

Strengths	Weaknesses
Having a strong and diverse engagement campaign will likely increase usership by local residents because they will have a sense of ownership of the greenway. This will also likely increase their pride in the greenway which may lead to more assistance in keeping it safe and clean.	Currently there is no budget and no timeline for the Rouge River Greenway. It is very hard to begin engaging residents around a project that still has so many unanswered questions.
Opportunities	Threats
By doing a large engagement process the developers may learn about very real wants or concerns they can incorporate into the design but had never thought about before. This is also an opportunity to enhance resident trust in government.	The City of Detroit fears if the word about the Rouge River Greenway becomes too widespread the acquisition of some lands needed to make it happen could become unaffordable

In addition to engagement, which is a central strategy with regards to the success of the Rouge River Greenway, the concept of connectivity has been identified as of the utmost significance by the Capstone team. To connect is defined as joining together so as to provide access and communication. Connectivity lends itself to a sense of access and communication. The group has identified six tactics that are believed to establish and support a sense of connectedness and connectivity, hence the success of the proposed route. These tactics and strategies are discussed in the following section.

### *Connectivity Recommendations*

This Capstone team feels it is very important for the City of Detroit Planning and Development Department and the Detroit Greenways Coalition to consider all opportunities to create and enhance connections to and along the proposed greenway route. If the greenway connects people to places that they are already going to this will help it to realize maximum usage and ensure long term success. The following recommendations focus on a process to identify and map key community assets as well as leverage community residents to encourage usage.

### *Recommendation 1: Identification of Important HOPE Destinations*

To identify important HOPE destinations, which will later be a part of the connectivity map, this Capstone team recommends the Detroit Greenways Coalition and City of Detroit Planning and Development Department ask residents and business stakeholders during the engagement process: what human, organizational, physical, economic, and cultural destinations would you use the greenway to get to? This is an important first step in creating the initial connectivity map that will help to support



Figure 33: Brightmoor Connection Food Pantry, an example of a Human (H) asset that may be identified by community members during the recommended process. Source: Authors

usage of the greenway. Focus groups, surveys and interviews are the recommended tactics for learning this information.

What	Why
Inventorying assets and points of interest prospective users of the greenway are connected to and desire to be connected to or have connectedness to improved.	Connectivity to what users find significant supports the everyday practical adoption and use of the proposed greenway and thus its overall success.
Who	When
Priority must be given to prospective users who can most realistically benefit most from the proposed greenway i.e. those who live, work and/or play in the surrounding area.	Ongoing, during the planning and development of Rouge River Greenway

*Recommendation 2: Creation of Routes to HOPE Destinations*

Once important HOPE destinations have been identified this Capstone team recommends the Detroit Greenways Coalition and City of Detroit Planning and Development Department create detailed routes for getting to these destinations via the greenway. These routes should be clearly identified on the connectivity map and should be supported by signage along the greenway.

What	Why
Familiarity with routes and methods currently being used to access HOPE assets and locations of interest.	A thorough understanding of mobility patterns in the area encompassing the proposed route
Who	When
City Planning, DGC, DDOT, SMART and potential users of the greenway within the surrounding area.	Ongoing, during the planning and development of Rouge River Greenway



*Recommendation 3: Identification & Integration of Connectivity Improving Routes*

As a way to keep the total project budget for the Rouge River Greenway as low as possible existing infrastructure should be utilized when identifying and creating the routes that connect greenway users with identified assets. This Capstone team recommends the Detroit Greenways Coalition and City of Detroit Planning and Development Department use pre-existing infrastructure whenever possible in the creation of connectivity routes. This should include a concentrated effort to connect the greenway to bus stops or to create new bus stops along the route of the greenway. The connections to bus routes will broaden and enhance the possibilities for connections.

What	Why
Identify opportunities for integrating the proposed greenway into existing transit infrastructure	Improving connectivity through low cost additions to the existing infrastructure in order to improve quality of life i.e. usage of time and opportunities to HOPE assets
Who	When
City Planning, DGC, DDOT, SMART and Public Works	Ongoing, during the planning and development of Rouge River Greenway

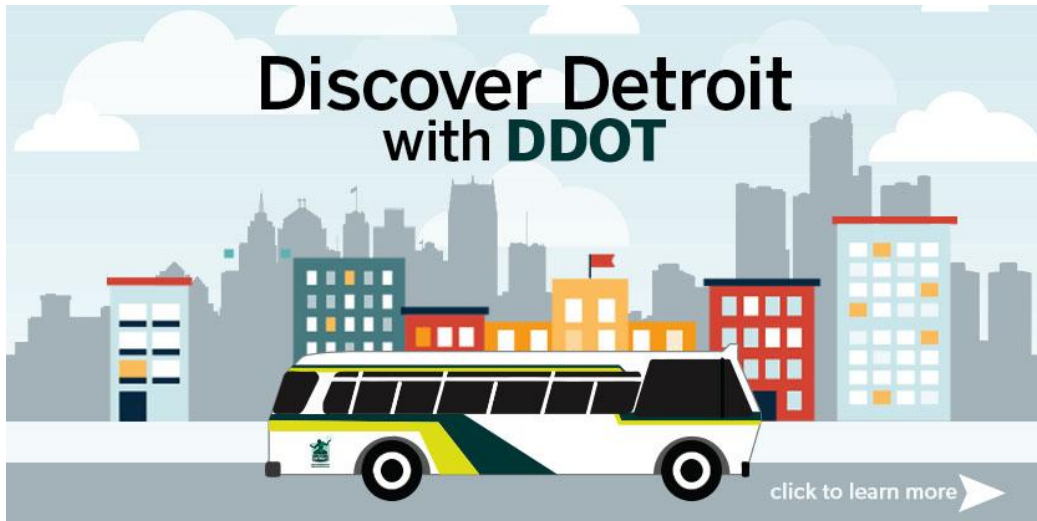


Figure 34: Detroit Department of Transportation advertisement. DDOT will be a key partner in creating connections to existing routes that cross or travel near the proposed greenway route. Source: City of Detroit

**Recommendation 4: Creation & Integration of Wayfinding Signs**

To make sure that all of the possible connections are obvious to greenway users this Capstone team recommends the Detroit Greenways Coalition and City of Detroit Planning and Development Department create branded wayfinding signage that is used to identify assets and destinations along the greenway. Examples of these signs include: mile markers, trail heads, restrooms, local businesses, cultural attractions, interpretive (ecological), neighborhood niches, and bus stops.

What	Why
Introducing and highlighting improved connectivity between HOPE assets and points of interest via curated routes	Improving connectivity through low cost additions to the existing infrastructure in order to improve quality of life i.e. usage of time and opportunities to HOPE assets
Who	When
City Planning, DGC, DDOT, SMART and potential users of the greenway within the surrounding area	Ongoing, during the planning and development of Rouge River Greenway



Figure 35: Example of wayfinding signage that is recommended for the Rouge River Greenway to help users navigate both the greenway and the surrounding neighborhoods. Source: Wayfinding Signage Program, Butler County, OH

**Recommendation 5: Creation of Rouge River Greenway Map (online and paper)**

So that users of the greenway may be able to identify in advance the ways in which they can use the greenway this Capstone team recommends the Detroit Greenways Coalition and City of Detroit Planning and Development Department create a connectivity map that details all of the previously identified assets. This map should be available both online and as a hardcopy. The hardcopy maps should be housed on the counters of businesses that are near the greenway and the website for the online map



Figure 36: Example of one type of map that may be created to help greenway users identify important destinations along the Rouge River Greenway. Maps like these can and should be created in print and digital versions. Source: www.detroitriverfront.org

should be a part of the public education campaign taking place for the greenway.

What	Why
A handy connectivity improvement guide and tool	Present and familiarize residents within the target area connectivity improving routes to their areas of interest
Who	When
Area residents, Detroit Collaborative Design Center, Detroit Design Core, Local Web Developer	Ongoing, during the planning and development of Rouge River Greenway

*Recommendation 6: Leverage Community Ambassadors*

To encourage use of the greenway by community residents this Capstone team recommends the Detroit Greenways Coalition leverage members of the area bicycle community as well as specific cycling groups. These individuals can be used to help connect neighbors to the new greenway and serve as connectors between the community and those developing the greenway. These ambassadors can establish familiarity, connection and trust to those conducting the greenway’s implementation and support adoption and usage. At the start of the engagement and development process these residents should be looked to as subject matter experts. In addition to their general community knowledge they should be regularly equipped with project details for dissemination on a grassroots neighbor to neighbor level. Within the community they should act as a block club captain would serving as a point person for questions about the overall greenway development process. For their time, efforts and expertise they should be compensated via stipends. As stages of construction are completed these ambassadors should organize opportunities for neighbors to experience the greenway, such as community bike rides. These community rides will serve as opportunities to introduce the greenway to neighbors. A ride to a historic or cultural institution like the Redford Theater would be a great start. A ride along the greenway to a regularly held community meeting at an area church is another great opportunity to have the greenway introduced by someone that is a familiar face en route to a familiar location.

What	Why
Identifying and supporting local users of the greenway	To encouraging use of the greenway via trusted local users
Who	When
Area bicycle enthusiasts/users of the greenway	Post completion of Rouge River Greenway and on an ongoing basis



Figure 37: Participants at Open Streets Detroit Southwest in October 2018. Individuals who enjoy time on their bikes and live in neighborhoods near the proposed greenway would serve as great greenway ambassadors. Source: Authors

### Connectivity Recommendation Analysis

Specific to connectivity, a central focus, goal and determining factor of our research into the proposed greenway and its success, various strengths, weaknesses, opportunities and threats have been identified. From what’s been identified an observable theme has come to the forefront. Across each area of the SWOT categories the emphasis on users, or the H of the HOPE Model is undeniable. Within the Strength category, the use of trusted individuals to garner buy-in is integral to any success that may be achieved. Also, within the strength category, the desired solution connected to the proposed greenway seeks to improve the lives of users. Those representing the H of the HOPE Model. The areas of Weaknesses and Opportunities also present an observation connected to users. Weaknesses center around the long-standing automobile centric culture and lifestyles of individuals in the region. This poses the most significant obstacle. Lastly, leveraging humans, those considered bicycle enthusiast



and also those who are trusted in their community highlight the most significant Opportunity. Humans may be the biggest determining factor of the success of a project like the proposed Rouge River Greenway.

Strengths	Weaknesses
<p>Two strengths support highlighting connectivity. Most significantly, leveraging trusted individuals and community organizations affords opportunities to get in front of the broader community and win over opponents. Secondly, increased connectivity offers solutions to service gaps in a municipal transit system lacking coverage for those that use it.</p>	<p>The long and deep-rooted automobile history of the city and reliance on automobiles may pose too much opposition to new nontraditional means of connectivity. Additionally, considerations connected to the severe winter weather of the region may raise skepticism over year-round practical use.</p>
Opportunities	Threats
<p>“Bike to...” programming sponsored and curated via a collaboration between DGC and city planning leveraging local ambassadors to lead new users of the greenway on journeys to familiar HOPE asset locations.</p>	<p>Unmet funding goals may result in cutting budget lines earmarked for highlighting improved connectivity as a benefit of the proposed greenway.</p>

*Project Timeline*

The idea of a trail along the Rouge River is not a new idea. This Capstone team felt it was important to consider the complete history of our project prior in addition to proposing a future project timeline for the completion of the Rouge River Greenway. The timeline below is a synopsis of important historic points in relation to the proposed Rouge River Greenway project as we know it today.

- 2000 - Todd Scott, then president of Michigan Mountain Biking Chapter, now Executive Director of Detroit Greenways Coalition, began working on the concept of a trail along the Rouge River from Hines Drive to Eight Mile Road

- 2004 - Todd Scott and then local resident Harvey Santana focused on building the first part of the proposed urban mountain biking trail located in Rouge Park between Tireman and Joy Road
- 2005 - “Michigan Mountain Biking Association Rouge Park Project proposed a 3.5 mile loop located within Rouge Park located on land bound by Spinozza to the east, Tireman to the south, Outer Drive to the west and Joy Road to the north”
- 2006 - Michigan Mountain Biking Association Rouge Park Project completed
- May 2009 Detroit’s first greenway, the Dequindre Cut opened along the former Grand Trunk Railroad Line (Detroit Riverfront Conservancy)
- April 2016 - A half-mile extension of the Dequindre Cut opened connecting further into Eastern Market (Detroit Riverfront Conservancy)
- December 2016 - “Envisioning Detroit as the World’s Greenways Capital - A 50-year vision of the Detroit Greenways Coalition” was published and included a proposed route along the Rouge River
- January 2018 - The City of Detroit Planning and Development Department included the proposed Rouge River Greenway in its planning framework in connecting with the master plan and schematics design for the Rogell Golf Course site located on Berg Road between Seven Mile Road and Grand River Avenue

In addition to considering the history of the Rouge River Greenway project this Capstone team has proposed a five-year future project timeline for the completion of the greenway. The future timeline seen below illustrates how this Capstone team has proposed community engagement as well as phased constructions over the next five years.

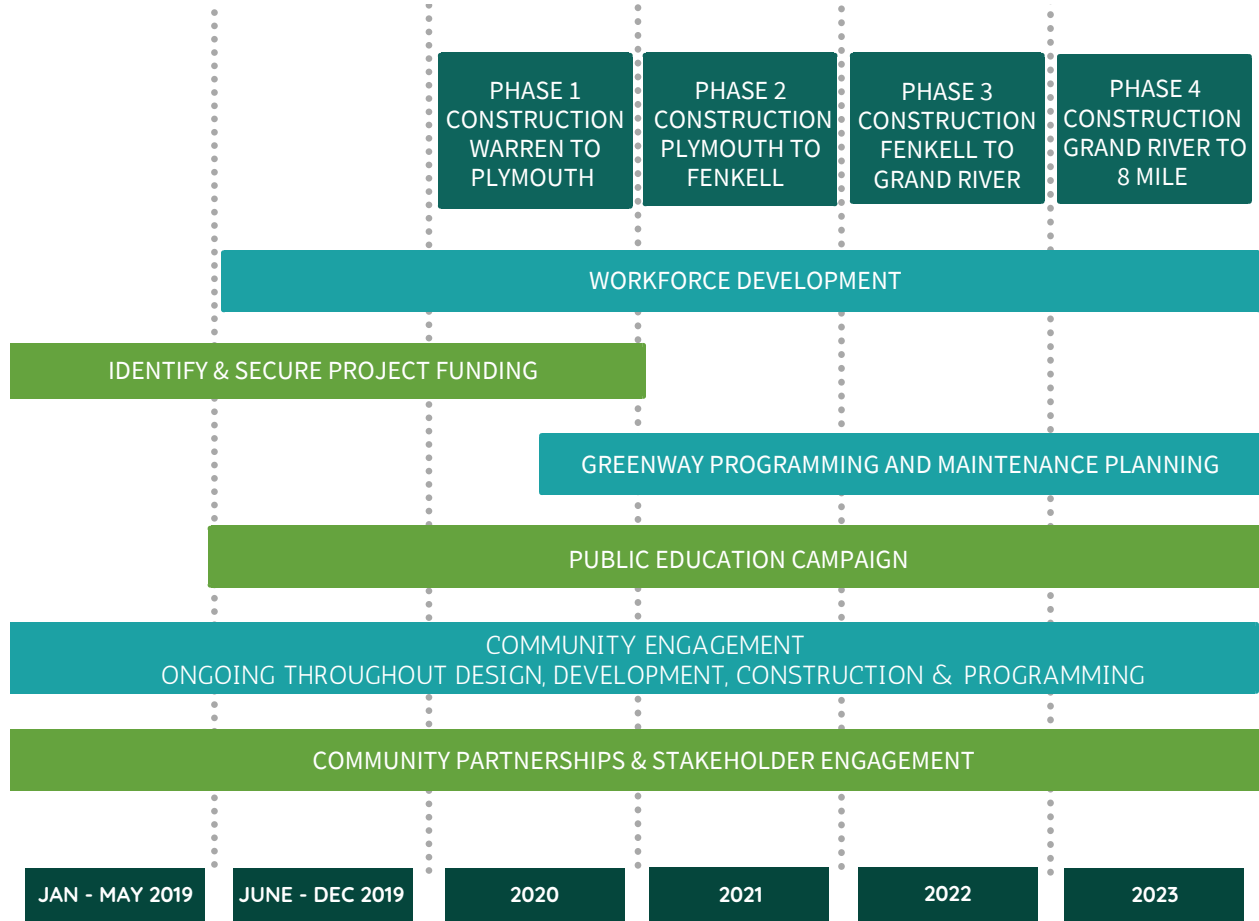


Figure 38: Proposed five-year project timeline for the completion of the Rouge River Greenway. Source: Authors

### Conceptual Project Budget(s)

To support the recommendations made by this Capstone team two conceptual budgets have been created, a budget for community engagement and a budget for signage. This team knows that they City of Detroit Planning and Development Department has experts to create budgets that will accurately reflect the cost of constructing the greenway however, community engagement and signage are important to the projects long term success. The budgets presented in the following sections are conceptual and all costs are estimates based on research done by the Capstone team and learnings from similar greenway case studies.

*Proposed Annual Community Engagement Budget*

This Capstone team believes and therefore recommends that community engagement be a key component of the Rouge River Greenway planning, development and implementation process. If community residents and stakeholders are engaged throughout the process this Capstone team believes that trust between government and residents will be improved and ultimate that residents will feel a sense of pride and ownership over the greenway. This trust, pride and ownership will likely translate into the greenway being used more by community residents, and resident support in maintenance and cleaning of the greenway, among other things.

This capstone team has created a conceptual budget for community engagement on an annual basis starting in 2019 and continuing, at least until the completion of greenway construction. The budget outlined below in Table 1 provides an annual budget for community engagement for the Rouge River Greenway. This budget includes salary for one Community Engagement Coordinator, hired full-time, whose responsibility is solely community engagement for the Rouge River Greenway. The budget also includes the cost of food for community events held throughout the year, any supplies needed to conduct community engagement, stipends for community residents that may support the work of the engagement coordinator and marketing of all community events.

<b>ENGAGEMENT BUDGET</b>	
Coordinator Salary	\$60,000
Supplies	\$15,000
Food Costs (\$1000 per event, 12 events)	\$12,000
Community Stipends or Support (gift card, hourly rate, etc)	\$12,000
Marketing	\$5,000
<b>Total Cost</b>	<b>\$104,000 / year</b>

*Table 1: Conceptual community engagement annual budget for the proposed Rouge River Greenway project. All figures above are cost estimates.*

### *Proposed Signage Budget*

Just like roads need signage so that users can know which ones to take and which ones they are on, so too do trails and greenways. All of these modes of transportation require certain types of signage – a mile marker for every mile on each side and signage that tells you when you are about to get on a road or trail. When utilized properly signage can be very helpful and ideally the road or trail you are traveling on has additional signage that tells you things like how far to the next popular destination, or which direction to travel in to get to where you want to go. We see this frequently on expressways; there will be a sign near an exit denoting all of the food options and when you choose that exit you see a second set of signs telling you which direction each restaurant is in and how far away each one is. This Capstone team has recommended that connectivity is vital to the success of the Rouge River Greenway and for that reason signage will play an instrumental role in the development of the greenway.

In 2010 the East Coast Greenway Alliance (ECGA) published a “Trail Signage Manual” that this Capstone team has used to create a conceptual signage budget for the Rouge River Greenway. This budget is a rough estimate for signage in the first five years of developing the greenway. As the greenway hopefully continues to spur economic development nearby additional wayfinding signage will likely be needed. Before diving into the details of how the signage budget was established it is important to first detail the different types of signage that will be used, and the base cost associated with simply having each metal sign made. (This base cost does not include the cost for the necessary branding and design work.)

- Information Signs \$200 each
- Direction Signs \$200 each
- Warning Signs \$200 each
- Access Point (Trailhead) Signs \$200 each
- Mile Markers \$50 each

The ECGA recommends the following in terms of quantity and placement of signage: “Place markers at trailheads or access points to notify entering users that the [greenway] can be accessed there. Place markers along stretches of the route where users might be left wondering if they are still on the [greenway]. The Alliance recommends one per mile in rural



areas, two per mile in suburban areas, and four per mile in urban areas. Post signs on the right-hand side facing trail users. Be sure there is a post or pole for each direction” (East Coast Greenway Trail Signage Manual. 8).

We begin with the budget for mile marker signs because this is the simplest to determine and will not change regardless of future development. One sign is needed for each mile of the greenway going in both directions for a total of sixteen signs.

**Mile Markers - \$50x16 = \$800**

The remaining budget will be based off of several assumptions such as how many access points the Rouge River Greenway will have. This Capstone team assumes that every mile of the greenway will have an access point on both the east and the west side and that the north and south portions of the trail will each have an access point, totaling eighteen signs.

**Access Point (Trailhead) Signs - \$200x18 = \$3,600**

Along the route of the greenway itself this Capstone team recommends four direction signs per mile per each side. Many of these signs can share a post, like the example below in figure 39.



Figure 39: Example of directional signage for the proposed Rouge River Greenway. Source: Streets.MN

This totals eight directional signs per mile of greenway, plus this Capstone team is recommending one directional sign off the path of the greenway per mile for both the east and west side to point people who are not yet on the greenway to its path.

**Directions Signs - \$200x80 = \$16,000**

Information signs will be used primarily once the user has exited the greenway to access their destination. For example, a direction sign along the path may tell the greenway user that the Redford Theatre is 1 mile in a certain direction, but this Capstone team recommends another sign be posted about half way to the destination to let the user know they are on the correct path. As mentioned previously, the ECGA recommends developers “place markers along stretches of the route where users might be left wondering if they are still on the [greenway].” This means that for every directional sign posted on the greenway there should be one accompanying informational sign off of the main route.

**Information Signs - \$200x64 = \$12,800**

In addition to using signage to connect people to the greenway, to HOPE assets, to cultural destinations, and to bus routes, this Capstone team also believes it is important for the Rouge River Greenway to connect people to nature. One of the engagement recommendations states that an environmental organization should be consulted on the creation of interpretive (ecological) signage that helps to connect greenway users to nature and to the Rouge River specifically. These signs are generally much larger and more colorful than the types of signage previously discussed. This, plus the fact that they require more knowledge to create, equals a much larger cost per sign.

According to the website [lewisandclark.org](http://lewisandclark.org), using numbers acquired in part from the USDA Forest Service, the cost for interpretive signage is broken down as such:

- Salary time for text development,
- Image acquisition (finding photos, illustrations, etc. If images need to be purchased, plan on additional expense),
- Graphic layout and design,
- File preparation for fabrication, and
- Project management

Given these variables, professional design costs can range from \$2,000 – \$3,500 per sign.

However, the cost to build the physical sign itself is fairly minimal, ranging from \$400-\$600 for a 3' x 2' sign. Below is an example of a common wooden frame interpretive sign.



As an example of a simple exhibit base, the style shown at the left is a simple "Hopewell" base that is easy to install and relatively inexpensive. A standard 3' x 2' frame costs approximately \$400 – \$600.

Figure 40: Example of interpretive signage for placement along the proposed Rouge River Greenway. Source: Lewis And Clark

Because of the high cost associated with these types of signs, and because not all eight miles of the park are in nature, this Capstone team is recommending six interpretive signs be installed within the first five years of developing the greenway. Rouge Park already has several interpretive signs so only one of these six should be installed in Rouge Park. The other five signs should be shared between Eliza Howell Park and Rogell Golf Course and should be placed deliberately in places where there are things like: access to Rouge River, wetlands, bird watching, and significant natural habitats. This Capstone team hopes that the greenway developers will be able to save some money on design costs by partnering with an environmental organization and estimates each interpretive sign will cost about \$3,500 total from design to installation.

**Interpretive Signs - \$3,500x6 = \$21,000**

This brings the total cost estimate for signage for Rouge River Greenway to \$54,200. It is important to note that this budget does not include the cost for designing the Access Point, Direction, and Information signs. This Capstone team recommends the cost for this service fall under another category – the PR Campaign. Another one of the recommendations was to launch a PR campaign that includes promoting greenways and creating a website. All of the marketing efforts should be branded and match, so the website and other materials used to promote the Rouge River Greenway should share a design and color scheme, including all signage. Other important costs that are missing are the installation of the signs. These costs should be included in the construction and maintenance budget. In Table 2 you will find the complete proposed budget for signage along the Rouge River greenway.

<b>Greenway Signage Budget</b>	
Mile Marker Signs (\$200 each, 16 recommended)	\$800
Access Point / Trailhead Signs (\$200 each, 18 recommended)	\$3,600
Direction Signs (\$200 each, 80 recommended)	\$16,000
Information Signs (\$200, 64 recommended)	\$12,800
Interpretive Signs (\$3,500 each, 6 recommended)	\$21,000
<b>Total Cost</b>	<b>\$54,200</b>

Table 2: Proposed signage budget for the Rouge River Greenway project. All numbers are cost estimates.

### *Potential Sources of Funding*

As a part of the action plan this Capstone team has identified various sources of funding that may be available for varying parts of the Rouge River Greenway planning, construction and continued support. These sources were identified by examining funding sources of similar types of projects as well as through recommendations provided individuals that the team interviewed throughout the project.

#### **Ralph C. Wilson Jr Foundation**

The Ralph C. Wilson Jr Foundation funds projects in the City of Detroit as well as Buffalo, New York. Their four areas of focus are children and youth, young adults and working families, caregivers, and livable communities. The Rouge River Greenway would fall into their definition of a project related to creating livable communities. They “seek opportunities to invest in: parks, trails and green design... and economic development levers that spur regional growth, innovation and equity (Our Focus – Ralph C. Wilson Jr. Foundation). According to Curbed Detroit, West Riverfront Park was awarded a \$50 million-dollar grant from the Ralph C. Wilson, Jr. Foundation and an additional \$50 million dollars was given to support trail systems in southeast Michigan (Runyan).

#### **Environmental Protection Agency**

The United States Environmental Protection Agency has a number of grant opportunities that may apply to this project. One specifically would be the Great Lakes Funding which “includes competitive grant funding for planning, research, monitoring, outreach and implementation projects in furtherance of the Great Lakes Restoration Initiative and the Great Lakes Water Quality Agreement” (Specific EPA Grant Programs).

#### **Erb Foundation**

Located in Royal Oak, Michigan, a suburb of Detroit, the Erb Foundation seeks to “nurture environmentally healthy and culturally vibrant communities in metro Detroit, consistent with sustainable business models, and supporting initiatives to restore the Great



Lakes Ecosystem” (Fred A. and Barbara M. Erb Family Foundation). Given the Rouge River Greenway’s focus on following the natural path of the Rouge River the Erb Foundation may be interested in supporting efforts to manage stormwater along the greenway or provide educational opportunities for user of the greenway to better understand our Great Lakes region.

### **National Fish & Wildlife Foundation**

Since the Rouge River Greenway closely follows the Rouge River and will travel near fish and wildlife habits there may be funding available from the National Fish and Wildlife Foundation. The foundation is working to support “projects that sustain, restore, and enhance our nations’ fish, wildlife and plants and their habitat (Grants. National Fish and Wildlife Foundation).

### **Infrastructure Support**

The U.S Economic Development Administration (EDA) provides funds to “empower distressed communities to revitalize, expand and upgrade their physical infrastructure” Michigan Department of Transportation (MDOT)

### **Transportation Alternative Program**

“The Transportation Alternatives Program (TAP) is a competitive grant program that uses federal transportation funds designed by Congress for specific activities that enhance the intermodal transportation system and provide safe alternative transportation options.”

### **Community Foundation for Southeastern Michigan (CFSEM)**

Funding priorities for the CFSEM include sustainability and regional impact both of which relate to the proposed Rouge River Greenway. Grants funds may be available to support the objectives of the Rouge River Greenway.

### **U.S Department of Housing and Urban Development Community Development Block Grants (CDBG)**

CDBG funds may be applicable to the Rouge River Greenway project because this project will benefit low- and moderate-income persons, as well as addressing the community's need for alternative modes of transit. Additionally, funds may be used towards citizen engagement during the project planning and implementation phases.

### **Associated Transit Improvements Funds (Rails to Trails)**

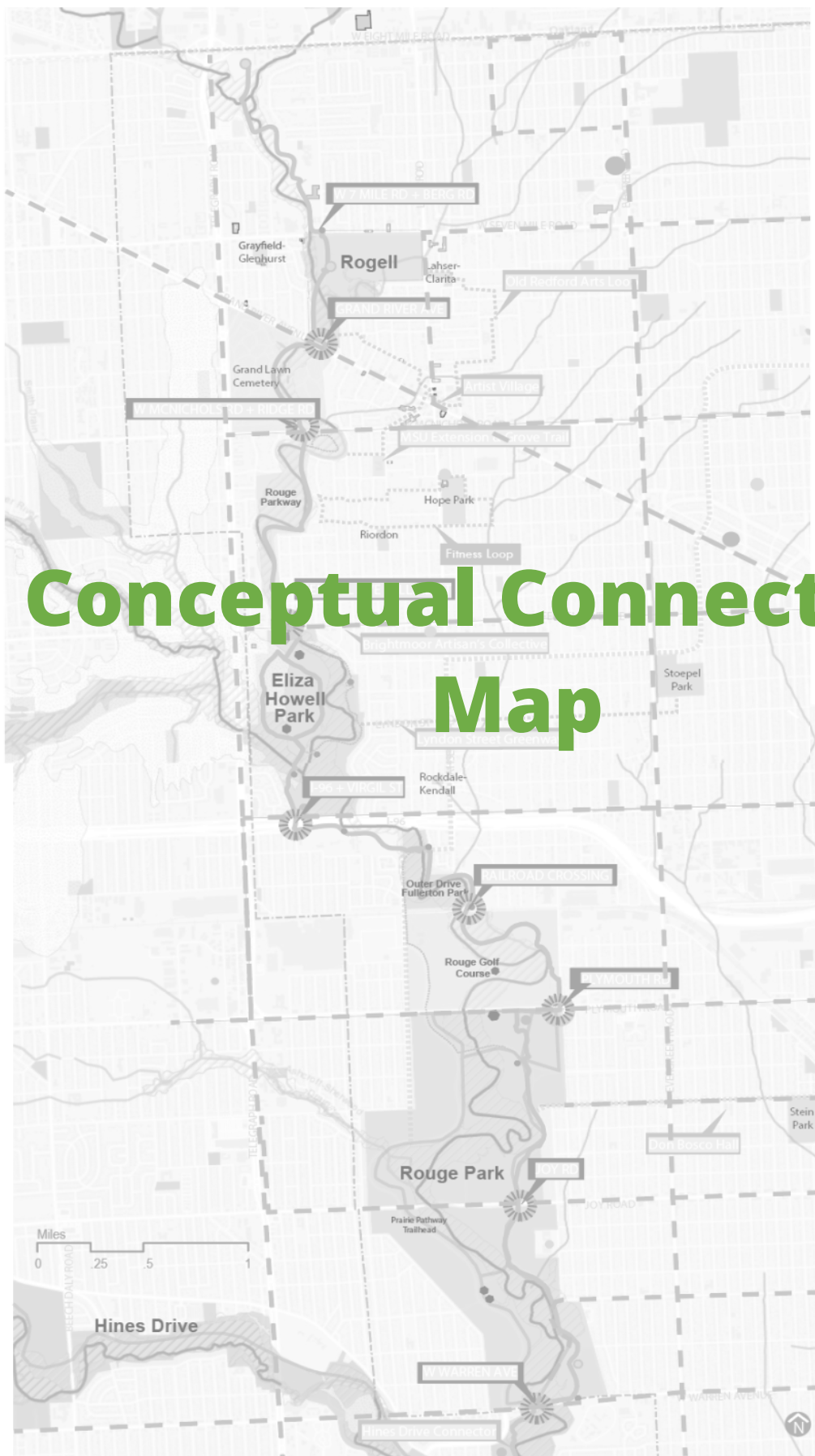
"The Federal Transit Administration requires that at least 1 percent of transit expenditures for urbanized areas of more than 200,000 people go to projects that improve access to transit service." The ability for the greenway to bridge gaps in communities between people and regional transit would make this project a candidate for this funding.

### **Impact Fees (Rails to Trails)**

"Regulated by county policies, impact fees require residential, industrial and commercial development project leaders to provide sites, improvements and/or funds to support public amenities such as open space and trails." With impending development some areas near the proposed greenway impact fees may be applicable.

ROUGE RIVER  
GREENWAY STUDY  
12 Miles Multi-use Path  
7 City Parks  
10 Major Intersections  
550 Acres of Wetland

# Conceptual Connectivity Map



- LEGEND**
- Detroit City Boundary
  - Existing Streams
  - Rouge River
  - Historic Streams
  - 100-year Floodplain
  - Preferred Route
  - Critical Intersection
  - Connecting Bus Routes
  - Organizational Assets
  - Economic Assets
  - Human Assets
  - Physical Assets
  - Cultural Assets

## Conceptual Connectivity Map

This Capstone team has worked to create a conceptual connectivity map for the purpose of illustrating the numerous connections that the construction of the greenway can provide. The based maps for this deliverable were created by the City of Detroit Planning and Development Department and illustrate the proposed route of the greenway in pink, various community connectors, existing or planned with dotted line and key intersections that could serve as economic nodes along the greenway. This specific map was used to create this conceptual connectivity map because it most clearly illustrates the proposed map of the greenway.

To ensure that the conceptual map was representative of assets in each of the four pillars of the Masters of Community Development Program this Capstone team identified human, organizational, physical, and economic assets as well as cultural assets that are unique to the neighborhoods. As previously recommended, this Capstone team hopes that these maps serve as examples as the Detroit Greenways Coalition and City of Detroit Planning and Development Department conduct in-depth community engagement in the communities along the route. The following maps illustrate assets mapped by this Capstone team, connecting bus routes that intersect the greenway and provide broader connections and a few scenarios that help illustrate the valuable connections that they greenway can provide.

The map in Figure 40 shows the complete 8.5 mile proposed route of the Rouge River Greenway and includes the assets identified by this Capstone team. There are many additional assets that are not shown on the map in Figure 41, but this team believes strongly that residents must identify the assets that are most important to them in order to ensure that the map is reflective of the community and its needs. The asset identification process is this team's first recommendation related to connectivity shared on page 82.

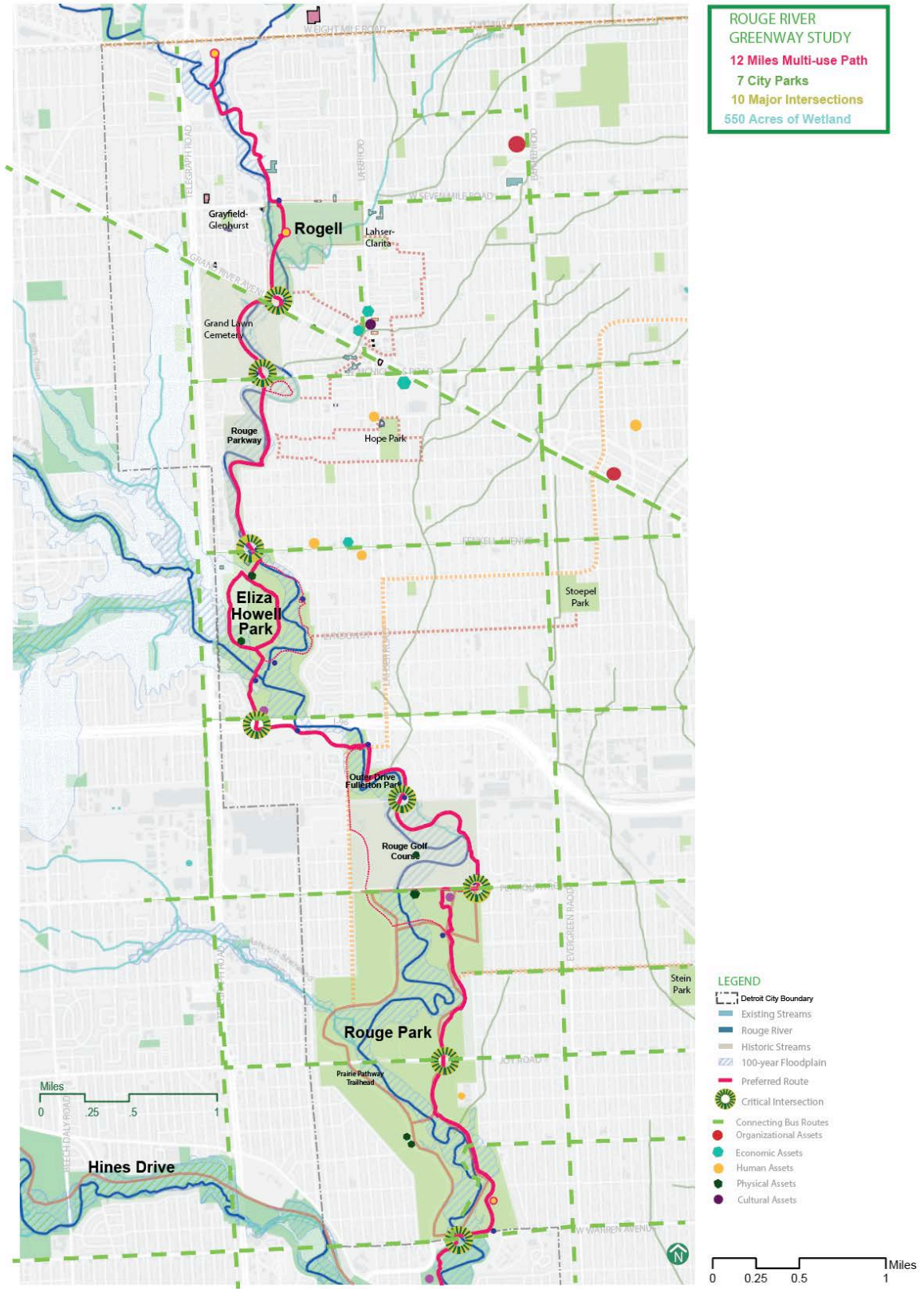


Figure 41: Proposed Rouge River Greenway map with human, organization, physical, and economic assets mapped as well as connecting bus routes. Source: City of Detroit Planning and Development Department



*HOPE Assets Mapped*

In order to illustrate the valuable connections that the Rouge River Greenway can provide this Capstone team focused on the area near Eliza Howell Park. Below in Figure 42 is a small section of the larger map shown in Figure 40 highlighting community assets in each of the HOPE categories as well as two of the key commercial districts that are assessable via the greenway. The assets mapped below represent just a few of the 240 assets that were mapped in this Capstone team’s initial asset mapping process discussed on page 47. This team envisions that this map will serve as a guideline as the Detroit Greenways Coalition and the City of Detroit Planning and Development Department develop a user friendly greenway map that can be shared widely. By providing a physical connectivity map that illustrates the endless opportunities for connections in people’s daily lives this team believes that residents will realize the usefulness of the greenway. As residents realize its usefulness the greenway may begin to shift how individuals think about their daily commutes.

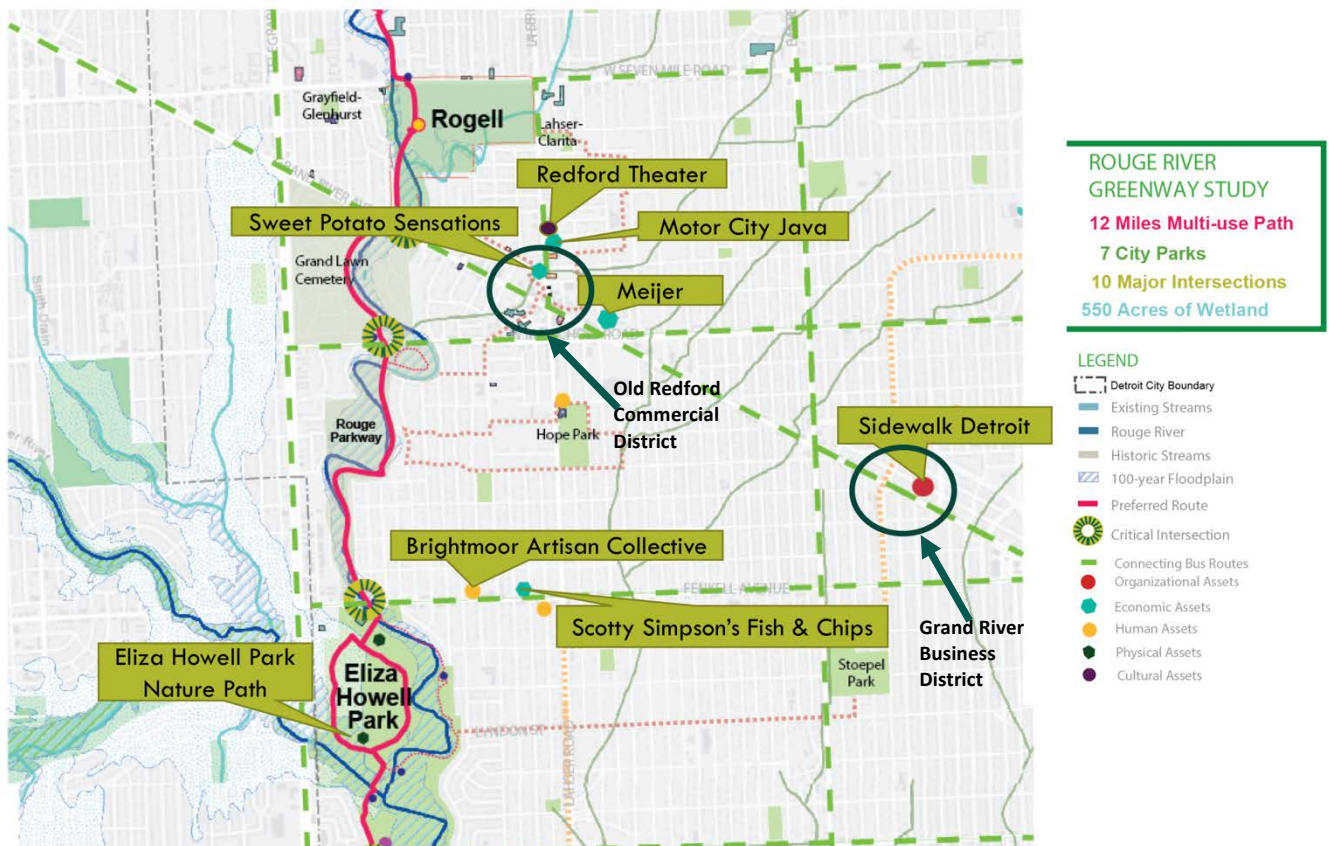


Figure 42: Conceptual connectivity map illustrating a few of the key assets in proximity to the Rouge River Greenway. Source: Authors

*Bus Routes Mapped*

In addition to considering the assets that were nearby to the greenway and mapping those on the conceptual connectivity map this Capstone team consider the broader connections that the greenway may provide for residents of Detroit’s west side. The green dotted lines Figure 42 represent Detroit Department of Transportation (DDOT) bus routes with dark green arrows, as well as Southeast Michigan Area Regional Transit (SMART) routes with a red arrow. This team envisioned this version of the connectivity map as a way to illustrate how a short trip on the greenway could provide easier access to a key bus route. The access to these bus routes may make jobs in the suburbs of Detroit more accessible for Detroiters and ease some of the challenges that exist with public transit in our city. You can imagine if you live near Eliza Howell Park that it may be easier and safer to use the greenway to access the Grand River express route bus to downtown Detroit or as far as Novi.

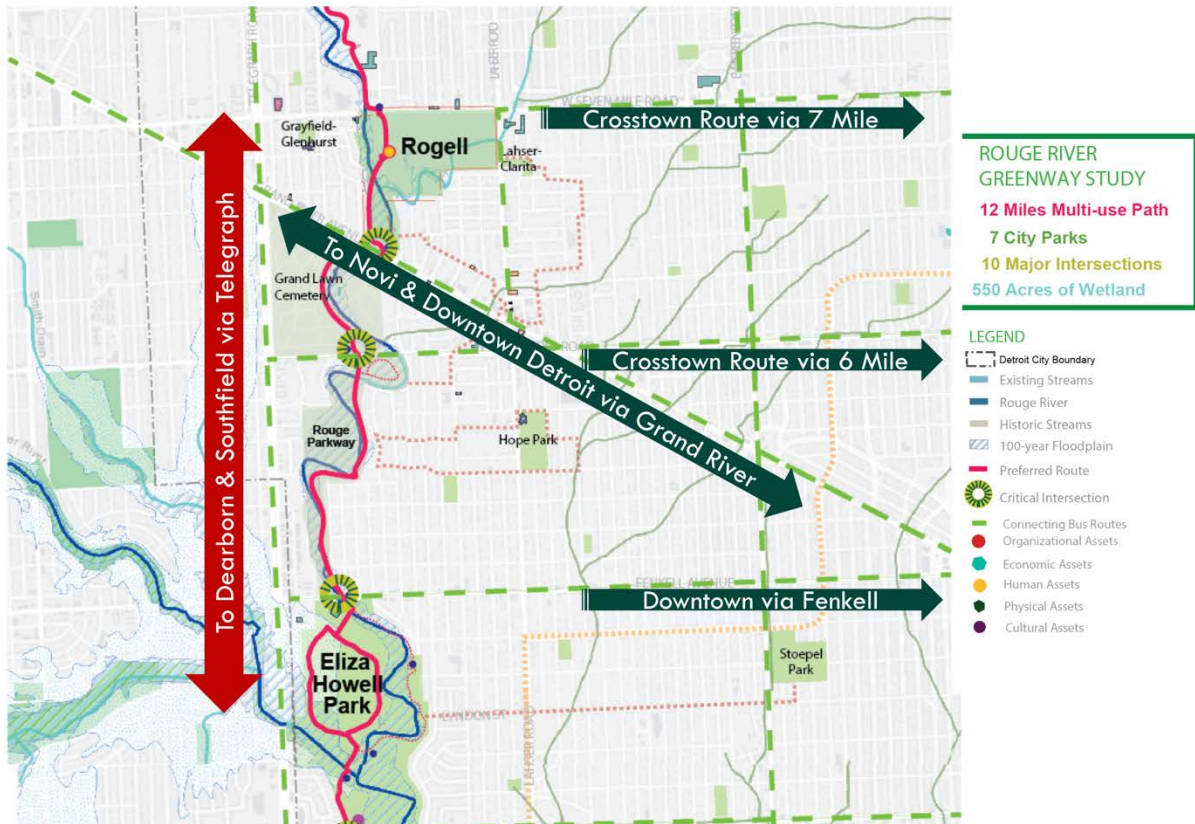


Figure 43: Conceptual connectivity map with major bus routes mapped to illustrate the broader connections that are possible via the Rouge River Greenway. Source: Authors

*Sample Routes*

Below are community assets and destinations identified by this Capstone team. Additional assets should be identified during the recommended community engagement processes. The below descriptions serve as examples of how residents may use the greenway to travel to key community places.

**Cultural Destination: Redford Theater, 17360 Lahser Road, Detroit MI**

If traveling north along the greenway through Eliza Howell Park to get to the Redford Theater users would take the greenway north 2.5 miles, through Grand Lawn Cemetery to Grand River Avenue. Then turn right on the Grand River Avenue and travel .5 miles to the corner of Lahser Road and Grand River Avenue. Turn left on Lahser Road and the Redford Theater will be located on the right-hand side of the street. This should take the average bike rider about 30 minutes.



Figure 44: Redford Theater Source: Redford Theater Facebook Page

**Human Destination: Meijer, 21431 Grand River Avenue, Detroit MI**

If traveling north along the greenway through Eliza Howell Park to get to Meijer users would take the greenway 1 mile to McNichols Road and turn right. Then travel along McNichols Road for .6 miles before turning right on Chapel Street and arriving at Meijer. This should take the average bike rider about 25 minutes.



Figure 45: Meijer on Grand River Avenue. Source: Meijer Newsroom



**Organizational Destination: Brightmoor Artisans Collective, 22735 Fenkell Avenue, Detroit MI**

If traveling north along the greenway through Eliza Howell Park you would turn right on to Fenkell Avenue and travel .4 miles to the Brightmoor Artisans Collective located at the corner of Fenkell Avenue and Beaverland Street. Per the signage recommendation a directional sign would be located halfway to the Brightmoor Artisans Collective letting the user know they are still headed in the right direction. This should take the average bike rider about 5 minutes.



Figure 46: Brightmoor Artisans Collective: Source: Brightmoor Artisan Collective website

**Physical Destination: Brennan Pool at Rouge Park, Detroit MI**

If traveling south along the greenway through Eliza Howell Park to get to Brennan Pool users would take the greenway 2 miles south to where Plymouth Road intersects Rouge Park. The pool is located within the park and users will not need to travel on any major roads to reach this destination. This would take the average bike rider about 15 minutes.



Figure 47: Brennan Pool located in Rouge Park. Source: Model D Media, Voices of Cody Rouge

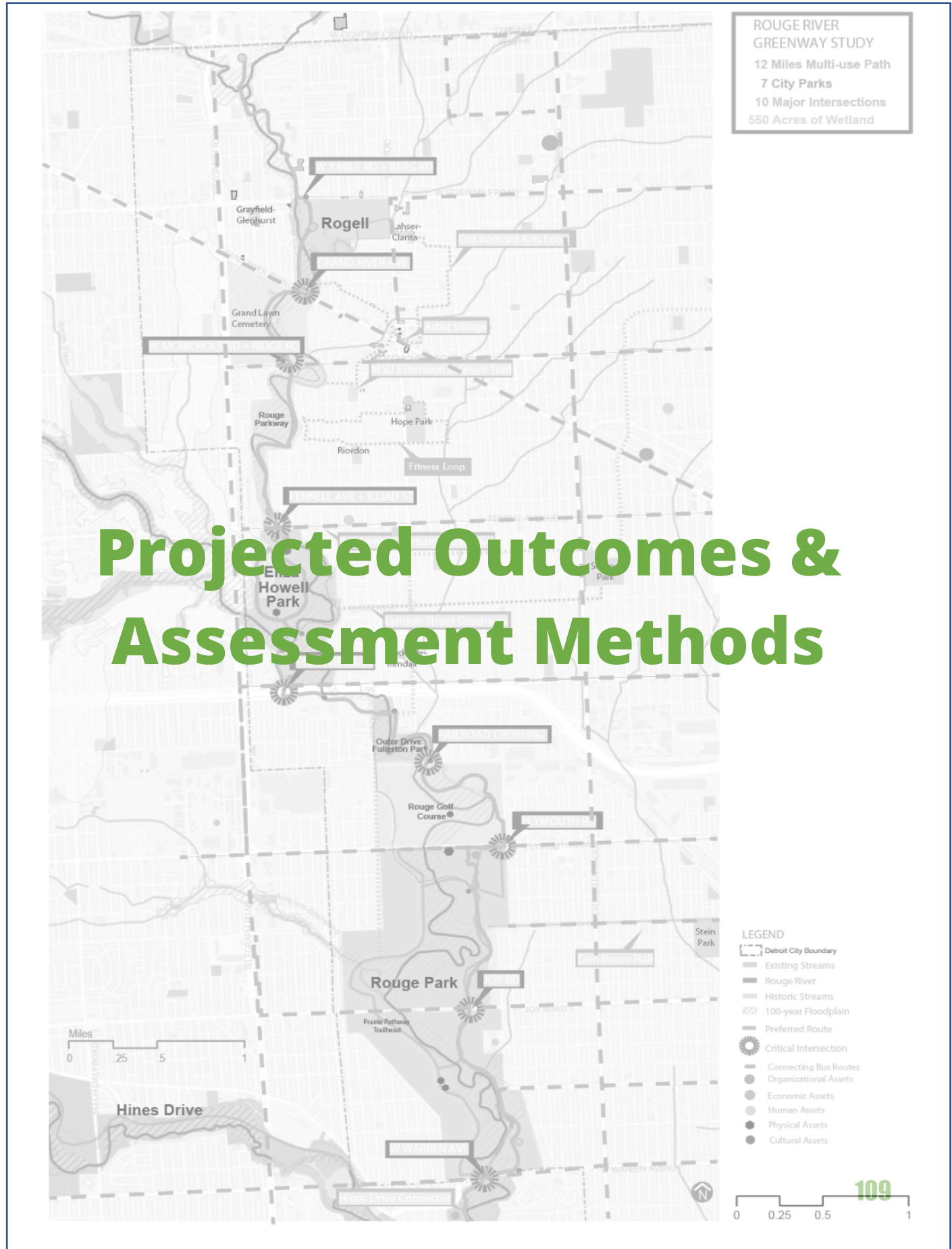
**Economic Destination: Scotty Simpson’s Fish & Chips, 22200 Fenkell Avenue, Detroit MI**

If traveling north along the greenway through Eliza Howell Park users would turn right on to Fenkell Avenue and travel .75 miles to Scotty Simpson’s Fish & Chips located on the left-hand side of the road. This should take the average bike rider about 7 minutes.



Figure 48: Scotty Simpson's Fish & Chips. Source: Photo Gallery, Scotty Simpson's Fish & Chips





## Projected Outcomes & Assessment Methods

Following the Action Plan Proposal, the Capstone team assessed the recommendations in order to identify the projected outcomes of the Rouge River Greenway project in they were followed. The Capstone team evaluated the recommendations in eight categories, shown in the following sections, and shared assessment criteria and methods. The assessment criteria and methods will help those who complete the work, likely the City of Detroit Planning and Development Department and the Detroit Greenways Coalition determine the holistic success of the Rouge River Greenway.

### *Human Development Outcomes*

If the recommendations of this Capstone project were to be implemented during the development of the Rouge River Greenway, human development would be the area that benefits most. If the residents are genuinely engaged in the development process, which is the number one recommendation from this group, then several positive outcomes are expected. These include development of a greenway that:

- is accessible and welcoming to all regardless of race, sex, age, income, or ability,
- serves the residents in both a recreational and a practical way,
- provides residents a sense of pride and ownership of the greenway,
- improves mental and physical health,
- meets multiple community needs, and
- builds trusts between residents and the city government

### **Assessment Criteria & Methods**

- Criteria: Is the Rouge River Greenway used by a diverse population (race, sex, age, income or ability)?
  - Method: Greenway ambassadors can conduct visual surveys along the complete route and observe who is using the greenway at varying times of the year.
- Criteria: Is the Rouge River Greenway used for recreation and transportation?
  - Method: Annual Survey distributed along the greenway and at partner organizations along the greenway asking residents if and how they are using the greenway.

- Criteria: Has trust been built between the City of Detroit Planning and Development Department, Detroit Greenways Coalition and the residents along the route of the RRG?
  - Method: Do all partners in the RRG communicate regularly. Do community members know who to contact when they have questions. Are the organizational partners (City of Detroit PPD and DGC) welcomed in the community?

### *Organizational Development Outcomes*

Organizational support and collaboration will be instrumental in the success and effectiveness of this Capstone team’s recommended engagement strategy. In order to engage with residents in a trusted setting the city planners working on the Rouge River Greenway need to meet them where they are at: community events, block club meetings, and neighborhood association meetings. Most importantly, organizations that provide solutions for residents who have fears of the greenway leading to gentrification need to be identified and promoted by the city as a resource. If the recommendations of this Capstone team are implemented the positive expected outcomes related to organizational development would be:

- that a large and diverse group of residents are engaged,
- Planning and Development Department is given a fair chance to earn the community’s trust by being partnering with a neighborhood-based community organization that residents are already familiar with,
- fears of gentrification are addressed by those with the resources to mitigate them

### **Assessment Criteria & Methods**

- Criteria: Trusted community organization along the route agree to partner with City of Detroit, Planning and Development and Detroit Greenways Coalition to engage community residents along the route
  - Method: Map all neighborhoods which the route travels through and the point of contact for each neighborhood organization. Hold monthly or quarterly meetings of these partners to provide up-to-date project information to all.

- Criteria: Housing remains affordable to a diverse population of current and future residents of the neighborhoods along the greenway route.
  - Method: Track housing prices, before, during and after the construction of the greenway.
  - Method: Strengthen an existing community group that is responsible for identifying affordable housing options and communicating with residents regarding resources to access affordable housing options.

*Physical Development: Criteria and Outcomes*

Since the Rouge River Greenway does not currently exist physical development will occur in all neighborhoods along the proposed route. And while nothing trumps human development, because that's who you're building for, this is above all else something that needs to be built; something that will impact its surroundings in a very physical way. This groups second, and only other recommendation focus area is connectivity. This can mean several things, but there are a few specific areas that this team believes will see positive outcomes if the previously made recommendations are implemented. These are:

- the greenway being seen as and used as a viable mode of alternative transportation,
- the greenway connecting people to jobs, bus routes, economic centers, and other community assets,
- the greenway and the areas surrounding it being programmed in physical ways to support community gathering,
- the greenway connecting people to nature in so that people recognize the Rouge River and the parks the trail goes through as valuable assets, and
- allowing for future opportunities to connect municipalities, specifically Dearborn and Southfield, with the City of Detroit

**Assessment Criteria & Methods**

- Criteria: The greenway connects people to existing and new job opportunities

- Method: Illustrate connections to jobs via a map and distribute the map to community residents and local businesses.
- Method: Host a community job fair, of businesses along or near the route and share information about how the greenway will help residents access the jobs.
- Criteria: The greenway is used as a community gathering space
  - Method: Greenway ambassadors and planning and development staff can visually survey the greenway throughout the year to identify popular gathering spaces along the route.
  - Method: Specific programmed locations along the greenway can be monitored for event activity.
- Criteria: An increase in community members and visitors spending time in the parks along the route, specifically Eliza Howell and Rouge parks
  - Method: Install counters along roads, and paths within the parks to monitor usage on an annual basis.

### *Economic Development Outcomes*

Although the Rouge River Greenway is planned to be the only greenway in the city with a focus entirely on nature, it still has the potential to be an economic driver. Other case studies on greenways have reported that greenways can raise the value of homes that are nearby and that greenways that connect to main roads or downtown areas can boost revenue for local businesses. The main recommendation from this group that would lead to positive economic impacts is the idea to incorporate a wayfinding campaign. That is, to use signage along the route of the greenway to indicate how you can connect to local businesses and other assets. If this recommendation is followed this Capstone team believes the following positive outcomes can be expected:

- local businesses will see an increase in revenue,
- local businesses may be more likely to sponsor wayfinding signage that promotes their business, adding to maintenance funds for the greenway



- the greenway could lead to easier access to jobs, an economic benefit for both employees and employers

### **Assessment Criteria and Methods**

- Criteria: Existing businesses along the greenway route experience an increase in traffic to their location and revenue at their store
  - Method: Conduct annual survey of businesses along the route asking about revenue year over year and traffic to their business
- Criteria: Existing and new businesses view the greenway as an asset to their business
  - Method: Businesses invest in the greenway through signage or “adopt-a-trail program”
- Criteria: New businesses locate in neighborhoods along the greenway
  - Method: Collect annual data on number of new businesses opening in neighborhoods along the greenway route.

### *Additional Expected Constraints, Limitations and Impacts*

The most obvious and expected constraints right now are related to the budget for this project. At the moment, there is no money earmarked by the city of Detroit to make the Rouge River Greenway happen. Because of this, there is also no project timeline. It is very difficult to begin an engagement process for a project that has so many unknowns. Another anticipated limitation is that there are some residents who simply will not ever want a greenway and cannot be swayed. An important thing to remember in community development is that you’re never going to be able to make everybody happy, but you still have to try.

### *Identify Social Justice Issues*

The two primary social justice issues that have been identified in this Capstone project are that greenways can lead to an increased cost of living in the communities they go through or are close to. This can lead to displacement of long-term residents / gentrification. The second is that greenways are public space and public space can be experienced very differently by

different people depending upon their race, sex, age, income and ability. This Capstone team believes the recommendations that have been made for this project are partially adequate for both of these issues. The truth is, recommendations for a greenway are never going to equal solutions for a social justice issues as large as these. Another truth is that some homeowners want to see the value of their home go up and welcome a greenway as a way to achieve that. One of the recommendations this Capstone team made that it hopes the City Planning and Development Department will embrace is that nonprofits and other social justice and community organizations that specialize in mitigating the effects of increased costs of living can be identified and promoted throughout the development process. The city should include names and contact information for the organizations on the Rouge River Greenway website and physical map. When it comes to responding to the issue of how public space is experienced this Capstone team truly believes that if a genuine and meaningful engagement process takes place, where all different types of voices are heard, then there is great chance that this greenway will be developed in a way that is welcoming and accessible to all.

### **Assessment Criteria and Methods**

- Criteria: Opportunities to mitigate the effects of gentrification and rising property values, including but not limited to the implementation of affordable housing along the route, are considered before, during and after the development of the greenway
  - Method: Monitor property values and rental rates along the route of the greenway and in the neighborhoods adjacent to the greenway and provide solutions if values and rental rates begin to price current residents out of the neighborhoods.

### *Expected Impacts on Diversity and Multiculturalism*

While it is not explicitly stated in this team's recommendations, the suggestion for a wayfinding campaign that uses branded signage to denote where community assets are located would be an excellent way to incorporate multiculturalism into the Rouge River Greenway plans. In addition to these signs highlighting obvious assets like schools and businesses, they

could also highlight areas of cultural and historical significance. When it comes to diversity this group once again expects that by engaging a diverse group during the development process this greenway will be a place that is enjoyed by all different types of people.

### **Assessment Criteria and Methods**

- Criteria: Greenway signage is reflective of the culture of the communities along the route
  - Method: Greenway signage is developed by communities along the route, in partnership with previously identified community organizations. When requested by the community signs should be made available in multiple languages.

### *Expected Impacts on Regional Development*

The Rouge River Greenway has many opportunities to have a positive impact on regional development. When it comes to connecting across municipal boundaries this greenway could potentially one day extend to the west into Dearborn and to the north into Southfield. While the initial proposed route maps do not include these extensions, this team feels strongly that the greenway should be built in such a way that these connections remain options for the future. These connections could be a very big deal in terms of the Rouge River Greenway being used by people who commute to or from the suburbs for work. In terms of development within the City of Detroit this team expects the Rouge River Greenway to become an economic driver that boosts the economy in the neighborhoods the greenway is connected to. One of the many reasons that this team keeps stressing the importance of engagement is because the wayfinding signage should ideally point out how to get to the assets people are already going to - so the City Planning Department needs to find out from the residents what these assets are. If the Rouge River Greenway ends up making it easier and/or more enjoyable to get to these assets then hopefully they will see an increase in traffic and grow either monetarily or in other ways, dependent upon the type of asset. Finally, the expected increase in home values near the greenway could lead to the restoration of formally vacant homes or the

building of new ones if the market stays the way it is currently. It is believed that living near green space is a desirable trait and that neighborhoods with green spaces do a better job of attracting families.

**Assessment Criteria and Methods**

- Criteria: Plans for extensions and connectors of the greenway are created for the northern and southern ends.
  - Method: City of Detroit Planning and Development connects with City of Southfield and City of Dearborn to outline possible connection points, a project timeline is created, and funding sources are identified

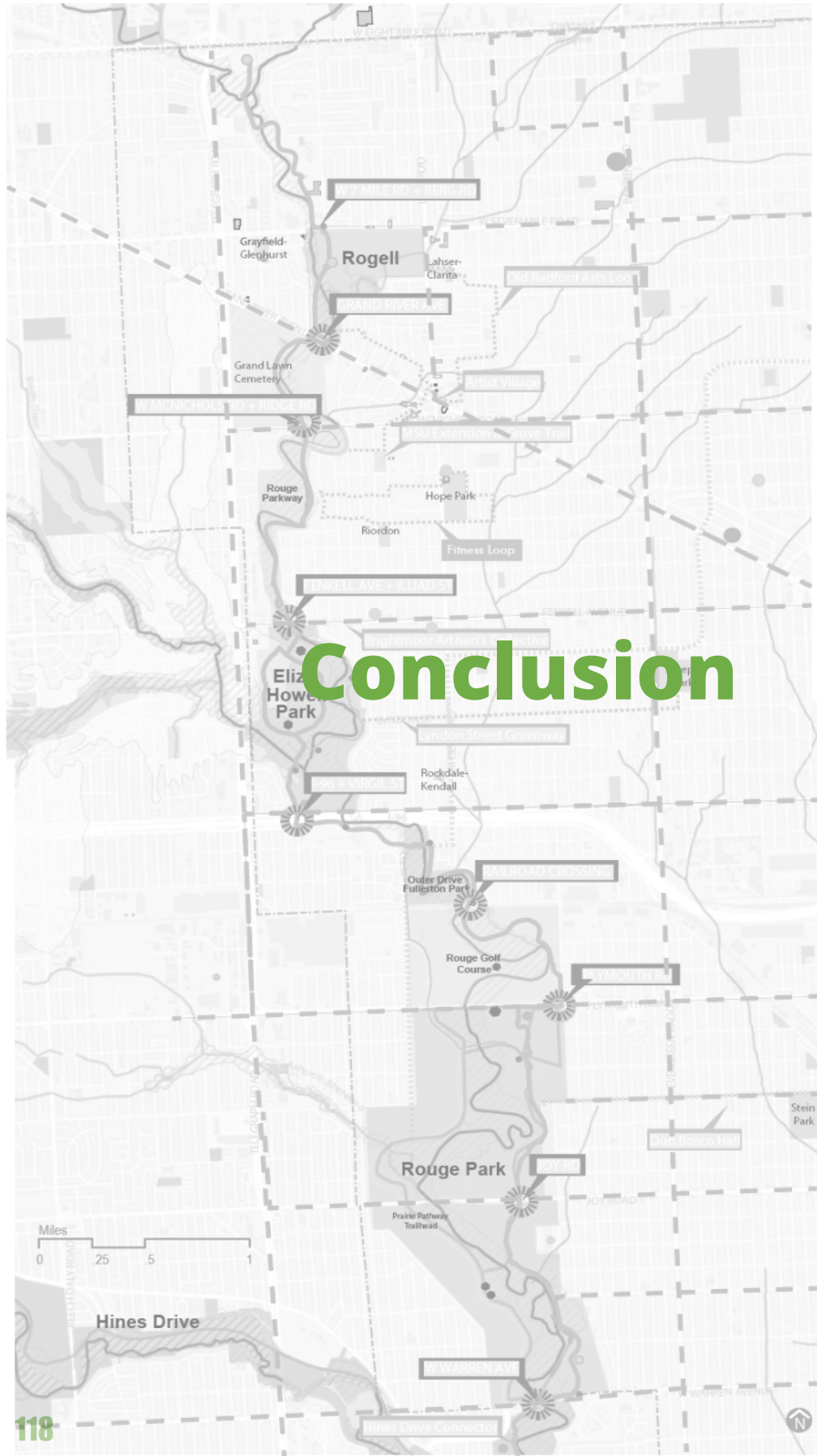
*Opportunities and Impediments of Public Policies and External Forces on the Project*

An unfortunate reality we have to keep in mind is that when the mayor of a city changes the priorities of a city also change. Greenways are important to Planning Director Maurice Cox, who is an appointee of Detroit Mayor Mike Duggan. This team approximates that it will take several years to build this greenway and if a new mayor takes over in that time Maurice Cox could be replaced and the Rouge River Greenway could be halted severely or stopped entirely. Another external force that would have a large impact would be a downturn in the economy. When there is less money to spend the essentials get funded first, and the Rouge River Greenway is likely not seen as essential.

**Assessment Criteria & Methods**

- Criteria: The greenway is completed despite changes in city government or planning agendas
  - Method: The communities along the proposed routes serve as advocates for the project and insist that it be completed in the event of a change of leadership

**ROUGE RIVER GREENWAY STUDY**  
 12 Miles Multi-use Path  
 7 City Parks  
 10 Major Intersections  
 550 Acres of Wetland



# Conclusion

- LEGEND**
- Detroit City Boundary
  - Existing Streams
  - Rouge River
  - Historic Streams
  - 100-year Floodplain
  - Preferred Route
  - Critical Intersection
  - Connecting Bus Routes
  - Organizational Assets
  - Economic Assets
  - Human Assets
  - Physical Assets
  - Cultural Assets



## Conclusion

At the beginning of this project all members of the Rouge River Greenway Capstone team shared the opinion that greenways are a great thing and that everyone must agree. Very early in the initial research and interview process the team learned that this was simply not the case. While there is an abundance of data available in regard to the benefits of greenways. There are also greenways that currently exist in the City of Detroit that are not used much, negative perceptions around cycling infrastructure, and fears that greenways are a sign of impending gentrification. The realization that greenways are mostly good but are still not wanted by everyone led this team to ask the question – what do we believe the Rouge River Greenway will need to prioritize to ensure it is successful? As a reminder, this team has defined success in this instance as realizing maximum usage.

After an extensive process including online research, interviews, surveys, community engagement at local events, asset mapping, a comparative analysis of other greenway case studies, and completion of a HOPE/SWOT analysis this team arrived at the conclusion that the Rouge River Greenway must focus on two areas to be successful: engagement and connectivity. Once these two themes were identified they were turned into eleven recommendations that this team believes if implemented by the Detroit Greenways Coalition and the City of Detroit Planning and Development Department will help the greenway to be successful.

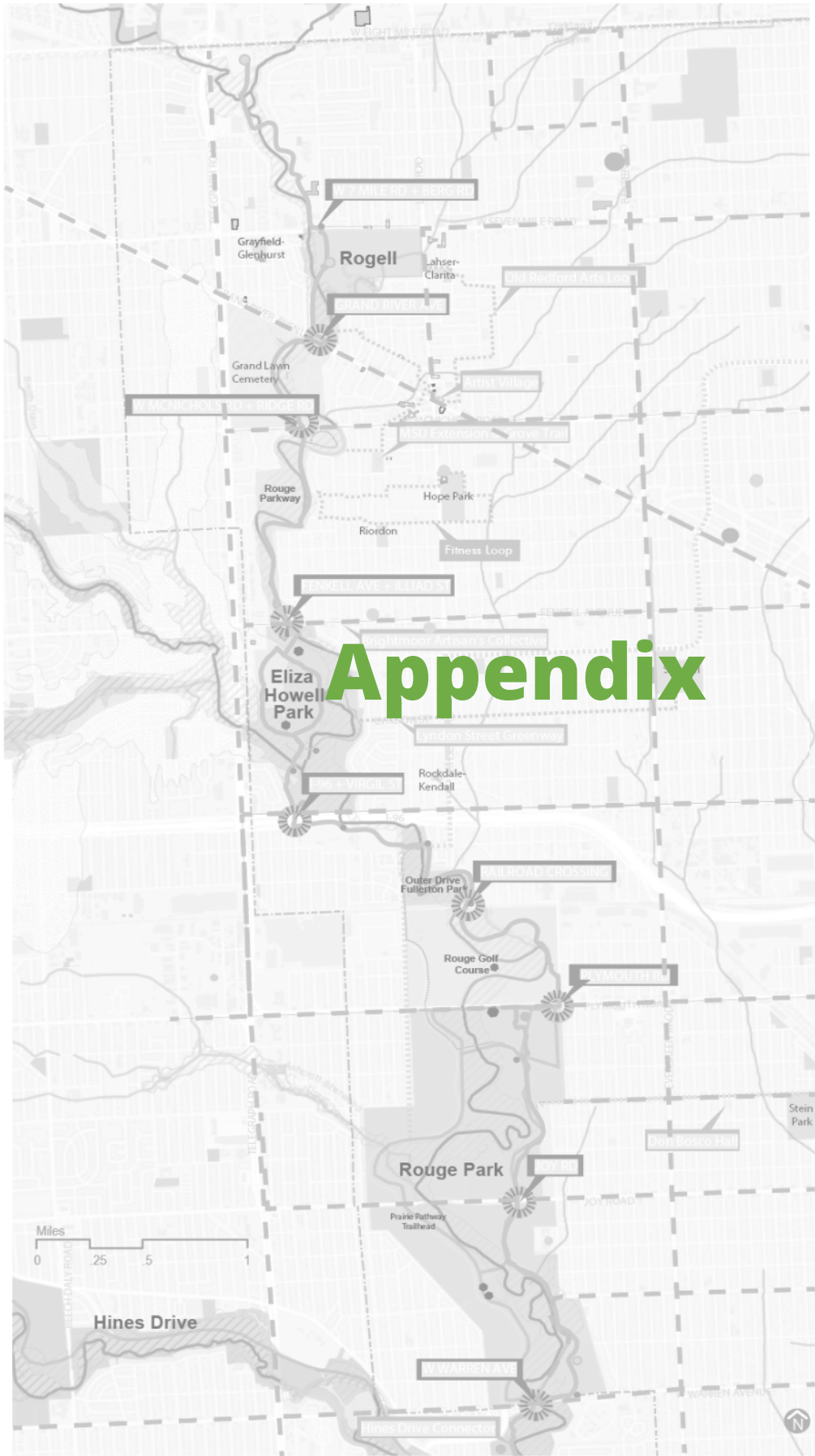
The focus on engagement is important for several reasons, but mainly because this team believes that if residents, businesses, and organizations are a part of the design and development process the greenway will be more likely to incorporate diverse elements that appeal to all types of people. If the engagement process is genuine, which it should be, then it will also result in a feeling of pride and ownership for the residents who live nearest to the greenway. Other benefits to engagement include: the potential for a greenway workforce development component, economic collaboration with local businesses, and assistance from environmental groups so that the greenway is built in a way that preserves and celebrates the Rouge River and the many parks it

runs through. Lastly, this project presents an opportunity for building trust and repairing the relationship between city government and residents.

Connectivity is the second focus area for this Capstone team's recommendations simply because other greenway examples have shown that when a greenway takes people to the people and places they were going to anyways they will be more likely to use it. Since the Rouge River Greenway runs for eight miles north to south on the City of Detroit's far west side it has limitless potential for connections. This team believes that if connectivity is built into this greenway at every step it will be highly successful. The greenway route should initially be built in a way that allows for easy access to existing commercial centers (economic "nodes") and should incorporate signage that guides people to existing human assets, organizational assets, physical assets, economic assets, cultural centers, and bus routes. This wayfinding signage should be branded so as to always be cohesive and recognizable. In addition to signage on the route there should be a Rouge River Greenway map that is accessible both online and in print. Lastly, to ensure maximum usage and familiarity with the greenway, neighborhood ambassadors should be hired to show people how to best use the greenway to get to their destinations.

The Rouge River Greenway Capstone team is excited to present these recommendations and stands behind them completely. They have been informed by eight months of research into greenways as well as over two years of study in the Masters of Community Development (MCD) program at the University of Detroit Mercy (UDM). The MCD program stresses the importance of holistic development, meaning that the human, organizational, physical, and economic (HOPE) components of any development project are intertwined and should be equally considered. These recommendations reflect that holistic approach and can help to ensure the Rouge River Greenway is built in an inclusive and equitable way.

**ROUGE RIVER GREENWAY STUDY**  
 12 Miles Multi-use Path  
 7 City Parks  
 10 Major Intersections  
 550 Acres of Wetland



# Appendix

- LEGEND**
- Detroit City Boundary
  - Existing Streams
  - Rouge River
  - Historic Streams
  - 100-year Floodplain
  - Preferred Route
  - Critical Intersection
  - Connecting Bus Routes
  - Organizational Assets
  - Economic Assets
  - Human Assets
  - Physical Assets
  - Cultural Assets

## Appendix A

### List of Organized Bike Rides and Clubs from Wheelhouse Detroit

#### **Wheelhouse Winter Joy Rides:**

Meet at our Hamtramck location once a month on Saturday mornings at 9 a.m. for a two-hour no-drop ride. Pace, route, and mileage will be dependent on who shows up and the weather. Flexible, fun, and free! November 16, 2017/December 9, 2017/January 13, 2018/February 17, 2018/March 10, 2018

#### **Detroit Bikes!:**

Monthly bike tours of Detroit, leisurely pace, free.

#### **Bike the Blizzard:**

A 24-hour ride where riders gather pledges to help fund Back Alley Bikes' programs. January 14, 2018

#### **Martin Luther King, Jr. Memorial Ride:**

Annual ride approximately 10 miles in length featuring several historical sites relevant to Dr. King and other activists that were integral to the March and the impact of the "I Have a Dream" speech delivered at Cobo center afterward. January 15, 2018

#### **Ride of Silence:**

An annual, national, slow-paced bicycle ride that takes place the third Wednesday of May to honor those cyclists who have been killed or injured while cycling on public roadways. Details forthcoming. May 16, 2018

#### **Tour D'Eastside (Cycle Into Spring):**

Ride the east side! Sixth Annual fundraiser for the Conner Creek Greenway. June 2, 2018

#### **Critical Mass:**

Last Friday of every month, 6:30 pm @ the corner of Warren & Trumbull.

#### **Sierra Club Green Cruise:**

Organized bike ride highlighting green alternatives. 42 and 22 mile options available. August 11, 2018

#### **J-Cycle:**

An annual ride celebrating exciting developments happening in and around the city to explore its Jewish history. August 19, 2018

**Bike The Bridge:**

Only chance of the year to bike across the Ambassador Bridge! October 28, 2018

**Tour de Troit:**

The state's largest bike ride, a fundraiser for local greenways. This one's MEGA-AWESOME! September 15, 2018

**People for Palmer Park:**

Thursday night rides, 7 pm.

**Slow Roll:**

Monday night cruises take off from various spots at 8 pm.

**Bike to Work:**

An annual event that encourages commuting to work by bicycle in the Motor City. 2019 date TBD

**Handlebars for the Homeless:**

The Neighborhood Service Organization's annual bike ride to benefit the homeless. 2019 date TBD

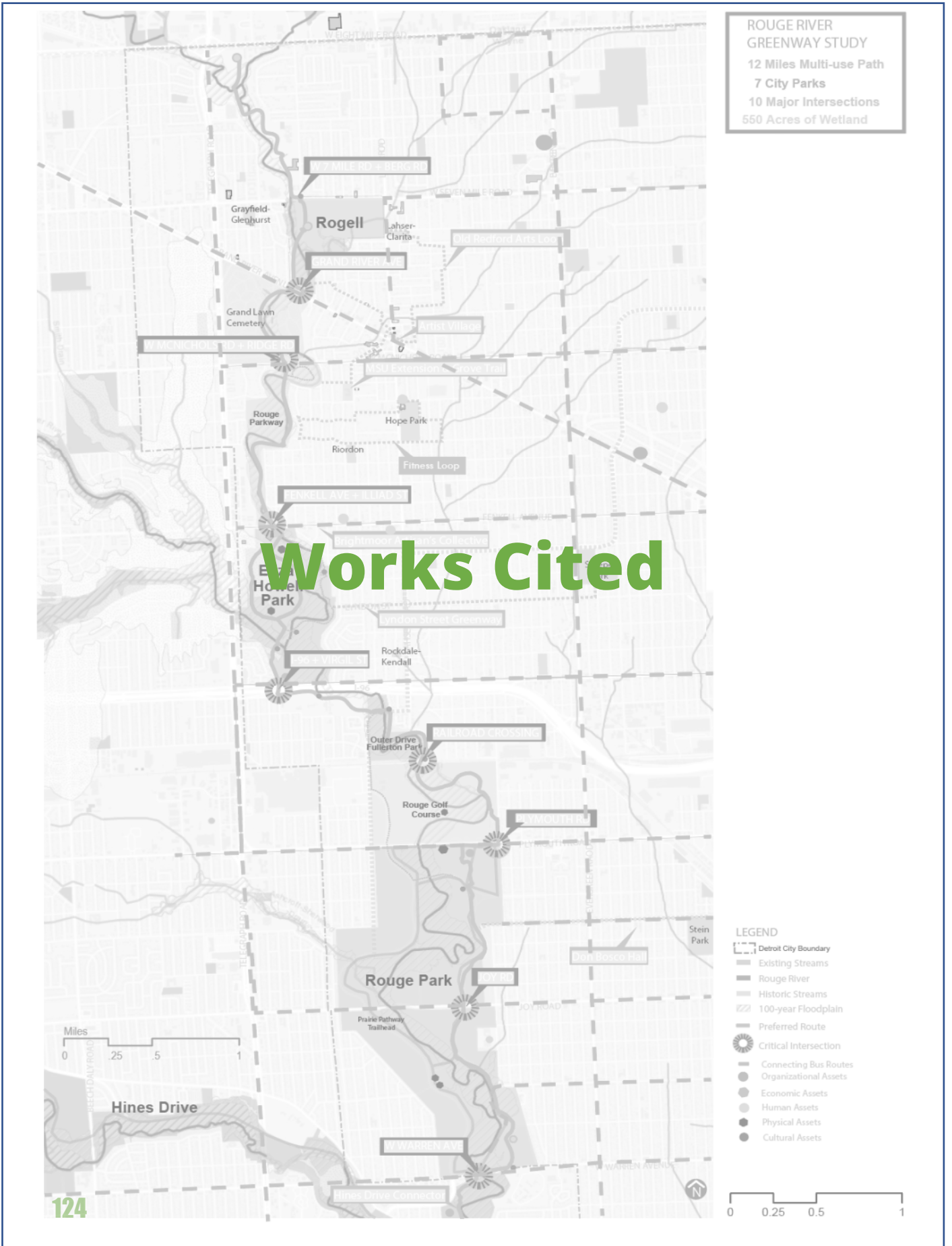
**WSU Baroudeur Ride:**

Raises funds to benefit students who embody the baroudeur spirit in their academic endeavors. August 18, 2018

**UDM Midnight Ride:**

An annual 20-25 mile ride that highlights some of Detroit's historic districts. September 14, 2018





## Works Cited

30th Street Industrial Corridor Greenway Corridor Report .CDM Smith. 30, March 2015.

[https://www.mmsd.com/application/files/1814/8304/3218/30th\\_ST\\_GWC\\_Report\\_FINAL040615.pdf](https://www.mmsd.com/application/files/1814/8304/3218/30th_ST_GWC_Report_FINAL040615.pdf).

Ahern, Jack. "Greenways in the USA: Theory, Trends and Prospects." Ecological Networks and Greenways: Concept, Design, Implementation, edited by Rob H. G. Jongman and Gloria Pungetti, Cambridge University Press, Cambridge, 2004, pp. 34–55. Cambridge Studies in Landscape Ecology.

Alliance for Biking and Walking. "Bicycling and Walking in the United States".

<https://www.aarp.org/content/dam/aarp/livable-communities/documents-2014/2014-Bike-Walk-Benchmarking-Report.pdf>. Accessed 1 June 2018.

Atlanta Beltline. <https://beltline.org/about/the-atlanta-beltline-project/atlanta-beltline-overview/>. Accessed 3 June 2018.

Atlanta Beltline. Connecting Residents with Jobs Along the Atlanta BeltLine.

<https://beltline.org/programs/employment/workforce-partnerships/>. Accessed 3 June 2018.

Atlanta Beltline. A Collaboration Focused on Progress.

<https://beltline.org/programs/employment/jobs-training-classes/>. Accessed 3 June 2018.

Baulch, Vivian M. "How the bicycle put Detroit on Wheels". The Detroit News, 2 Feb.

2000, [blogs.detroitnews.com/history/2000/02/02/how-the-bicycle-put-detroit-on-wheels/](https://blogs.detroitnews.com/history/2000/02/02/how-the-bicycle-put-detroit-on-wheels/).

Accessed 3 June 2018.

- Carrington, Demetrius. "How Jason Hall and slow roll changed everything". Beautiful Machine. <http://www.thebeautifulmachinemag.com/how-jason-hall-and-slow-roll-changed-everything>. Accessed 30 May 2018.
- Cashen, Norene. Spin Out. Detroit Event Newsletter. 30 April 2008.  
<https://www.metrotimes.com/detroit/spin-out/Content?oid=2191992>. Accessed 1 June 2018.  
 City of Boston. <https://www.boston.gov/>. Accessed 22. May 2018.
- Collins, Reuben. Grand Rounds Branding & Design. Streetsmn. 19 October 2015.  
<https://streets.mn/2015/10/19/grand-rounds-branding-design/>. Accessed 24 November 2018.
- Corpus Christi Detroit - New Hope Non-Profit Housing, Corpus Christi Catholic Community, [corpuschristi-detroit.org/new-hope-non-profit-housing](http://corpuschristi-detroit.org/new-hope-non-profit-housing). Accessed 13 June 2018.
- Conner-Creek Greenway Master Plan. <http://www.connercreekgreenway.org/blog/wp-content/uploads/2010/06/Conner-Creek-Greenway-Master-Plan-1.pdf>. Accessed 2 May 2018.
- Conner- Creek Greenway. Image. <http://www.connercreekgreenway.org/blog/wp-content/uploads/2010/05/WKKF-296.jpg>. Accessed 1. August. 2018
- Copenhagen Green Cycle Route.  
[file:///C:/Users/alman/Downloads/CSGN%20Green%20Active%20Travel%20-%20Copenhagen%20Green%20Cycle%20Routes%20\(1\).pdf](file:///C:/Users/alman/Downloads/CSGN%20Green%20Active%20Travel%20-%20Copenhagen%20Green%20Cycle%20Routes%20(1).pdf). Accessed 2 July. 2018.
- Detroit Greenway Coalition. <http://detroitgreenways.org/detroit-bike-laws/>. Accessed 1 June 2018. Documentary Chronology of Selected Events in the Development of the American Conservation Movement, 1847-1920.

<https://memory.loc.gov/ammem/amrvhtml/cnchron3.html>. Accessed 29 March 2018. Detroit Greenway Coalition. Detroit Bike laws.

<http://detroitgreenways.org/detroit-bike-laws/>.

Accessed 1 May 2018.

Detroit Eastside Community Collaborative Conner Creek Greenway.

<http://www.connercreekgreenway.org/>. Accessed 13 May 2018.

Detroit RiverFront. <http://detroitriverfront.org/riverfront/dequindre-cut/dequindre-cut>. Accessed. 22 March 2018.

Detroit Transit History. <http://www.detroittransithistory.info/PCC/DetroitPCC-5.html>.

Accessed 12 March 2018.

Downtown Detroit Partnership - Our Mission, Downtown Detroit

Partnership, [downtowndetroit.org/about-ddp/our-mission/](http://downtowndetroit.org/about-ddp/our-mission/).

Accessed 23 June 2018.

Dybis, Karen. Jason Hall Quits Slow Roll, Talks About What's Next, Daily Detroit. 31 May, 2018. <http://www.dailydetroit.com/2018/05/31/jason-hall-quits-slow-roll-talks-whats-next/>.

Accessed 2 June 2018.

East Coast Greenway Alliance Trail Signage Manual. October, 2010.

file:///C:/Users/alman/Downloads/trail\_signage\_manual.pdf.

Farley, Ren. River Rouge Park. Dec, 2015. [www.detroit1701.org/River%20Rouge%20Park.html](http://www.detroit1701.org/River%20Rouge%20Park.html).

Accessed 31 May 2018.

Flournoy, Michele. Personal interview. 21. March 2018.

Fred A. and Barbara M. Erb Family Foundation. <https://www.erbff.org/>. Accessed 14 November 2018.

Greenways Inc. <http://www.greenways.com/benefits-of-greenways>. Accessed 12 March 2018.

Grants. National Fish and Wildlife

Foundation. <https://www.nfwf.org/whatwedo/grants/Pages/home.aspx>. Accessed 22 November 2018.

Hinojosa, Isabella. "Bike rider deaths have spiked in Michigan — Detroit hopes new cycling infrastructure can help". Detroit Metro Times. 20 Jun. 2017, <https://www.metrotimes.com/news-hits/archives/2017/06/20/as-bike-rider-deaths-have-spiked-in-michigan-detroit-hopes-new-cycling-infrastructure-can-help>. Accessed 28 May 2018.

Hyer, Virginia. Biking to Work Increases 60 Percent Over Last Decade, Census Bureau Reports, 08 May 2014, <https://www.census.gov/newsroom/press-releases/2014/cb14-86.html>.

Accessed 28 March 2018.

Hype Athletics. <http://www.hypeathletics.org/about/>. Accessed 17 June. 2018.

Interpretive Sign planning. Cost Considerations for Panel Design, Fabrication, and Mounting. [http://www.lewisandclark.org/grants/docs/NFS\\_Interpretive\\_Sign\\_Planning.pdf](http://www.lewisandclark.org/grants/docs/NFS_Interpretive_Sign_Planning.pdf).



Levy, Libby. Personal interview. 11.June 2018.

LoveLand. <https://makeloveland.com/>. Accessed 26 May 2018.

Lewis and Clark Trail; Heritage Foundation.<http://lewisandclark.org/>. Accessed 01 December 2018.

Morrish, William Planning to Stay: a Collaborative Project. Milkweed Editions, 1994.

Masters of Community Development Program. Syllabus for MCD 5900, Capstone I, Fall 2018.

Accessed 23 Mar. 2018.

Owens, Megan. Transit History, Transit Riders United, 8 Jan. 2008,

[www.detroittransit.org/transit-history/](http://www.detroittransit.org/transit-history/). Accessed 3 June 2018.

*Our Focus - Ralph C. Wilson Jr Foundation*, Ralph C. Wilson Jr. Foundation,

[www.ralphcwilsonjrfoundation.org/our-focus/](http://www.ralphcwilsonjrfoundation.org/our-focus/). Accessed 24 Nov. 2018.

Parris, Terry .Detroit Park Watch, 9 Jun

2014. <http://detroitparkwatch.tumblr.com/post/91312443916/this-pool-represents-a-community-coming-together>.

Accessed 20 November 2018.

Red Fields to Green Fields. "Red Fields to Green Fields Parks Revitalize & Connect

Communities Greenway Connections, Environmental Health, and Urban Transformation." <http://rftgf.org/PP/pdf-presentations/CityStudies/Detroit.pdf>.

Runyan, Robin. West Riverfront Park lands \$50M grant from Ralph C. Wilson, Jr.

Foundation. Curbed Detroit, 17 Oct.

2018, [detroit.curbed.com/2018/10/17/17984670/west-riverfront-park-50m-grant-ralph-c-wilson-jr-foundation](https://detroit.curbed.com/2018/10/17/17984670/west-riverfront-park-50m-grant-ralph-c-wilson-jr-foundation). Accessed 10 November 2018.

Sands, David. "Detroit Bike History: Jack VanDyke Talks Cycling In The Days Before Detroit Became The Motor City". Huffpost, 28 Apr. 2012, [https://www.huffingtonpost.com/2012/04/28/detroit-bikes-history-jack-vandyke\\_n\\_1460660.html](https://www.huffingtonpost.com/2012/04/28/detroit-bikes-history-jack-vandyke_n_1460660.html). Accessed 3 June 2018.

Scott, Todd. Personal interview. 11. June 2018.

Scott, Todd. Rouge River Greenway. 2018. E-mail.

Sokol Detroit. <https://www.sokoldetroit.com/>. Accessed 17 June. 2018.

Specific EPA Grant Programs. United States Environmental Protection Agency. <https://www.epa.gov/grants/specific-epa-grant-programs>. Accessed 18 November 2018.

Stafford, Katrease. "This old Detroit golf course could become park, stormwater facility." Detroit Free Press, 13 Mar. 2018.

Stockum, Sophie. Personal interview. 13. June 2018.

The Early History of Public Transit in Detroit (1863 - 1890, Detroit Transit History, 4 June 2010, [www.detroittransithistory.info/TheEarlyYears.html](http://www.detroittransithistory.info/TheEarlyYears.html). Accessed 3 June 2018.

The Sidewalk Story, Sidewalk Detroit, [sidewalkdetroit.com/the-sidewalk-story/](http://sidewalkdetroit.com/the-sidewalk-story/). Accessed 19 June 2018.

United States Census Bureau.

<https://www.census.gov/quickfacts/fact/table/detroitcitymichigan/PST045217>.

Accessed 31 March 2018.

Weber, Leonard. Personal interview. 14 July 2018

[Wheelhouse Detroit. Detroit Bike Rides.http://www.wheelhousedetroit.com/detroit-bike-rides/](http://www.wheelhousedetroit.com/detroit-bike-rides/). Accessed 31 March 2018.

Woiwode, Thomas. Personal interview. 3 June 2018

[Wolf River Conservancy. Wolf River Greenway. https://wolfriver.org/the-wolf-river-greenway](https://wolfriver.org/the-wolf-river-greenway). Accessed 1 May 2018.