# DESIGN AS A COMMUNITY CATALYST

rebuilding downtown identities

dedicated: to my parents, family & friends to whom without, none of my success would be possible.

### **SCOTT REYNOLDS**

MASTERS THESIS
UNIVERSITY OF DETROIT MERCY
SCHOOL OF ARCHITECTURE
PROFESSOR NOAH RESNICK
2013-2014

## **INDEX**

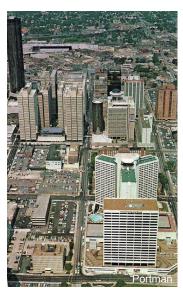
### INTRODUCTION

- 1 | THESIS STATEMENT
- 2 | ABSTRACT
- 3 | SPRAWLING SOCIETY
- 4 | DETROIT SATELLITES
- **5 | NEW URBANISM**
- 6 | FRAMEWORKS
- 7 | THE SITE

- 8 | SAGINAW URBAN DESIGN CHARRETTE
- 9 | THE LAKE ORION DDA
- 10 | CASE STUDIES
- 11 | DESIGN IMPLEMENTATION
- 12 | PRECEDENT STUDIES
- 13 | DESIGN DEVELOPMENT
- 14 | DESIGN PROPOSAL

RESOURCES





### INTRODUCTION

The initial motivations for this thesis began with the desire to extend the life of a building through the processes of adaptive reuse and historic preservation. Society's disposable nature leaves structures functional for their initial purpose, but less likely for any future uses or functions. These vacant structures of embodied historical and cultural relevance are left vacant and underutilized while new developments are built in another part of town. Culture is fascinated with making their own fresh imprint on society, rather than building upon some else's. These conditions present an intriguing opportunity to revitalize existing structures, so they respond to the future, while also respecting the past.

The topics of this thesis were also motivated by my personal desire to be an architect and developer of my own projects. The modern architect is constantly responding to situations at hand, rather than creating them. The discrepancy between the architect and the client tends to be one of the biggest problems within the field of architecture. By no means am I suggesting that an architect can solve all the problems within architecture, but I am suggesting the architect has an opportunity to seize the world's potentials just like architect's clients.

This thesis was also driven by my personal interest in architecture that is not just an end product, but rather a catalyst to future growth and development. The work of John Portman in Atlanta, Georgia was an early inspiration. Portman reinvigorated an area of Atlanta that few would have came near at the time. His visions and designs created millions of square feet of thriving retail, office and residential spaces. Portman's work led to over fifty years of continual development and investment into the area.







# 1 | THESIS STATEMENT

The urban infrastructures created by 19th century satellite towns are viable opportunities to reestablishing strong urban cores of identity in today's sprawling suburban environments. A reinvestment in these existing downtown conditions - via the intervention of a community catalyst - can establish these lost identities and yield a regional node of mixed functions and mass appeal. Therefore, creating a stronger network of nodes with the metropolitan region.

# 2 | ABSTRACT

Thriving Post-World War Two America created cities that were no longer dependent upon America's major city centers, but rather a network of regional developments. Highways allowed metropolitans to rapidly expand and engulf the small satellite towns that were once independent of any major city. Small satellite communities, like Lake Orion, Michigan, were forced to function very differently; Main Street was no longer the center of the community, but rather viewed as an inconvenient place of the past. As the suburbs developed on fringes of town, community borders slowly blurred one town into the next. Today these satellite communities lack identity, but have the embodied attributes to become a viable urban core. A reinvestment in these existing downtown conditions, via the intervention of a community catalyst, can establish these lost identities. The study of Lake Orion's, past, present and future frameworks inspired a connection back to the community's waterfront roots. By reengaging the community's assets in new ways, innovative programing and development opportunities are presented, turning what were once limitations into opportunities for the community's future.

### DETROIT 1900

# TOPOGRAPHY David Rumsey

### DETROIT 1920



At the turn of the century cities like Detroit, Michigan were rapidly expanding. In a period of twenty years, Detroits' population more than tripled.

# 3 | SPRAWLING SOCIETY

They called it the American Dream. A place of new frontiers where anyone could grow and prosper. Americans could have a successful career, build a home of their own and in a neighborhood where they could be proud to raise their kids. Many flocked to the satellite towns on the outskirts of the city limits, where the small, self-sustaining economies had an abundance of potential for expansion. Everyone wanted to make their own imprint on the future of America. Major cities like Detroit were growing faster than ever before.

At the turn of the 20th century, Detroit's population was just over one quarter of a million people; by 1910, its population had nearly doubled. New industries were developing and Detroit was becoming the Automotive Capitol of the World. Henry Ford's assembly line was mass producing the Model T at record breaking rates<sup>1</sup>. Efficient manufacturing meant lower prices while still yielding high profits.

<sup>&</sup>lt;sup>1</sup>See PBS video publication on "Ford Install First Moving Assembly Line"

Ford was paying workers five dollars a day. An uncommonly high wage for the period<sup>1</sup>. People were flocking to Detroit from all over the world. By 1920 Detroit's population had once again doubled, to just shy of one million<sup>2</sup>.

By 1950, Detroit was busting at its seams and had reached its peak in population and size. A few short years later, The Federal-Aid Highway Act of 1956, was signed into law and the Interstate Highway System was born. Over 41,000 miles of highways would be constructed over the next ten years. This network of highways connected cities large and small across the United States. A level of convenience and accessibility was now achieved that never existed in the centuries prior. Families and businesses were no longer confined to the city limits, but could now settle anywhere in America.

The automotive industry that had undoubtedly been the foundation of Detroit's success contributed to the demise of the urban city core and the establishment of the larger metropolitan region, also known as the suburbs. The automobile allowed people to move outside the city limits to cheaper, undeveloped areas that still could reap the benefits of a major city. By the end of the 1950's, the region was no longer just defined by the city center, but rather a larger metropolitan region of developments and destinations. By the 1960's, the city of Detroit's population was on the decline, yet the suburbs were growing at an exponential rate.

The rapid population growth that had occurred in Detroit earlier in the century was now occurring in the suburbs. The existing, and in many cases, nonexistent infrastructures were unfitting to society's demands, fueling rapid development and expansion. Zoning laws were developed to control the rapid growth, but its restrictions had little influence on the large amounts of unconcentrated developments that would occur on the fringes of the city center. Convenience and the automobile became the focus of society; consequently creating a disconnected and heavily automobile reliant network of destinations. The concentrated urban centers were now viewed as inconvenient, outdated and under parked. Walkability and social interactions would slowly be replaced by more time in the automobile and would worsen as development continued farther outside the city center. Urban sprawl erased the center nodes of society.

<sup>&</sup>lt;sup>1</sup>See PBS video publication on "Ford Install First Moving Assembly Line"

<sup>&</sup>lt;sup>2</sup> See United States Census Bureau

The thriving suburbs did not just establish new destinations, it also changed existing destinations. The small satellite towns that were once independent from the city center were now engulfed by the larger metropolitan region. The booming times brought mass growth and ultimately major changes to the identity of these historically self-reliant places. The towns' local economies were now interdependent upon the economy of the greater metropolitan region. The main streets that used to be the center of the community were now viewed as an outdated place of yesteryear.

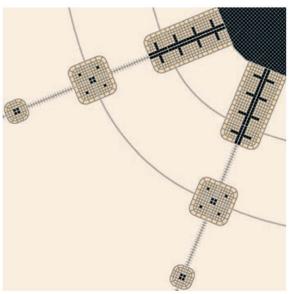
These satellite towns are still highly desirable and populated communities today. Their location on the edge of the metropolitan region is far enough from the struggling city center, but close enough that a daily work commute is still feasible. The school systems tend to be very strong and successful. Homes are typically fitting of the American dream: new, large and affordable. The communities are typically filled with middle to upper-class, well-educated families.

### **NETWORK PLACES**



Daily lives are filled with Live, Work and Play. Historically all three events occurred near one another, but in modern society these three places are only connected by a commute in the automobile.





1-7. First-generation suburbs: traditional growth patterns formed streetcar and railroad communities outside the city limits



1-8. Forest Hills, New York



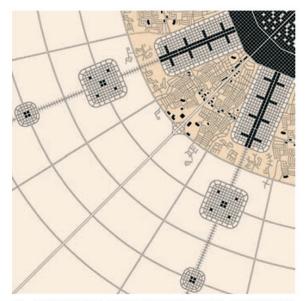
First-generation suburbs

Railroad or streetcar lines

Undeveloped land

Sprawl Repair Manual

Development in the early 19th century was highly dense and structured. Large amounts of undeveloped land existed.



 $1-9. \quad Second-generation \ suburbs: \ conventional \ suburban \ development \ created \ car-dependent \ sprawl \ along \ new \ highways$ 



1-10. Levittown, New York

Decline in urban core

Second-generation suburbs

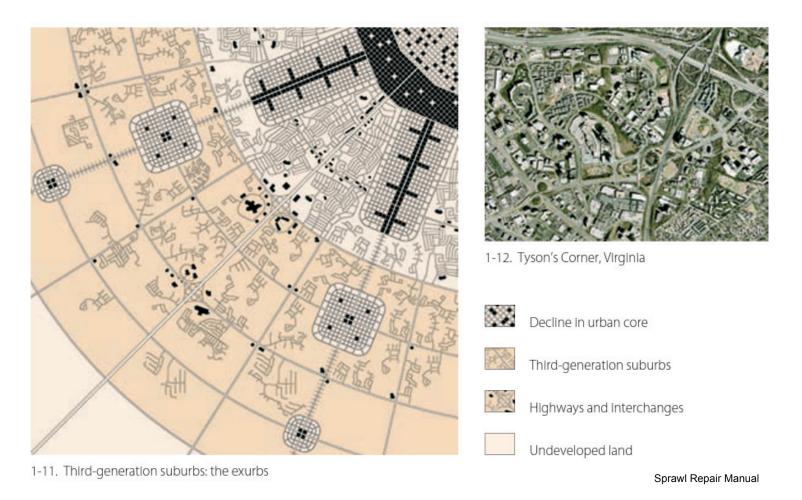
Highways and interchanges

Undeveloped land

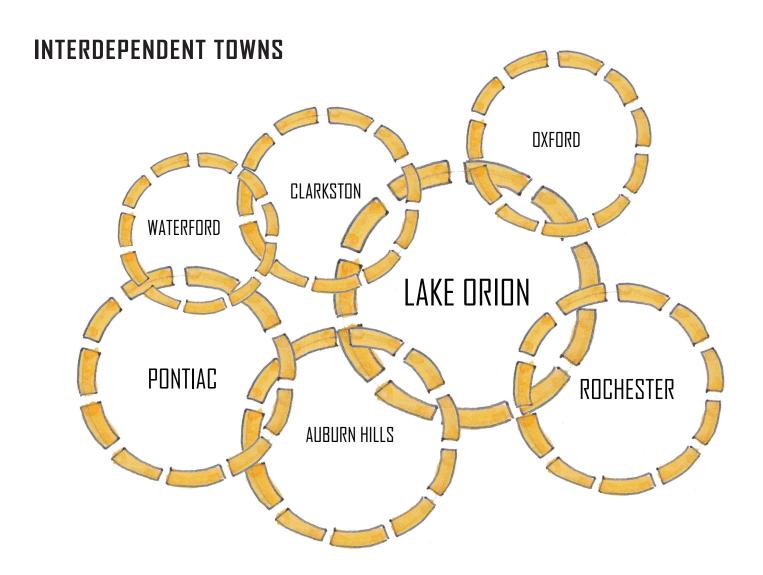
Sprawl Repair Manual

As the city grew, so did the region; the interstate system gave americans a new sense of freedom and new definition of home.

### DEVELOPMENT PATTERNS OF THE 21st CENTURY

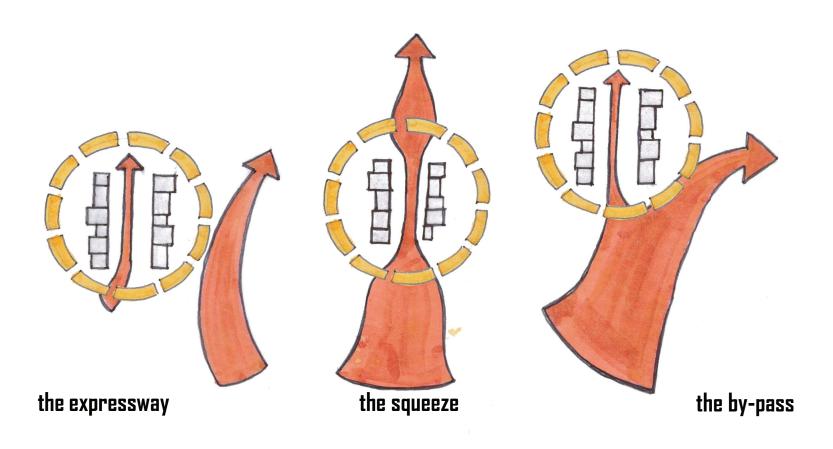


The continuous growth of the region, lead to the demise of city centers. Development typically occurred on greenfield sites on the edge of town, creating a heavy reliance on the automobile.



Towns that were once self-reliant and segregated from the next town over are now interwoven. The automobile has blurred borders, leaving towns not only defined by their own identity, but rather the entire region's identity.

### THE CONDITIONS OF MAIN STREET - POST SPRAWL



Main Street was no longer viewed as the center of the community, but rather as a inconvenience that did not respond to the automobile or modern day society.

# MICHIGAN, USA

# **DAKLAND COUNTY**



# 4 | DETROIT SATELLITES

### THE CITIES OF NORTHERN METROPOLITAN DETROIT

Lake Orion and Clarkston Michigan are both examples of such satellite towns in the metropolitan region of Detroit. Established in the 1820's by economies surrounding the abundant natural resources. The addition of the railroad, brought exponential population growths from 1850-1870. By the turn of the 20th century both towns had become a seasonal destination for people around the region. The expansive forest and lakes were a huge draw to the city dwellers to the south. By The Great Depression, tourism was no longer the center of the local economy. The interstate infrastructure created in the 1960's brought the next wave of prosperity to the region, but not to the city center. The late 1980's brought new subdivisions filled with new large family homes. Today development is still occurring, but are typically unconcentrated fringe developments.

These satellite towns have viable past, present and future frameworks to invest upon. The historic fabrics of significance, that helped establish the identity of these places in the past, could help reestablish them in the future.

Certain periods, people and places could play key roles in future developments. The present assets and anchors allow for future developments to build upon frameworks that currently exist within the community. This includes existing assets of not just the built environments, but also the natural and social environments that exist. An analysis of present frameworks may also reveal the underutilized opportunities that exist within the community. The future frameworks may already be in place, but not implemented yet. The future of these communities should build upon its existing frameworks of potential.

The future of these places should undoubtedly build upon its history, but it should not glorify it. There is a fine line between recognizing history as a framework and viewing it as nostalgic. The economies and functions that established these places in the past are not necessarily viable pieces of their future. The history of these places were very much part of the period they existed in. Although, some components of the past may be appealing, it's important to establish a future that also responds to its current identity.

The future identity of these urban centers should address the reality of today. Rebuilding identity is not going to reverse all the conditions of urban sprawl. The redevelopment of urban centers will improve one of the many social conditions that exists within modern society. The redevelopment of these historic districts may not reestablish the geographic or economic center of these towns, but will help establish an urban core of identity. The future identity of these urban cores may be improved with other changes to society, but a solution for the future has to respond to the reality of today. Although a less car dependent society would help improve the identity of these places, the automobile is a key component within today's society.

The infrastructure created by 19th century downtowns are viable frameworks to build upon. The history of these downtowns create authentic infrastructures that cannot be replicated by modern society. The density and scale of these places are highly suitable to urban cores of identity. In the past these place were the identity of these communities and can be once again. The self-sustaining economies that established these places are an example of functions that could be reintroduced in the future identity of these urban centers.

### METROPOLITAN DESTINATIONS









**3.9** MILES WATERFORD, mi



**28**<sub>MILES</sub> FLINT, mi

42<sub>MILES</sub>
DETROIT, mi

**47**MILES
ANN ARBOR, mi

# CLARKSTON, MICHIGAN





### **EXISTING DEMOGRAPHICS**

50 square-miles

402 households

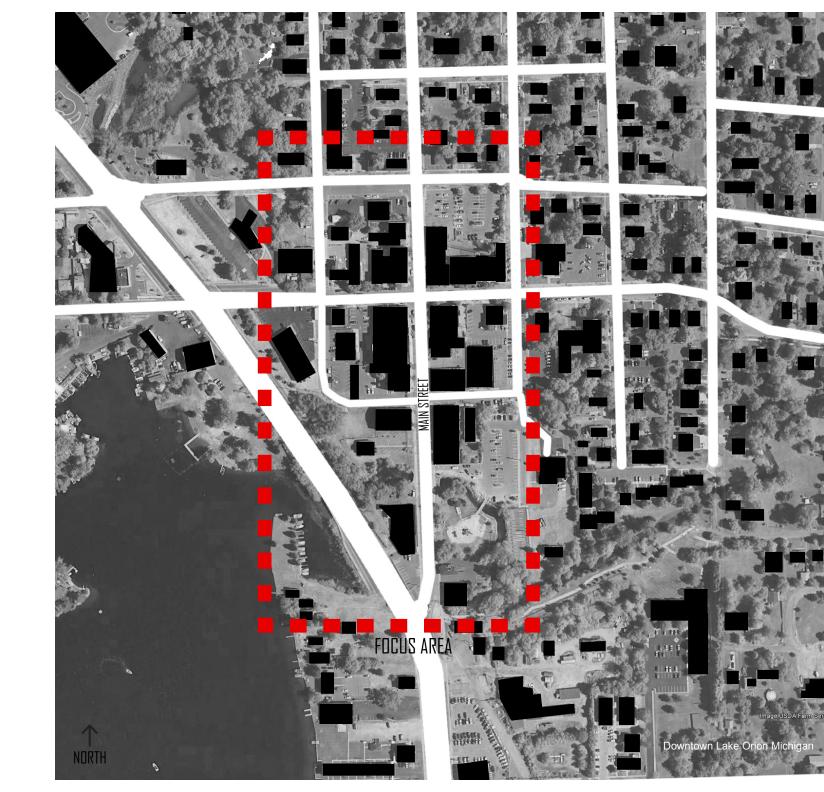
893 POPULATION

27% A STATE OLD have children under 18 YEARS OLD

97.7% caucasion

44.8







**8.0** MILES AUBURN HILLS, mi

**4.5**<sub>MILES</sub> OXFORD, mi



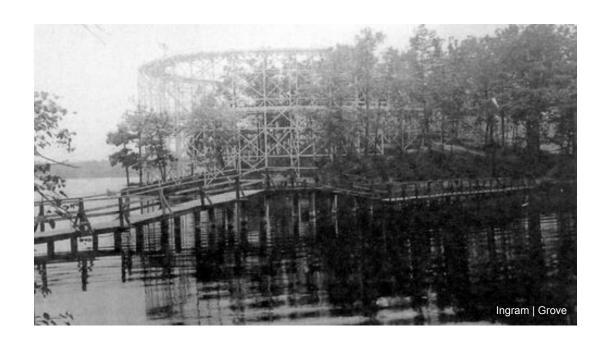
37<sub>MILES</sub> FLINT, mi

39<sub>MILES</sub> DETROIT, mi

**59** MILES ANN ARBOR, mi

# LAKE ORION, MICHIGAN





### **EXISTING DEMOGRAPHICS**



1,304 households

2,973 POPULATION

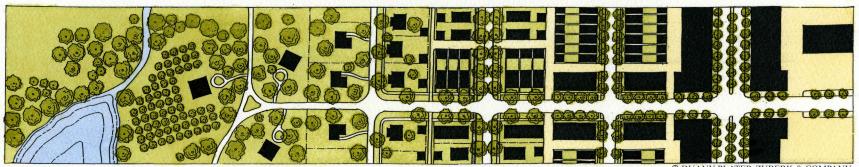


1664 acres of water









The Transect - New Urbanism

© DUANY PLATER-ZYBERK & COMPANY

# 5 | NEW URBANISM

### A FOUNDATION & REFERENCE

The concepts and principles of New Urbanism were undoubtedly a foundation and reference to this thesis. New Urbanism is one the leading organizations promoting walkable, diverse mixed-use neighborhood developments, sustainable communities and healthier living conditions. It was established by co-founders Andres Duany, Peter Calthorpe, Elizabeth Moule, Elizabeth Plater-Zyberk, Stefanos Polyzoides and Dan Solomon and is supported by various design, education, governing bodies and communities across the United States and around the world. "The principles of New Urbanism reinforce the character of existing areas while also making the whole region more livable, coherent and sustainable. New Urbanism takes a proactive and multi-disciplinary approach to restoring communities and relies on planners, developers, architects, engineers, public officials, investors and community activists to create and influence the community.

<sup>1</sup> See "What is CNU" and other publications by the Council of New Urbanism for more information

The principles of New Urbanism has established vibrant communities within the complexities of modern society. Their walkable and diverse urban cores still address the flow of traffic and parking. Birmingham, Michigan is an example of community designed within the principles of New Urbanism. The community faces the complexities of urban sprawl just like the satellite towns. The main street has been by-passed in response to traffic volumes and most people drive to its urban center. Even within these complexities, it remains as a thriving urban core. The communities have plenty of parking, yet its street fronts are highly activated and walkable. Birmingham, Michigan has a of variety destinations and retain high home values.

New Urbanism does have its imperfections. The diverse and well planned communities of New Urbanism typically become highly desirable communities to reside in. Their high demand has a tendency to drive up prices and rent values, making these communities a commodity of the wealthy, rather than a community obtainable by all. The community of Celebration, Florida, had such a high demand, all of its home values nearly doubled before a single home was sold. The community that was planned for a diversity of incomes became a community of wealth. These early New Urbanism communities such as Celebration, Florida were typically built as greenfield communities, fabricated from the ground up. Rather than building upon the community that already existed, these New Urbanism community fabricated their own. New Urbanism has addressed its disadvantages by constantly evolving and improving its principles.

The concepts of New Urbanism are nothing new to developing viable urban cores. Mixed functions, density and walkable streets have been part of urban centers throughout history. The satellite towns established in the 19th century embody all of these concepts. Making these environments viable opportunities to reestablishing strong urban cores of identity in today's sprawling suburban environments.

# **NEW URBANISM CASE STUDIES**





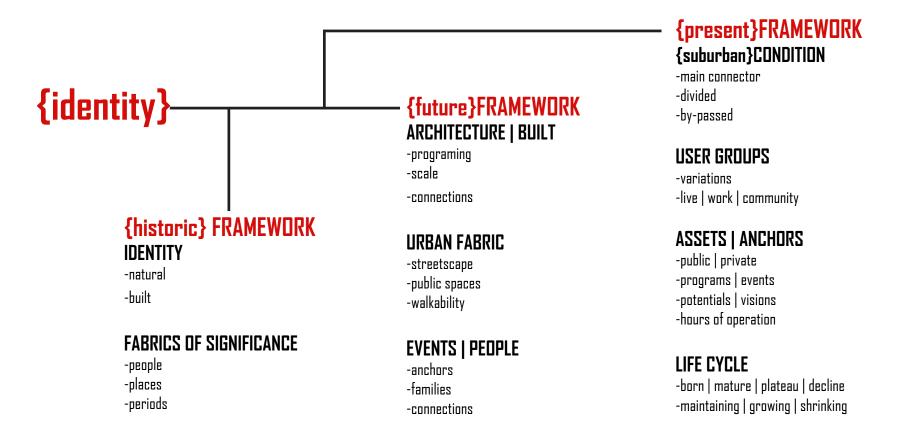




# THE COTTON DISTRICT STARKSVILLE, MISSISSIPPI



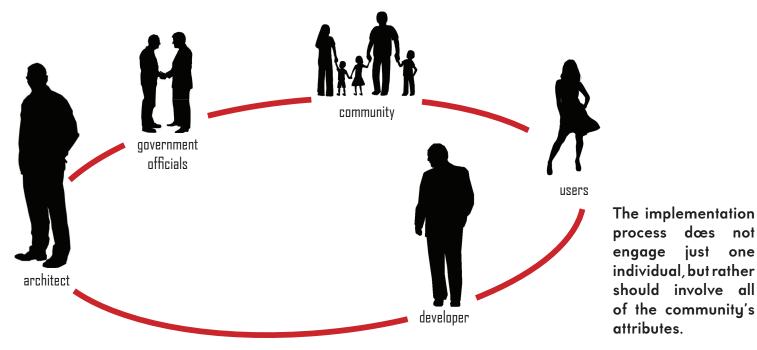
### THE FRAMEWORKS OF IDENTITY



The past, present and future attributes of satellite towns are important to their identity. Historical events could be an inspiration for future events or developments. Present attributes could be the foundation of a community's future.

# **6 | FRAMEWORKS**

# PAST, PRESENT & FUTURE



# **{14} ATTRIBUTES OF IDENTITY**

**VALUE** OPPORTUNITY STREETSCAPE **SUSTAINABILITY** CHARACTER SUPPORT **PROGRAMING** HISTORY TRANSPORTATION **EVENTS** SAFETY/COMFORT **CULTURE** DIVERSITY **AMENITIES** 

30

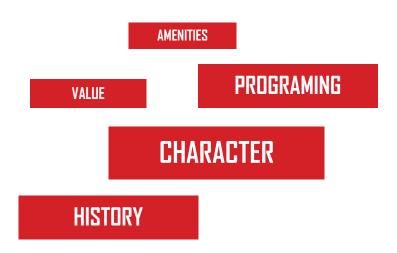
The study of urban theory

and planning implementation led to the development of fourteen attributes that were used to analyze existing site conditions and understand

possible design interventions. Initially the attributes were viewed as a checklist, but were later reestablished as reoccurring themes in various

community projects.

### INTERVENTION {A} developer/architect



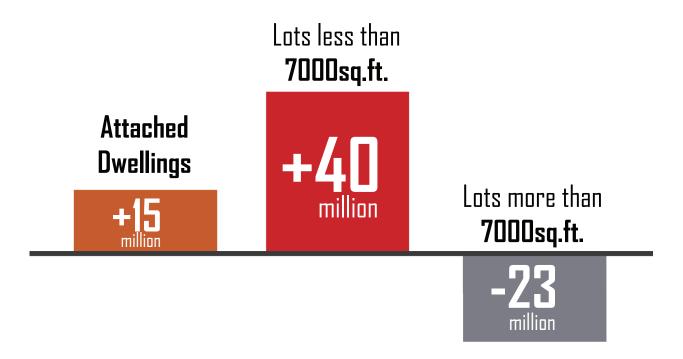
An architect or developer may focus on the æsthetics or programing of a building, but may also engage history, while providing the community with more amenities and increasing property value.

## INTERVENTION (B) community group



A local community group may organize an event that engages the streetscape. The event may tie back to a historic event in the community. The event strengthens the culture, and in turn provides more community comfort and safety.

#### PROJECTED MARKET TRENDS



Recent studies by the National Realtors Association show a growing desire among consumers to live in higher density urban cores. Community amenities are becoming more important than home size.



of households will be without children by 2025





median distance between new residence and previous residence



more concerned about commuting costs than household operating expenses



of Millennials are buying based on location amenities



are more likely to move farther from their current home than other age groups



# 7 | THE SITE

#### THE VILLAGE OF LAKE ORION, MICHIGAN

The site of Lake Orion, Michigan was selected for its viable historic, present and future frameworks that exist as opportunities for implementing identity within its downtown. The frameworks of Lake Orion were not foreign to me, but rather quite familiar. I was raised in Lake Orion and have lived there most of my life. My parents built the home I grew up in during the mid-1990's in a subdivision on the edge of the city. They, like many others, were able to build a home of their dreams at price they could afford, in a place their children could receive a good education.

The history of Lake Orion began in 1828, when Nathan Heminway of Detroit traveled two days to reach the land that would later become Lake Orion. In 1830, Philip Bigler and Jesse Decker arrived and erected a dam to unite several lakes into one body of water, Lake Orion. The railroad brought rapid growth to village surrounded by Lake Orion. Lake Orion became well known for its beauty and natural features.

In 1874, a group purchased the island that would later become known as Park Island. A bridge was constructed to connect the island to the mainland and was followed by the construction of a dance hall, an eight foot tall viewing tower and an amphitheater. By this time, thousands of people were arriving in Lake Orion daily via four trains. Lake Orion was thriving and was a well-known summer destination to people across the region. Park Island would later grow to include many amenities, including a roller coaster and a carousel. In 1891, a hotel was constructed on the Lake to appeal to Lake Orion's visitors. Passenger boats were actively distributing citizens and visitors across the active water ways. By the turn of the 21st century, the village of Lake Orion boasted over 1.5 miles of sidewalk, a major feat for the period. By 1909, the Marine Postal Center was established to deliver mail to over three hundred cottages on the lake and its islands. The mass integration of the automobile and The Great Depression brought major changes to the village of Lake Orion.

Lake Orion remained a viable summer destination through the 1950's, but the interstate system brought great changes to the region. Development started occurring outside the village limits rather than within them. The interstate system brought easy access to the city of Detroit, making a home in Lake Orion and a job closer to Detroit a viable reality. Lake Orion was no longer just a summer community, but rather a functional part of the greater metropolitan of Detroit. The main street was bypassed in response to the mass influx of population to the area, and created a major divide between the lake and the village. The downtown that was once the center of the community was now just a sentimental piece Lake Orion's past.

Lake Orion has certainly grown and changed since its demize in the mid-20th century, but in rather random and unconcentrated ways. The active anchors that exist within the community are independent from other community anchors. There are many thriving components, but few work together to create a stronger urban core. The school system is strong and residents are typically well educated. The area is home to many thriving businesses and industries. The community components are typically reliant upon their own assets and identity, rather than that of the community, because in most cases a community identity is nonexistent.

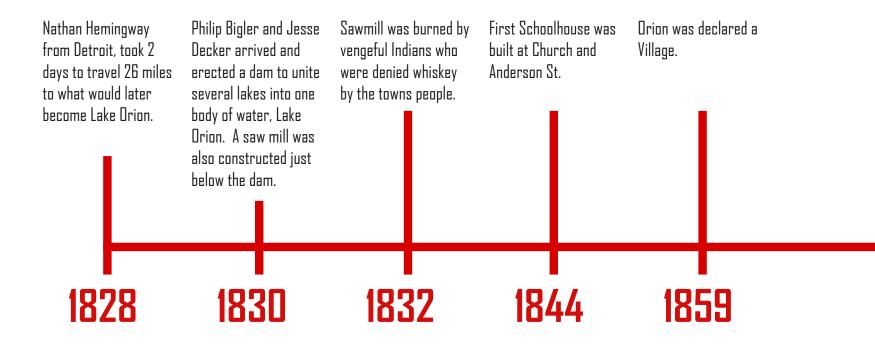
The future of these urban cores are rooted within the frameworks of identity. Through fourteen aspects of identity, opportunities and assets can be identified, established and built upon (see previous chapter). The frameworks of identity are comprised of overlapping attributes, many of which are elements of design. The aspects of identity are not just those of the built environment, but also those of the social and natural environments within a community. Identity is not a focus upon the everyday best practice of these environments, but rather a focus on the aspects that tend to be overlooked.

The identity of Lake Orion responds to and incorporates the past, present and future frameworks within the community. It's future should be visionary, yet conservative to reveal opportunity nodes to build upon. Identity cannot be implemented by just one person, but rather a community of people. Its implementation cannot be a linear process, dependent upon one project to complete the next, but rather a parallel process that is phased and integrated.

By incorporating the frameworks of identity into the existing community of Lake Orion, a number of projects could be identified as opportunities and assets to build upon. The lake that was once the center of the community could be reincorporated into the downtown's future identity. The dam that unified several bodies of water could become a future asset. A number of vacant and underutilized buildings that exist within the downtown could be redeveloped. Community functions that draw people from across area, such as the farmers market, could be developed as future community anchors. The implementation of one or many of these projects can establish the lost identity of Lake Orion and act as a catalyst to future developments.

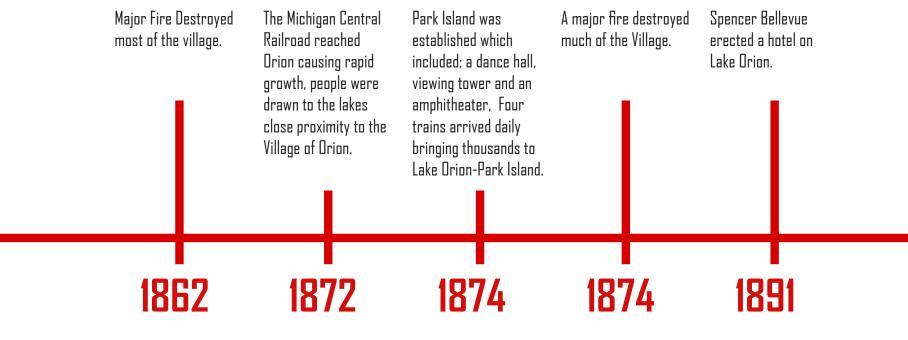




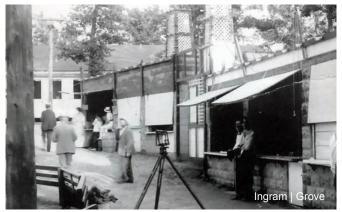


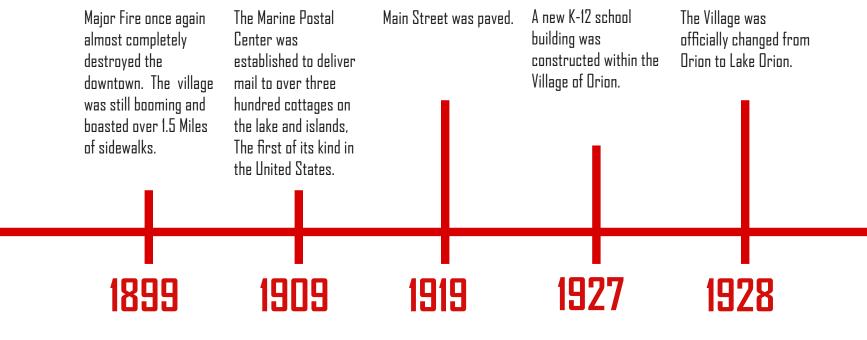
















Amelia Earhart visited
Lake Orion and flew
an experimental glider
at Scripps Mansion.
Lapeer Road was
paved in the same
year.

A city well was added to offset the danger of the future fires that plagued the town. Park Island was no longer flourishing in its original existence but Lake Orion was still a very active Summer and Winter destination. A new High School was constructed outside the Village of Lake Orion and operated for 40 years.

The newly opened I-75 interstate brings easy access to the area and the metropolitan region.

1929

1930

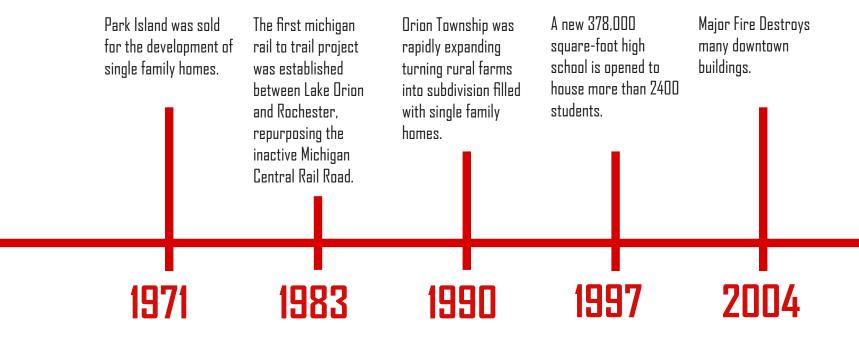
1948

1957

1962













A major portion of the downtown is rebuilt after the major fire from 2004.

A major portion of the downtown is rebuilt after the major fire from 2004.

Forty additional parking spaces are added to downtown after demolishing an existing building.

A vacant historic structure collapses in on itself after a heavy snow fall .



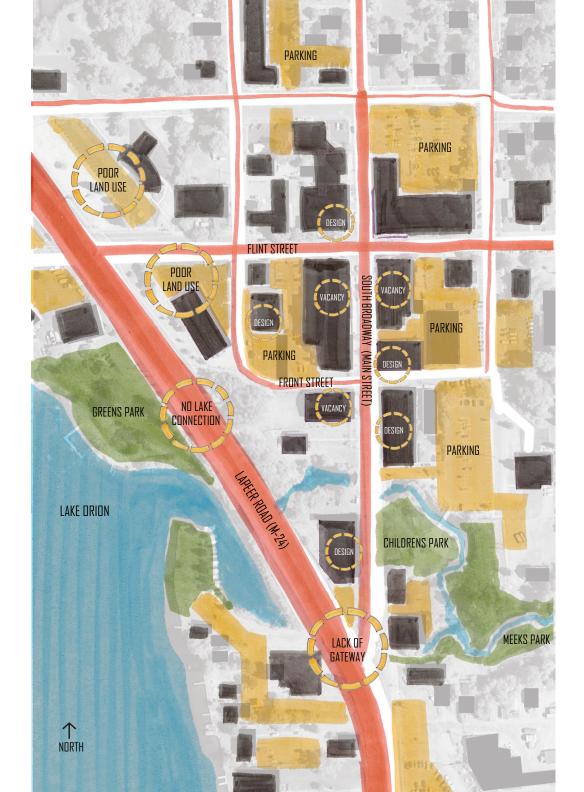
2007

2011

2013

2014

Lake Orion currently has an existing infrastructure that lacks unity. Many storefronts are vacant and in need of rehabilitation. The five lanes of Lapeer Road (M-24) act as a divide between Lake Orion and the downtown: connection exists between the two places. Reinvestments have been made in the recent past to improve the streetscape and parking infastructure.



# **EXISTING SITE CONDITIONS**











# 8 | SAGINAW URBAN DESIGN CHARRETTE

#### NEW E.R.A COMMUNITY GROUP

While developing the concepts and theories, I was presented with the opportunity to participate in the Saginaw Urban Design Charrette. The city of Saginaw, Michigan struggles with similar conditions to the satellite towns within this thesis. Although, the scale of these communities are quite different, their urban cores are in an identity crisis. The community members of Saginaw saw the present conditions as an opportunity rather than a hindrance. Through multiple outreach events, the community became educated and involved in the future of their community. The charrette did not produce a Master Plan, but rather developed frameworks for the future of Saginaw to rebuild with. The processes and outcomes of the charrette became a foundation for the development of this thesis.





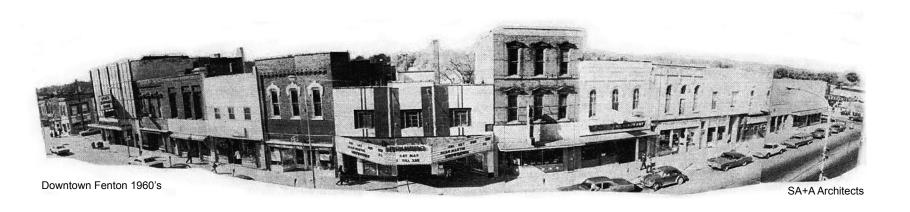
# 9 | THE LAKE ORION DDA

#### **DESIGN COMMITTEE**

The development of this thesis included the input of many community members and organizations. The Lake Orion Downtown Development Authority is very active in the Village of Lake Orion and became a major asset to the results of this thesis. An active and encouraging community is just one of the many reasons why downtown Lake Orion became the perfect location for this thesis.

The theories and developments of this thesis have been presented to the community and have been well received. Although, this thesis arose from my own passion for architecture, historic preservation and development, it is extremely rewarding to have had the chance to actually implement various thoughts and theories from this thesis.





# 10 | CASE STUDIES

#### CITIES OF REFERENCE & INSPIRATION

The theories and proposals of this thesis were developed through the study of a variety of cities, especially many of which are located in southeastern Michigan. Opportunities may vary from location to location, but many suffer from very similar conditions. Some are establishing new identities, but are at various stages of implementing their new identity.



# C.W.C. HARDWARE.

# ROCHESTER, MICHIGAN

A neighboring community to Lake Orion, downtown Rochester has gained popularity in recent years. Plagued with a variety of restaurants and shops its streets are highly activated year-round. In the winter the historic facades are lit with thousands of L.E.D. lights. Events pull in people from the entire region. The downtown has a major thoroughfare for a main street, yet the downtown still responds to parking and the demands of the automobile.





# FENTON, MICHIGAN



A recent private-public partnership between the city and a developer is establishing a new identity for downtown Fenton; the Fenton Cornerstone Building. A four story mixed-use building will reestablish main street building frontage that was demolished in the 1960's for urban renewal. The new building will bring a variety of residential and commercial tenants to the downtown and will act as a catalyst to future developments in the downtown.





# The Garden Theater

# DETROIT, MICHIGAN

Major reinvestment is occurring in the city of Detroit. Developments like the Garden Theater are reviving historic amenities that were thought to be gone for forever. The entire block was redeveloped to house a variety of residential, office and retail functions. The block also provides ample parking through the use of a multi-story parking deck. Originally slated as an impossible development, has now contributed to an increase in rental prices in the surrounding area.





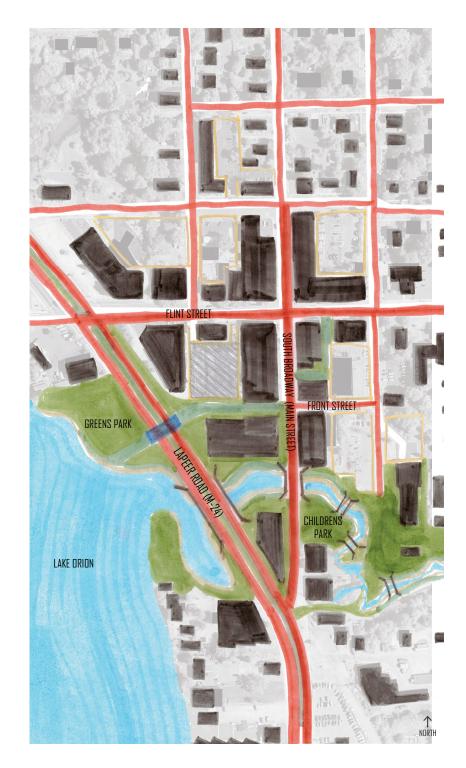


what is your vision for lake orion?

# 11 | DESIGN IMPLEMENTATION

A variety of studies occurred to understand where the greatest impact for downtown Lake Orion could be made. The village and the surrounding area was studied at a variety of scales to understand the present and historical conditions of downtown Lake Orion. A project site within downtown Lake Orion was selected for its ability to tie the past, present and future frameworks of Lake Orion together via the intervention of a community catalyst.

After studying the historic and present conditions of downtown Lake Orion, it became very prevalent that the downtown needed connection with the waterfront. As the town developed and Lapeer road created a divide between the waterfront and the downtown. Reconnecting main street to the waterfront could act as a community catalyst and reestablish an identity for Lake Orion.

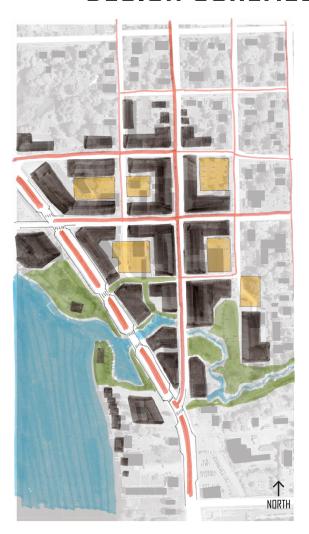


An intervention with new developments that engage the existing scale and conditions of the downtown; could establish a new identity for Lake Orion that is reliant upon its past and its future.

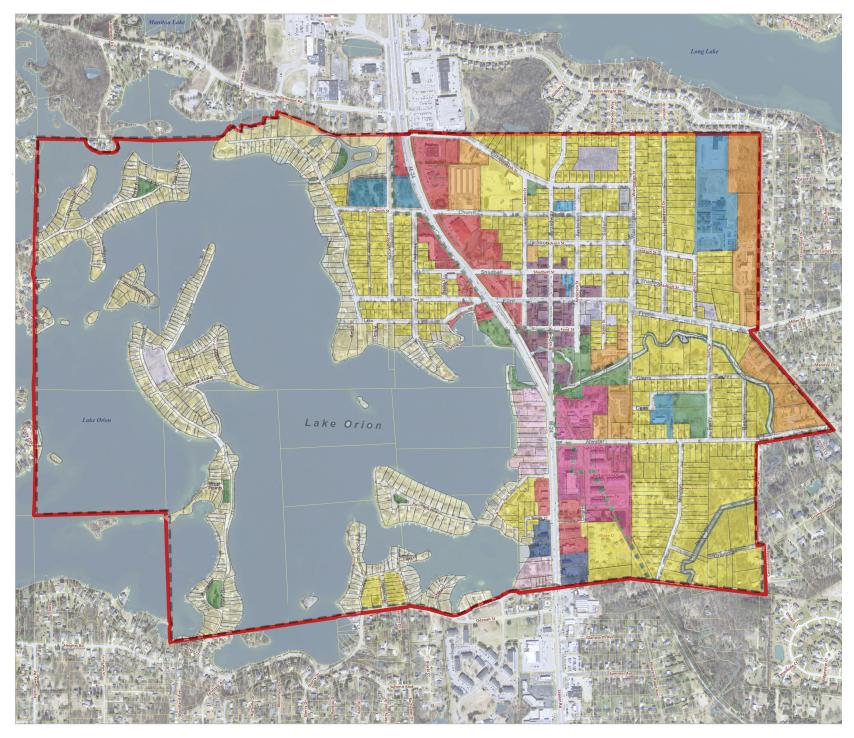
# **DESIGN SCHEMES**



An intervention that respected all existing conditions would ultimately provide a very minimal impact of the community's identity.



An intervention that proposed a large number new buildings would destroy the existing urban fabric of Lake Orion.



#### **LEGEND**

PARK | OPEN SPACE

PUBLIC | INSTITUTIONAL

LAKE FRONT RESIDENTIAL

SINGLE FAMILY RESIDENTIAL

MULTI-FAMILY RESIDENTIAL

**COMMERCIAL CORRIDOR** 

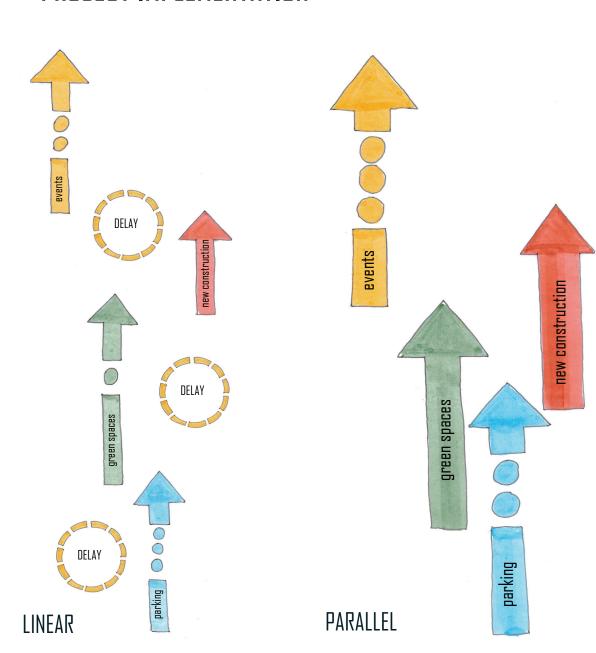
GENERAL OFFICE

HIGH DENSITY MIXED-USE

MED. DENSITY MIXED-USE

**EXISTING LAND-USE** 

#### PROJECT IMPLEMENTATION



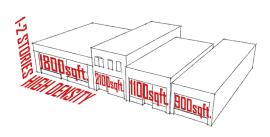
community intervention should not be a linear process, but rather a parallel One issue does not have to be resolved before the next. The community may suffer from a lack of parking, but parking solutions could be completed in the future from the generated revenues from a new mixed-use development.

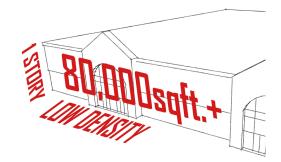
#### **DEVELOPMENT SCALES**

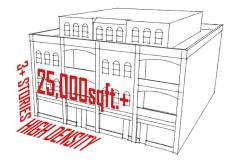










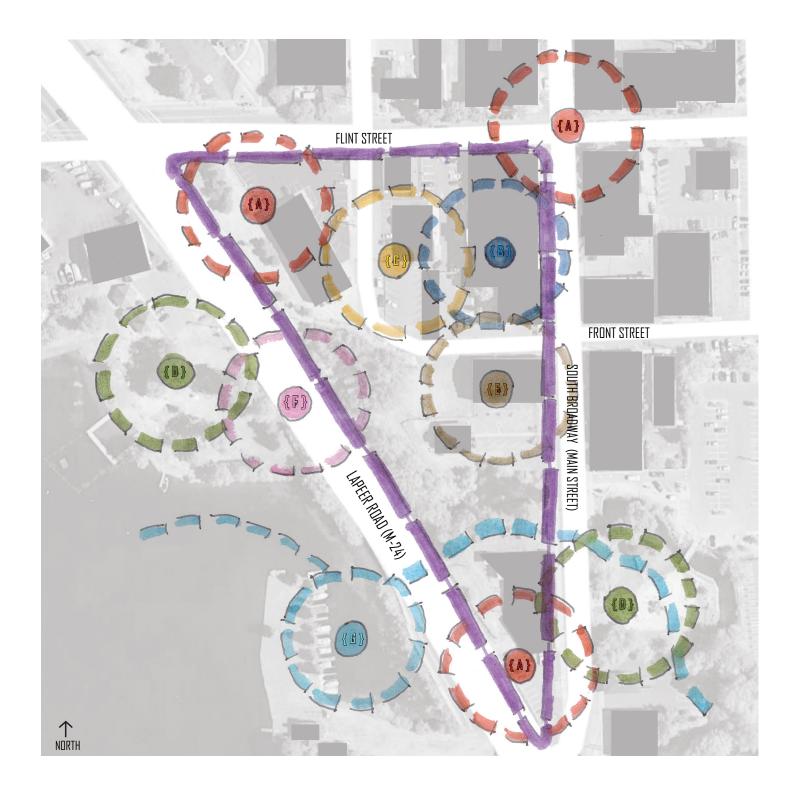


HISTORICAL

**BIG BOX** 

MIXED-USE

The scale of development that occurred historically may not be economically feasible today, but the big box solution is not the best answer for development today either. Mixed-use development could maintain the scale of historic development while providing larger footprint for modern tenants and developers.



#### **LEGEND**

#### { A } INTERSECTIONS

- -flint + broadway
- -broadway + lapeer
- -flint + lapeer

## { B } ANCHORS

-restaurants (sagebrush)

## { C } PARKING

## { D } GREEN SPACE

- -greens park
- -childrens park

## { E } OPPORTUNITIES

-vacant structures (wagon wheel)

#### { F } DIVIDES

-lapeer road (m-24)

## { G } AQUATIC ASSET

-lake orion

## SITES OF OPPORTUNITY

Within downtown Lake Orion a focus area was selected to determine the best location for a community catalyst. The triangular site, bordered by Front Street, South Broadway and Lapeer Road, presented itself with the largest opportunities to connect Lake Orion's past, present and future assets. The site addresses, the downtowns three main intersections, is in close proximity to two public parks and waterfront. One of the downtowns anchor restaurants is in located within this site and a number of vacant or underutilized parcels are located in the site too.



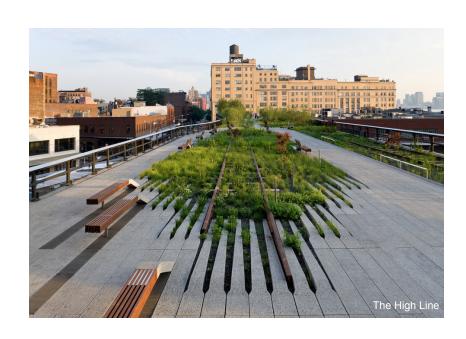
A connection to the lake could become a pathway from mainstreet to Greens Park and terminate in the lake.



Similar to the final solution, but located further south. This place allowed for fewer connections between existing and future assets.



A greenway along the axis of Front Street, provides the greatest opportunity to connect to the downtowns existing and future assets. When located between multiple building developments, the greenway had the chance to connect to the second floor of buildings and a future parking garage. By crossing Lapeer road on an angle, a dynamic intersection occurs between the greenway and the roadway.



## 12 | PRECEDENT STUDIES

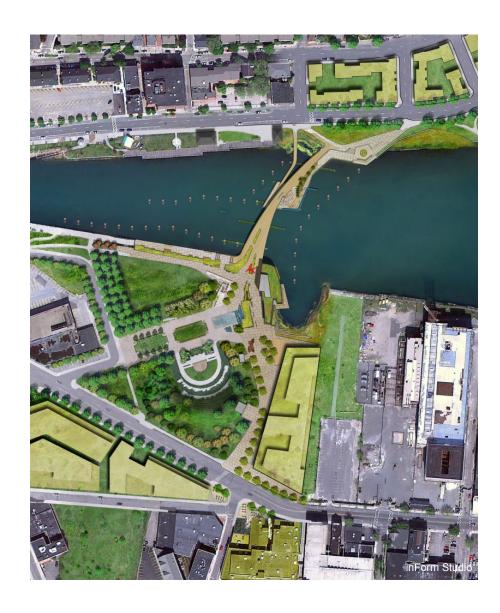
#### **DESIGNS**

When it became apparent Lake Orion needed a connection between main street and the waterfront, a variety of precedents were studied to inspire the intervention in Lake Orion. A reconnection with the waterfront could be more than just a pedestrian crossing or bridge, it could be greenway that unites main street with Lake Orion. The Providence River Bridge Competition submission from inFORM studio, engages both sides of the river with dynamic design of programed spaces for users. The High Line in New York City, activates abandoned subway lines with a linear park. The once unactivated space is now engaged with a variety of unique spaces and functions. The Bagley Bridge reconnects two pieces of a community that was once divided by a freeway. The Bagley Bridge stands as an icon for the community and freeway users.





# THE PROVIDENCE RIVER BRIDGE COMPETITION PROVIDENCE, RHODE ISLAND







# THE HIGHLINE NEW YORK CITY, NEW YORK

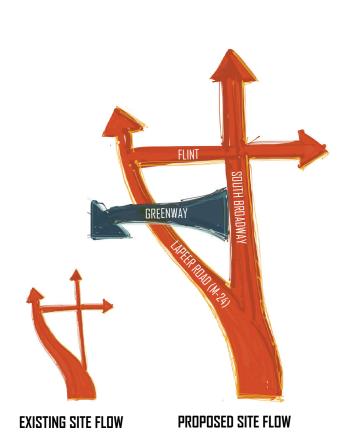


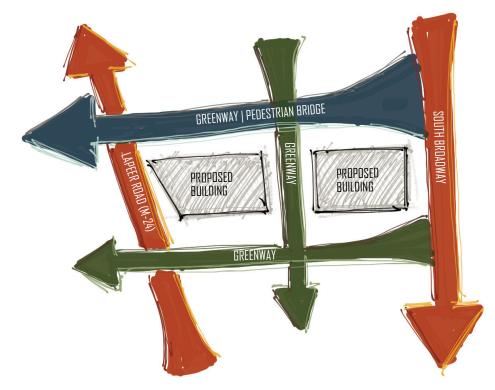




# THE BAGLEY BRIDGE DETROIT, MICHIGAN



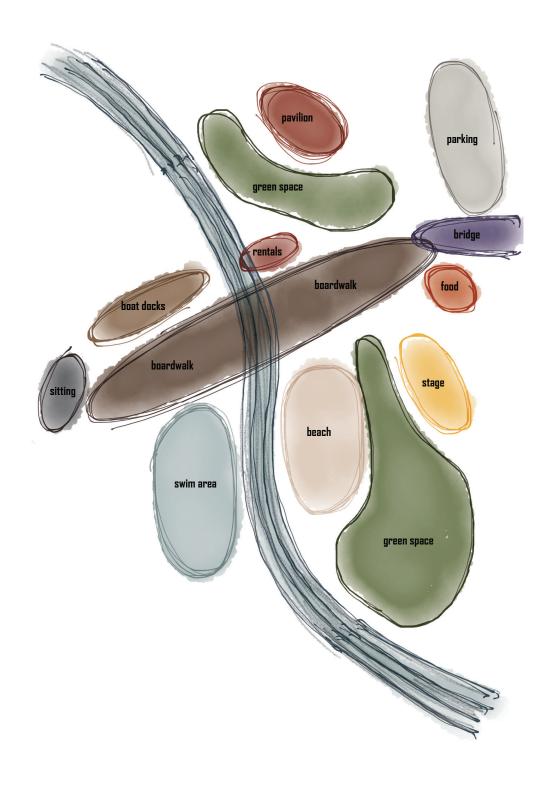


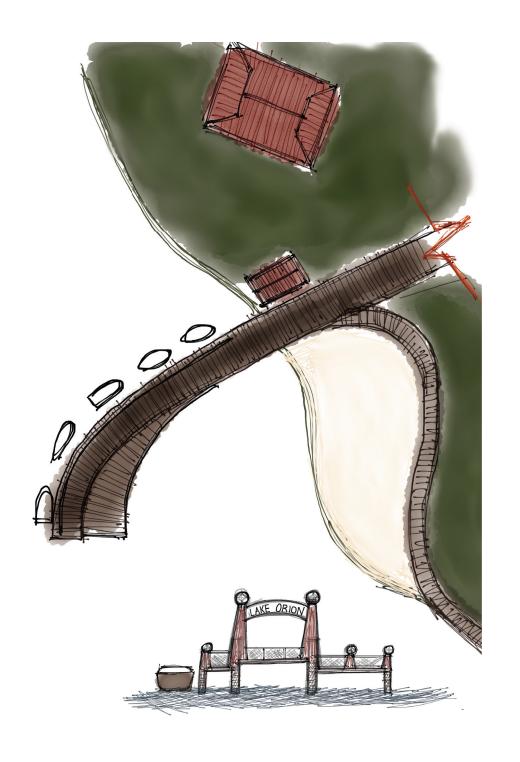


PROPOSED SITE FLOW + BUILDING INTERACTION

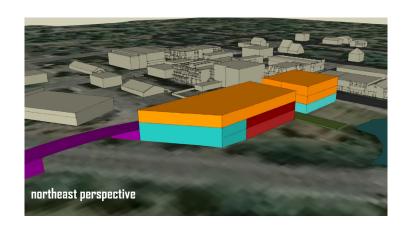
## 13 | DESIGN DEVELOPMENT

The design process can easily be weighted down with logistics and feasibility issues, but a strong design pushes the limits of design. Lake Orion needed a bold connection between the waterfront and main street. The design could not be focused on just one piece, but rather as an entire entity. A new identity established by a greenway could become the catalyst for future developments within the downtown and along the waterfront.



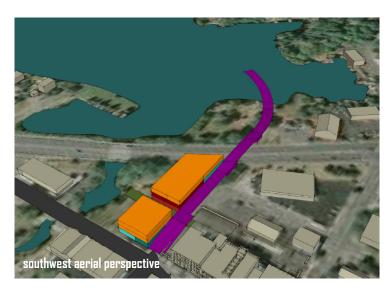


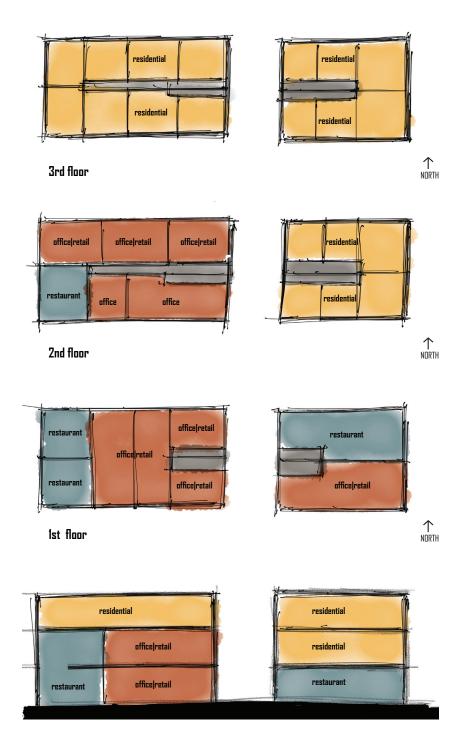
# **GREENS PARK**



## MIXED-USE DEVELOPMENT

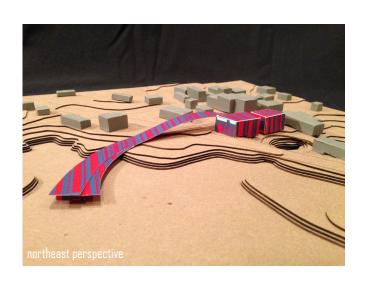




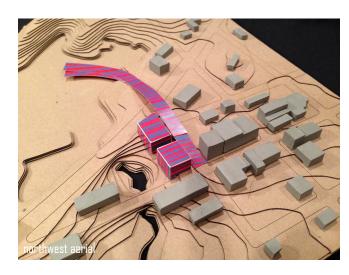


east | west building section





## STUDY MODELS

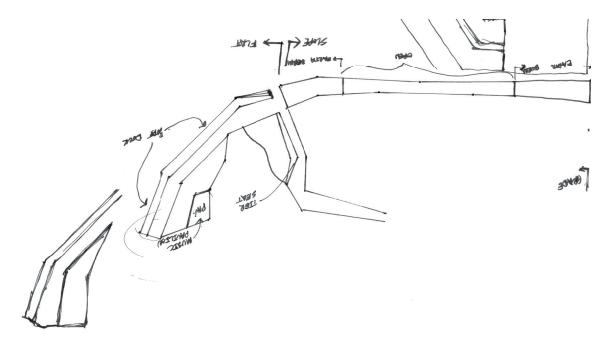


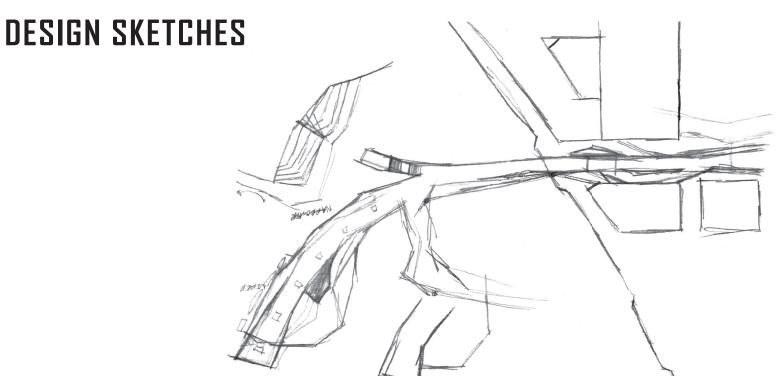


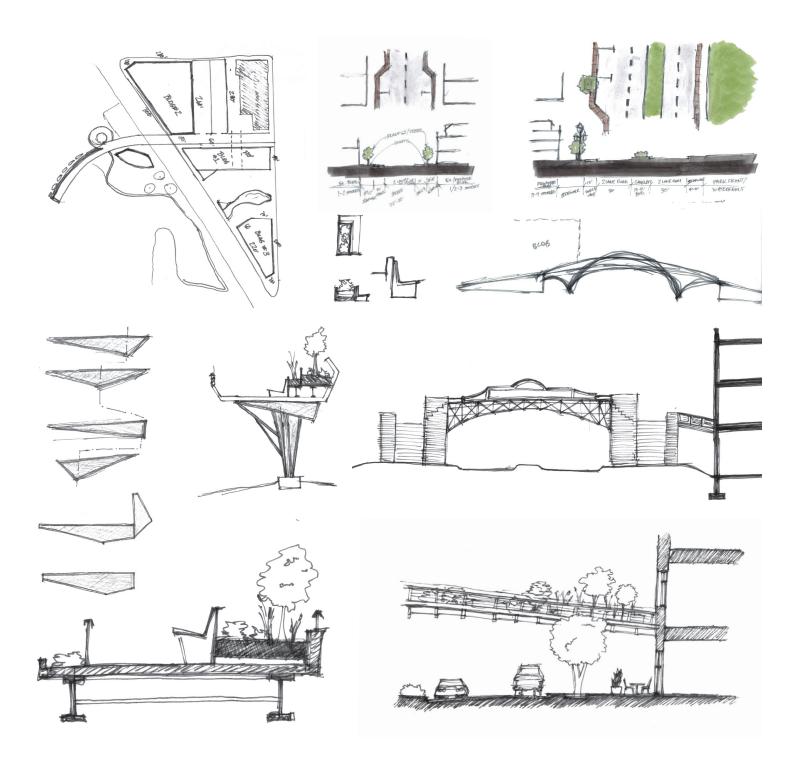


## STUDY MODELS

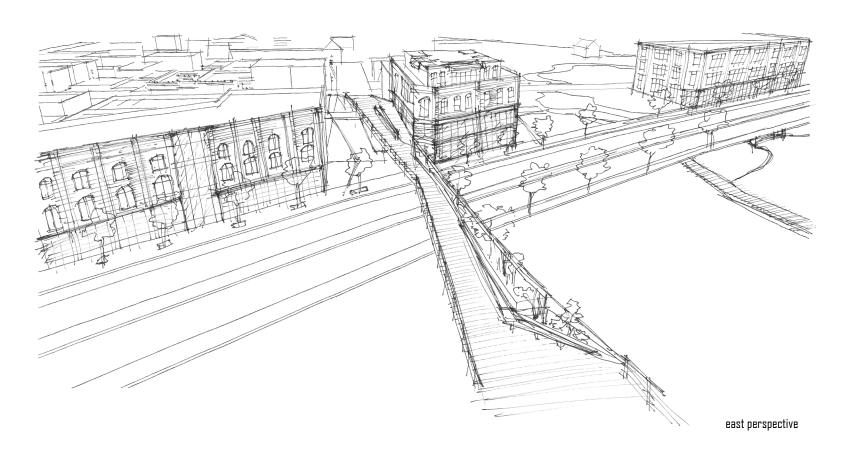


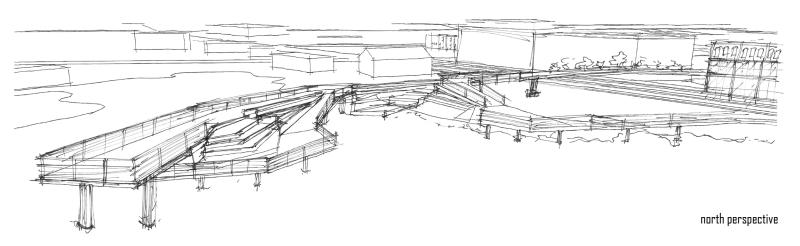














## 14 | DESIGN PROPOSAL

#### LAKE ORION GREENWAY

A greenway connection between main street and the waterfront rekindles a historic identity for downtown Lake Orion, that presents new opportunities for the downtowns future. By engaging Lapeer Road with an enhanced street section, the five lane road is no longer a hindrance to the downtown, but rather a development opportunity. The extension of the greenway out into the lake, draws the waterfront into main street and main street out to the waterfront. The activated greenway presents new programing opportunities for events on and off the waterfront along with many key sites for future building developments along Lapeer Road.



## **LEGEND**

#### PEDESTRIAN GREENWAY

- {A} MAIN STREET CONNECTION
- {B} ADA ACCESSIBILITY
- {C} 2ND FLOOR BUILDING ACCESS
- {D} SEATING
- {E} FOLIAGE
- {F} BEACH
- {G} BOARDWALK
- {H} WATERFRONT AMPHITHEATER
- {J} BOAT DOCKS
- {K} PIER

## **{M-24} DEVELOPMENT**

#### PROPOSED

BLDG {A} 3 STORY 16,600sq.ft.

BLDG {B} 4 STORY 36,400sq.ft.

#### **FUTURE PHASING**

BLDG {C} 3 STORY 39,600 sq.ft.

BLDG {D} 4 STORY 40,900sq.ft.

BLDG {E} 3 STORY 12,900sq.ft.

BLDG {F} 4 STORY 30,600sq.ft.

BLDG {G} 2 STORY 4,400sq.ft.

#### **PARKING**

PARALLEL STREET PARKING PARKING DECK (192 SPACES)

## **LAPEER ROAD (M-24)**



10' SIDEWALK | 2 LANES | MEDIAN | 2 LANES | PARKING | 20' SIDEWALK

## **SOUTH BROADWAY (MAIN STREET)**



10' SIDEWALK | PARKING | 2 LANES | PARKING | 10' SIDEWALK



















## RESOURCES

- "2012: Transforming the Bridge Cleveland Design Competition."

  Cleveland Design Competition. N.p., 2012. Web. Feb. 2014. <a href="http://clevelandcompetition.com/past-competitions/2012-transforming-the-bridge/">http://clevelandcompetition.com/past-competitions/2012-transforming-the-bridge/</a>.
- "About Us." Charlevoix Area Chamber of Commerce Home. ChamberMaster, n.d. Web. Jan. 2014.
- APA. "How Cities Use Parks for ... Economic Development." American Planning Association. N.p., 2013. Web. Feb. 2014.
- Basinger, Susan K. "Clarkston's History: A Synopsis." Village Of Clarkston Historic District. Independence Township Library, 21 Aug. 2000. Web. 17 Oct. 2013.
- Beshouri, Paul. "Garden Theater: Former Ruin Gets Well-Deserved
  Restoration." Curbed Detroit. N.p., 10 Dec. 2013. Web. Feb. 2014.
  <a href="http://detroit.curbed.com/archives/2013/12/after-decades-of-neglect-the-garden-theater-shows-off-a-welldeserved-restoration.php">http://detroit.curbed.com/archives/2013/12/after-decades-of-neglect-the-garden-theater-shows-off-a-welldeserved-restoration.php>.
- Clarkston Community Historical Society. "City History: A Brief History of Clarkston..." Clarkston Community Historical Society. Core|3 Solutions LLC. 2003. Web. 17 Oct. 2013.
- "Creating Rural 'Smart Growth'" Daily Yonder-Keep It Rural. The Daily Yonder, 15 Oct. 2010. Web. Jan. 2014.
- "Detroit History." City of Detroit, the Offical Website of Detroit. The City of Detroit/Communications and Creative Services Division, 2013. Web. 07 Dec. 2013.

- "Downtown River Greenway Project." City of Sioux Falls. The City of Sioux Falls, 2012. Web. Feb. 2014. <a href="http://www.siouxfalls.org/parks/greenway/">http://www.siouxfalls.org/parks/greenway/</a>.
- Duany, Andres, Elizabeth Plater-Zyberk, and Jeff Speck. Suburban Nation: The Rise of Sprawl and the Decline of the American Dream. New York: North Point, 2000. Print.
- Duany, Andres, Jeff Speck, and Mike Lydon. The Mmart Growth Manual. New York: McGraw-Hill, 2010. Print.
- Dunham-Jones, Ellen, and June Williamson. Retrofitting Suburbia: Urban Design Dolutions for Redesigning Suburbs. Hoboken, NJ: John Wiley & Sons, 2009. Print.
- "Ford Installs First Moving Assembly Line: 1913." PBS: People and Discoveries. PBS, 1998. Web. 07 Dec. 2013.
- "Gantry Plaza State Park." THOMAS BALSLEY ASSOCIATES. N.p., 2014. Web. Jan. 2014. <a href="http://www.tbany.com/projects">http://www.tbany.com/projects</a> cat.php?categoryid=3>.
- Gross, Rebecca. "Bold New Suburbia: Meet The Architects Daring to Better the 'Burbs." ArchDaily. N.p., 27 Aug. 2013. Web. 07 Dec. 2013.
- Gross, Rebecca. "The Suburban Canvas." NEA Arts Magazine. National Endowment for the Arts, 2013. Web. 07 Dec. 2013.
- Grozdanic, Lidija. "Pedestrian Bridge Intensifies Tourist-Local Interactions in Amsterdam EVolo | Architecture Magazine." EVolo. EVolo Architecture Magazine, 7 Aug. 2012. Web. Feb. 2014. <a href="http://www.evolo.us/architecture/pedestrian-bridge-intensifies-tourist-local-interactions-in-amsterdam/">http://www.evolo.us/architecture/pedestrian-bridge-intensifies-tourist-local-interactions-in-amsterdam/</a>.
- "The Happy Pontist." Web log post.: Bridges News Roundup. Blogspot, 20 Dec. 2010. Web. Jan. 2014.
- The High Line, and Friends of the High Line. "Park Information." High Line. N.p., 2014. Web. Feb. 2014. <a href="http://www.thehighline.org/">http://www.thehighline.org/</a>>.
- "Historical Maps of Michigan." Historical Maps of Michigan. University of Alabama, 2013. Web. 17 Oct. 2013.
- Holmes, Damian. "Pirrama Park | Sydney Australia | ASPECT Studios «
  World Landscape Architecture Landscape Architecture Webzine."
  World Landscape Architecture Landscape Architecture Webzine RSS.
  World Landscape Architecture, 5 Sept. 2012. Web. Jan. 2014.
- "Home." City of the Village of Clarkston. Cavalry Computing, 2012. Web. 17 Oct. 2013.

- JDS Architects. "Maritime Youth House." Archinect. N.p., n.d. Web. Feb. 2014. <a href="http://archinect.com/firms/project/39903/maritime-youth-house/9174599">http://archinect.com/firms/project/39903/maritime-youth-house/9174599</a>.
- Kozlowski, Kim. Birmingham Theater. Digital image. Kim Kozlowski Photography. N.p., n.d. Web. Feb. 2014. <a href="http://kimkozlowski.com/img/s8/v82/p1358155034-5.jpg">http://kimkozlowski.com/img/s8/v82/p1358155034-5.jpg</a>.
- "Lake Orion." Orion Township. Scate, 2013. Web. 15 Nov. 2013.
- LRK. "Baldwin Park Village Center." Looney Ricks Kiss. LRK, 2014. Web. Jan. 2014.
- "Main Street Oakland County ®." Main Street Oakland County ®. Oakland County Michigan, 2012. Web. 07 Dec. 2013.
- Mansfield, Todd, Ross Yockey, and L. Beth Yockey Jones. Craving Community: The New American Dream. Seattle: Abecedary, 2008. Print.
- MBA Architects. "Charlevoix East Park and Marina, Charlevoix, Ml." Masonry Institute of Michigan. The Masonry Institute of Michigan, 2010. Web. Jan. 2014.
- Michigan Historical Museum. "What's Cool About Maps? Michigan Historical Museum Exhibit." What's Cool About Maps? Michigan Historical Museum Exhibit. State of Michigan, n.d. Web. 17 Oct. 2013.
- "National Main Street Center." Preservationnation.org. National Trust of Historic Preservation, 2013. Web. 21 Nov. 2013.
- "New Urbanism." New Urbanism. N.p., n.d. Web. 22 Oct. 2013.
- Oakland County. "Property Gateway." Oakland County Property Gateway.
  Oakland County Michigan, 2013. Web. 17 Oct. 2013.
- "Phyllis J. Tilley Memorial Bridge / Rosales + Partners Architects." ArchDaily. N.p., 13 Feb. 2013. Web. Feb. 2014. <a href="http://www.archdaily.com/331593/phyllis-j-tilley-memorial-bridge-rosales-partners-architects/">http://www.archdaily.com/331593/phyllis-j-tilley-memorial-bridge-rosales-partners-architects/</a>.
- "Plan of the Month." Better Cities & Towns. Freethought Design, 02 May 2011. Web. Jan. 2014.
- Portilla, Daniel. "PLASMA Studio and Groundlab Win Competition to Relocate and Enhance Italian Railway Station." ArchDaily. N.p., 25 Jan. 2014. Web. Feb. 2014. <a href="http://www.archdaily.com/455949/new-railway-station-area-master-plan-innichen-san-candido-italy/">http://www.archdaily.com/455949/new-railway-station-area-master-plan-innichen-san-candido-italy/</a>.
- Portman, John C. "John Portman: Why I Am Successful." Forbes. Forbes Magazine, 30 Oct. 2009. Web. 14 Nov. 2013.

- Project for Public Spaces. "What Is Placemaking?" Project for Public Spaces. PPS, n.d. Web. 14 Nov. 2013.
- "Projects." InForm Studio: Architecture Experts, Urban Architecture, Green Architecture, Sustainable Design. InForm Studio, 2014. Web. Jan. 2014. <a href="http://www.in-formstudio.com/">http://www.in-formstudio.com/</a>>.
- "Property Gateway." The Oakland County Property Gateway. Oakland County Michigan, 2013. Web. Dec. 2013.
- Ptak, John F. "Dis-investing the Left-Hand Turn-City Planning with Le Corbusier." The Science Book Store. Ptak Science Books, 26 May 2010. Web. Jan. 2014. <a href="http://thesciencebookstore.com/tag/city-planning/">http://thesciencebookstore.com/tag/city-planning/</a>.
- Research Division. "Home Buyer and Seller Generational Trends." Realtor.
  National Association of Realtors, July 2013. Web. 4 Nov. 2013.
- "Rochester Elevator Listed on National Register of Historic Places." Web log post. Remembering Rochester. Blogspot, 24 Dec. 2010. Web. Jan. 2014. <a href="http://rochesteravonhistory.blogspot.com/search?updated-min=2010-01-01T00:00:00-05:00&updated-max=2011-01-01T00:00:00-05:00&max-results=50">http://rochesteravonhistory.blogspot.com/search?updated-max=2011-01-01T00:00:00-05:00&max-results=50</a>.
- Rosenfield, Karissa. "Heatherwick Releases Updated Images for London's 'Garden Bridge'." ArchDaily. N.p., 05 Nov. 2013. Web. Jan. 2014. <a href="http://www.archdaily.com/389848/thomas-heatherwick-designs-garden-bridge-in-london/">http://www.archdaily.com/389848/thomas-heatherwick-designs-garden-bridge-in-london/</a>.
- Rumsey, David. "City Atlas." David Rumsey Map Collections. Cartography Associates, 2010. Web. 17 Oct. 2013.
- Segal, Jonathan, FAIA. "Architect as Developer." Architect as Developer. N.p., 2013. Web. 01 Dec. 2013.
- Sills, Aaron, and Sills Van Bohemen Architecture. Good Solutions Guide for Mixed Use Development in Town Centres. N.p.: North Shore City Council, n.d. Urban Design Case Studies -. June 2005. Web. Jan. 2014.
- Silver Spring Urban District. Downtown Silver Spring MD: Arts, Entertainment, Restaurants, and Events. Geocentric, 2012. Web. 07 Dec. 2013.
- "Smart Growth in Your Town." New Jersey Future. New Jersey Future, 2014. Web. Jan. 2014.
- Speck, Jeff. Walkable City: How Downtown Can Save America, One Step at a Time. New York: Farrar, Straus and Giroux, 2012. Print.

- "Spectacular New Floating Cycle Roundabout." Web log post. Bicycle Dutch. WordPress, 23 Aug. 2012. Web. Jan. 2014. <a href="http://bicycledutch.wordpress.com/2012/08/23/spectacular-new-floating-cycle-roundabout/">http://bicycledutch.wordpress.com/2012/08/23/spectacular-new-floating-cycle-roundabout/</a>.
- Spoonemore, Sharon. "The Boardwalk at Town Center Gets National Acclaim for Design." Www.yourwoodlandsnews.com. The Villager, 17 Mar. 2009. Web. Jan. 2014.
- Stælker, Tom. "Lincoln Center's Catwalk for Culture The Architect's Newspaper." The Architects Newspaper. Diller Scofidio + Renfro, 15 Feb. 2011. Web. Feb. 2014. <a href="http://archpaper.com/news/articles.asp?id=5162">http://archpaper.com/news/articles.asp?id=5162</a>.
- StormchaserMike. Downtown Rochester. Digital image. Flicker, Jan. 2014. Web. 14 Dec. 2013. <a href="http://farm4.staticflickr.com/3781/11392244585\_617d879aa0.jpg">http://farm4.staticflickr.com/3781/11392244585\_617d879aa0.jpg</a>.
- Tachieva, Galina. Sprawl Repair Manual. Washington: Island, 2010. Print.
- "Twisted Valley / Grupo Aranea." ArchDaily. N.p., 25 Dec. 2013. Web. Jan. 2014. <a href="http://www.archdaily.com/461075/twisted-valley-grupo-aranea/">http://www.archdaily.com/461075/twisted-valley-grupo-aranea/</a>.
- United States Census Bureau. "American FactFinder Community Facts."

  American FactFinder Community Facts. U.S. Department of Commerce, 2010. Web. 17 Oct. 2013.
- U.S. Department of the Interior, and U.S. Geological Survey. "The National Map: Historical Topographic Map Collection." The National Map: Historical Topographic Map Collection. The United States Government, 14 Nov. 2013. Web. 17 Nov. 2013.
- U.S. Department of Transportation. "Application of Design Standards, Uniform Federal Accessibility Standards, and Bridges Design FHWA." U.S. Department of Transportation-Design Standard. Federal Highway Administration, 07 Apr. 2011. Web. 19 Apr. 2014. <a href="http://www.fhwa.dot.gov/design/0625sup.cfm">http://www.fhwa.dot.gov/design/0625sup.cfm</a>.
- "Village History." Village History. The Village of Lake Orion Michigan, n.d. Web. 07 Dec. 2013.
- "Waterfront Inspiration: A Little Goes a Long Way." Web log post. Fish & Bicycles. WordPress, 23 June 2011. Web. Jan. 2014.

- Weingroff, Richard F. "Federal-Aid Highway Act of 1956: Creating the Interstate System." Federal Highway Administration. U.S. Department of Transportation, Summer 1996. Web. 05 Dec. 2013.
- Weiss, Tasha. "Steel Shots: Olympic Bridge." Modern Steel Construction.
  American Institute of Steel Construction, 3 Aug. 2012. Web. Feb. 2014. <a href="http://www.modernsteel.com/SteelInTheNews/?p=1860">http://www.modernsteel.com/SteelInTheNews/?p=1860</a>>.
- "Welcome to The Village of Rochester Hills." The Village of Rochester Hills.

  Robert B. Aikens & Associates, 2011. Web. 01 Dec. 2013.
- West, Michæl J. "Avant-Garde, Green Design Shape Chicago's Millennium Park." ICA Newsletter. International Communication Association, Jan.-Feb. 2009. Web. Feb. 2014. <a href="http://www.icahdq.org/pubs/publicnewsletter/2009/1-2/JANFEB09">http://www.icahdq.org/pubs/publicnewsletter/2009/1-2/JANFEB09</a> MILLENNIUM.asp>.
- "What Is CNU?" Congress for the New Urbanism. N.p., 2011. Web. 08 Dec. 2013.