



OLYMPIC HERITAGE LANDSCAPE

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ABSTRACT

A global phenomenon, urbanization started after the Industrial Revolution. Since 1800, the world population has increased by 6 times. In that same time, urban population has increased by 60 times and the rate of urbanization is constantly increasing. The function and scale of the city has seen a tremendous change. Mega cities are emerging at the fastest rate in history. By 2050, the urban population will have increased to 6.4 billion. This means that during the process of urbanization, more and more people will be moving to back to the city for various reasons from the suburbs.

On the contrary, according to an investigation report by OECD, over the past 15 years, in 45 major cities in countries including America, England and France, there is an obvious trend of population decline. Many high income earners in urban areas are escaping the city to avoid the health risks associated with living in an urban environment, ultimately looking for a more comfortable quality of life. Along with a decline in population and the resulting decrease of tax revenue, the urban economy will begin to decay, urban unemployment and crime rates will see an inevitable rise. Each of these phenomena are signals that urban decay has already begun.

Urban decay occurs for a multitude of reasons, and each of these reasons interact with each other. Such as in contemporary society, a new urban plan or transportation system will cause cities located at an important transportation hub in the old transportation system to lose its function; in an industrial society, when there is no new industry to support the formal emerging economic system, industrial systems will experience a depression. Each of the aforementioned historic cities went through the long development process of human civilization and carry with them the rich history of human culture. Also, there is an intricate web of living facilities, neighborhoods, and structures that has been woven to directly support people's lives. Should people abandon these cities as they begin to decay, massive amounts of human infrastructure will be wasted. So, in recent years, many historians, urban planners, and architects have tried to explore different methods to save these cities from outright decay. The critical question they have been faced with is how they will be able to create a new urban system that can meet the new demands of urbanization and attract people back to the city to work and live in there, while at the same time maintaining the memories and history deeply engrained into the city.

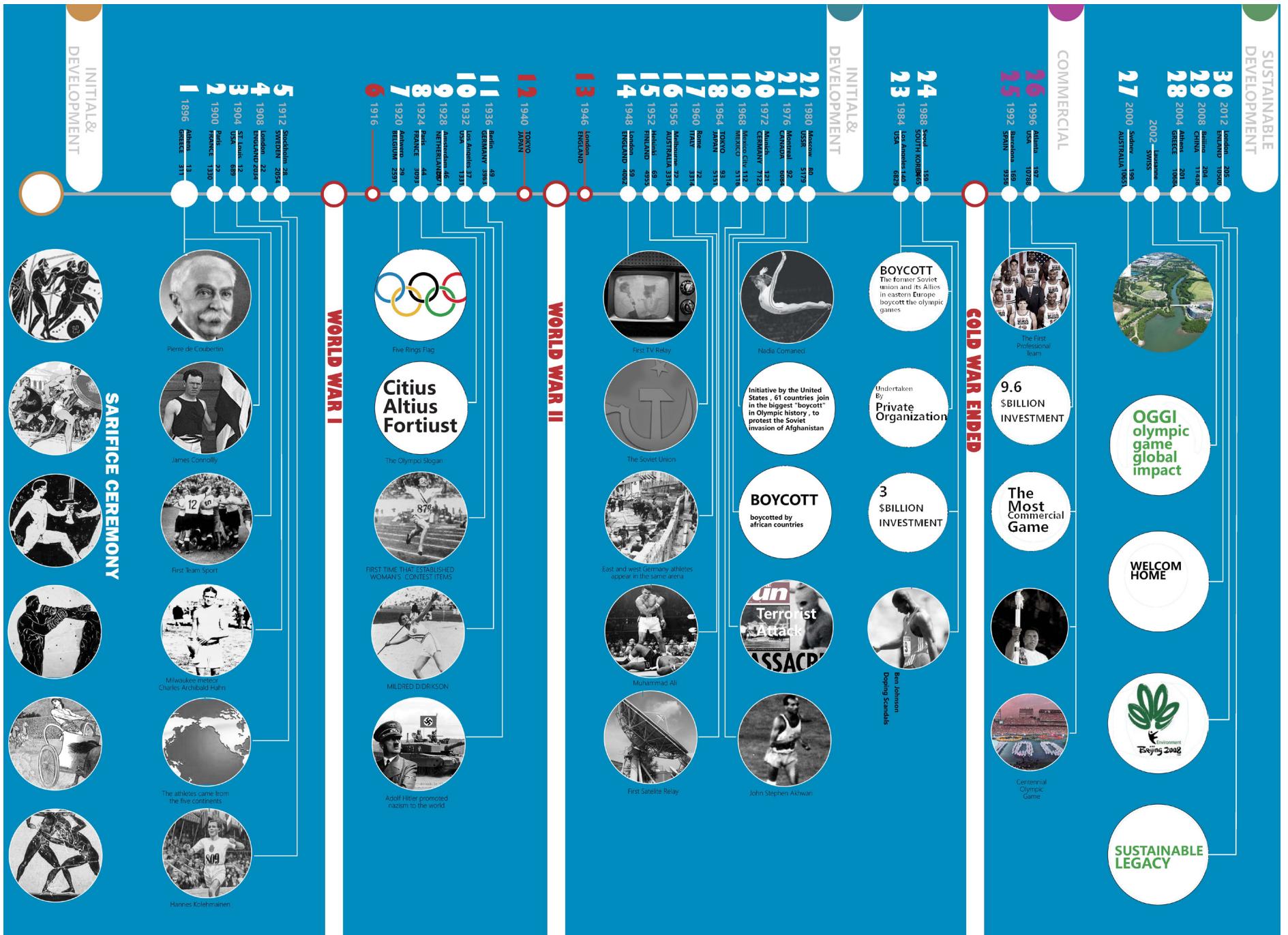
The Olympic Games that are held every four years present the unique opportunity for a city to face their biggest issues head on and rethink their public infrastructure. With careful design, a city's response to Olympic Development can be more specific, systematic and comprehensive. The host city will spend a huge amount of human power and material resources to improve the urban infrastructure, sports facilities, public services, ecological environment and urban culture regardless, so it's only fit that these initial costs are worth it. Although this means a great investment, the benefits are invaluable for each host city. These moves are exactly what a city needs to jumpstart urban regeneration. Compared with other young cities, the advantage of old, decaying cities is that there are already some public facilities, sports venues and public service systems that would prevent unreasonable and redundant construction. The most recent Olympic host cities have already demonstrated that the benefits associated with sustainable Olympic development are huge. The benefits extend far beyond promoting the strength of the city and into more social benefits, economic benefits, ecological benefits. Therefore, offered here are a set of successful Olympic development strategies that can create tens of thousands of job opportunities, high quality public spaces and services, improved ecological environments, and even a new urban culture, fundamentally providing a strategy for regenerating decaying cities.



CHAPTER 1

**A NEW TYPE OF
OLYMPICS HERITAGE**

Olympic Heritage



The first contemporary Olympic Games in Athens, Greece in 1896, marked start of an event that would have long lasting impacts on human civilization, culture, society, technology for years to come. For many people, the most impressive aspects of the Olympics were the games themselves and the famous athletes that competed in them. The excellent performance of these athletes inspired and motivated the people that watched the games. However, an arguably greater impact was the strengthening of international communication and relationships between the different countries from the five continents that were represented at the games.

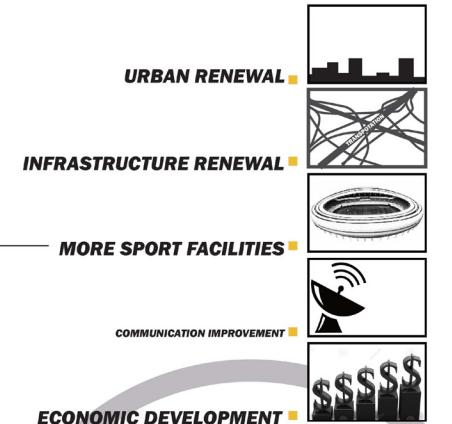
Even though the Olympics have been used at times as a stage of political promotion by politicians during World War I, World War II, and the Cold War, the heritage left by the Olympics has remained generally positive, some would even say spiritual. As more countries joined the games, the scale of the Olympics grew exponentially. As the size of the games grew, so did the involvement in the planning and execution of such an event. Aspects such as commercial and city development, culture promotion, and others became increasingly important considerations for each host city. To host the Olympic Games presents a huge opportunity for a country to increase its international influence. At the same time, being a host city means huge investments for each detail of the event.

Countries quickly became aware of the development opportunities that came with spending such massive amounts of money. The great example of conscious development came with the 27th Olympic Games in Sydney, Australia 1996. As the host city, Sydney used the Games as an opportunity for urban system improvement along with the construction of sports venues. Since then, the benefits of the Olympics have become more tangible and diverse.

However, in many cases, while large amounts of new sports facilities and urban infrastructure are built, some dissenting voices emerge in conversations about the long-term use of these facilities. Due to cases of blind Olympic development, some have come to associate the Olympics with enormous loads of debt and countless abandoned sports facilities. As a result, contemporary Olympic host cities must be ready to develop and implement a set of sustainable development strategies.

INTANGIBLE HERITAGE

"INSPIRE A GENERATION"
"ONE WORLD ONE DREAM"
"WELCOME HOME"
"SHARE THE SPIRIT"
"FRIENDS FOR LIFE"
"HARMONY AND PROGRESS"
"PLAY PART IN HISTORY"



POLITICAL EFFECTS

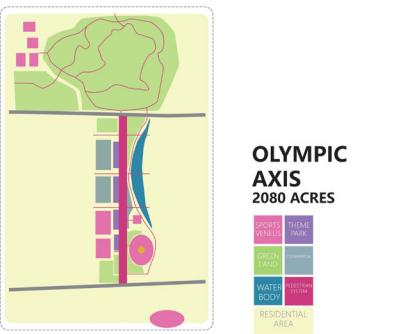
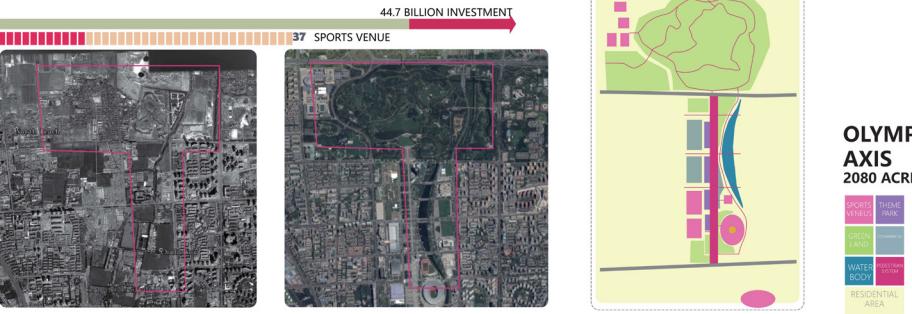
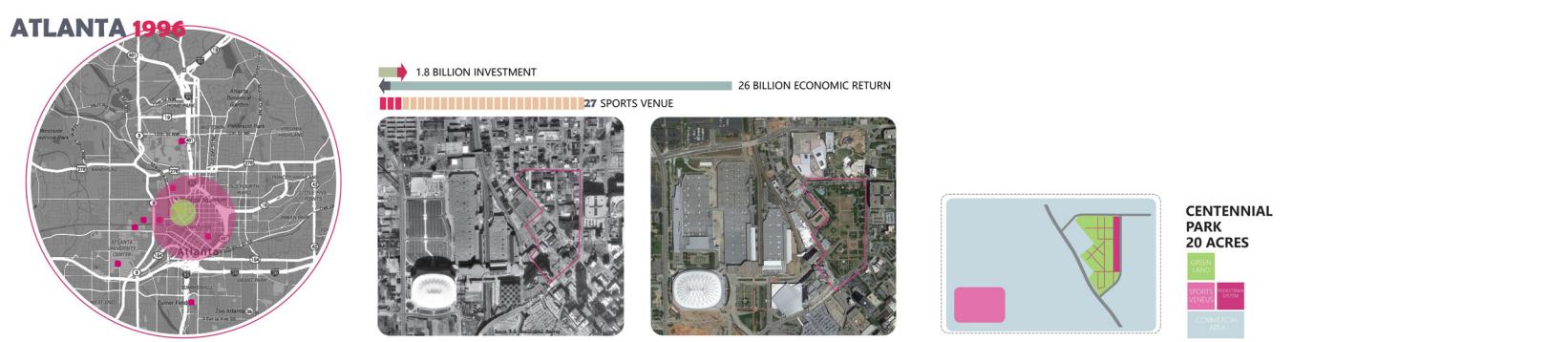
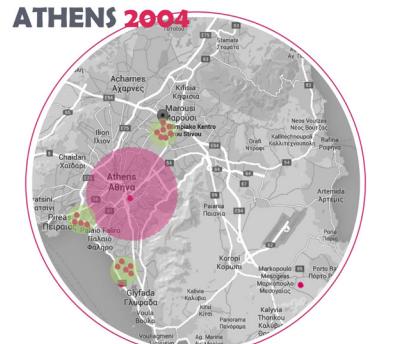
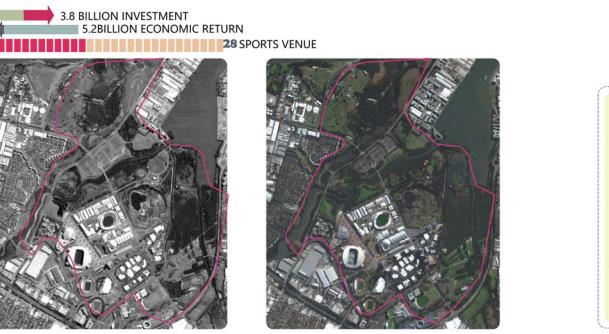
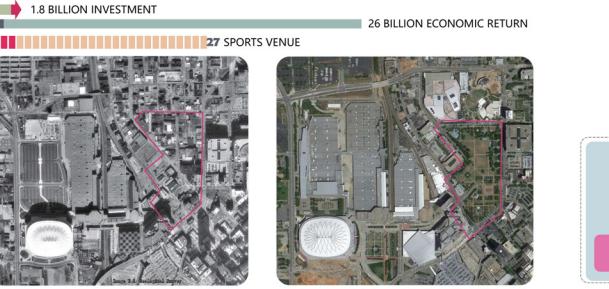
DOPING SCANDAL

TERRORIST ATTACK

RACIAL DISCRIMINATION



NATURAL HERITAGE



Previous Host City Comparison

Through research and investigation of the five host cities below - Atlanta (1996), Sydney (2000), Athens (2004), Beijing (2008) and London (2012) – conclusions may be drawn about successful Olympic facility development methods that avoid the construction of simple function sport facilities. Instead, these countries focused on creating more subsequent social benefits, economic benefits and ecological benefits by using the facilities after the games. As a result, as investment allocation of Olympics was growing, the ratio of urban infrastructure was keep increasing. In Beijing Olympic game 2008, the host city invests over 30 billion to improve the infrastructure of city. The heritage of Olympics has completely changed the host city.

White Elephant

Conversely, in this sense, the Athens Olympic games were an outright failure. The return of their huge investment was an excess of useless, abandoned sports venues, immense sums of debt and countless complaints from local residents. In reality, the city didn't need so many sports facilities, especially after the Olympics were over. While the Olympics in Athens could have been an opportunity for positive development, the games resulted in a significant burden. The situation in Athens immediately forced people to reinterpret the values of contemporary Olympic development for each host city.



New Organizing Method

Joint host

In order to meet the demands and requirements for the Olympic games, a joint effort between different cities in the same region (a close proximity) should be created for a smarter and more efficient program that would most benefit the host city and the communities that make it up. Cities which already have high quality sports venues would pair well with a host city in not only reducing the investment and development needed to setup for the Olympic games, but would also create a partnership between the cities that could help generate revenue, strengthen communication, and create a cooperative effort between the joint host cities.

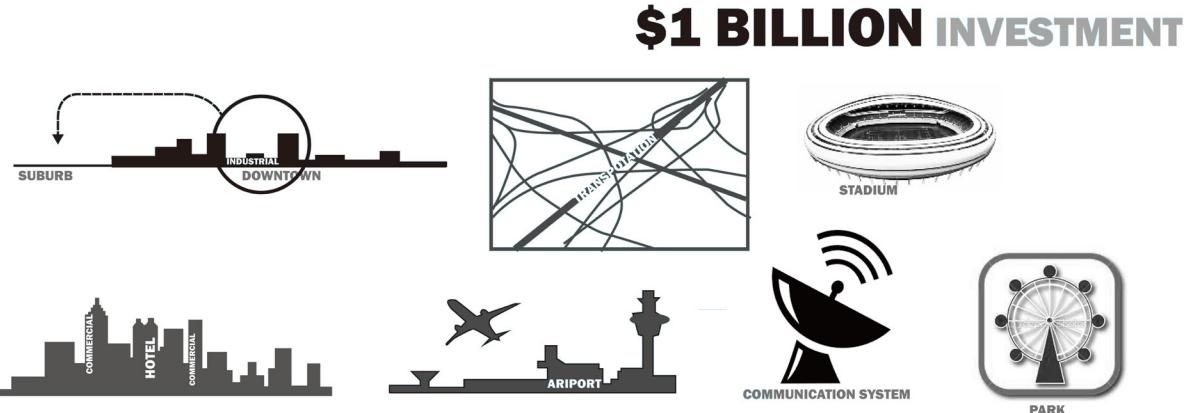
The Most Successful Commercial Olympic Games

By implementing a unique hosting approach, Atlanta gained the title of the most successful Olympic games in 1996. The Atlanta Olympic games represented the first time in history that the games were not hosted by the government, but instead a private commercial institute who aimed to reallocate spending in effort to maximize commercial success.

By cooperating with other 13 cities, Atlanta avoided the construction of new sports venues and put the money saved towards commercial promotion and urban service system improvement. So, over five years following the Olympics, Atlanta realized a \$5 billion direct economic return on just \$1 billion of investments. Although many people protested that the over-commercialization would ruin the spirit of Olympics, taking the focus away from the athletes and centering it on the host company, Atlanta provided future host cities with a new methodology for maximizing returns on Olympic development investment.



THE MOST BEAUTIFUL RESIDENTIAL AREA

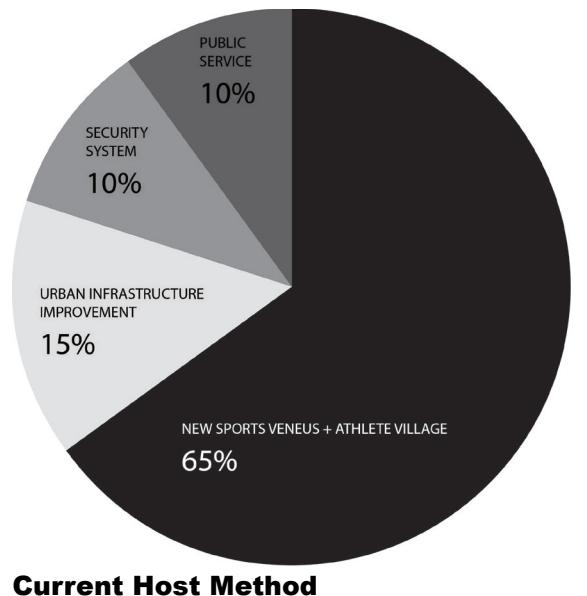
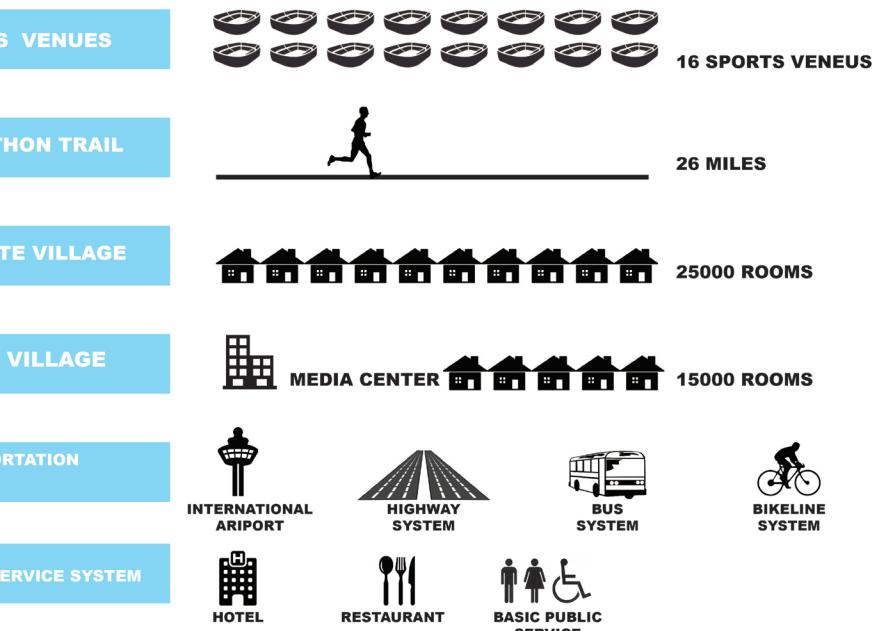


\$5.1 BILLION RETURN

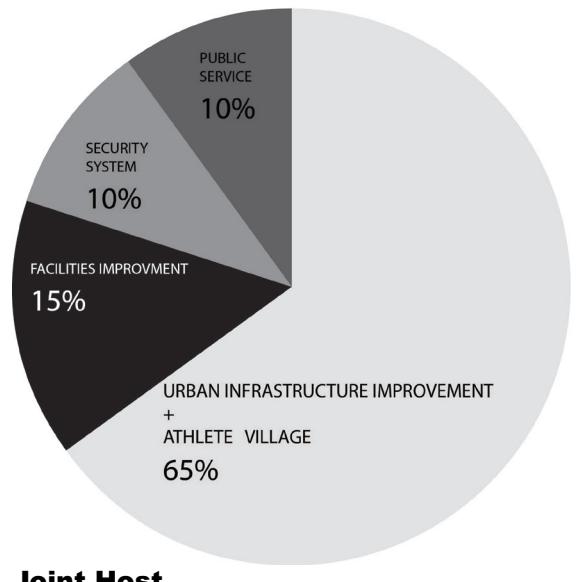
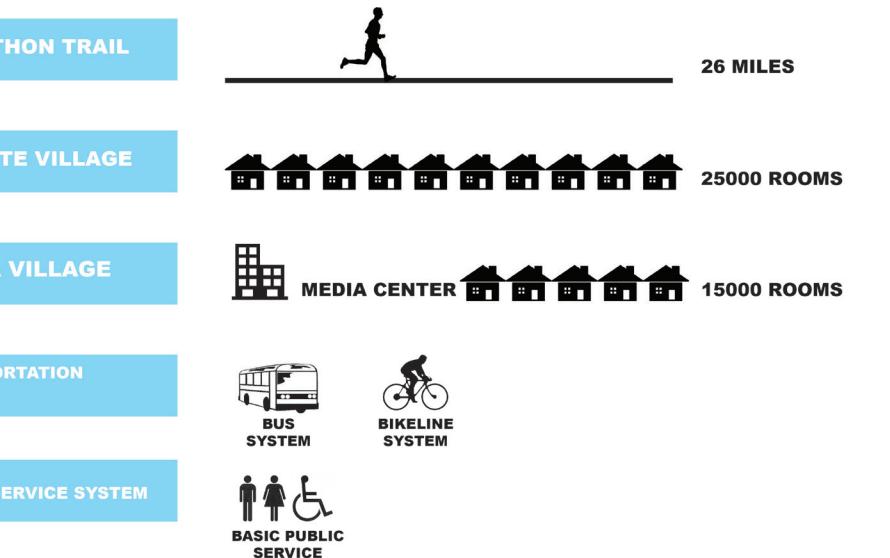
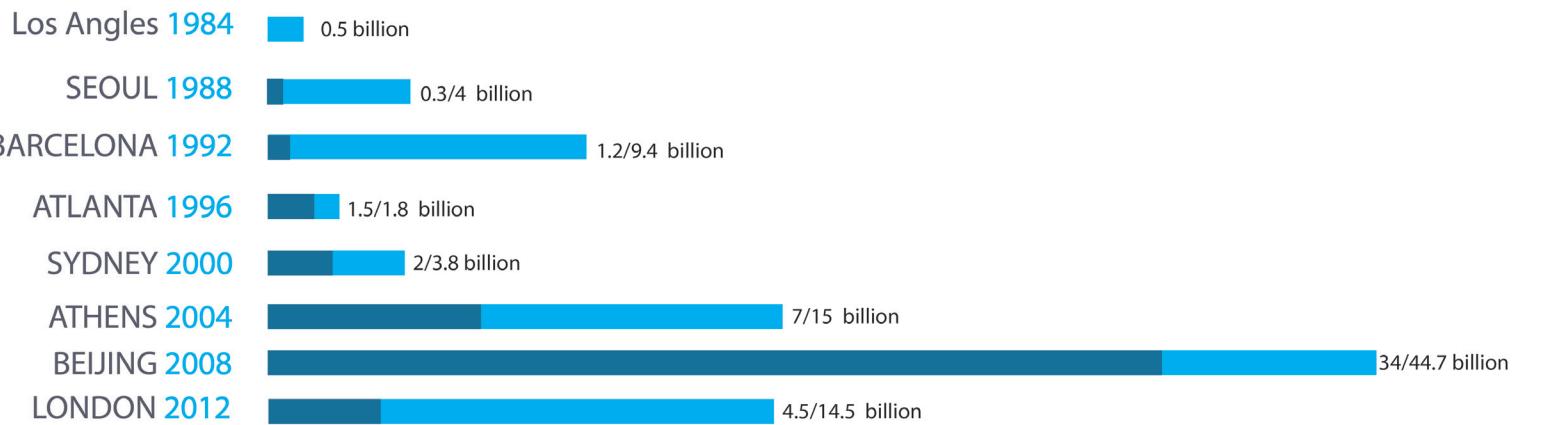


New Approach of Investment Allocation

Compared to the traditional host city method, a new joint host approach wouldn't need to program and build everything from scratch as the traditional method normally states. But rather, the best facilities in each city could be used to reduce the initial investment needed and put less stress on one individual city to prepare and construct everything needed. The allocation of funds originally designated to building the necessary stadiums and facilities could then be reallocated to benefit other parts of the program or even be directly invested into these cities. Besides the necessary sports venues upgrading work that would be required, the investment and allocation of funds will be spent more on upgrading the urban infrastructure, public service system, urban ecology, and urban promotion, etc.



INFRASTRUCTURE INVESTMENT



CHAPTER 2

DECAYED CITY AND OLYMPICS
(During Olympics)

Make A Sick City Healthier, Rather Than Make A Healthy City Healthier

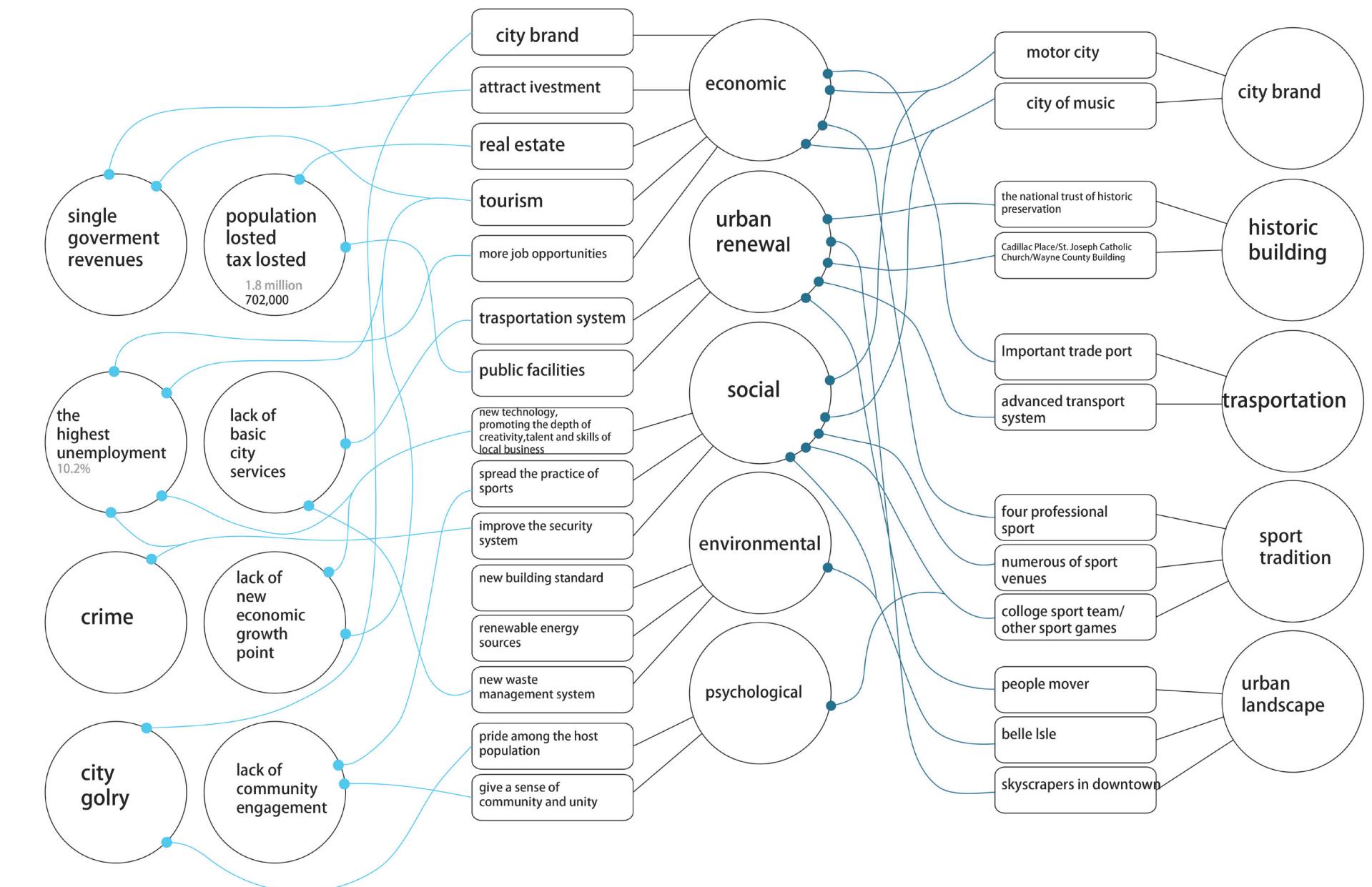
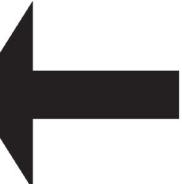
In the history of the Olympic games, a majority of host cities were generally the most influential or popular cities in the country. Cities such as Beijing, London, Sydney, all served as an obvious choice to host the games. The competitiveness of these host cities has always been the higher quality urban system, urban popularity and urban culture. For bidding for the right to host, cities kept putting a lot of public investment in the city to build new stadiums and improve the urban infrastructure. But the fact is that these host cities don't necessarily need all new sports facilities and the urban infrastructure was already well equipped to handle the games.

Some things have happened in Athens and Beijing that have already proved this old Olympic development strategy was wrong and that the big investment didn't necessarily bring the city big benefit as expected but rather more struggle about how to treat big stadiums and wide roads. If we can persuade the more decayed cities to put in a bid to be an Olympic host city and use the investment not to just build new things, but solve existing problems, than the meaning of modern Olympic games and programming for them can be changed for future use and catalyze a new approach to how we design for the Olympic games.



This research is focused on Detroit, Michigan which is representative of perhaps the most decayed city in the United States. In its current state, Detroit would not be able to afford the investment required to host the Olympics. But, as a historic industrial city, the city posses several advantages beneficial for an Olympic host city such as a well-developed transportation system and numerous sports facilities. Detroit is in dire need to reinvent itself, and the Olympic Games would offer just the opportunity. The crucial thing is aime to gain from this research was the development of a new development pattern which would combine the existing advantages Detroit as an industrial city with the benefits associated with hosting a well-planned Olympic games that would ultimately work to aid the city during its most difficult times.

URBAN HUMAN





Stronger Connection Between The Decayed City And Other Host Cities

The biggest benefit of the joint host city network lies within the creation of a stronger connection, not just regionally but more connection in economic and cultural aspects. All the involved cities will be able to share information and experiences through the proposed network. So, the decayed city is not a individual unit within the Olympic picture a part of a regional urban system. The biggest difference between a decayed city and developing city is the decayed city will always have a well-developed transportation system which is a big advantage to build a necessary, city network.



More Targeted Development By The Limited Funds

As a part of the host city network, each city can contribute to the Olympic process in different ways. The demands between the cities will be different, so the limited funds can be used more flexibly and more specific. The most important thing that the organizer and investor need to do is to analyze the specific problems in each city and provide different solutions that can start to combat these specific issues.



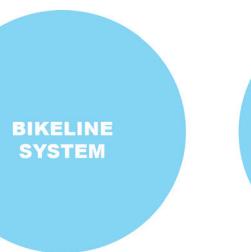
MARATHON TRAIL



ATHLETE VILLAGE



MEDIA VILLAGE



BIKELINE
SYSTEM



BASIC PUBLIC
SERVICE



26 MILES



8000 ROOMS



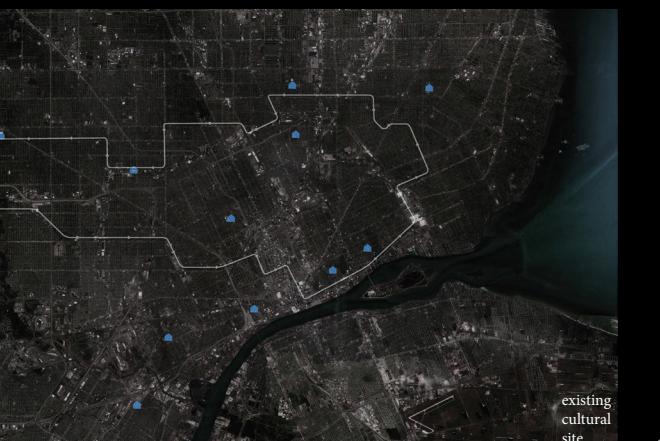
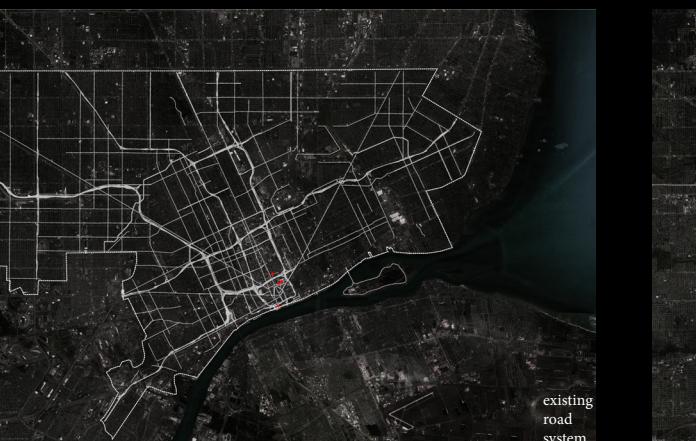
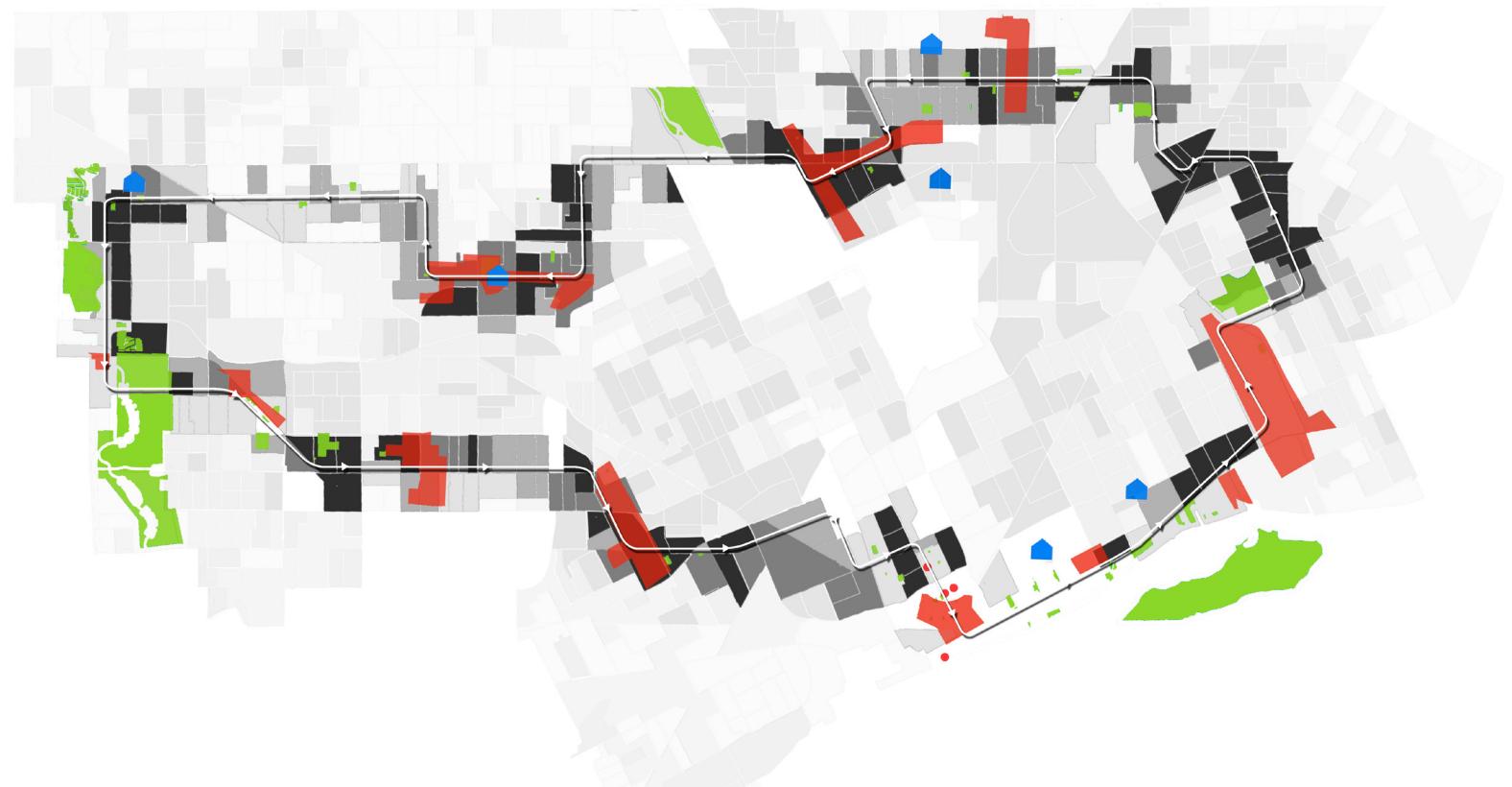
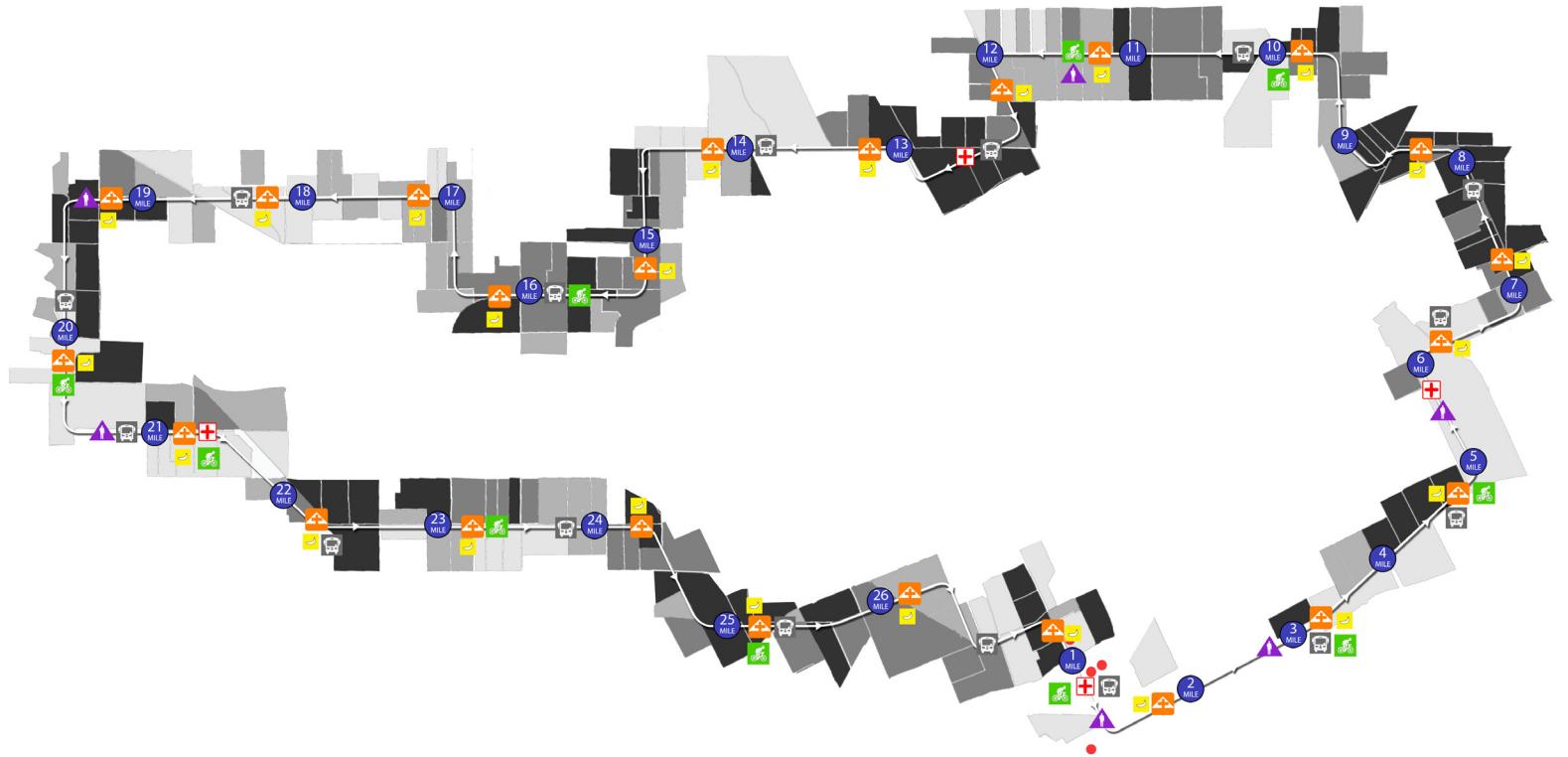


figure 1



Make the divided city as an organic whole

Because the route selection of the marathon loop will combine the different types of landscapes of Detroit, such as the downtown, industrial and cultural sites, existing park systems and the lands in different vacancy rates. So the loop will become the best trail system to see the different features of Detroit. After the Olympics, the marathon loop can be easily and efficiently transformed into a new urban system. This can then start to provide different functions to the city such as a high quality public transportation system, public service system, recreational system, cultural corridor, economic corridor, ecological corridor. This multi-functional loop system will create a new urban morphology that can not only revamp Detroit, but start to serve as the foundation and framework for other cities.

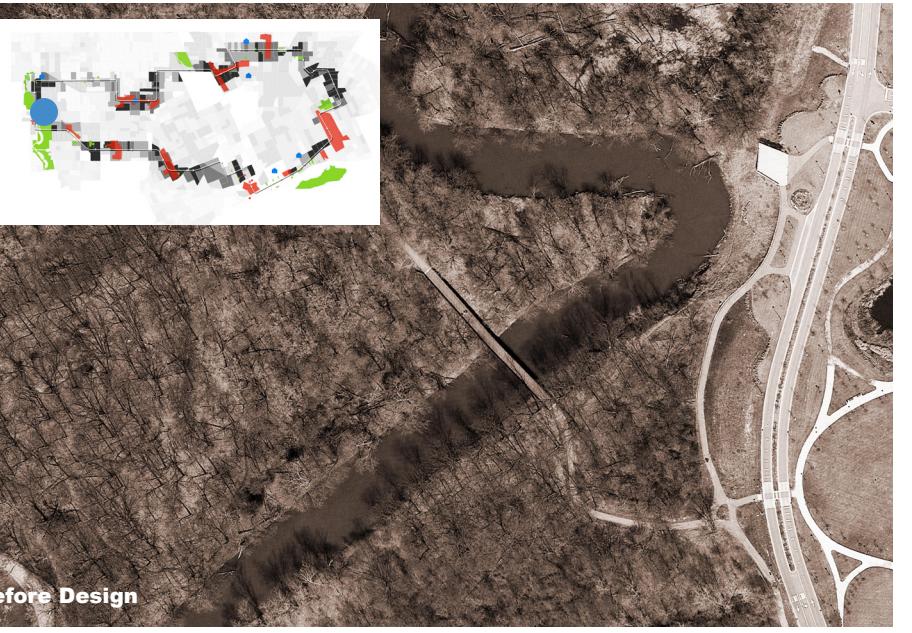


- restroom
- add station
- mile marker
- bike line
- food on course
- bus station
- game watching point
- medical station

Design Test 1

Natural park area

Designing the facilities for a marathon during the Olympics includes a wide array of consideration involving public service facilities like mile markers, aid stations for water and medical care, portable toilets, bus stations and bike lanes. Each of these facilities provide a service beyond the marathon game that can continue to provide public services after Olympic games. By situating these facilities in a previously underutilized natural area, a new public park could be created. Due to the set of well-furnished facilities, the natural park will become a very attractive recreation destination not just for local residents, but for future tourists of a burgeoning Detroit as well.



Design test 2 Residential Area

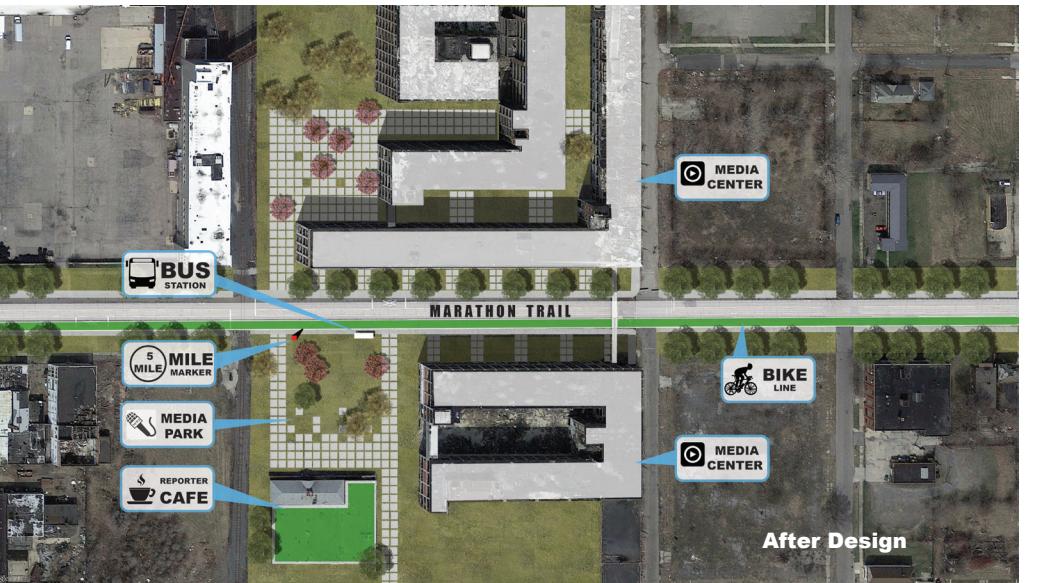
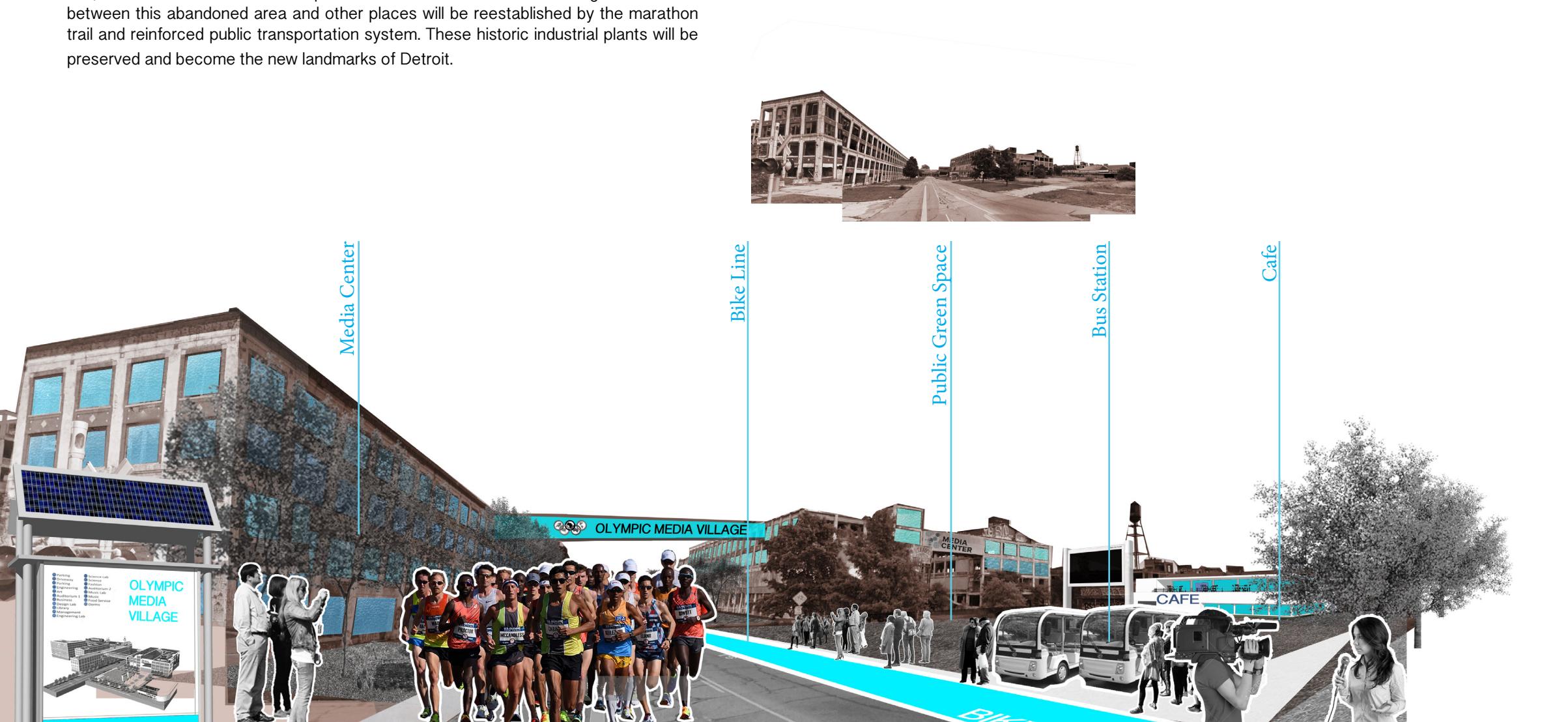


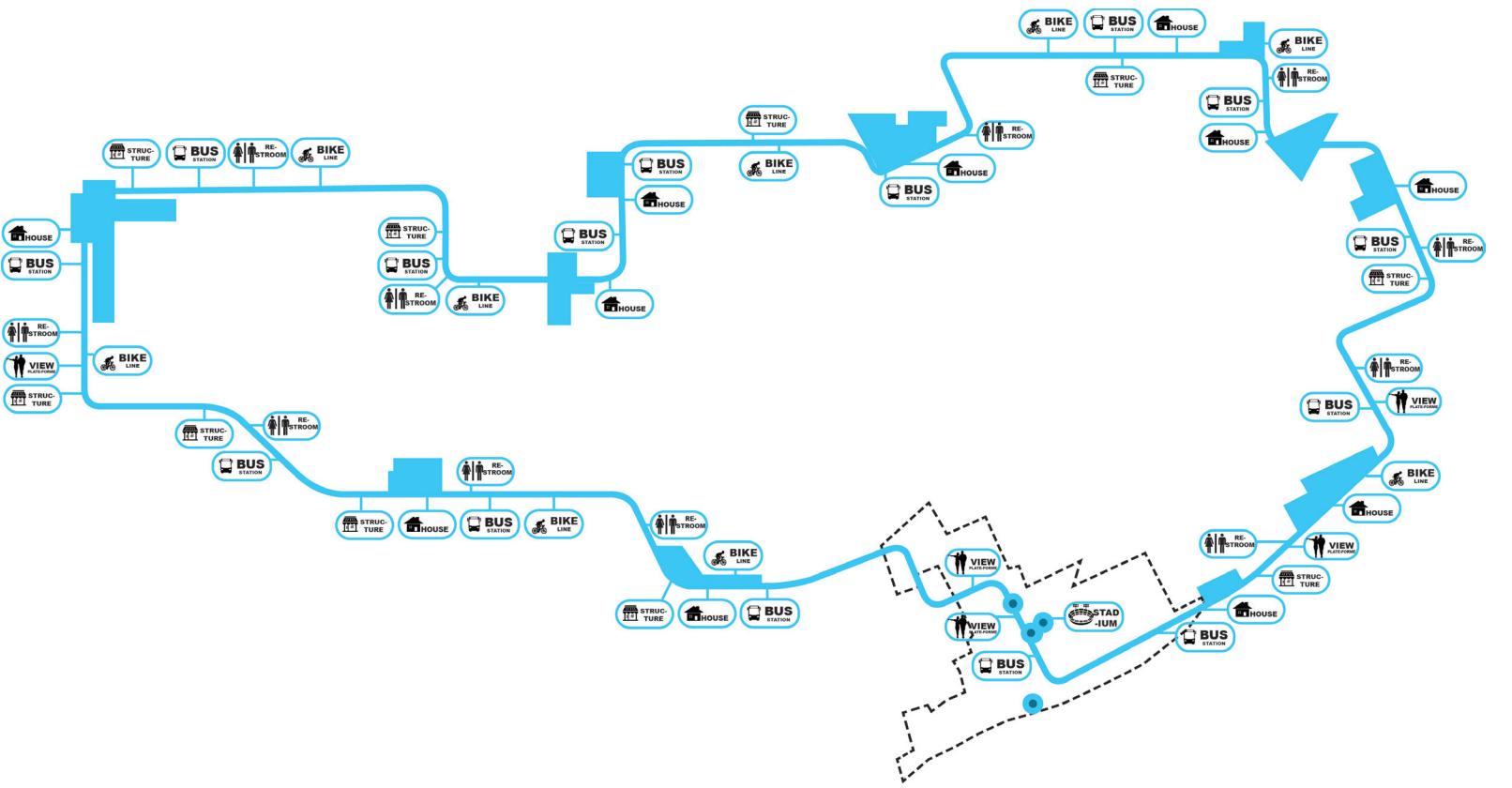
In the residential area, along with the marathon trail, a set of living facilities will be set up. The most important facilities are the athlete villages and related commercial facilities. The design strategy is to choose the areas of highest vacancy to create the athlete village. Any remaining residents would be relocated, run-down houses would be demolished, and a new athlete village would be built. As one of the biggest investments of Olympic development, it is essential for the project to have long-lasting impacts. After the games, the athlete village can provide at least 8000 homes for local residents.



Design test 3 Post industrial area

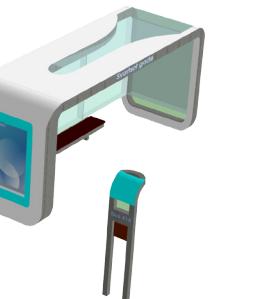
The most element of Detroit's urban cityscape are the vast quantities of post-industrial buildings littered throughout the city. It would be a shame to ignore the potential benefits of focusing Olympic development around these existing structures. During development, some buildings of good quality could be transformed into multi-functional areas such as media center for broadcasting the games worldwide, related commercial service facilities, as well as cultural facilities to promote Detroit's reclamation. A stronger connection between this abandoned area and other places will be reestablished by the marathon trail and reinforced public transportation system. These historic industrial plants will be preserved and become the new landmarks of Detroit.





A Multi-functional Urban System

After the Olympics, the marathon trail and all the facilities along with it will become a new urban multi-functional system that will provide a better transportation system, high quality housing, numerous commercial and public services, recreational areas and cultural areas. The initial investment of Olympic development will successfully transform urban infrastructure, resulting in ample benefits for local residents and the city.



Bus station



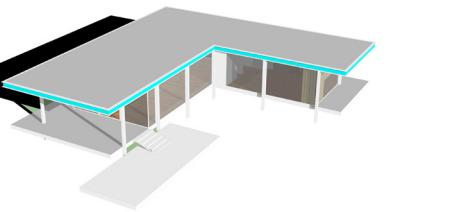
bathroom



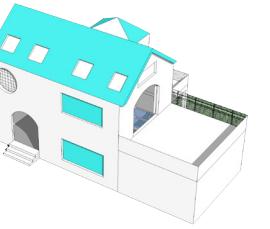
Sign system
(miles marker)



Bike line



New
commercial
structure
(add station)



New House
(Athlete
village)

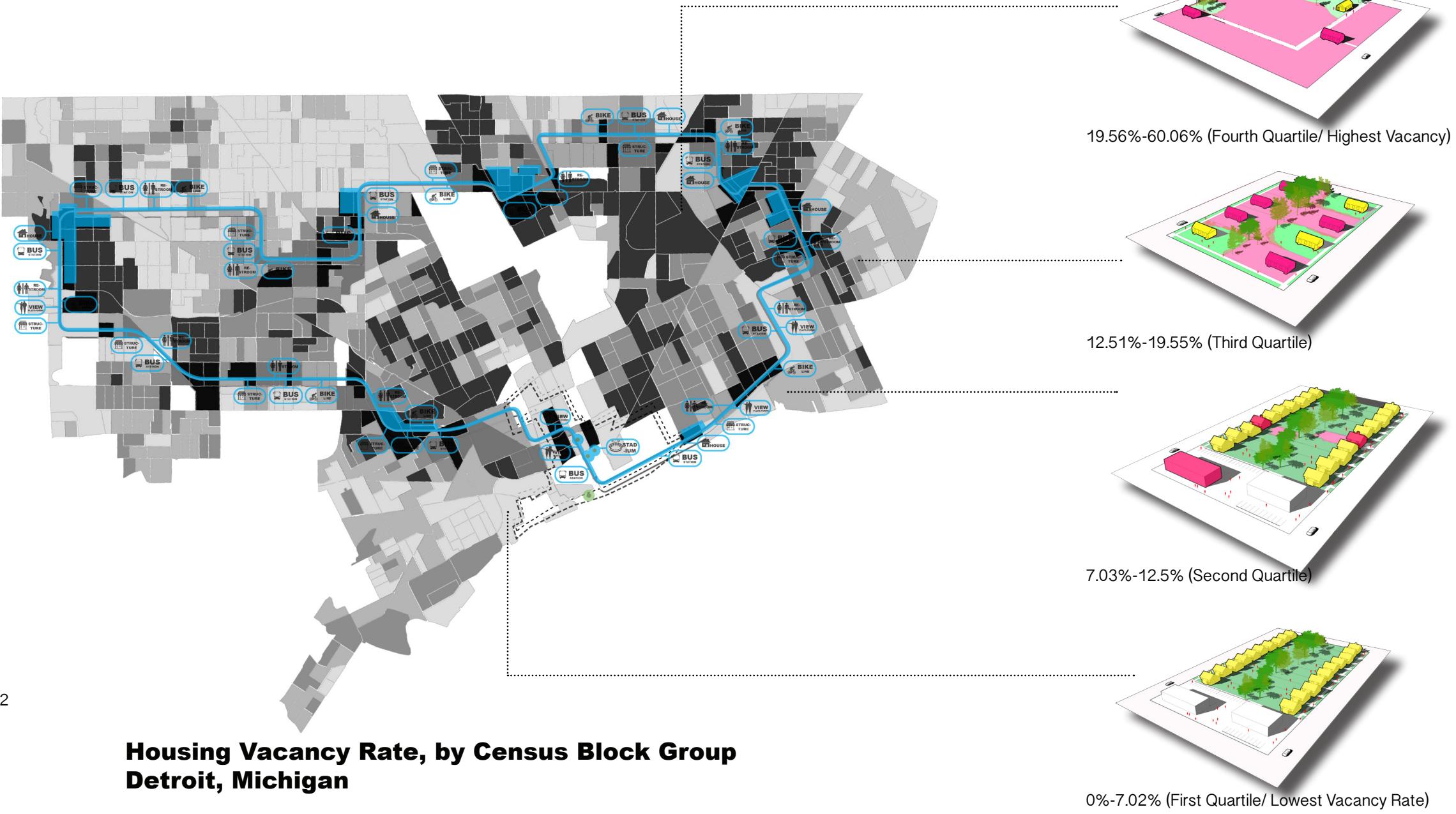


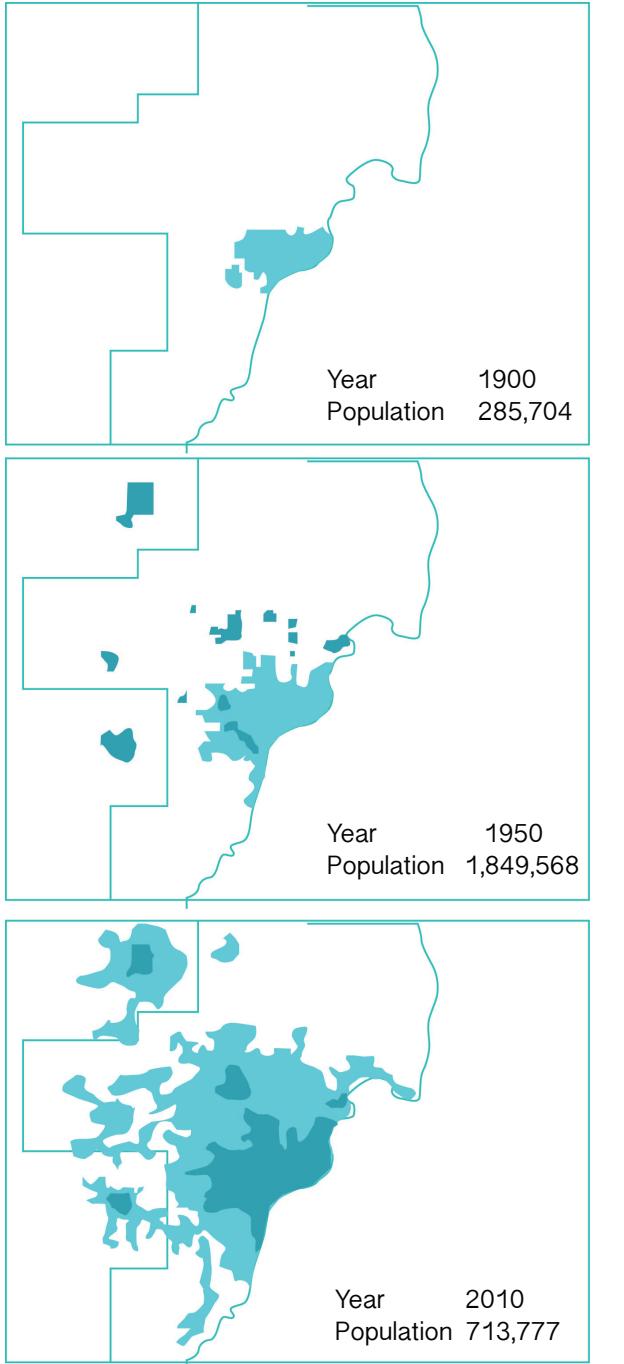
Retrofitted
Industrial building
(media center)

CHAPTER 3

**THE LONG TERM IMPACTS
IN THE NEXT 50 YEARS
(Post Olympics)**

figure 2





Guttenberg New Jersey	58,821
Union City New Jersey	52,326
West New York New Jersey	48,733
Hoboken New Jersey	39,066
Kaser New York	27,788
New York City New York	27,016
Ciffsider Park New Jersey	24,577
Highest Vacancy Area Detroit MI	2000

Data from en.wikipedia.org

The Current Situation In Detroit

Over the span of 100 years, from 1900 to 2010, Detroit saw an increase in scale thanks to a flourishing automotive and manufacturing industry. Unfortunately, due to a sharp decline in industry with the rise of overseas manufacturing, as well as a serious case of blind urban sprawl, the city has seen rapid decline. Today, Detroit has lost 60% of its population and is currently dealing with the variety of social problems associated with it. 40% of the population is using 100% of the the urban infrastructure, and the lack of attention to maintenance and support funding results in a very low quality of infrastructure and housing.



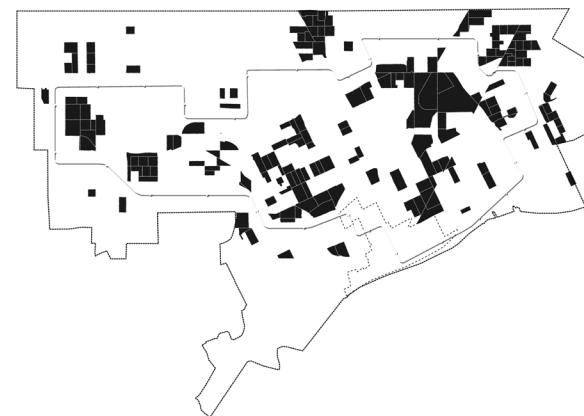
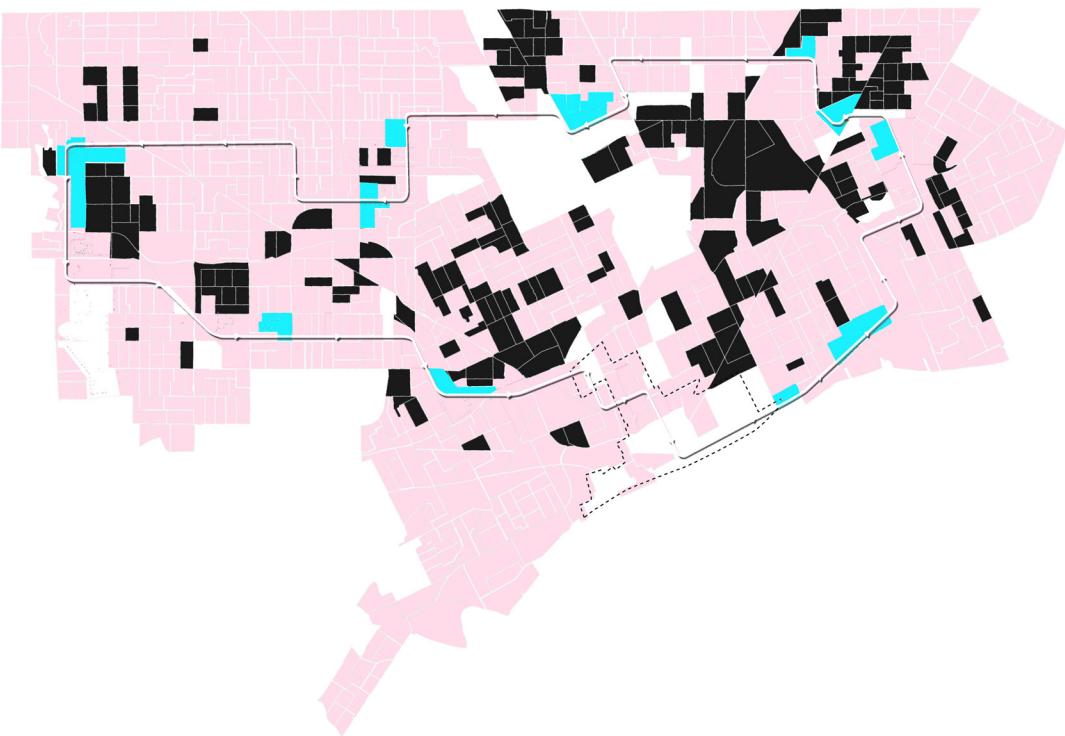
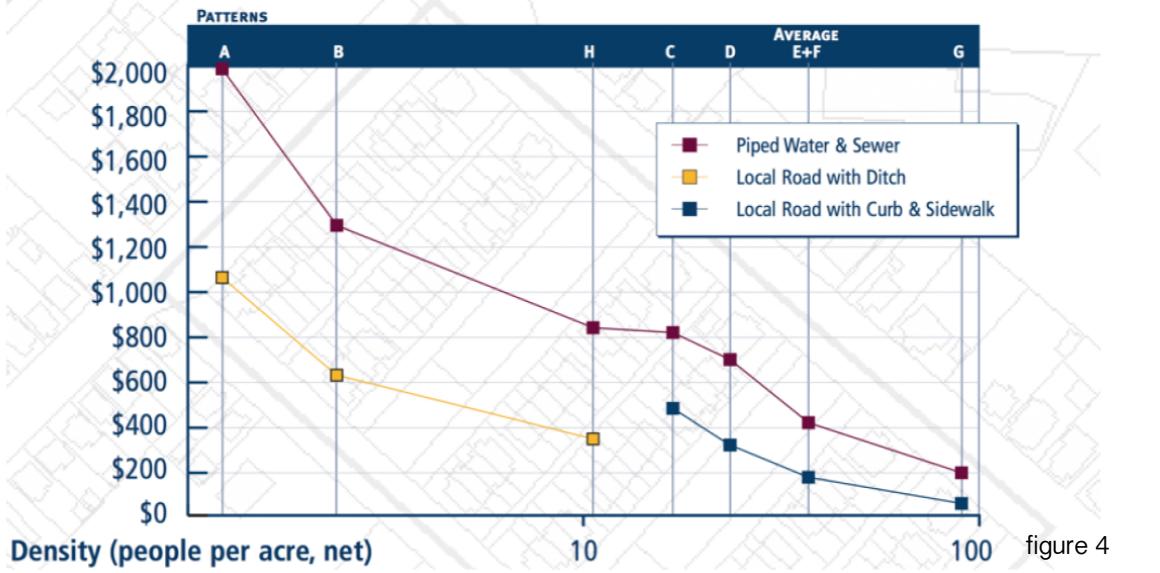
figure 3

A New Round of Population Shifting

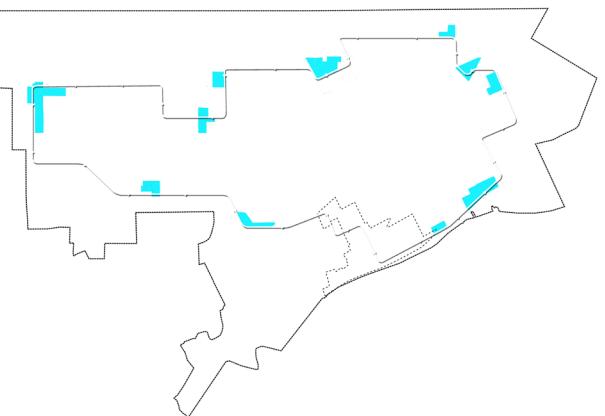
Based on research about the relationship between population density and urban service cost, conclusion that the current biggest urban problem in Detroit is the population density unbalance. In areas with a high vacancy rate, the investment in urban infrastructure is much lower, resulting in a quality of life far less than those in more densely populated areas. So, as a critical point of this research is to explore an approach to re-balance the population through changing urban structure.

After the Olympics, the newly proposed loop system can provide a higher quality urban service. It can become a big attraction for the residents who lives in high vacancy areas. People will be more inclined to live closer to the loop, while the existing framework of the loop will trigger a new round of population shift which will provide people with more benefits provided by the loop.

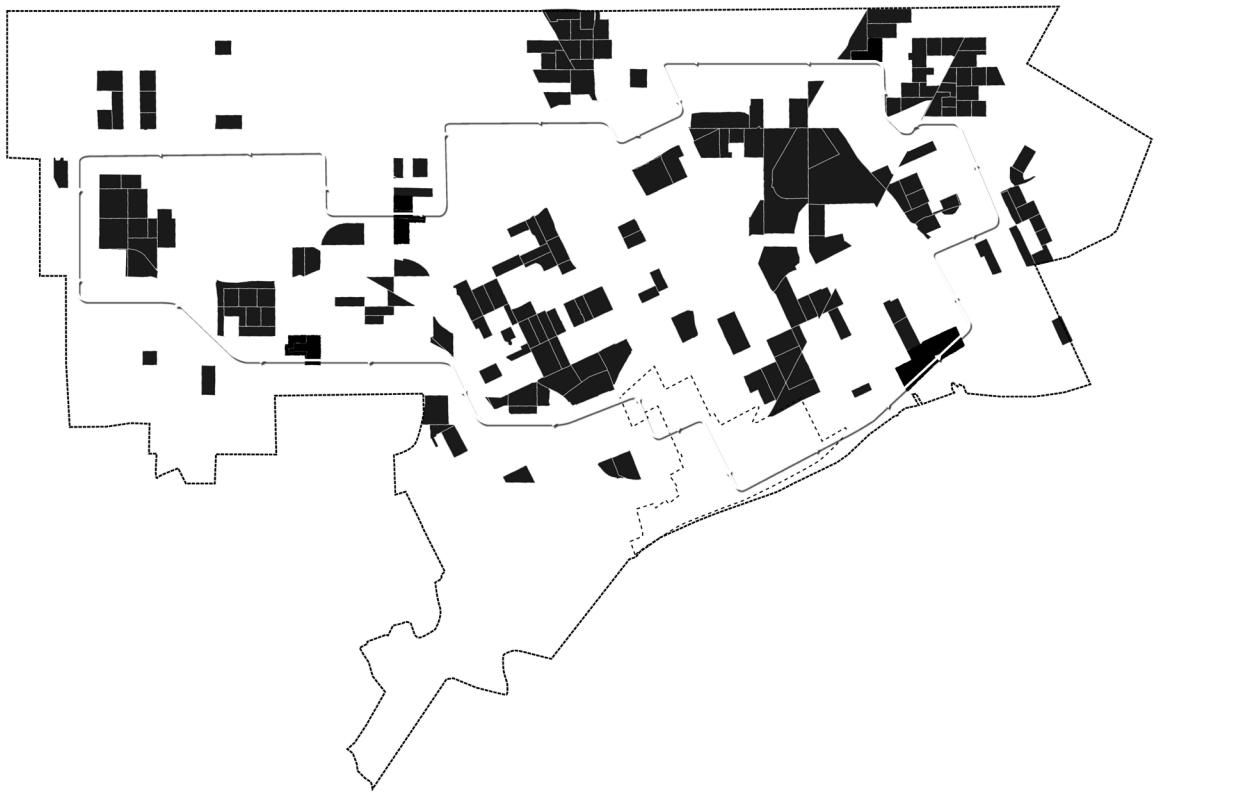
Estimated Annual Service Costs (per household)



Highest Vacancy Area
AREA 8 Square Miles
POPULATION DENSITY 1,000 /square mile
POPULATIOPM 8000

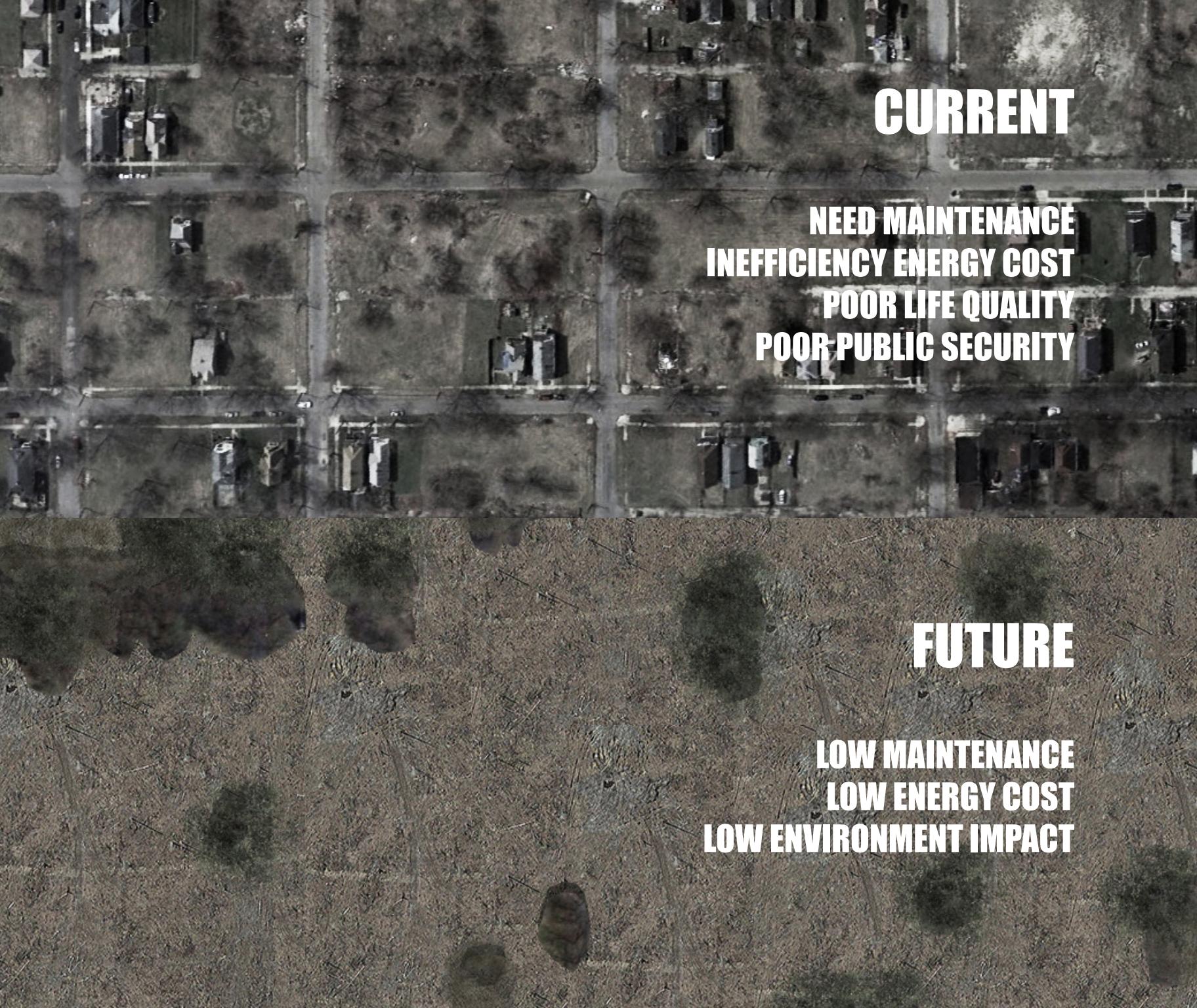


New Houses
AREA 0.8 Square Miles
POPULATION DENSITY 10,000 /square mile
POPULATIOPM 8000



New Type of Urban Land

After the population shift, the previous higher vacancy areas will transform to a completely abandoned area that will become a new type of urban land. This new type of urban landscape doesn't need as high of maintenance as before and consumes the lowest energy. Through a serious plan and design, the new land will become a multi-functional landscape that can encompass urban agricultural land, an urban and ecological wildness area, and an educational area.



CURRENT
NEED MAINTENANCE
INEFFICIENCY ENERGY COST
POOR LIFE QUALITY
POOR PUBLIC SECURITY

FUTURE
LOW MAINTENANCE
LOW ENERGY COST
LOW ENVIRONMENT IMPACT

**SMALL
SCALE
1 BLOCK**



EDIBLE GARDEN



PRIVATE STUDIO

Small Scale

At the block scale, the site can be used as an edible garden and private studio, providing community engagement and new economic functions.

**MEDIUM
SCALE
3 TO 6 BLOCKS**



GREENHOUSE



ORCHARD



NURSERY

Medium Scale

Zooming out, the site can be used as the location for contemporary urban industries such as urban agriculture, orchards, nurseries. It is vital, though, that all these new industries must be low cost, low maintenance, and operate with low environment impact. The city can then use these areas as a new economic growth point.

**BIG
SCALE
6 TO 15 BLOCKS**



WILDNESS



HIKING



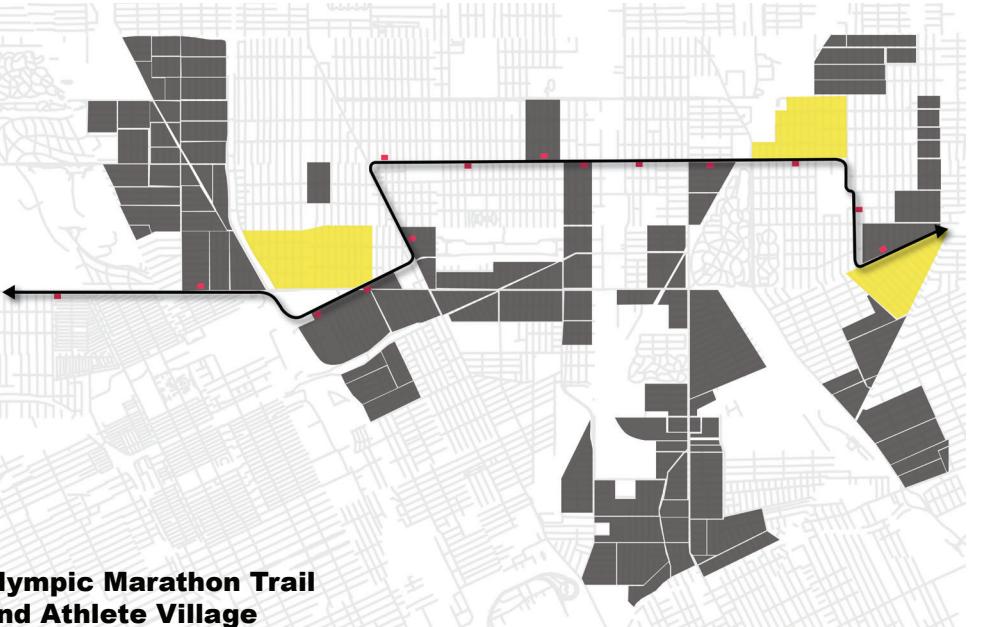
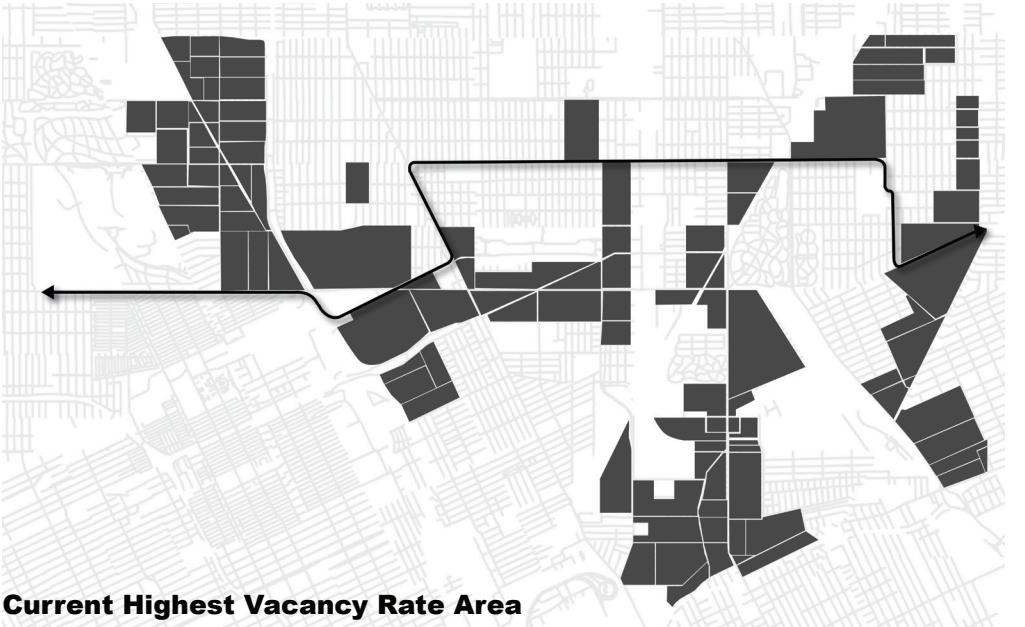
WILDLIFE HABITATE

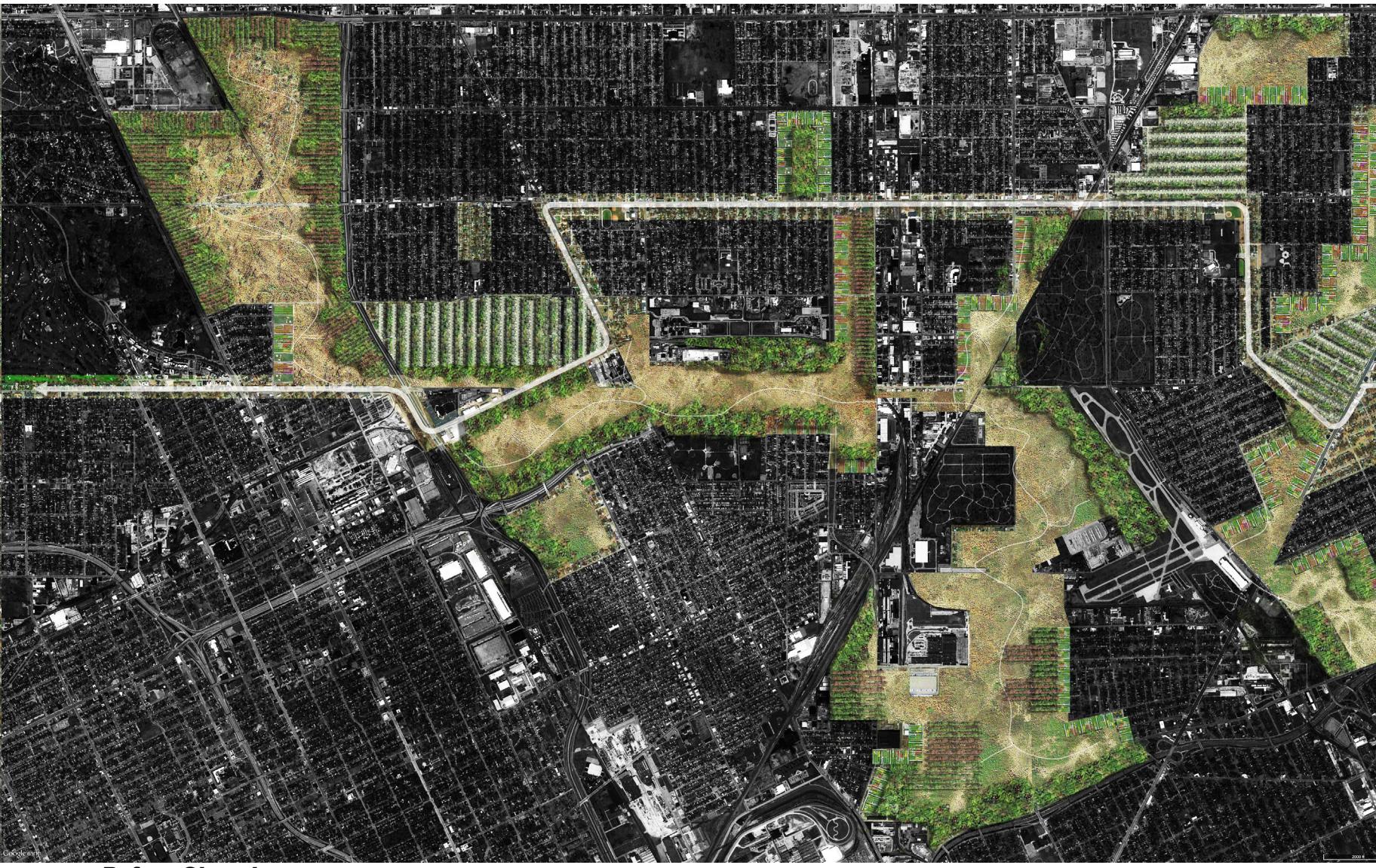
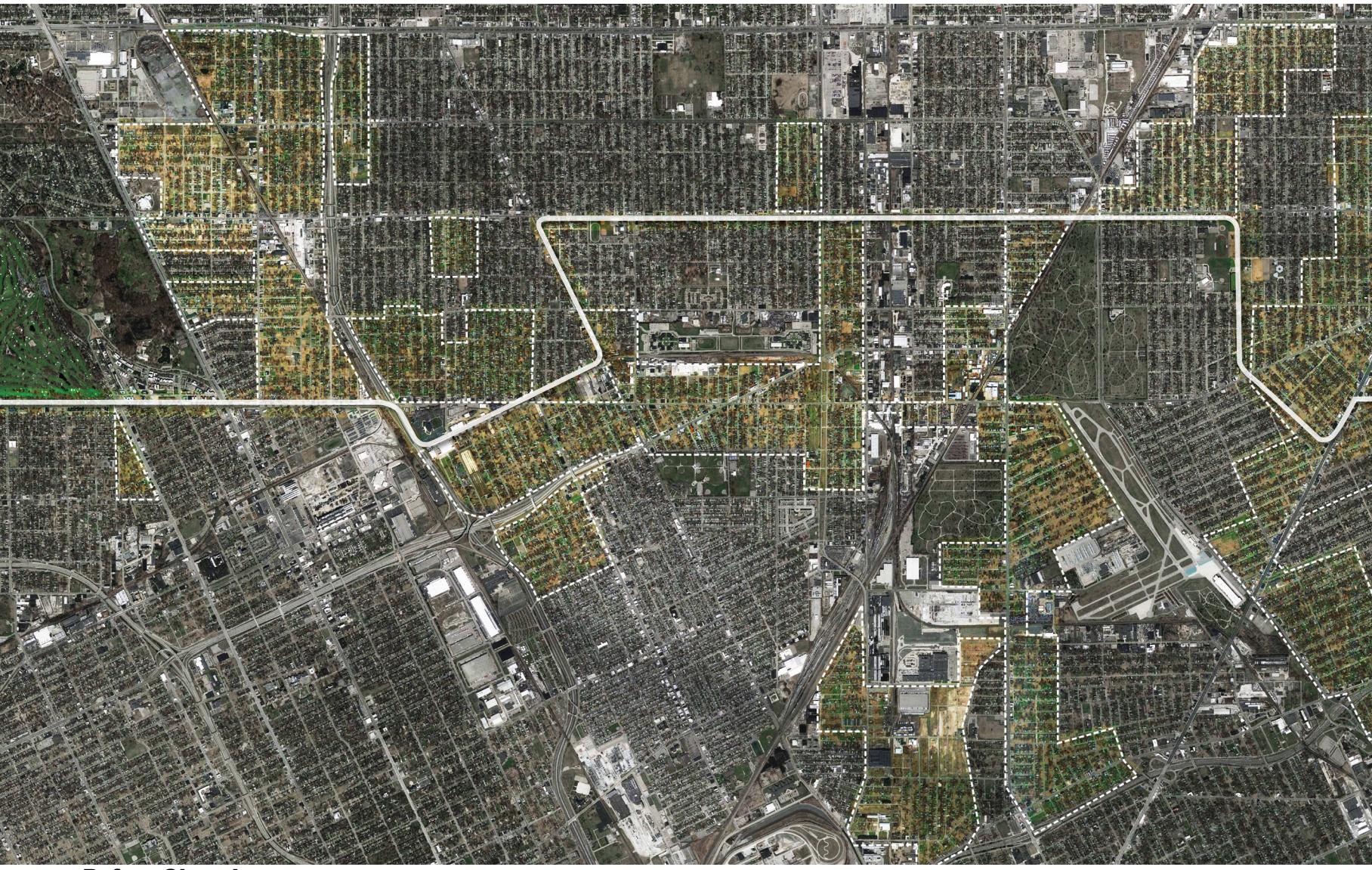


MANMADE WETLAND

Big Scale

For the historic industrial city, the large scale open field represents a very rare ecological area brimming with potential. After all the existing buildings and urban infrastructure are demolished and left to exist without the impact of human activities, the site will become an urban wildness area and provide various of ecological functions. Included in these functions are urban storm water collection, more wild plant communities, wildlife habitat, increased biodiversity, and even some new recreational functions. It's a long process but possesses the power to completely change the city, and even bring in a new urban culture. Detroit will transition from a traditional industrial city to a natural landscape city.





**SMALL
SCALE
1 BLOCK**

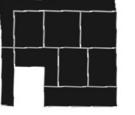


EDIBLE GARDEN



PRIVATE STUDIO





MEDIUM
SCALE
3 TO 6 BLOCKS



GREENHOUSE

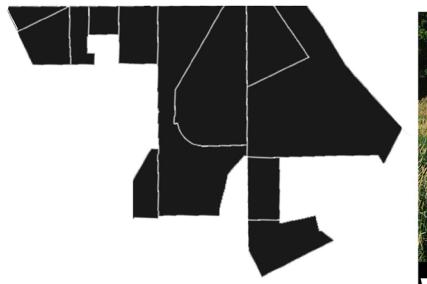


ORCHARD

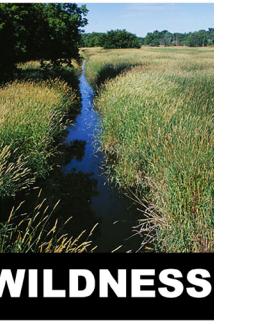


NURSE





**BIG
SCALE
6 TO 15 BLOCKS**



Conclusion

This research tried to describe a different future for the city of Detroit. Poised on the edge of an era of development, the urban problem that the city faces is changing and it is crucial that traditional ideas should be abandoned. The strategy of urban problem solving has become more flexible. This research provides a new approach to combining a mega-event with utilization of the city's existing resources to solve urban problems. The Olympic heritage should not just focus on sports itself but more on the city and its people. The benefits of the Olympics should not just be seen by one single city, but instead by an entire region. The immense initial investment should be used to create more values for the people. This research proved through joint hosting and more rational investment allocation, a truly sustainable development strategy can be created and the city will be ultimately changed for the better. The most important components necessary for success are the transformation of people's old ideas about the impacts of the Olympics, avoiding the unnecessary construction, and trying to reuse existing resources. Urban regeneration is not just blind sprawl, and should without a doubt be evermore strategic. For most decaying cities, downsizing and centralizing the urban scale is vital to improve the efficiency of urban systems.



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5. figure 1, figure 2

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7. figure 4

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