

RURAL URBANIZATION

[Aerotropolis]

SARAH CICHOWSKI

UNIVERSITY OF DETROIT MERCY SOA MASTER THESIS 2013-14 NOAH RESNICK

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Rural Urbanization

Sarah Cichowski

Master of Architecture | Thesis 2013 - 2014

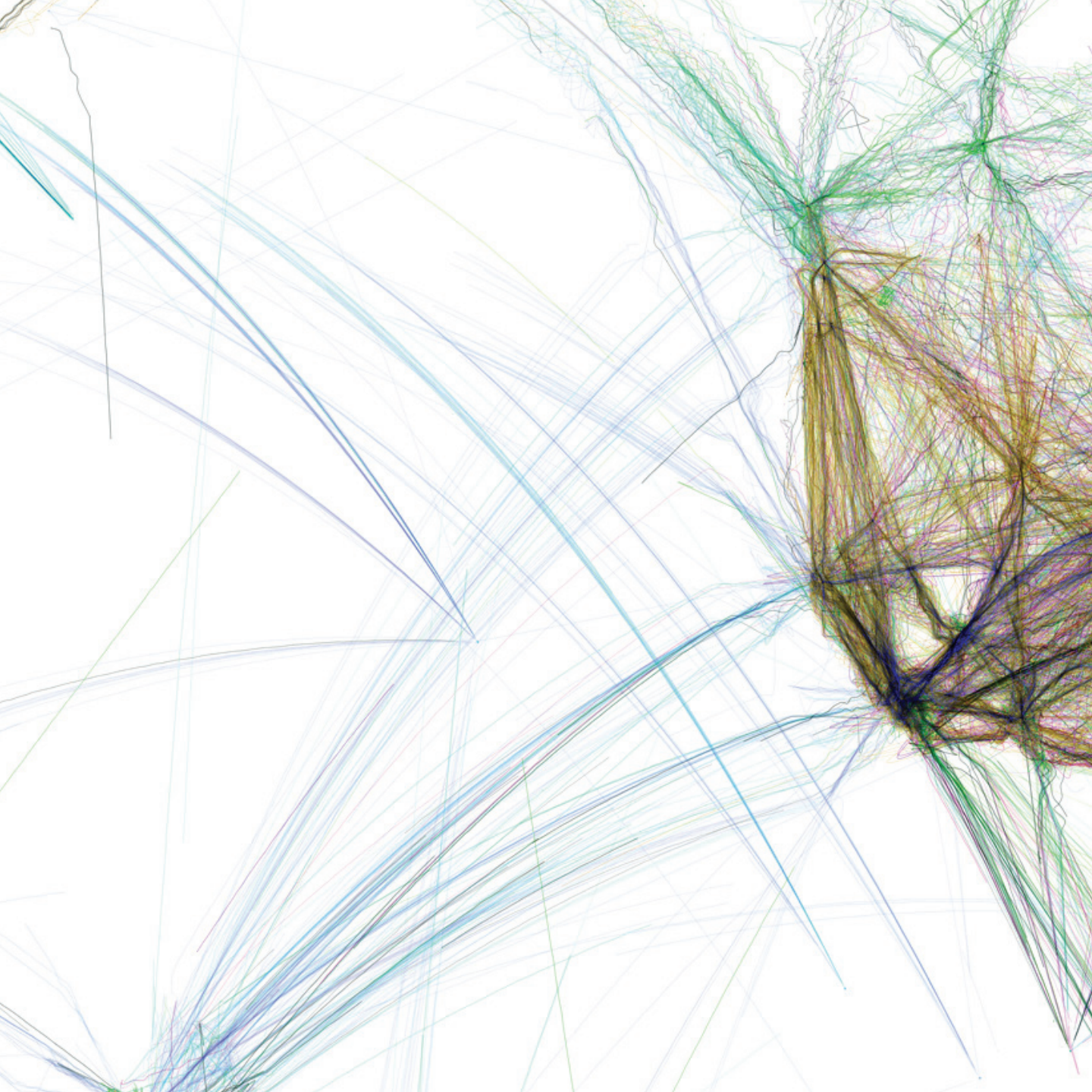
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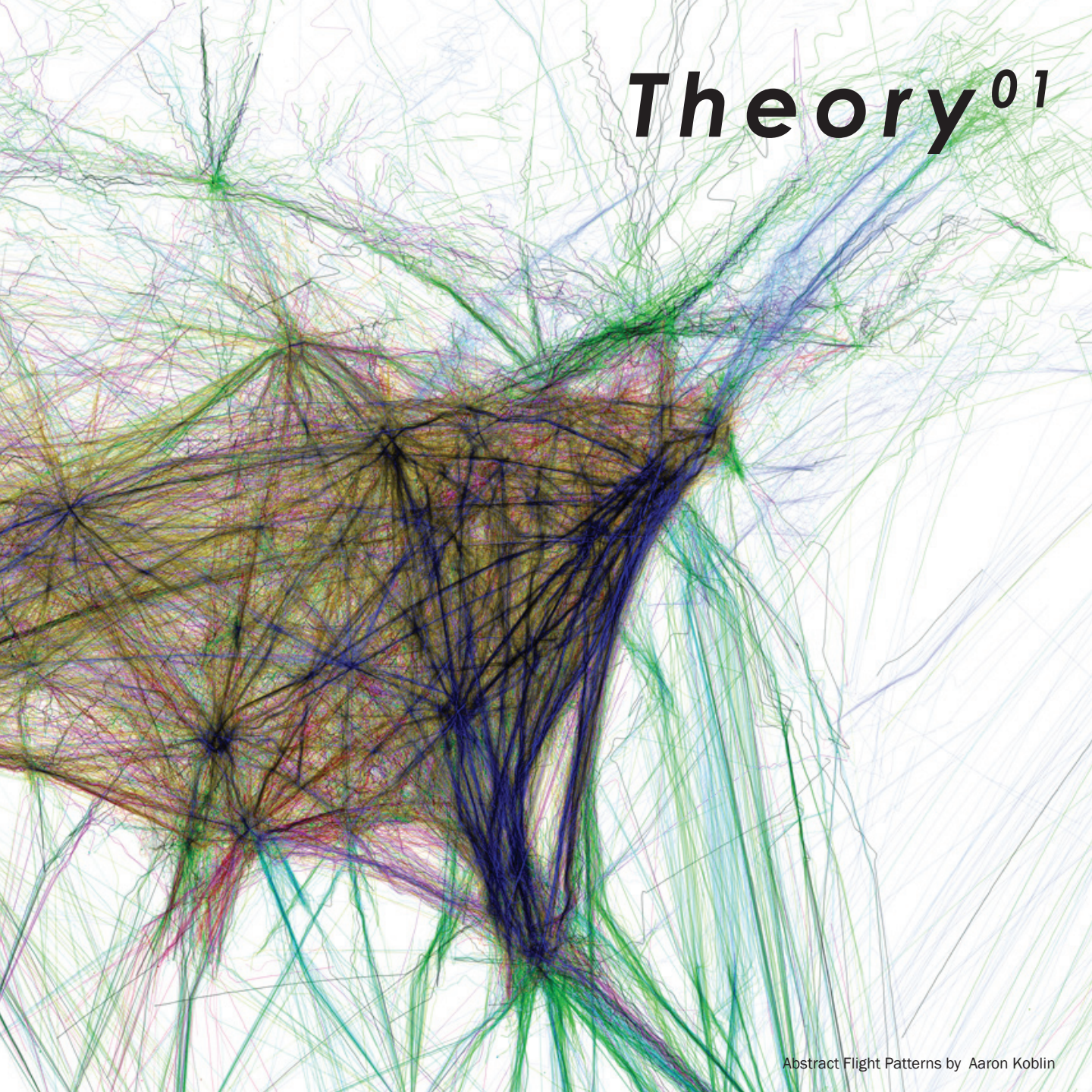
Professor Noah Resnick

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Theory⁰¹



Abstract Flight Patterns by Aaron Koblin

Thesis Question

**How can rural urbanization be done successfully,
keeping aspects that so many search for when
moving into suburbia?**

Ur-ban [ur-buh n]

adjective

1. Of, pertaining to, or designating a city or town.
2. Living in a city.
3. Characteristic of or accustomed to cities; citified: He is an urban type.

Ru-ral [roo r-uh]

adjective

1. Of, pertaining to, or characteristic of the country, country life, or country people; rustic: rural tranquility.
2. Living in the country: the rural population.
3. Of or pertaining to agriculture: rural economy.

noun

4. A person who lives in a rural area.

Rural land is being taken away from current users in communities to formalize new uses and purposes. Large vacant lands that surround airports are being looked at in new ways and there is debate how to develop them for a new purpose. "Aerotropolis" is the development of new urban cities around airports. John Kasarda created the concept and looks at how airports are going to shape the economic zones and urban development of the 21st century as expressways did in the 20th century, railroads did in the 19th century, and seaports did in the 18th century. (Thorbeck, Dewey) (Meinig, Donald M.)

Aerotropolis development is for new users: the commuters and the business men and women traveling for work. Aerotropolis allows the commuter to experience the cities during a layover. It, however, is not for the current community who utilizes the land or developments for their purposes. It forgets the woods, and farmland where wildlife live, replacing them with green spaces. (Kasarda, John)

This thesis takes a look at the aerotropolis plan for the Detroit Metro Airport and how the plan will affect the current area. The current site has an abandoned horse race track on it and is set up for future development. The plan was abandoned after the race track shut down after almost 3 years of success. It had poor management, and race tracks only succeed when they have been implemented for years. The community in Huron Township and other adjacent communities and users were not enough to keep it going. A successful track needs people who are knowledgeable in placing bets and willing to do so with large sums of money. Some places even have training sessions to help people learn the game and navigate the system. Without the financial capacity or experience, people are less likely to spend money needed to support the track. (Kasarda, John)

The current community does have an equestrian lifestyle. The current high school, Huron High, is 2 miles from the track, and it has an equestrian team. The team has no facilities to train their horses, no boarding areas, and no place to perform. Many residents have small tracks to train horses, as well as boarding for those who do not have the facilities to board their own horse.

This thesis paper looks at how the site can be developed for new users and the current community, and how it can entertain the commuter with Olympic Equestrian events in an equestrian community. Huron Township's downtown area lacks infrastructure. Community outreach for resources could allow for amenities.



Rural⁰² Urbanization



"The greatest asset a city or neighborhood can have is something different from every other place." (Thorbeck, Dewey pg. 123) Rural designs seek to understand and embody the unique characteristics of open landscape, rather than defining infrastructure and public space as the norm of urban design. Detroit Metro Airport is proposing an aerotropolis master plan that encompasses Huron Township. Huron Township wants to achieve a design that still entails a rural feeling but brings in new development for necessary growth. A successful aerotropolis plan for the Detroit Metro Airport needs to represent the needs of the community or it will push them out of their homes and lifestyle. This thesis challenges John Kasarda's aerotropolis plan for Detroit Metro Airport by creating a unique and characteristic landscape that urbanizes the rural region that represents the community. (Thorbeck, Dewey) (Meinig, Donald M.)

When planning for new urban conditions, nature is converted into "green spaces" that ignore what was there before. The users and purpose of the landscape are lost and forgotten. Wildlife areas are removed and pushed out for these new developments. These natural conditions should not be pushed to the side but used to create a unique region true to its characteristics. The existing wildlife should be interwoven into rural urbanization.

People move to suburbia looking for these unique characteristics and elements of a rural life, such as quality schools, safe outdoor space for children to play, and entertainment. When searching for a rural region to live, people look at these landscapes from different points of view. Each person sees the same elements such as houses, roads, and trees, but they have their own interpretation of what is in front of them. (Meinig, Donald M.)

From inner cities to the outer rural lands, the landscapes drastically change. New developments take areas that were once "unknown" and transform them into popular urbanized cities. Rural lands are often viewed as undeveloped and are carelessly developed without a second thought of the impact on the surrounding area. (Meinig, Donald M.)

These rural regions are disappearing, and the urban condition is taking over. Farmlands are being replaced with subdivisions, strip malls, and surface parking. The challenge is how developers and architects can plan and design rural areas to welcome urban entities and allow rural dwellers to experience rural living with amenities of an urban condition.

"From planning to experts to community leader to farmers, people in Michigan are alarmed at how fast sprawl is gobbling up open land." -Newspaper Statements about sprawl

This thesis challenges the "planning and design" of the urban landscape and how it can blend into rural urbanization. Can urban amenities and rural landscape co-exist? What is the logic and manner of urban design and how can it be influenced? Urban communities are growing uncontrollably and threatening the natural environment, agriculture, and energy resources. It is increasing impervious surfaces and storm water runoff problems, decreasing wildlife habitat, increasing water and air pollution, and increasing non-native species. (Meinig, Donald M.)



10 Million people live in Michigan
82.5% Live in Urban "*Central City*"
Suburban Collar

Wildlife Management

*Attempts to balance the
needs of wildlife
with the need of
people*





This 3D architectural rendering depicts a coastal urban environment. On the left, a harbour area features a large cruise ship, a cargo ship, and several industrial storage tanks. To the right of the harbour is an industrial zone with various factory buildings and tall chimneys. In the upper right, a prominent, large, white, star-shaped building with multiple radiating arms stands out. The foreground shows a grid-like street pattern and smaller commercial or residential buildings. The entire scene is set against a light grey background.

Public Security

Harbours



This 3D architectural rendering shows a dense city skyline. On the left, several tall, modern skyscrapers with unique, curved designs dominate the view. To the right, a large, classical-style building with a prominent dome and multiple windows is situated. The foreground is filled with a variety of smaller, rectangular buildings of different heights, creating a textured urban landscape. The scene is set against a light grey background.

Consultancy Framework

Airports

Aerotropolis⁰²

Energy & Environmental Care

Water & Wastewater

Public Administration

Education

Traffic Management &
Public Transportation

("Aerotropolis – the future has already begun")

THE INDUSTRIAL HUB



New **[Urban]** City



Multi-Family

[Infrastructure]



Aerotropolis

Urban Cities

Business Parks



Transportation





Johnson, Anna

[The Businessman]

Residential [The travelers home]

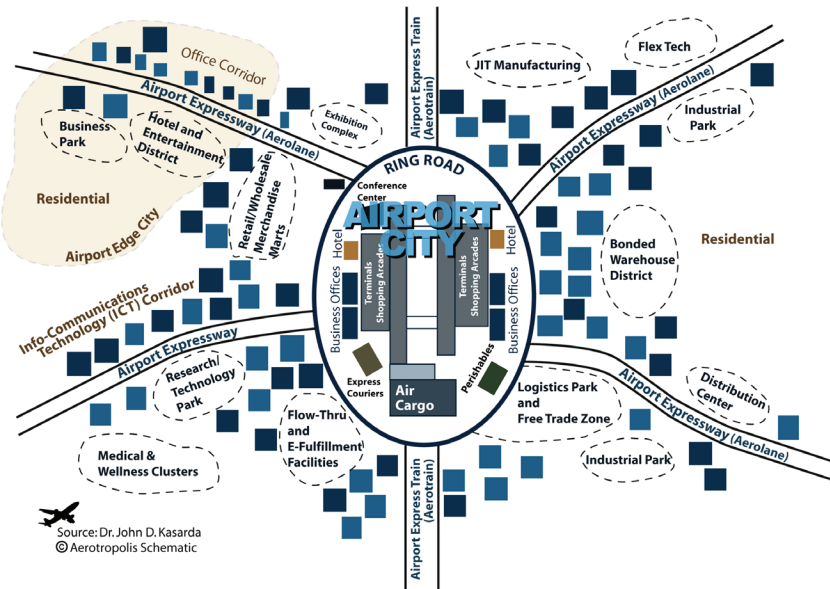


["Open & Green Area"]

COMMUNITY



[Dereviev, Mark]



Source: Dr. John D. Kasarda
© Aerotropolis Schematic

Shipping [Cargo]



[Google Search]

LOGISTICS



[Shah, Shalin]

[transportation]



[Google Search]



[Innovative Solutions For Wiring and Cable Assemblies]

John Kasarda

The man with the plan



[Derewicz, Mark]

These rural regions have an appeal that the city dwellers search for and admire. The rural life style gives room to breathe, open space, and room for children. However, by living in these regions, people normally sacrifice direct access to amenities. Aerotropolis is changing this reality.

Aerotropolis involves new urban development around airports, and repurposing undeveloped land. It is affecting metropolitan areas around the world, expanding the airports and surrounding areas that were once just overgrown fields, farms, and woodlands.

Aerotropolis works well for a commuter if he takes other means of transportation into the city. Transportation makes it easier and faster for travelers, especially without an automobile. A well thought out transportation plan will benefit all, including the travelers flying.

What is it???

Aerotropolis is a concept and vision developed by John Kasarda, a professor from North Carolina. Aerotropolis is a new form of urban development to create a city around the central core of an airport, linking businesses, services, and residential development. John Kasarda describes aerotropolis as the urban incarnation of the physical internet; the primacy of air transportation makes airports and their hinterlands the places to see how it function and to observe the consequences. It can be looked at as a type of urban sprawl that will evolve into a system.

Is aerotropolis the way we live next?

Or is this just how we happen to do business? – John Kasarda

Often these developments destroy the natural landscape instead of working with the unique characteristics of the land. This new type of urban development threatens the rural regions where airports were created originally to reduce citizens' exposure to pollution and unattractive appearance. Aerotropolis is not an airport, it is the development of a city 20 miles around an airport. (Kasarda, John)

Aerotropolis is a test, experiment, or a prototype for future city developments that are happening all over the world. It is forming new hubs that create attractions and entertainment for those with layovers. Airports have become more than just an airport. They are becoming their own little cities with shopping, restaurants, bars, spas, and next to anything a city could offer. Why would you ever want to leave the airport? Aerotropolis is and can be used as a process to bring people out of the airport and into experiencing the surrounding city. (Kasarda, John)

Transportation has been the central hub and creator of cities. Our main transportation influences urban development now as expressways did in the 20th century, railroads in the 19th century, and seaports in the 18th century. The clean slate surrounding airports opens up endless possibilities for planning new cities within a rural context. It also creates the possibility of rural regions being destroyed. These new cities need to be planned for smart growth for future expansion of the airport. (Kasarda, John)

Who is Aerotropolis for?

Airports can compare to the technology of the internet today allowing fast communication, research, and fun. People know when and how they can get something shipped faster. Airports decrease time and increase convenience. Convenience is something our society thrives on. People are constantly increasing their expectations, and speed is our main concern. Location and accessibility are the other main aspects of an aerotropolis. The speed and convenience of these areas attract diverse companies to relocate or open new locations. (Kasarda, John)

Aerotropolis allows the business man / woman to live in a metropolitan region and to work in another city or state. It is for the commuter a place that becomes more than just a layover. It allows for one to be entertained and to experience the city. One could get to know the surrounding city and with easy access and fast transportation through the city. It has positive aspects for the community, bringing businesses in and allowing ease of working in your community or elsewhere. However, it does not truly address the wildlife or current users. The woodlands and farmland where wildlife live are replaced with green spaces. This plan encroaches on their land and on their home. We need to be more respectful to the unique rural condition.

Businesses



Cities

Corporations

[Google Search]

Population





Culture



Business man
Business woman

Wildlife

Families

Youth

Community

Commuter



Aerotropolis Themes

1. Developments should cluster together

Manufacturing - Corporations - Homes . . .

2. Manufacturing, warehousing, and trucking

Should be SEPARATE from other business areas and passenger flow.

3. Green space - separate developments

4. Strip developments

BE LIMITED

5. Expressways and express trains

Connect airport with major business and residential areas

6. TRUCK ONLY lanes in busy areas

Help reduce traffic congestion and improve safety

7. Businesses that use the airport the most

Should be the closest

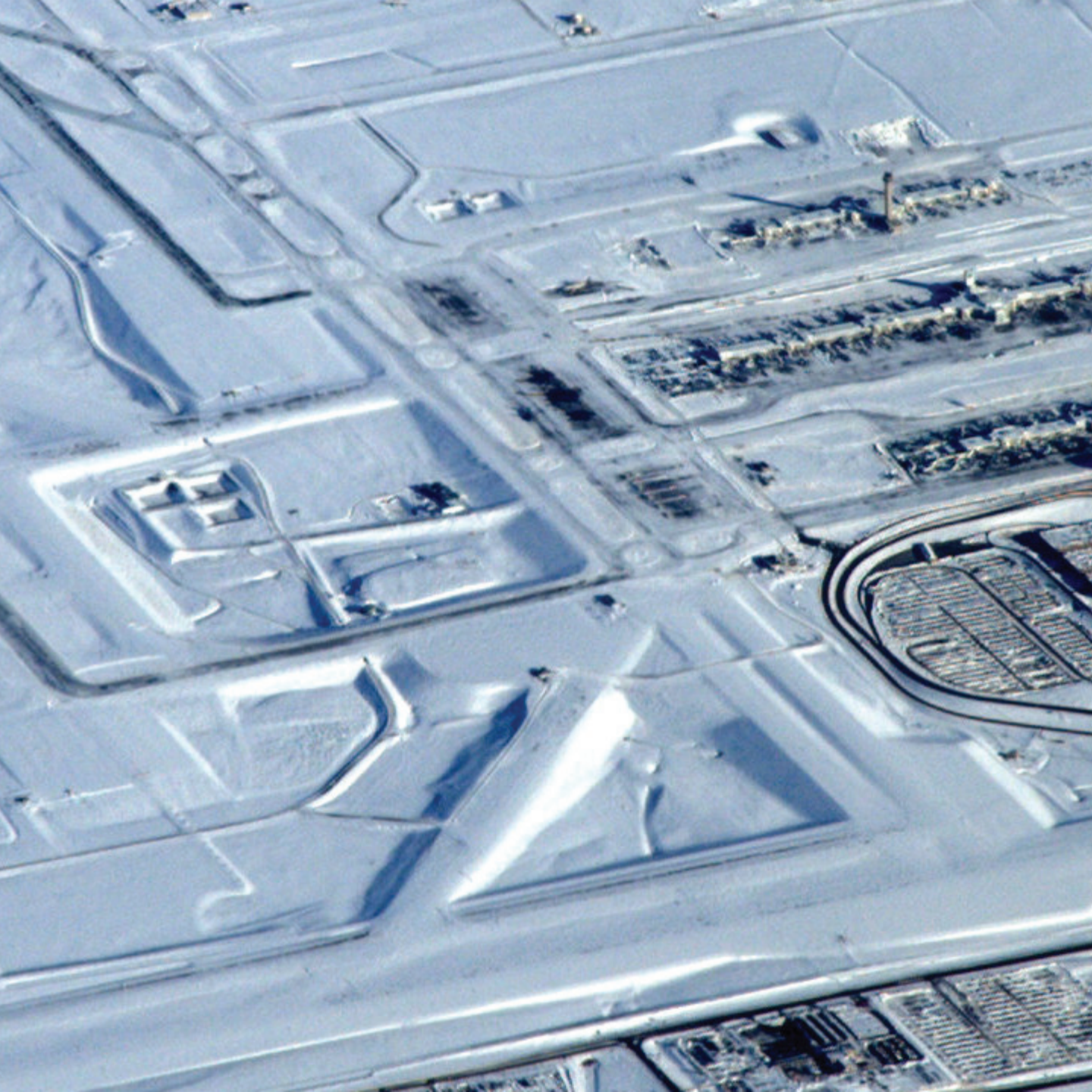
8. Noise & emission - sensitive commercial and residential areas

Should lie OUTSIDE high-intensity flight paths

“A city made for speed is made for success”

-Le Corbusier





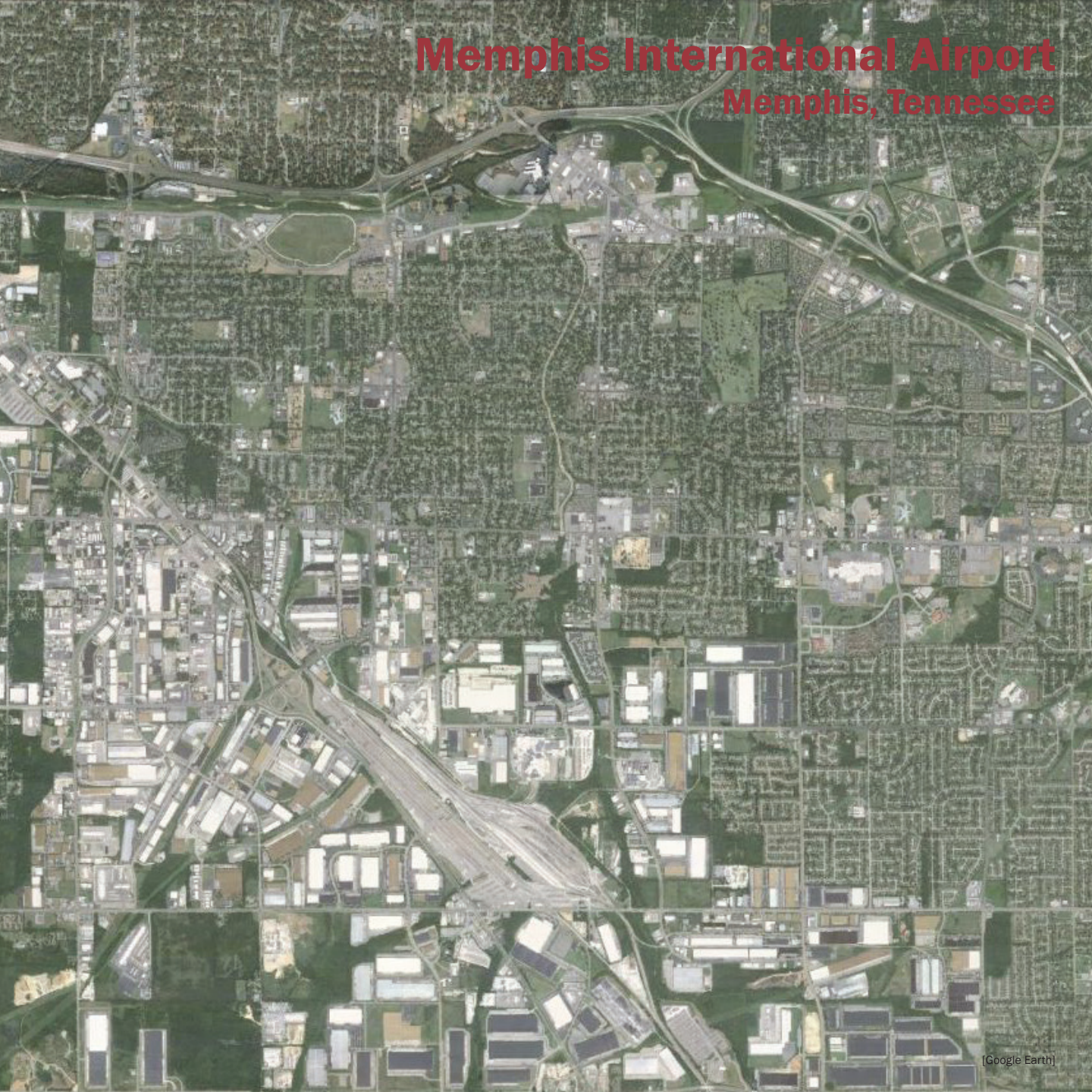
Precedent ⁰⁴ Studies





Memphis International Airport

Memphis, Tennessee



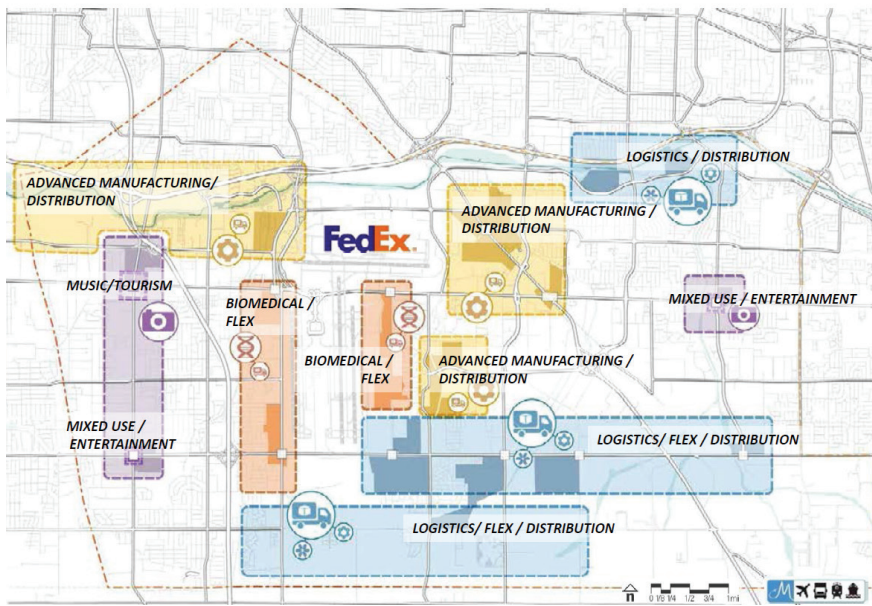


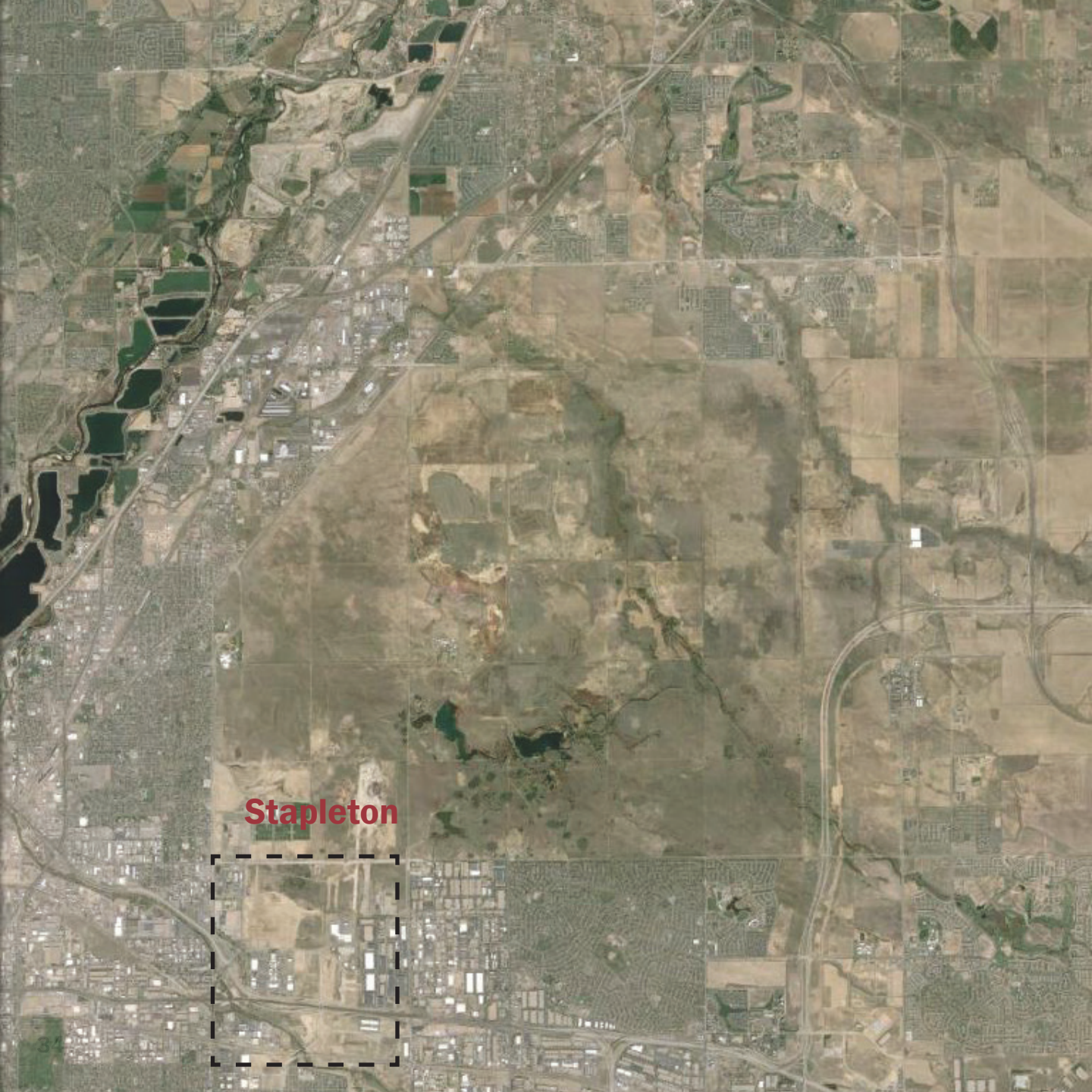
Society is conflicted about airports. We view them as an unwanted nuisance and environmental threats. We also love the convenience they bring and believe they are desperately needed. Aerotropolis has been spreading throughout the country side from Memphis, Tennessee to Denver, Colorado. Both these regions started with urban sprawl, with people realizing they needed and wanted to be near airports and businesses followed. John Kasarda developed aerotropolis roughly 30 years ago. At first, no one believed him. Now people can see this pattern of movement towards airports. (Kasarda, John)

Memphis International Airport is considered the premiere American Aerotropolis. It started in 1927 on 200 acres located 7 miles from downtown. It sits between an urban and rural condition and is considered an aerotropolis. John Kasarda created an economic vision for Memphis in 2006. Their aerotropolis reaches out 50 square miles, and the airport serves over 10 million passengers a year. During the planning for aerotropolis, they took community surveys to determine what they thought was important. The community was interested in establishments with entertainment and food. The community also sought transportation to link trails and open spaces. Memphis International aerotropolis was a success and created a strong master plan. It will continue to succeed as long as there is enough room planned for smart growth. (Airport City Master Plan Outreach Presentation)

PROPOSED DISTRICTING

PRELIMINARY CONCEPTS





Stapleton

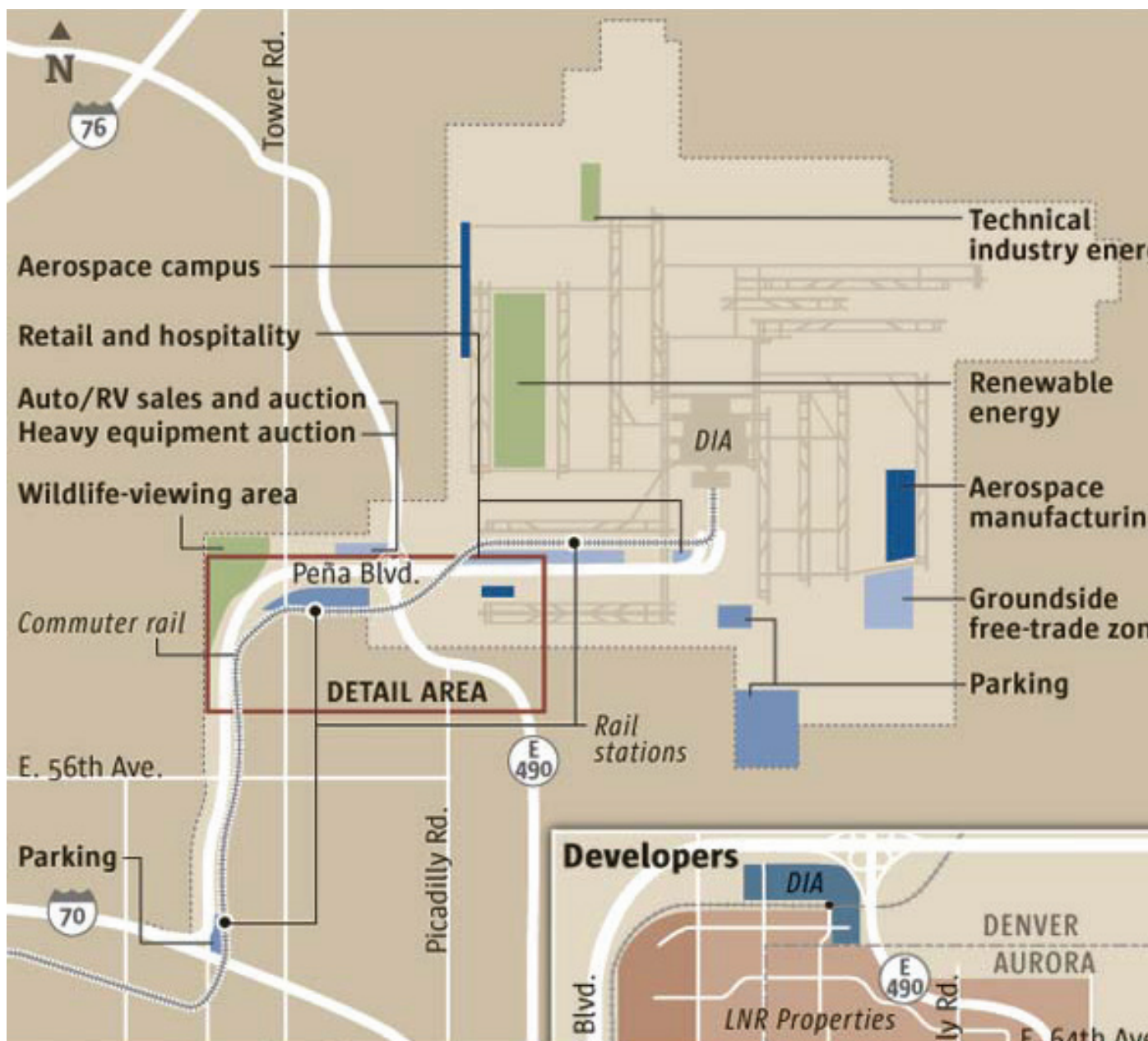
Denver International Airport

Denver, Colorado



Denver

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Sources: LNR Properties; Fulenwider; MXD Development Strategists



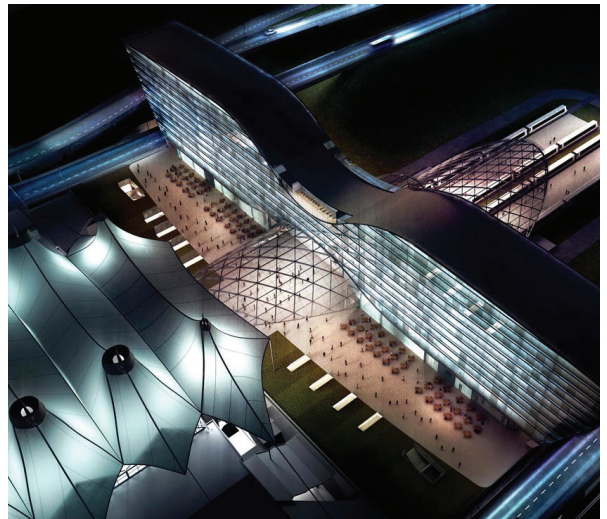
Stapleton Airport in Colorado was built in 1929 as one of the busiest airports. It is on the edge of the city where residents had more land than they knew what to do with. The airport expanded until three sides bordered suburbia. With runways butting up to front yards, the need to move the airport beyond the urban edge became obvious. In 1995, the airport was moved 25 miles northeast of the downtown. Stapleton, with 30,000 residential houses, became one of the largest urban communities. Denver International Airport (DIA) now has a 53 square mile clean slate to start over and now serves around 161,000 passengers on an average day. The biggest question was if the people were going to follow? They will, and they have, just like they did around Stapleton Airport. There are people who really want the ease of transportation and do not mind living by the airport. (Kasarda, John pgs. 133-136)

“Are there really people who want to live close to the airport? Yeah, there are. That’s been proven around the country too. They travel a lot on business, or whatever it is they do, but they’re connected to the airport in some way, shape, or form. Somehow.” said John Kasarda.

(Kasarda, John pg. 135)

The DIA residential region took advantage of rebranding the landscape where they were going to live. They made a backstory of a ranch and farm there. While driving, you see the historical presence. You notice the walls represent the foundations of homes that were there, and tree planting represents orchards. The people have followed and have begun to create a purely residential aerotropolis that is driving the commercial activity. (Kasarda, John pgs. 133-136).

“John Kasarda believes he holds the blueprints to a fix that is beautiful, efficient, and ultimately sustainable – a far cry from the hideous, haphazard, and polluted messes most cities have inherited,” (Kasarda, John pg. 136).



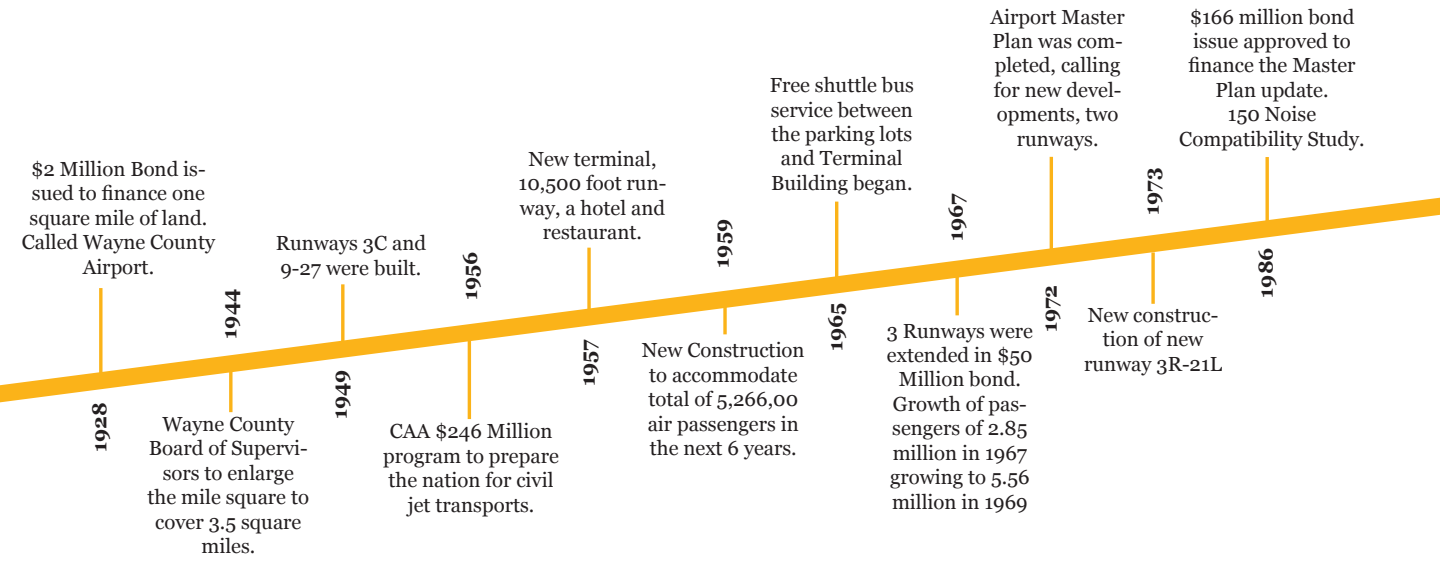
[Young, Niki May]

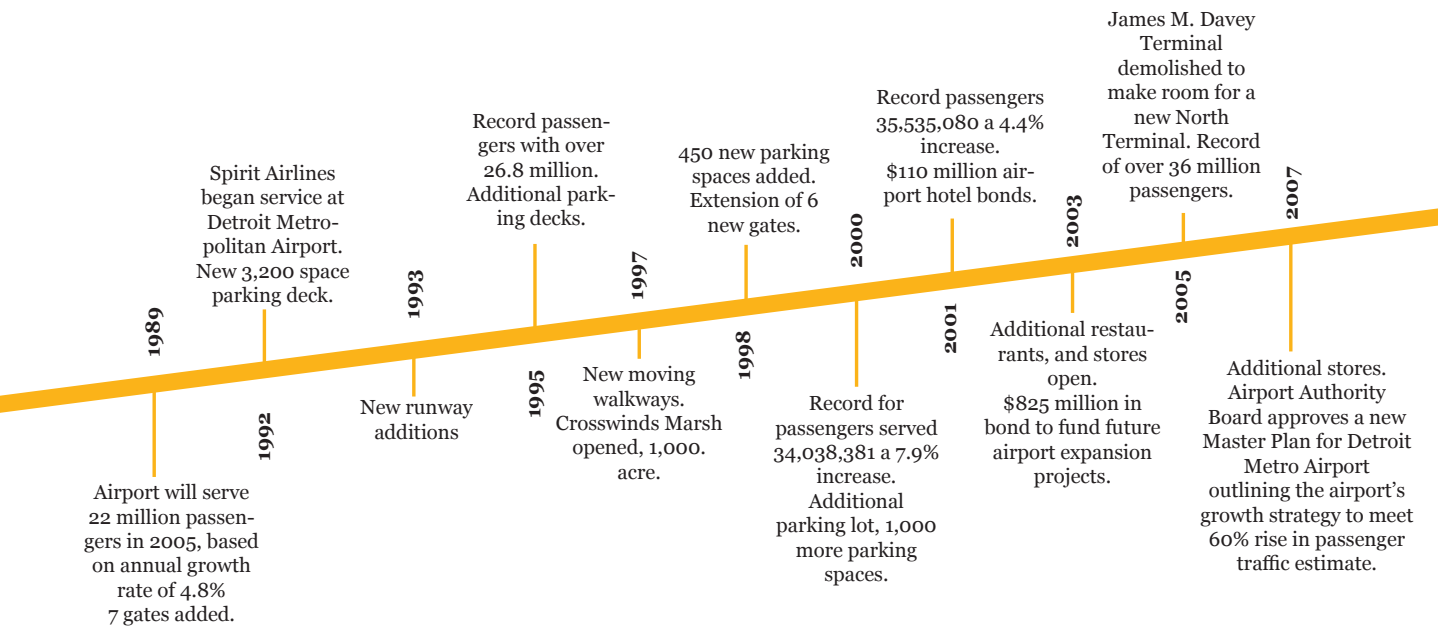


Detroit Metro⁰⁵ Airport

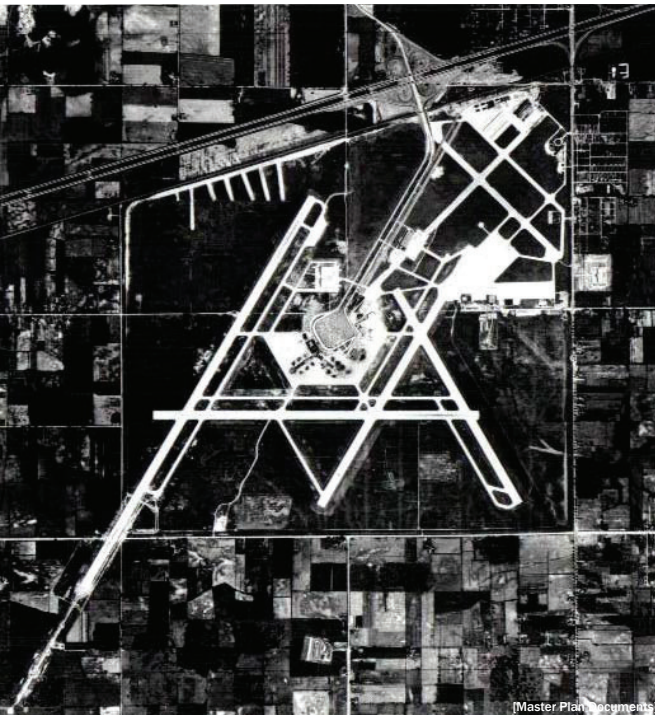


DTW Timeline

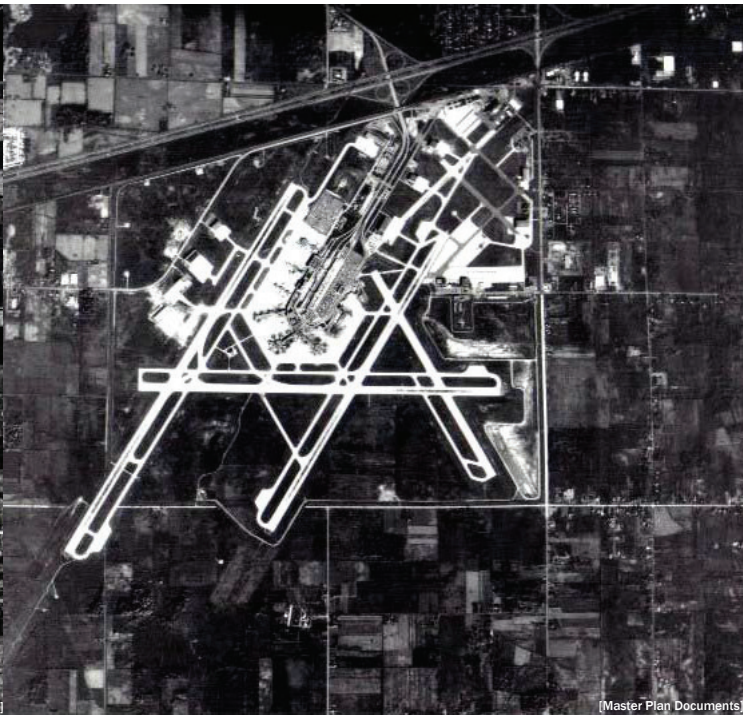




DTW Growth



1956



1970



[Master Plan Documents]

1991



[Master Plan Documents]

2005



* For Diagrammatic and Illustrative Purposes Only

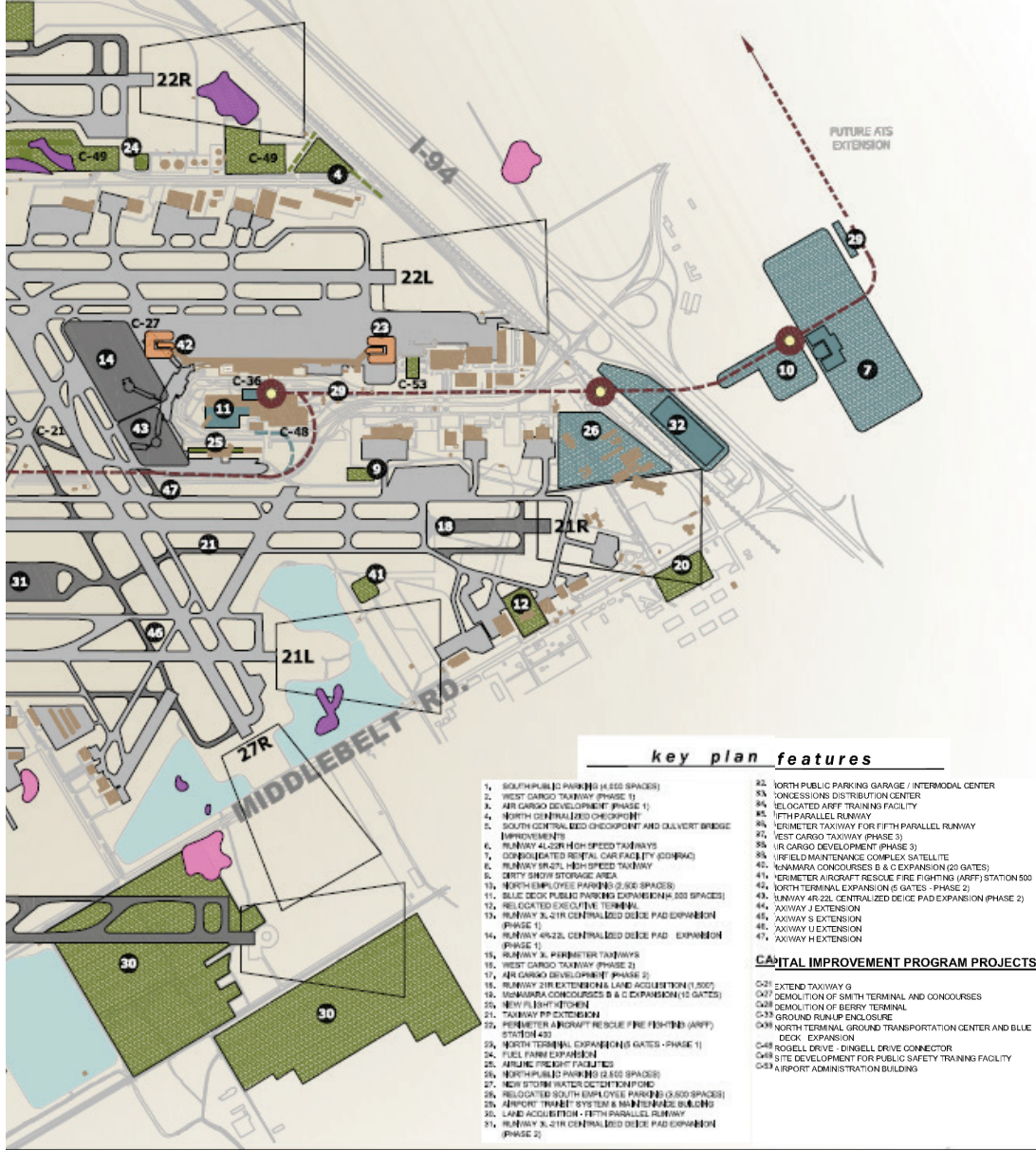
Detroit Metropolitan
Wayne County Airport



DETROIT METRO • WILLOW RUN
WAYNE COUNTY AIRPORT AUTHORITY

MASTER PLAN STUDY

PREFERRED DEVELOPMENT



Plan depicts projects anticipated to be implemented by year 2027

MENT PLAN



EXHIBIT 8.1-1

DTW Aerotropolis Plan

Detroit Metro Airport (DTW) master plan vision is “To provide an achievable, flexible and fiscally responsible development plan that will help ensure that DTW can accommodate future activity levels, further its position as an international gateway and world-class hub airport, and support aviation-related economic development.” (Wayne County Airport Authority) The concept for this region is going to transform global commerce, regional economic development, and the 21st century urban living. This region will encompass a central global business district, integrated with offices, warehouses, residential, retail, and entertainment venues. (Wayne County Airport Authority)

An aerotropolis needs to be planned and designed with intelligence, smarts, and greenways. DTW has an aerotropolis plan. The new development for the rural region will allow access that was not available before. The DTW is thought of as a key spot for large cargo shipping bringing new industries to the area. The airport currently owns 60,000 acres of developable land. (Kasarda, John)

Detroit Metro Airport has developed a 25 year build out plan that, when complete, will generate \$10 billion annually in economic activity and \$171 million in tax revenue. The plan will also employ 64,000 people and attract 40,000 residents. (JDA)

Aerotropolis allows the business man / woman to live in a metropolitan region and work in another city or state. It is for the commuter a place that becomes more than just a layover. It allows them to be entertained and to experience the city. One could get to know the surrounding city and with easy access and fast transportation through the city, with not just the automobile. It has aspects for the community bringing businesses in and allowing ease of working in your community or elsewhere. The Detroit Metro Airport is centered between Ann Arbor and Detroit with 30 minutes either way down Highway 94.

An aerotropolis increases a region's current population, salaries, and tax revenues. It urbanizes a rural region with amenities it did not have before, such as a grocery stores, restaurants, shopping, or coffee shops. An aerotropolis will give the community the choice of working locally with 64,000 new job opportunities. The goals of aerotropolis will attract those companies who want the location near the airport: advertising, cargo shipping, and travel. Companies will be moving their current location or opening new headquarters, but what effect will this have on existing surrounding cities? Forming new “test” infrastructure in the rural area could have a large impact on the area if it does not succeed or if it hurts the surrounding cities that already have urbanized.

If aerotropolis is planned for smart growth, what happens if the population decreases like Detroit? Detroit was a growing population with close to 2 million residents in 1950. Its population has decreased to under 700,000. What effect will creating a new city 30 minutes away from Detroit, which needs to be revitalized have, especially for a city that was designed as a ‘autotropolis’? Airports can be built as hubs connecting larger cities to them as Ann Arbor and Detroit. The current region around Detroit Metro Airport does not have the infrastructure to serve a huge city. Ann Arbor and Detroit were developed and currently have the infrastructure to host new development. They need a strong connection to the airport.

Location



Detroit Metro Airport is looking at creating an aerotropolis for this region and they would be stakeholders for aerotropolis. They are Wayne County, Washtenaw County, Wayne Country Airport Authority, Belleville, Huron Charter Township, Romulus, Taylor, Van Buren Township, Charter Township of Ypsilanti, and Ypsilanti.

Surrounding Cities

Detroit, MI



[Holeywell, Ryan]



[Dumas, Karen]

Flint, MI



[Nicole]



[Watson, Jason]

Ann Arbor, MI



[About Ann Arbor]

Toledo, OH



[Greetings!]



[Toledo Ohio]

DTW Future Aerotropolis



DTW as existing

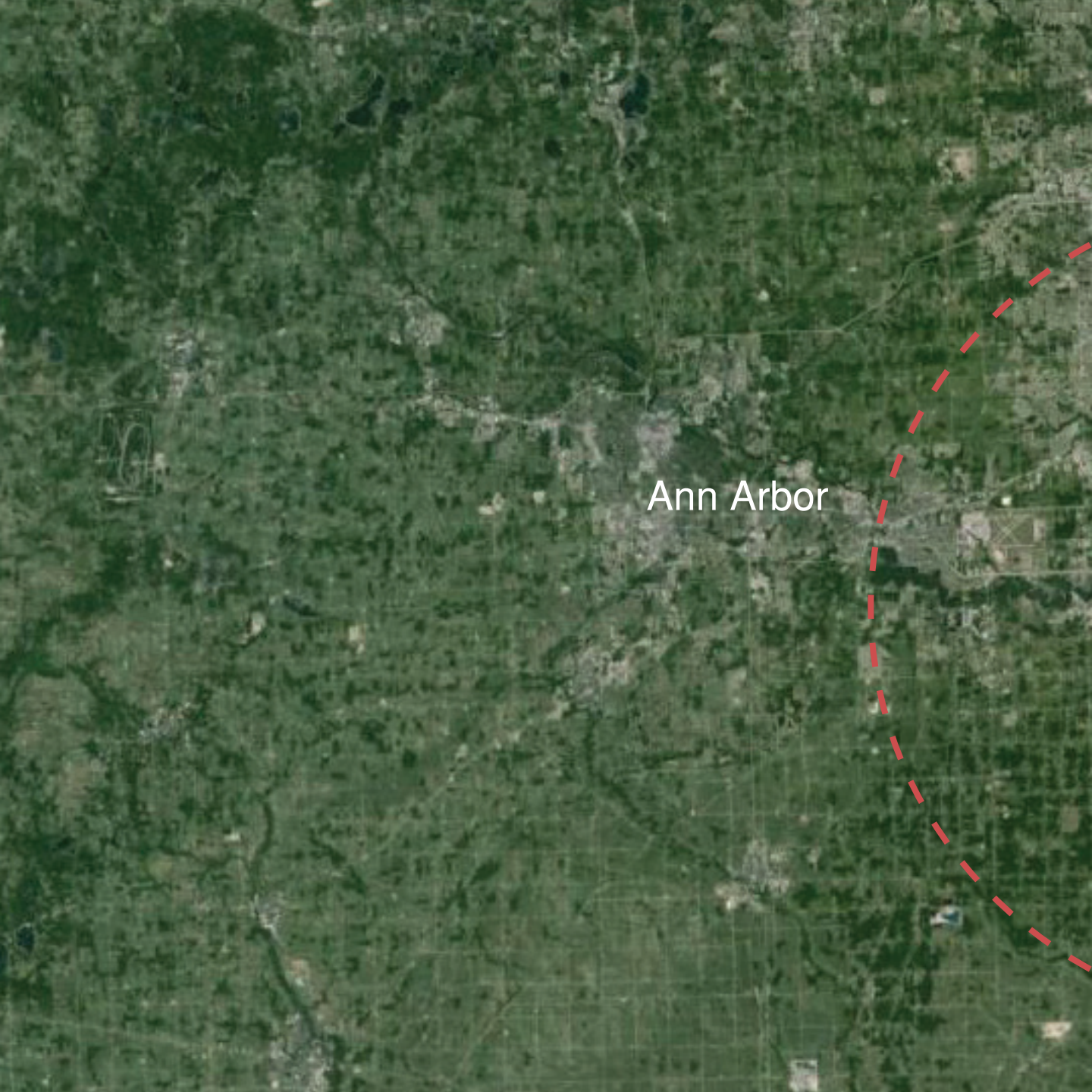
(Arend, Mark)





*Location*⁰⁵





Ann Arbor

Detroit Aerotropolis Region

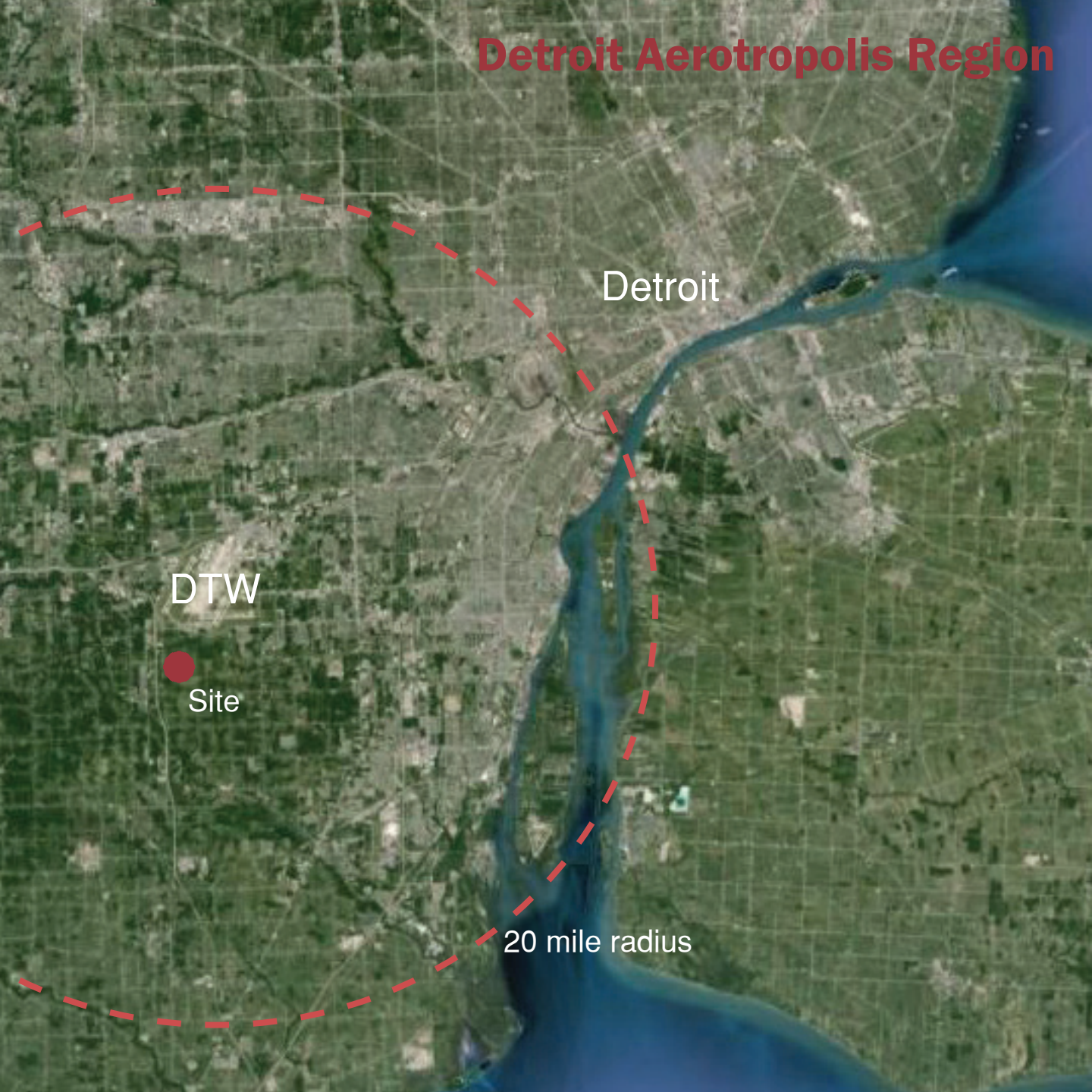
Detroit

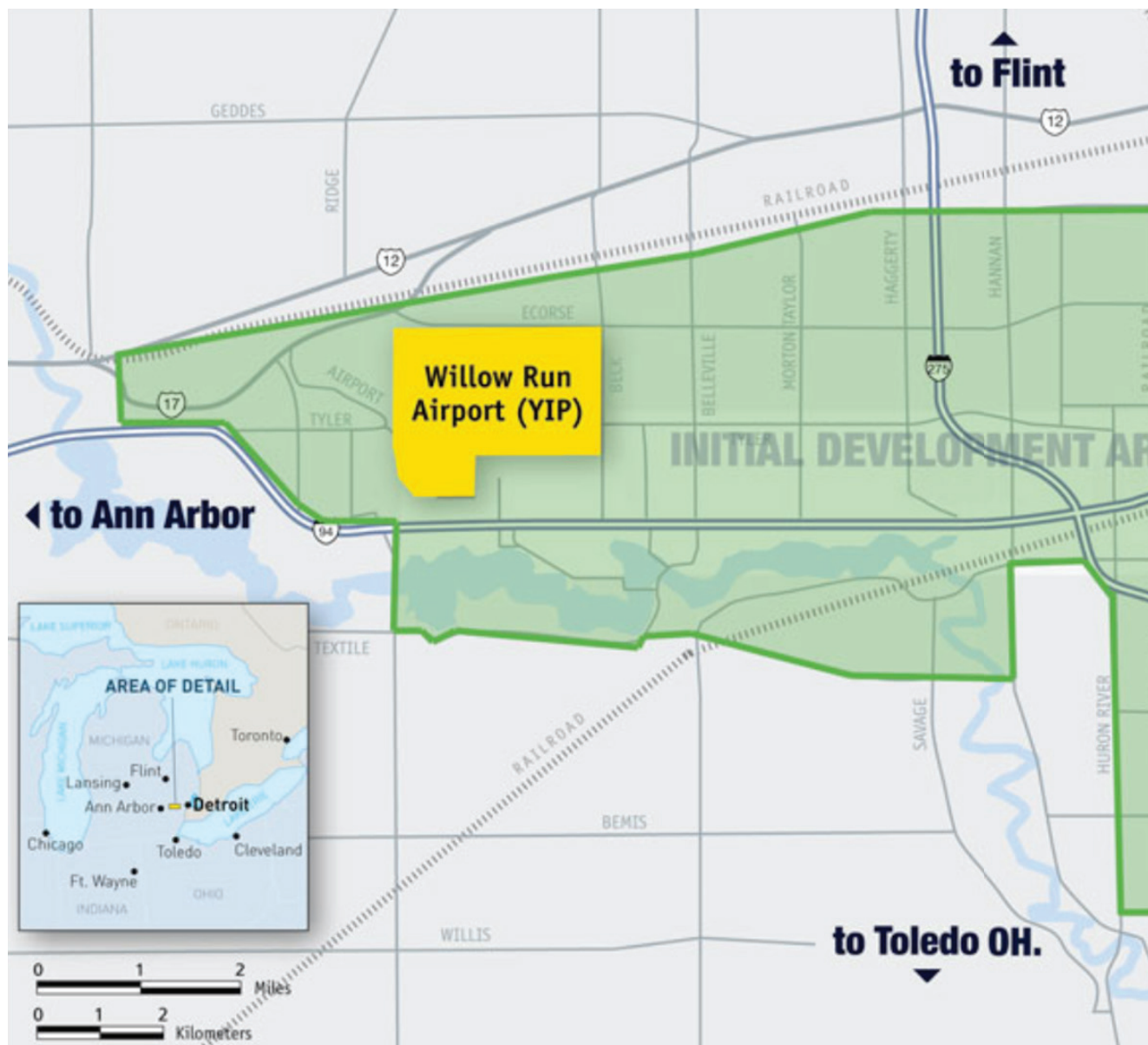
DTW



Site

20 mile radius





Detroit Metro Airport Property

Vantage Port

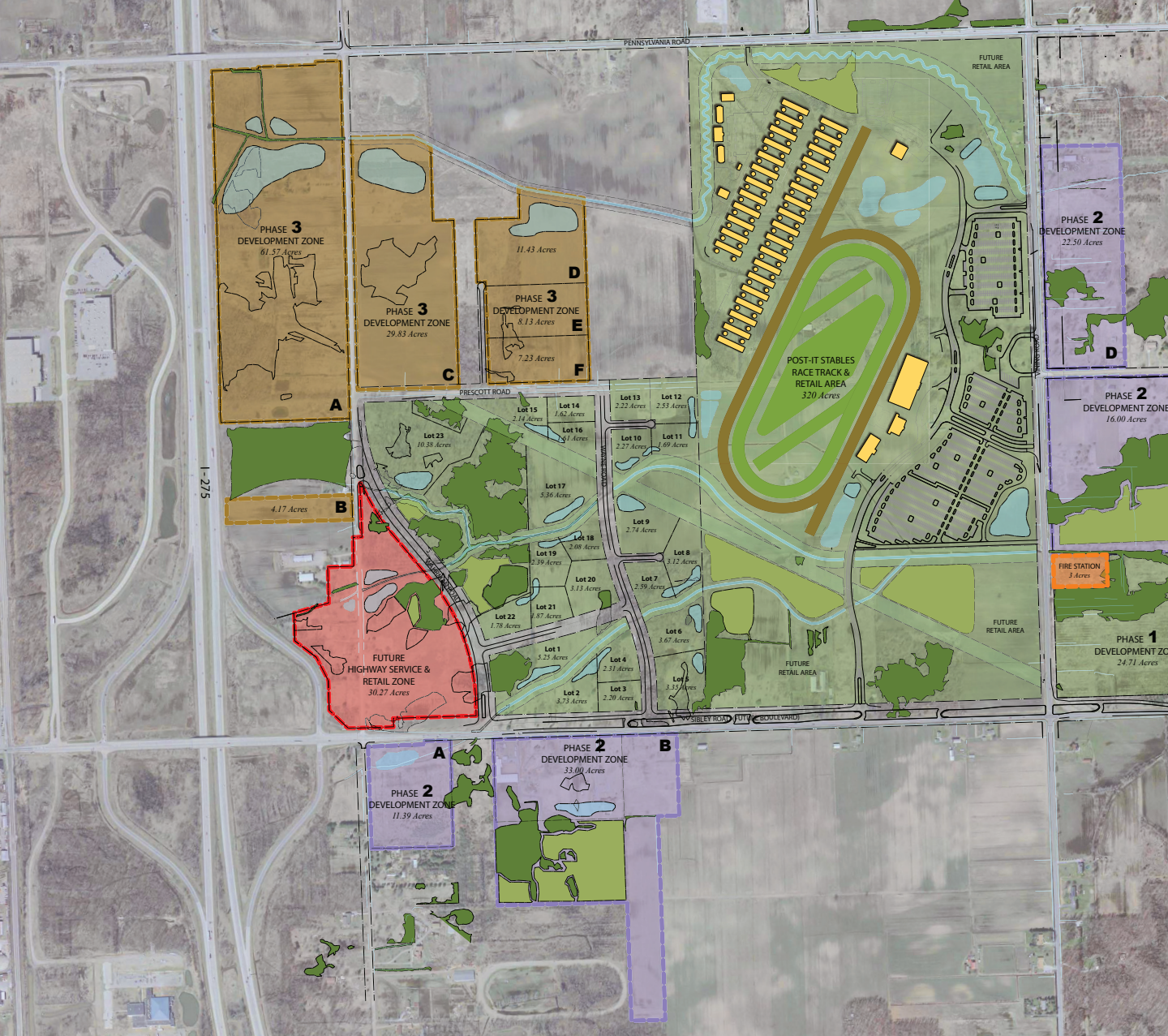


“Aeropark” is an Aerotropolis plan for 1,500 acres southeast of DTW. It will encompass industrial, corporate headquarters, research, and development parks. The creation guidelines are who can build, how it should look, and who qualifies to set up there. Aesthetics are not high on the list, which is a major downfall, especially for a new, large development with a clean slate. (Kasarda, John)

A one-square mile lot of Aeropark is currently being developed. It was referred to as “Pinnacle Aeropark” but has been relabeled as “Vantage Port” by a new developer. It is an old prototype described by, “picturing a glass box half hidden among poplars while planes hover overhead.” (Kasarda, John) The plan laid out hotels, a horse race track, casino, lakeside resorts, performing arts center, and other entertainment, while incorporating large amounts of existing wetlands. The site currently sits with an abandoned horse race track, the Pinnacle Building, and 15 horse barns. This area was to create a half-mile village south of the airport, with narrow streets, multistory buildings with supermarkets, day care centers, shops, offices, and apartments. Farther out of the city there would be bungalows and retirement communities for those who would not need to own a car and fly on the weekends. (Kasarda, John) (Hinzmann, Dennis)

The Vantage Port development is on the southern edge of the aerotropolis master plan. It will be urbanizing a region that is currently vacant lots, woods, and a small industrial strip. This current plan does not reflect the interest or have the

["Vantage Port"]



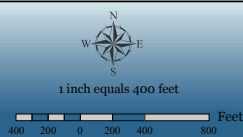
Wayne County Pinnacle Project - Mixed Use Development Master Plan



support of the community. The additional industrial parks should be located where the current shipping yards are and other industrial park strips along interstate 275. (Kasarda, John)

The current master plan for aerotropolis is an inaccurate model for the new development of homes, creating dwellings for the region that fits the needs and purposes desired. The plan lacks a master plan and aesthetics interests for the metropolitan region. It could end up being urban sprawl, which is not a smart growth plan the region needs. The plan will need to consider future expansion of the airport, and how it will affect the region. The developments could collapse, creating an abandoned region, a dangerous setting, making this plan a waste of a rural region. The metropolitan region is taking a large risk with this plan not including an accurate model for the community and their needs. The priorities are for the development, not for the community, and with no real model to follow, the concept of aerotropolis will not be a guaranteed success. The lack of accuracy of a prototype or model is due to the absence of a master plan. Projects are being approved, but without the master plan they are unable to fully design the city into a web of aerotropolis for future expansion: a true model for local attractions, creating “things to do” for the locals. (Kasarda, John)

The community lacks current attractions to bring outsiders in. The Pinnacle Race Track was an attraction point for a few years when it opened in 2008, but it closed in 2010. Horse racing succeeds in areas that have been there for years, in established cities. It brings in a particular group of people who race or bet on horses. If one does not have the knowledge of betting on horses, they are not likely to bet the large amount of money that needs to be involved. (Kasarda, John)

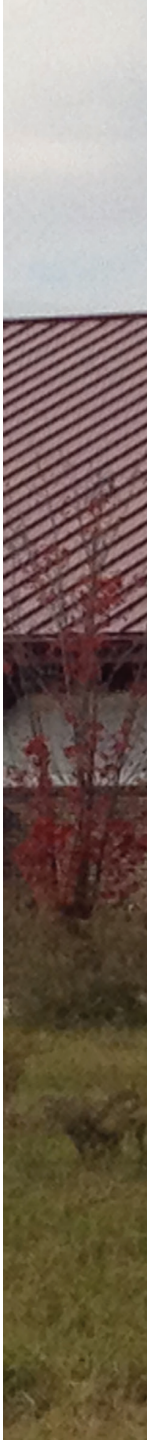




Site Conditions



The idea of aerotropolis is a great plan made for success. The business and developments it could bring to a region could help rural lands become urbanized, localize jobs instead of out sourcing, and it can attempt to populate a community. Imagine a rural region of farmlands and woodlands still intact, and you urbanize pieces of the area. You will have country and city folks mixed in the region, creating a unique community that people desire and would move for. The current plans bring into question who it really is for. The plan takes in anything and everything from batteries, biofuels, windmills, and smart grid building software consultancies. The worst case scenario, which is the most threatening for the community, is they build and no one comes. On the flip side, it could transfer talents and opportunities elsewhere. For a successful development of this region, aerotropolis needs to be looked at from a different angle than John Kasarda is used to making. He needs to make a plan that fits, that is different, and that celebrates this region and connects to the larger cities it centers between. To the current population, the most important element is their rural landscape. (Kasarda, John)





PINNACLE PAVILION





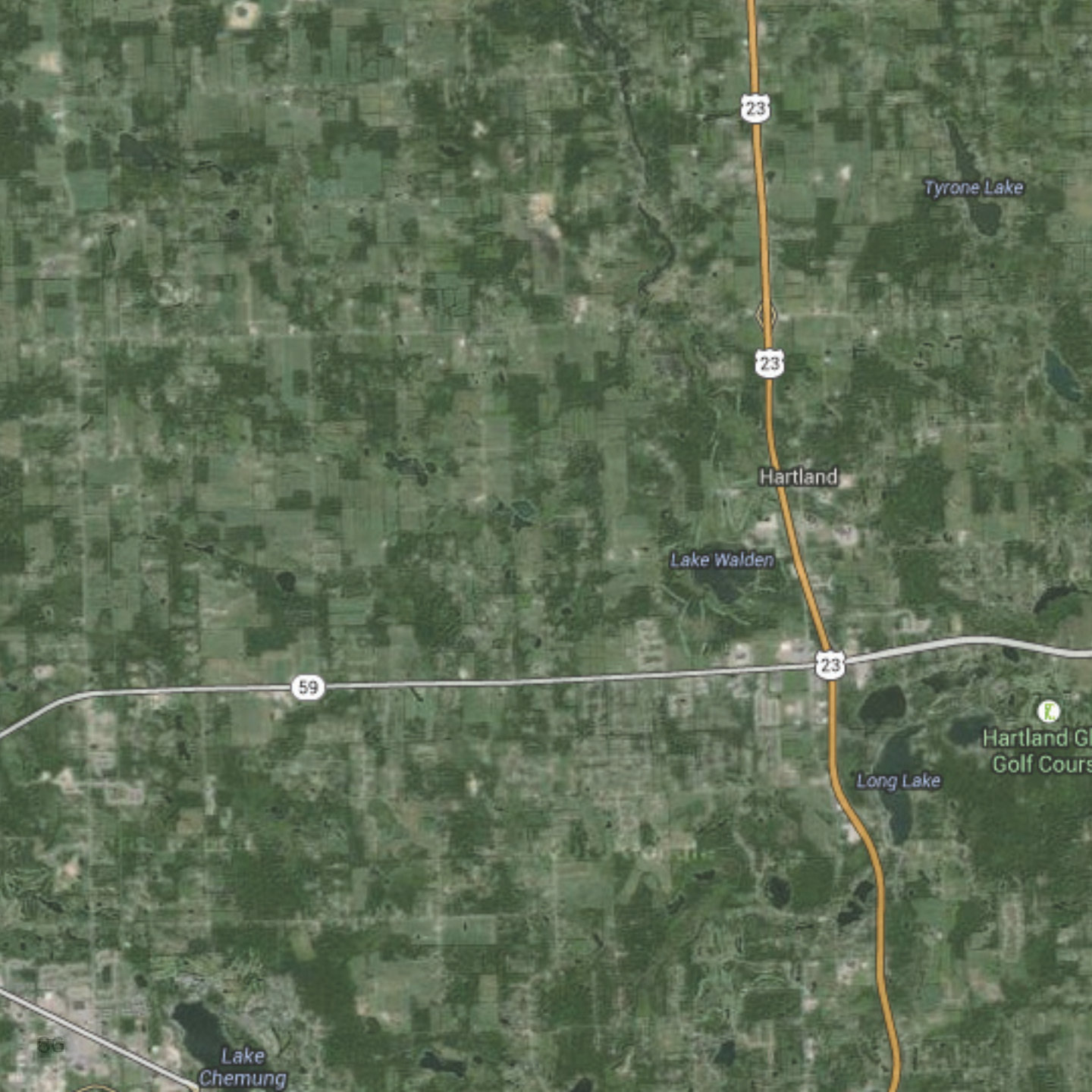
Horses are the last bastions holding back sprawl

- Sharon Greene

Equestrian ⁰⁶ Communities



["Equestrian & Lifestyle Amenities"]



23

Tyrone Lake

23

Hartland

Lake Walden

59

23

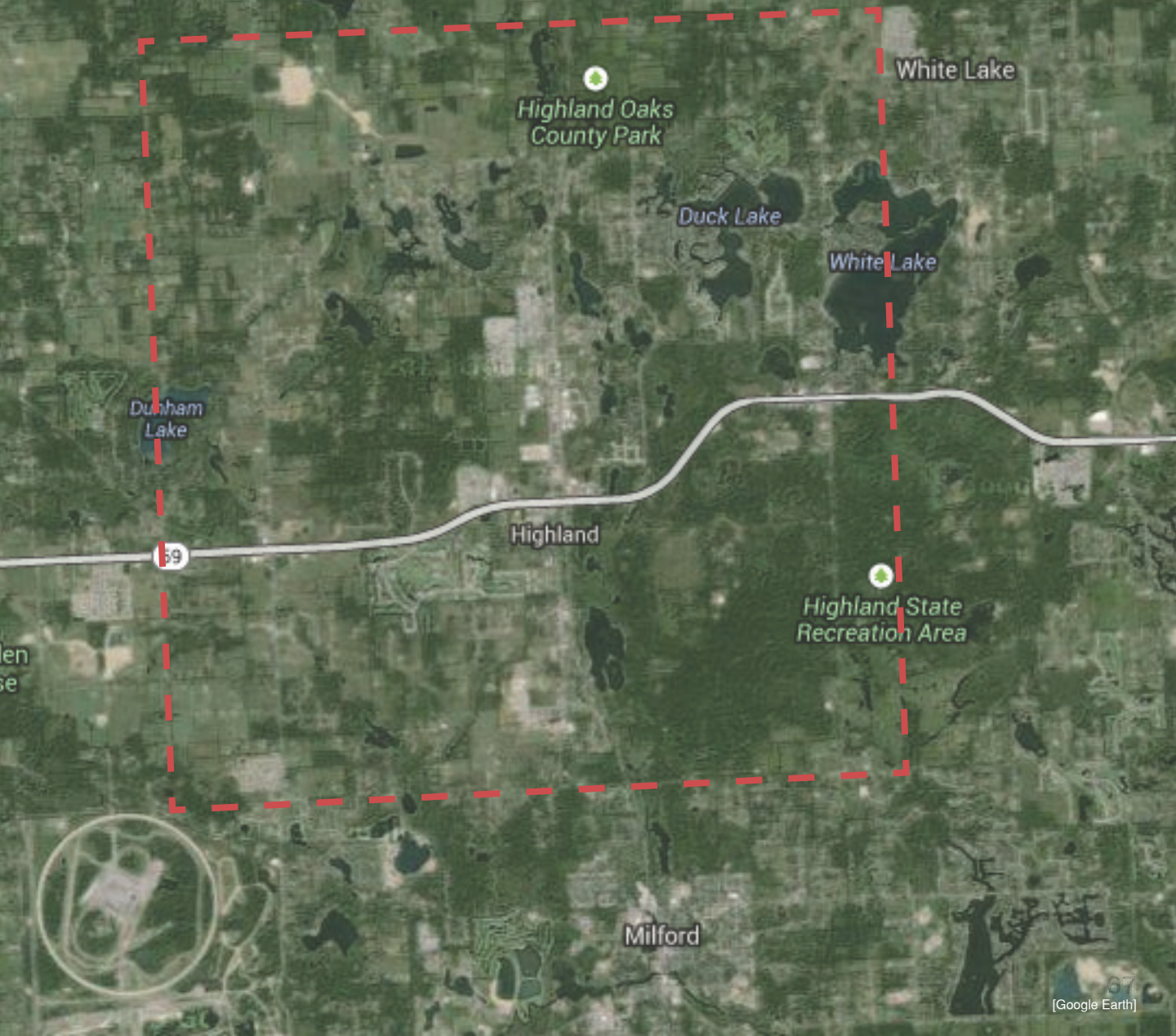
Hartland Golf Course

Long Lake

Lake Chemung

Highland Equestrian Conservancy

Highland Township, Michigan





"Show me your horse and I will tell you who you are."

- Old English Saying

“Many people have signed for the ‘good old days’ and regretted the ‘passing of the horse,’ but today when only those who like horses own them, it is far better time for horses.” – C.W. Anderson

The site has an existing race track for horses, and 15 horse barns that are already prepped and ready for some type of horse activity and boarding of horses. The site has had testing done, so horses will not be bothered while staying here or performing. The current community is very involved with horses, and there are several horse boarding barns throughout the township. The current high school has an equestrian team but no facility or place to practice and perform. This site could cater to the needs of the community while still being a place for entertainment for the commuter or conference attendees. There are successful equestrian communities in Michigan, as well as throughout the country. These communities cater to the residents, desires, and really build a city around their life style. (Liebman, Bennet)



["Horse-Friendly Highland Township"]



["Horse-Friendly Highland Township"]

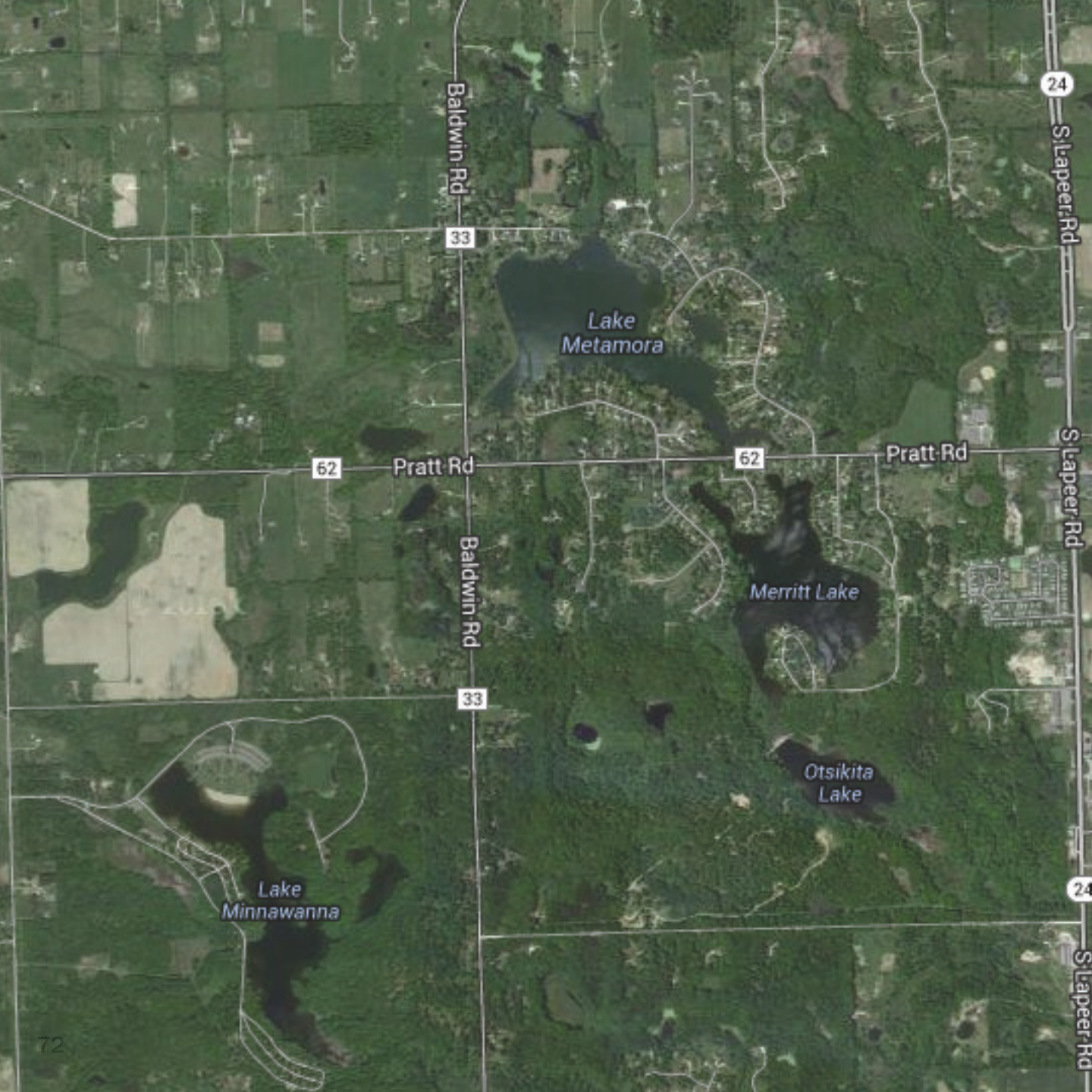
There are several examples Huron Township could consider. Highland Equestrian Conservancy is the first of its kind in Michigan, in Highland Township. The “highland model” was established to promote conservancy space, interconnecting greenways and wildlife corridors that include equestrian trails. (“Highland Equestrian Conservancy”) This community is a great example for Huron Township to follow, keeping their rural aspect strong but allowing urban development to happen. The community connects their lifestyle with the urban development that needs to happen. (“Highland Equestrian Conservancy”)

***"Riding a horse is not a gentle hobby,
to be picked up and
laid down like a game of Solitaire.
It is a grand passion."***

-Ralph Waldo Emerson



["Horse-Friendly Highland Township"]



Baldwin Rd

33

Lake
Metamora

62

Pratt Rd

62

Pratt Rd

24

Silapeer Rd

Silapeer Rd

Baldwin Rd

33

Merritt Lake

Otsikita
Lake

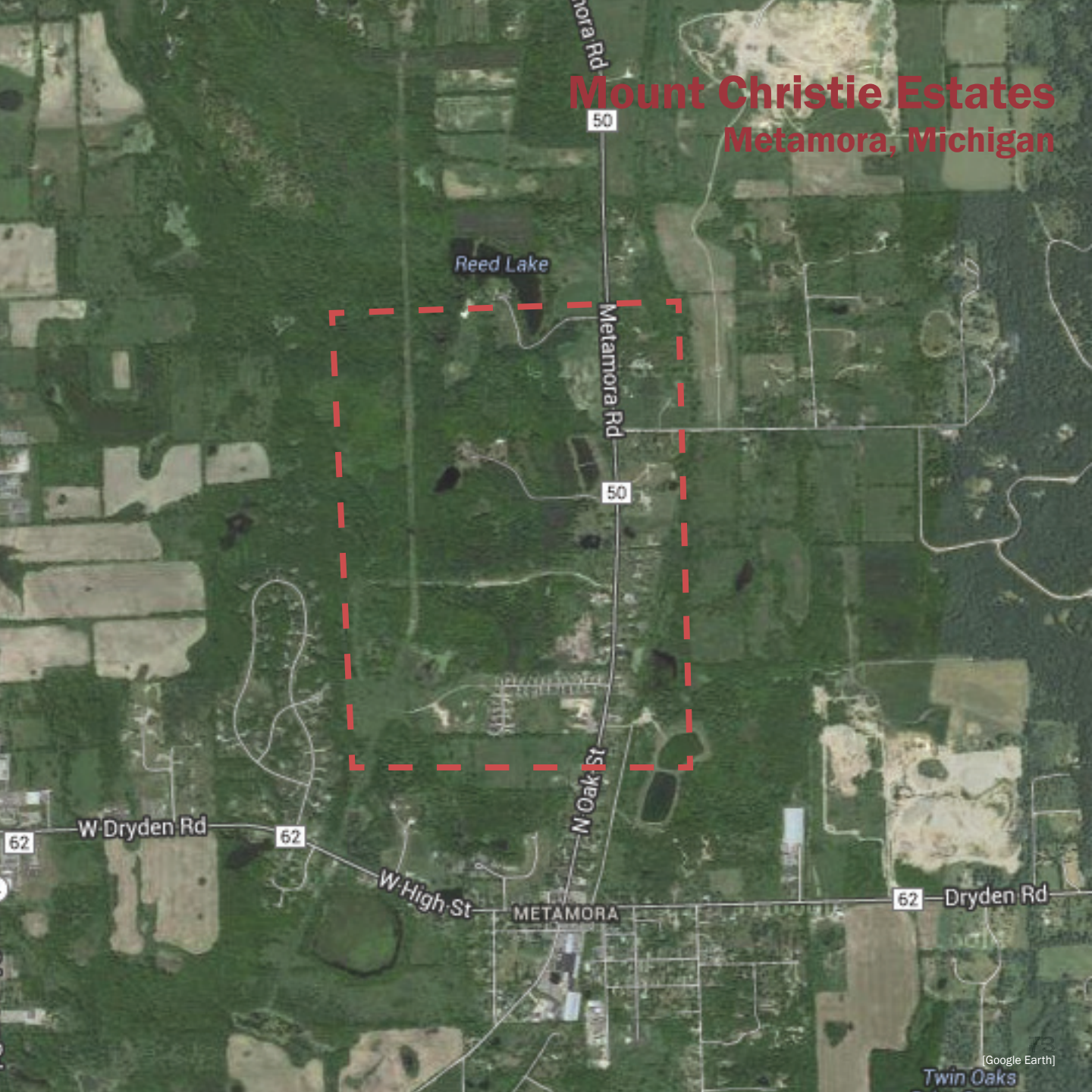
Lake
Minnawanna

24

Silapeer Rd

Mount Christie Estates

Metamora, Michigan





[Sherwood, Anne]

***There is something about
the outside of a horse
that is good for the inside of a man.***

-Winston Churchill

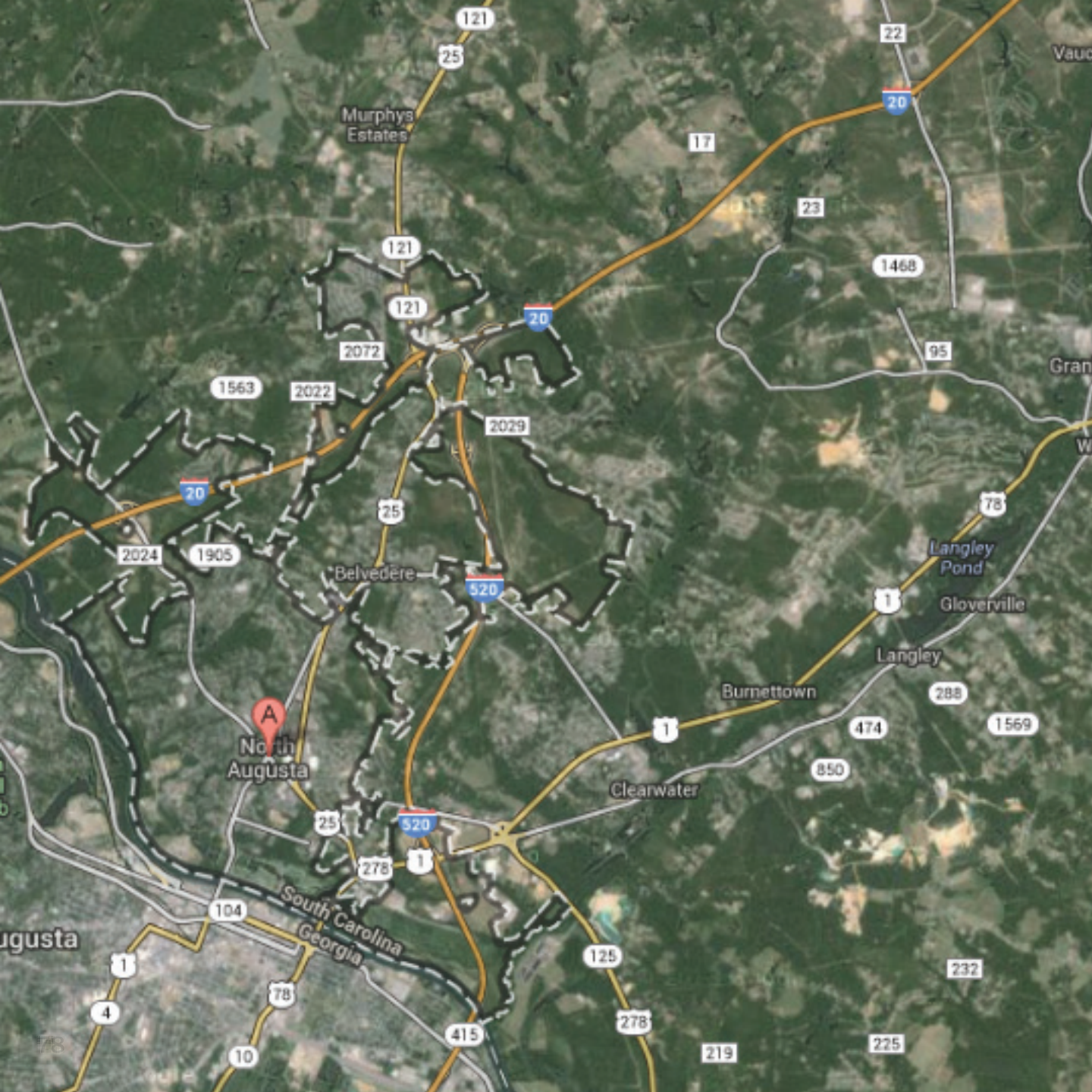




Mount Christie Estates in Metamora, Michigan is a gated community of 34, one-plus acre lots with 50 acres total. Each lot is carefully laid out for the homes to have a view of nature, not another home. Metamora Township is known for its equestrian communities, protecting them from uncontrolled growth, and keeping trails accessible. The community is also known for the history of horses and their use, such as hunting with hound dogs. ("Mount Christie Estates")

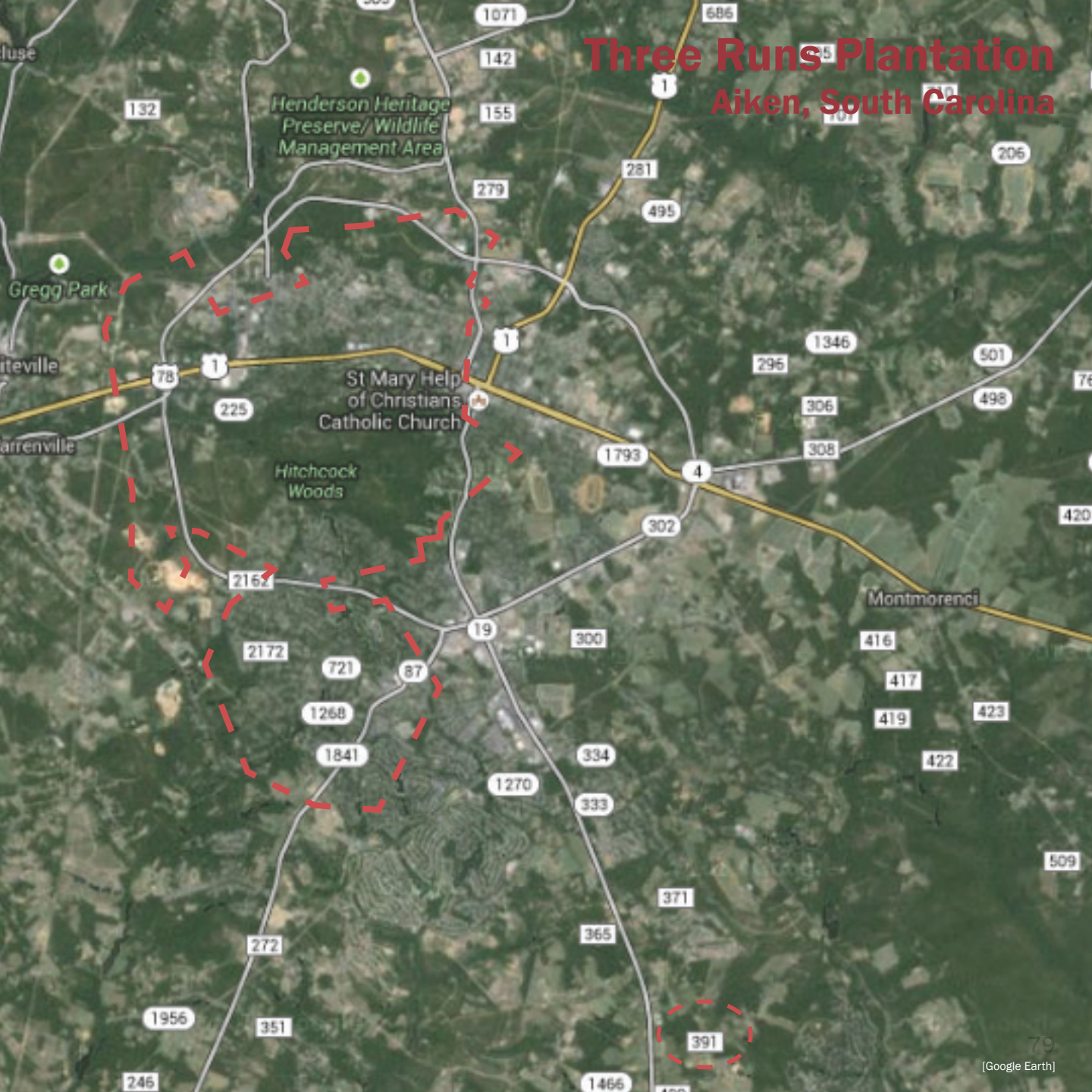
***"A Man on a horse is spiritually
as well as physically bigger than a man on foot."***

- John Steinback



Three Runs Plantation

Aiken, South Carolina







Three Runs Plantation in Aiken, South Carolina is a 2,400 acre custom-build community. Home lots range from four-plus acres, allowing you to build to suit your lifestyle. They have 30 miles of maintained trail system through woods, savannahs, wetlands, and hill sides with creeks. They have a clubhouse for competitions, a practice arena, and a pavilion for gatherings. It is a small town where horses have always existed, and they have a perfect blend of the old and new. (“The Trails At Three Runs Plantation”)

The master plan on the left is Three Runs Plantation community, along with images on the next page showing the activity spaces and facilities.





["Equestrian & Lifestyle Amenities"]



["Equestrian & Lifestyle Amenities"]



["Equestrian & Lifestyle Amenities"]



Proposal 07



Community + Horses



“Huron Township is a unique community. We’re the last semi rural community in the area, and our aim is to keep it that way. The development is necessary for the growth of the township, but we want to keep it on the rural side”

Eike Doom Supervisor at the time. (Hinzmann, Dennis)

Show Hunter



Dressage



Jumper



Inspiration

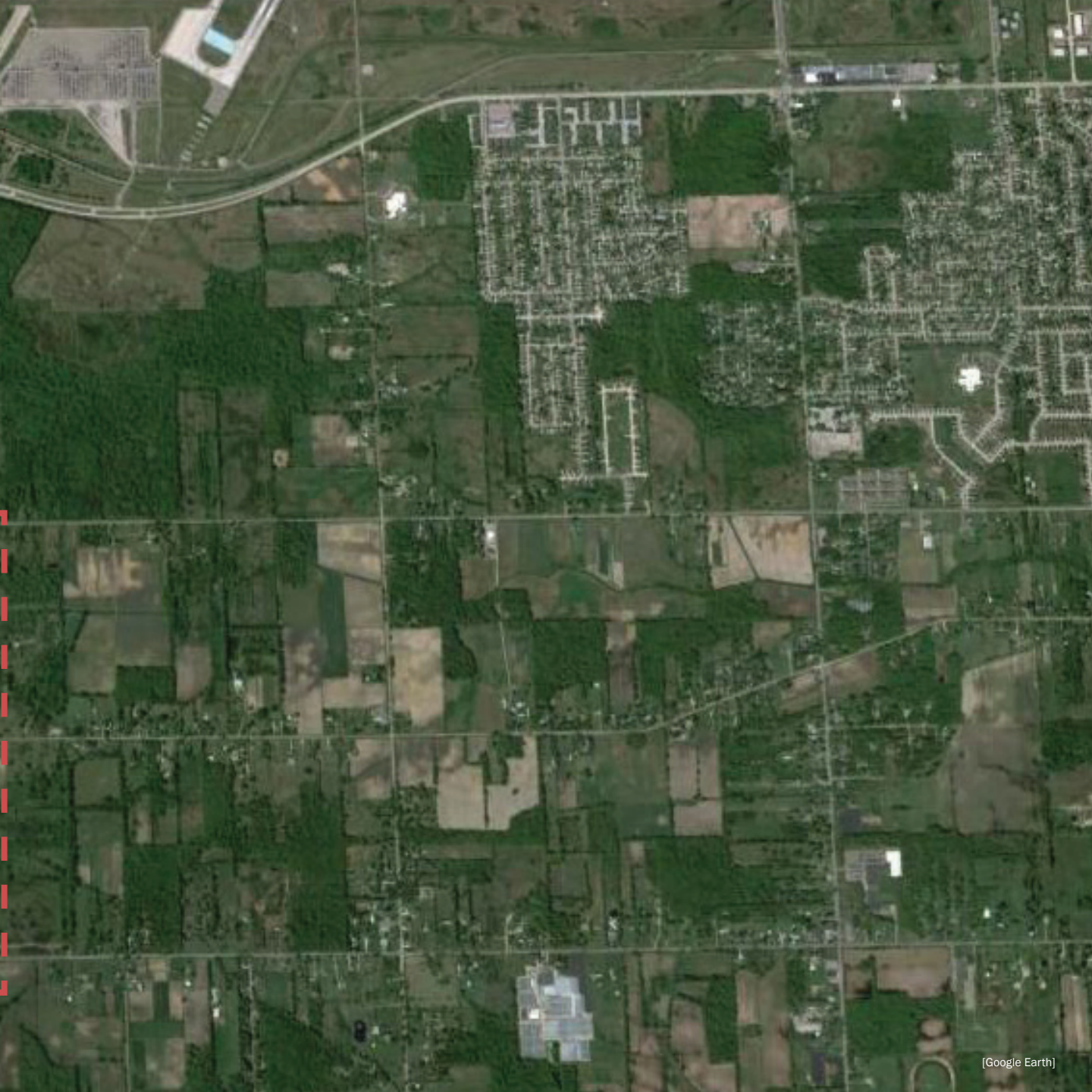




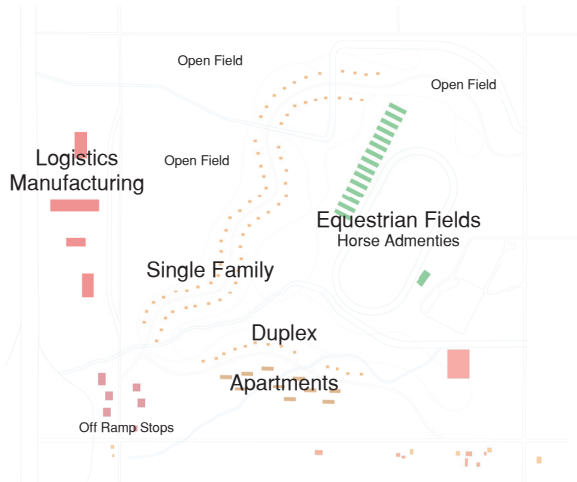
Site

1 Mile \varnothing

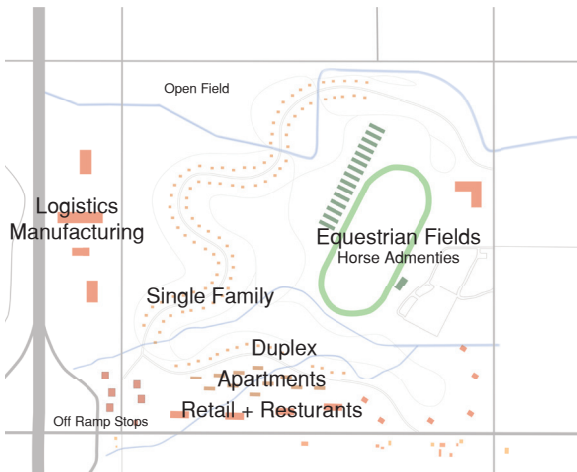




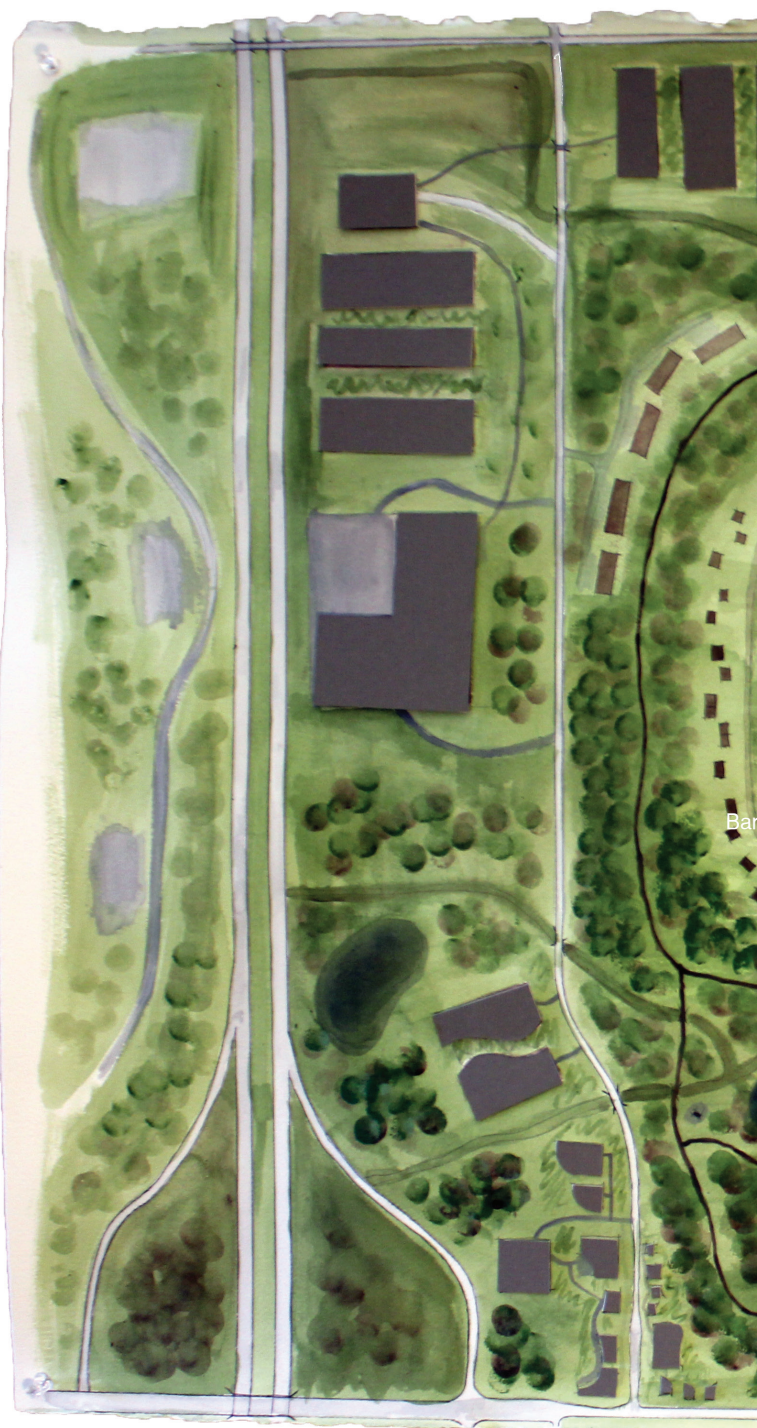
Proposal 1



Figure



Figure





Pennsylvania Rd

Single Family
Duplex
Apartments

Paddocks + Fields

Indoor Arena

Club House

Parking

Equestrian Fields
Horse Amenities

ns + Paddocks

Picnic Areas

Hotel
Conference Center

Wetlands

Picnic Areas

Parking

Retail
Resturants

Sibley Rd

Vining Rd

Proposal 1

Huron Township, adjoining the city of Romulus, and other nearby communities have horses embedded into their lifestyles. The site should take advantage of a large development and embedded lifestyle when developing instead of ignoring the needs of the community. This region has plenty of space and a metro park trail system that could be fully utilized in a new type of development. Aerotropolis comes in and brands areas. This region should brand themselves, making it unique from other cities and aerotropoli. A rural urbanization could happen with new plans and developments for smart growth of the area.

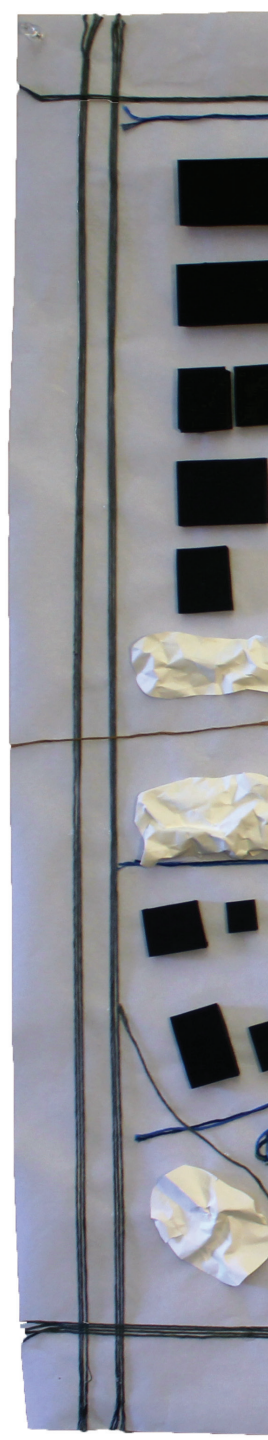
The site can allow Huron High School to utilize a clubhouse, stables, and training arenas for students. People moving to this region and the current community could move to this site for the facilities it provides and they lack. Also, people could move to this site not being involved in horses but wanting to enjoy the unique environment.

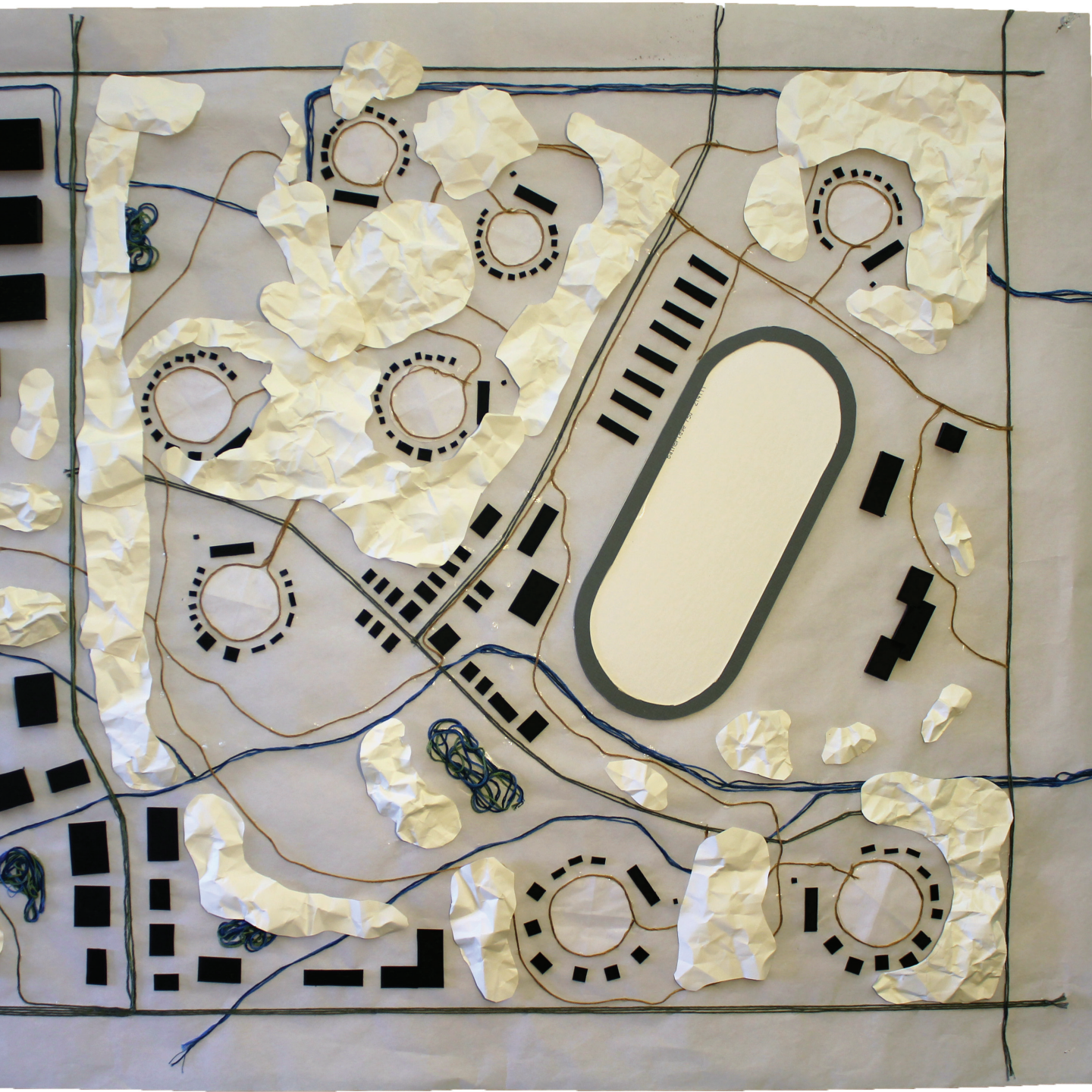
The site can still bring in tax revenues by making this a mixed use site. The industrial strip along Interstate 275 and Wahrman Road, with offices, retail, and restaurants, can continue. Huron Township has a small downtown area that does not contain a grocery store, retail shops, or restaurants. This site could cater to the community who has to outsource simple life essentials and bring in jobs and tax revenue. There are other regions in the aerotropolis development plan where more industrial, logistic parks can happen and not encroach on residential areas.

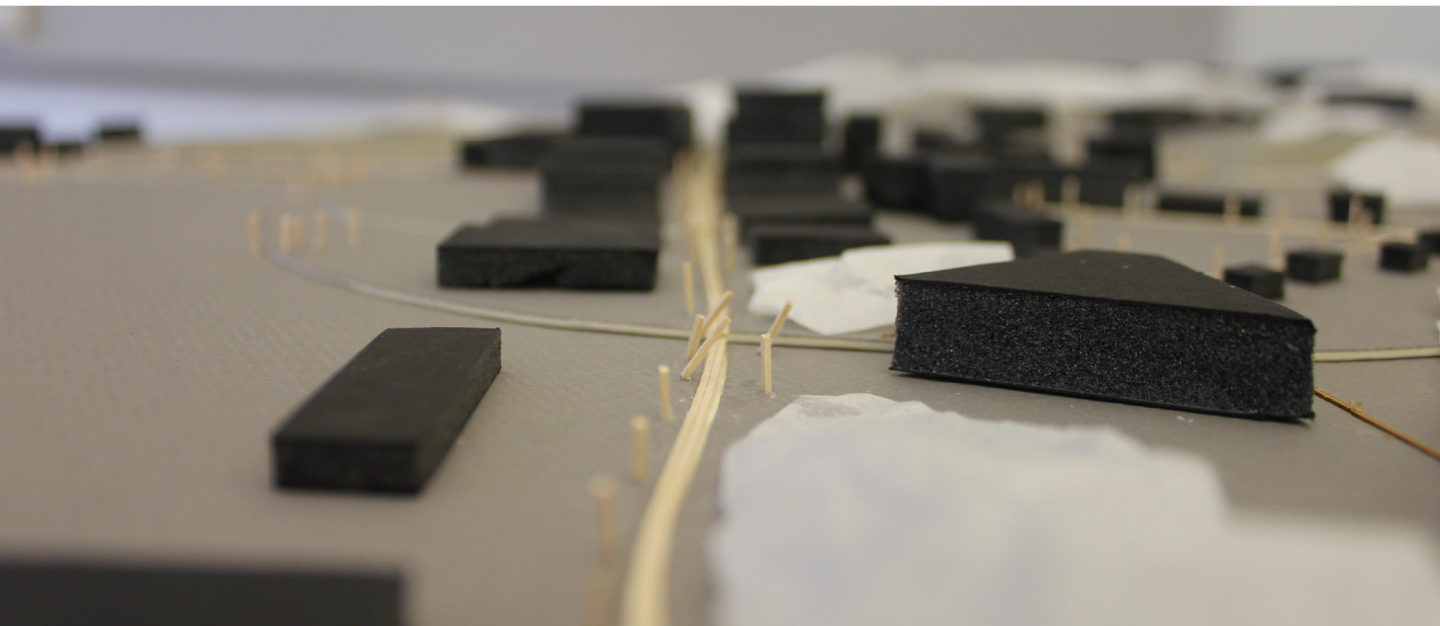
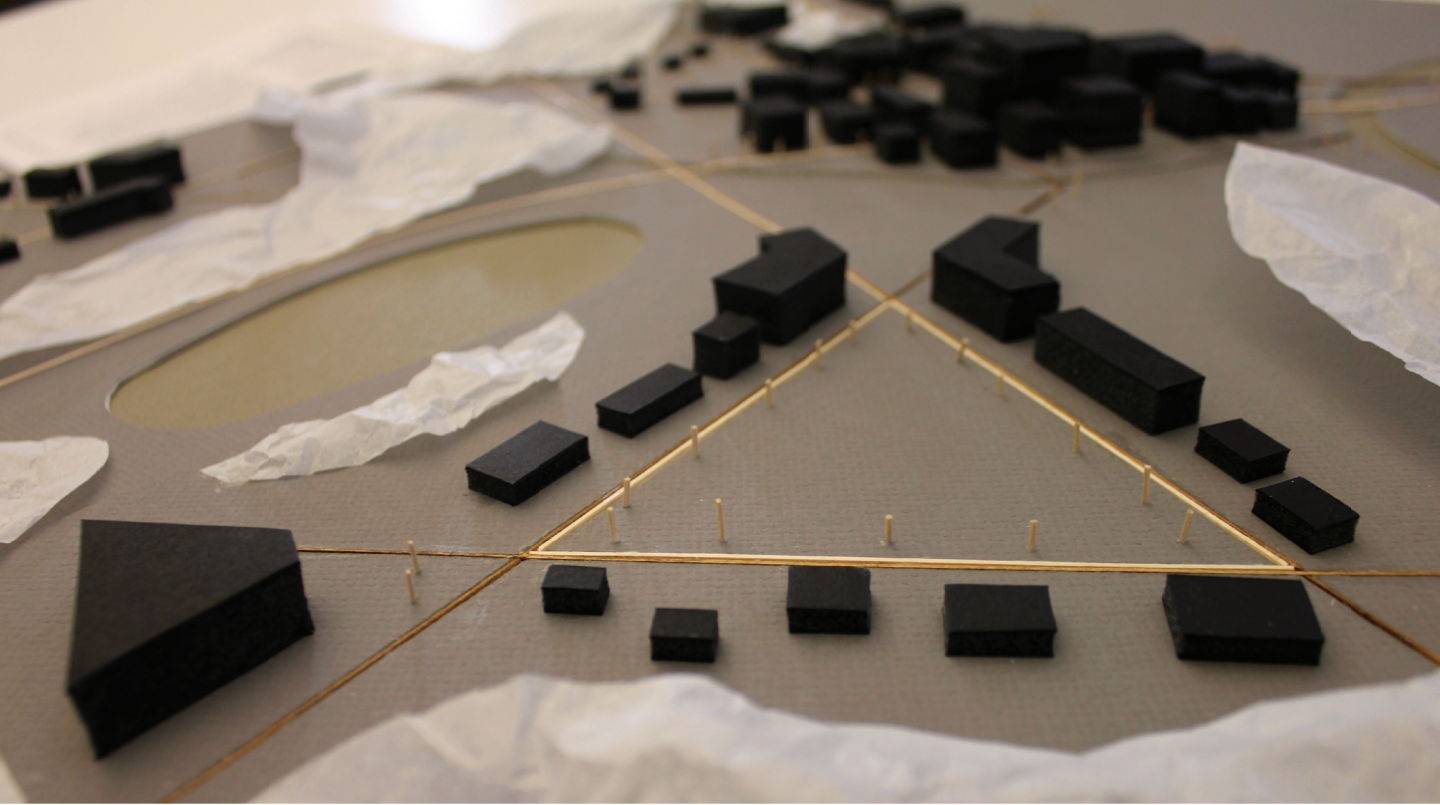
[Pages 96-97]

The first sketch diagrams dissected the one-mile square lots into areas where developments could be placed. It broke down residential, commercial, industrial, and retail shops. It looked into the current wet areas on the site, large county drains, existing woodland areas, and existing structures. It also shows the multiple-use roads from dirt roads, single lanes, and double lanes. It also sits directly between Interstate 275, woodlands, and farmlands. This site sits in a region with extreme potential, but it also gives many extreme challenges for the design.

The first proposal brings the residential area to the core allowing direct access to the airport. Each house has direct access to the trail system that surrounds the residential area and grows out throughout the site. In the core of the residential area there are paddocks, which are areas for horses to go out into when not locked in a stable or pasture. There are free range pasture, and stables to have direct access to your horse near your house. These are all shared facilities that the residents would need to accommodate horse types and uses. The stables by the track would be for boarding horses, and horses could be used for lessons. This would be a private club you could join. The Huron High School equestrian team would be a part of this facility.







Section Model

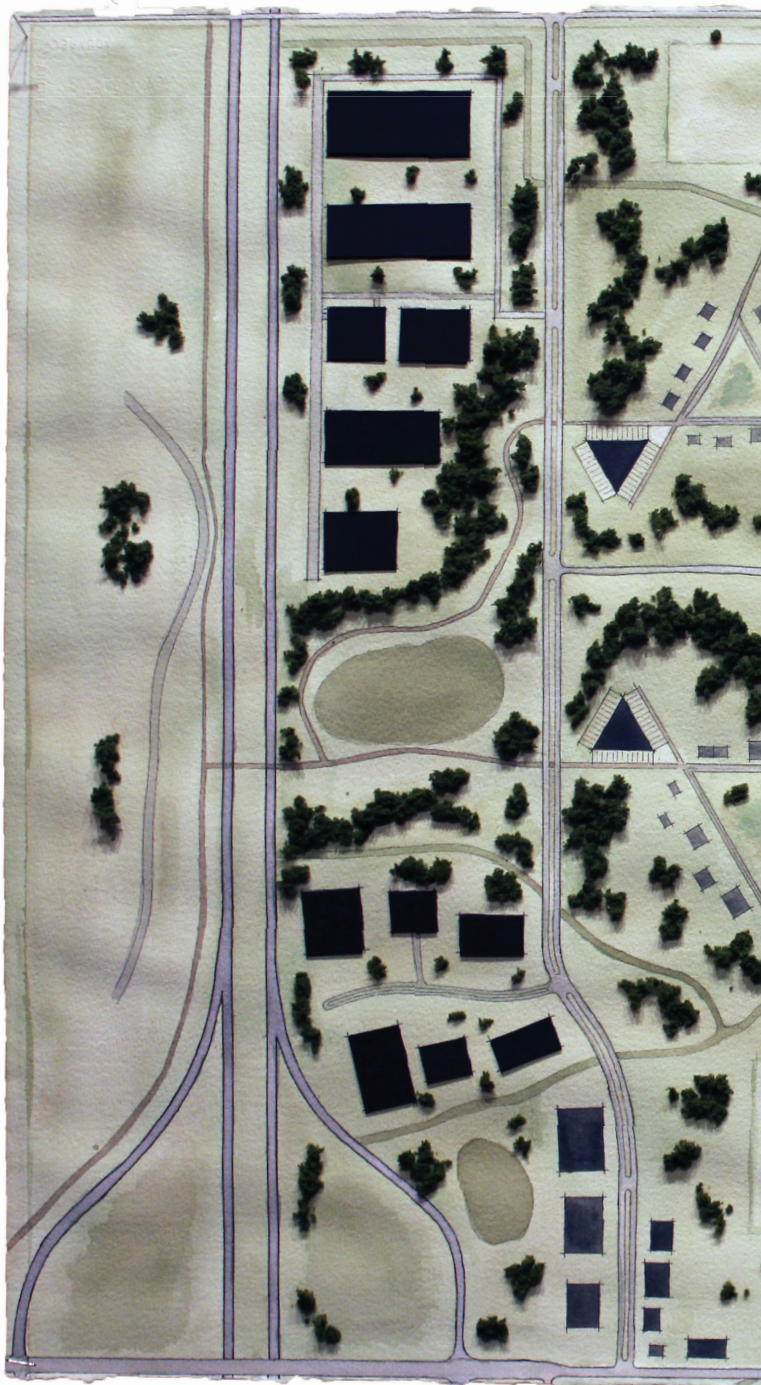


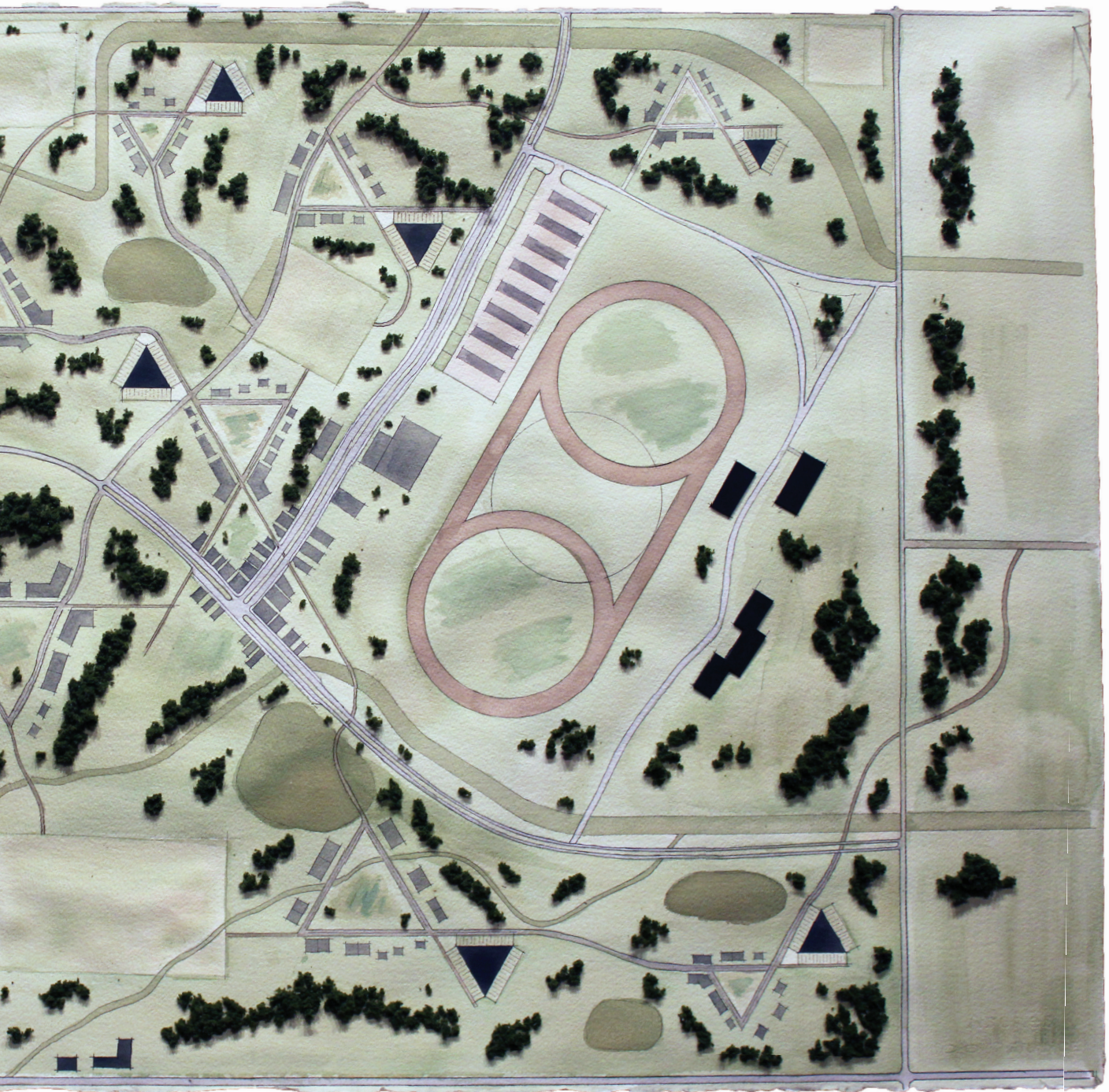
This section model was worked off from the sketch model on the previous page before where the villages were abstract circles. The use of yard showed how each area should connect being either one lane or multiple lane. This in between phase of working out the villages and downtown relationship used a drastic scale to help show volume, and direct relationship of the buildings.

Final Proposal

The concluding proposal examined how the airport is organized. The airport surrounds itself with its transportation and runways with sharp angles and does not allow for large amounts of dead spaces. The first proposal had more of the suburbia house style in a subdivision, not being unique or relating to the airport. To solve this issue relating to the airport, the subdivision style was broken down into small villages, allowing for different types of living styles. Each village would have a horse barn with paddocks, single family homes, townhouses, apartments, and a town center for an area to practice. The strong angles creating the triangular pattern comes from the relation of the runway, not having wasted spaces, and allowing for pathways to connect each village to one another by a trail system. The trails would also connect to an existing path along Interstate 275, which connects to the Metro Park trail system.

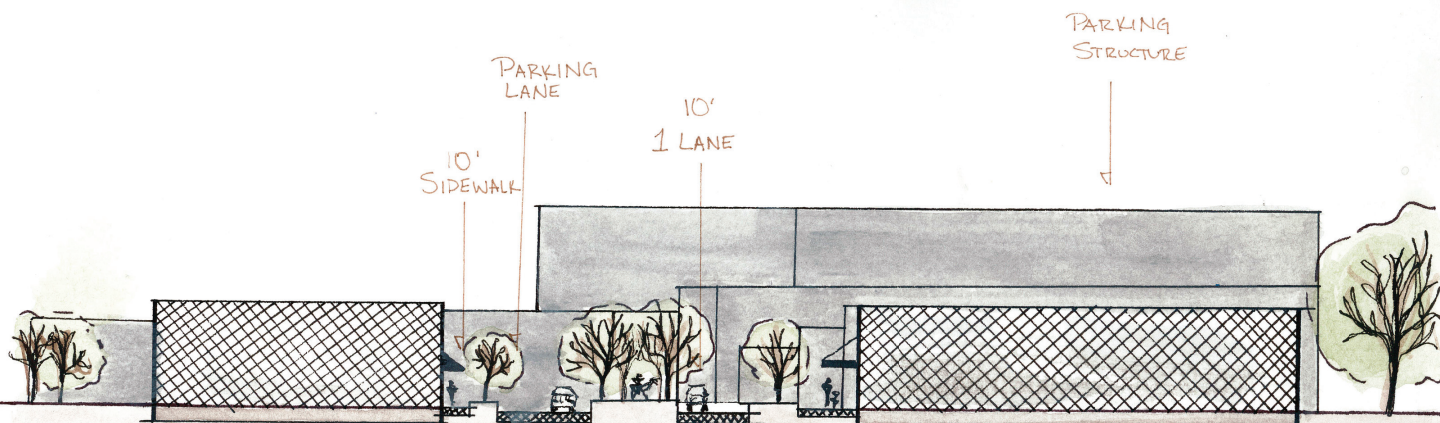
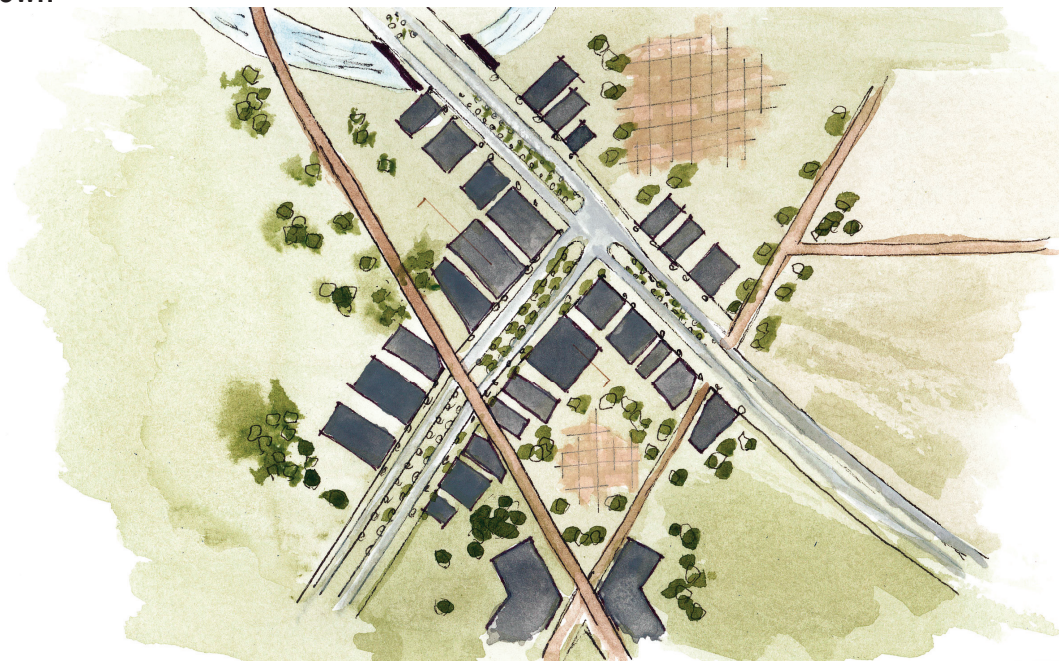
The villages are placed around dedicated wetlands so the areas could be built up to prevent flooding and drain toward the wetlands or existing large county drains. The roadways connecting the villages to the town roads would be mixed use of automobile and horses with designated lanes. Traffic would flow one way through each village. The town roads would connect to a small downtown that would cater to this community, as well as the surrounding community, bringing in essential stores, shops, restaurants, and feed mills that the region lacks. There would also be a boulevard strip for heavier truck traffic to utilize, keeping the heavy traffic away from the community and using the woodlands on the site as buffers for noise.





Typical Road Conditions

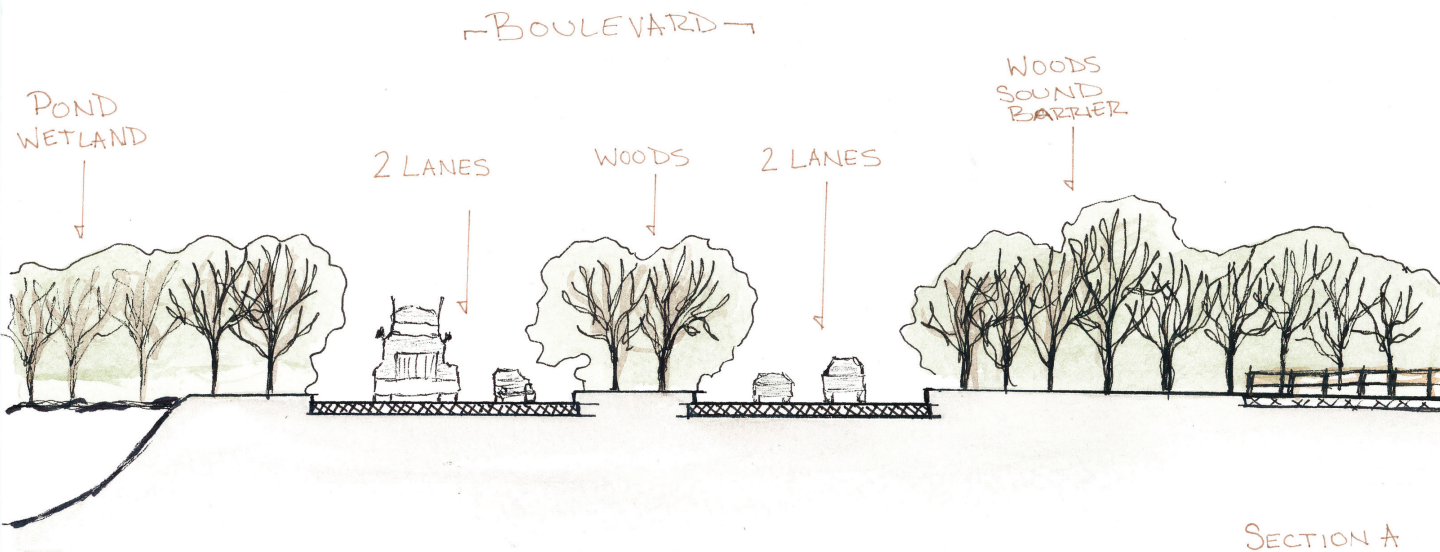
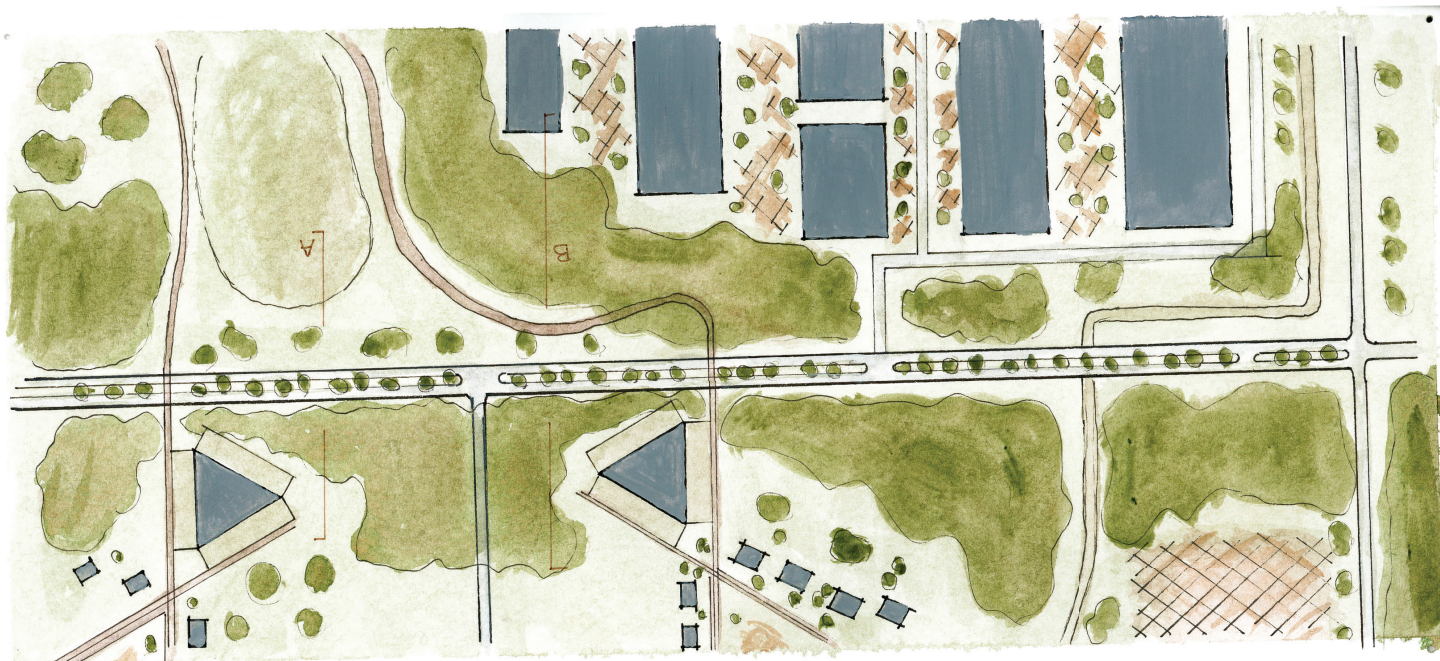
Downtown





These paintings show a plan, section, and perspective of the smaller downtown area on the site. They are working through the road conditions and how they should be treated. To make this a unique downtown area, the horse path goes directly down a nature path in the middle of the street. There is one lane traffic with street parking. The tan areas represent spaces for further design of gathering areas for either people or horses.

Boulevard





These paintings show a plan, two sections, and model image of the commercial boulevard that would be placed to keep heavier truck traffic separate. Bridges keep the horse trails separate from main road automobiles.

The boulevard would connect directly to the airport or Interstate 275. The woodlands would act as a buffer for noise and sight of the manufacturing region from the villages.

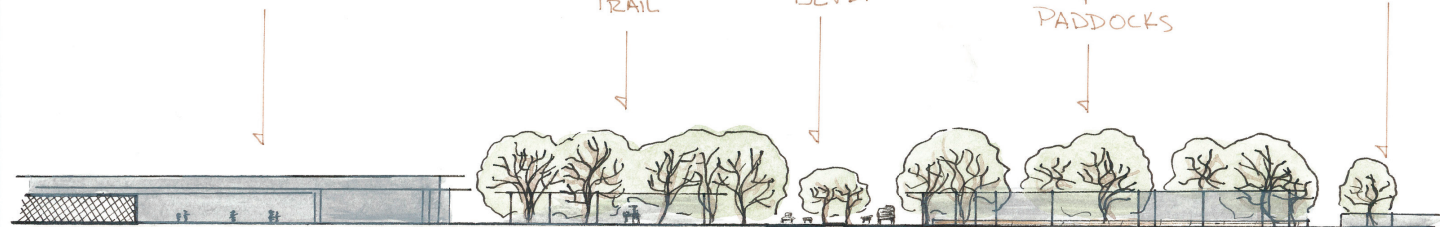
MANUFACTURING

HORSE
TRAIL

BLVD.

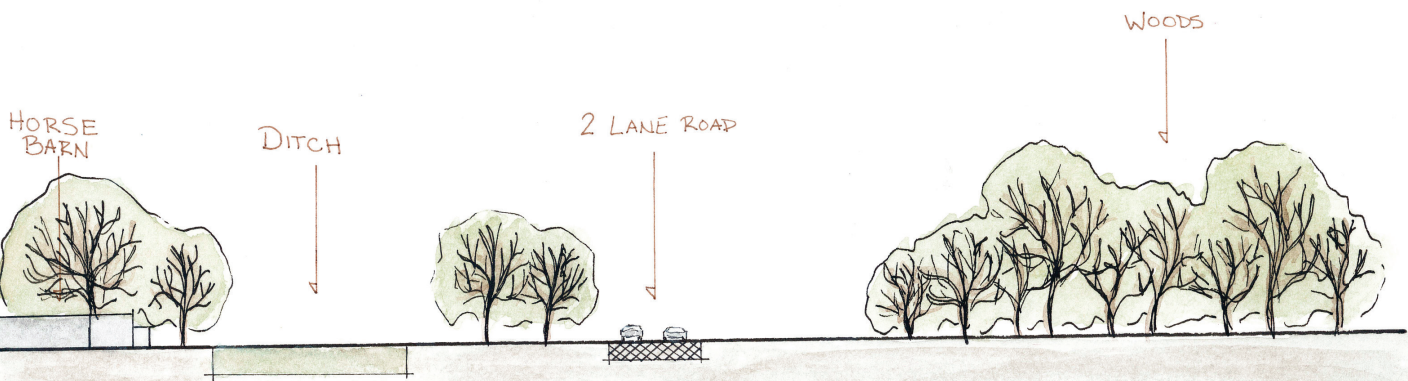
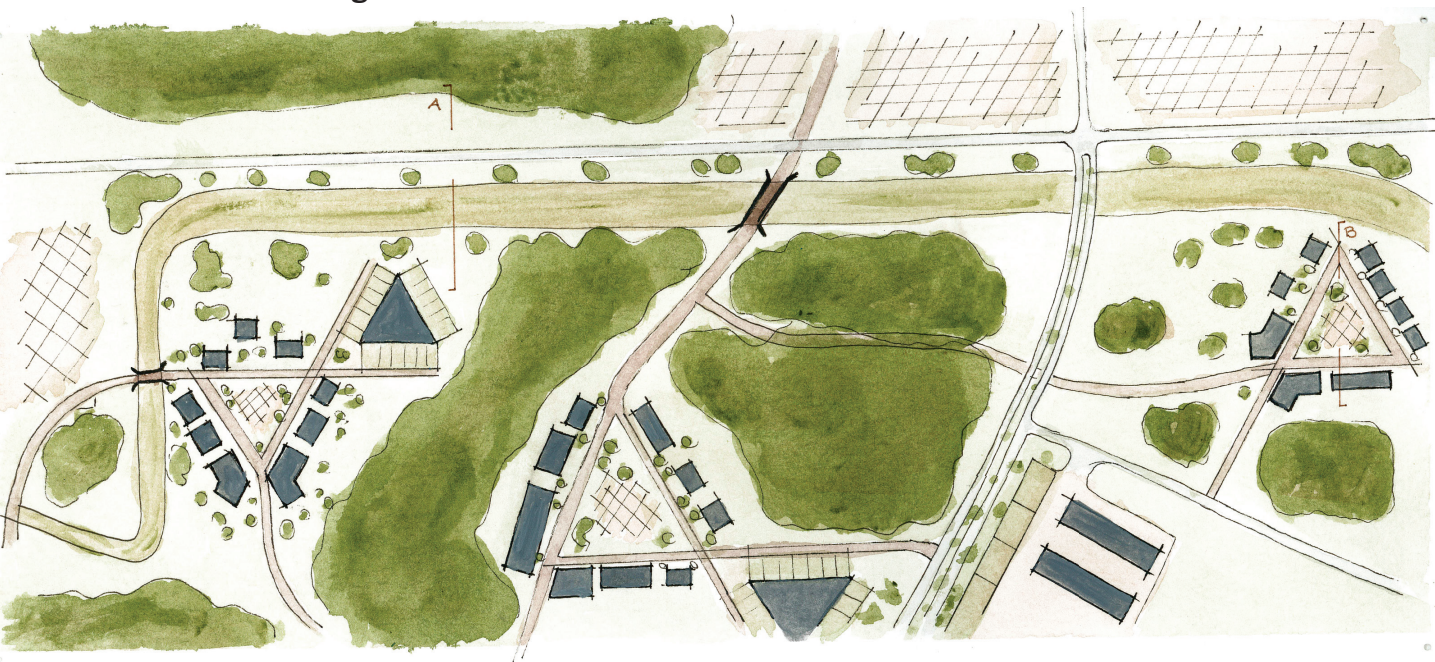
HORSE BARN
+
PADDOCKS

VILLAGE



SECTION B

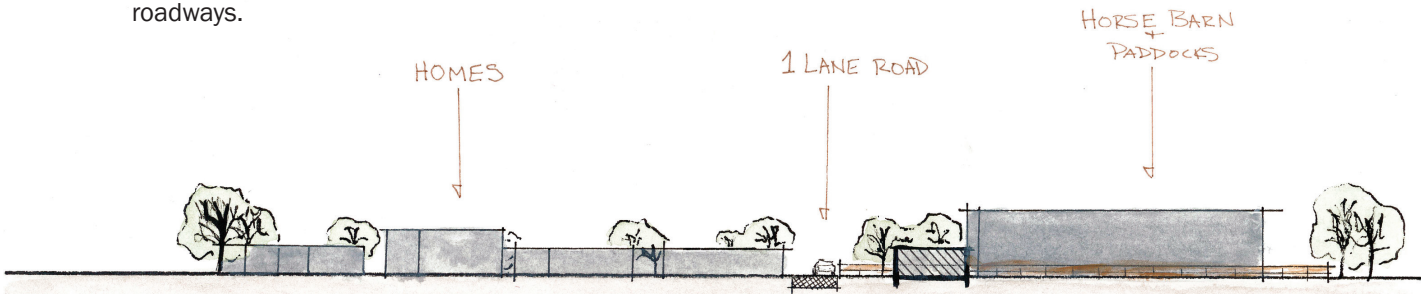
Main Roads + Villages



SECTION A

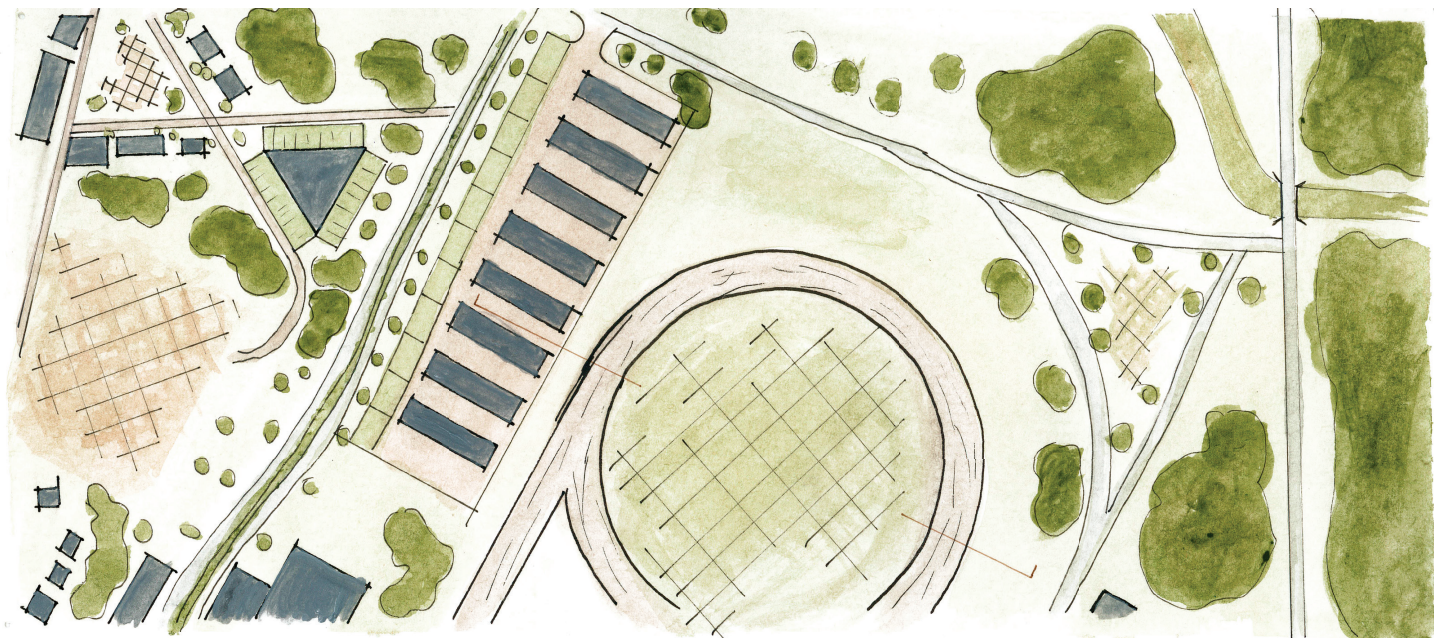


These paintings show a plan, two sections, and perspective of the main roads and village's relationship, using the woodlands to create some privacy for the villages and noise buffer from the heavier-traveled roadways.

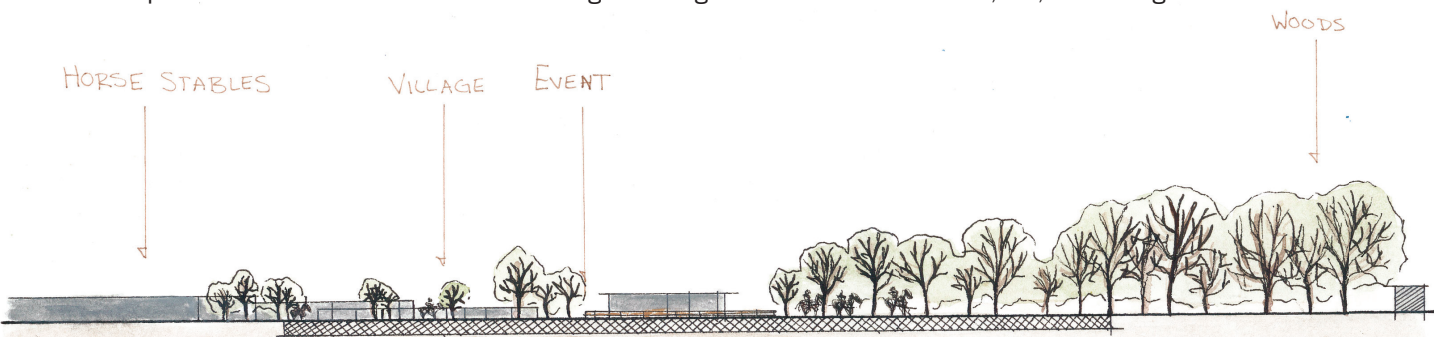


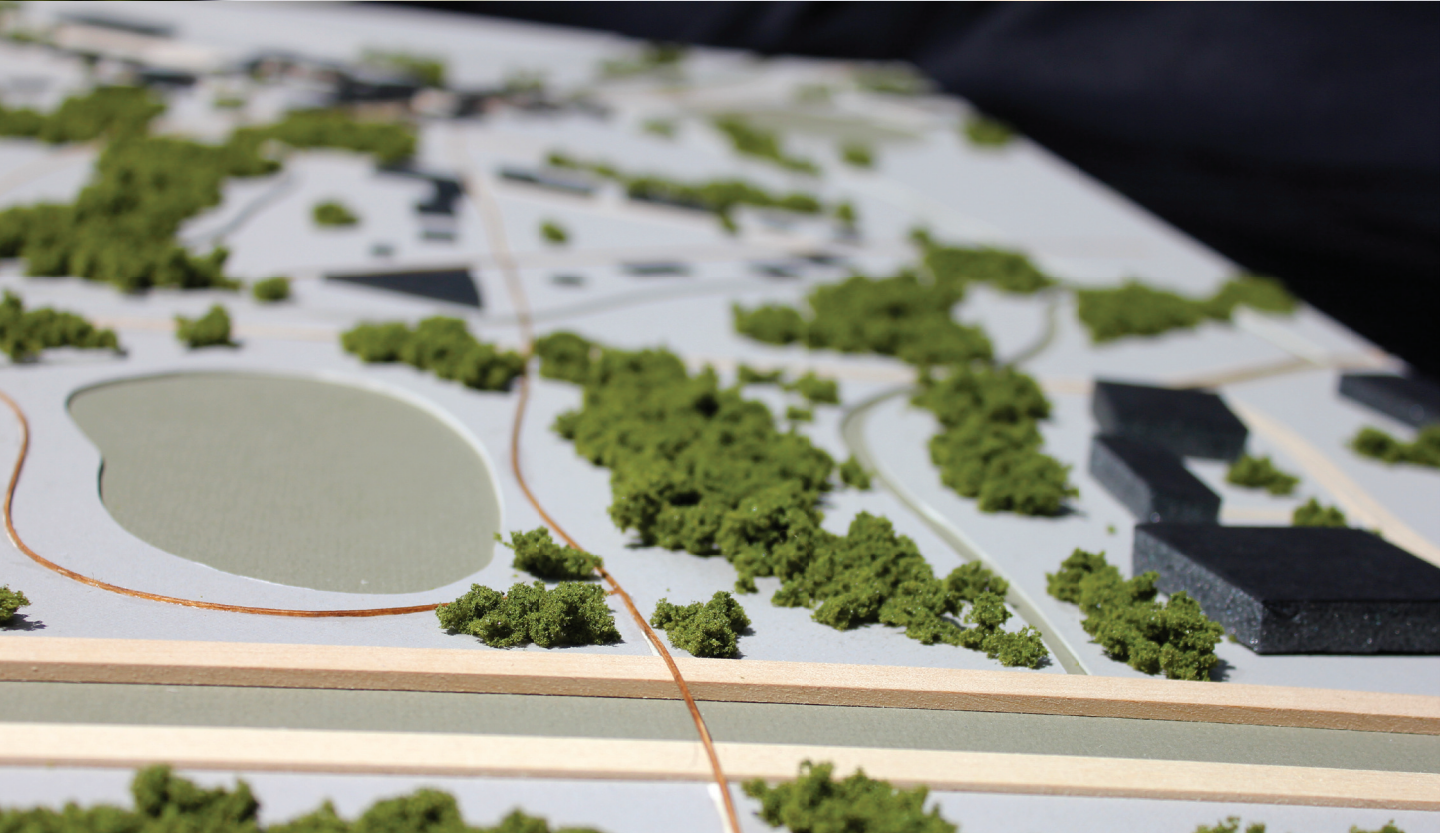
SECTION B

Track - Equestrian Fields



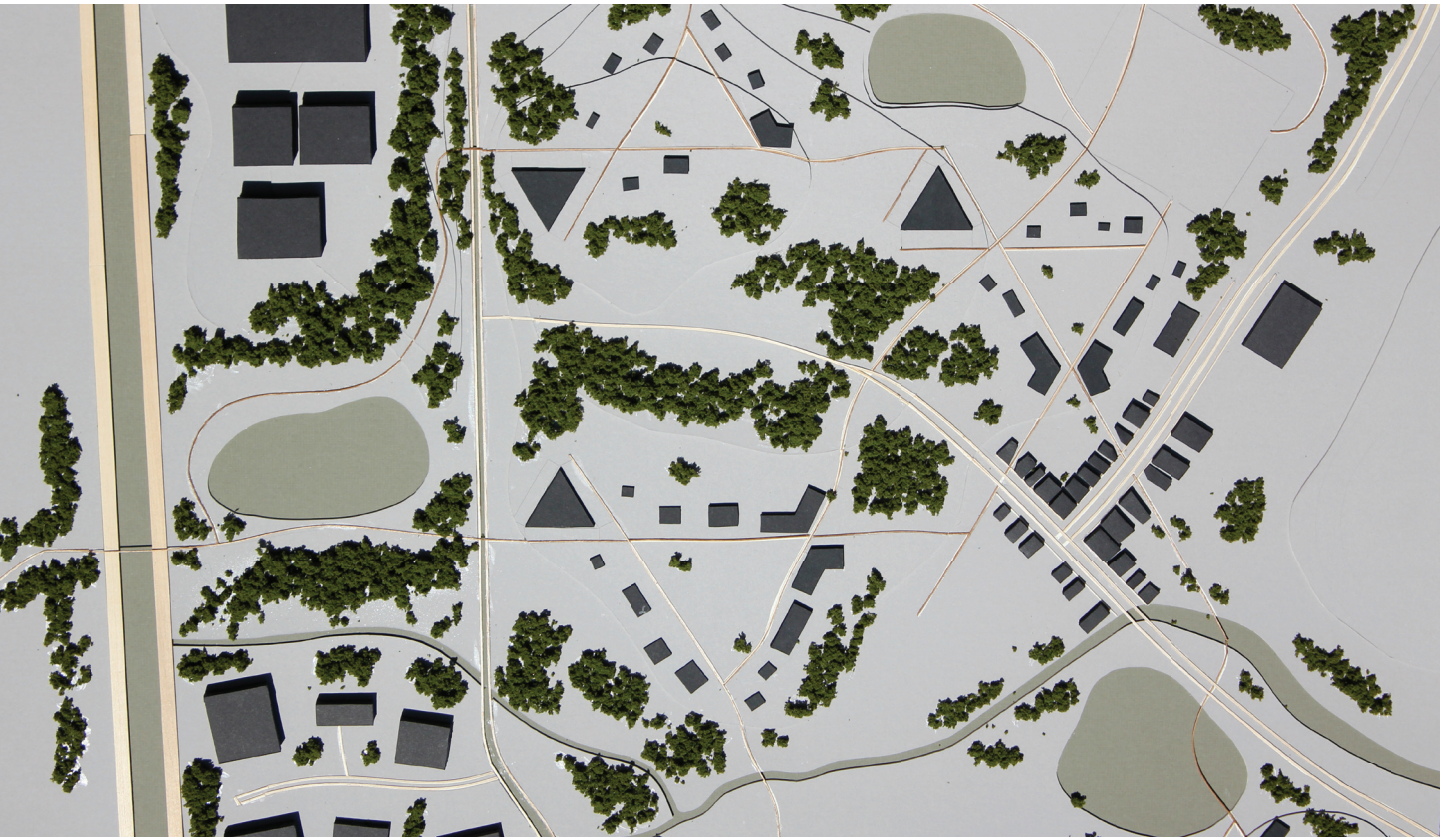
These paintings show a plan and section of the north end of the horse race track and its relationship to the surround facilities with the villages having direct access from horse, car, or walking.





Conclusion

Overall, the final proposal started to break down the site and uses that the community and commuter could utilize. To greater achieve this proposal, the region would need to embed this type of living style more into a greater master plan for the area. This proposal achieves what was intended for creating a unique and characteristic landscape that urbanizes a rural landscape. It shows that the urban and rural landscapes can co-exist. This type of infrastructure brings in something different but with the same uses that the current community looks for. With Aerotropolis development happening, this community will need somewhere to ride, with dirt road disappearing and pushing wildlife out. It really is pushing a community out of their homes and their lifestyle.



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