Troy/Birmingham transit center

University of Michigan 2008 Design Charrette

connect 4



Leave your keys at home.

Why Transit Here?

We feel strongly that a functional rail-based transit system can help solve many of the economic and social problems facing the Detroit metro area. Our team saw this charrette as an opportunity to illustrate to the citizens of Troy and Birmingham the ways in which rail transit will benefit them, and the reasons they should support and invest in a regional transit system.



Troy



Birmingham

Birmingham

- Walkable Urbanism
- High rents
- High occupancy rates



Troy has been called the “City of Innovation” in recognition of its remarkable history as a place where many technological advancements have been developed. But in order for Troy and Oakland County to retain its innovative edge and remain competitive locally and nationally, it must attract and retain knowledge-based workers and businesses. A key strategy to do this is to create the vibrant, walkable environments and amenities sought by the creative class.

Birmingham is an excellent example of such an environment, and its desirability is evidenced by highest rents and occupancy rates in the region.

Why Transit Here?

Troy, by contrast, is an example of “drivable sub-urbanism”--an entirely auto-dependent environment with heavy traffic as a result. While it is still considered a prestigious address, it is losing out to the rest of the region with lower rents and among the lowest vacancy rates—only 74% compared to 83% for the metro area as a whole.



Troy

- Drivable Suburbanism
- Still a prestigious address
- Lower rents
- Declining occupancy rates (currently 74% compared to 83% for metro area)
- Heavy traffic (75,000 cars per day on Big Beaver)

Why Transit Here?

This contrast was born out by Google's decision to locate in Birmingham—their desire to be in this type of environment is so strong that they are willing to pay one of the highest rents in the region ($35 per square foot) and fulfill requirements placed on them by the city, including dedicating the ground floor of their building to a public café.



What Will Transit Do For This





- Attract and retain a talented workforce
- Create value and raise tax revenues
- Improve quality of life
- Encourage new development without increasing traffic
- Attract all kinds of riders and trips
- Build on the current strengths of each community

We don't feel Troy can or should turn itself into another Birmingham. But we do feel that Troy, Oakland County, and the region as a whole will benefit from a more walkable, vibrant environment. Expanding transit, rail-based transit in particular, is a key to getting there. A transit system encourages new development and allows an increased intensity of uses with increasing traffic.



Portland, Oregon

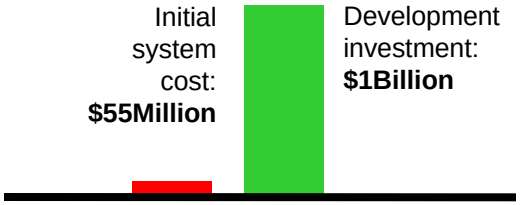




In response to a new tram system, Portland achieved:

- 20-year housing goal in 7 years
- 100 projects worth $2.6 billion
- 25% affordable housing
- Developers built twice the density next to line as further away

The improved environment and accessibility attracts development and raises property values. An increased tax base reduces the tax burden on citizens. More importantly, the kinds of environments developed around transit can help attract and retain a talented workforce, contributing to the economic health of the region.



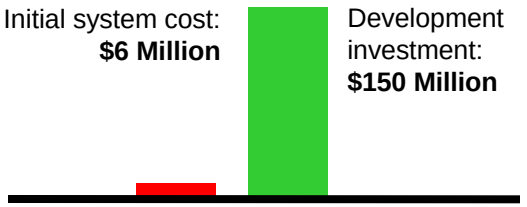
Economic Benefits





Kenosha, Wisconsin

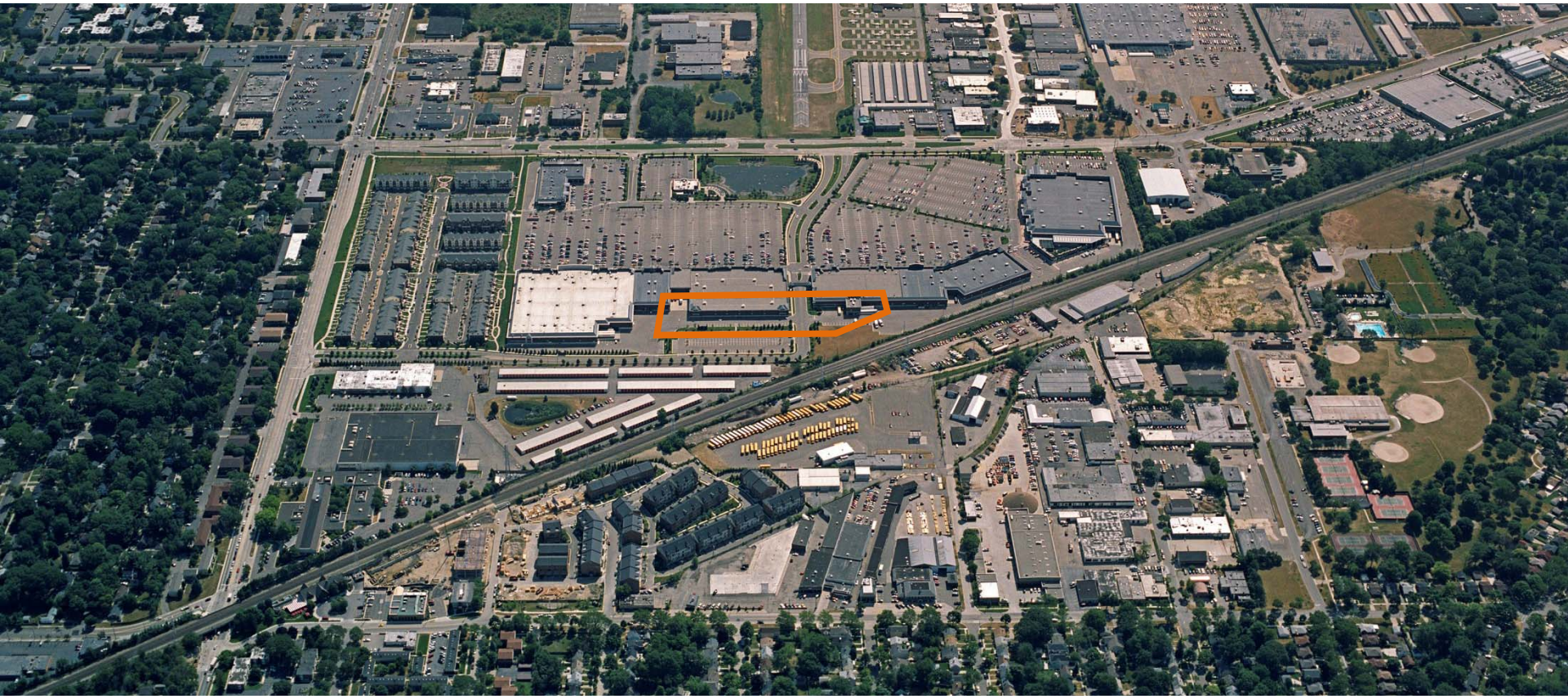
- $ 6 million **total** cost
- 400 new Housing units in first year
- Developers now proposing 14-story buildings in otherwise very low-density downtown
- Residents have new destination park and other amenities



Economic Benefits

Step 1: Build the Transit Center

The first step toward improved transit is to follow through with plans already underway to build a transit hub. Our team chose to retain the transit center on the site currently being planned, so as not to jeopardize this important project in any way. The site is far from ideal, but we developed strategies to help overcome its problems with visibility and accessibility.



Keep the momentum of this exciting opportunity

Step 2: Connect Troy and Birmingham with a Tram Line

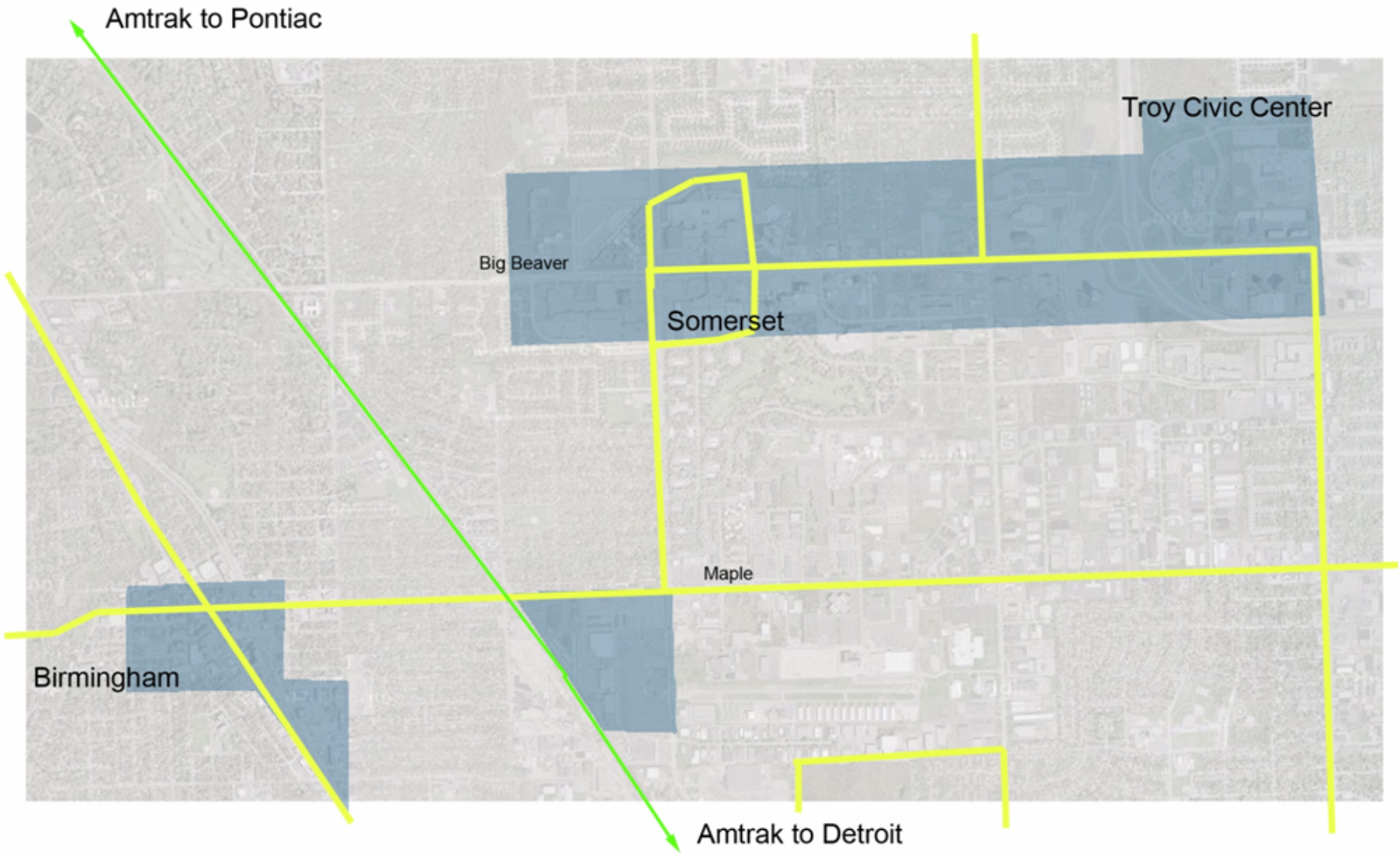




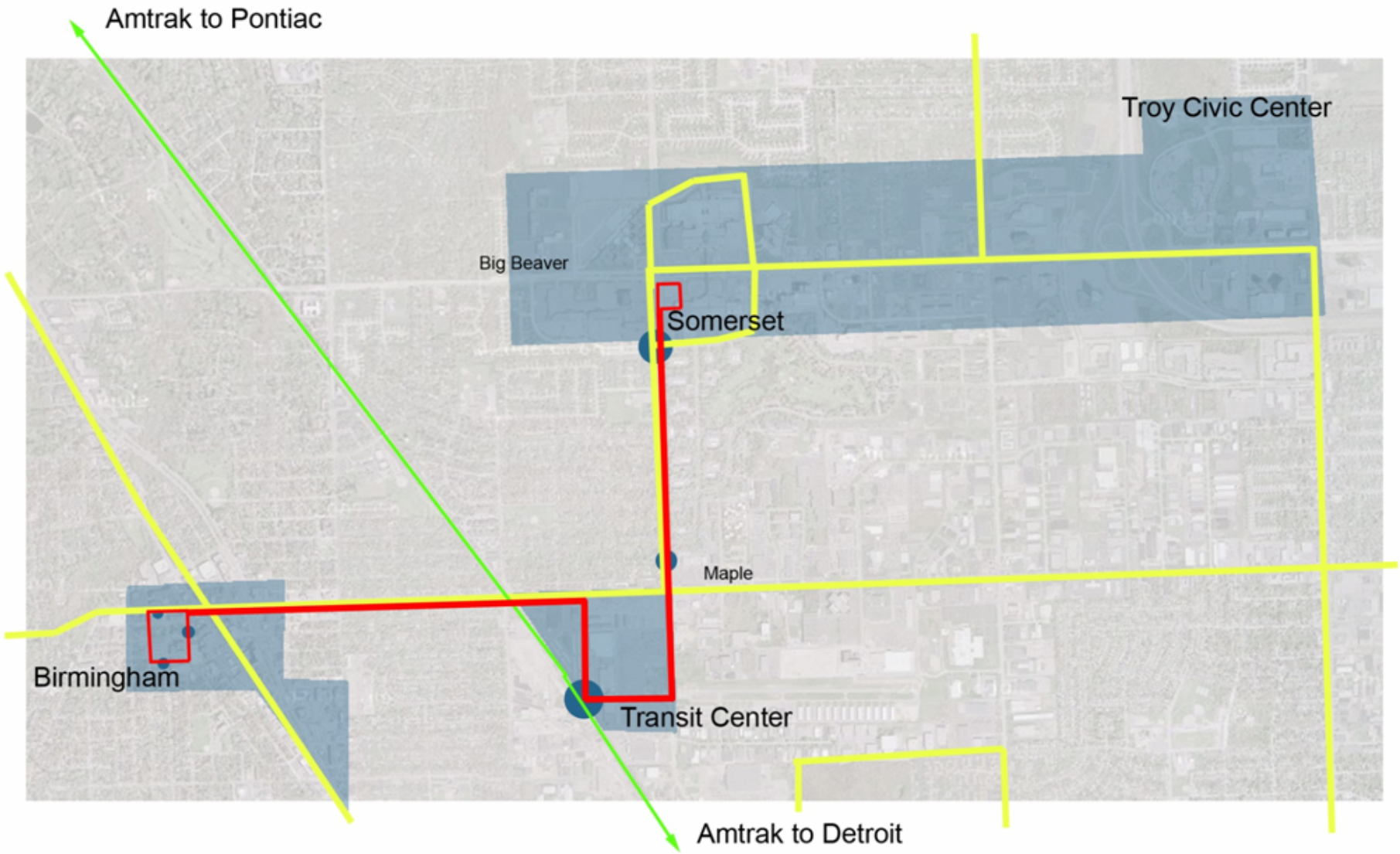
The second step, and perhaps our most important recommendation, is to build a tram line that connects Birmingham and Troy, through the transit center.

What is a Tram?

- Sleek, elegant, modern transportation
- Runs on the street, with signal priority
- Low cost ($6M-15 million per mile vs. $35-50 million per mile for light rail)
- Fast to build (a block per week) with low business impact
- Stimulates private investment because its location is permanent (unlike bus)
- Frequent stops serve and promote an intensity of uses



Transit Strategy



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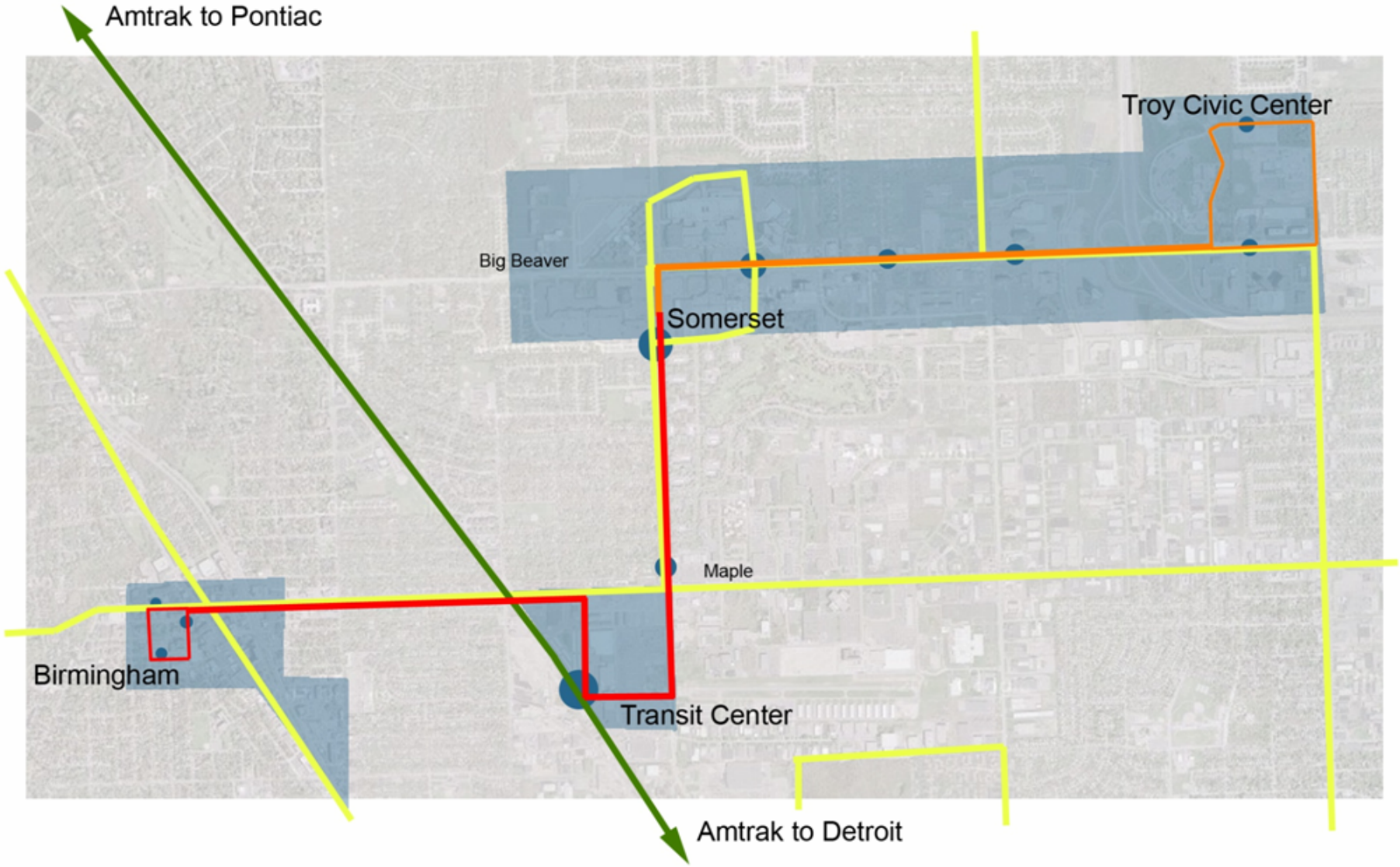

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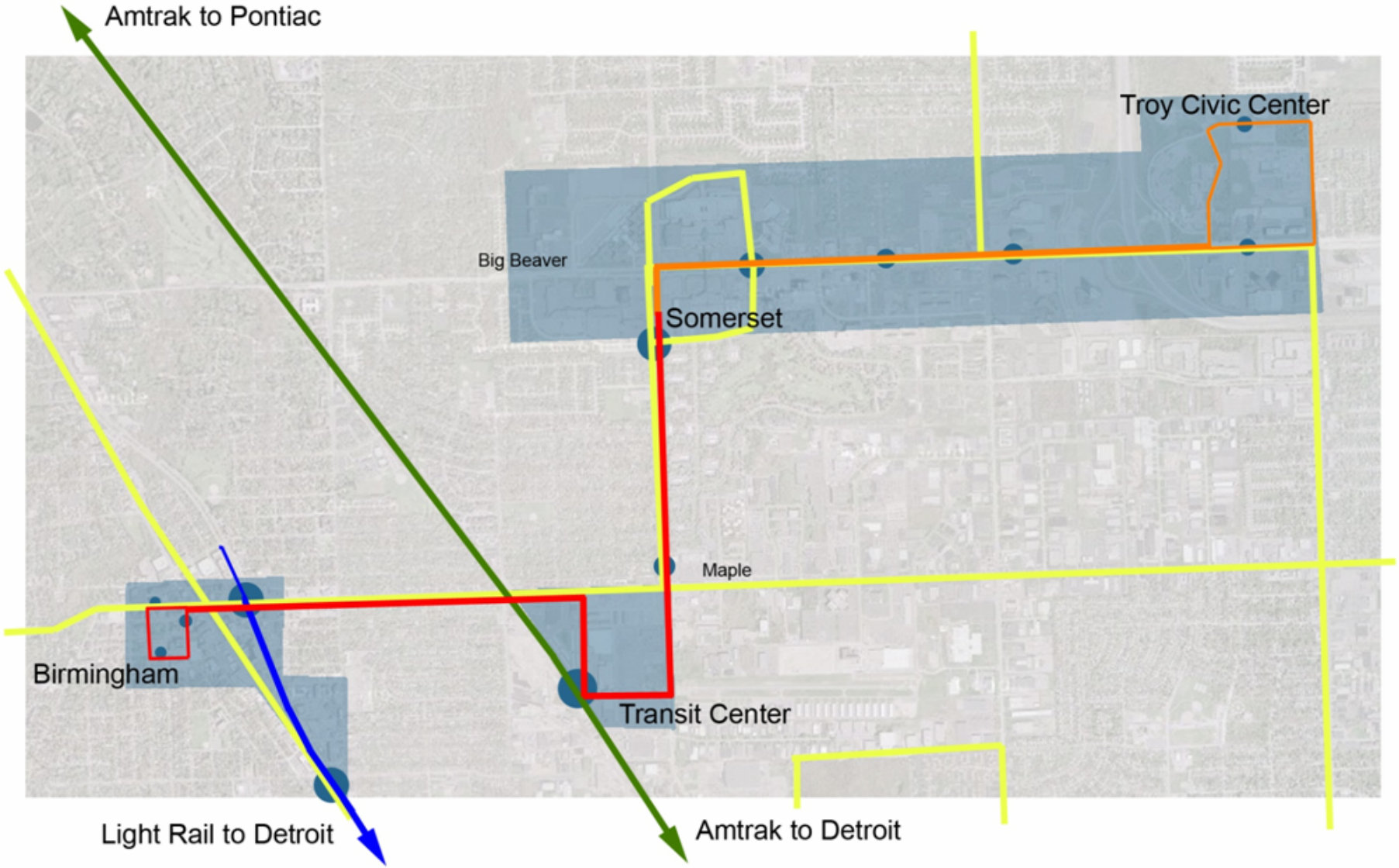

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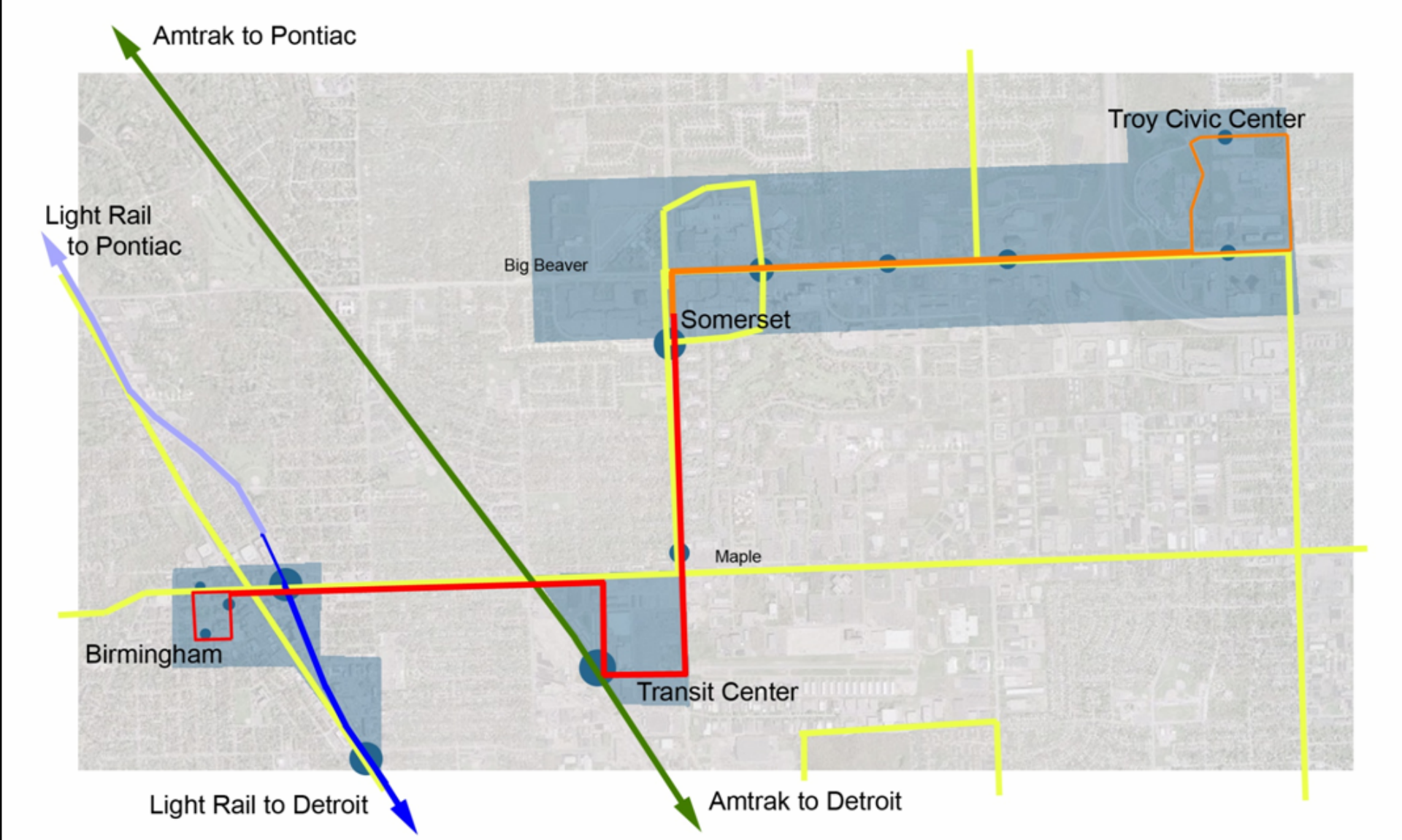
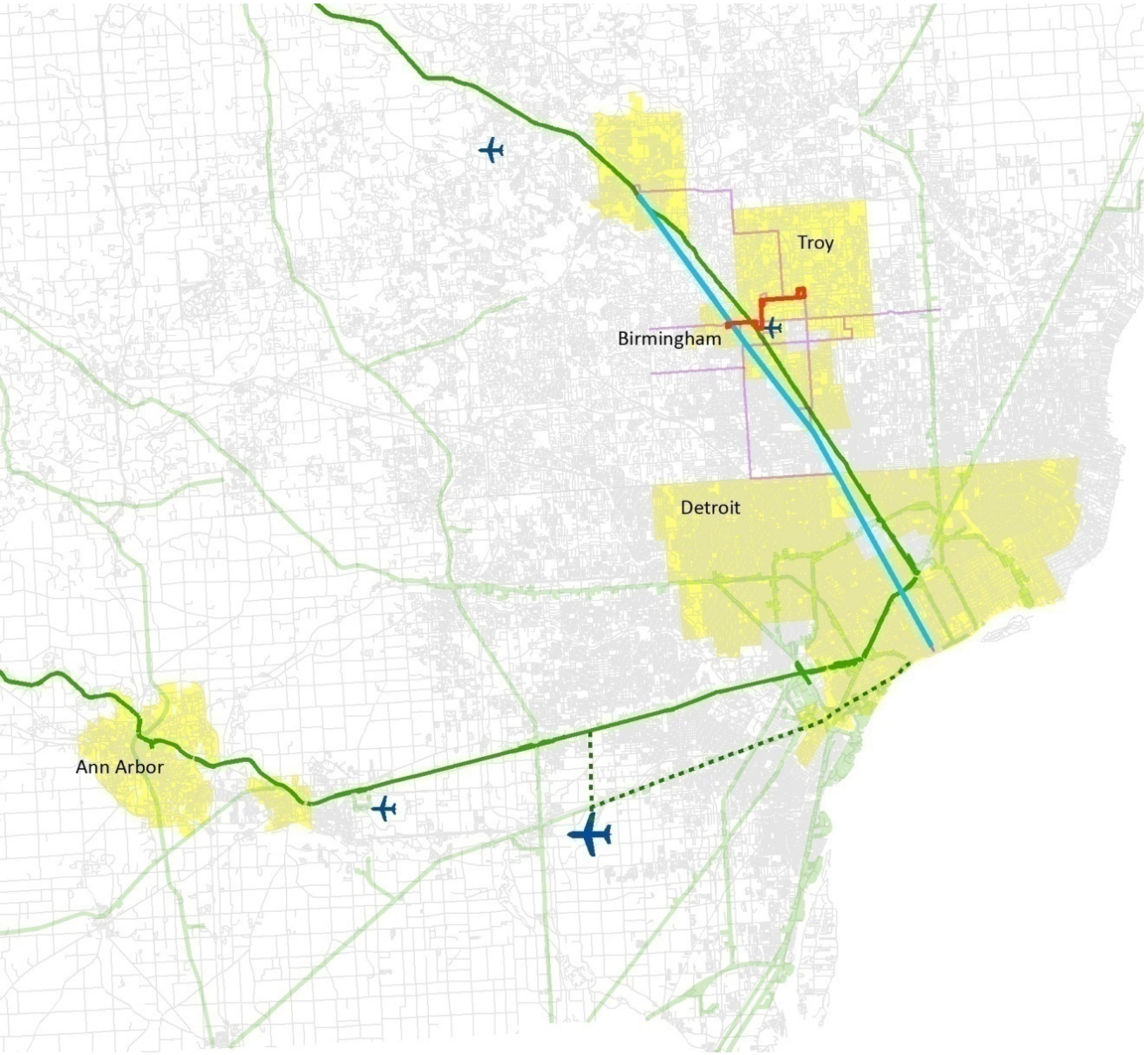


Transit Strategy

Extend the Regional Transit Network



The tram line will eventually link Troy and Birmingham to different pieces of the planned regional system: Amtrak, bus, commuter rail, and light rail.

- Tram Route
- Light Rail Line
- Bus Route
- Heavy Rail
- Proposed Rail Connections
- Streets
- City Area

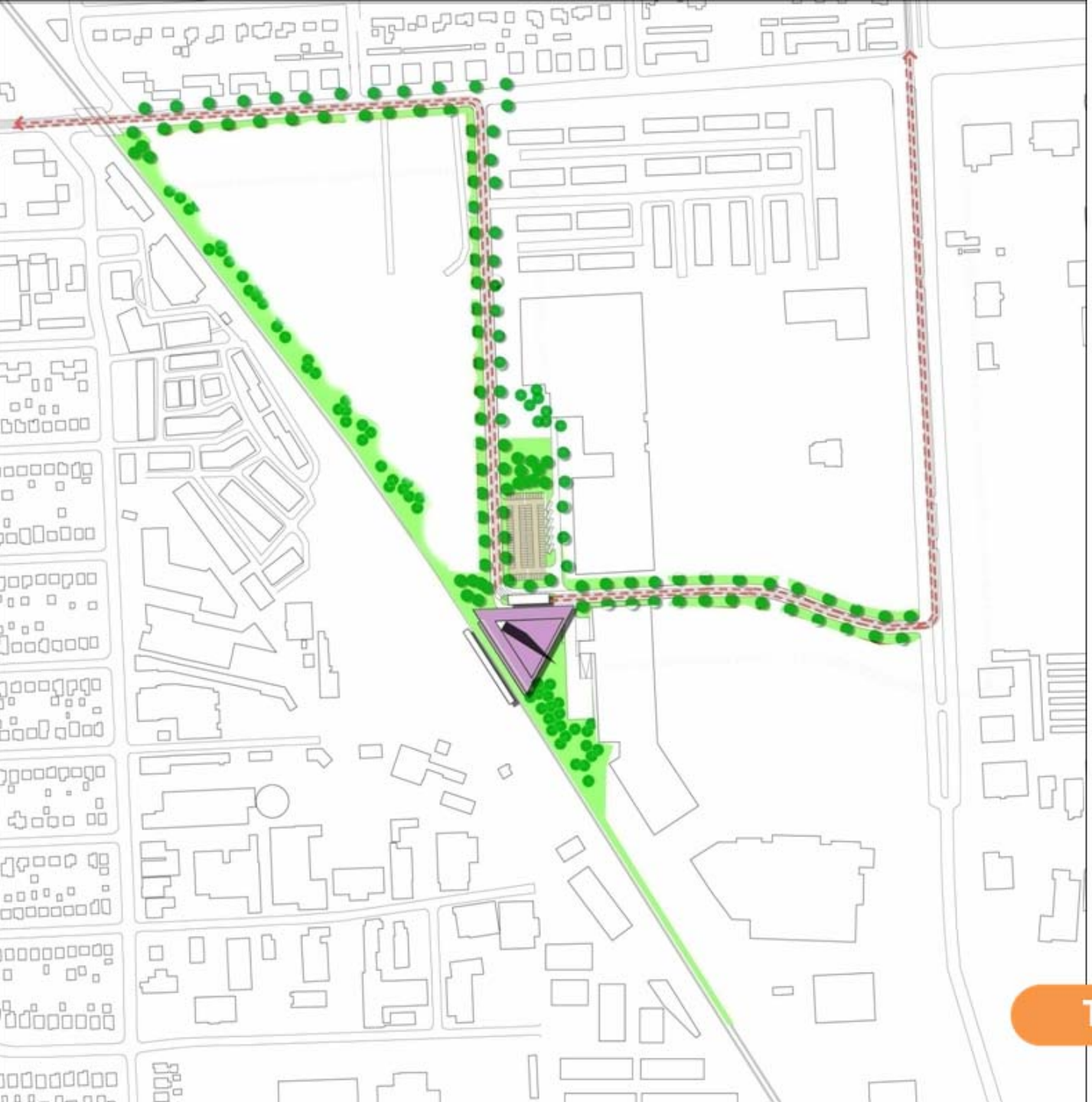
Transit Strategy



Phase A

Improve access to the transit hub with the new tram line and landscaped streets that connect it directly to Maple and Coolidge. Design the transit hub with a vertical element, or “campanile” to increase its visibility.

Transit Hub



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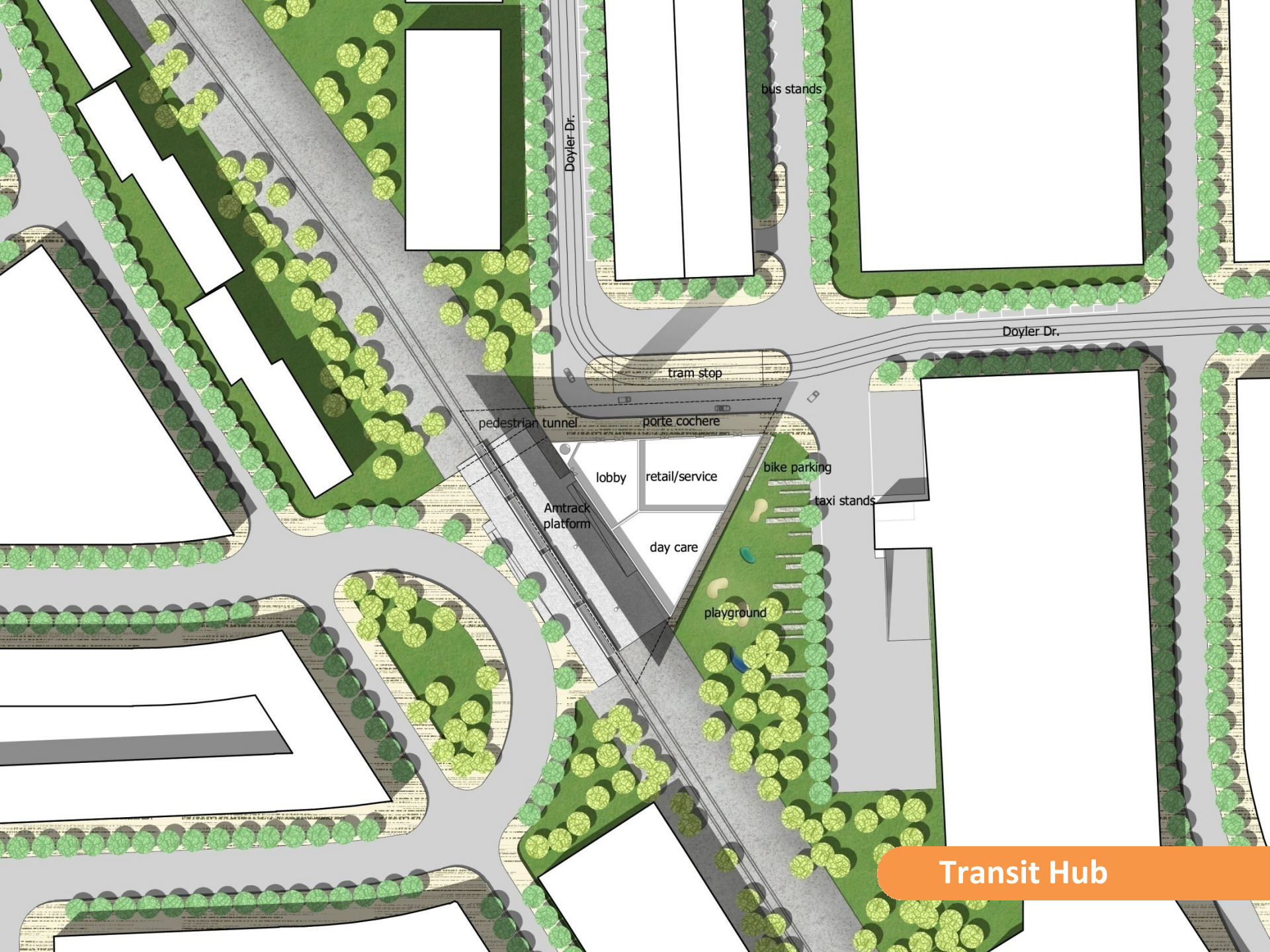
bus stands
Doyler Dr.
Doyler Dr.
tram stop
pedestrian tunnel
porte cochere
lobby
retail/service
bike parking
taxi stands
Amtrack
platform
day care
playground

Transit Hub



Transit Hub



Phase B

Develop mixed-use live/work buildings that define the street to Maple. Personal services that go into the ground floor spaces along this street can enhance the use of transit center, including childcare, drycleaners, café, convenience store, hair salon, etc. Redevelop the transit center parking lot with ground floor retail with a parking garage above, as well as transportation services that expand transportation options, including a rental car agency and a flex car service, such as Zip Car.

North Rail District



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North Rail District



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Phase C

Redevelop Midtown Center into shopping street district by replacing the surface parking with parking decks with retail liner buildings. A new shopping street that fronts Home Depot will connect via a vehicular underpass to Cole Street, the main street of an emerging design district on the Birmingham side of the tracks.

Phase D

Mixed-use live/work development enhances the emerging character of the Birmingham side of the tracks. New streets off of Coolidge provide a direct connection to plaza that fronts the pedestrian underpass to the transit center, and provides a place for cars to pick up and drop off passengers.

South Rail District



Midtown Redevelopment



Midtown Redevelopment





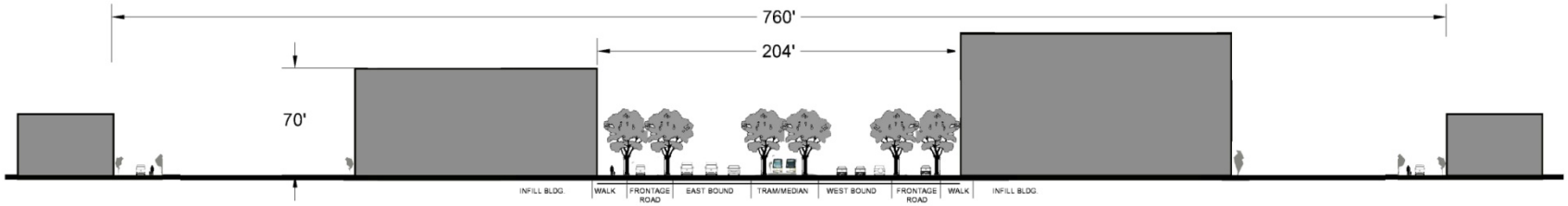
South Rail District



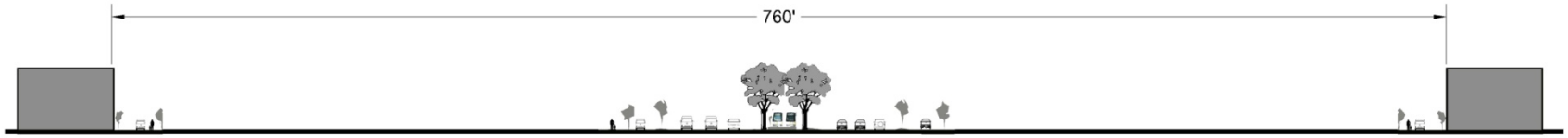
South Rail District

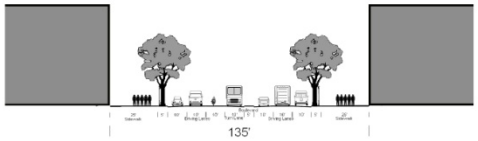
Big Beaver Road

- Boulevard of Dreams
- Transition from auto-dominant to multi-modal nodes

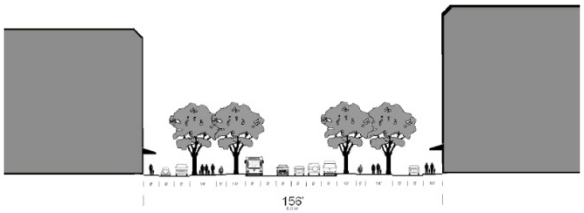


BIG BEAVER RD, TROY, MICHIGAN

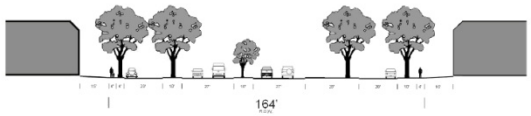




AVENUE DES CHAMPS ELYSEES



AVIGUADA DIAGONAL BARCELONA, SPAIN



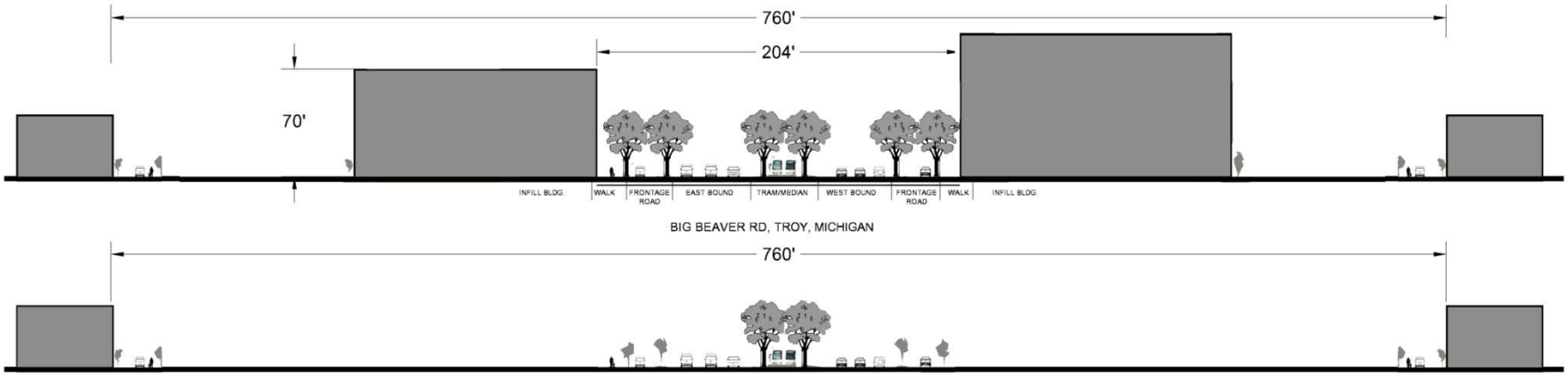
THE ESPLANADE, CHICO, CA

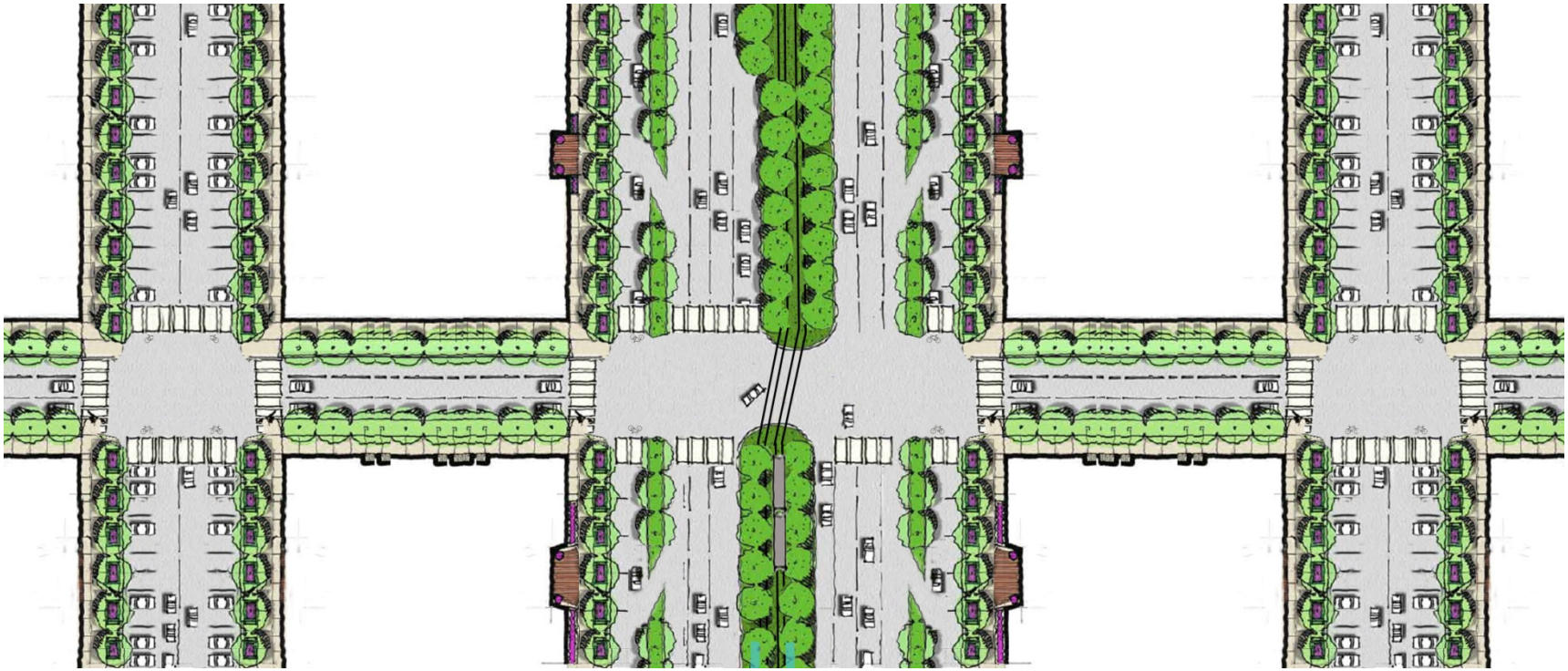


Big Beaver Road



Big Beaver Road





Big Beaver Road

Transit is Key

- Innovative
  - Appeals to the talented workforce
  - Enhances the progressive image
- Economic
  - Generates big returns
  - Optimizes infrastructure
- Life Enhancing
  - Relieves commuter traffic
  - Unites the metro region
  - Reduces environmental impact

Shape and Control our Destiny