



Troy Big Beaver Corridor Shuttle

A PUBLIC/PRIVATE PARTNERSHIP CONCEPT

Developed in Partnership with the City of Troy and SMART
October 2016



Overview

The Big Beaver Corridor in the City of Troy is a dynamic, growing ‘main street’ – home to numerous hotels, offices, restaurants and retail establishments. Centrally located in Oakland County and accessible to the region, this stretch of boulevard is poised for continued growth for years to come. The recent relocation of the Birmingham Amtrak Train Station to the Troy Transit Center provides an additional opportunity for regional connectivity only a mile south of the Big Beaver Corridor.

The development pattern, form and character of development over the past decades has mirrored national development trends, with a focus on large individual buildings with ample parking for cars. Recent trends nationally have turned interest back toward mobility options, including the ability to walk, bike, or otherwise move between destinations without having to rely on a personal vehicle – especially for visitors staying at a hotel. SMART provides some fixed route and flexible route service along the corridor, but the frequency and design of the service is not optimized for the type of frequent circulating service required by the objectives of the corridor stakeholders.

The City has already invested time and energy in contemplating this trend through the “Move Across Troy” initiative, which focuses on navigating the Big Beaver Corridor. SMART, as the mobility authority for Troy and the region, started meeting with the City to discuss how public transportation could play a role in the developing priority – leading to this formal concept.

KEY OBJECTIVES

- Provide mobility options for workers and visitors along Big Beaver
- Connect hotels with restaurants and shopping
- Connect hotels with Troy Transit Center connecting to train and airport
- Encourage business visitors to stay, work and play along the corridor
- Connect Big Beaver corridor with Troy Transit Center

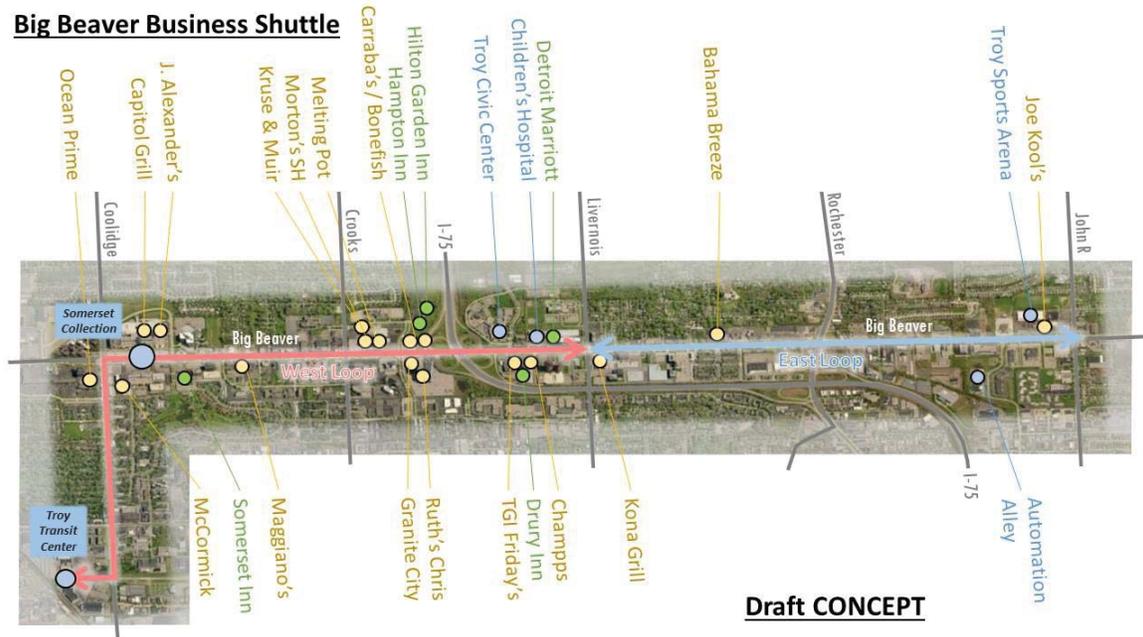
KEY CHALLENGES

- Balancing frequency and travel time versus convenience of stops
- Connecting opposite sides of the corridor efficiently
- Controlling costs while providing an attractive service
- Educating users/user experience and ease of use

Service Concept: Big Beaver Corridor Shuttle

After several meetings between the staff of the City and SMART, a service concept was developed to introduce a level of scheduled shuttle service along the Big Beaver Corridor, including a connection along Coolidge Road to the Troy Transit Center. This initial concept attempts to balance the challenges and objectives noted above, while also identifying an acceptable level of investment for the City to demonstrate the service and encourage support for a more robust service.

Big Beaver Business Shuttle



SHUTTLE SERVICE OPERATION AND ROUTING

- The shuttle vehicles will run on a regular frequency along the corridor in a loop pattern, meaning the vehicles will travel the length of their route along one side of the street before turning around and heading the length in the opposite direction.
- To keep the travel time along the corridor as fast as possible, the vehicles will generally remain on Big Beaver and Coolidge, with a few exceptions noted on the route map.
- The initial routing will divide the corridor into two loops (East and West) to maintain a faster travel time east to west, avoiding a long trip from one side of the street to the other where the shuttle has to go all the way around the end of the route first. The two loops will meet at Livernois Road, and will have a pre-determined location to meet for riders transferring between loops.

FREQUENCY AND HOURS OF SERVICE

- West Loop shuttle vehicles will arrive at each stop every 15 minutes or less. This will require three vehicles in service on the West Loop.
- East Loop shuttle vehicles will arrive at each stop every 30 minutes or less. This will require one vehicle in service on the East Loop.
- Due to the higher density of destinations, the West Loop will have a higher initial frequency. The frequencies are designed to allow the two loops to meet around the same time in the middle (every other time).
- The initial concept and cost estimate in this document is based on a limited time of day service to limit costs. The service will operate weekdays for 8 hours, split between 10am-2pm and 4pm-8pm.



VEHICLES, STOPS AND AMENITIES

- The vehicles can be any number of types including trolley style (30' Medium Heavy Duty) or small bus style (23' Cutaway similar to SMART and Troy Medi-Go vehicles). Initial service may require the use of existing SMART and/or Troy vehicles while new vehicles are ordered and manufactured.
- The vehicles will be lift-equipped to accommodate disabled passengers. If the vehicles are not lift-equipped, an ADA-accessible vehicle would need to be available any time the shuttle is running to pick up a passenger who requires an accessible vehicle.
- The vehicles can be wrapped with patterns, graphics, pictures and business information for corridor businesses, but must include the SMART logo in some form and cannot include any paid advertisements.

- Each stop will have a unique branded sign and a panel for printed information for riders. The stops will be co-located with SMART Bus stops in most cases where the stops are on the street.
- Highest use stops that do not already have a modern glass bus shelter and/or bench would be outfitted with those amenities.

HOW TO RIDE THE SHUTTLE

- The service would be free to ride (no fare) for everyone.
- The service would be open to the public.
- SMART and the City could partner to develop features to allow cell phone/website shuttle tracking, next shuttle information, and schedules.
- The City or others could host a shuttle official website.

Costs and Responsibilities

RESPONSIBILITIES

The City and SMART will work with the business community, non-profit groups, and the public in developing, implementing, and adjusting the shuttle service. Initially the service would be run through the City with assistance from SMART. The following outlines the roles and responsibilities for the initial concept.

SMART

- SMART will procure and lease four vehicles to the City for this concept at no cost to the City through existing grant programs. SMART will work to find used vehicles while the new vehicles are ordered and manufactured, depending on the City's desired timeframe. If the service is ended, the vehicles will be returned to SMART for use in our service area for other services.
- Under the current system for opt-in communities like Troy, SMART will provide maintenance and repairs needed for the vehicles for only the cost of parts required. The service will be handled at our Troy Terminal just ½ mile south of the corridor.
- SMART will continue to provide staff assistance in the design, operation, and adjustment of the shuttle service.
- SMART will help the City research and apply for grant funds that could help cover any of the operating or capital requirements of the project, including dispatch, scheduling, or vehicle locator equipment.
- SMART will install and maintain modern glass bus shelters and/or other amenities at stops when located along the public right-of-way, including installing any shuttle signs provided by the City (if desired).

CITY OF TROY

- Troy will operate the shuttle service as part of the City government structure and/or Troy Medi-Go. This includes pay, benefits, drug and alcohol testing, hiring, firing and discipline for all necessary drivers and support staff. This also includes all of the costs of operating the service, including fuel, lubricants, supplies and maintenance of vehicles and supporting equipment and facilities (except for the shuttle stops).
- SMART has estimated that the driver cost for this concept, based on the service description and frequencies above (8 hours per weekday, 15 minutes frequency

West Loop/30 minutes East Loop), to be approximately \$100,000 annually. This includes:

- \$75,000 for 6,200 driver hours at \$12.00 per hour (no benefits) for West Loop
- \$25,000 for 2,100 driver hours at \$12.00 per hour (no benefits) for East Loop
- As operator, Troy will be responsible for phone system, number, and handling calls and complaints about the service.
- Troy will need to have a system in place for dispatching and tracking the vehicles. SMART will provide information about our system and also help pursue grant opportunities to fund modern dispatch/vehicle locator equipment.
- Troy will be the primary agency in any efforts to coordinate and/or partner with any other supporters of the service including the retail, restaurant and hospitality industries along the corridor.
- Troy or its business partners will design, print and install any vehicle wraps, decals or other visual elements including brochures and other information materials.
- Troy or its partners will design and produce the shuttle service signs and provide them to SMART for installation (if desired).
- Troy or its partners will design and implement any website, mobile app, social media, or other electronic information systems.

Potential Collaborations and Enhancements

SMART and the City of Troy will continue to meet, collaborate and partner as the shuttle is implemented and adjusted in the future. There are a number of opportunities where Troy and partners can collaborate to enhance the service and make it more attractive to potential users. SMART will be a willing participant, providing experience and knowledge of our use of these systems wherever helpful to the service. These possibilities include:

1. Mobile App. An app could be developed and implemented to include many elements, including:
 - Real-time location of vehicles with next vehicle arrival times
 - Interactive corridor map with business/community information around stops
 - Shuttle information paired with reservation portals for hotel or restaurants
 - Wayfinding app assistance to support cross-corridor foot traffic

2. Wayfinding Plan. A effort for signage related to cross-corridor traffic could be tested out first around shuttle stops where a 'captive' audience is getting on/off the shuttle.
3. Additional Crossings. The success of this concept could be used in continued efforts by Troy and SMART to gain support and approval from MDOT for additional signalized crossings along the corridor.

Potential Funding Methods (P3)

- Economic development groups (business, chamber, hospitality, commerce) can build support and lend services (e.g. mobile app)
- Businesses or groups can provide financial support to offset cost of running the service
- Bus wraps can include corridor/business information
- Maps, materials, and website can all include advertisements and/or business information

Implementation

SMART is ready to work with the City to discuss and revise this concept, as desired. The City will need to take steps to identify and approve needed funding and systems in place, and also provide guidance on vehicle type desired.

The timing for implementation is limited by the procurement and installation of signage, assuming the use of used 23' vehicles available from SMART. SMART will look to the City for its approval and direction moving forward.