

Transit Feasibility Study

RANGE OF TRANSIT ALTERNATIVES – INTRODUCTION AND INITIAL REVIEW

Draft for Discussion

City of Hobart, Indiana

May 16, 2016

Introduction

BACKGROUND

The purpose of this document is to provide information regarding the range of transit concepts the consulting team has been reviewing for discussion with the Study Advisory Committee and then at the June 2016 public information meetings.

This document is organized to include:

- Introduction of each of the general operating concepts included in the universe of alternatives.
- Assumptions, methods, and preliminary findings for transit trip use/generation for each of the alternate operating concepts.
- Cost estimates for each of the alternatives including annual operating costs and capital costs for the estimated fleet needs. The cost estimate does not include facilities for storage and administration for an alternative assuming Hobart is the operator.

ACTION REQUESTED

Information included in this report will be the focus of the Study Advisory Committee meeting on May 24. The consultant team requests that members review the information and prepare any questions to be addressed at the committee meeting. If additional clarifying information is needed or if there are questions that need to be addressed before the committee meeting, please contact Bill Troe from SRF at 402-513-2158 or at btroe@srfconsulting.com.

Range of Alternatives

Alternatives included in the “universe” of alternatives include:

- Enhanced/expanded demand response service.
- Adding fixed route service and required complementary paratransit service. One question that will need to be addressed as the screening continues is whether the current demand response service in Hobart (provided through South Lake County Community Services) would be continued.
- Adding deviated fixed route service to the range of concepts available to people in Hobart. Deviated fixed route service operates along a fixed alignment or path (the fixed part of the definition) at generally fixed times, but may deviate from the route alignment to collect or drop off passengers who have requested the deviation. In many locations offering deviated fixed route service can eliminate the need to also provide paratransit service if the deviation parameters replicate paratransit.
- Adding fixed route service to provide connections to the South Shore Line or provide a stop with park-and-ride along the current ChicaGo Dash service provided by V-Line through Hobart.

ENHANCED/EXPANDED DEMAND RESPONSE SERVICE

Two demand response service alternatives are being evaluated as part of the feasibility study:

1. Hobart would contract with South Lake County Community Services to provide more demand response service in specifically for residents of Hobart.
2. Hobart would establish an independent service from South Lake County Community Services, which would include added costs for facilities and full administration and driver costs rather than incremental costs.

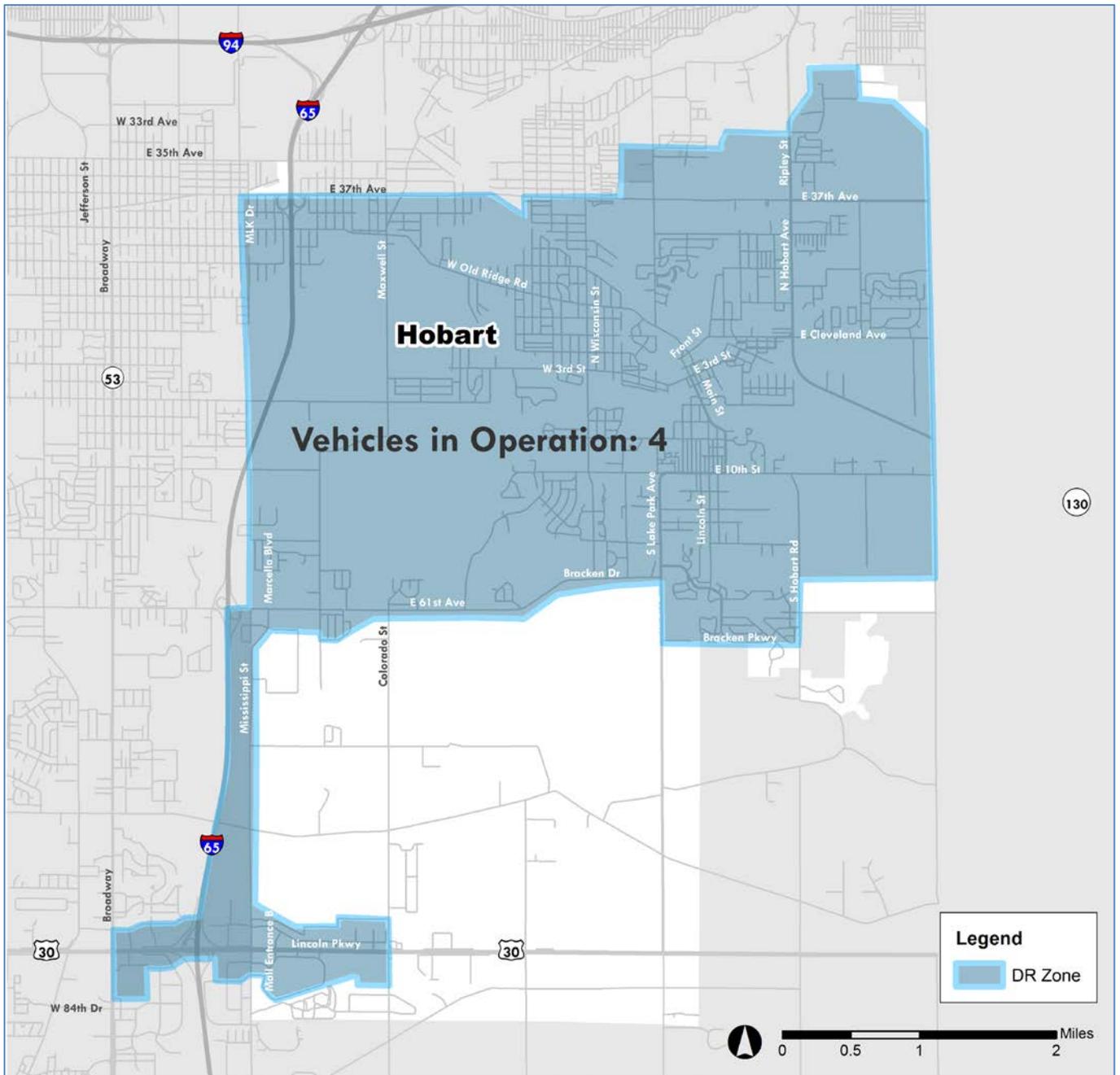
For each of the alternatives the general operating parameters were assumed, including the anticipated coverage area. While the assumption is that service would be available throughout Hobart, the anticipated higher use areas are the higher development density areas north of East 61st Avenue.

General parameters of the operating concept are:

- Days of Service: Monday through Friday. Weekend service feasibility should be discussed with the Study Advisory Committee.
- Daily Service Hours: The initial assumption is the service day would run from 8:00 AM through 5:00 PM. Service in these hours would be more reflective of a service for seniors as it would not support the typical office work day.
- Two operator scenarios have been included in the assessment and need to be discussed with the Study Advisory Committee:
- Purchase additional service from South Lake County Community Services (the current transit provider) at a negotiated rate.
- Establish a city operated transit service.

The most significant difference between the two options is with the city operated service there would be additional administrative costs that would be entirely covered by the city. As South Lake County Community Services may not have to expand their administrative staff, the incremental cost of adding more Hobart service would be lower than if the city operated the entire service.

Figure 1. Potential Enhanced Demand Response Service Area



FIXED ROUTE SERVICE

As the title reflects, fixed route service operates on a designated route (series of streets) on a preset time table between the route start location and the terminus location. Along the route people can be picked up/dropped off at predetermined stops or a less formal “flag stop” format can be implemented. In the flag stop concept a person simply steps to the curb at a safe location and waves down the driver. Similar when exiting the vehicle, a rider indicates the location along the route they want to get off.

While it is possible for Hobart to operate fixed route service, the level of investment to get the service going and the specific skill sets required to complete daily operations is very substantial. Due to the substantial startup cost and potential current operators that express interest in being the service provider for expanding into Hobart, the concept of Hobart being the operator was not evaluated.

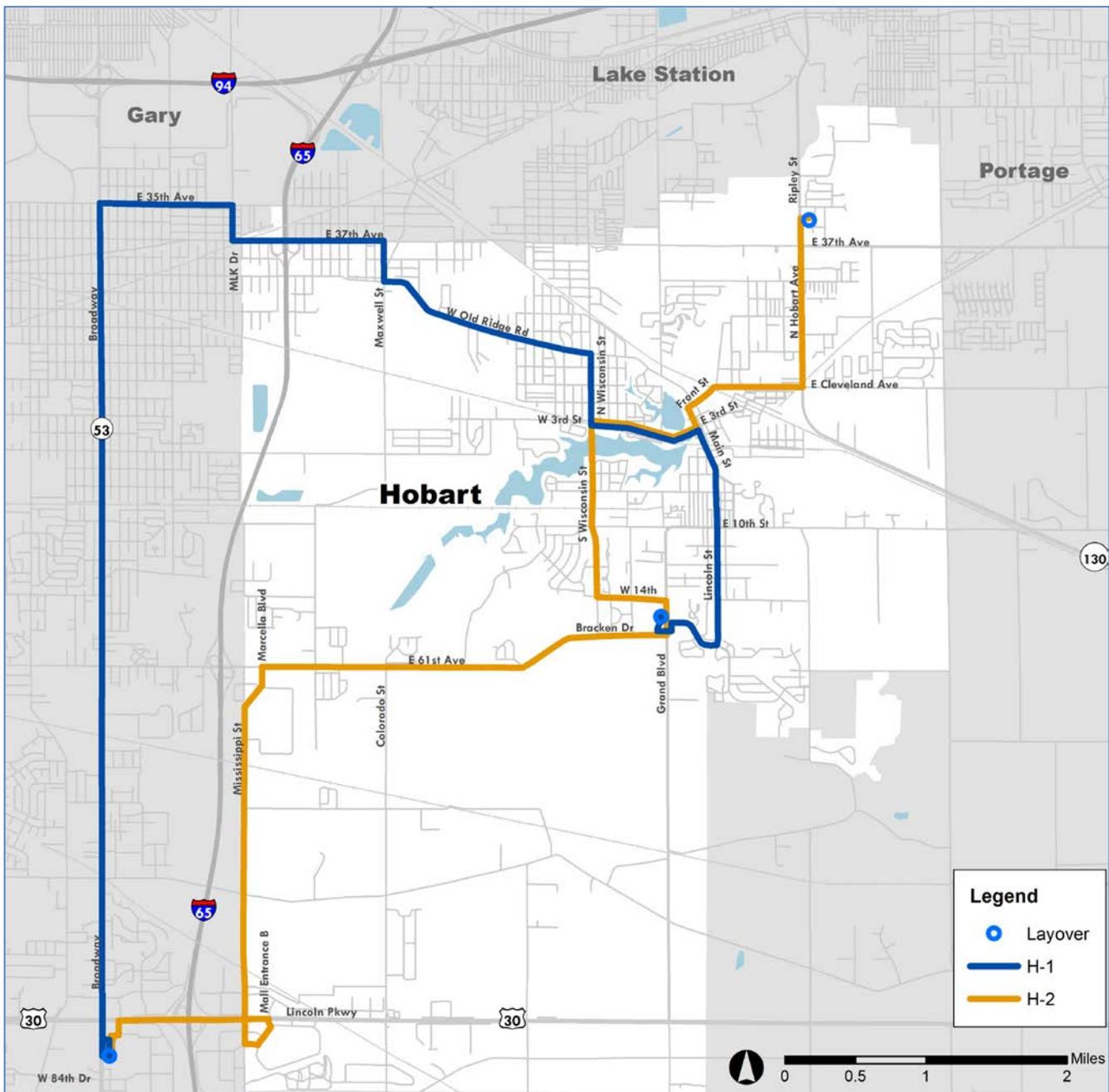
Two fixed route concepts of two routes each were developed for Hobart:

- Option 1 – Includes the following routes:
 - H-1: A route generally running southeast/northwest through town with a western terminus at Indian University Northwest. The route proposal travels along East 35th Avenue, East 37th Avenue and West Old Ridge Road to North Wisconsin Street. At North Wisconsin Street the route would turn south 3rd Street and provide access to downtown Hobart. At Main Street the route would turn south along Lincoln Street and travel south to Bracken Parkway where it would turn back to the west to its terminus at St. Mary’s Medical Center. The route would include transfer points with the H-2 route in downtown Hobart and at St. Mary’s Medical Center.
 - H-2: The route would generally travel through Hobart in a southwest to northeasterly direction, which the western limits being in Merrillville at the regional retail area. The route would travel into Hobart along US 30, providing access to/from the Westfield Southlake Mall. From the mall the route would travel north on Mississippi Street to East 61st Avenue, where it would turn east to travel to St. Mary’s Medical Center. From the medical center the route would connect into downtown from South Wisconsin Street and West 3rd Avenue. Northeast of downtown the route would continue along Front Street, East Cleveland Avenue to North Hobart Avenue where it would turn north. The northeast terminus of the route would be the retail area north of East 37th Avenue (US 6).

Figure 2 displays the general alignment proposal for the Option 1 routes.

- Option 2 – Is similar to Option 1 relative to the routing in Hobart, however, the concept would include service along the Broadway Street corridor providing a connection from Indiana University Northwest to the retail area in Merrillville at Broadway/US 30. The purpose of the Broadway service is to provide improved connectivity between the university area and Century Mall and ultimately Westfield Southlake Mall. Figure 3 displays Option 2 route concept alignments.

Figure 3. Potential Fixed Route Service Option 2



General parameters of the operating concept are:

- Days of Service: Monday through Friday. Weekend service feasibility should be discussed with the Study Advisory Committee.
- Daily Service Hours: The initial assumption is the service day would operate for 12 hours per day. A proposed set of start and end times can be defined through discussion with the Study Advisory Committee.

- A primary assumption of the fixed route options is that service would be purchased from one of the providers in the area, which are Gary Public Transit Corporation (GPTC) and V-Line. The consulting team has had conversations with both agencies and each has interest in at least discussing the concept. Central to the discussion needs to be cost to Hobart and proximity of the providers. For Hobart:
- Service rates for V-Line (currently) are substantially lower (\$42.15) than for GPTC (\$96.25).
- Deadhead costs for V-Line provided service would be substantially higher, which reduces service cost effectiveness.

The pluses and minuses of each potential provider will be discussed with the Study Advisory Committee. Cost estimates for both have been developed.

- Complementary paratransit service for persons with disabilities that would restrict them from walking to/from, boarding a bus, or exiting a bus would be provided to areas within $\frac{3}{4}$ mile of the identified routes.

DEVIATED FIXED ROUTE

Deviated fixed route service is very similar to fixed route service in that it GENERALLY operates along a predesignated route/alignment and follows a preset time schedule. The difference is that vehicles would be allowed to exit the route to pick up/drop off people that have a reservation and the trip can be accommodated. Service in Valparaiso operates in this format.

The fixed portion of the concept is consistent with the proposed concepts outlined in the fixed route description. Deviation of up to approximately $\frac{3}{4}$ mile. Vehicles that deviate from the route mark the point where they exited their run, pick up/drop off their fare and then travel back to the point they left the route to resume fixed route operations. Figure 4 displays the route concept and the estimated deviation coverage. The proposed deviated fixed route service concept was prepared for only alignments that reflect the Option 1 concept as there would be limited benefit to the city associated with deviations from the Broadway corridor included in Option 2.

Operating parameters for the deviated fixed route concept are consistent with the fixed route concept.

COMMUTER SERVICE

For the feasibility study, one commuter route alignment was developed to connect to both a potential V-Line ChicaGo Dash stop in Hobart and the South Shore Station at Miller South Shore. Figure 5 displays a potential route through Hobart between the two stops/stations.

The concept would operate as fixed route service with the following operating parameters:

- Six one-way trips per weekday between a potential Dash stop along North Hobart Avenue and the Miller South Shore station, which reflects three morning and three evening trips.
- Creating a stop connecting to the ChicaGo Dash would require an undetermined as of yet capital investment. In discussions with V-Line there would need to be an area large enough to maneuver their coach vehicle and ticketing. One suggestion for ticketing would be a staff person. Ticket kiosks are being discussed at V-Line,

however, the costs are substantial. More information is being gathered on ticketing.

- Weekday service only.
- No route deviation.
- V-Line is operating near capacity on most of the morning and afternoon trips. Continued discuss of the potential to assist in adding capacity is required.
- The operator needs to be determined. The costs developed reflect GPTC as the operator.

Figure 4. Potential Deviated Fixed Route Alignment and Deviation Area

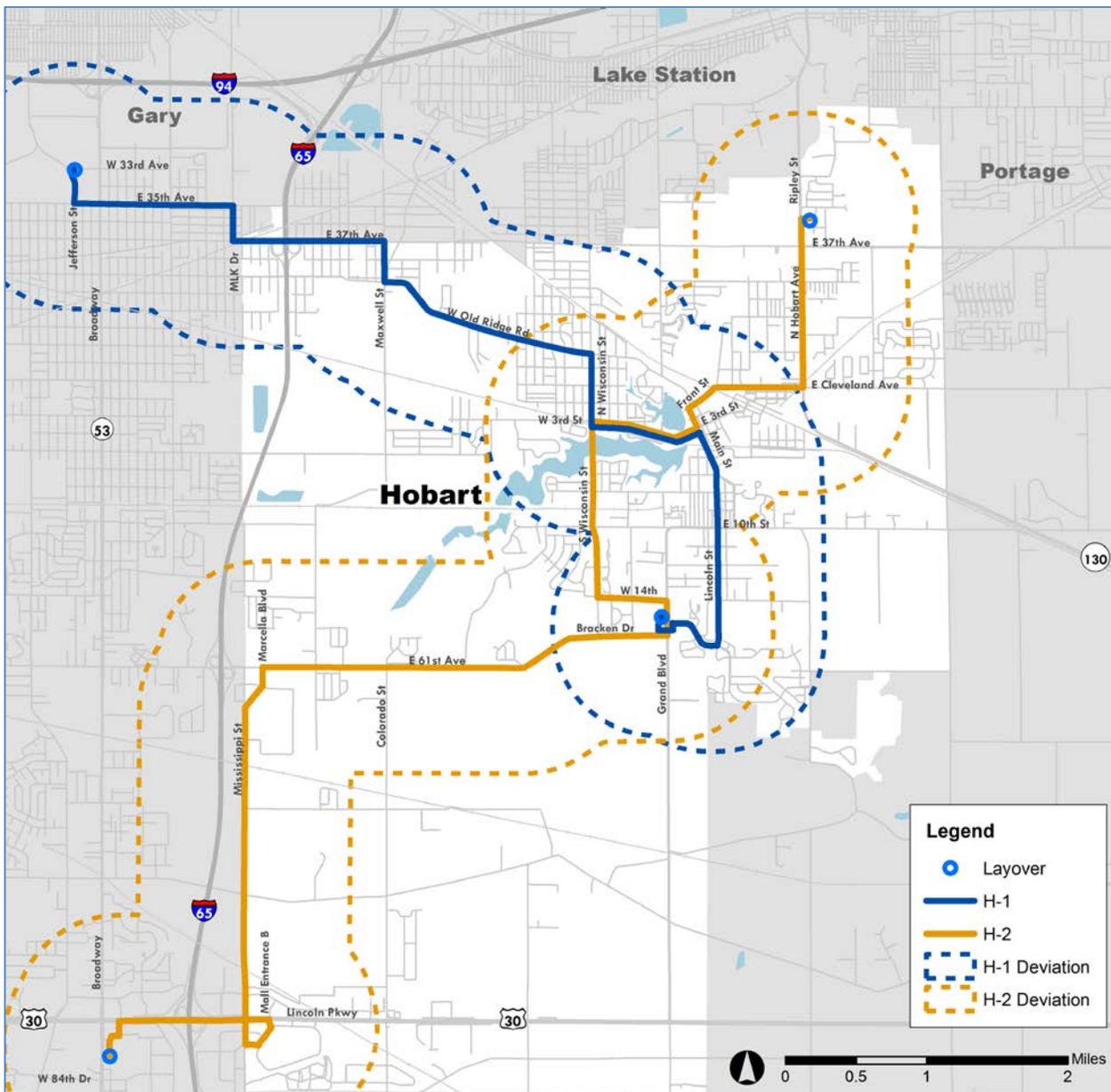
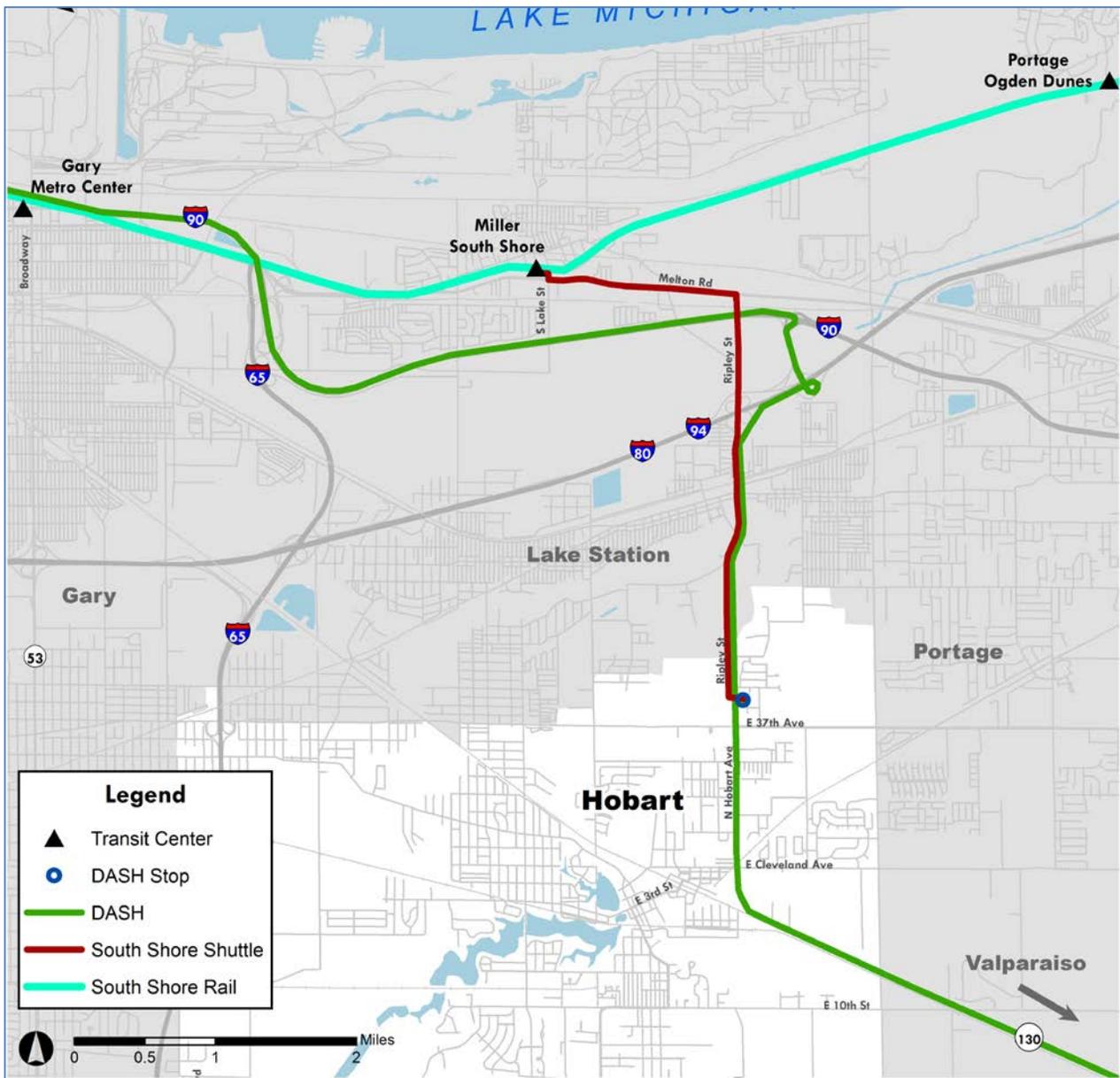


Figure 5. Potential Commuter Route Alignment



Ridership Estimates

Daily ridership for each of the alternatives was derived through applying the average trip rate from the identified Indiana peers to the population in the service area. Two sets of data were reviewed:

- Daily trips per capita: Derived by dividing total trips by population within the service area.
- Trips per revenue hour: Calculated by dividing daily trips by revenue hours of service per day.

Through applying these different rates, a range of possible daily trips was calculated.

Table 1 displays the average rates derived from the peer data, local population estimates, estimated daily and annual ridership.

Table 1. Ridership Generation

Service Type	Daily Trips Per Capita	Trips Per Revenue Hour	Revenue Hours	Annual Trip Estimates Based on:		Daily Trips Based on:	
				Trips Per Capita	Trips Per Rev. Hour	Trips per Capita	Trips Per Rev. Hour
Demand-Response	0.52	2.50	9,180	15,100	23,000	60	90
Fixed Route	4.30	9.40	12,240	125,000	115,100	500	460
Deviated fixed Route	4.30	9.40	12,240	125,000	115,100	500	460
Commuter	0.50	10.00	459	12,500	4,600	60	20

Note: Source for trips per capita and per revenue hour are other Indiana agencies.

Data Parameters:

- Local Service Area Population – 29,059
- Commuter Service Area Population – 29,059

Operating and Capital Cost Estimates

Operating cost estimates for each of the service concepts (demand response, fixed route, deviated fixed route, or commuter) have been calculated by applying a cost per revenue hour by the assumed number of annual revenue hours. Key parameters or assumptions are outlined below:

- Typical average hourly rates reflect peer communities in Indiana and information gathered from the National Transit Database or from the Indiana Public Mass Transportation Fund (PMTF) and from information provided by GPTC and V-Line.
- Revenue hours reflect the daily span/hours of service for the unique assumption and number of vehicles required to provide for the demand.
- Weekday service results in approximately 245 annual days of service.

Table 2 documents the estimated operating costs for each of the alternatives.

Table 2. Capital and Operating Cost Estimates for Range of Service Concepts

Alt	Service Type	Daily Riders	O & M Cost	Vehicles Needed	Capital Cost	Admin Type	Local Share Of Operating	Local Cost Per Rider
1a	Demand Response	60-90	\$368,000	5	\$350,000	Purchased	\$80,960	\$5.29
1b	Demand Response	60-90	\$459,000	5	\$350,000	Directly Operated	\$100,980	\$6.60
2a	Local Route	460-500	\$1,179,000	5	\$350,000	Purchased	\$365,490	\$3.12
2b	Local Route	460-500	\$1,179,000	5	\$350,000	Directly Operated	\$365,490	\$3.12
2c	Local Route	460-500	\$516,000	5	\$350,000	Purchased	\$159,960	\$1.36
3a	Commuter	20-60	\$0	0	\$50,000	Purchased		
3b	Commuter	20-60	\$45,000	3	\$210,000	Purchased	\$13,950	\$2.74

Alternatives Key:

Alternative 1a – Add more demand response service by South Lake County Community Services

Alternative 1b – Hobart provides demand response service

Alternative 2a – Extend GPTC routes into Hobart on the Option 1 alignment.

Alternative 2b – Independent Hobart routes operated by GPTC

Alternative 2c – Independent Hobart routes operated by V-Line

Alternative 3a – Access to ChicaGo Dash

Alternative 3b – Establish commuter service route to South Shore line at Miller South Shore Station

Key to the decision making process is the local cost of providing service. In general across the state the following are generally the local responsibility by type of service:

- Demand response for small urban areas: 22 percent of total costs
- Fixed route for small urban areas: 31 percent of total costs.

These average rates for peers across the state were used in the initial cost analysis. The 31 percent of total cost for fixed route was also used for the commuter service option.

Additional Discussion Items with Advisory Committee

The following bulletpoints identify key elements of each alternative that need to be discussed with and direction gathered from the Study Advisory Committee:

- 1a | Demand Response | Add service to SLCCS:

- How would service be allocated between Hobart residents and rest of SLCCS?
- Would Legacy Fund be used to offset fare charges to users (as is done now for demand response through SLCCS)?
- 1b | Demand Response | Independent Hobart service operated by city:
 - Higher cost reflects the fact city would need to manage the service.
 - Costs assume service only operates within Hobart limits. How would residents connect to the rest of the county?
 - How to serve low density area east of Colorado and south of 61st Avenue?
- 2a | Local Route | GPTC service extended into Hobart:
 - Operating costs lower initially due to CMAQ, but would increase after grant runs out. Cost estimates reflect the POST grant amounts.
 - Connects Hobart to larger GPTC bus network.
 - ADA service also expanded into Hobart.
 - No additional costs for city to manage service.
- 2b | Local Route | Independent service operated by GPTC:
 - Operating costs lower initially due to CMAQ, but would increase after grant runs out. Cost estimates reflect the POST grant amounts.
 - Could possibly require a transit manager employed by the city.
- 2c | Local Route | Hobart service operated by V-Line:
 - Requires long deadhead distances for vehicles to travel from garage (in Valparaiso) to Hobart.
 - The cost per hour (currently \$42.15) is likely to increase once RideRight renegotiates the contract with Valparaiso.
 - Could possibly require a transit manager employed by the city.
- 3a | Commuter | Chicago DASH Park and Ride Station:
 - Location of station is important to attract greatest number of riders.
 - Sharing facility with another complementary use is preferred.
 - V-Line requirements for a stop include:
 - Right in/right out access during AM peak.
 - Area where tickets can be sold.
 - Parking for 50 vehicles.

- 3b | Commuter | South Shore Commuter Shuttle:
 - Works best as connection to both South Shore train and DASH park and ride station to provide maximum commuter connections to Chicago.
 - Unclear who would operate service (potential operators include GPTC or City).