Portage Transit Feasibility Study

RANGE OF TRANSIT ALTERNATIVES – INTRODUCTION AND INITIAL REVIEW

Draft for Discussion

City of Portage, Indiana

May 16, 2016

INTRODUCTION

BACKGROUND

The purpose of this document is to provide information regarding he 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 Portage is the operator.

Based on information received at the public information meetings held in March, for each of the alternatives it should be assumed that South Haven is included as a part of the service concept. Thus, for each of the alternatives references of Portage/South Haven reflect including service in both locations. This assumption also brings with it the complementary assumption that residents in South Haven would be assigned costs (operating and capital) proportionate with their population relative to Portage.

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 Portage

(provided through Porter County) would be continued.

- Adding deviated fixed route service to the range of concepts available to people in Portage. 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 or a commuter service route between Portage and a ChicaGo Dash park-and-ride lot in Hobart.

ENHANCED/EXPANDED DEMAND RESPONSE SERVICE

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

1. Portage/South Haven Township would contract with Porter County to provide more demand response service in Portage and South Haven.
2. Portage/South Haven Township would establish an independent from Porter County service, which would include added costs for facilities and full administration and driver costs rather than incremental costs.

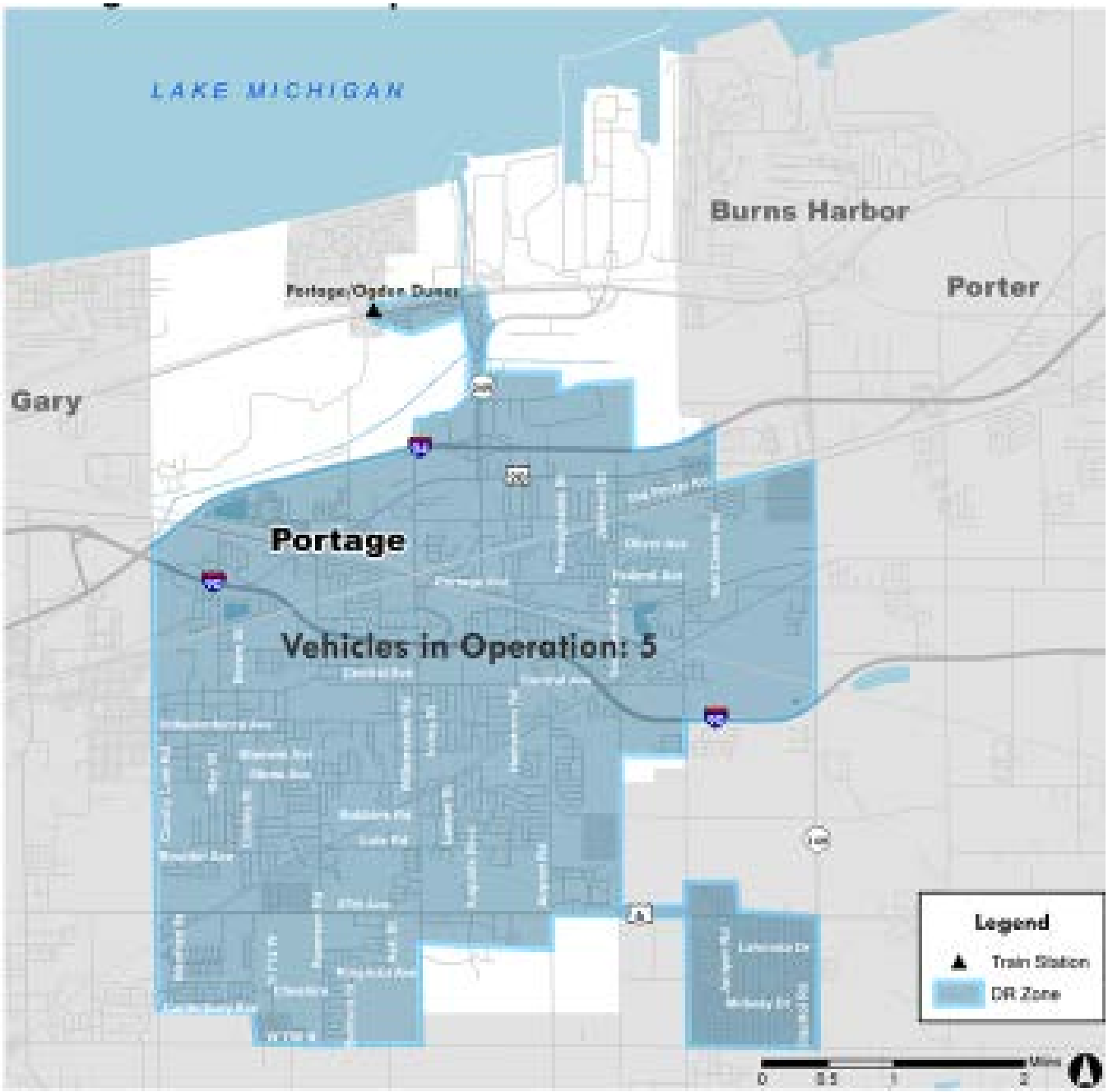
For each of the alternatives the general operating parameters were assumed, including the anticipated coverage area. While the assumption is that service would be available throughout Portage and South Haven Township, the anticipated higher use areas are:

- Portage: South of I-94 from the eastern to western city limits. Figure 1 displays the high use area of Portage. The higher use area assumed reflects the origin and/or destination of most of the current demand response trips recorded by Porter County.
- South Haven Township: The area of South Haven developed at urban residential and commercial density is essentially another neighborhood to Portage. During the first round of public meetings many statements were made that many people living in South Haven work in Portage and most commercial business of residents is done in Portage.

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 Porter County at a negotiated rate.
    - Establish a city operated transit service.

Figure 1. Potential Enhanced Demand Response Service Area



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 Porter County may not have to expand their administrative staff, the incremental cost of adding more Portage and South Haven service would be lower than if the city operated the entire service.

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 Portage 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 Portage and South Haven, the concept of Portage being the operator was not evaluated.

Two fixed route concepts were developed for Portage:

- P-1: Eastern Portage and South Haven service in the higher density areas south of I-94. The route would include transfer points with the P-2 route at Willowcreek/Central Avenue and adjacent to Walmart south of US 6.
- P-2: Western Portage south of I-90 through the southern city limits.

Figure 2 displays the two route concept alignments.

General parameters of the operating concept are:

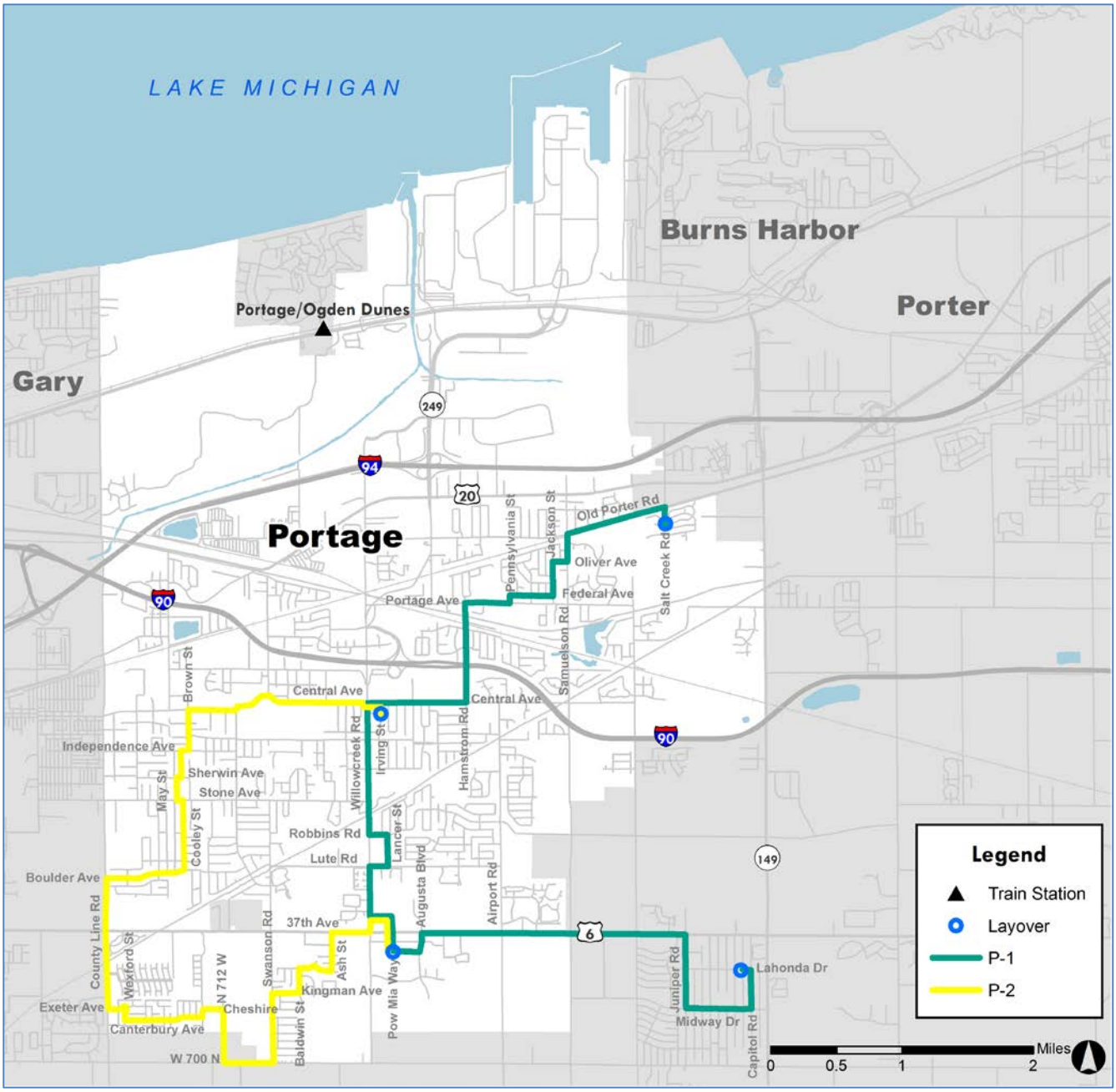
- Days of Service: Monday through Friday. Weekend service feasibility should be discussed with the Study Advisory Committee.
- Daily Service Hours: The initial assumption is the service day would operate for 12 hours per day. A proposed set of start and end times can be defined through discussion with the Study Advisory Committee.
- V-Line would provide service through a contract with the city and township.
- 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 ¾ 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.

Figure 2. Potential Fixed Route Alignment Alternatives



The fixed portion of the concept is consistent with the proposed concepts outlined in the fixed route description. Deviation of up to approximately ¾ 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 3 displays the two fixed route concepts and the estimated deviation coverage.

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 Portage/Ogden Dunes. Figure 4 displays a potential route through Portage 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 US 6/Willowcreek and the Portage/Ogden Dunes 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 a 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 V-Line as the operator, but getting vehicles to Portage in the early morning may be difficult.

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, which includes South Haven. 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.

Figure 3. Potential Deviated Fixed Route Alignment and Deviation Area

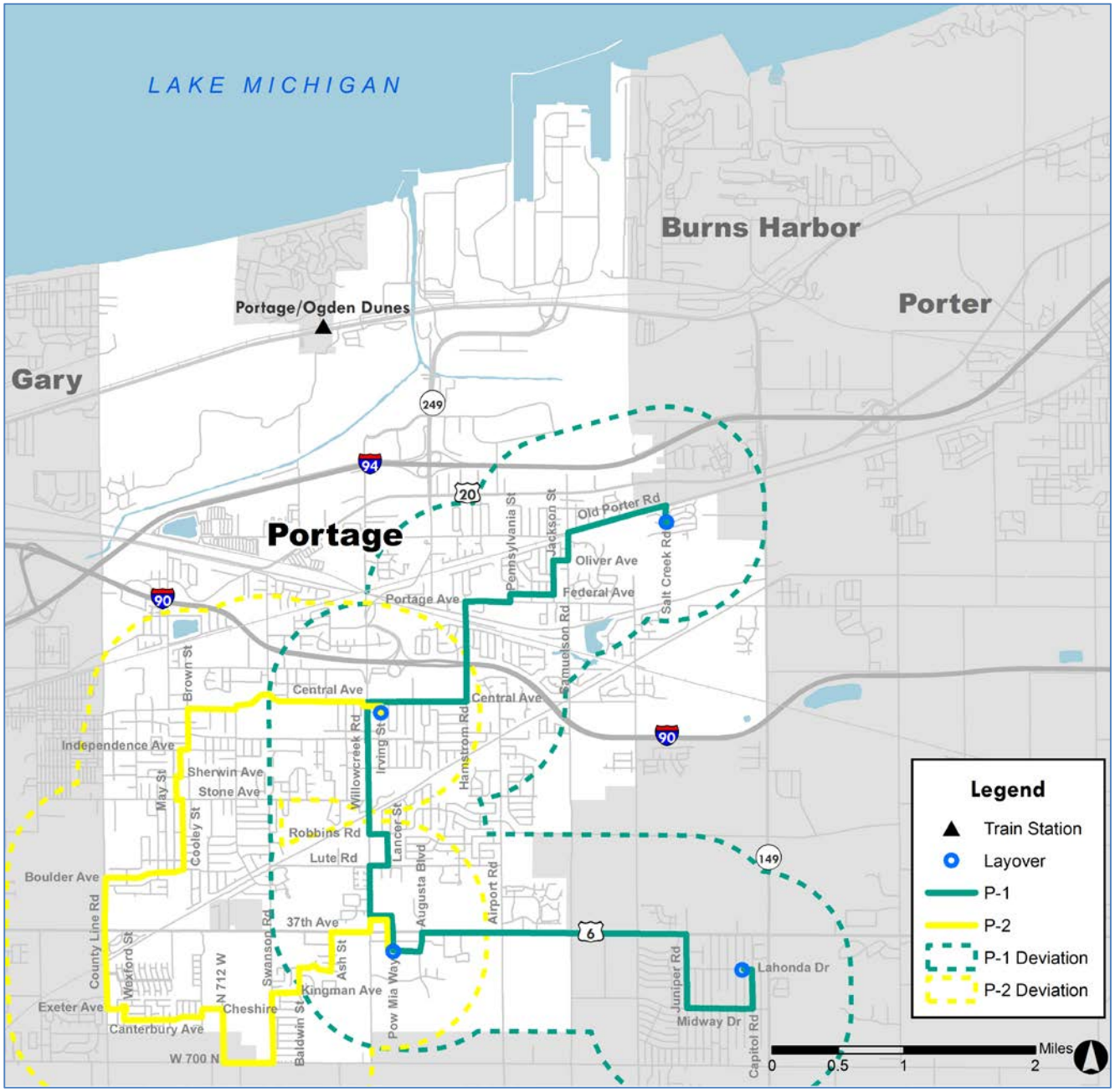


Figure 4. Potential Commuter Route Alignment

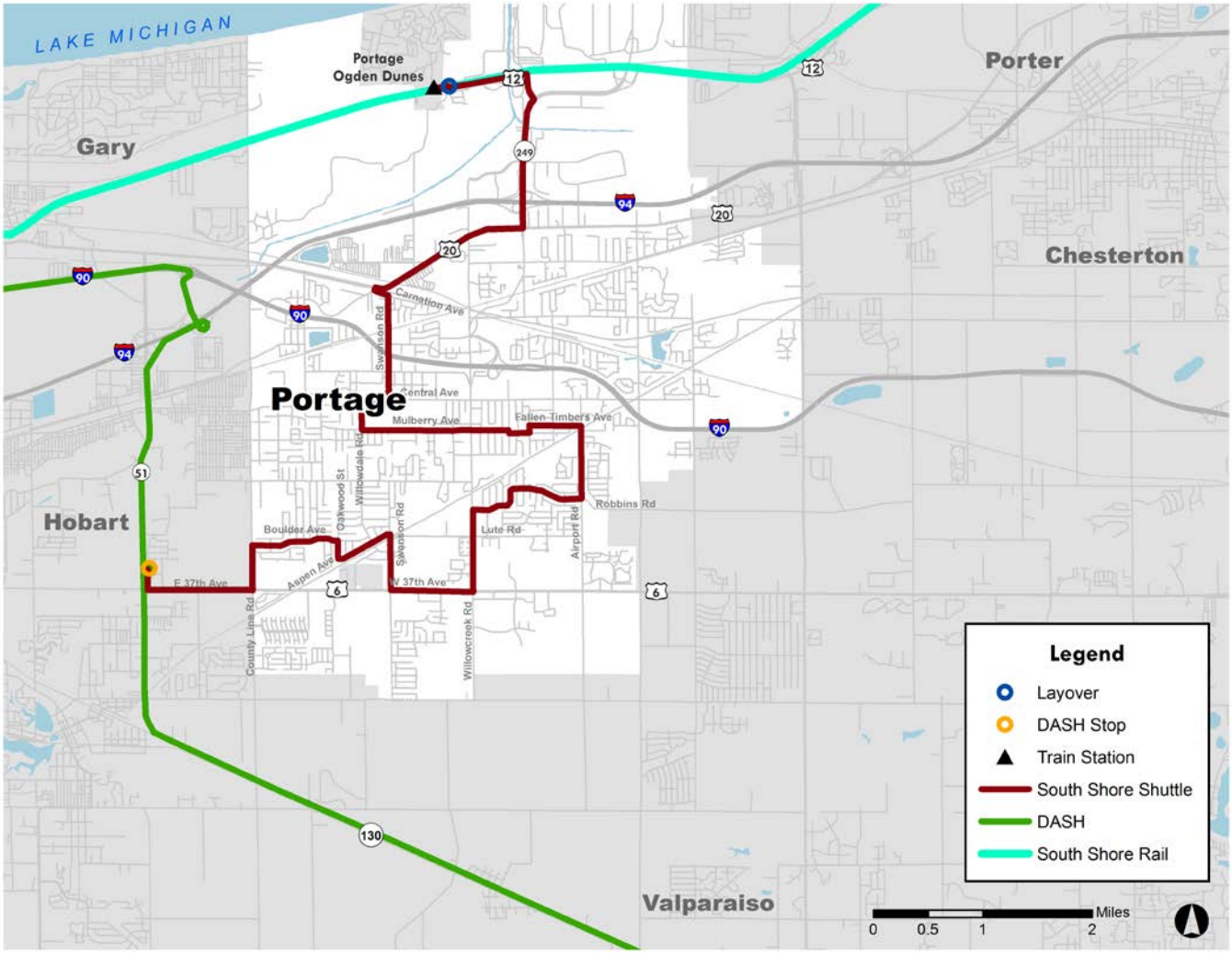


Table 1. Ridership Generation

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	14,700	21,900	36,800	90	150
Fixed Route	4.30	9.40	12,240	181,000	115,100	710	460
Deviated fixed Route	4.30	9.40	12,240	181,000	115,100	710	460
Commuter	0.50	10.00	1,367	18,400	13,700	80	60

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

Data Parameters:

- Local Service Area Population – 42,094
- Commuter Service Area Population – 36,812

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 Porter County 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.

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.

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

Alt	Service Type	Daily Riders	O & M Cost	Vehicles Needed	Cost	Admin Type	Local Share Of Operating	Local Cost Per Rider
1a	Demand Response	90-150	$618,000	6	$420,000	Purchased	$135,960	$5.92
1b	Demand Response	90-150	$764,000	6	$420,000	Directly Operated	$168,080	$7.32
2a	Local Routes	460-710	$516,000	5	$350,000	Purchased	$159,960	$1.36
2b	Local Routes	460-710	$769,000	5	$350,000	Directly Operated	$238,390	$2.03
3b	Commuter	60-80	$58,000	4	$280,000	Purchased	$17,980	$1.18

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:

- Alternative 1a | Demand Response | Independent Portage service operated by Porter Co:
  - How would costs and service be allocated between Portage and Porter County?
  - Would policy allow Portage residents to connect with the rest of the county?
- Alternative 1b | Demand Response | Independent Portage service operated by city:
  - Higher cost reflects the fact city would need to manage the service – Is the concept viable?
  - Costs assume service only operates within Portage limits. How would residents connect to the rest of the county?
- Alternative 2a | Local Route | Portage service operated by V-Line:
  - Requires long deadhead distances for vehicles to travel from garage (in Valparaiso) to Portage. Is there an option that would store vehicles in Portage?
  - The cost per hour (currently $42.15) is likely to increase once RideRight renegotiates the contract with Valparaiso.
- Alternative 2b | Local Route | Portage service operated by city:
  - Higher cost reflects the fact city would need to manage the service
  - Vehicles would not need to travel from Valparaiso for service
  - City would negotiate own contract with third-party operator, providing a greater level of control with the service

- Alternative 3a | Commuter | South Shore Commuter Shuttle:
  - Connects to both South Shore train and DASH commuter bus to provide maximum commuter connections to Chicago
  - With the short span of service in morning and evening, the deadhead from Valparaiso may not be economical. Thus, an operator other than V-Line needs to be discussed.
  - Connection to ChicaGo Dash would require capital dollars in order to create a park and ride station in Hobart. Cost could be shared with Hobart.