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# **Evaluation of Economic Development Strategies: New Baltimore**

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**This report is a result of work sponsored by Michigan Sea Grant under R/CCD-33, NA14OAR4170070 from National Sea Grant, NOAA, U.S. Department of Commerce, with funds from the State of Michigan**

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## 1. Executive Summary

The Michigan SeaGrant has been conducting an interdisciplinary project intended to develop a sustainable small harbor management strategy for Michigan's coastal communities. The team is hosting charrettes (facilitated community planning sessions) in New Baltimore, Au Gres, Ontonagon and Pentwater. These communities were selected based on several considerations, including broad geographic representation across Michigan and variety in type of harbor, community population size and type of adjacent water body.

New Baltimore is located on Lake St. Clair, a popular destination for fishing and boating. Although New Baltimore has an attractive downtown, its percentage of local retail capture is low relative to similar waterfront towns. Finding ways to enhance overall economic activity and municipal revenue streams would improve the economic sustainability of New Baltimore. The marina at New Baltimore is currently privately owned and poorly connected with the nearby downtown area and public boat launching facilities in the area are limited.

Conducting the charrette process for New Baltimore resulted in a "Preferred Alternative" identified as "New Baltimore 2035" representing a 20-year future condition. Potential changes identified in the charrette process include the construction of a boat launch at New Baltimore, municipal ownership of Schmid Marina, a new (Burke) marina abutting downtown New Baltimore and development of the New Baltimore downtown area.

This evaluation indicates that the changes identified in the charrette process have significant potential for enhancing the economic sustainability of New Baltimore. The implementation of the boat launch and Schmid Marina concepts currently appear to be the most promising concepts. Further refinement of the vision along with a developing a deeper understanding of likely costs, revenues, and funding mechanisms are recommended.

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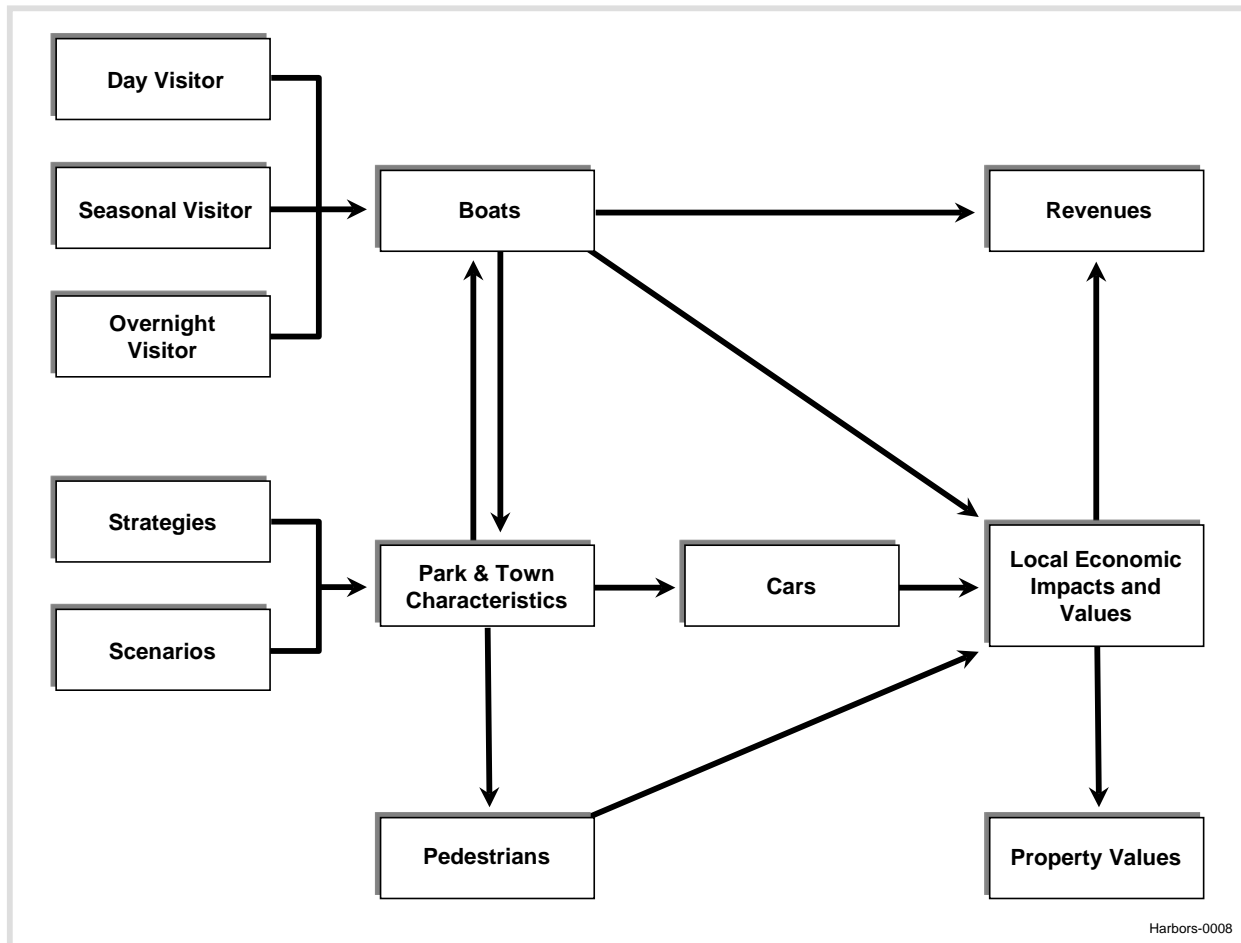
## 2. Overview

Enhancing the economic sustainability of harbor towns requires making important decisions in the face of complicated conditions. To support these efforts, a generalized economics-based decision-support model that can be tailored to individual harbor towns is being developed. The model evaluates demand for waterfront facilities, town and marina visits, and expenditures.<sup>1</sup> Demand arises from the nearby population and includes features commonly considered recreation and urban planning, such as park features, town walkability, town marina access, and marina amenities.

The models are intended to support consideration of strategies and scenarios. Strategies are considered by decision-makers and include changes to typical harbor characteristics (e.g., number of slips) as well as urban planning related characteristics, such as walkability and town/harbor access. Scenarios are external factors such as population levels and distribution, incomes, boat ownership levels, gas prices, harbor maintenance costs, and labor costs. Figure 1 illustrates the highest level architecture of the model—at the level of the relationship between strategies/scenarios and costs/revenues.

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<sup>1</sup> This is fundamentally different from existing economic models of marinas and launches, which are simple input-output models.



**Figure 1: High Level Model Architecture**

As Figure 1 depicts, Strategies and Scenarios influence Harbor and Town Characteristics and there are Implementation Costs associated with them. The Harbor and Town Characteristics impact the level of Boat Visits, Pedestrian Visits, and Car Visits and a vibrant marina can draw additional visits. This is indicated by the double arrow between Boat Visits and Park and Town Characteristics. Changes in Boat Visits lead to changes in both Marina Costs and Marina Revenues as (for example) harbor operators purchase and sell more gas and utility services.

Along with these trips come expenditures, which are represented by Local Economic Impacts and Values. With these expenditures, local businesses make profits and pay taxes. This change in value is a potential source of indirect revenue for the marina. Along with improved tourism prospects there is the potential for changes in property values, which is another improvement in value that could cause taxes to increase and be a potential source of indirect revenue.

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### 3. New Baltimore Model

Tourism and recreational demand modeling was undertaken to characterize the economic value of the Preferred Alternative (New Baltimore 2035) that was identified during the New Baltimore charrette process.<sup>2</sup> To accomplish this, the Small Harbor Sustainability economic model was customized to the New Baltimore 2035 scenario. This effort focuses on economic values that could potentially be captured to support a more sustainable future.

The model underlying this report is based on the best currently available information. Locations and incomes of potential visitors are collected from the census, and travel costs to New Baltimore are identified based on distance and driving costs. Further secondary research or expert opinion could improve this specification.

Models are based on the best behavioral functions and framework available. Recreation attractors include Schmid Marina and amenities, Burke Marina and amenities, boat launch, and downtown development. Demand for visits to town is based on town characteristics including walkability and marina access. The market for town visits also include transient visitors to the marinas and is therefore a symbiotic connection between demand for transient slips in marinas and demand for town trips from marinas; improving town conditions increases transient marina visits and improving marina conditions increases town visits by transient boaters.

The model is intended to provide an environment for evaluating certain outcomes. For example, some concepts forwarded include that:

- New Baltimore currently captures 1.5% of the local retail market and should be able to capture 3.5%.
- A boat launch at New Baltimore would attract three times the number of available parking spaces.
- A municipally-owned Burke Marina would be economically viable at a cost of \$4M.
- A municipally-owned Schmid Marina would be economically viable.
- ♦ 160 boat slips at 90% occupancy at Schmid Marian would potentially net over \$300K annually
- ♦ Boat launch fees, on-site storage, marina store improvements, and leasing agreements would generate additional revenue.

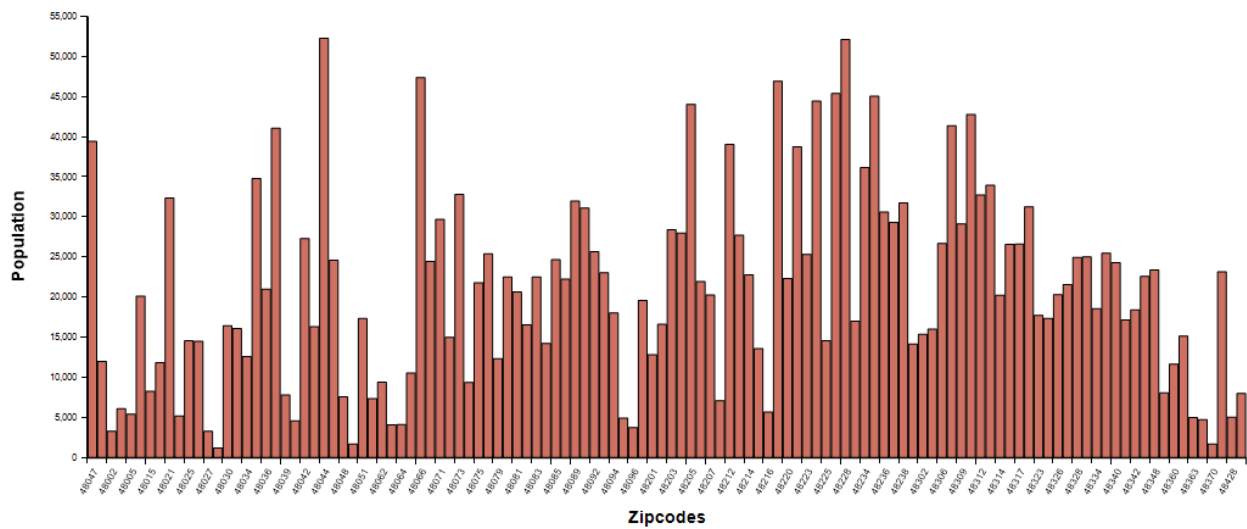
Site-specific behavioral information is not available. Because of this recreation information is transferred using professional judgment. For example, the measurement of travel costs and specification of the “disutility” of travel costs is consistent with results from recreation

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<sup>2</sup> Description available in the New Baltimore Charrette Final Report produced by Lawrence Technological University.

demand literature. Similarly the average positive utility is specified as consistent with recreation studies.

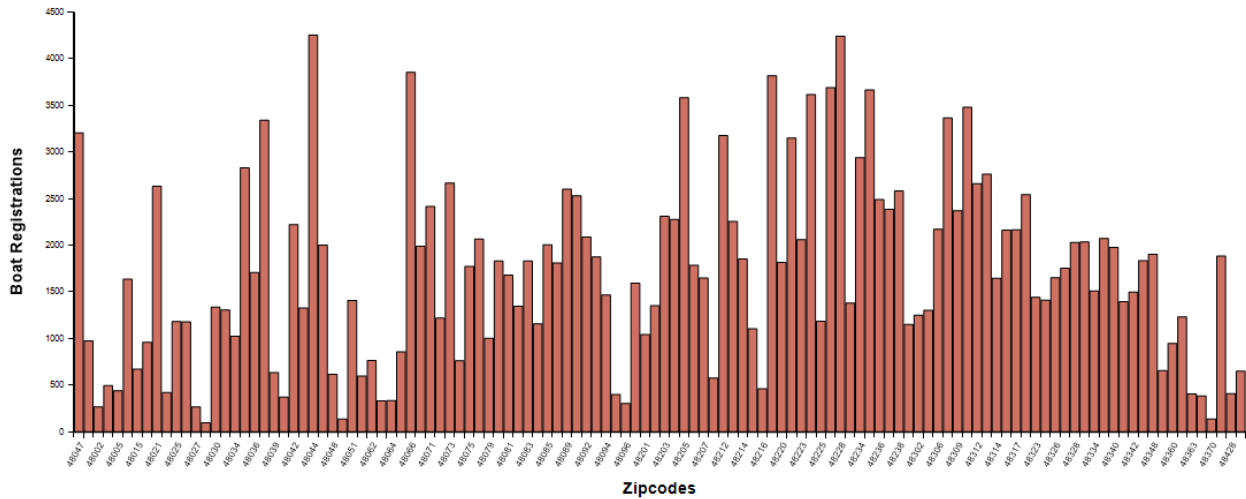
The evaluation considered the market of potential users of New Baltimore and its' marina(s) and boat ramps. Marina users can include both seasonal slip rentals and transient boaters. Trips by town visitors can come by land and overwater. The land based market that could potentially use the town, boat ramps, and marinas is specified to be the population within 50 miles of downtown New Baltimore. The ZIP Codes within this distance and their populations (based on US Census data) are depicted below.



**Figure 2: ZIP Codes and Populations within 50 Miles of New Baltimore**

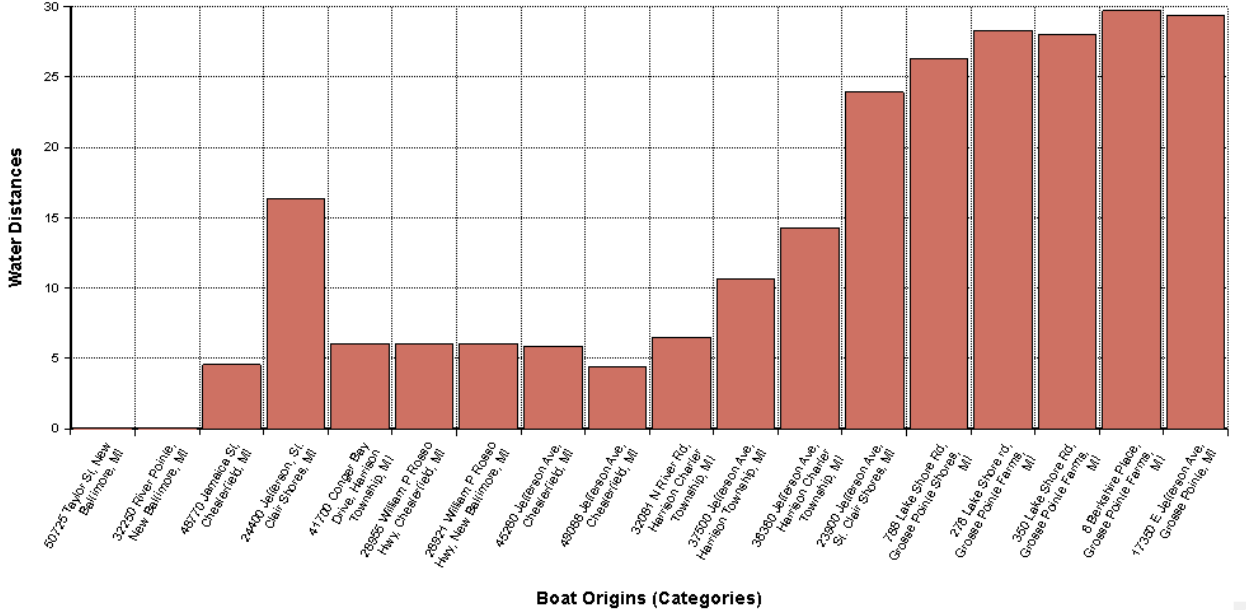
The primary market for slips and launches is specified to be the population of boat owners within 50 miles of the marina. Figure 3 depicts estimates of boat ownership for ZIP Codes within this area. Actual levels of boat ownership in this area are unknown and are specified at a statewide average of 8%.





**Figure 3: Specified Boat Ownership within 50 Miles of New Baltimore**

The market for transient slips and the town visits consists of boats on Lake St. Clair within traveling distance. Figure 4 depicts distances for locations where concentrations of boats were identified that are within 30 miles by water of New Baltimore.



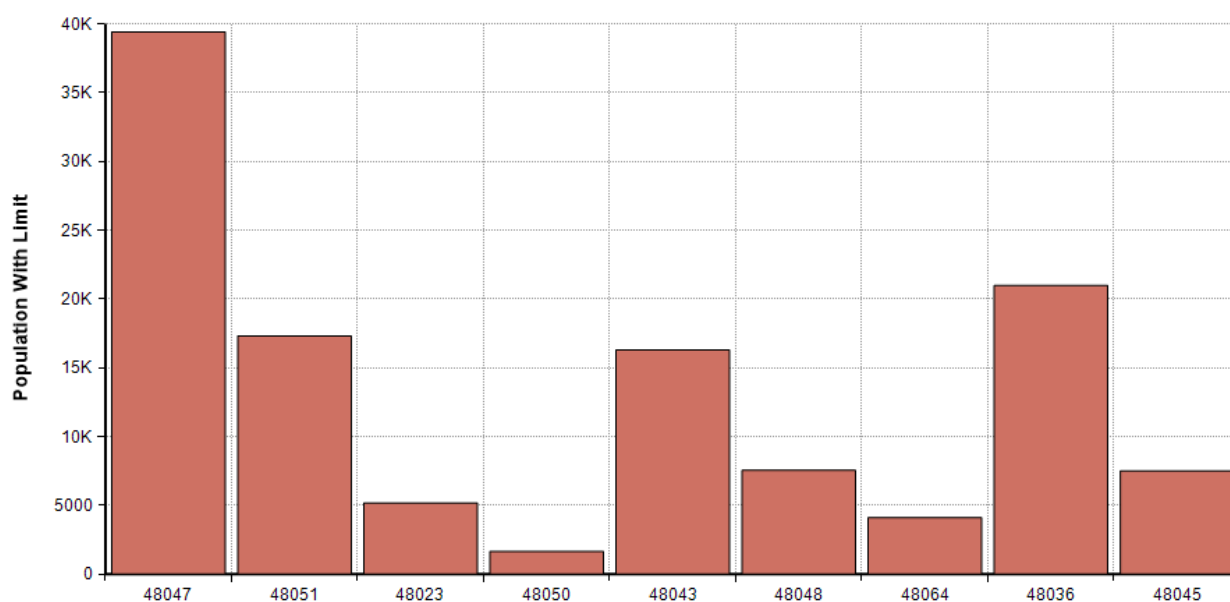
**Figure 4: Distances from Origin Points with Concentrations of Boats**

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## 4. Baseline

The modeling approach applies the “Baseline and Counterfactual” framework. A representation of current conditions is developed and the model is calibrated to represent these conditions. After developing this baseline characterization, counterfactual strategies can be evaluated by making changes to model inputs. Doing this requires information about baseline conditions. Because town trips, seasonal marina occupancy, transient marina occupancy, and boat-launch use are important variables that are subject to change under different strategies and scenarios, these are identified as targets for calibration.

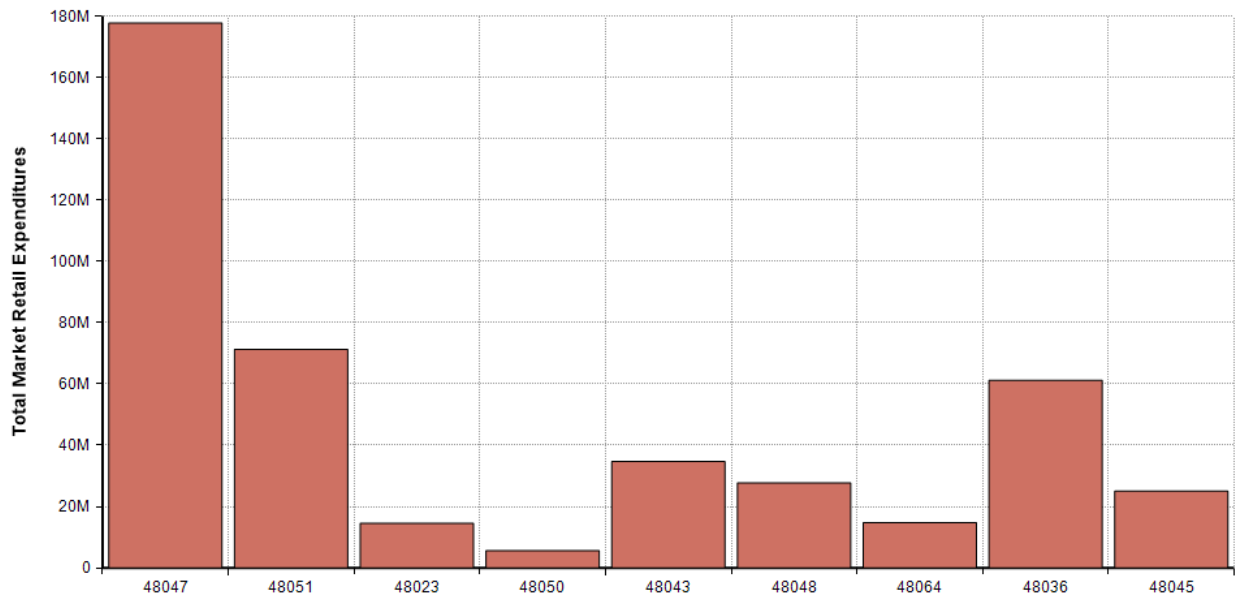
The best available information about town trips is from the retail trade evaluation which notes that the primary retail trade area has an estimated population of 120,000 (45,000) households and that the downtown businesses capture 1.5 to 1.6 percent of retail trade for this population. To calibrate to this point, expenditures in town are specified as \$50 per adult visitor. This would be spent on food, drink, miscellaneous items and entertainment including recreation. Trips to the downtown business area are evaluated as those coming from the nearest 120,000 people. These ZIP codes are taken to represent the “primary retail trade area.” These ZIP codes and their populations are depicted in the figure below.



**Figure 5: Populations by ZIP Code in “Primary Retail Trade Area”**

Calibrating to 1.5% of retail trade for this group of people requires characterizing total retail trade. For the purposes of this document, it is temporarily specified as 10% of post-tax

income where gross income is specified as taxed at 30%. Total retail expenditures in the retail trade area are depicted in the figure below.

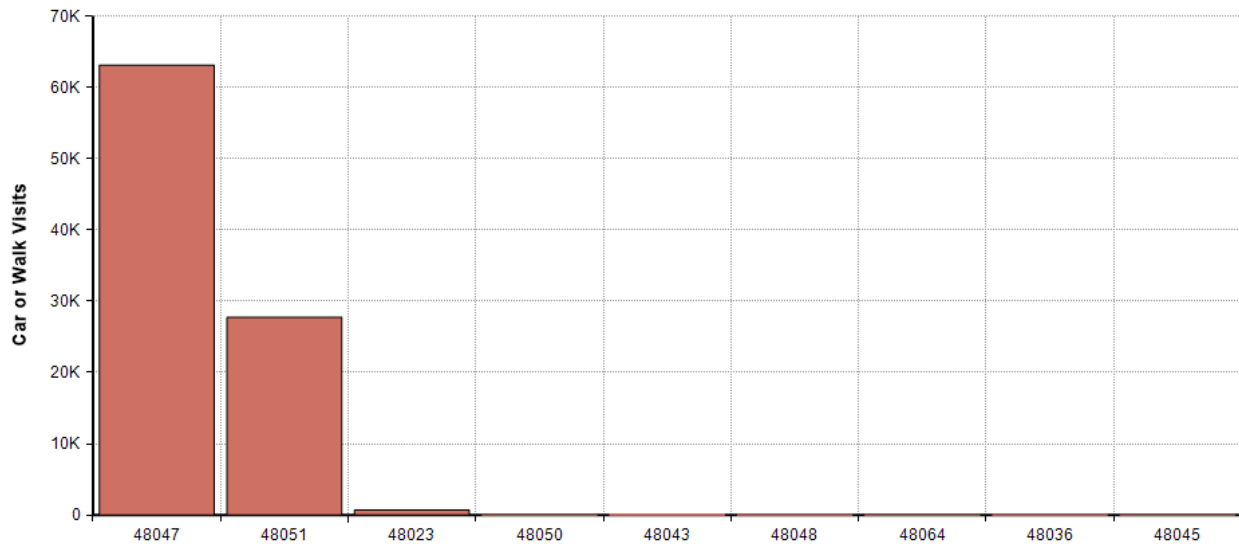


**Figure 6: Total Retail Expenditures in “Primary Retail Trade Area” by ZIP Code**

Car/walk trips in the baseline model are expected to account for all baseline trips to town and are calibrated so as to produce expenditures that are 1.5% of retail spending, where total retail expenditures are \$946.6 million. In simulations, the market is conceptually considered to have a number of choices for recreation. Among these are trips to the New Baltimore downtown and marina complex. Trips are composed of two adults spending \$70 each across tourism categories “Food and Beverage”, “Retail”, and “Transportation”.<sup>3</sup> With this specification, to generate a “retail capture” of 1.5% members of the “market” take approximately 200,000 trips per year. In the context of economic impacts this is \$14M in “direct” economic activity. There is also indirect economic activity (inputs) and induced (employment) spending which is not evaluated.

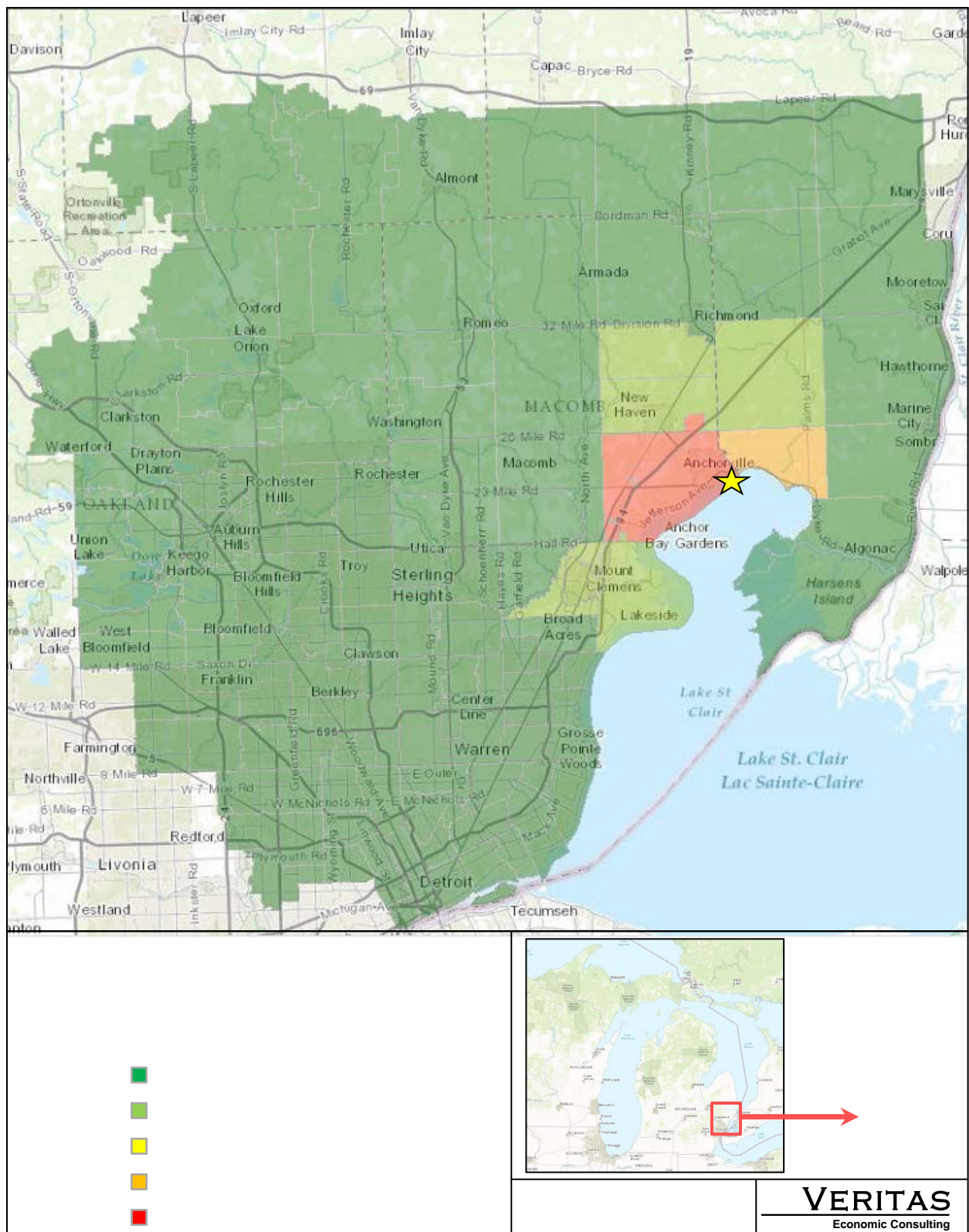
The figure below depicts the demand for trips to New Baltimore. In this figure, ZIP Codes are sorted by distance from downtown. The majority of trips come from the closest two ZIP Codes which are less than ½ mile from downtown and have populations of approximately 57K. The next ZIP codes with populations above 10K are 10 miles away.

<sup>3</sup> The breakdown of \$32 for food and beverage, \$18 for retail, and \$21 for recreation is based on transferred tourism day trip expenditures (Bingham, Lupi, and Sinha 2016).



**Figure 7: Calibrated Baseline Town Trip Demand**

Figure 8 depicts these trips by ZIP code spatially with trip intensity represented by red, orange, yellow, and light green. Area in dark green is ZIP codes that are within 50 miles but are not part of the 120,000 people in local retail capture.



**Figure 8: Calibrated Baseline Town Trip Demand Depicted Spatially**

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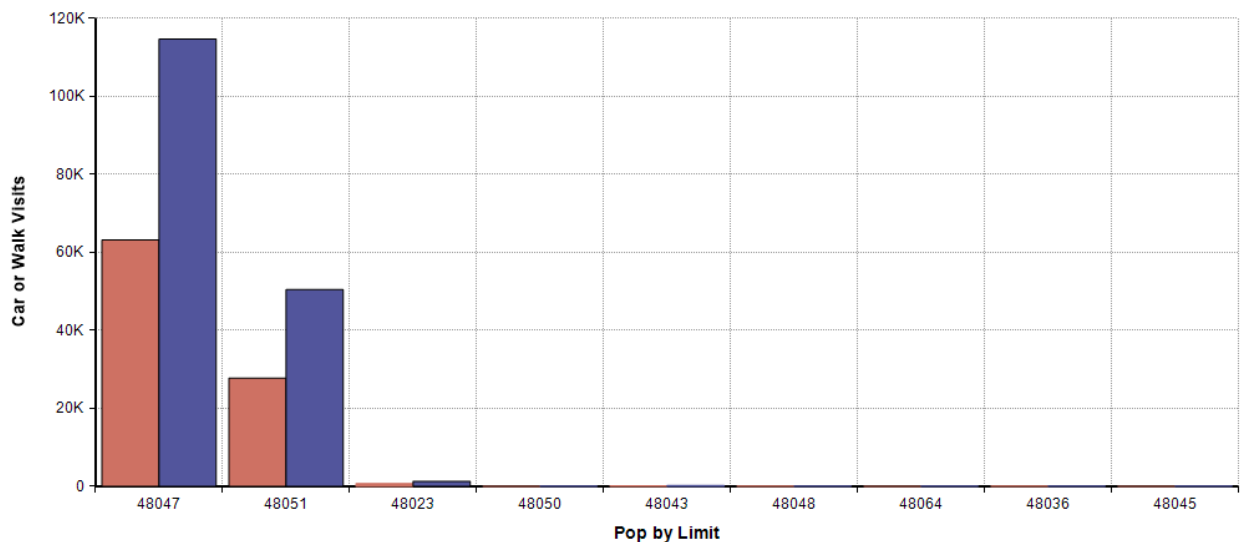
Under possible scenarios, town trips could come from land or from transient boaters or from people using the new launch. Because there is no launch capability near downtown and no connectivity between town and marina in the current conditions, the trips resulting from walking and by car are the only trips to downtown and no more calibration is required. Moreover, as there is no municipal marina or launch, these are not characterized for baseline.

## 5. New Baltimore 2035

With the baseline conditions characterized, strategies can be evaluated by changing underlying data and running model simulations. Conducting the charrette process for New Baltimore resulted in a “Preferred Alternative” identified as “New Baltimore 2035,” representing a 20-year future condition. This design includes substantial downtown development, purchase and development of Schmid Marina, construction of a boat launch and parking with 60 spaces, and construction of a new marina—Burke Marina—which would be adjacent to New Baltimore and occupy the space of the current beach and park.

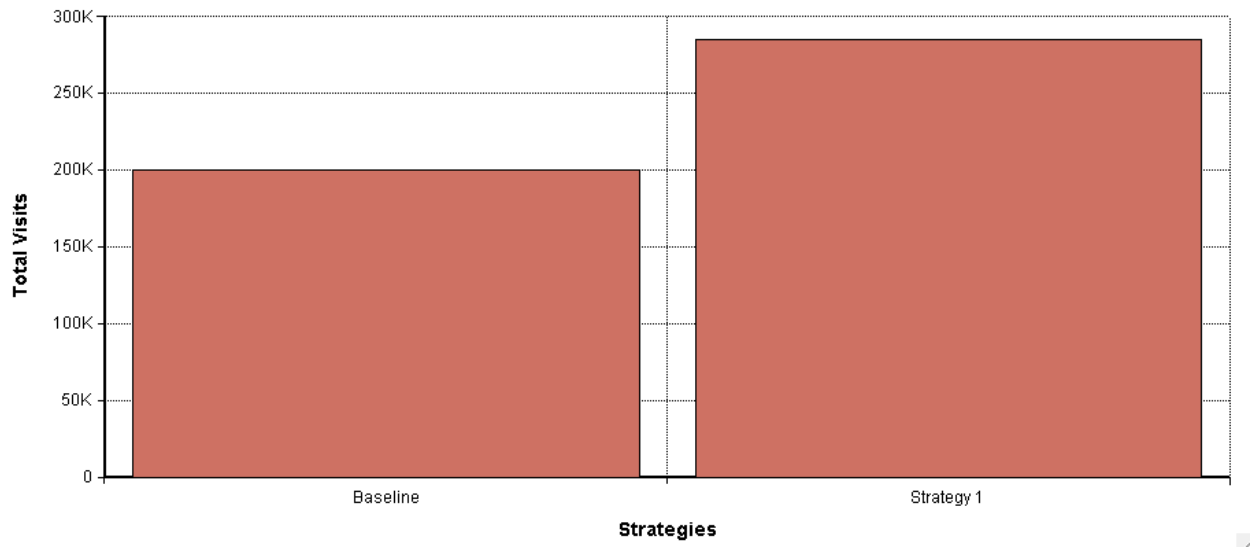
The changes to downtown and access to marinas would improve the quality of downtown New Baltimore. Town attractiveness is composed of walkability and marina access. Walkability is an important influence on value (Leinberger and Lynch 2015). However, no studies of the walkability of New Baltimore or the effect of walkability on tourist visits are available. Based on professional judgment, walkability scores for downtown are changed from their baseline specification of 5 to 8. In baseline, Burke Marina does not exist and Schmid Marina is not accessible from town. Therefore access for both is 0. In the Preferred Alternative, Burke Marina abuts downtown and access is assigned a value of 10 (highest possible). Schmid Marina is accessible, but still some distance away and access is set to 5 for an average marina-town access of 7.5.

Figure 9 depicts Baseline (red) and New Baltimore 2035 (blue) trip demand.



**Figure 9: Baseline and New Baltimore 2035 Trip Demand**

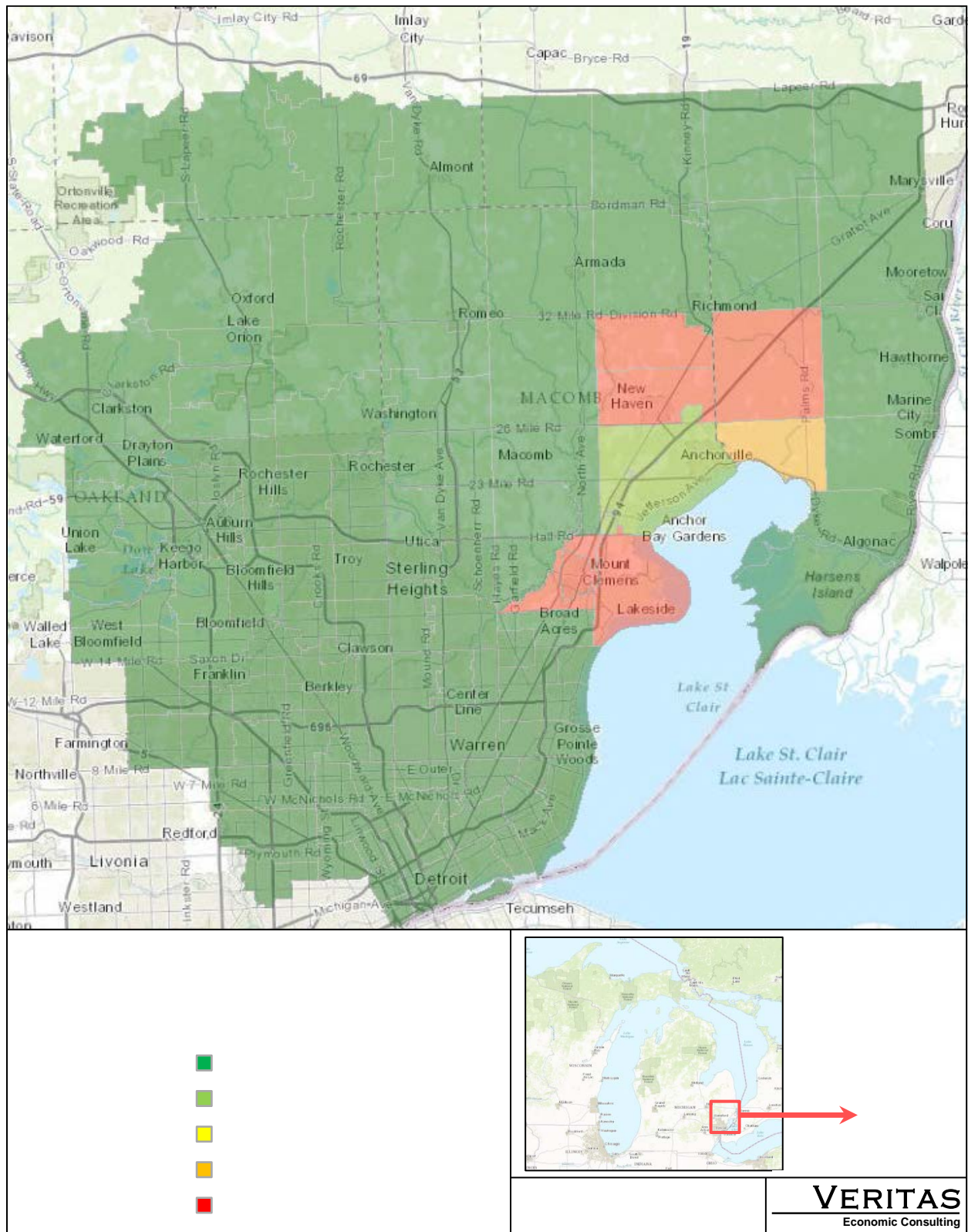
This results in an overall increase in trips as depicted below.



**Figure 10: Baseline and New Baltimore 2035 Alternative Trips**

As Figure 10 indicates, visits by car visitors and people who walk increase from about 200,000 to 275,000. Figure 11 depicts relative percentage change rates. Although absolute changes are larger for nearby ZIP Codes, relative percentage changes are larger for further ZIP Codes.





**Figure 11: Percentage Change in Car or Walking Trips**

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The purchase and development of Schmid Marina would include converting the marina from private to municipally-owned. The marina's current 80 slips would be expanded to 160. Access to the downtown business district would be improved by widening the existing road to 12 feet in each direction and adding a bike lane. Revenues would arise from transient and seasonal slip rentals, boat launch fees, on-site storage, marina store improvements and leasing agreements.

Slip rentals are expected to be an important revenue driver. Slip fee schedules are established by the Michigan State Waterways Commission but can nevertheless vary substantially. For example a 30-foot seasonal slip could be between (approximately) \$1,000 and \$3,000. At \$2,000 per slip, seasonal slip occupancy levels of 90 percent would result in total revenues of \$288,000. Under the current private ownership and configuration, occupancy levels are closer to 50 percent. The substantial enhancements to the marina and town that would occur under the Preferred Alternative would be a substantial draw.

Considering transient slips, the Waterways Commission daily (standard) rates are \$37 for a 30-foot slip. At 20 percent occupancy over 100 days, the remaining slips could generate daily rental fees of approximately \$12,000. This would also be associated with an additional number of town visits, perhaps up to 1,000 people. Regarding the likelihood of receiving transient trips, Anchor Bay and areas to the south are home to a substantial numbers of boats. These boats are land and water based. Although quantifying them was not feasible for this effort, it was possible to characterize concentrations of boats as depicted below. As this figure indicates, there is a substantial concentration of boats relatively nearby. In particular, boats from relatively nearby areas such as Harrison Township (first large red circle going south from New Baltimore) would be likely transient visitors given sufficient town and marina attractiveness.

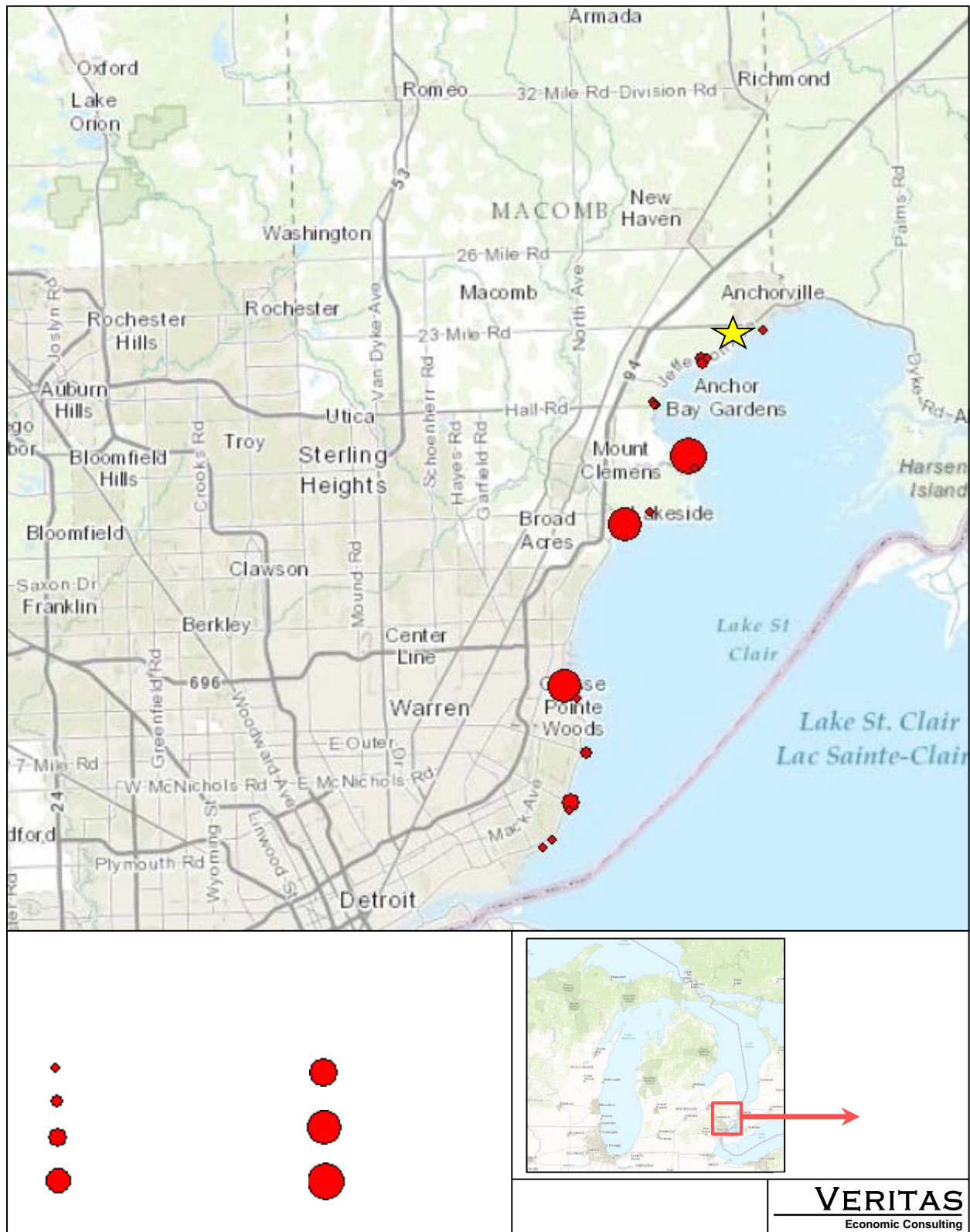
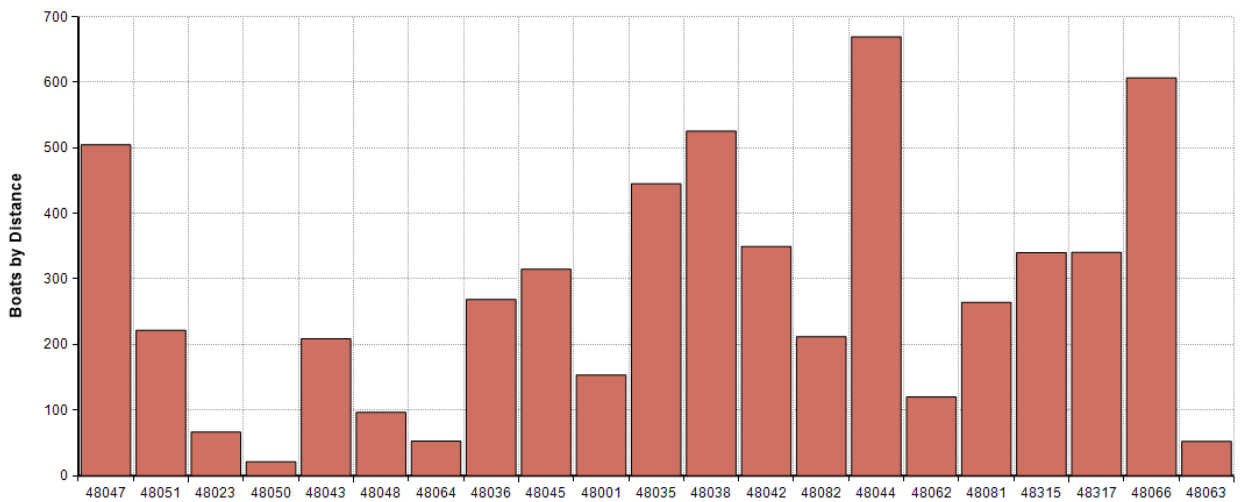


Figure 12: Potential Market for Transient Boaters

Schmid Marina would also include boat launches and associated parking. The project team judged the area to be underserved with respect to launch capabilities. It is possible that the launches would be fully utilized. Here, “full utilization” is specified as available parking of 60 spaces turning over three times daily during a 100 day boating season. This full utilization specification would yield over 14,000 launches. At \$10 per launch this would be \$140,000 in total revenue.

For logistical (e.g. crowding) and practical (e.g. weather) reasons, full utilization is judged unlikely. However, as depicted in Figure 13, there could be several thousand boats within 20 miles of New Baltimore.



**Figure 13: Potential Market for Launch Users**

Given the lack of competing launches, it does appear feasible that new launches at New Baltimore would attract thousands of boaters each season.

The Burke Marina component of the Preferred Alternative includes moving some existing facilities, particularly the beach and park equipment in Burke park. Following this, land would be removed and a marina that connects to downtown would be constructed. This marina would have superior connectivity to town. However, this connectivity would come at a cost of significant land loss and construction expense – roughly estimated at \$4 million. Town and park proximity and connectivity would be an important draw for Burke Marina. This would support higher slip fees in other ways demand for seasonal and transient slips is similar to the Schmid Marina evaluation.



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## 6. Conclusions

The attractiveness of New Baltimore and the associated harbor would be greatly improved through development activities as identified by the Preferred Alternative—New Baltimore 2035—described in the charrette final report. With successful development activities and value capture from these activities, the economic sustainability of New Baltimore would be enhanced through increased visitation from tourists and nearby residents.

Economic sustainability requires some form of value capture. Direct value capture is possible through the municipality operating facilities. This is similar to operating a business and requires positive net revenues—i.e., total revenues that exceed total costs. Costs include regular operating expenses as well as servicing any debts incurred in development.

Considering direct value capture, the project team judged the area to be underserved with respect to launch capabilities and the boat launch at Schmid Marina is expected to be a substantial draw. Full utilization of this launch would be the available parking of 60 spaces turning over three times daily during a 100 day boating season. This full utilization specification would yield over 14,000 launches. At \$10 per launch this would be over \$140,000 in total revenue. These revenues could be collected on site. Doing so would require an employee. However, this would only be required for several months out of the year and maintenance costs for the ramps would be minimal. Although the costs for developing the parking and launching facilities is not known, on an ongoing basis the launch component is likely to be self-funding and enhance the economic sustainability of New Baltimore.

Regarding the Schmid Marina concept, this marina could potentially lead to \$300,000 or more in revenues from wet slips. Additional revenues would arise from gas sales, leasing, and other opportunities. This projection depends upon high occupancy rates which have not been achieved in the existing private marina. Developing the marina, enhancing town connectivity, and providing amenities will increase the marina's attractiveness. With affordable slip rates high occupancy appears likely even with an increased number of slips. Uncertainties include the cost of operating the marina and the cost of purchasing and developing the marina.

The Burke Marina concept would directly connect downtown New Baltimore with a marina. This level of connectivity would dramatically enhance the harbor-town nature of New Baltimore. However, this is also the most disruptive and expensive component of the New Baltimore 2035 concept while providing only half the slip space of the Schmid Marina. Especially when combined with appropriate downtown development, the Burke Marina would be quite attractive and would draw more transient visitors than Schmid Marina. Also, because of

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its' location, Burke Marina visitors would be more likely to visit town and spend money. However, the high cost of this component of New Baltimore 2035 combined with limits on allowable slip fees make the Burke Marina the least likely component to enhance economic sustainability through direct collection of revenues that exceed costs.

With the envisioned town and marina improvements there would be a substantial increase in trips to and expenditures in New Baltimore. Even with significant marina improvements, trips to town by boaters would be a relatively small portion of total new trips to town. Marina development, connectivity, and improvements would be a draw for land-based trips but would not be of overriding importance. An important consideration for land-based trips is that the nearby population density drops off somewhat quickly. People who are launching boats will come more frequently from further distances than people only visiting the town. Identifying means to capture retail revenue from boat launchers would enhance this component of New Baltimore 2035. A countervailing effect is that the launches would generate significant traffic which could disrupt Schmid Marina town connectivity and negatively affect the experience of visiting New Baltimore.

Unlike municipally owned boat launches and marina, value capture to support town development would not come from direct sales and accordingly some sort of policy mechanism may be required to support related efforts. Value capture from private activities is potentially available through tax increment financing (TIF). Michigan "allows an established TIF authority to 'capture' property tax revenue from incremental increases in value in a determined area and spend the 'tax increment revenue' or a percentage of the total increased collections to develop the area or finance a specific project." Municipalities find TIF plans attractive partially because funds can be generated for economic development without the need to levy new taxes. A municipality such as the City of New Baltimore can create a TIF authority and designate the district where the TIF plan will be applied (Krogulecki 2016).

Information limitations regarding development and operations funding and costs are the most significant impediment to drawing definitive conclusions about the economic viability of the New Baltimore 2035 concept. Detailed costs for identified improvements have not been developed. Developing these costs and considering them in the context of more refined revenue projections is recommended. Clearly lower implementation outlays would lead to enhanced economic sustainability by lowering the stream of future costs. The Michigan Department of Environmental Quality's Coastal Zone Management (CZM) Program provides grants to coastal communities to assist in "the development of vibrant and resilient coastal communities." The New Baltimore 2035 concept appears consistent with CZM funding criterion.

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Grant-based funding from this source or others would enhance economic sustainability by lowering outlays that must be recouped to ensure economic sustainability.

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