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Economic Impact of Proposed Harbor Shores Development

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Economic Impact of Proposed Harbor Shores Development

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Disclaimer

This Upjohn Institute report provides an estimate only of the potential economic impact of the proposed Harbor Shores development in Berrien County, Michigan. It must not be construed as a market feasibility study for the proposed development. It is based solely on growth projections provided by the Harbor Shores developers, and it does not offer an assessment of the soundness of these projections. In addition, the Upjohn Institute in providing the report is not thereby giving its support for the leasing of 22 acres of the Jean Klock Park for the development's golf course. An assessment of the social and environmental consequences of this action is well beyond the scope of this report.

Executive Summary

The Harbor Shores development project will generate positive economic impact for Berrien County through three main activities:

1. Construction of new housing units, commercial and retail space, two hotels (one including a water park), and the golf course.
2. Attraction of new income to the area in the form of both permanent residents and second-home owners.
3. Increased tourism and associated local spending.

The jobs and income associated with the construction activities will, of course, only be temporary; once the project is completed, it will no longer support local jobs in construction trades or other associated support activities. As shown in the executive summary table on page 4, the economic impact of the construction activities is expected to peak near the middle of the project phases, when combined commercial and residential construction is at its peak. If construction proceeds as planned—both in terms of project size and timeline—we estimate that in Berrien County around 900 jobs and personal income of between \$32.9 and \$42.9 million will be supported during the peak years of project construction (2010 through 2014).

Although more modest in size, the economic impact associated with the attraction of new tourists, second-home owners, and full-time residents will be permanent. These individuals generate economic impact by bringing new spending into the local economy, which continues after the project development is complete. If the project reaches full occupancy at the expected completion date in 2020, we estimate that the combined local consumption spending of associated tourists, second-home owners, and new year-round residents will generate approximately 700 jobs and personal income of roughly \$29.2 million in 2020 in Berrien County. (See summary table on page 4.)

Project Description and Assumptions

As stated earlier, this economic impact assessment is based entirely on pre-project assumptions provided by Harbor Shores developers. Any changes to the size, activity mix, or timeline of the project may substantially alter the economic impact of the project on Berrien County.

- Residential construction will consist of 826 units built over three phases. Costs are calculated based on an average of 1,234 square feet per unit at a cost of \$114.05 per sq. ft. All costs and expenditures that continue over time are assumed to inflate at an annual rate of 2.5 percent.
- Commercial construction costs include:
 - 44,000 sq. ft. of general commercial retail constructed at \$114.05 per sq. ft. (inflation adjusted to the year)
 - \$70 million for golf course construction
 - \$40 million for a small boutique hotel and associate facilities
 - \$125 million for the large hotel and water park
 - \$4 million for marina construction (two phases)
 - \$22 million for roads, infrastructure, and environmental issues.

- Tourism spending is based on the assumption that the development offers a *unique draw* that will bring in visitors from outside the county. Spending associated with the small hotel is based on 65 percent occupancy of 80 rooms costing an average of \$171 per night. Spending associated with the large hotel and water park is based on a 70 percent occupancy rate for 350 rooms and a \$245 average cost for room and admission. Additionally, other local tourism expenditures are based on an average local spending rate of \$122 per occupied room night.
- New full-time permanent residents are assumed to have an average household income of \$185,000, of which 66 percent is spent on local consumption (based on Bureau of Labor Statistics national expenditure averages for high-income households).
- New second-home owners are also assumed to have an average household income of \$185,000. Average annual time in residence is assumed to be 25 percent or three months. Consumption is estimated based on both a smaller sub-set of the national expenditures mix (i.e. vacation homeowners are unlikely to purchase automobiles or have primary medical care in Berrien County). Only 25 percent of household income is assumed to be available to the area, of which only 33.7 percent is expected to be spent locally. Therefore, an estimated 8.4 percent of total vacation homeowner household income is expected to impact Berrien County in the form of consumption expenditures.

Summary Table: Harbor Shores Development Economic Impact on Berrien County

Construction Impact (thru life of project only)

| | <u>2008</u> | <u>2009</u> | <u>2010</u> | <u>2011</u> | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total Construction Spending (\$mil) | \$19.4 | \$30.2 | \$48.2 | \$50.6 | \$52.8 | \$54.7 | \$60.1 | \$15.4 | \$15.6 | \$14.8 | \$15.1 | \$15.5 | \$15.8 |
| Residential Construction | \$0.0 | \$8.7 | \$8.9 | \$9.1 | \$9.2 | \$12.9 | \$13.2 | \$13.6 | \$13.7 | \$13.0 | \$13.3 | \$13.6 | \$14.0 |
| Commercial and Other | \$19.4 | \$21.5 | \$39.3 | \$41.5 | \$43.5 | \$41.8 | \$46.8 | \$1.8 | \$1.8 | \$1.8 | \$1.8 | \$1.8 | \$1.8 |
| Total Employment | 418 | 610 | 930 | 929 | 939 | 900 | 937 | 217 | 196 | 171 | 166 | 163 | 162 |
| Construction Impact | 315 | 457 | 697 | 697 | 704 | 676 | 704 | 169 | 156 | 137 | 131 | 127 | 123 |
| Other Indirect Employment | 103 | 153 | 233 | 232 | 235 | 224 | 233 | 48 | 40 | 34 | 35 | 36 | 39 |
| Personal Income (\$mil) | \$13.0 | \$20.4 | \$33.0 | \$35.8 | \$38.7 | \$39.5 | \$42.9 | \$16.1 | \$14.2 | \$12.5 | \$11.8 | \$11.4 | \$11.3 |

Impact of Tourism, New Part-time Residents, and New Permanent Residents (continues beyond project development)

| | <u>2008</u> | <u>2009</u> | <u>2010</u> | <u>2011</u> | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total Tourist & Resident Consumption (\$mil) | \$0.0 | \$2.2 | \$9.9 | \$12.4 | \$14.9 | \$51.1 | \$55.3 | \$59.7 | \$64.3 | \$68.8 | \$73.4 | \$78.3 | \$83.4 |
| Part-time Residents (second homes) | \$0.0 | \$0.7 | \$1.5 | \$2.3 | \$3.2 | \$4.4 | \$5.6 | \$6.9 | \$8.2 | \$9.5 | \$10.9 | \$12.4 | \$13.9 |
| Permanent Residents | \$0.0 | \$1.5 | \$3.0 | \$4.6 | \$6.2 | \$8.5 | \$11.0 | \$13.5 | \$16.1 | \$18.7 | \$21.4 | \$24.2 | \$27.1 |
| Tourist Spending | \$0.0 | \$0.0 | \$5.4 | \$5.5 | \$5.5 | \$38.2 | \$38.8 | \$39.4 | \$39.9 | \$40.5 | \$41.1 | \$41.8 | \$42.4 |
| Hotel & waterpark sales | \$0.0 | \$0.0 | \$3.2 | \$3.3 | \$3.4 | \$21.9 | \$22.5 | \$23.0 | \$23.6 | \$24.2 | \$24.8 | \$25.4 | \$26.0 |
| Other local tourist spending | \$0.0 | \$0.0 | \$2.1 | \$2.1 | \$2.1 | \$16.3 | \$16.3 | \$16.3 | \$16.3 | \$16.4 | \$16.4 | \$16.4 | \$16.4 |
| Total Employment | 0 | 18 | 131 | 147 | 161 | 660 | 679 | 691 | 697 | 699 | 701 | 703 | 705 |
| Retail, Hotel, Amusement, & Restaurants | 0 | 9 | 101 | 108 | 113 | 534 | 533 | 532 | 530 | 526 | 523 | 520 | 517 |
| Other Consumption-related Employment | 0 | 9 | 30 | 39 | 48 | 126 | 146 | 159 | 167 | 173 | 178 | 183 | 188 |
| Personal Income (\$mil) | \$0.0 | \$0.4 | \$2.7 | \$3.6 | \$4.4 | \$15.8 | \$18.8 | \$21.2 | \$23.1 | \$24.8 | \$26.3 | \$27.8 | \$29.2 |

Detailed Economic Impact

To better understand the relative impact of various activities associated with the proposed Harbor Shores development project, the economic outputs—jobs and income—associated with the project’s individual activities are broken out in greater detail.

Construction

The proposed Harbor Shores development entails three major types of construction activity: single-family and multi-unit residential housing, road and environmental work, and commercial development, which includes retail, hotel, and office structures, as well as a major golf course development. In terms of economic impact, these construction activities represent the majority of the project’s direct economic effect on the community, which will occur through construction jobs, building material purchases, and ensuing “spin-off effect” spending that support local retailers, restaurants, and service providers. As stated earlier, construction activity directly related to Harbor Shores will take place during the next 12 years—through 2020—and will support a varying degree of economic impact in any given year, depending on the phase of development and the total construction activity.

Given that Harbor Shores is primarily a residential development project, it is not surprising that the construction of houses, townhouses, and condos is expected to provide local economic benefit consistently between the start of the project and the projected completion in 2020. As shown in the table detailing the residential and road construction impact (Table 1), the proposed construction of 826 housing units between 2009 and 2020 is estimated to generate between 150 and 200 jobs each year during the period. These include on-site construction jobs as well as off-site indirect jobs. In addition, the project’s construction activity will generate from \$5.1 million to \$9 million in personal income each year. This is based on an average construction cost of \$114 per square foot¹ and an average unit size of 1,283 square feet, which results in over \$143 million in cumulative direct local construction spending² during the development period.

In addition to the direct construction of structures, a certain amount of road construction will be necessary to support the new population. The proposal includes a total of \$6 million to be spent on roadways and related issues. Since a specific timeline is not provided for this peripheral construction spending, we assume that it will also occur gradually over the years up until the projected 2020 completion date. As shown at the bottom of Table 1, this aspect of the project is relatively minor and is expected to yield six-to-ten jobs and personal income of less than \$1 million each year during the construction development timeline.

¹ In nominal 2008 dollars, an inflation factor of .025 is used to estimate adjusted construction costs for each following year.

² Note that construction spending is different from sales price or market value in that it includes only the monies directly spent locally on construction activities (e.g. framing, plumbing, electrical, painting, etc.) and does not include other value added portions of real estate, such as the value of the land, development design, or fees and developer profits.

Table 1: Residential Construction and Road Construction Detail

| Approx. Development Phase: | Phase 1 | | | | Phase 2 | | | | Phase 3 | | | |
|---|---------|--------|-------|-------|---------|---------|--------|--------|---------|--------|--------|--------|
| Year: | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Housing Units | | 231 | | | | 311 | | | | 284 | | |
| Est. Sales Value Inc Land, Misc. (\$mil) | | \$77.0 | | | | \$104.0 | | | | \$95.0 | | |
| Direct Construction Sector Demand (\$mil) | \$8.7 | \$8.9 | \$9.1 | \$9.2 | \$12.9 | \$13.2 | \$13.6 | \$13.7 | \$13.0 | \$13.3 | \$13.6 | \$14.0 |
| <u>Residential Development Economic Impact</u> | | | | | | | | | | | | |
| Total Employment | 165 | 162 | 158 | 151 | 200 | 195 | 190 | 182 | 163 | 159 | 155 | 151 |
| Construction Jobs | 123 | 120 | 117 | 112 | 149 | 145 | 142 | 137 | 123 | 120 | 117 | 114 |
| Other Sectors | 42 | 42 | 41 | 39 | 51 | 50 | 48 | 45 | 40 | 39 | 38 | 37 |
| Personal Income (\$mil) | \$5.1 | \$5.6 | \$6.0 | \$6.1 | \$8.2 | \$8.6 | \$8.9 | \$9.0 | \$8.6 | \$8.7 | \$8.8 | \$8.9 |
| Year: | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Road Construction Spending (\$mil) | \$0.5 | \$0.5 | \$0.5 | \$0.5 | \$0.5 | \$0.5 | \$0.5 | \$0.5 | \$0.5 | \$0.5 | \$0.5 | \$0.5 |
| <u>Road Construction Economic Impact</u> | | | | | | | | | | | | |
| Total Employment | 10 | 10 | 9 | 9 | 8 | 8 | 8 | 7 | 7 | 6 | 6 | 6 |
| Construction Jobs | 8 | 8 | 7 | 7 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 |
| Other Sectors | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 |
| Personal Income (\$mil) | \$0.3 | \$0.3 | \$0.3 | \$0.4 | \$0.4 | \$0.4 | \$0.4 | \$0.4 | \$0.4 | \$0.4 | \$0.4 | \$0.3 |

The Harbor Shores development also proposes a number of non-residential construction activities, including a golf course, a resort and a boutique hotel, and an assortment of commercial and retail space. This type of construction activity varies significantly from the long-term residential development in that each project is separate and is expected to be completed over a relatively shorter period of time. Therefore, the economic impact of the commercial construction portion of the Harbor Shores project is likely to create a high level of economic impact (jobs and income) in the county, but for a less consistent duration. Also included is the construction of infrastructure and environmental abatement projects associated with the overall project, for which the proposal budgets expenditures of \$16 million.

As shown in Table 2, the commercial development activities associated with the proposed Harbor Shores development are expected to support from 418 to 779 jobs and personal income between \$13 million and \$34 million in Berrien County during the peak years of construction: 2008 to 2014. Additionally, the total infrastructure and environmental construction budget was spread out over the life of the Harbor Shores development (through 2020) with the expectation that aspects of infrastructure and environmental construction projects will also be associated with the residential phases of construction. From 2015 to 2020, annual infrastructure and environmental construction projects are expected to continue at a cost of approximately \$1.3 million and support roughly seven jobs each year.

Table 2: Commercial Construction Detail

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 - 2020 |
|---|--------|--------|--------|--------|--------|---------|--------|-------------|
| Est. Cost by Project | | | | | | | | |
| Retail, offices, welcome center (19k sqft.) | | \$2.2 | | | | | | |
| Retail & commercial phase w/ 25,000 sqft | | | | | \$2.9 | | | |
| Boutique hotel (80 rooms, spa, restaurant) | | | \$40.0 | | | | | |
| Large hotel (350 rooms, indoor water park) | | | | | | \$125.0 | | |
| Marina (36 slip and 24 slip phases) | \$1.9 | | | \$2.2 | | | | |
| Golf course | | \$70.0 | | | | | | |
| Direct Construction Demand (\$mil) | \$19.4 | \$21.0 | \$38.8 | \$41.0 | \$43.0 | \$41.3 | \$46.3 | \$1.3 |
| Commercial Development Economic Impact | | | | | | | | |
| Total Employment | 418 | 435 | 758 | 762 | 779 | 692 | 734 | 7 |
| Construction Jobs | 315 | 327 | 570 | 572 | 585 | 521 | 553 | n.a |
| Other Sectors | 103 | 108 | 188 | 190 | 194 | 171 | 181 | n.a |
| Personal Income (\$mil) | \$13.0 | \$15.0 | \$27.0 | \$29.5 | \$32.2 | \$30.9 | \$34.0 | n.a |

Tourism

The Harbor Shores development proposal includes unique amenities that are expected to bring new tourism activity into the region. For example, the design of the large hotel—scheduled to begin construction in 2012—includes an attached indoor water park, which is expected to be a unique draw for the region. Additionally, the proposed golf course is described by the developers as high quality and unique in its design, with the potential of attracting out-of-area visitors.

Care must be taken in estimating the number of tourists and the amount of spending that can be *directly* attributed to the Harbor Shores project. To some degree, the tourism-related parts of the development—the golf course, the hotels, and the indoor water park—will at the same time both compete with existing local recreation amenities and act as additional draws for visitors from outside the area. In other words, some visitors that would have come to Berrien County for

vacation regardless of whether or not the Harbor Shores development exists are certain to choose to stay at one of the new hotels in the development, merely transferring their dollars from one hotel to another and adding nothing new to the area. Additionally, it is certain that some local residents will visit and spend money at the new golf course or the water park instead of spending their money on other local recreation options.

However, at the same time, if attractions such as the golf course or indoor water park are truly successful, they may be able to draw far more new visitors to the region than the new hotels in Harbor Shores can handle on a given weekend. For the purposes of this economic impact report we are, therefore, required to base our analysis on some assumptions. In this case, the analysis assumes that the new tourism impact on the area is captured entirely by the two new hotels proposed for the Harbor Shores development. The size, occupancy rates, and spending expected in association with each operation are detailed below in Table 3.

**Table 3: Annual Tourism Spending Estimates
First-year of Operation Associated Visitor Spending**

| | Boutique Hotel | Large Hotel & Water Park |
|---|--------------------|--------------------------|
| Rooms | 80 | 350 |
| Occupancy Rate | 65% | 70% |
| Average Local Spending (per occupied room night) | \$122 | \$122 |
| Tourism Spending | \$2,300,000 | \$10,900,000 |
| Room Rate | \$171 | \$245 |
| Hotel Spending | \$3,200,000 | \$21,900,000 |

Note: Large hotel rate includes average waterpark admission.

During its first year of operation, the 80-room boutique hotel is expected to generate \$3.2 million in sales and attract local tourist spending of approximately \$2.3 million. The large hotel and water park are projected to generate hotel room rental and recreation sales of \$21.9 million, while attracting tourist spending of \$10.9 million to the county.³

Assuming that the hotels proposed as part of the Harbor Shores development are able to meet their expected operations level and that they are successful in attracting new visitors into the area, the economic impact from tourist spending that is associated with Harbor Shores will create a number of permanent jobs in Berrien County. As shown in Table 4, tourism spending associated with guests staying at the smaller boutique hotel are expected to support 96 jobs and personal income of \$1.9 million in Berrien County during the first year of operation. The opening of the large hotel with its unique indoor water park is expected to substantially increase local tourism spending, boosting the economic impact of associated tourism to 572 jobs and \$13.2 million of personal income in 2013. Although the economic model does predict some diminishment in the total number of jobs⁴ over time, in general the economic impact generated

³ Again, in future years an inflation factor of .025 is used to estimate nominal dollar costs.

⁴ There are a number of reasons our economic model predicts a long-term decrease in the total number of jobs associated with tourism spending, including productivity gains in the industry, job reductions in other local firms (due to increased wage and completion pressure from the new operations), and differing monetary inflation factors.

by establishing new tourist attractions is permanent—unlike the jobs and income associated with construction, which are limited to only the initial years of the development.

Table 4: Economic Impact of Tourism Spending

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|----------------------------------|-------|-------|---|--------|--------|--------|--------|--------|--------|--------|
| Local Tourism-related Spending (\$mil) | \$5.6 | \$5.6 | \$5.7 | \$38.4 | \$39.0 | \$39.5 | \$40.1 | \$40.7 | \$41.3 | \$42.0 | \$42.6 |
| Total Employment Impact | 96 | 96 | 94 | 572 | 570 | 561 | 548 | 533 | 518 | 504 | 491 |
| Accommodation & Food Service Jobs | 75 | 73 | 71 | 442 | 430 | 420 | 409 | 399 | 389 | 380 | 371 |
| Other Jobs | 21 | 23 | 23 | 130 | 140 | 141 | 139 | 134 | 129 | 124 | 120 |
| Personal Income (\$mil) | \$1.9 | \$2.2 | \$2.5 | \$13.2 | \$15.4 | \$16.9 | \$18.0 | \$18.8 | \$19.4 | \$19.9 | \$20.3 |
| | <i>Opening of boutique hotel</i> | | | <i>Opening of large hotel and waterpark</i> | | | | | | | |

Part-time Residents

Harbor Shores is primarily a residential development that will attract new residents, income, and consumer expenditures into Berrien County. It is anticipated by the developers that the vast majority—approximately 80 percent—of new homeowners in the Harbor Shores development will not live there year-round, but will instead treat their properties as secondary vacation homes or investment properties that will be used primarily during the summer months. On the one hand, the resort-nature of the new residences will boost the project’s economic impact, since vacation home buyers are by definition located outside the area and inject new dollars into the region without requiring employment in the local area. However, at the same time seasonal homeowners are also, by definition, absent from the area for most of the year. Additionally, even when these new homeowners are staying at their Harbor Shores residence, their purchasing habits are likely to be significantly different from the county’s average resident, since expenditures on things such as large-ticket items or medical care are more likely to take place in their region of primary residence.

Table 5: Part-time Resident Assumptions

| | |
|-------------------------------------|-----------|
| Average Household Income | \$185,000 |
| Pct. Disposable Local Spending | 33.7% |
| Avg. Income for Local Spending | \$62,345 |
| Months of Local Residence | 3 |
| Percent of Year | 25% |
| Local Consumption Share by Category | |
| Vehicles and Parts | 0% |
| Computers and Furniture | 0% |
| Other Durables | 0% |
| Food and Beverages | 36% |
| Clothing and Shoes | 14% |
| Gasoline and Oil | 7% |
| Fuel Oil and Coal | 13% |
| Other Non-durables | 0% |
| Housing | n.a. |
| Household Operation | 1% |
| Transportation | 0% |
| Medical Care | 2% |
| Other Services | 27% |

Much like our estimates for tourism, determining the impact of new residents—both full and part time—requires making assumptions about the characteristics and spending habits of the individuals and families that ultimately purchase residences in Harbor Shores. Table 5 summarizes the basic assumptions regarding the income and consumption pattern of the average part-time Harbor Shores homeowner. It should be noted that the expected average household income figure, \$185,000, was provided by the developer; consumption share data are based on the Bureau of Labor Statistics 2005 household expenditures data for higher income households

(above \$150k/year); and annual usage⁵ is based on general assumptions about seasonal usage patterns in the area.

The average income of households purchasing a residence in Harbor Shores is expected to be relatively high—regardless of whether they become a full-time or part-time resident of the local community—which is a function of the nature of the residences that are being constructed, as well as the desirability and cost of lakeshore property. Based on BLS expenditure data⁶, we calculate that approximately 37.7 percent of total income will be spent in categories that have reasonable potential to be captured through local consumption. Additionally, because we assume that vacation and investment homeowners spend an average of three-months of the year living and spending money in Berrien County, the portion of income that can be captured locally⁷ is estimated to be one-quarter of consumption in local consumption categories. Finally, the “local consumption share by category” section in Table 5 details how the total income captured in Berrien County is allocated to the economic model.

Not surprisingly, the majority of part-time resident homeowner spending locally is expected to be captured in categories such as food and beverages, clothing and shoes, gasoline, fuel, and services, since these represent goods and services that are nondurable and subject to regular consumption. Expenditures on large-ticket items such as automobiles (vehicles) or computers and furniture are likely to take place near one’s place of primary residence. For example, we would expect the owner of a Harbor Shores property who resides in Chicago for most of the year to purchase and register his or her car through an Illinois dealer, since most of its use will occur near the place of primary residence; however, it is also assumed that a relative share of expenditures on maintenance, repairs, and fuel will be captured in Berrien County. Finally, it should also be noted that housing expenditures are not re-entered for part-time resident consumption, since the full direct value the home is already captured through the economic impact estimates for construction.

On the next page, Table 6 details the economic impact associated with the local expenditures of new part-time residents. The impact will occur in conjunction with the completion and occupancy of the residential portion of the proposed Harbor Shores development, as discussed in the section of the report on the economic impact of residential construction. The number of jobs and personal income associated with these new residents will increase throughout the life of the development, finally peaking with the expected completion of the project at the end of the year 2020. After that, the economic impact of these new residents will remain, as these are permanent new additions to the community; however, the level of local consumption will not be expected to increase beyond the rate of inflation unless there is a significant change in the nature of these

⁵ It is important to acknowledge that there will be a large degree of variation in the type and amount of use that each vacation home receives. Possible uses range from owners who might visit only a few weekends each summer, to investors who rent the property to a wide range of vacationers, as well as retirees who might reside for four or five months at a time. However, because it is impossible to know beforehand the nature of use, we must rely on what we feel to be broad and conservative estimates regarding the level of use and the potential for local expenditures associated with these housing units.

⁶ Bureau of Labor Statistics (February 2007). *Consumer Expenditures in 2005*. Washington D.C.: U.S. Department of Commerce, Report 998.

⁷ This can be calculated as $\$185,000 \times 0.377 \times 0.25$. Please note that as with other values used in this report an inflation adjustment factor of .025 is used to calculate nominal dollars for each year of the analysis.

part-time residents, such as the average income level significantly increases or decreases, or a significant number convert from part-time to full-time residency status.

Table 6: Economic Impact of the Local Consumption Expenditures of New Part-time Harbor Shores Residents

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Estimated Local Expenditure Total (\$mil) | \$0.7 | \$1.5 | \$2.3 | \$3.2 | \$4.4 | \$5.6 | \$6.9 | \$8.2 | \$9.5 | \$10.9 | \$12.4 | \$13.9 |
| Total Employment Impact | 7 | 13 | 19 | 25 | 33 | 41 | 48 | 56 | 62 | 68 | 75 | 81 |
| Retail Jobs | 2 | 4 | 5 | 7 | 9 | 11 | 13 | 14 | 15 | 17 | 18 | 19 |
| Food Service & Accommodations | 2 | 4 | 6 | 9 | 11 | 14 | 17 | 20 | 22 | 24 | 27 | 29 |
| Other Sectors | 3 | 5 | 8 | 9 | 13 | 16 | 18 | 22 | 25 | 27 | 30 | 33 |
| Personal Income (\$mil) | \$0.1 | \$0.3 | \$0.4 | \$0.6 | \$0.9 | \$1.1 | \$1.4 | \$1.7 | \$2.0 | \$2.3 | \$2.6 | \$3.0 |

In total, at full development in 2020, the expenditures of new part-time residents who purchase vacation or investment homes in the Harbor Shores development are expected to support 81 local jobs and personal income of around \$3 million. Most of these jobs will be in the food service and retail sectors, with 29 and 19 jobs generated, respectively. The rest of the employment impact will be distributed primarily throughout other local service sectors.

Full-time Residents

The local consumption expenditures of new full-time (or year-round) residents living in the Harbor Shores development can have a relatively high economic impact on the area, since these are expected to be high-income households that will be spending the majority of their disposable income at area businesses. However, at the same time it is important to note that *the economic impact of these households is only relevant if they are truly new to Berrien County*. Households that merely re-locate from a home elsewhere in the area are not injecting new money into the community, since they were already previously supporting the local economy. The developers of this project assert that its draw will be unique; because Harbor Shores is a high-end, resort-style community they expect it to attract primarily buyers from outside the area who are seeking a specific style of lakeshore living. Indeed, because of this the proposed project is assuming that only 20 percent of the 826 residential units planned for Harbor Shores will be occupied by full-time, year-round residents.

Table 7: Full-time Resident Assumptions

| | |
|-------------------------------------|-----------|
| Average Household Income | \$185,000 |
| Pct. Disposable Local Spending | 66% |
| Avg. Income for Local Spending | \$122,100 |
| Local Consumption Share by Category | |
| Vehicles and Parts | 5% |
| Computers and Furniture | 8% |
| Other Durables | 3% |
| Food and Beverages | 12% |
| Clothing and Shoes | 4% |
| Gasoline and Oil | 2% |
| Fuel Oil and Coal | 0% |
| Other Non-durables | 9% |
| Housing | n.a. |
| Household Operation | 5% |
| Transportation | 3% |
| Medical Care | 18% |
| Other Services | 17% |

Our analysis makes the assumption that the development’s roughly 165 year-round households will consist entirely of persons not previously having their primary residence in Berrien County.

Additionally, the total average income of these households is expected to be the same as for part-time residents, \$185,000 per year; however, the consumption patterns are expected to be much larger, based on national average consumption patterns for high income households from the 2005 BLS expenditures survey.⁸ Table 7 summarizes these basic assumptions.

⁸ See footnote 6.

Table 8: Economic Impact of the Local Consumption Expenditures of New Full-time Harbor Shores Residents

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| Estimated Local Expenditure Total (\$mil) | \$1.5 | \$3.0 | \$4.6 | \$6.2 | \$8.5 | \$11.0 | \$13.5 | \$16.1 | \$18.7 | \$21.4 | \$24.2 | \$27.1 |
| Total Employment Impact | 11 | 22 | 32 | 42 | 55 | 68 | 81 | 93 | 104 | 114 | 124 | 134 |
| Retail Jobs | 3 | 6 | 9 | 11 | 14 | 17 | 20 | 23 | 25 | 27 | 29 | 31 |
| Health Care | 2 | 5 | 7 | 10 | 13 | 16 | 19 | 22 | 25 | 28 | 31 | 33 |
| Other Sectors | 6 | 11 | 16 | 21 | 28 | 35 | 42 | 48 | 54 | 59 | 64 | 70 |
| Personal Income (\$mil) | \$0.3 | \$0.6 | \$0.9 | \$1.3 | \$1.7 | \$2.3 | \$2.8 | \$3.4 | \$4.0 | \$4.6 | \$5.3 | \$6.0 |

Despite being smaller in number, the expenditures of new full-time residents of Harbor Shores will have a larger impact on the community than the part-time residents. As shown in Table 8, assuming the project is complete and fully occupied in 2020, we estimate that the expenditures of new full-time residents will support 134 local jobs and personal income of \$6 million. In the case of full-time residents, the jobs generated fit a slightly different pattern than for part-time residents, with employment in the health care sector and retail sector making up the largest sectors of employment. Overall, the employment impact of full-time resident spending generates a much broader range of economic impact than part-time residents.

Summary

The total estimated impact resulting from the Harbor Shores development, as currently proposed, is summarized in Table 9. Because the economic impact comes in multiple forms—temporary impacts associated with specific years or phases of activity, as well as permanent economic activity additions that build over the life of the project—it is impossible to provide a simple summation of the project’s total projected economic impact. Indeed, during the most active years of proposed development activity, 2010 thru 2014, we estimate that the project’s economic impact will peak, due solely to the strong impact of multiple commercial and residential construction projects. However, the economic impact associated with the expenditures of tourists and new residents is expected to grow steadily until the project is completed in 2020.

As mentioned earlier in the report, Harbor Shores is expected to generate both short-term and long-term economic impact in Berrien County. Therefore, the summary table (Table 9) provides not only a year-by-year project total, but also a summation of the temporary construction impacts and the permanent ongoing impacts associated with newly established local expenditures. Between 2008 and 2020, various construction projects associated with the proposed development are expected to be between 162 and 937 jobs and \$11.3 to \$42.9 in annual personal income, depending on the year. After the project is built out in 2020, the economic impact of these activities will disappear.

The economic impact associated with new tourist and resident expenditures are expected to increase steadily during the life of the project, growing from about 18 jobs and less than \$0.5 million of personal income in 2009 to over 700 jobs and personal income of \$29.2 million in 2020. Following project completion in 2020, the jobs and income generated through these new expenditures are expected to continue at the same rate; so in other words these roughly 700 jobs and personal income of \$29.2 million can be considered the permanent economic impact associated with the Harbor Shores development.

Table 9: Economic Impact Summary

| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <u>Total Economic Impact</u> | | | | | | | | | | | | | |
| Employment | 418 | 628 | 1,061 | 1,076 | 1,100 | 1,560 | 1,616 | 908 | 893 | 870 | 867 | 866 | 867 |
| Personal Income (\$mil) | \$13.0 | \$20.8 | \$35.7 | \$39.4 | \$43.1 | \$55.3 | \$61.6 | \$37.2 | \$37.3 | \$37.3 | \$38.1 | \$39.2 | \$40.5 |
| <u>Short-term Construction Impact</u> | | | | | | | | | | | | | |
| Employment | 418 | 610 | 930 | 929 | 939 | 900 | 937 | 217 | 196 | 171 | 166 | 163 | 162 |
| Personal Income (\$mil) | \$13.0 | \$20.4 | \$33.0 | \$35.8 | \$38.7 | \$39.5 | \$42.9 | \$16.1 | \$14.2 | \$12.5 | \$11.8 | \$11.4 | \$11.3 |
| <u>Permanent Tourism and Expenditure Impact</u> | | | | | | | | | | | | | |
| Employment | 0 | 18 | 131 | 147 | 161 | 660 | 679 | 691 | 697 | 699 | 701 | 703 | 705 |
| Personal Income (\$mil) | \$0.0 | \$0.4 | \$2.7 | \$3.6 | \$4.4 | \$15.8 | \$18.8 | \$21.2 | \$23.1 | \$24.8 | \$26.3 | \$27.8 | \$29.2 |

Appendix 1: Methodological Notes

The W.E. Upjohn Institute maintains an economic computer model especially designed to estimate the economic impact of changes in Berrien County. The model was constructed by Regional Economic Models Incorporated (REMI) and contains three separate components that together capture the resulting total impact on the local economy because of a change in employment. These components are:

- an input-output model that estimates the impact on the local economy of changes in inter-industry purchases. This component of the model captures the impact of an increase in orders to local suppliers of goods and services, as well as, the impact of households increasing their purchases of consumer goods and services.
- a relative wage component that estimates the impact of the expected changes in the area's cost structure due to changes in economic activity. For instance when a major employer moves into the area, it can cause wages to increase across most all industries due to the increased demand for workers and other local resources. This boost in wages, while generating additional consumption expenditures, increases the cost of doing business in the area, making the area slightly less attractive to other industries.
- a forecasting and demographic component that forecasts the resulting changes in future employment and population levels due to a change in economic activity.

The model generates two separate “realities” for the period 2009 to 2020: one with the construction of the Harbor Shores development and the other without this activity. It is the difference between the two that estimates the economic impact of the development on Berrien County.

Appendix 2: Comparability with Other Prior Studies (not issued by the Upjohn Institute)

In 2005 an economic study of the Harbor Shores development was conducted Paul Fisher and Brooke Douglas. Their report presented significantly different findings than are estimated in this report by the Upjohn Institute. Based on our assessment, there are several reasons for these differences that make the two reports non-comparable. First, the Fisher and Douglas report was composed over two years ago and was therefore based on project development assumptions that have been revised; the Upjohn Institute report uses the most current assumptions provided by the Harbor Shores developers as of December 2007. Second, the Fisher & Douglas report examines some issues, such as property tax and sales tax flows, which are not examined in the Upjohn Institute report. Also, the findings of the Upjohn report are restricted to the county level, while the Fisher and Douglas report offered economic impact estimates on the city and township levels.

Finally, and most importantly, the Fisher and Douglas report chose to use the concept of “job years” to report the employment impacts associated with the Harbor Shores project. This concept is not a reporting technique generally used by professional economists. In essence, a “job year” is one year of employment. By this measure, a solitary individual who works at the same job for 10 years would be reported as 10 “job years.” The Upjohn Institute reports all employment impacts in terms of conventional jobs or employment levels, which is compatible with standard, publicly-reported employment statistics.

For the sake of comparability, the following table summarizes what each employment impact estimate would look like presented in “job years.” Again, these data are provided for comparison purposes only and do not represent an official manner of presenting results by the Upjohn Institute.

**Appendix Table
Employment Impact Using "Job Years" Method
For Comparison to Fisher & Douglas Study Approach**

| | 2008 - 2020 |
|--|--------------------|
| Total Employment Impact | 12,730 |
| Short-term Construction Impact | 6,738 |
| Permanent Tourism and Expenditure Impact | 5,991 |