The Harbor Town Project team is a collaborative partnership across the IBX that includes several universities and institutions. The team also includes Bunny Sanders, Phil McMullan, and Peter Thompson, who developed an earlier version of this strategy in 1993.
The Water Ferry System is one of three Phase One initiatives to increase tourism and create sustainable jobs and careers.

A ferry system serving the Albemarle Sound is an attractive investment opportunity that can become profitable.

Five Boats

49 seat catamaran

149 seat catamaran

Towns

In phase 1, ferries stop in six towns:

- Elizabeth City
- Edenton
- Hertford
- Plymouth
- Columbia
- Kitty Hawk

Impact

The ferry has the potential to create 94 jobs. Tourism is estimated at $14M.

Cost

$13.8M in capital expenditures is required to launch the ferry. Average annual operating expenses are $1.95M.

Return

The ferry has the potential to be profitable in year 1. Year 1 annual ridership is projected to be 107,000.
The Albemarle Sound region of northeastern North Carolina is a region rich in history, natural resources, and faith.

Ferries have long been part of the life and lore of the Albemarle Sound region.

350th Anniversary Guided Cruise
May 11-13, 2018
$1,000+ per person
First four counties in NC: Currituck, Chowan, Perquimans and Pasquotank, created in 1668 as precincts of the Albemarle area.

Proof of Concept?
The historic communities of the region have considerable potential tourism appeal because of their unique histories and identities.

Plymouth—Civil War and The Battle of Plymouth

Edenton—“the South’s prettiest town”—Forbes

Hertford—Antiques and S-bridge

Columbia—Art and Nature

Elizabeth City—Harbor of Hospitality USCG and EC Shipyard Stories

Kitty Hawk—First in Flight

Source: Forbes, Team Analysis

Tourists and visitors would enjoy visiting historic towns and sites, seeing nature, and exploring the IBX region by ferry.
Routes would include Elizabeth City-Columbia-Plymouth-Edenton-Hertford circuits, and Kitty Hawk-Edenton direct express.

Average trip: 66 min @ 32 mph (28 knots)   Plymouth-Edenton: 24 mins
2 Ferries on Kitty Hawk-Edenton Direct Express: 1 hr 45 mins
1 Ferry on Clockwise and 1 Ferry on Counterclockwise 5 town circuits
1 Ferry maintenance, charter, or special scheduling

Why These Cities:
- Location (accessibility and inter-distance)
- Infrastructure and amenities
- Vitality, attraction, and potential
- Bring more tourists to BOTH the OBX AND the IBX
- Generate tourism in the IBX
- Complement existing NCDOT ferry service

Quick ramp up time & flexible hop on hop off trips

Total operating hours/day per vessel: 10.5 hours

We can apply best practices from other successful public and public-private water transportation systems.

Pricing
- Local resident discounts
- Commuter/education bulk pass
- Hop on/hop off pricing
- Family/seasonal passes
- Ticket prices vary greatly

Partnership
- Public transportation at docks (bikes rentals, etc.)
- Onshore nature walks
- Discounts at local businesses

Positioning
- Onboard entertainment
- Seasonal schedule
- Onboard concessions
- Special event charters – nature talk, star gazing, weddings, wine and cheese, sunset dinner and drinks, holiday cruises

See Appendix for more information on benchmark studies in price/schedules
More routes and ferries can be added over time to include other locations on the Albemarle Sound, IBX, OBX, and Pamlico Sound.

- Connect to other IBX and OBX cities
- Add one-off trips to more cities near the Albemarle Sound and up rivers
- Reach towns along the Pamlico Sound and Pamlico River
- Complement ferry service provided by NCDOT Ferry Division

---

Exploring the IBX is a perfect way for visitors to experience North Carolina.

- Idyllic Atmosphere
- Outdoor Fun
- Charming Villages
- Historic Architecture
The IBX friendly small-town culture and Southern Hospitality make for an authentic tourist experience.

- Local Arts
- Welcoming Hosts
- Colonial History

The estimated market in Year 1 is 107,000 visitors from three different consumer groups.

<table>
<thead>
<tr>
<th>Projected Visitors:</th>
<th>Weekenders</th>
<th>Coastal Tourists</th>
<th>Inner Banks Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Area:</td>
<td>5,000,000</td>
<td>8,000,000</td>
<td>200,000</td>
</tr>
<tr>
<td></td>
<td>13,200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Ferry:</td>
<td>20,000</td>
<td>57,000</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td>107,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A projected **107,000 visitors** will use the Albemarle Sound Ferry System in Year 1.
A ferry service provides an essential part of the infrastructure required for successful economic development of the Albemarle Sound region.

**107,000 estimated visitors**
in first year
170,000 per year when fully established

With the initial ferry capacity

**$14,000,000** estimated initial direct tourism spending year one
at $131 per person per day

**94+** estimated direct employment
by ferry system, town docks, and other managerial and operational personnel,
plus additional employment from econ and historic sites, new business start ups in the harbor towns, etc.

Source: Team Analysis

The initial investment for all three initiatives will be about $22 million and will take about five years to be fully operational.

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEMED RENEWAL OF 5 COMMUNITIES</td>
<td>$680,000</td>
<td>$720,000</td>
<td>$440,000</td>
<td>$160,000</td>
<td>$2,000,000</td>
<td></td>
</tr>
<tr>
<td>avg $400,000 per community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3% contingency</td>
<td>$20,400</td>
<td>$21,600</td>
<td>$11,200</td>
<td>$4,800</td>
<td>$60,000</td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td>$700,400</td>
<td>$741,600</td>
<td>$451,200</td>
<td>$194,800</td>
<td>$3,060,000</td>
<td></td>
</tr>
<tr>
<td>REGIONAL WATER FERRY TRANSPORTATION SYSTEM</td>
<td>$127,500</td>
<td>$76,500</td>
<td>$25,500</td>
<td>$12,750</td>
<td>$255,000</td>
<td></td>
</tr>
<tr>
<td>start up costs – planning, design, permitting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3% contingency</td>
<td>$4,925</td>
<td>$4,545</td>
<td>$1,061</td>
<td>$523</td>
<td>$15,000</td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td>$132,425</td>
<td>$81,045</td>
<td>$36,561</td>
<td>$13,273</td>
<td>$260,000</td>
<td></td>
</tr>
<tr>
<td>RENEWAL OF 25 EXISTING REGIONAL ECO AND HISTORIC TOURISM SITES</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td></td>
</tr>
<tr>
<td>5 per yr @ avg $200,000 per site</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3% contingency</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$30,000</td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td>$1,030,000</td>
<td>$1,030,000</td>
<td>$1,030,000</td>
<td>$1,030,000</td>
<td>$1,030,000</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>$1,661,255</td>
<td>$1,571,645</td>
<td>$1,591,415</td>
<td>$1,715,633</td>
<td>$1,880,000</td>
<td></td>
</tr>
<tr>
<td>PROJECT PLANNING, MANAGEMENT AND COORDINATION</td>
<td>$186,173</td>
<td>$347,265</td>
<td>$501,662</td>
<td>$163,903</td>
<td>$1,513,515</td>
<td></td>
</tr>
<tr>
<td>30% of budget less direct cost of ferries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>$2,047,428</td>
<td>$2,219,525</td>
<td>$2,593,077</td>
<td>$3,079,536</td>
<td>$3,444,515</td>
<td></td>
</tr>
</tbody>
</table>

Source: Team Analysis
Success of the Water Ferry System is enhanced by the coordinated development of all three Phase One tourism-based initiatives.

- Themed Renewal of 5 Communities
- Renewal of 25 Existing Regional Eco and Historic Tourism Sites
- Regional Water Ferry Transportation System
The Harbor Town Project celebrates the beauty, assets, resources, and history of the Albemarle Sound region and its people.

Towns and counties across the IBX understand the shared benefits of regionalism.

State and local political and community leaders support a major planned, coordinated tourism-based economic development intervention for the region.

Other traditional economic development initiatives will benefit from the Harbor Town Project.

Funds from Golden LEAF Foundation’s forthcoming Community Based Grant Initiative could be leveraged by private investment, additional foundation grants, and other state and federal funding for capital and start up expenses.

People understand the benefits of the Harbor Town Project and get excited about it! It will renew and upgrade the historic downtowns of IBX waterfront communities, and existing eco and historic tourism sites across the region.

The Harbor Town Project will foster other creative, thoughtful regional initiatives.

---

**Upgrades in historic downtown waterfronts can leverage existing infrastructure to serve both ferries and other water traffic.**

<table>
<thead>
<tr>
<th>Port City</th>
<th>Power</th>
<th>Water</th>
<th>Pump Out</th>
<th>Fuel</th>
<th>Wifi</th>
<th>Restaurant</th>
<th>Restroom/ Shower</th>
<th>Groceries/ Shopping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Edenton</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Elizabeth City</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hertford</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Plymouth</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Kitty Hawk</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Note:** Fuel dock to be added at Edenton and Dry Dock/Maintenance Facility to be built at location TBD

*"The Albemarle Loop Marinas" brochure, 2015*
Weekenders or Day Trippers can be attracted from population centers within driving distance of the Albemarle Sound.

The Outer Banks is an established tourist brand and attractive destination now drawing over 8 million visitors annually.

Source: US Census, Social Explorer, Team Analysis
Some coastal tourists in the OBX want to do more than just enjoy the beach.

Popular activities for overnight visitors in the coastal region of North Carolina:

- **Shopping**: 28%
- **Visiting the Beach**: 70%
- **Rural Sightseeing**: 17%
- **Visiting Historic Sites**: 15%
- **Wildlife Viewing & Bird Watching**: 10%

Source: 2013 North Carolina Regional Travel Summary, North Carolina Department of Commerce

Between 100,000 and 140,000 tourists from the OBX might enjoy riding the ferry and visiting the IBX each year.

- **8 million** Tourists who visit the Outer Banks annually
- **17%** Interested in rural sightseeing or historical tours
- **1.36 million** Outer Banks tourists interested in rural sightseeing
- **10%** Assumption about how many would take the ferry

Sources: 2013 North Carolina Regional Travel Summary, NC Department of Commerce
2013 Economic Impact of Travel on Counties, NC Department of Commerce
North Carolina’s Northeast Alliance
IBX residents are interested in a wide variety of outdoor activities, adventures, and good times.

- Over 40% of the total Inner Banks population makes over $50,000 annually
- Average age: ~ 40 years

- Outdoor Activities:
  - Fishing
  - Hunting
  - Horseback Riding
  - Baseball
  - Basketball
  - Volleyball
  - Golf
  - Tennis
  - Swimming
  - Skiing
  - Boating
  - Biking
  - Camping
  - Gardening

Source: [http://accessnc.commerce.state.nc.us/docs/](http://accessnc.commerce.state.nc.us/docs/)

The ferry system would operate for 174 days a year.

---

### Total Operational Days: 174
Based on benchmark cities and NCDOT Ferry System data, the IBX ferry system will experience seasonality in ridership demand.

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Total</th>
<th>Operating Days</th>
<th>Average Daily Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>February</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>March</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>April</td>
<td>6,198</td>
<td>12</td>
<td>516</td>
</tr>
<tr>
<td>May</td>
<td>11,812</td>
<td>19</td>
<td>622</td>
</tr>
<tr>
<td>June</td>
<td>17,052</td>
<td>30</td>
<td>568</td>
</tr>
<tr>
<td>July</td>
<td>23,591</td>
<td>31</td>
<td>761</td>
</tr>
<tr>
<td>August</td>
<td>21,409</td>
<td>31</td>
<td>691</td>
</tr>
<tr>
<td>September</td>
<td>14,499</td>
<td>30</td>
<td>483</td>
</tr>
<tr>
<td>October</td>
<td>8,639</td>
<td>14</td>
<td>617</td>
</tr>
<tr>
<td>November</td>
<td>3,777</td>
<td>7</td>
<td>540</td>
</tr>
<tr>
<td>December</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>106,977</td>
<td>174</td>
<td>615</td>
</tr>
</tbody>
</table>

Our models show that the water transport system is a strong opportunity for operational sustainability.

Investment Opportunity:
- Five 49-passenger catamaran ferries traveling Route 1, Route 2, and Route 3
- Sells food and drinks, but not alcohol

<table>
<thead>
<tr>
<th>Start-Up Costs</th>
<th>Year 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration and Due diligence</td>
<td>$255,000.00</td>
</tr>
<tr>
<td>Boats</td>
<td>$8,500,000.00</td>
</tr>
<tr>
<td>Terminal Expenses</td>
<td>$354,684.50</td>
</tr>
<tr>
<td>Dry Dock Facility</td>
<td>$4,350,000.00</td>
</tr>
<tr>
<td>Contingency (3%)</td>
<td>$403,790.54</td>
</tr>
<tr>
<td><strong>Total Start-Up</strong></td>
<td><strong>$13,863,475.04</strong></td>
</tr>
</tbody>
</table>

Assumptions
- Capital expenditures and start up costs are fully funded
- Ticket prices escalate 5% annually
- Yearly ridership escalates 5% annually
- Marketing and advertising expense is 10% of ticket sales
Conservative assumptions were made for ticket prices and number of passengers.

The model is most sensitive to ticket prices and ridership. Ticket prices and Passengers escalate at a conservative 5% annually.

Different investment scenarios yield different financial outcomes.

<table>
<thead>
<tr>
<th>Financial Metrics (10 year model)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>$ 0</td>
<td>$4,350,000</td>
<td>$8,854,685</td>
<td>$13,204,685</td>
</tr>
<tr>
<td>Start Up Costs</td>
<td>$13,863,475</td>
<td>$9,513,475</td>
<td>$5,008,791</td>
<td>$658,791</td>
</tr>
<tr>
<td>Year 1 Net Income</td>
<td>($302,910)</td>
<td>($87,447)</td>
<td>$88,191</td>
<td>$228,242</td>
</tr>
<tr>
<td>Year 10 Net Income</td>
<td>$1,707,323</td>
<td>$1,814,327</td>
<td>$1,925,136</td>
<td>$2,032,139</td>
</tr>
<tr>
<td>Internal Rate of Return (IRR)</td>
<td>-9%</td>
<td>-3%</td>
<td>8%</td>
<td>67%</td>
</tr>
<tr>
<td>Return on Investment (ROI)</td>
<td>(0.55)</td>
<td>(0.20)</td>
<td>0.78</td>
<td>14.42</td>
</tr>
<tr>
<td>Net Present Value (NPV)</td>
<td>($10,585,333)</td>
<td>($5,288,242)</td>
<td>$126,654</td>
<td>$5,328,243</td>
</tr>
<tr>
<td>Payback Period</td>
<td>Over 10 Years</td>
<td>Over 10 Years</td>
<td>7.75 Years</td>
<td>2.14 Years</td>
</tr>
</tbody>
</table>

Scenario 1: No outside funding
Scenario 2: Dry Dock Facility Financed
Scenario 3: Boats and Terminal Expenses Financed
Scenario 4: All Capital Expenditures Financed
The Albemarle Sound represents a significant opportunity for tourism-based economic development in northeastern North Carolina.

### Resources

- **Existing assets, including area attractions and dock facilities, provide a foundation for success**

### Passengers

- **Current interest from existing tourists and residents provide a readily available market**

### Plans

- **Operational assumptions provide a foundation for projected profitability**

#### A ferry service in the Albemarle Sound region can draw 170,000 visitors annually and generate an NPV of $5 million over the next 10 years