

Rapid Commuter Ferry Service for Penobscot Bay



A Transformative
Plan for Commuter
Ferry Service on
the Coast.





Phase 1 - Arcadia Alliance contracts with Front Street Shipyard to build 75 passenger carbon fiber low-emission ferry to be placed into service for commuter route between Islesboro and Belfast.

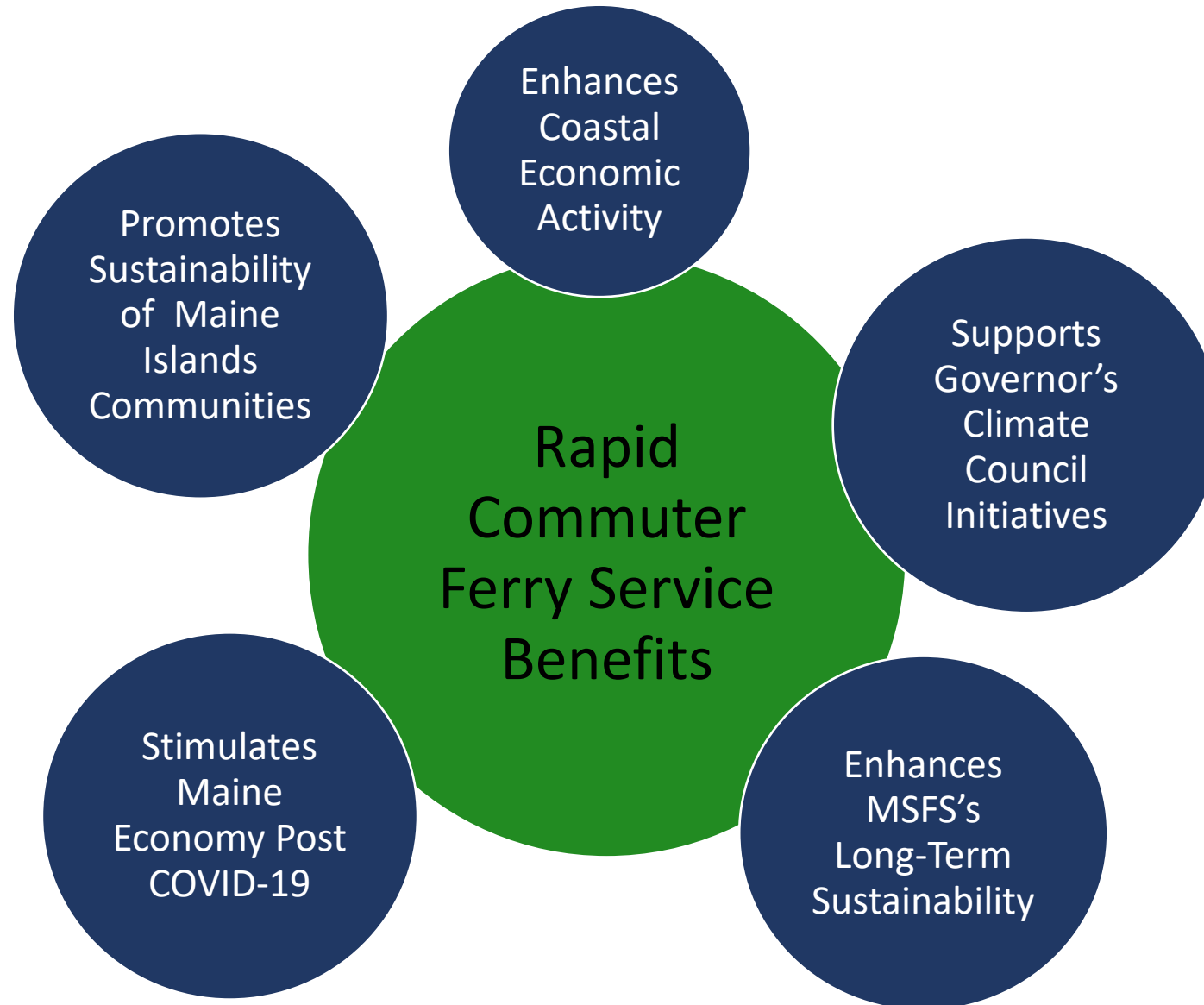


Phase 2 – Front Street Shipyard builds an All-Electric zero-emission ferry for the Islesboro commuter route. Phase 1 ferry moves to service other island communities in Penobscot Bay.



Concurrent with building the All-Electric ferry, infrastructure for recharging the vessel will be constructed. A solution is to have solar arrays on either end that charge land-based charging stations which can deliver the power need when the ferry docks. This design will help avoid the need to pull power from the grid during peak demand periods (if at all) when electrical costs spike and avoid taxing the existing grid on Islesboro

The Benefits of Adding Commuter Service



Supports the Governor's Climate Council Initiatives

- Provides Maine DOT and the State Ferry Service opportunities to address Governor's mandate to reduce regional emissions.
- CO2 reduction through meaningful removal of vehicles along the coast.
- Strong potential to reduce underutilized vehicular ferry trips between mainland and islands.
- Utilizes most advanced and proven ferry technology in the world.
- Phase 2 "All-Electric" vessel to utilize locally generated renewable energy source.
- Reduces need for inefficient smaller vessel trips currently needed to support island community life.



Promotes Sustainability of Maine Island Communities

- Island residents given better opportunities to commute to work. Rapid commuter ferries allow for more choices and flexibility in a changing economy.
- Emergency Response / Ambulance services aboard the ferry for fewer disruptions in regular service.
 - Added safety and security to island residents.
 - All-weather capabilities.
- Addresses critical needs expressed by island communities.
- Enhances coastal Maine's competitiveness.
- Brings tourism to island communities.



Enhances Maine State Ferry Service Long-Term Sustainability

- Advanced composite vessel design :
 - Reduces operating costs through greater fuel efficiency.
 - Reduces maintenance costs by eliminating corrosion.
- Smaller commuter vessels reduce crew size.
- Ability to optimize route schedules to the island communities in combination with vehicle ferries.
- Easily expandable service to various coastal and island communities.
- Enhances route flexibility through use of readily available landing infrastructure.



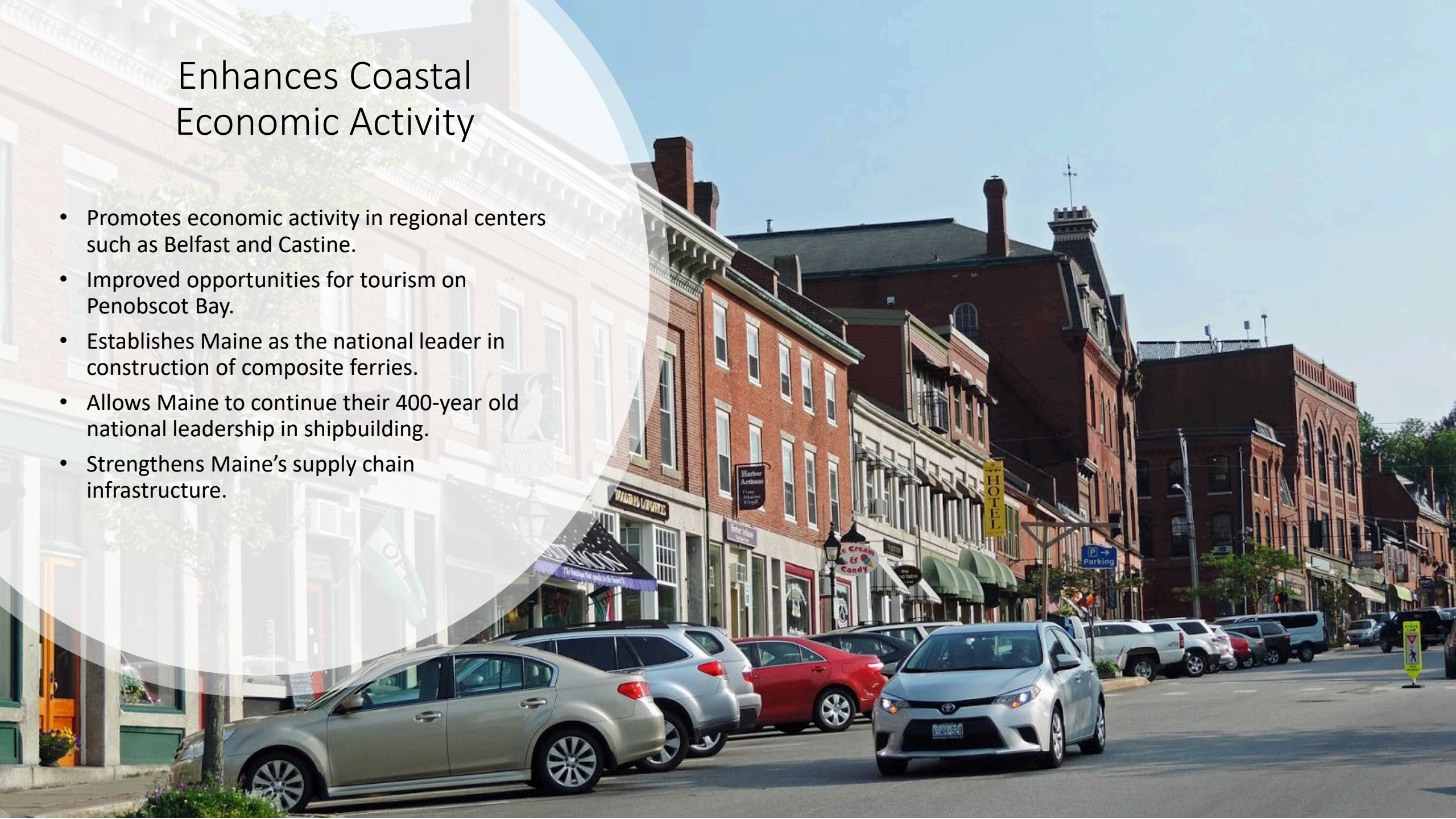


Stimulates Maine Economy Post COVID-19

- Homegrown economic solution which is “shovel ready”.
- Job creation of 75+ employees required for production of vessels at Front Street Shipyard and development of land-based infrastructure.
- Subcontracting opportunities for Maine boatbuilding and composites industries.
- Supports critical supply chain infrastructure for the Coast of Maine.

Enhances Coastal Economic Activity

- Promotes economic activity in regional centers such as Belfast and Castine.
- Improved opportunities for tourism on Penobscot Bay.
- Establishes Maine as the national leader in construction of composite ferries.
- Allows Maine to continue their 400-year old national leadership in shipbuilding.
- Strengthens Maine's supply chain infrastructure.





Proposed Timeline



3-5 Months

- Designs Finalized
- Contract Signed
- Financing Finalized
- Tooling Initiated
- “Keel Laid” Diesel Ferry

12-14 Months

- “Keel Laid” for Electric Ferry
- Development of Infrastructure for Electric Ferry Begun

21-23 Months

- Diesel Ferry Launched
- Sea Trials Completed
- Passenger Service to Islesboro Begins

24-26 Months

- Solar Charging Infrastructure Completed
- Systems Tested
- Solar System Comes On-Line

27-29 Months

- Electric Ferry Launched
- Sea Trials Completed
- “Electric” Passenger Service Begins
- Passenger Service to Other Islands Begins



Financial Considerations

Phase 1 – Diesel Vessel Cost Estimated at \$3.8 Million

- 100% Financing through 10-12 Year Municipal Lease Purchase
- Projected Self Supporting Financially following Ramp-Up to Stabilized Revenue

Phase 2 – All Electric Vessel Cost Estimated at \$4.8 Million

- 100% Financing through 10-12 Year Municipal Lease Purchase
- Financially Self-Supporting Year-1 of Operations
- Grant Opportunities and Solar Contract Structures Possible to Reduce Land-Based Capital Costs



FRONT STREET
SHIPYARD

Arcadia
ALLIANCE



REVISION
ENERGY



The Maine **Composites** Alliance