Boats, Trams, and Automobiles
Gulf Islands National Seashore
Emerald Coast Transportation Symposium
February 26, 2019
Gulf Islands National Seashore is the nation’s largest national seashore, stretching 160 miles from Cat Island, MS to Destin, FL. It skips over Alabama.

GUIS is typically one of the top 10 most visited National Park areas, with 5 million annual visitors.

GUIS boundary encircles islands extending 1 mile north and south.
Gulf Islands – More than Beaches

Most visitors think of Gulf Islands’ expansive sugar white sand beaches, but the park’s enabling legislation emphasized the Seashore’s many forts, and Congress included far more marine resource than land within the park’s boundary. 82% of the park is marine.
The park boundary in Florida stretches 56 miles from Johnson Beach (Perdido Key) to Destin. It includes the island units Perdido Key, Fort Pickens, Santa Rosa, Okaloosa, and mainland units Naval Live Oaks and NAS Pensacola forts (Barrancas, Spanish Water Battery, and Advance Redoubt).

Fort Pickens is the busiest area of the park, with about 700,000 annual visitors. But there are about 2 ½ times more vehicles using J. Earle Bowden Way (Hwy. 399) due to commuters and those traveling it as a scenic drive. Together the Ft. Pickens Road and J. Earle Bowden Way have over 1 million vehicles/year.

This can be significantly affected by storms and the tenuous nature of the roads.
White Beaches & Gold Mines

- The Pensacola area economy is tourism driven, about $800 million annually.
- Lack of access to Fort Pickens and J. Earle Bowden Way directly impacts the tourism economy and draws attention very quickly from the visiting public, local community, and our political representatives.
Vehicle access to the island from Pensacola is via 2 long bridges through the communities of Gulf Breeze and Pensacola Beach.

It can take 2 hours or more during peak season to travel the 8 miles from Pensacola to the Fort Pickens entrance station due to bumper to bumper traffic, where visitors may then wait in line for another 30-45 minutes to pay their entrance fee.

“If you have to wait 2 or 2 1/2 hours in traffic to get to the beach, you aren’t inclined to it.” Robert Rinke, quote in Pensacola News Journal 3/10/17
Cruisin’ for a Parking Space

The number of vehicles on the island far exceeds parking capacity during the peak season. Once beach-goers finally get to the island, they often end up circling endlessly waiting for a parking space to open up.
The Infamous Fort Pickens Road....

The Fort Pickens Road has been repeatedly damaged or destroyed by hurricanes:

- 1965 H. Betsy, Cat. 4
- 1975 H. Eloise, Cat. 3
- 1979 H. Frederic, Cat. 4
- 1985 H. Juan, Cat. 1
- 1995 H. Erin, Cat. 2
- 1995 H. Opal, Cat. 4
- 1997 H. Danny, Cat. 1
- 1998 H. Georges, Cat. 2+
- 2001 T.S. Barry
- 2002 T.S. Hannah
- 2004 H. Ivan, Cat. 3
- 2005 T.S. Arlene
- 2005 T.S. Cindy
- 2005 H. Dennis, Cat. 4
- 2009 T.S. Ida
- 2011 T.S. Lee
- 2012 T.S. Debby
- 2012 H. Isaac
- 2017 H. Nate
- 2018 H. Michael

Hurricane Ivan damage - 2004
The islands are made up entirely of sand. The sand moves constantly from wind and waves, and shorelines fluctuate dramatically.

The islands migrate westward due to prevailing Gulf currents.

Hurricanes frequently overwash the low-lying islands, submerging them beneath storm surge. Storm surge will occasionally breach a barrier island, cutting it in two. Sometimes the breaches don’t heal and the island becomes two separate islands (ex. Dauphin Island => Petit Bois Island).

The islands are gradually shrinking as sand erodes faster than new sand is added.

Unrestrained sand washes out from beneath the road, it collapses, and the asphalt debris is scattered.

Common road design techniques (red clay or gravel base, sheet piling, sea walls, artificial berms) would fundamentally change how the island functions.

Concrete road sections built on pilings sunk in the sand have been considered but rejected due to exorbitant cost ($400 million for 3 mile bridge).
Hurricane Ivan created a mile long breach with open water flowing between the Gulf and Pensacola Bay. The breach eventually closed.

Fire Island National Seashore was breached by Hurricane Sandy in 2012, and today it remains as two separate islands.
The roads were rebuilt after Hurricane Ivan and were within 5 days of opening in June 2005 when Tropical Storm Arlene destroyed them again, followed by Tropical Storm Cindy and Hurricane Dennis – all within 30 days.

In 2007, after much debate, FHWA approved rebuilding the roads again. Gulf Islands was advised to “start getting serious about boat service.”

It cost $23 million to rebuild the roads twice in successive years following Hurricanes Ivan (2004) and Arlene/Cindy/Dennis (2005). Approx. $50 million has been spent to repair/rebuild the roads to date.
When the Fort Pickens Road reopened in June 2009, it had been closed for nearly 5 years (2004 – 2009).

The road remains problematic. It is located on the lowest, narrowest part of the island that is most at risk. The Fort Pickens Road is frequently closed, often due to routine, non-tropical weather events.
The island is littered with asphalt and road debris.

Gulf Islands received $10.85 million BP NRDA funding to restore beach habitat

In 3 years, removed 14,024 cubic yards of asphalt & road debris – 700 large construction dumpsters
Intertidal areas (the wet sand area) on both the Gulf and Sound side are affected.

Asphalt debris is also scattered up to 40 feet offshore in subtidal, submerged areas on Gulf and Sound sides of the island.
Before..... 

.... and After
Sugar White to Salt ‘n Pepper

- Wind scours cleaned areas, exposing road debris still underneath.
- The sugar white sand is now laced with pea-sized asphalt and gravel that is nearly impossible to remove without adversely affecting the beach habitat.

The island has been forever changed and will never be the same.
J. Earle Bowden Way and Fort Pickens Road pass directly through critical shorebird nesting habitat, including several T&E species.

Roadkill exceeds 150/season.

Fledge rates are 2-9%; minimum 20% fledge rate for population viability.

NPS Director Newton Drury rejected road in 1940’s: “It would be an extremely expensive road to build and maintain and it would seriously affect the natural values of the [park resources], the safeguarding of which is the primary responsibility of the [National Park] Service.”
Chick Magnets

Save a Chick
Drive 20 mph

Watch for me,
I’m hard to see!
Looking to the Future

General Management Plan:

“J. Earle Bowden Way (SR 399) will continue to be maintained as a public access road and evacuation route between Pensacola Beach and Navarre Beach.”

“The intent of the national seashore is to reconstruct the [Fort Pickens] road after major storms, if feasible... but there are situations that may arise in the future where conditions become so altered that it is no longer feasible to build or maintain the road.”

“Nature always bats last, and it always bats 1,000.” Robert K. Watson
Fort Pickens Road was scheduled for routine asphalt overlay in 2016

1.6 miles of the road was 15-50 feet from Gulf of Mexico

Requested additional $2.3 million (FHWA funding) to realign at-risk portion of road north of the primary dunes
Doing what is feasible

- Road realignment 2016/2017
- Geotextile & geo grid road base to help confine sand under road
Cycling in the national seashore is very popular.

- J. Earle Bowden Way and Fort Pickens Road have bike lanes.
- Hwy. 98 through Naval Live Oaks has a multi-use trail to separate users from traffic.
Birth of Pensacola Bay Cruises

- Public boat service to the island first proposed in 1978 General Mgt Plan:
  1) alternative access/continuity of access
  2) a water excursion experience (82% of Gulf Islands is marine)
  3) reduce traffic congestion to the island.

- Concession operated boat service is not new to the park. Ship Island Excursions has provided boat service to West Ship Island in Mississippi under an NPS concessions contract since 1971.
The Key Pieces: docks, boats, operator

- Feasibility studies concluded that to stand up a new service, docks & boats would have to be provided to reduce the operator’s capital outlay.

- The park received a $2.8 million TRIP grant in 2010 to build a boat pier and shade pavilion, completed Nov. 2012.
$1.2 million park fee money to restore mine storeroom building for ticketing and retail sales.

$164k concession franchise fees for interior and plaza exhibits.
Gulf Islands received $4 million in BP funding in 2014 to purchase boats to restore lost visitor use due to Deepwater Horizon oil spill, and $1.3 million from FHWA Alternative Transportation Program = $5.3 million total.

Contract awarded in 2015 to All American Marine in Bellingham, WA for two 150 passenger, double decker, aluminum catamaran tour boats.
Ferry arrival

Delivery of “Turtle Runner” and “Pelican Perch” to Pensacola: April 2017
27 passenger solar powered electric trams connect boat passengers with Langdon Beach and Fort Pickens campground. Available to all visitors at no charge. Battery Langdon modified for tram storage and recharging station.
Dock completed January 2018

Landside facilities: ticketing, information, office, shaded seating, restrooms; scheduled for completion March 2019 (temporary facilities in 2018)

Total cost approximately $3.5 million: $2.1 million FHWA FLAP, $850k FSTED, $1 million LOST

NPS/City General Agreement for exclusive use of the City’s terminal facilities. City/concessioner lease agreement for use and occupancy.
Centrally located on the Boardwalk within easy walking distance of the beach and visitor services.

- Phase I: dock, ADA ramp, ticket booth; $980k FLAP plus local funding
- Phase II: widen pier, shade shelter over clamshell amphitheater; $1 million FLAP
- NPS/City General Agreement for exclusive use of the County’s terminal facilities during operating season.
Pensacola Beach – Marked Channel
Concession Contract

- Service between Pensacola, Pensacola Beach, Fort Pickens
- Operating Season: Mid-March through October*
- Daily mid-May to mid-August; weekends in shoulder seasons*
  *concessioner authorized for expanded schedule, specialty cruises, charters
- 2 boats; opposite directions
- Schedule determined by operator
- Each leg 40-60 minutes
- All-day, hop-on/off ticket; price set by operator; NPS set ceiling
- Boats berthed in Pensacola
- Began June 22, 2018 (delay in dock completion)
- Projected 2019 start - mid-May

Legend
- Boat 1
- Boat 2
- Gulf Islands National Seashore
- Pensacola
- Fort Pickens
- Fort Barrancas
- Pensacola Bay
- Gulf of Mexico

Naval Live Oaks
Unlike the concessioner operated boats to Ship Island in the Mississippi side of Gulf Islands, Pensacola Bay Cruises competes with road access to the island.

Beach-goers can get to the island for the price of some gas and a $1 bridge toll if they are willing to endure the traffic and parking inconveniences. For those continuing to Fort Pickens, the park entrance fee is $20/vehicle.

For passengers aboard Pensacola Bay Cruises, park entrance fees are waived. Rangers are onboard to point out dolphins, pelicans, and other wildlife, and bring the 500 year history of Pensacola to life. It is a cruise, a water experience.

Getting there is half the fun.......
Thank You!

Questions?