

Surface Transportation Board

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STB's Comments

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Port Canaveral Rail Extension

Comments

For The

Surface Transportation Board

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Cape Canaveral, Florida
32920-1086**

15 December 2014

Docket Number: FD 35852

Case Title: Canaveral Port Authority—Petition For
Exemption To Construct A Rail Line
Extension To Port Canaveral, Florida

Deciding Body: Director, Office of Environmental
Analysis

Submitted To: Mr. Dave Navecky
Surface Transportation Board
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Washington, DC 20423-0001

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Dated: 15 December 2014

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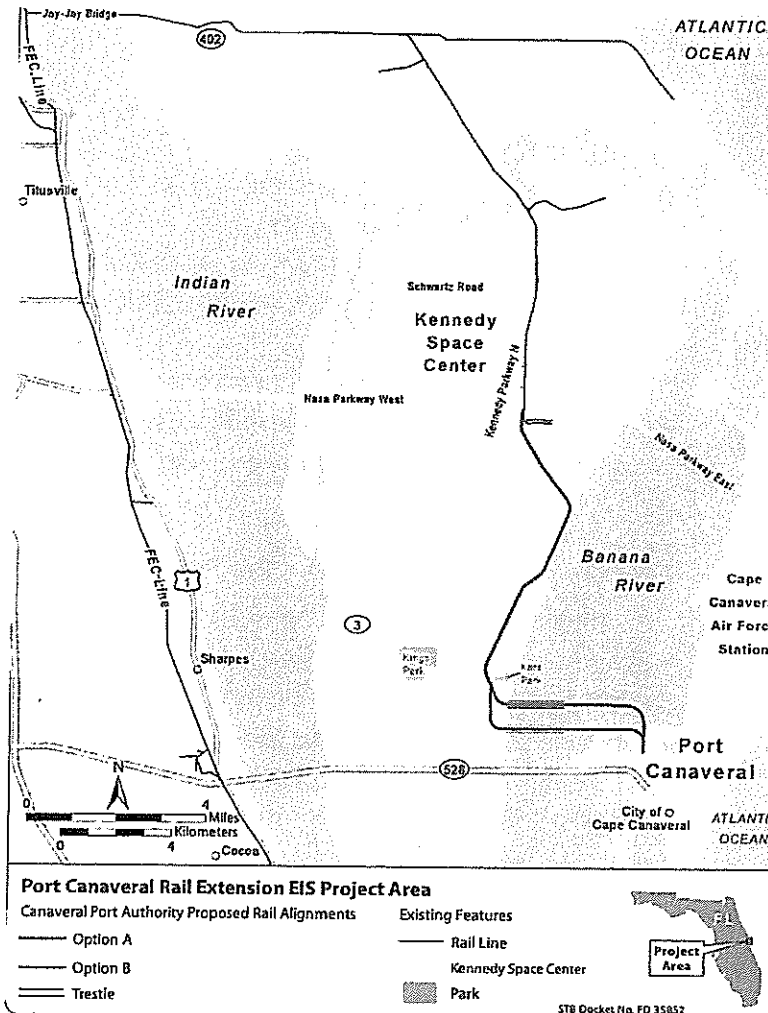
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Abbreviation Guide

BLE	Beach Line Expressway
CCAFS	Cape Canaveral Air Force Station
CMAQ	Congestion Mitigation Air Quality Program.
CPA	Canaveral Port Authority
FHA	Federal Highway Administration
FPFC	Florida Ports Financial Commission
FSTED	Florida Seaport Transportation Economic Development Program
HazMat	Hazardous Materials
KSC	Kennedy Space Center
IRLNEP	Indian River Lagoon National Estuary Program
IRLS	Indian River Lagoon System
NASA	National Aeronautics and Space Administration
NMIHOA	North Merritt Island Homeowners Association
MINWR	Merritt Island National Wildlife Refuge
PCRE	Port Canaveral Rail Extension
PSM	Public Scoping Meeting of November 19, 2014
SIP	Seaport Investment Program
SJRWMD	St. Johns River Water Management District
S.R.	State Road
STB	Surface Transportation Board
TEU	Trailer Equivalent Unit

What is the Port Canaveral Rail Extension (PCRE) project?



The PCRE is intended to provide railroad access to the north side of Port Canaveral for the purpose of transporting cargo.

The idea is to bridge the Banana River and run 11 miles of track in order to link up with 17 miles of existing NASA rail leading to the existing rail bridge over the Indian River and thus connect to the Florida East Coast (FEC) line on the mainland.

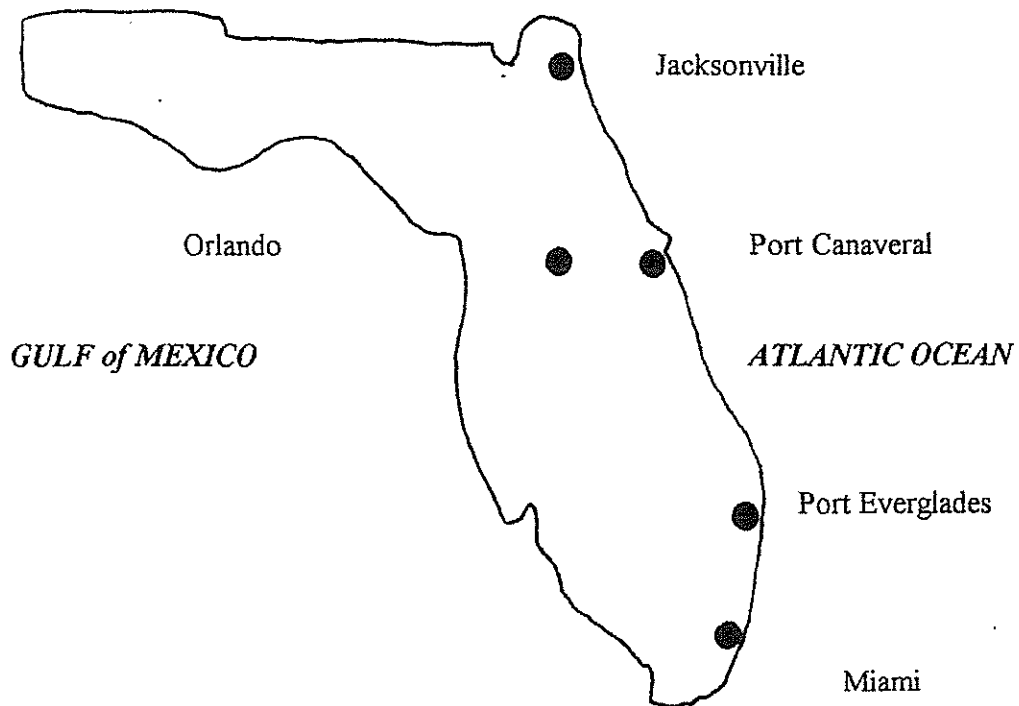
About 1 mile of the PCRE will run across the Banana River.

Thus, 10 miles of track will run on Kennedy Space Center (KSC) land.

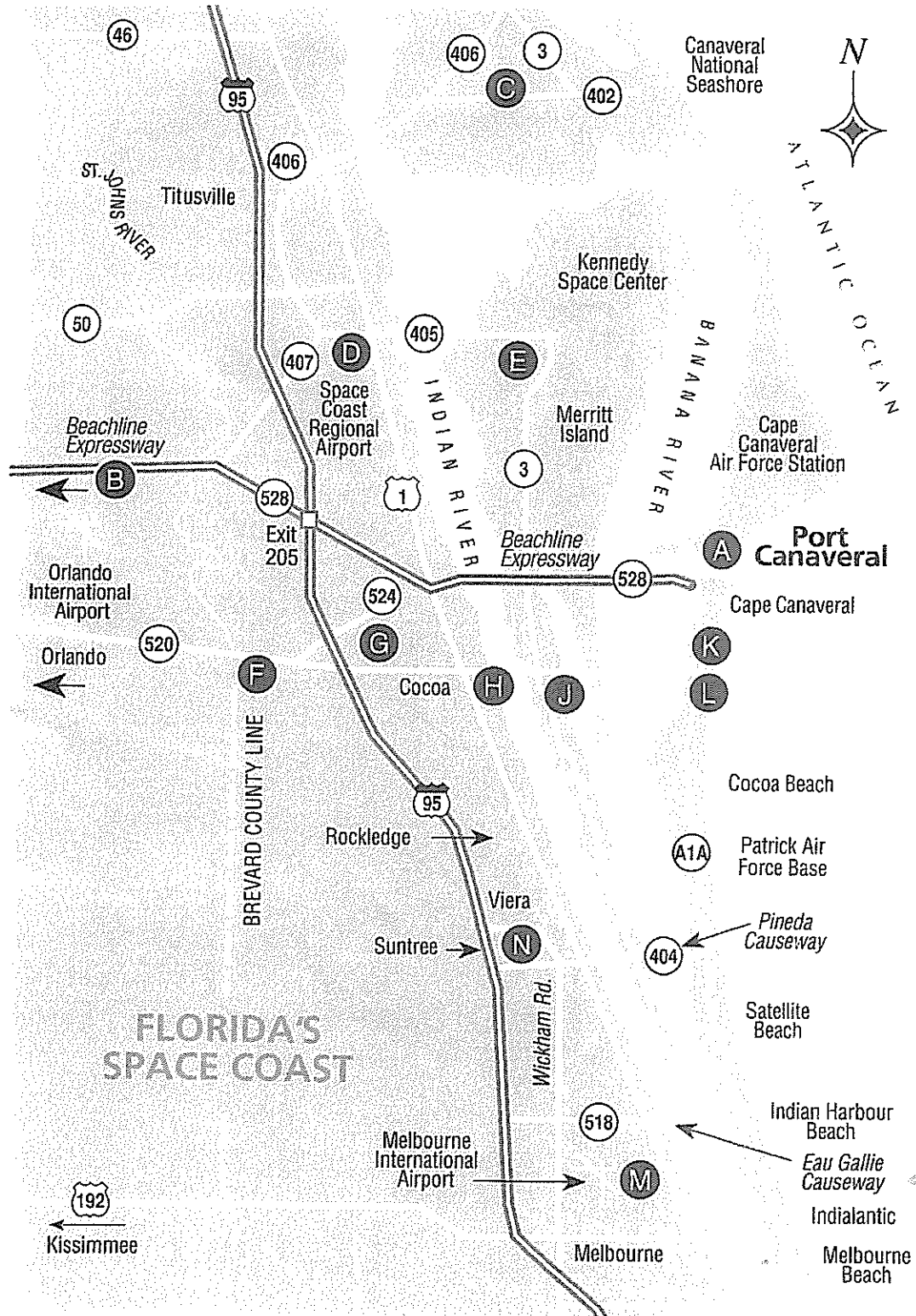
The PCRE right of way is to be 100 feet wide. However, the actual rail roadbed will most likely only be 50 feet wide.

Gateway To Central Florida

Port Canaveral is the gateway to Central Florida. It is roughly midway between Jacksonville, 160 miles north, and Port Everglades and Miami, 182 miles and 206 miles respectively to the south.



Canaveral is the only major Florida port without a rail connection.



CANAVERAL PORT AUTHORITY AREA LOCATOR MAP

LOCATOR MAP KEY

A Port Canaveral

C Merritt Island Wildlife Refuge

E KSC Visitor Center

G Brevard Museum

I No "I"? Hmmm!

K Cocoa Beach Pier

M Melbourne Airport

B To Orlando

D Astronaut Hall of Fame

F Lone Cabbage Airboats

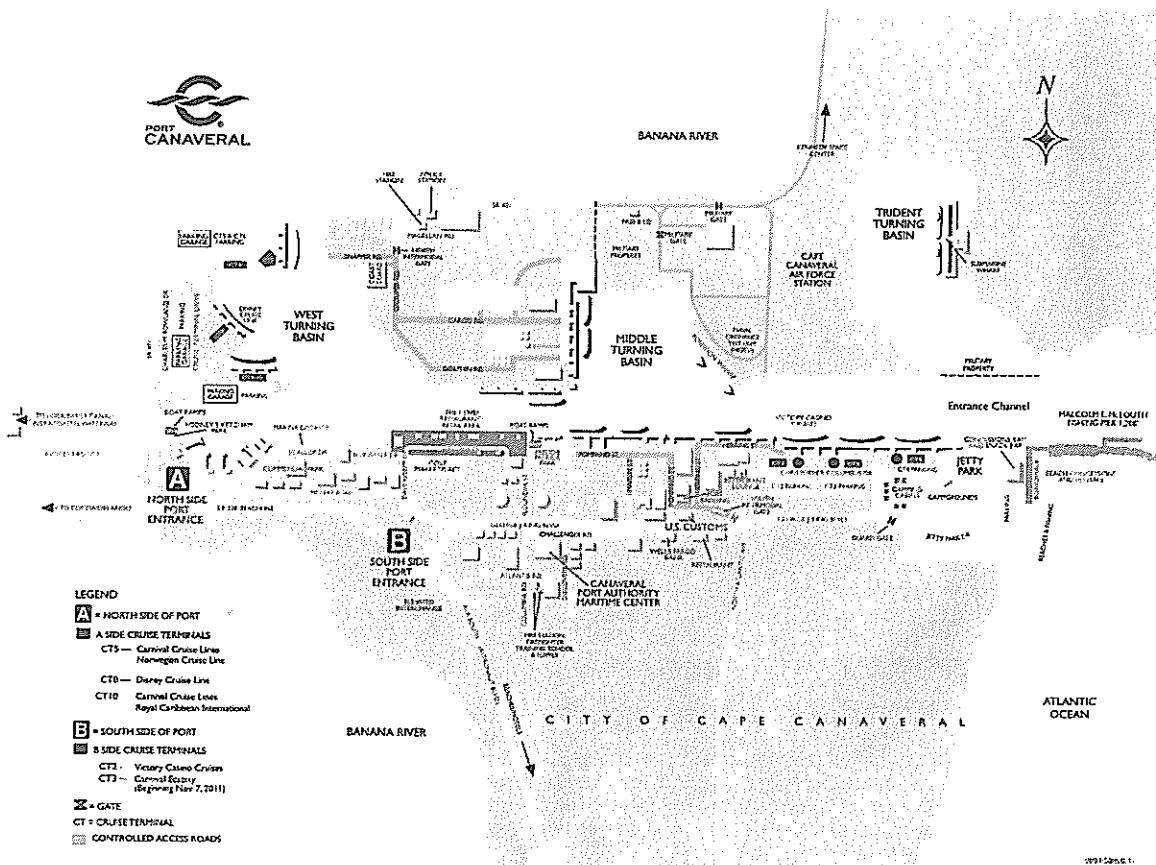
H Cocoa Village

J Merritt Square Mall

L Ron Jon Surf Shop

N Brevard Zoo

There are three turning basins in the Port; Trident Basin, Middle Basin and West Basin.



Trident Basin: The property for this basin was sold by the Canaveral Port Authority (CPA) to the United States Navy. It is devoted solely to military use.

Middle Basin: The north and east portions are controlled by the military. The west and south sides are controlled by the CPA.

West Basin: The U.S. Coast Guard Station is located in West Basin. A dock equipped with two container gantry cranes is located at the West Basin entrance. There are a number of cruise ship terminals in West Basin.

Barge Canal: At the west end of the Port, but not in the West Basin, a lock operated by the U.S. Army, Corps of Engineers, leads to the Barge Canal. The Barge Canal runs east/west and splits Merritt Island in two. Locals differentiate the two areas as North and South Merritt Island.

What access does the Port have to the mainland?

The Port is at the eastern terminus of S.R. 528. The Beach Line Expressway (BLE) is the only direct vehicle connection that the Port has to the mainland.

The Barge Canal does not provide access to the mainland as there is no terminal there. The S.R. 401 and S.R. 3 drawbridges cross the Canal.

What limits access to the north side of the Port?

The only route out of the cargo handling areas on the north side of Port Canaveral is via Grouper Road. Where Grouper Road runs north/south, it ends in a T intersection with S.R. 401.

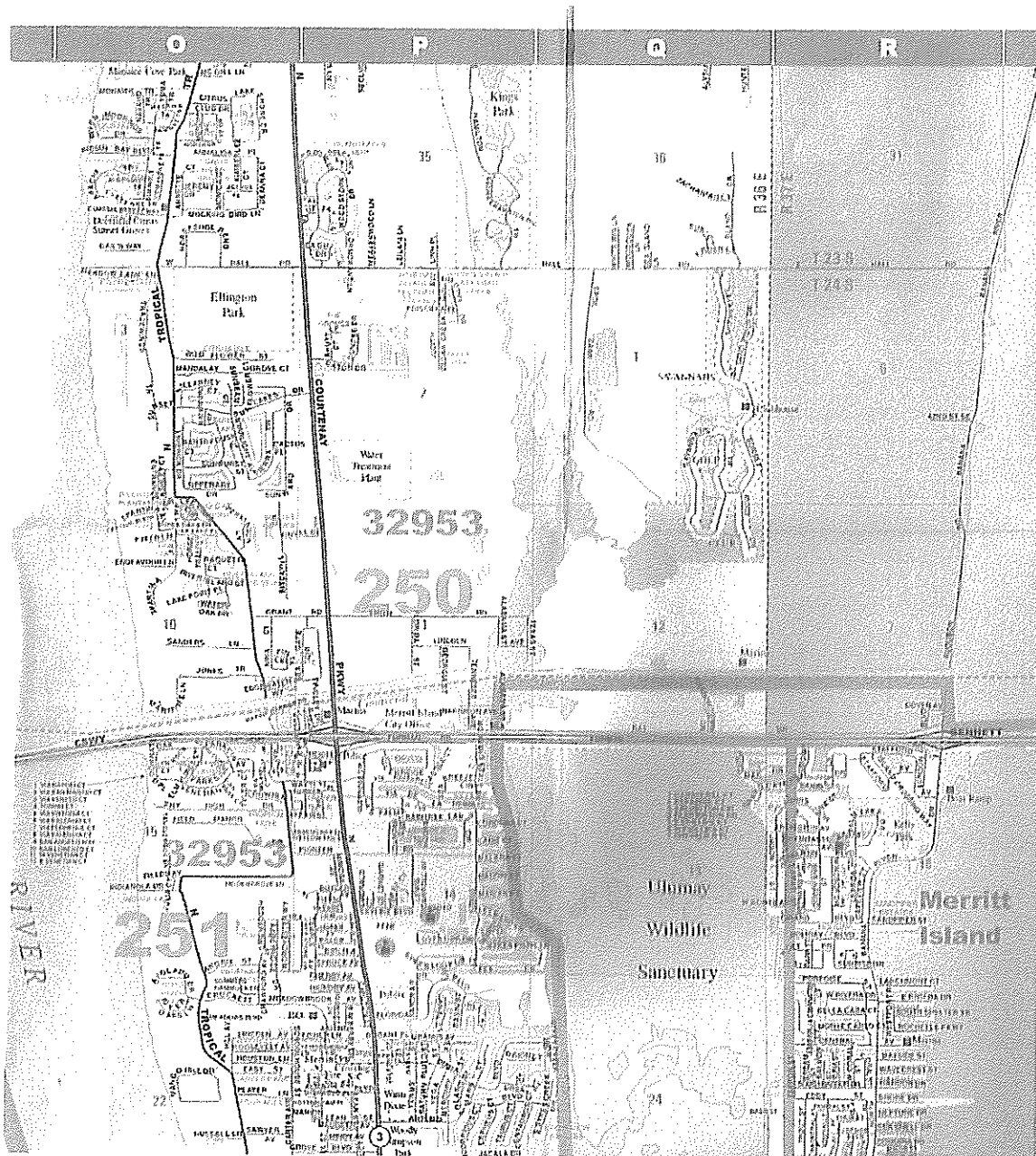
West Basin---Looking Northeast



The military installations on the north side of the Port are to the east of the T intersection. To the west are numerous cruise ship terminals. All vehicular traffic leaving the north side, from the military installations, the cargo docks and the cruise terminals, must pass over the S,R, 401 drawbridge that crosses the Barge Canal.

What is Merritt Island?

Merritt Island is an unincorporated area of Brevard County, Florida. The space shuttle crawlerway turned it into a peninsula. The Banana River is to the east, the Indian River is to the west.



What about the Cape?

Kennedy Space Center: According to the NASA website, KSC covers 6,000 acres or a bit more than 9 square miles. Facilities at KSC include:

184 miles of paved road

380 miles of unpaved road

Many miles of railroad track

7,800,000 square feet of building area

Cape Canaveral Air Force Station: According to the Patrick Air Force Base website, CCAFS covers 16,000 acres or 25 square miles. There are 1,500 facilities at CCAFS,

Merritt Island National Wildlife Refuge: According to the NASA website, the MINWR shares a boundary with the Space Center. The MINWR covers 140,000 acres or almost 219 square miles.

It appears that at least 84% of the Cape acreage is dedicated to the MINWR.

What about the Banana River?

The Banana River is not a river. It is a lagoon. It is part of the Indian River Lagoon System (IRLS).

The IRLS is comprised of three inter-connected, shallow estuaries, the Indian River Lagoon, Mosquito Lagoon and the Banana River Lagoon. The IRLS extends 156 miles from Ponce de Leon Inlet in Volusia County to the southern boundary of Martin County.

At the PSM Mr. Alex Gorichky, a kayak fishing guide, asserted that the IRLS generates \$3.7 billion in annual income. That claim is false.

A 2007 study by the Indian River Lagoon National Estuary Program (IRLNEP) placed a capitalized value on the IRLS of \$3.7 billion dollars. The study estimated that in 2007 the IRLS generated \$630 million dollars in income to the 1.5 million residents of the five counties that border the IRLS, Volusia, Brevard, Indian River, St. Lucie and Martin.

The IRLNEP study determined that the IRLS contained 72,400 acres of sea grass and placed a value on each acre of grass of \$4,600. Since the total value placed on the sea grass was over \$3.3 billion, it appears only \$4 million of the value was attributed to other aspects.

According to the St. Johns River Water Management District (SJRWMD) in the six years from 2007 to 2013, the IRLS lost 60% or 47,000 acres of its sea grass. Adjusting for inflation, \$3.7 billion equals \$4.2 billion and \$4,600 equals \$5,170 in 2013 dollars.

Taking 47,000 acres times \$5,170 per acre gives a loss in value of \$2.4 billion. This loss leaves an estimated value of \$1.8 billion in 2013 dollars.

These numbers are not cited in an effort to downplay the value of the IRLS. They are cited in an effort to state facts and figures correctly.

How might the PCRE affect the environment?

Sea Grass: One of the many people to speak about sea grass was Alex Gorichky, a kayak fishing guide. He spoke at length and forcefully about the importance of sea grass and the immense reduction in sea grass in the Banana River.

Mr. Gorichky is a regular contributor to a monthly publication entitled ***Coastal Angler***. None of his articles from January through November 2014 mention any problems with the Banana River environment. Here are some quotes:

July: "We have come into summer bait season with the lagoons bursting at their seams with all types of food for predators."

August: "All bait fish, from mullet to pinfish and porgies, are extremely abundant and predators will be feasting."

"The summer sea grasses are growing thick and tall in the Space Coast lagoons."

Redfish: With respect to this species, Mr. Gorichky had much to say. What he did not say is what he said in the September ***Coastal Angler***:

"For those of us on the lagoons that keep an eye on such things, the redfish spawn will be in full swing. Unlike some folks on the water, I refuse to chase and **bump** these magnificent schools of giant fish."

What it means to "bump" a redfish is unclear. What is clear is that Mr. Gorichky sees his fellow fishermen as a hazard to the fish population.

Manatees: These gentle creatures are considered to be endangered. No one wants to see them adversely affected.

Scrub Jays: These birds are considered to be threatened. They require a specific type of habitat. Whether the PCRE will affect any of this specific habitat is something that is not presently known.

What is known is that the PCRE will have a small footprint. About 1 mile of track will cross the Banana River and 10 miles will be on KSC land.

NASA uses 6,000 acres.

CCAFS uses 16,000 acres.

The MINWR uses 140,000 acres.

The total is 162,000 acres.

Assuming the PCRE railroad structure, not the right-of-way, but the actual structure, is 50 feet wide and 10 miles long, the PCRE footprint will be 2,640,000 square feet or 60.7 acres.

Those 60.7 acres equal *4/1000ths of one percent* of the total land on the Cape.

Human Beings: When bad things happen to flora and fauna, of course, it affects humans. Yet, some things affect humans more directly.

Noise: Several PSM speakers worried about loss of property value. One spoke of the “squealing of steel wheels on steel rails”. Noise can affect property value.

“Noise” has been defined as “an unwanted sound”.

“Noise pollution” has been defined as noise that is “annoying, distracting or physically harmful”.

“Physically harmful” is a measurable, objective standard.

“Annoying” or “distracting” are subjective. Whether a sound is “annoying” or “distracting” can depend on a number of factors.

Who is making the sound? The sound of your teenager practicing the trumpet may be music to your ears. To your next-door neighbor it may be annoying or distracting.

When is the sound being made? Trumpet playing at 3:00 p.m. may be acceptable. But, at 3:00 a.m.?

What is the person hearing the sound doing? If the hearer is studying quantum mechanics, a trumpet will be annoying or distracting. If the hearer is cleaning the garage, a trumpet may sound fine.

What is the duration of the sound? Trumpet practice lasting one hour is different from trumpet practice lasting three hours.

What are the foibles of the person hearing the sound? Some people pay good money for wind chimes. Other folks hate them. One person's music is another person's noise.

The PCRE trains are intended to move at a maximum of 10 mph. The total length of the PCRE run will be 28 miles. Thus, the time a train will traverse the Cape area in less than 3 hours.

Controlling noise: No one at the PSM claimed that the PCRE would create physically harmful noise. And, there are ways to deal with noise.

Abatement: Eliminating or reducing the production of noise at its source.

Buffering: Intervening between the noise source and the area affected.

Masking: "White noise" to reduce the effects of unwanted noise.

Groundwater Flow: Mary Hillberg, Vice President of the NMIHOA, expressed the fear that the PCRE would interfere with groundwater flow resulting in flooding on North Merritt Island.

Vice President Hillberg did not mention that the NMIHOA recently opposed a zoning change for property on North Merritt Island adjacent to Hall Road that would permit the construction of 220 residences on 110 acres.

One of the key arguments made by Ms. Hillberg on behalf of the NMIHOA was that the proposed development would cause flooding. The County Commissioners, including former Commissioner Chuck Nelson, whose district included North Merritt Island, rejected the NMIHOA flooding argument.

Courtenay Notes, the NMIHOA monthly newsletter, reported that a major Brevard County stormwater project for North Merritt Island, is nearing completion. ***Courtenay Notes*** also reported that the County has begun design work for stormwater improvements on West Crisafulli Road.

The Brevard County government is not unmindful of the issue of groundwater. There is no reason to presume that the CPA and NASA will be unmindful.

Drinking Water: Ms. Sue Ford, who was a member of the CPA Commission 25 years ago, said that preservation of wetlands is essential for the preservation of drinking water. At this point it is not clear how much the PCRE will impact wetlands or that any affected wetlands actually have an impact on drinking water.

Hazardous Materials: Transportation of HazMat by rail is many times safer by rail than by truck. More to the point, there is no indication that the PCRE will be used for HazMat transportation.

Fuel Oil: Mr. Tim Jacobs was concerned about the possible future movement of fuel oil over the PCRE.

A survey of over 240 ship owners, operators and agents conducted in the early 1990's, revealed that no entity involved with tankship operations, had any interest in transportation of fuel oil by rail.

What about mitigation?

Mitigation is not simply a question about money. It is also a question about acting intelligently.

Science: The December 6th issue of the ***Economist*** reported on a survey conducted over many years by Occidental College in Los Angeles that compared the biomass of marine life around oil and gas rigs with that of natural reefs. The rigs supported a biomass 27 times greater than natural reefs. In fact, the structures are viewed as so environmentally beneficial that consideration is being given to leaving the rigs in place after they cease production.

The ***Economist*** also reported that artificial reefs built in Japan support a biomass of fish 20 times greater than a natural reef and that more than 500,000 specially designed concrete structures called "reef balls", have been placed in the waters of 60 countries.

Engineering: Fear has been expressed that crossing the Banana River with a causeway plus bridge may interfere with the wind-driven currents that affect the distribution of sea grass.

In 1995 Mr. William Stokely, the FEC's Vice President for Engineering, envisioned a steel trestle 9 feet above the water plus a steel bridge with a 2 percent grade rising an additional 25 feet to provide a minimum center clearance of 32 feet. The estimated cost in 1995 was \$27.5 million dollars (\$42.8 million in 2014 dollars).

Might the PCRE benefit the environment?

Fuel Efficiency: In 1993 rail could move one ton of cargo 279 miles on one gallon of fuel. A truck could only move one ton 93 miles. It took 3 times as much fuel for a truck to move one ton as it took a railroad.

Today, according to the American Association of Railroads, rail can move one ton of cargo 450 miles on one gallon of fuel. That is a 171-mile gain in 20 years. Put another way, it is a 61%, increase in efficiency.

Reducing the amount of fuel needed to haul cargo reduces damage to the environment and the economy.

Emissions: The emissions caused by trains are far less than those of trucks. Twenty years ago the numbers were:

Diesel Particulates: Trucks 9.85 times dirtier than train.

Hydrocarbons: Trucks 9.7 times dirtier than train.

Nitrogen oxides: Trucks 2.9 times dirtier than train.

Carbon monoxide: Trucks 2.8 times dirtier than train.

Safety: The fatality rate per mile for trucks in 1995 was three times greater than for rail.

One rail car replaces 4 trucks.

Are there reasonable alternatives to the PCRE?

State Road 528 or Beach Line Alternative:

A number of speakers at the PSM favored having the PCRE run parallel to S.R. 528. None specified whether they wanted the PCRE to run **north** or **south** of the Barge Canal

North of the Barge Canal:

Although the north side of the Barge Canal is not as densely developed as the south side, a rail line north of the Barge Canal is not a reasonable alternative for a number of reasons.

1. There are residences and a marina on the north side.
2. Sykes Creek would have to be bridged.
3. Courtenay Parkway, S.R. 3, the main, four-lane, north/south artery on North Merritt Island and a major access road to KSC, would have to be bridged. Presently S.R. 528, the Beach Line Expressway, flies over S.R. 3.
4. The Indian River would have to be bridged.
5. There are residences in High Point very close to the where the west end of any Indian River bridge would be positioned.
6. To reach the FEC line, it would be necessary to cross U.S. Highway 1, a four-lane highway that is being widened.

South of the Barge Canal:

1. To reach the south side of the Barge Canal, the PCRE would have to either (a) bridge, or (b) tunnel under the Barge Canal.
2. The area south of the Barge Canal is even more densely developed than the north side. There are residences, marinas and light industrial facilities in this area.

The December issue of *Courtenay Notes*, the monthly newsletter of the NMIHOA, reported (quite favorably it seemed) that construction of the ***Crossroads Resort and Marina*** will begin in early 2015 on the site of the former Tingley's Marina.

3. The northern boundary of the Ulumay Wildlife Sanctuary is on the south side of the Barge Canal.
4. Sykes Creek would have to be bridged.
5. Courtenay Parkway, S.R. 3, the main, four-lane, north/south artery on North Merritt Island and a major access road to KSC would have to be bridged. Presently S.R. 528, the Beach Line Expressway, flies over S.R. 3.
6. The Indian River would have to be bridged.
7. There are residences very close to the where the west end of any Indian River bridge would be positioned.
8. To reach the FEC line, it would be necessary to cross U.S. Highway 1, a four-lane highway that is being widened.

The CPA plan for the PCRE creates a new access to the North Side of the Port. Creating a new access away from S.R. 528 is an important aspect. Routing the PCRE to run parallel to S.R. 528 defeats the purpose.

Unlike either route paralleling S.R. 528, the CPA plan for the PCRE does not use any private land.

In 1991 a CPA plan for a high- speed rail and pipeline to the Orlando Airport following S.R. 528 was rejected.

Additionally, when Eugene K. Garfield, the founder of AutoTrain, approached the Port Authority later in the 1990's on behalf of North American Maglev Corporation, with a plan for a maglev train running from the Port to Orlando via S.R. 528, his project was rejected.

[Note: Maglev is short for "magnetic levitation". A maglev train floats on a magnetic field without conventional wheels, axles and bearings.]

Cape Canaveral Air Force Station (CCAFS) Alternative

Mr. Lee Coates and several other speakers at the PSM suggested that rail access to the Port should run through the CCAFS. Apparently the Air Force has taken the position that this alternative is not acceptable.

Mr. Mark Buchness asserted that the USAF rejected the idea of using the CCAFS route due to security concerns. It is unknown whether this assertion is true or false.

Mr. Brian Rye asked, "If it is no good for the Air Force, why is it good for NASA?"

It's not rocket science. NASA has taken a close look and concluded that the PCRE is good for NASA.

Ms. Sarah Turner, a nurse practitioner, voiced concern about terrorism, particularly bio terrorism.

The aim of terror of any kind is to alter the behavior of the terrorized. To reject a project because it generates security problems or because terrorists may some day, some how, carry out an act of terror against it, is to act in precisely the manner which acts of terror are designed to promote.

North of Kars Park Alternative

Kars Park is a recreational facility on the east shore of the Banana River. It is actually two parks, Kars Park I and Kars Park II. These parks are open from 6:00 a.m. until 10:00 p.m, but they are **not** open to the public.

The following is how NASA describes the parks.

KARS Park I

The park has two large picnic pavilions (Area I and Area II), one Tiki Hut area, one TV/Rec Room, and one Conference Room. Kars I also has recreational vehicle and tent campsites, racquetball courts, tennis courts, volleyball courts, marina, horseshoe pits, basketball courts, playgrounds, softball fields, retail store, and a clubhouse in Area III.

Area I and II picnic pavilions each have a seating capacity of approximately 120 - 150 people. Area II has additional covered seating of approximately 96 - 100 people located outside of the pavilion. Each area is equipped with lights, ceiling fans, electrical outlets, one (1) medium grill (charcoal and utensils not supplied). Both areas have a new children's playground nearby.

Recreation and Athletic Activities: KARS Park offers the following activities for your enjoyment. Recreational equipment may be checked out with a valid KARS membership card at the KARS Country Store (located at KARS I).

- KSC American Legion Post #332
- 104 RV sites with water & electricity
- Primitive camping area
- Marina with ramp & boat slips (10 slips with water/electricity and 10 along seawall without water/electricity)
- Observation Pier
- Three (3) Softball fields
- Two (2) Volleyball courts
- Cornhole Sets
- Racquetball courts
- Nature & Jogging trails
- KSC Ceramics Arts and Crafts Activities

- Laundry Room (registered campers only)
 - Two (2) dump stations
 - River Fishing
 - Three (3) playgrounds
 - Flag Football field
 - Two (2) Tennis courts
 - Two (2) Basketball courts
 - Four (4) Horseshoe Pits
- 9 hole Miniature Golf course

KARS Park II

Located on the Kennedy Space Center off of the Kennedy Parkway (SR3). The park has a picnic pavilion, volleyball court, tennis courts, and racquetball courts. **This park is only accessible by badged employees of KSC / CCAFS.**

The picnic pavilion has a seating capacity of approximately 100 people and is equipped with lights, fans, electrical outlet, and one (1) large grill.

Not one speaker at the PSM voiced any concern that all this activity and all these structures at Kars Park may be having a negative effect on the environment.

Richard Lowenstein advocated running the PCRE from the Port at a 45 degree angle to an unspecified point north of Kars Park.

To run at 45 degrees from the Port to north of Kars Park would lengthen the Banana River Lagoon crossing proposed by the CPA from 1.0 to about 2.0 miles. Nevertheless, it is an alternative worth investigating.

What does Port Canaveral mean to John Q. Public?

A 2012 study found that the Port generated \$809 million in direct benefits to the community. That is \$834 million in 2014 dollars. The Port is responsible for almost 17,000 jobs.

Port Canaveral Jobs & Economic Impact

<u>Type</u>	<u>Number</u>	<u>2012 Dollars</u>
Cruise	11,000	482, 000,000
Cargo	3,400	225, 000,000
Realty	2,200	86,000,000
Marina	390	16,000,000
Totals	16,990	809,000,000

Kathleen Burson, a landscape architect, said at the PSM that she opposes the PCRE. However, as a recent candidate for Titusville City Council, Ms. Burson took a strong stand on job creation. In an interview with a local newspaper, ***Florida Today***, she said:

"This is Titusville's do or die moment. We must expand our business and industry resources."

"We need to focus on true economic growth---business and industry that establishes here and stays here."

Well, jobs at the Port cannot be outsourced to China or India. Likewise, jobs that will be created by building and operating the PCRE will ""stay here".

Why is cargo important?

Ms. Cheryl Lankes said she would like to see "an all cruise port". True, the cruise business is now the main business at the Port. However, it is well to consider both the past and the future.

First, cargo built the port. Long before there was a cruise ship industry, cargo vessels were operating in the Port.

Second, and more importantly, no one can predict what some of the changes on the horizon may portend.

Panama Canal Expansion: This project means bigger ships will be coming from the west coast of Latin America and the Far East. Because of its location and its navigational advantages, Port Canaveral may be attractive to these ships if it has the necessary land connections.

Nicaragua: Work is scheduled to commence soon on a project to build a canal through Nicaragua. Will this really happen? What will it mean for world trade? What will it mean for Port Canaveral?

Cuba: Political change is coming. In years gone by, Cuba was banned from the ***Summit of the Americas*** because it is not a democracy. In April 2015, President Raoul Castro will attend the Summit in Panama. With political change will come economic change.

Will the end of America's embargo of Cuba help or hurt Canaveral? Will cargo moving between the U.S. and Cuba move through Canaveral or bypass it?

What makes Port Canaveral attractive?

Approximately 80 percent of the world shipping moves in containers. Container ships are getting larger. Maersk Lines newest containership is 1,312' x 194'. It has a capacity of 18,000 Trailer Equivalent Units (TEU). The hourly operating cost of these ships is very, very high.

Port Canaveral has these advantages.

1. Short run in and out.
2. No bridges to pass under.
3. No sharp channel bends.
4. No strong currents.
5. Few days of reduced visibility.

Construction of the PCRE will be a welcome addition to this list.

Money Matters.

Taxes: At the November 19, 2014, PSM, Ms. Sue Ford, a former member of the Port Commission, reminded everyone that the CPA has the power to levy taxes and, although it has not done so for decades, might do so in the future. What she did not mention were sources of funds for projects such as the PCRE.

CMAQ: The Congestion Mitigation Air Quality Program (CMAQ) gives federal financial support to transportation projects that reduce air pollution.

FHA: The Federal Highway Administration allocates funds for railroad crossings.

FSTED: The Florida Seaport Transportation Economic Development (FSTED) program receives \$10,000,000 annually from fees generated by motor vehicle licensing and registration.

FPFC: In 1996, the Legislature created the Florida Ports Financing Commission (FPFC), a separate legal entity comprised of the various ports. This entity allocates FSTED funds. Additionally, it is part of the mechanism created by the legislature to allow the issuance of bonds to fund port improvement projects.

Bonds: In 2011 the FPFC issued bonds. Moody's has assigned an Aa3 rating to these bonds. The bonds are well within the "investment grade" category. The Official Statement for the bonds says:

"None of the obligations of the Borrower's under their respective Loan Agreement are secured by a pledge of their taxing powers, if any, and none are payable from *ad valorem* taxes.

SIP: In 2012 the Legislature created the Seaport Investment Program which authorizes an additional \$10,000,000 annual contribution to FSTED to begin in FY 2014 and continue for 30 years. This revenue will be leveraged with bonds that will support \$150,000,000 of seaport projects.

Opportunity: The costs of borrowing money are at record lows. Now is the time to invest in capital improvements.

Is the CPA "out of control"?

Robert Mullins and Richard Lowenstein seemed to believe the answer to this question is "yes".

In point of fact, the CPA, throughout its six decades of existence, has taken many environmentally friendly actions. Just take a look at the many public parks within its jurisdiction.

Credentials.

Here is a brief statement of my education and experience.

1963 graduate U.S. Merchant Marine Academy.

1968 graduate Duquesne University School of Law.

Admiralty law attorney in Pennsylvania, the Panama Canal Zone and Florida.

Officer on various types of merchant ships. Licensed by the U.S. Coast Guard as Master, oceans, unlimited.

1987 through 2005, Port Canaveral pilot licensed by the State of Florida and the U.S. Coast Guard.

1995 *Spaceport-Seaport Rail Link*

A copy of this document is included as part of this submission. It was provided by me to the Metropolitan Planning Organization and to every Port Director from Mr. Charles Rowland to Mr. John Walsh.

Respectfully.,



Earl McMillin

15 December 2014

PORT CANAVERAL

SPACEPORT-SEAPORT RAIL LINK

May 1995

SPACEPORT-SEAPORT RAIL LINK

Foreword

Port Canaveral is the only one of Florida's 14 ports which has no rail service. The *Spaceport-Seaport Rail Link* is a plan for bringing rail service to the port.

This booklet is an overview. It is intended to answer in broad terms some threshold questions about the plan.

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SPACEPORT-SEAPORT RAIL LINK

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SPACEPORT-SEAPORT RAIL LINK

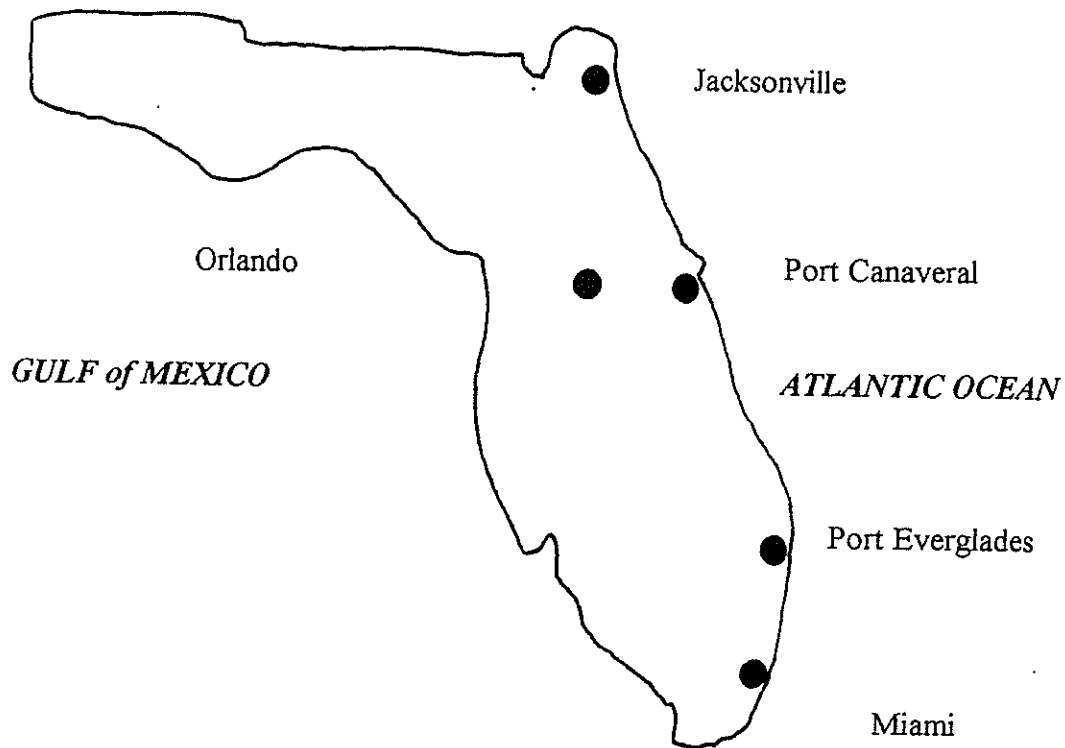
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SPACEPORT-SEAPORT RAIL LINK

Where is Port Canaveral?

Port Canaveral is on the east coast of Florida.



Port Canaveral is about 180 miles south of Jacksonville and 180 miles north of Fort Lauderdale.

Port Canaveral is east of Orlando and is about 45 minutes away via the limited access Beeline Expressway (SR 528).

Port Canaveral is in Brevard County and lies on the southern edge of the Kennedy Space Center.

What is the local geography?

SPACEPORT-SEAPORT RAIL LINK

What is Port Canaveral?

Port Canaveral is a man-made, deepwater port. Naval vessels, cruise ships and commercial carriers keep the port busy. Inbound cargoes include petroleum products, cement, salt, lumber, crushed rock, newsprint, and refrigerated foodstuffs. Outbound cargoes include scrap, fresh citrus, frozen food and general cargo.

Port Canaveral has three basins. The east basin devoted solely to military and public vessels; the middle basin with a Navy pier on its eastern side, but primarily devoted to commercial shipping and the west basin devoted to cruise ships.

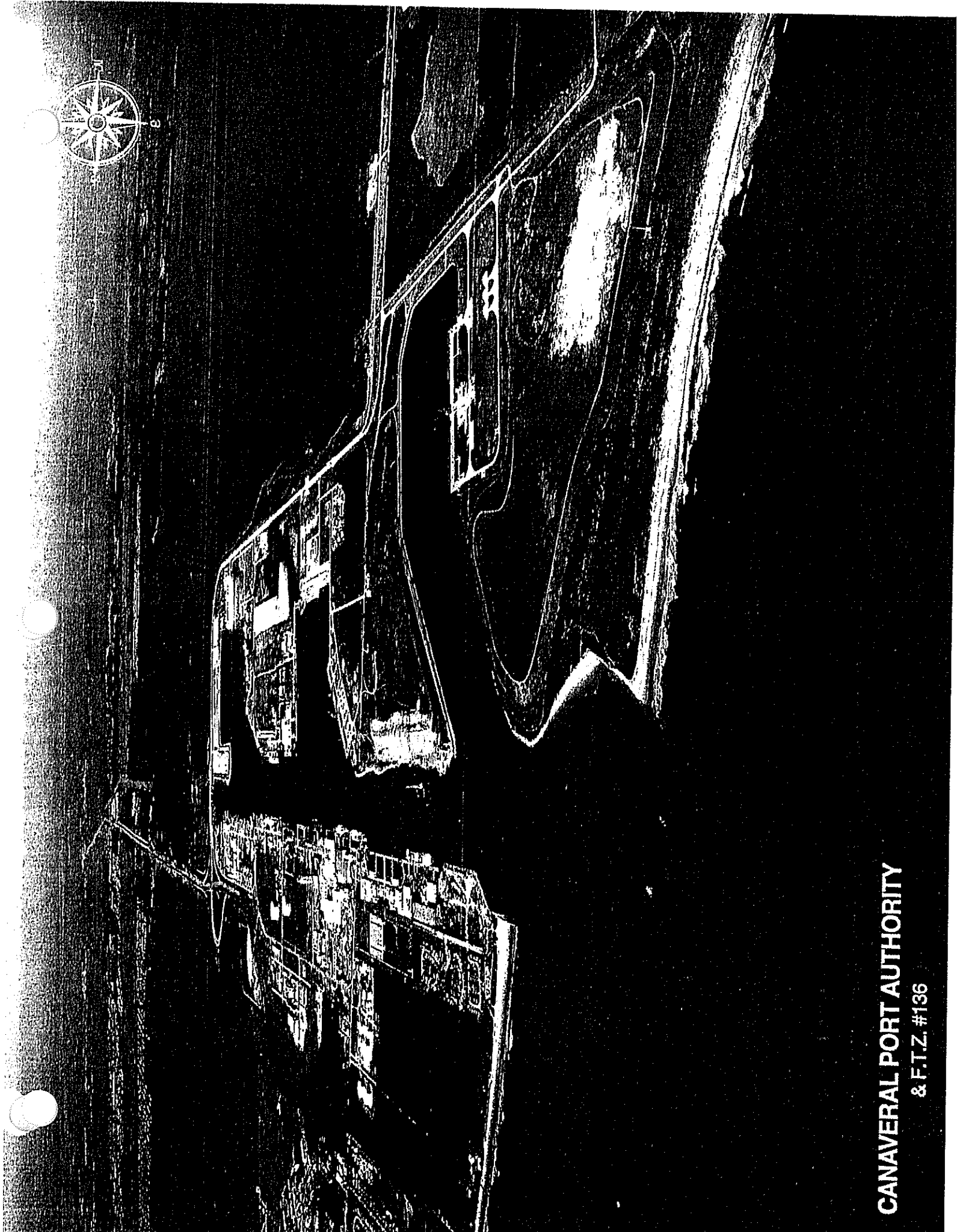
Port Canaveral is a convenient port. From the time an inbound ship arrives at the pilot station until she is secure at her berth usually takes about an hour and a half. Outbound ships often have the pilot away and are coming to sea speed in less than one hour.

The recent completion of a channel widening and deepening project has made Port Canaveral accessible to larger and deeper ships. The maximum draft is presently 38 feet, 6 inches.

Access for shallow draft vessels and tug/barges to the Intracoastal Waterway is via a lock at the west end of the port. Because of this lock, there is little current in the port. Reduced visibility rarely hampers vessel movements at Port Canaveral which enjoys exceptionally good weather.

Port Canaveral is also a busy fishing port; the main catches are scallops and shrimp. These seafoods are processed at plants located in the southwestern part of the port area.

The aerial photo on the next page gives a far better idea of the port arrangement than a description ever can.



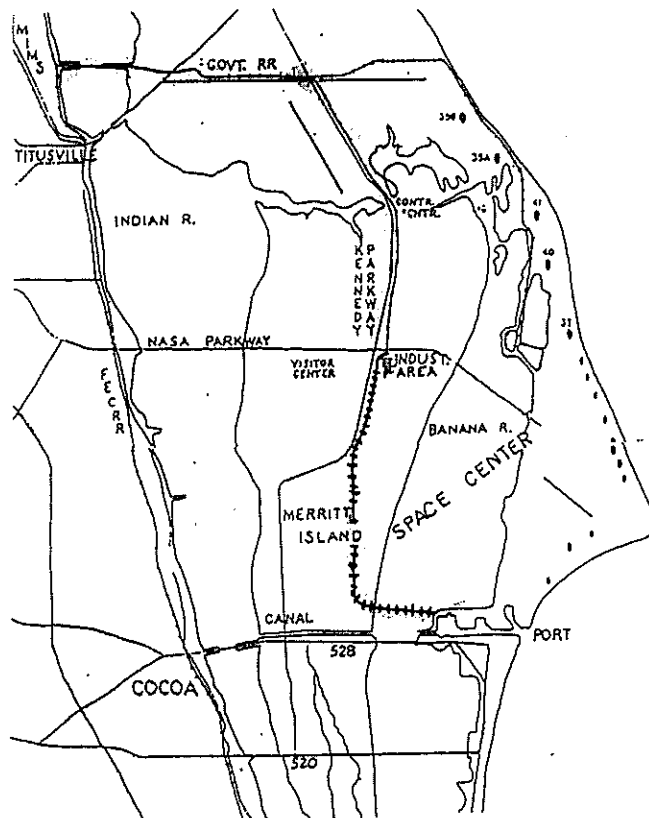
CANAVERAL PORT AUTHORITY
& F.T.Z. #136

SPACEPORT-SEAPORT RAIL LINK

What is the Spaceport-Seaport Rail Link?

Past studies of Port Canaveral rail access have looked directly westward to connect the port with the mainland by bridging the Banana and Indian Rivers and crossing developed areas of Merritt Island. Past goals have been to (1) link up with the Florida East Coast Railway in Cocoa, and/or (2) to continue 50 miles west with a brand-new rail line to Orlando.

The *Spaceport-Seaport Rail Link* looks northward to connect the port with the mainland using the U.S. Government Railroad inside the Space Center and gaining access to the Florida East Coast Railway in the Titusville/Mims area. In addition to urbanized areas, this route steers clear of environmentally sensitive areas.



SPACEPORT-SEAPORT RAIL LINK

Why a rail link?

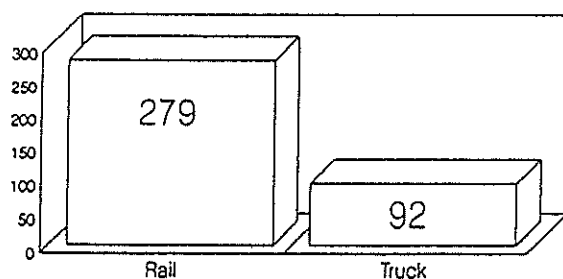
Port Canaveral has experienced healthy growth over the past decade. However, without a rail link, it can never grow to its full potential and serve the people of Florida with maximum efficiency.

Rail Efficiency

Today three locomotives can do the work it took four to do just ten years ago. Since 1980, the fuel efficiency of rail has improved 52% and future increases will occur.

Rail is far more efficient than road. In 1993, railroads used 3 billion gallons of diesel, or 2% of the total petroleum fuel used in transportation. Rail competitive trucks used 17 billion gallons of diesel to carry only 2/3's the cargo carried by the railroads. Rail can move one ton of cargo 279 miles on a gallon of diesel. A truck uses 3 gallons to move the same weight the same distance. Put another way, rail can go 279 revenue/ton/miles per gallon while a truck can only go 92 revenue/ton/miles.

Revenue Ton-Miles Per Gallon: Rail v. Truck

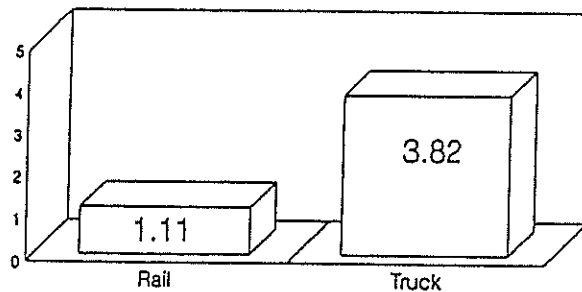


SPACEPORT-SEAPORT RAIL LINK

Rail Safety

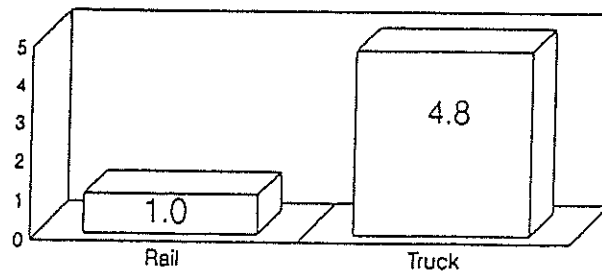
The fatality rate for rail is one third that of trucking. Moreover rail is getting safer. Train accidents have dropped 30% during the past decade.

Fatalities Per Billion Ton-Miles In 1991: Rail v. Truck



When railroads move hazardous materials (hazmat), 99.99% reach their destinations without any accidental release of product. For every billion ton/miles of hazmat transportation, trucks have five times the number of accidental releases as trains.

Hazmat Accidents Per Billion Ton Miles In 1991: Rail v. Truck



SPACEPORT-SEAPORT RAIL LINK

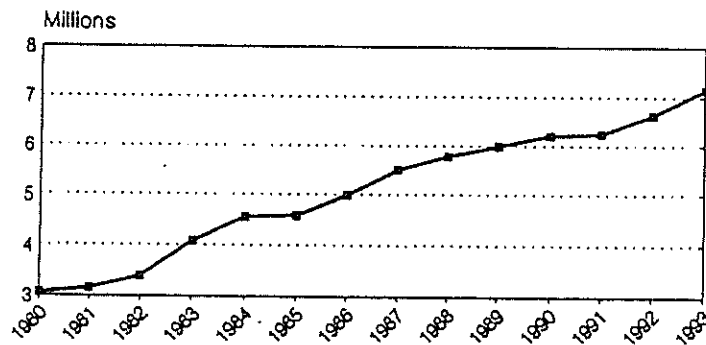
Railroad Boom

Rail traffic in America has experienced continuing growth over the past decade. Today 38% of all intercity freight moves by rail---more than by any other mode. Rail's share of long-haul is even higher and accounts for over 46% of all movements over 500 miles. In the year 1994 rail traffic increased 14%. Much of this growth can be attributed to the development of *intermodal* systems.

Intermodal Transportation

When goods move smoothly from one mode of transportation to another without interruption, that efficient transition is called *intermodal*. This concept has led to a revolution in transportation. During the past 15 years, intermodal movements, particularly of trailers and containers, have been steadily growing.

Trend In Intermodal Loadings: Millions of Tons



SPACEPORT-SEAPORT RAIL LINK

Much of the cargo coming into Port Canaveral---cement, salt and crushed rock---comes in bulk. Other cargo---lumber and newsprint---comes in large units. Such cargo is ideally suited for direct, uninterrupted transfer from ship to rail. Thus, bringing rail to the port would make movement of cargo already using the port more efficient.

But, dealing more efficiently with present cargo, while a good reason, is hardly a great reason for building the *Spaceport-Seaport Rail Link*. The great reason is that building the rail link is the only way in which Port Canaveral can participate in the growing intermodal boom because the rail link is the key to developing an *Intermodal Cargo Transfer Facility (ICTF)*.

Containerization

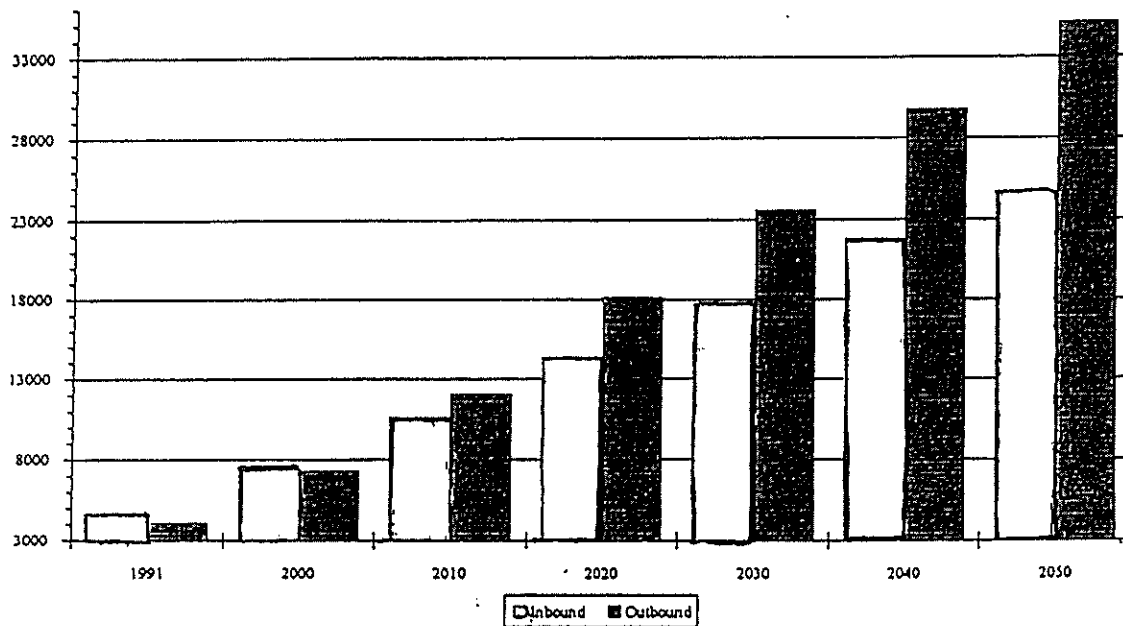
Containerization has changed our world forever. From 1982 to 1992, 1 million American jobs shifted abroad. As a result the American economy has become more import dependent, particularly on products moved in containers. Port Everglades handled 2.4 million tons of container traffic in 1994. This is expected to grow to 3.4 million tons in 1995; a 41% increase.

Containerized shipments just in the year 1993 and just in Florida grew a staggering 63%. According to a June 1993 joint Corps of Engineers/Maritime Administration (USACOE/MARAD) study, *The Future Market for Containership Traffic in the South Atlantic Region of the United States*, "Under the current productivity pattern of the existing facilities..., there will not be sufficient capacity to meet the increase in additional cargoes beyond the year 2000. Ports will therefore have the opportunity to attract new cargoes and carriers. However, their success will become more dependent on their ability to provide facilities and services to insure the seamless transfer of goods from ships to inland destinations."

SPACEPORT-SEAPORT RAIL LINK

When people talk containers they often talk "TEUs" an acronym for "trailer equivalent units" a measure equal to one 20 foot container. As the graph below shows, U.S. container trade will grow strongly in the first half of the 21st century.

U.S. Containerized Trade in Thousand TEUs



SPACEPORT-SEAPORT RAIL LINK

The Latin America Connection

In the U.S. intermodalism has led to the creation of the *land-bridge*; the east/west transcontinental movement of cargo by a combination of sea and rail. The land-bridge is so efficient that shipments from Japan to the U.S. East Coast take 13 days. That is 10 days less or 43% faster than movement entirely by sea via the Panama Canal.

In recent times a north/south land-bridge has begun to develop along the U.S. East Coast for goods moving to and from Latin America. Florida is the gateway to Latin America and can profit substantially if it creates the infrastructure necessary to be the southern terminus of this new land-bridge.

Suezmax Containerships

For many years containerships were designed in such a way that they could carry the maximum number of TEUs and still transit the Panama Canal. Such ships are called *Panamax*, shorthand for "Panama Canal maximum". Some Panamax ships can carry 4,000 TEUs.

The South Atlantic region's total containership cargo was 16 million tons in 1991. By 2000 it will be 28 million tons. By 2050 it will be 111 million tons; seven times the 1991 total. The South Atlantic containership fleet as a share of world containership fleet will increase significantly in the coming years, especially on routes to foreign trading partners with whom trade will grow fastest, such as Latin America.

To prepare for such growth, some containership operators are planning post-Panamax or so-called *Suezmax* ships that will carry 6,000 to 8,000 TEUs. The limiting factor for such ships is the port. Such ships need ports that are easy to get in and out of from both the navigational and the cargo handling points of view. Port Canaveral has the navigational advantage, but without a rail link and the *ICTF* that such a link will enable it to develop, it can never gain a cargo handling advantage.

SPACEPORT-SEAPORT RAIL LINK

Why Port Canaveral?

Ships using Jacksonville must contend with mile after mile of current in a narrow, winding river. Additionally, because it is 180 miles north of Port Canaveral, winter fogs and winter cold fronts that never reach Canaveral regularly sweep over Jacksonville. Port Canaveral has the advantage over Jacksonville from a navigational standpoint.

Miami, Port Everglades and Port Canaveral are all similar to navigate. However, Miami and Port Everglades are both congested. With regard to Miami, for example, the USACOE/MARAD study points out that, "...all container traffic (including rail traffic moving between the port and Florida East Coast Railroad's intermodal terminal) must traverse city streets."

Miami and Port Everglades are hemmed in by heavily urbanized areas. In the next 25 years, the population of Florida is expected to grow by over 6 million. This increase alone is more than the combined population of 37 states. South Florida is already congested, central Florida is not. Port Canaveral has the advantage over Miami and Port Everglades from the access standpoint.

Why Port Canaveral now?

Florida has to prepare today to be ready for tomorrow by making the best use of assets such as Port Canaveral. This preparation needs to be done before growth makes it impossible.

Port Canaveral has at least 75 acres of open land between the middle and west basins. This is the ideal location for rail to come into the port and for development of an Intermodal Cargo Transfer Facility.

SPACEPORT-SEAPORT RAIL LINK

As the drawing on the next page indicates, there are two piers, North Cargo Piers (NCP) 6 and 7 still in the planning stage. Also in the planning stage, but much closer to being carried out, is the expansion and renovation of NCP 5.

These piers are just south of the vacant 75 acres. NCP 6 and NCP 7 should be designed to support container cranes and a rail track.

Employment

Defense and space programs are throttling back. Every day there is news of layoffs related to these programs. Brevard County has struggled for years to diversify its economy away from its heavy reliance on defense and space. Improving the port can help.

Competition

Miami is planning to develop an *ICTF* near its airport. Port Everglades is planning to extend rail service to its Southport area and develop an *ICTF*. Fort Pierce is being eyed by the FEC Railway as a future site for a sea/rail/highway hub. If Port Canaveral fails to act now, the window of opportunity will close forever.

PORT CANAVERAL FACILITIES

Total unencumbered upland land area measures 757 acres in the deep water port proper and 130 acres along the Canaveral Barge Canal.
Total acreage: 3,300

CRUISE SHIP TERMINALS

Cruise Terminal No. 2

500' pier face, draft 35', 26,000 square feet, 246 paved parking spaces

Cruise Terminal No. 3

600' pier face, draft 41', 25,000 square feet, 662 paved parking spaces

Cruise Terminal No. 4

960' pier face, draft 34', 29,000 square feet, 699 paved parking spaces

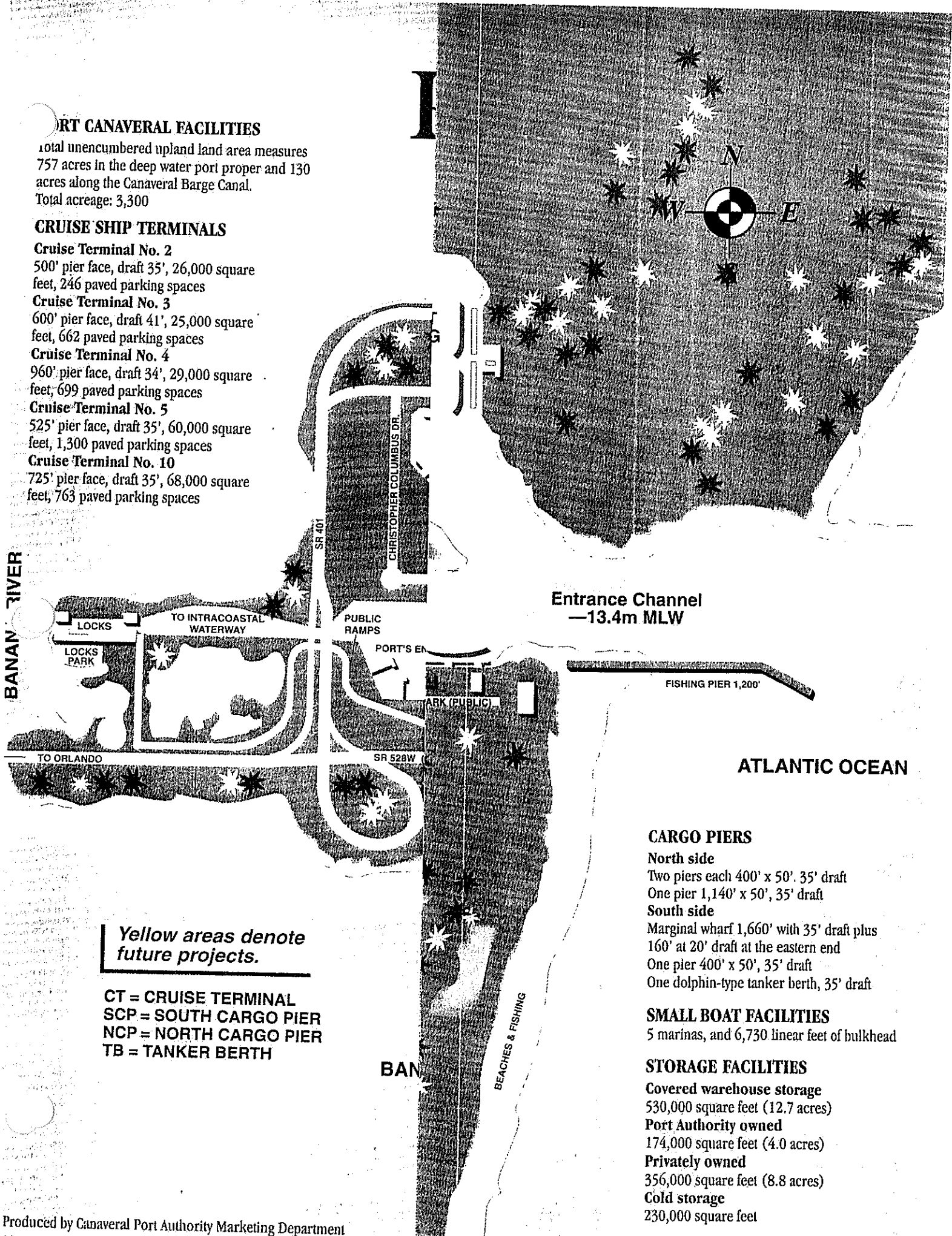
Cruise Terminal No. 5

525' pier face, draft 35', 60,000 square feet, 1,300 paved parking spaces

Cruise Terminal No. 10

725' pier face, draft 35', 68,000 square feet, 763 paved parking spaces

BANAN RIVER



Yellow areas denote future projects.

CT = CRUISE TERMINAL
SCP = SOUTH CARGO PIER
NCP = NORTH CARGO PIER
TB = TANKER BERTH

Entrance Channel
—13.4m MLW

FISHING PIER 1,200'

ATLANTIC OCEAN

CARGO PIERS

North side

Two piers each 400' x 50', 35' draft

One pier 1,140' x 50', 35' draft

South side

Marginal wharf 1,660' with 35' draft plus 160' at 20' draft at the eastern end

One pier 400' x 50', 35' draft

One dolphin-type tanker berth, 35' draft

SMALL BOAT FACILITIES

5 marinas, and 6,730 linear feet of bulkhead

STORAGE FACILITIES

Covered warehouse storage

530,000 square feet (12.7 acres)

Port Authority owned

174,000 square feet (4.0 acres)

Privately owned

356,000 square feet (8.8 acres)

Cold storage

230,000 square feet

SPACEPORT-SEAPORT RAIL LINK

What will it cost?

The total cost of the *Spaceport-Seaport Rail Link* will be just under \$38,000,000.

The biggest expense will be bridging the Banana River. The estimated distance is 10,000 feet. Most of this distance will be bridged using a trestle with a height of 9 feet above the water. A steel bridge with a 2 percent grade will rise an additional 25 feet to provide a minimum clearance at the center of 32 feet. The total estimated cost of to bridge the Banana River is:

Trestle: 7500 feet at \$2,000 per foot	15,000,000
Bridge: 2500 feet at \$5,000 per foot	<u>12,500,000</u>
Sub-Total:	27,500,000

The nine miles of track, grade crossings, signals and port railyard costs are estimated to be:

Track: 9 miles at \$800,000 per mile	7,200,000
Crossings: 6 at \$50,000 each	300,000
Signals:	400,000
Yard:	<u>1,000,000</u>
Sub-Total:	9,900,000
Sub-Total:	<u>27,500,000</u>
Grand Total:	37,400,000

SPACEPORT-SEAPORT RAIL LINK

How does \$38,000,000 compare with other projects?

Past estimates of the cost of bringing rail into Port Canaveral have ranged from \$300,000,000 to \$400,000,000. Unlike past proposals, with the *Spaceport-Seaport Rail Link*, (1) no right-of-way need be purchased, (2) the Indian River need not be bridged, and, (3) the existing rail is only 9 miles away.

Thirty-eight million is a lot of money. But, compared with some of the other projects in Florida it is a bargain. Tri-Rail, a passenger line connecting Palm Beach, Ft. Lauderdale and Miami, which has a daily ridership of around 10,000 passengers, will soon spend \$500,000,000 on capital improvements. That is \$50,000 per rider!

The known facts are these. Building the rail link will not become cheaper and not building it will cost Port Canaveral, Brevard County and Florida dearly in the years ahead.

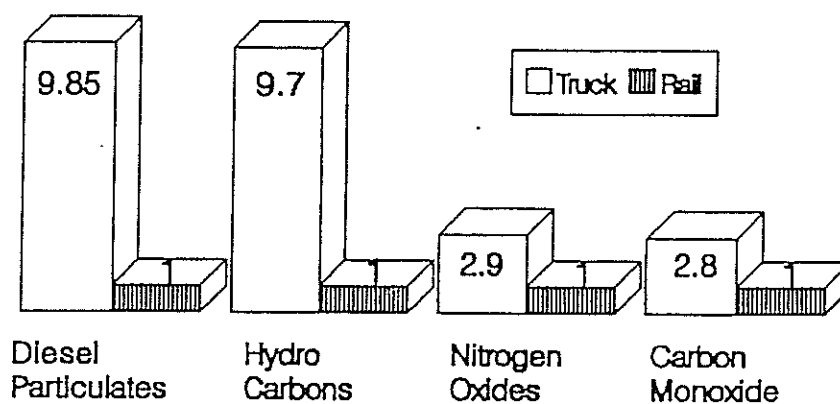
Is it worth it?

Florida has for many years had a policy in place intended to insure that Florida does not become another California. The policy is that major highways will have a maximum of 5 lanes in each direction. One train can do the work of 200 trucks and a single train can move the same amount of goods that would require a 8 lanes of highway. Taking trucks off the highway reduces congestion and reduces wear and tear on the highways.

SPACEPORT-SEAPORT RAIL LINK

Rail saves energy. By saving energy, rail improves the environment.

Ratio of Emissions Per Billion Ton Miles: Truck v. Rail



In 1991 the U.S. Congress enacted the *Intermodal Surface Transportation Efficiency Act* (ISTEA). This law committed the nation to developing the most efficient surface transport system possible and created the *Congestion Mitigation Air Quality Program* (CMAQ) because the Congress recognized, among other important matters, the importance of protecting the environment.

Congress recognized too that transportation costs increase the price of goods. When transportation costs drop, the price of goods drops. The American consumer pays less for imports. The American producer finds it easier to export.

SPACEPORT-SEAPORT RAIL LINK

The safety advantages of rail over road have been touched on earlier. There is an added safety concern unique to Florida. Concentrating all intermodal development in the Miami/Port Everglades area could be a big mistake. The two ports are so close together that a storm like *Hurricane Andrew* could put them both out of action. Historically, Port Canaveral has not suffered major hurricane damage.

Is it worth it to the Canaveral Port Authority?

Port Canaveral already has inbound bulk shipments of salt, cement and crushed rock. The port's outbound bulk commodity is scrap. All these items are ideally suited for direct rail-ship transfer. Faster handling means less cost to the customer and less cost means a happier customer. Faster handling also increases port capacity without increasing port size. More capacity means a greater ability to handle more happy customers.

Presently, a large amount of port property is used to store scrap. A rail link would enable scrap to be kept upland and free this property for higher revenue use.

Containerized and trailerized shipments do not have to be warehoused. If they remain in the port, they remain in container yards and parking lots. Even refrigerated products can be stored in self-contained units in yards and lots. Also, containers can be stacked high, making optimum use of valuable real estate.

An added benefit to the port is savings gained in moving materials for port improvement projects. The South Jetty Extension is a prime example. Tons of huge rocks---sometimes only two to a flatbed---have had to be trucked 20 odd miles from the Florida East Coast rail line across Merritt Island and into Jetty Park.

SPACEPORT-SEAPORT RAIL LINK

Charging for the privilege of operating on the rail link will be a direct benefit to the port.

Finally, the railroad will enable the development of an *ICTF* without which the port will not be able to fully compete in the years ahead and to diversify its operations so that its economic health is not too closely tied to that of the cruise industry. The cruise industry has been good for Port Canaveral, but it is well to remember that long before the first cruise ship visited the port, there was cargo.

Is it worth it to the Florida East Coast Railway?

The railroad stands to benefit in two ways. First, someone will have to design and build the rail link. Florida East Coast Railway will have to participate in that endeavor if only to transport the construction material. Beyond that it is simply a matter of increased traffic generating increased revenues.

Is it worth it to NASA?

NASA and its contractors use Port Canaveral. For example, down range tracking stations are supplied by tug/barge units and oceangoing ships that call at the port..

NASA can benefit from the latest transportation technology whether it is an *ICTF* or a *Roadrailer*, a truck trailer with retractable conventional and steel wheels that can operate on road or rail. Technology will enable NASA and its contractors to cut costs by making better use of the port.

NASA will share in the revenue generated by the rail link. This will be through payments for right-of-way rent and/or for running on government track.

SPACEPORT-SEAPORT RAIL LINK

NASA will gain a new window on the world. A short spur could take visitors over the river and through the woods from the cruise terminals to the Visitors Center. This, together with the favorable exposure NASA will gain from being a cooperative neighbor will gain NASA an even brighter image.

What about NASA security concerns?

Precisely what those concerns are cannot be known until NASA is approached. However, it would seem that whatever they may be measures can be taken to address them.

The total distance from the port to the Florida East Coast rail junction at Mims is 21 miles. Assuming a 100 foot right-of-way, the total area used would be about 254 acres. Further, the new portion of track is only 8 miles long and runs through areas little used by NASA.

The frequency of train traffic will not be so great that it cannot be controlled. The rail link could be subject to many reasonable restrictions such as daylight only use.

Finally, even at 20 mph a train would be on NASA right-of-way only about one hour. A 40 mph speed would cut that time to 30 minutes.

SPACEPORT-SEAPORT RAIL LINK

Where will the money come from?

FSTED

Chapter 311, Florida Statutes, contains laws relating to *Florida Seaport Transportation Economic Development* (FSTED). The statute created the *FSTED Trust Fund*. Money from gasoline tax goes into the state Transportation Trust Fund and some of that money flows into the FSTED Trust Fund. The maximum any port can obtain from the FSTED Trust Fund in any one 5 year period is \$7 million in one year or a total of \$30 million over 5 years.

The FSTED Trust Fund provides matching funds. In other words, a port must provide one dollar of its own for every dollar it derives from the fund.

The *FSTED Council* is a 15 member body composed of the port directors of 12 Florida ports, including Port Canaveral, and the secretaries of Commerce, Community Affairs and Transportation. The *Rules of Procedure* for the Council are in Chapter 14B-1, Florida Administrative Code. These Rules contain a roadmap for obtaining matching funds from the FSTED Trust Fund.

CMAQ

The *Congestion Mitigation Air Quality Program* (CMAQ) is intended to provide federal support to transportation projects that will reduce air pollution from motor vehicles. CMAQ funds are available in areas where the air quality is poor, so-called *non-attainment areas*. Some success has been had in obtaining CMAQ funds for projects in areas with good air quality by demonstrating that the project will benefit non-attainment areas however remote they may be.

SPACEPORT-SEAPORT RAIL LINK

FHA

The *Federal Highway Administration* (FHA) controls federal funds used to improve railroad grade crossings. Such funds would be available to make any improvements on the existing U.S. Government Railroad line and possibly at the Mims/Titusville junction. Whether such funds would be available for any grade crossings in the area of new construction is an open question.

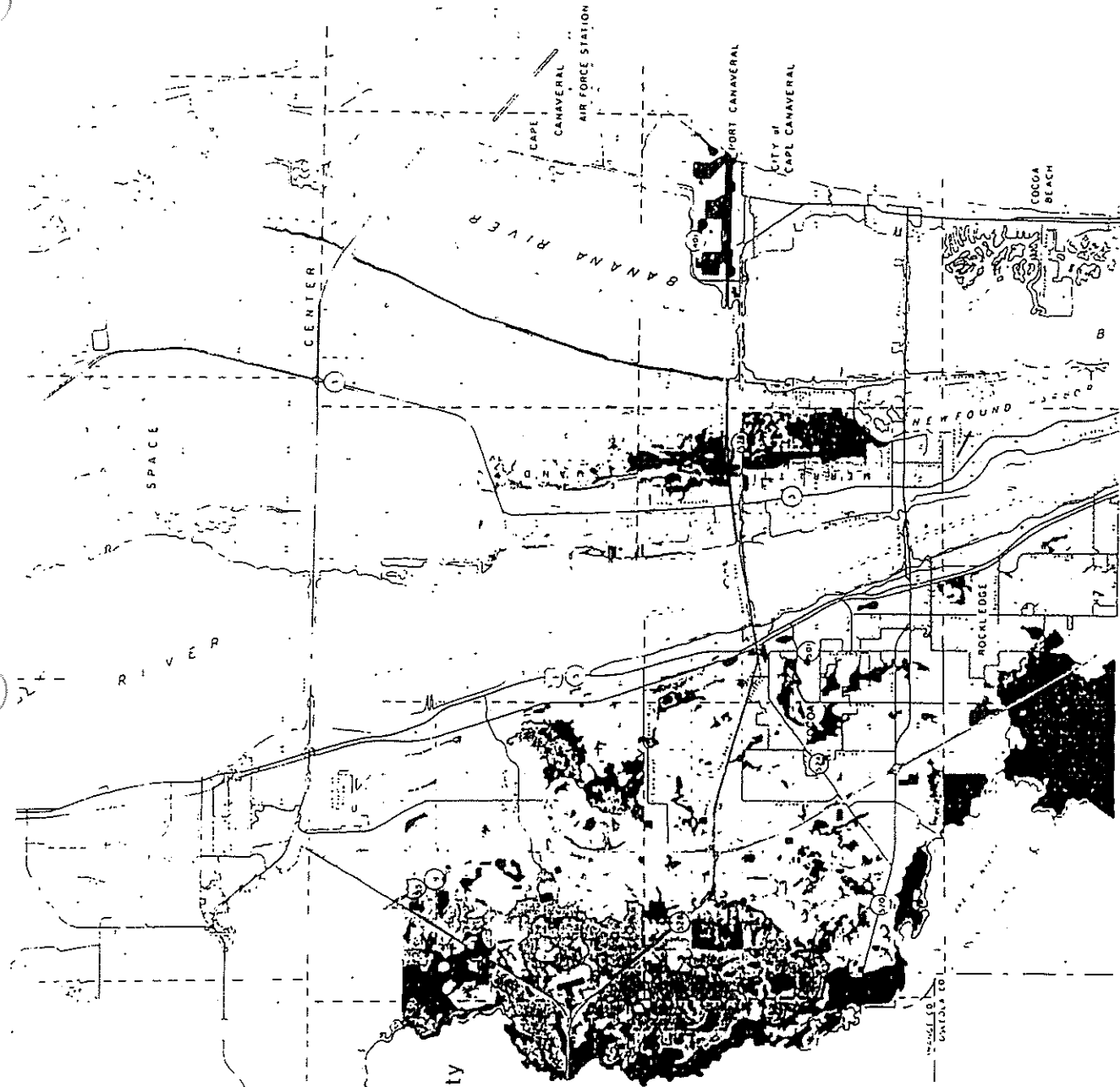
Consumers

Consumers eventually pay for everything because all expenses sooner or later end up in the price of goods. In this case that payment should be a wash. The money spent on the rail link will be factored into the price of goods, but that should be offset by the savings gained by efficiency.

Will there be any negative impact on the environment?

The study of the *Proposed Utility Corridor Between Port Canaveral And Orlando International Airport, Final Report*, July 1991, looked at building a double-tracked, high speed rail and utility line that would run over much of the route proposed here for the *Spaceport-Seaport Rail Link*. That study found the impact on wetlands, flood prone areas, aquifer recharge areas, threatened and endangered species and historic sites would be minimal.

The six maps on the following pages are from that study. There is no reason to believe that the world has changed so much in the past 4 years that the Utility Corridor findings are totally out of date. This is particularly so when it is remembered that the present proposal is for a single-track, low speed rail line.



The Wetlands of Brevard County

Hydric Hammock

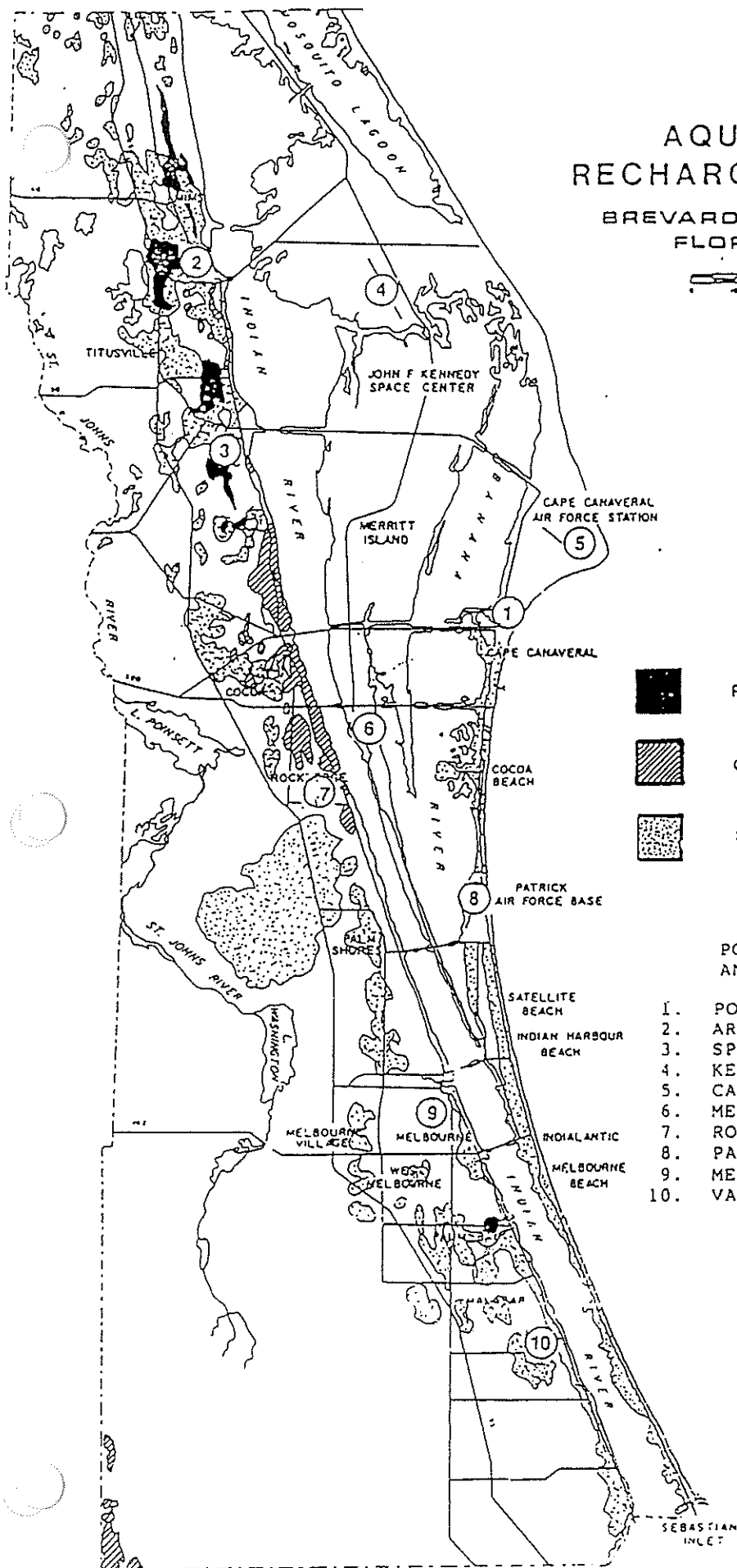
Mixed Hardwood Swamp

Bayhead

Shallow Marsh

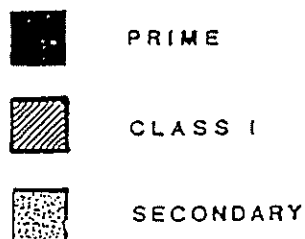
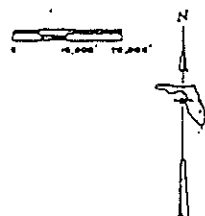
Deep Marsh

Mangrove Swamp



AQUIFER RECHARGE AREAS

BREVARD COUNTY
FLORIDA



PORTS, AIRPORTS AND RELATED FACILITIES

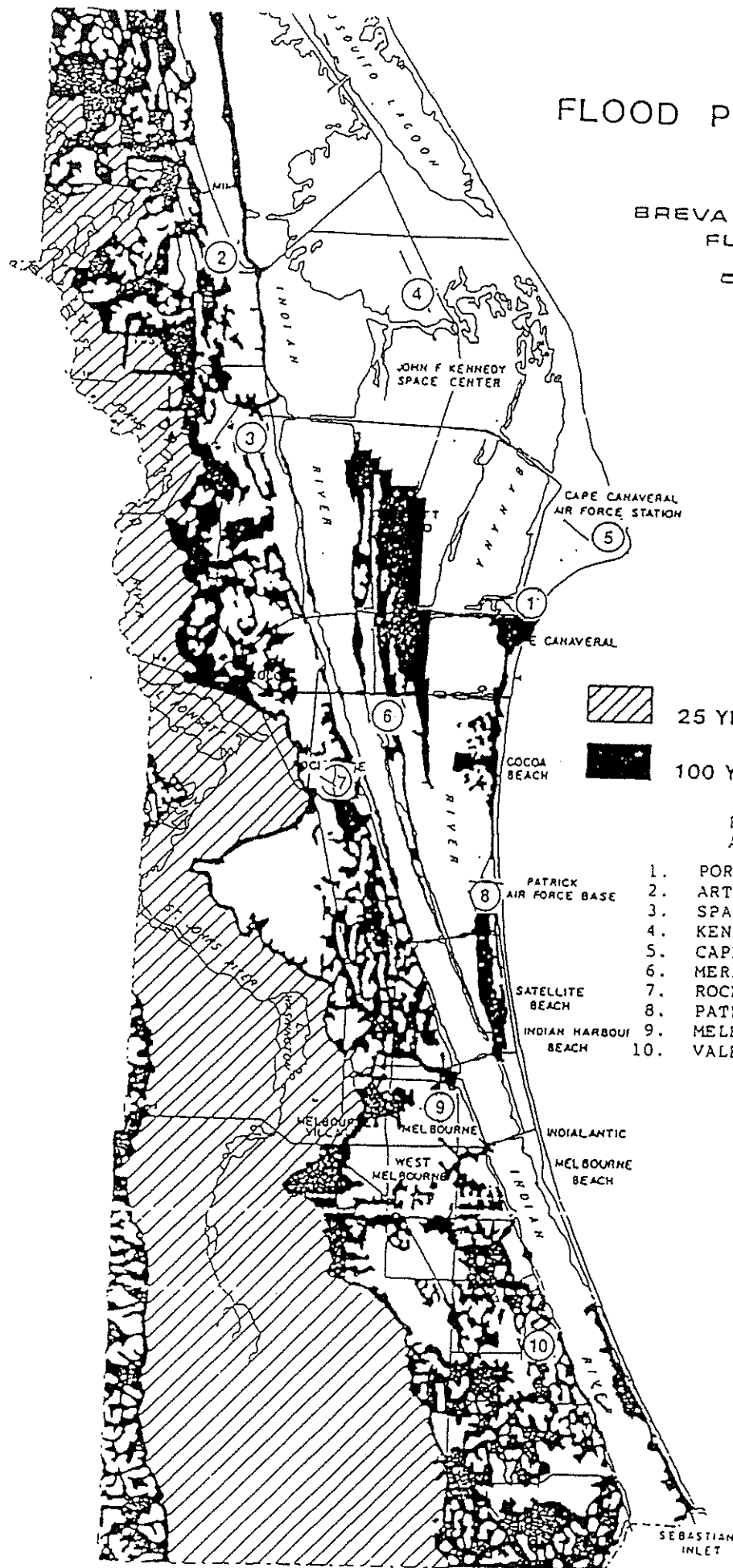
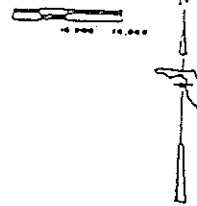
1. PORT CANAVERAL
2. ARTHUR DUNN AIRPARK
3. SPACE CENTER EXECUTIVE AIRPORT
4. KENNEDY SPACE CENTER
5. CAPE CANAVERAL AIR FORCE STATION
6. MERRITT ISLAND AIRPORT
7. ROCKLEDGE AIRPARK
8. PATRICK AIR FORCE BASE
9. MELBOURNE REGIONAL AIRPORT
10. VALKARIA AIRPORT

Source: Brevard County
Conservation Overlays - 1981

FIGURE 2-11

FLOOD PRONE AREAS

BREVARD COUNTY
FLORIDA

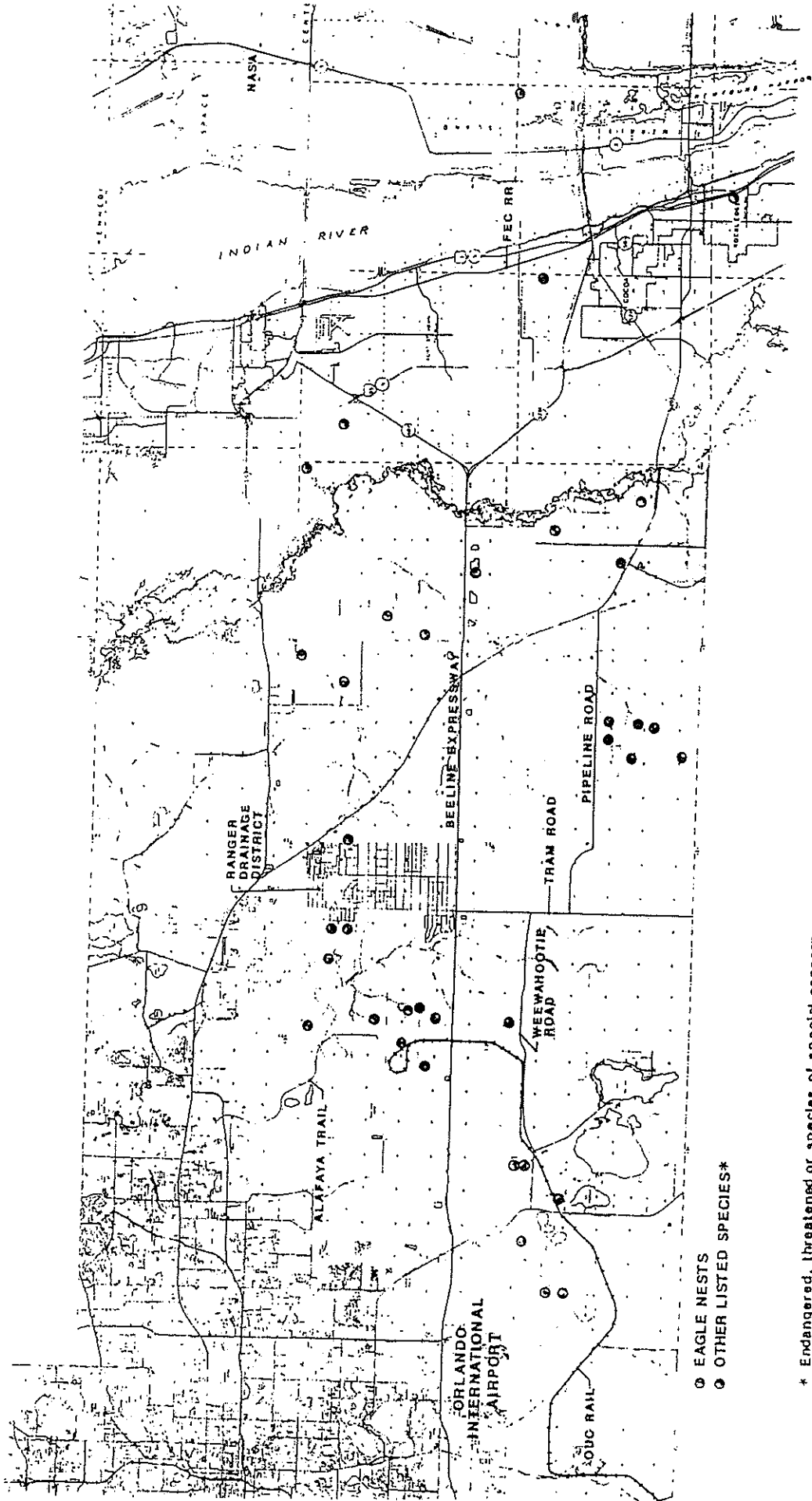


 25 YEAR FLOODPLAIN
 100 YEAR FLOODPLAIN

PORTS, AIRPORTS
AND RELATED FACILITIES

1. PORT CANAVERAL
2. ARTHUR DUNN AIRPARK
3. SPACE CENTER EXECUTIVE AIRPORT
4. KENNEDY SPACE CENTER
5. CAPE CANAVERAL AIR FORCE STATION
6. MERRITT ISLAND AIRPORT
7. ROCKLEDGE AIRPARK
8. PATRICK AIR FORCE BASE
9. MELBOURNE REGIONAL AIRPORT
10. VALKARIA AIRPORT

Source: Brevard County
Conservation Overlays - 1981

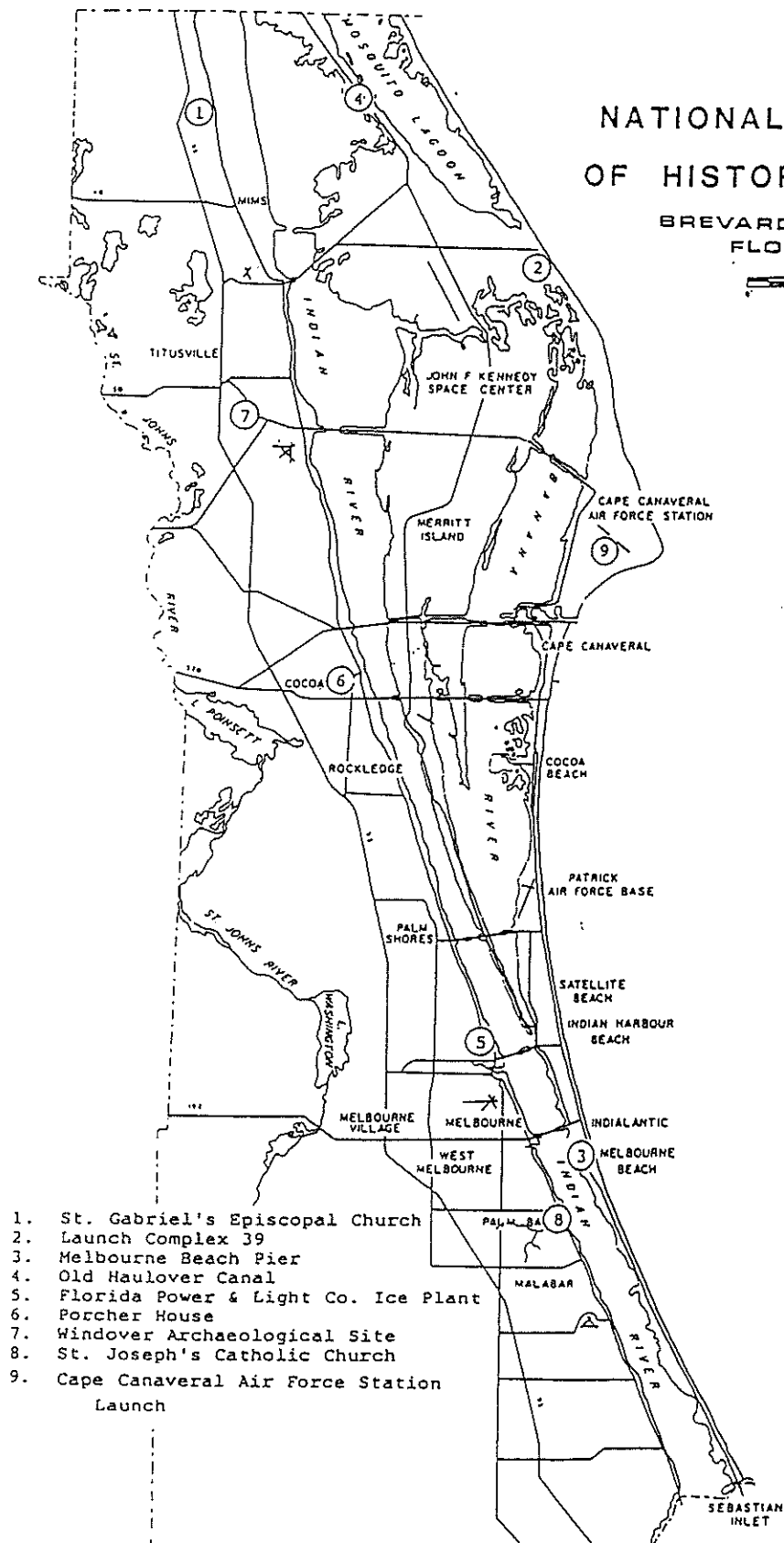


- EAGLE NESTS
- OTHER LISTED SPECIES*

* Endangered, threatened or species of special concern

PROPOSED UTILITY CORRIDOR
Between
Port Canaveral and
Orlando International Airport

THREATENED AND ENDANGERED SPECIES



NATIONAL REGISTER OF HISTORIC PLACES BREVARD COUNTY FLORIDA

1. St. Gabriel's Episcopal Church
2. Launch Complex 39
3. Melbourne Beach Pier
4. Old Haulover Canal
5. Florida Power & Light Co. Ice Plant
6. Porcher House
7. Windover Archaeological Site
8. St. Joseph's Catholic Church
9. Cape Canaveral Air Force Station Launch

Source: U.S. Department of the Interior. National Park Service
National Register of Historic Places. August, 1988

FIGURE 2-20

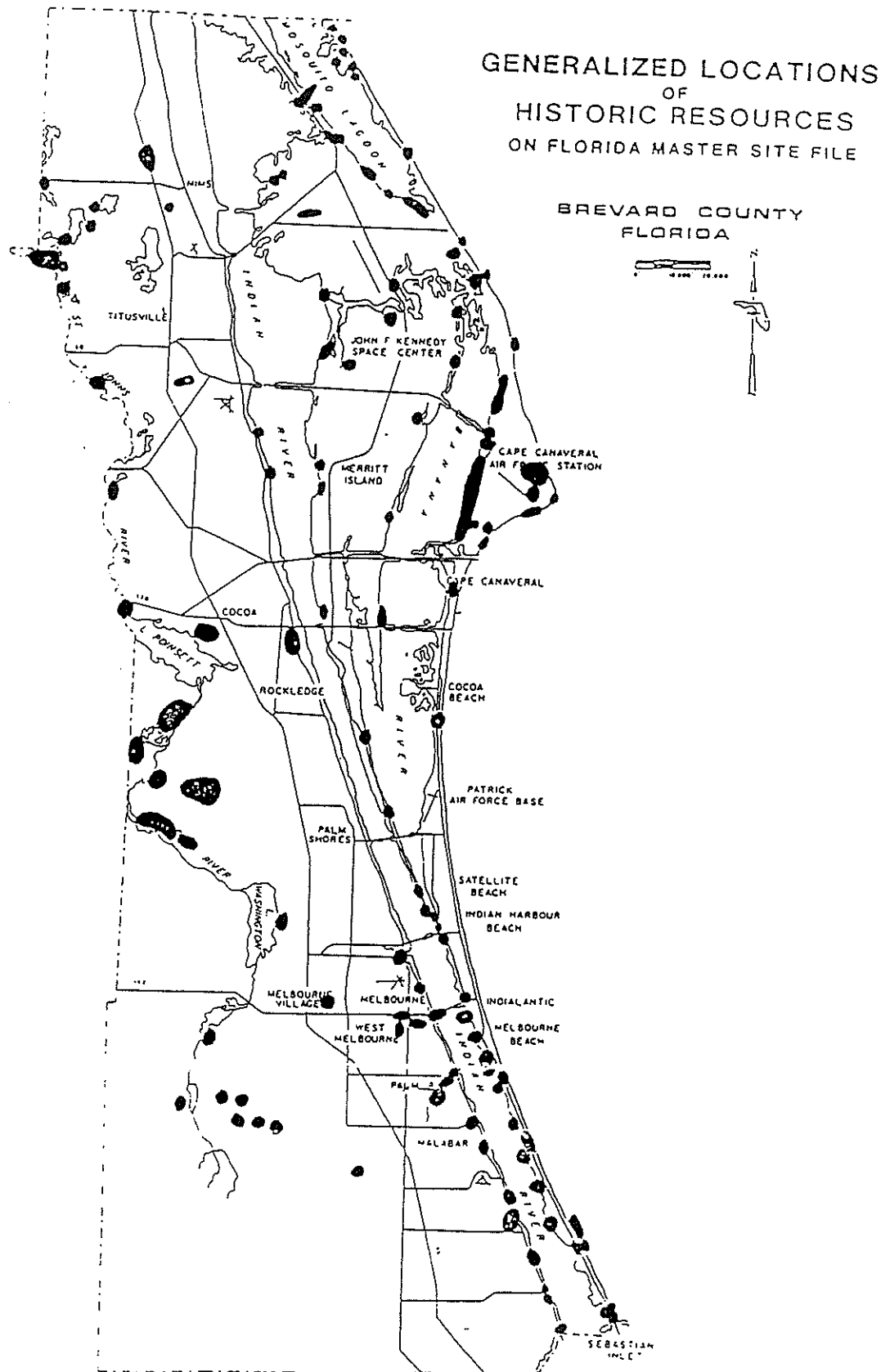


FIGURE 2-21

SPACEPORT-SEAPORT RAIL LINK

What are some of the unanswered questions?

As was said at the outset, this document is an overview. It does not attempt to answer the many questions that will have to be answered before the first train rolls over the rail link. Some of those questions are:

Who will design it?

Who will build it?

Who will operate it?

Who will maintain the bridge and the track?

Who will provide the rolling stock?

Who will maintain the rolling stock?

Where will the rolling stock be maintained?

Afterword

America's vast land area gives it many advantages over its competitors in international trade. One advantage those competitors enjoy, however, is that their sources of production are not far removed from their outlets to the sea. This is not true in America. To compete, America needs the very best transportation system in the world. Providing rail service to Port Canaveral is just one link in the transportation chain the nation must forge to meet the challenges of the coming century.

Spaceport-Seaport Rail Link

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SPACEPORT-SEAPORT RAIL LINK

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