Reconstruction and Enhancement Project

CRA
POMPANO BEACH

IT'S HOW YOU FEEL WHEN YOU'RE HERE

pompano beach
Florida's Warmest Welcome

Background Information

- Pier is used by +/-36,000 individuals (per 2007 data).
- Pier was built in the early 1960s.
  - Typical life span +/- 50 years
- Pier is approximately 865' long and 18' wide (+/- 16,000 Sq. Ft.).
- Concrete and timber deck supported by a cast-in-place concrete pile cap.
- Amenities include low level bollard lighting, benches, wash stations, bait wells and a light duty shelter.
- Other features include bait/souvenir shop (manned by City personnel).

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

The Past

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Meeting with FDEP

- Staff met with FDEP to discuss basis for rebuilding existing Pier (May 19, 2011).
  - FDEP is willing to award a new 25-year lease.
  - Possible lease (fee) waiver if any municipal fees are used for pier maintenance.
  - There is no history of FDEP demand to remove a pier except for derelict structures.
    - Current structure might be unsafe due to age by 2016.
  - Pier eviction would only occur due to non-payment of fees, unauthorized activities.

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Points to Ponder
To Re-build or not To Re-Build

- Based on 2005 report (Volkert & Assoc.), pier replacement was recommended within 10 years (on/or about 2015).
- Pier is old and a severe storm may damage it beyond repair.
  - Hurricane Sandy caused damages that require immediate attention (i.e., replace railings, end deck, etc.).
- Should the City decide not to renew the lease with FDEP, then FDEP may require the City to remove the pier.
  - The renewal for pier lease expires April 1, 2016 (assumes the State executes the lease just approved at December 11, 2012 City Commission meeting)
- New FDOT design criteria must meet 75-year design life.

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Points to Ponder (cont'd)

- City Staff will be seeking approval from the City Commission (January 8, 2013) to execute a proposal for a pier Structural Assessment to be conducted by Lakdas/Yohalem. If approved, the assessment should take 5 weeks to accomplish.

Scope of work will include:

- Review available documentation for pier (construction documents, previous condition surveys, maintenance records)
- On site structural condition survey of
  - Pier concrete deck
  - Pier wood deck
  - Bent beams
  - Supporting piles (below water survey, 4' – 6' depth)
- Compile detailed report document with findings, comments, and recommendations
- Prepare cost estimates for corrective work
- After the survey is complete the consultant will be able to provide an estimate on the life span of the pier, with recommended structural restoration or without the restoration work.

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Allowed Uses/Permitted Structures

- Pier is primarily a fishing pier.
- Structure to be water dependent.
  - Fishermen related activity to remain as primary objective.
- Fishing competitions (semi-annual or annual fishing tournaments?
- Overhanging balconies can be built to support water dependent activities and add beauty/special touch.

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Non-allowed Uses

- Serving food or alcohol (permanent structures east of Erosion Control Line).
  - Vendor Carts (non-permanent structures) – If allowed, a 6% lease fee would be charged to the City based on gross revenue.
  - May require Governor and Cabinet (G & C) level approval.
- Bathrooms over sovereign water.

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Chronology of Recent Repairs and Structural Evaluations

- Handrails replaced prior to 1997.
- Repair work in 2001.
  - Concrete restoration.
  - Handrail and timber decking repair.
- Structural evaluation in August 2005
  - Spalled (missing/chipped concrete due to corrosion) or cracked concrete with and without exposed reinforcing steel.
  - Delamination (concrete that has separated from the main structure/wide cracks) due to overstress.
  - Corrosion bleed out (stains on concrete due to corrosion from underlying reinforcing).

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Existing Conditions

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Chronology of Recent Repairs and Structural Evaluations (cont'd)

- Structural repairs in 2007 (initial award was $300K including design fees, but City spent $663K due to additional repairs to shops/change orders/engineering services).
  - Scope of work included:
    - Repairs to spalled (missing/chipped corrosion from underlying reinforcing).
- Regular maintenance (replace damaged railings and deck, deck and railing/staining, etc.) (yearly expenses $15K-$20K).

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

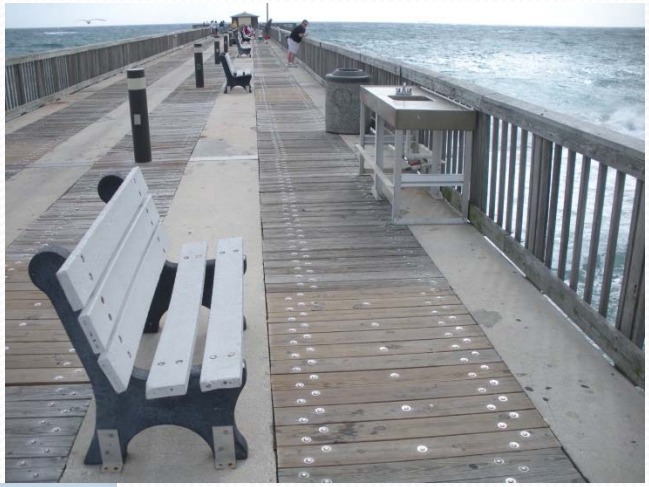
Structural and Usability Issues

- Concrete structure at the end of life expectancy (50 years).
- Railings do not meet current code (inadequate spacing).
- Limited room for pedestrians when fishermen line up on both sides.
- Lights in the center aisle further impede pedestrian traffic.

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

The Present



CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

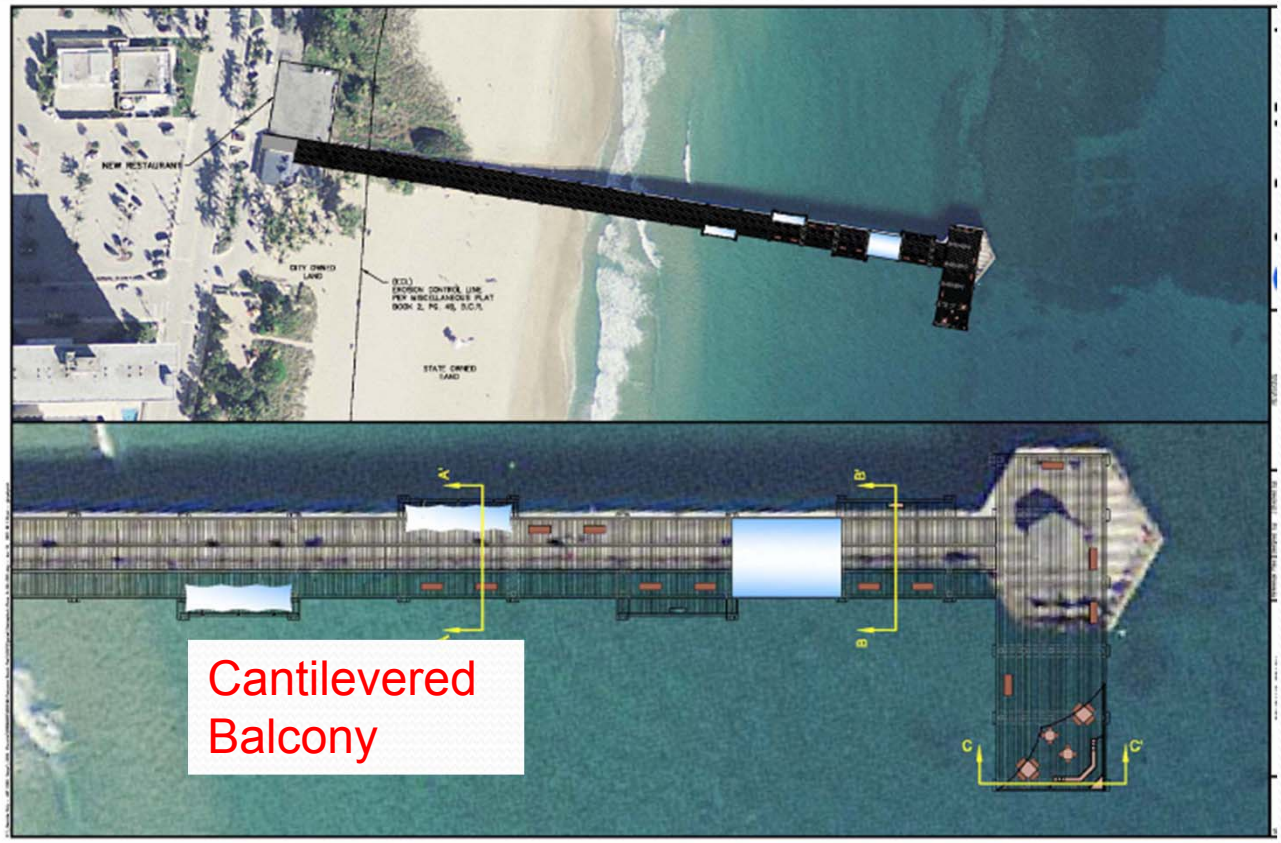
Proposed Design Considerations

- Re-build pier at or above 100-year storm event elevation (17.4' NGVD or 17.4' above sea level) (current pier is at 16.5' NGVD good for 20-year event).
  - Storm events are related to the rainfall amount and severity that can affect wave energy impact on pier.
    - A 100-year event "occurs" once every 100 years.
- Increase pier width to 30 feet.
  - Increases functionality and use (fishermen occupy 5' in width with their roads).
  - Widening pier would provide more room for fishermen, pedestrians, and vendor carts (if allowed).
- Construct cantilevered sections (balconies) to further widen and beautify pier (with umbrellas/awnings).

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Proposed Design Considerations (cont'd)

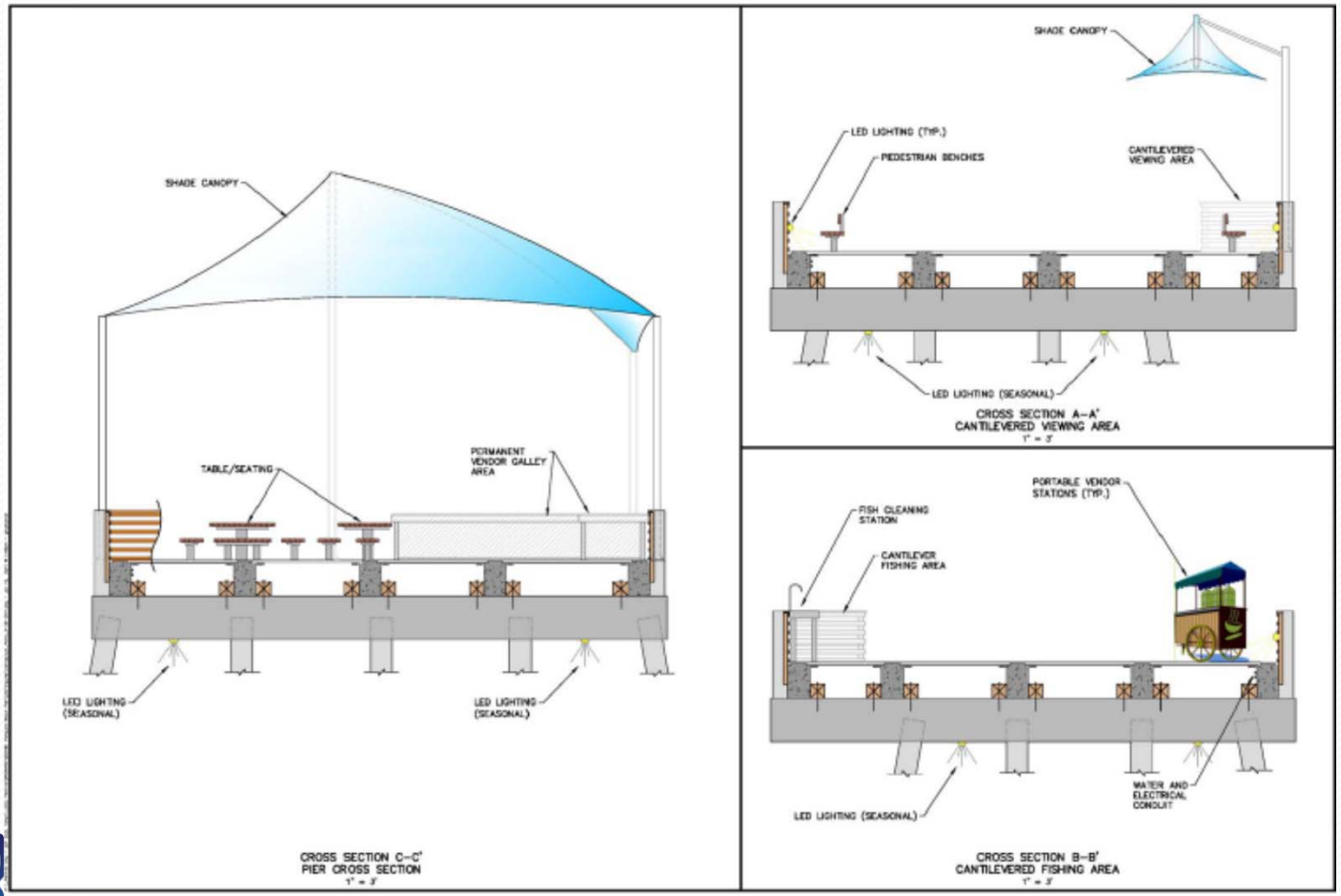


Atrium/Gathering Area

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Proposed Design Considerations (cont'd)



CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Proposed Design Considerations (cont'd)

- Add/expand multi-purpose kiosk (proposed by Pier Developer – New Urban Communities).
- Permanent sea turtle friendly lighting system.
  - Temporary lights (i.e., 4 of July decoration) are allowed, but must be removed after holiday celebration.
- Install sea turtle compliant lighting along the railings.
- Install Educational signage (Sea Turtle, Marine Wildlife).
- Create connection to Pompano Beach Boulevard Streetscape and Pier Parking Lot.

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

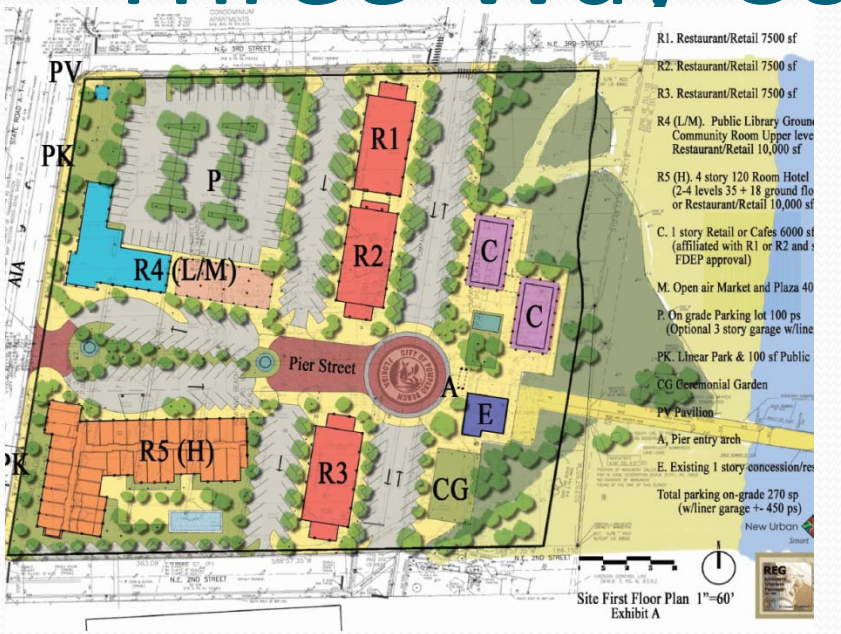
Three-Way Connection?

- Pompano Beach Boulevard Improvements are substantially complete

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Three-Way Connection?



- Pier Parking Lot – Development Order Ready for City Commission Approval.

CRA POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Three-Way Connection?
The Possibilities

MERCURY / SEAVEE

POMPANO BEACH Saltwater Shootout FISHING TOURNAMENT

CRA POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Proposed Design Components (cont'd)

- Install supplemental power sources for special events.
- Install supplemental water sources for special events and/or maintenance needs.
- Install handicap railings to comply with ADA standards.

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Technical Design Considerations

- Pier must be designed to withstand erosion, scour, and hydrodynamic loads (20-year storm event).
- Pier decking and railings may be designed as expendable parts.
- Must consider coral transplantation mitigation.
- Must consider impacts to hardbottom.
- Must consider impact to fishing lines being snagged.

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Technical Design Considerations (cont'd)

- Structural computations are required.
  - Permit package must include a thorough presentation.
  - Describe historical uses showing consistency with approved activities (fishing).
  - No specific wave theory is required for structural calculations.
- Must demonstrate impact caused by shading that may be produced by awnings/umbrellas, etc.

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Required Permits

- Joint Coastal Permit (JCP).
  - Florida Department of Environmental Protection (FDEP).
  - US Army Corps of Engineers (USACE).
- Additional agencies responsible for review and approval:
  - Florida Fish and Wildlife Conservation Commission (FWCC).
  - National Marine Fisheries Service (NMFS).

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Recent Replacement Costs

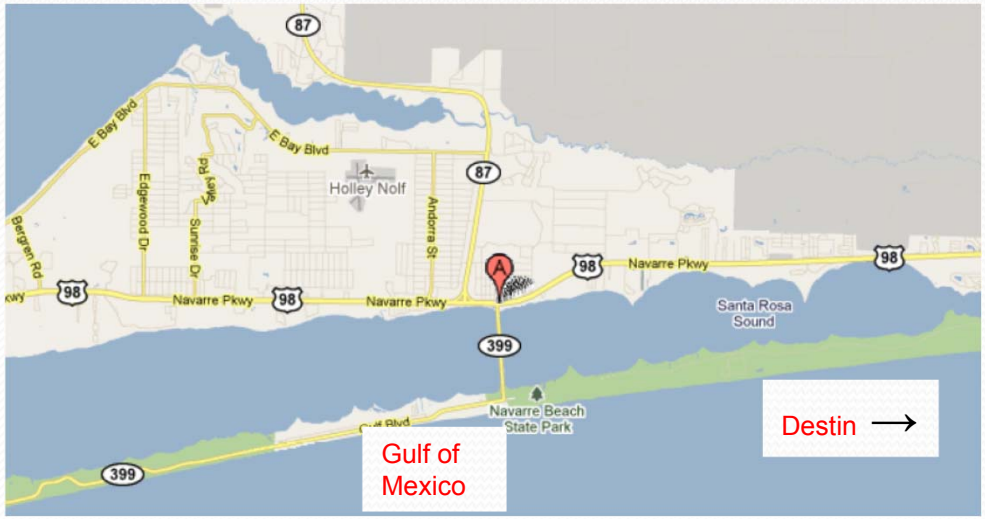
- Unit costs based on three recent pier replacements:
  - Navarre, 33,000 Sq. Ft., $8.4 million ($255/Sq.Ft.)
  - Titusville, 9,750 Sq. Ft., $3.5 million ($359/Sq.Ft.)
  - Panama City Beach/Bay County, 2-25,000 Sq. Ft., $10.0 million each ($400/Sq.Ft.) including shopping area.

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Navarre Pier

- Total surface +/- 33,000 Sq. Ft.
- Longest pier in the Gulf (1,545 Feet).
- Octagonal end design (3,800 Sq. Ft.).
- Deck height – 30 feet above water.
- 16 handicap accessible railing locations.



CRA POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Navarre Pier Fees

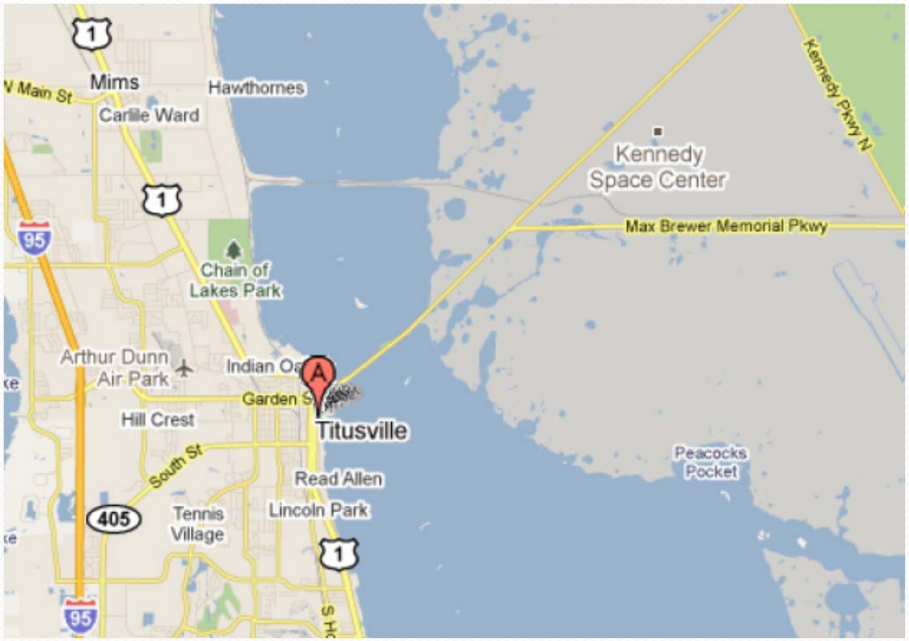
- Sightseeing - $1 per day
  - $5 weekly pass, $60 annual pass .
- Adult Fishing - $7 per day, $240 annual pass
  - Youth - $4 per day, $200 annual pass
  - Senior - $6 per day, $225 annual pass
  - Children under 6 free with adult
  - Disabled veterans free
  - Weekly pass $45
- Annual visitors - +/- 25,000
- Annual revenues - +/- $310K

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Titusville Veteran's Memorial Pier

- 310 Feet long.
- 9,750 Sq. Ft.
- Deck height – 6 feet above water.



CRA POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Titusville Veteran's Memorial Pier Fees

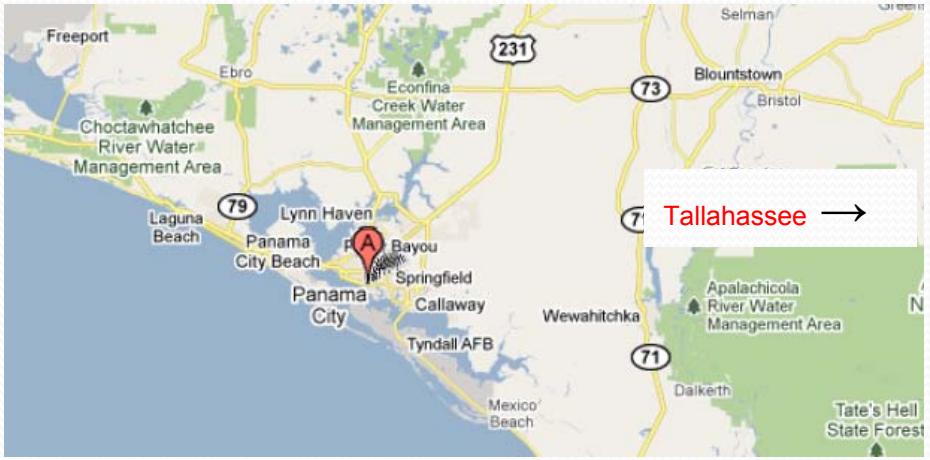
- Free – no charge for access, use, etc.
- Brevard County owns the pier and manages/funds maintenance and repairs from General Fund (tax-based funding).

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Panama City Beach
Russell-Fields Pier

- Completed in October 2010.
- Total surface +/- 25,000 Sq. Ft.
- 26 feet above the ground.
- Pier length 1,500 Feet.
- Rectangular end design with rectangular cantilevered deck midway.
- Open 24 hours.
- Major center of attraction/shops.



CRA POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Panama City Beach
Pier Fees

- Sightseeing – $2.00
- Adult Fishing (2 Rods plus 1 bait rod included)
  - Regular (over 6 years of age) $6.00
  - Disabled (presentation of registration and handicapped sticker) $3.00
  - Active Military $3.00
  - Senior (65 years of age and over) $3.00
- Seasonal/Annual Passes
  - Spectator and Fishing - 3 Rods plus 1 bait rod included
  - 20 Visits $60.00
  - 3 Months $60.00
  - Annual $90.00
  - Disabled, Active Military and Senior Citizens 50% off from the above

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Engineer's Opinion of Cost

- Alternative 1:
  - Replace pier based on existing cross section (865'x18', 16,000 sq. ft.): $4.0 to 6.3 million.
- Alternative 2:
  - Replace pier (large expansion, 1000'x30', 30,000 sq. ft.): $7.7 to 12 million.

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Engineer's Opinion of Cost

- Alternative 3:
  - Replace pier (medium expansion, 1000'x25', 25,000 sq. ft.): $6.4 to 10 million.
- Alternative 4:
  - Replace pier (350'x18, 500'x30' combined with another 750'x16' extension, 33,300 sq. ft.): $8.5 to 13.3 million.
- Demolition costs: $311K to $467K ($20.00-$30.00 Sq. Ft.)

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Pier Maintenance

- Quarterly, semi annual or annual diver cleanup to remove trash and monofilament fishing lines.
  - Approximately $30,000.00 each cleanup (about $150.00/hr, 5-man crew, for 5 days)
- Conduct routine maintenance and/or replacement of railings and deck sections.
  - Approximately $20,000.00/year

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Projected Expenses

- Anticipated costs - $6 million (Alternative 1) to 13.3 million (Alternative 4).
- Anticipated annual maintenance costs - $100K
- Annual lease costs - $20-30K.
- Anticipated debt service - $278K to $824K (based on loan durations of 25, 30, 40, and 50 years at 4% interest).
- Pier life cycle design must be 75 years.
  - Note: the City has funds allocated to this project sufficient to offset engineering and permit fees.

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Admission Fees

- Deerfield Beach (open 24 hours):
  - Sightseeing $1.00
  - Adult Fishing $4.00
  - Annual visitors: 104K
  - Annual revenues: $179K
- Lauderdale by the Sea (open 24 hours):
  - Sightseeing $2.00
  - Adult Fishing $7.00
  - Annual visitors: 82K
  - Annual revenues: $197K

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Admission Fees

- Dania Beach (open 24 hours):
  - Sightseeing $1.00
  - Adult Fishing $3.00
  - Annual visitors: 13K
  - Annual revenues: $70K
- Juno Beach Pier (open daylight hours during Sea Turtle season, 24 hours the rest of the year, privately operated, pays $50K yearly to County to manage):
  - Sightseeing $1.00
  - Adult Fishing $3.00
  - Annual visitors:18K
  - Annual revenues: $110K

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Potential Revenue Sources

- Users (average monthly counts and 2007 fees)
  - 2000 Visitors - $1.00 = $2K
  - 1000 Fishermen - $3.00 = $3K
  - Total (current) revenue = +/-$60K/year
- 2 Tournaments/year (revenues projected using Seafood Festival attendance count 20,000 daily)
  - Fees to see competition $5.00/person (adults only) = $100K each event
- Combined estimated revenues
  - +/-$260K ≈ $290K (75-year lease projection).

CRA POMPANO BEACH

pompano beach Florida's Warmest Welcome

Potential Grant Funding Sources

- Federal Emergency Management Agency (FEMA)
- U.S. Fish and Wildlife Service
- National Oceanic and Atmospheric Administration (NOAA)
- Department of Commerce
- United States Geological Survey (USGS)

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

Next Steps

- Retain professional(s) to begin preliminary design work.
- Conduct a feasibility study to determine REAL potential revenues.
  - Project revenues necessary to recover upfront investment, routine maintenance and operation over 25, 50 and 75 years.
  - Identify opportunities for servicing the debt.
  - Identify investment opportunities by private investors.
- Prepare a detailed mapping/survey over resources required for new permit application.
- Conduct a hardbottom evaluation to determine mitigation.
- Meet with fishermen to better understand needs and wants.

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome

The Future?

CRA
POMPANO BEACH

pompano beach
Florida's Warmest Welcome