

August 28, 2014 **Alternatives Public Meeting**

Advantages and Disadvantages

ADVANTAGES DISADVANTAGES No Build/Repair: 10-Year Service Life Install cathodic protection pile jackets No acquisition of right-of-way (ROW) or submerged land easements Nine-week bridge closure and detour via Anna Maria Bridge (12 miles, Lowest initial cost compared to Rehabilitation and Replacement Repair the fender system 23 minutes) and Ringling Bridge (32 miles, 53 minutes) Upgrade drawbridge electrical system A short service life (10 years), then replacement is needed alternatives No impacts to utilities Repair concrete (sealing cracks, patching spalls, etc.) Bridge will continue to be functionally obsolete for the life of the structure (i.e. no shoulders, not designed to current structural and safety standards) in the piles, pile caps, deck, beams, and traffic railing No height restrictions for boats Continued and increasing operation, maintenance, and repair costs Repair the drawbridge operational machinery No mangrove and seagrass impacts Replace the beams, deck, and traffic railing on 6 of the Continued safety concerns associated with the raised curb and lack of adequate shoulders Repair and paint drawbridge steel Continued safety concerns associated with the substandard traffic railings Continued safety concerns associated with vessels impacting the piles Install 10 crutch bents Continued concern for effective and reliable hurricane evacuation and Requires 9-week bridge closure recovery should mechanical systems malfunction or vehicles become disabled, blocking the through lane No improvement in water quality in Anna Maria Sound/Sarasota Bay since stormwater will not be treated Continued vehicular delay caused by the drawbridge openings Continued delay as vessels wait for bridge to open Continued vulnerability of the bridge to wave action in severe storms No benefit of additional 10 foot horizontal clearance between fenders Repairs would not prevent the need to post the bridge for weight restrictions, meaning that heavy trucks could be restricted No aesthetic improvements Rehabilitation: 25-Year Service Life Replace all the beams, deck, and traffic railing of the No acquisition of ROW or submerged land easements A relatively short service life (25 years), then replacement is needed Bridge will continue to be functionally obsolete for the life of the structure fixed spans Minimal impacts to utilities Install cathodic protection pile jackets No height restrictions for boats (i.e. no shoulders, not designed to current structural and safety standards) Install 10 crutch bents No permanent mangrove and seagrass impacts Continued and increasing costs, including bridge tender, maintenance Repair concrete (sealing cracks, patching spalls, etc.) costs, and repair costs Repairs would prevent the need to post the bridge for weight restrictions, in the piles, pile caps, deck, beams, and traffic railing Continued safety concerns associated with the lack of adequate shoulders meaning that heavy trucks would not be restricted Replace the fender system Continued safety concerns associated with vessels impacting the piles Replace electrical and mechanical systems Continued concern for effective and reliable hurricane evacuation and Repair and paint drawbridge steel recovery should mechanical systems malfunction or vehicles become Replace curbs and non-crash tested bridge railings disabled, blocking the through lane No improvement in water quality in Anna Maria Sound/Sarasota Bay since on drawbridge Requires a temporary bridge (\$14.6M) stormwater will not be treated Continued vehicular delay caused by the drawbridge openings Continued delay as vessels wait for bridge to open Continued vulnerability of the bridge to wave action in severe storms No aesthetic improvements No benefit of additional 10-ft horizontal guide clearance between fenders Requires a temporary bridge (\$14.6M) Impacts of temporary bridge and roadway connections on land and marine environment including minor mangrove and seagrass impacts Replacement - Low-Level Drawbridge: 75-Year Service Life Replace existing bridge with Low-Level Drawbridge Continued vehicular delay caused by the drawbridge openings No height restrictions for boats Continued delay as vessels wait for draw bridge to open Improvement in water quality in Anna Maria Sound/Sarasota Bay due to treatment of stormwater runoff Potential effects on the natural environment Improved safety and functional adequacy of bridge due to added Continued operating costs due to the need for a bridge tender shoulders, a wider sidewalk, a crash tested barrier, and increased Requires acquisition of submerged land easement for fenders resistance to ship impact and storm surge Minor mangrove and seagrass impacts Increased horizontal distance between the fenders will accommodate Utility impacts safer navigation 8-ft sidewalks are an improvement over the existing sidewalks and accommodate multiple users, including pedestrians, fishermen, bicyclists, and other recreational users Similar visual impacts relative to existing bridge height Similar grades for pedestrians to cross bridge relative to existing bridge grades No additional ROW is required Long Service Life (75 years) Similar visual impacts relative to existing bridge height Traffic can use existing bridge while replacement is being constructed No restrictions for heavy trucks Replacement - Mid-Level Drawbridge: 75-Year Service Life Replace existing bridge with Mid-Level Drawbridge No height restrictions for boats Continued vehicular delay caused by the drawbridge openings, though Reduced traffic delays due to fewer drawbridge openings fewer openings than today Continued delay as vessels wait for draw bridge to open; though fewer Improvement in water quality in Anna Maria Sound due to treatment of stormwater runoff openings than today No additional ROW is required Continued operating costs due to the need for a bridge tender Greater visual impacts relative to the existing bridge height Improved safety and functional adequacy of bridge due to added shoulders, a wider sidewalk, a crash tested barrier, and increased Potential effects on the natural environment resistance to ship impact and storm surge Steeper grades for pedestrians to cross bridge relative to existing bridge Increased horizontal distance between the fenders will accommodate grades, but still meets ADA standards Requires acquisition of submerged land easement for fenders safer navigation The 45-ft navigation height will allow over 50 percent of the boats that Minor mangrove and seagrass impacts currently require the bridge to open to pass under the closed bridge Utility impacts 8-ft sidewalks are an improvement over the existing sidewalks and accommodate multiple users, including pedestrians, fishermen, bicyclists, and other recreational users Long Service Life (75 years) Traffic can use existing bridge while replacement is being constructed No restrictions for heavy trucks

Replacement - High-Level Fixed Bridge: 75-Year Service Life

- Replace existing bridge with High-Level Fixed Bridge
- Improvement in water quality in Anna Maria Sound due to treatment of stormwater runoff
- No operating costs since no bridge tender is required
- Significant operational improvements and no vehicular delay from drawbridge openings
- Improved safety and functional adequacy of the bridge due to added shoulders, a wider sidewalk, a crash tested barrier, and increased
- resistance to ship impact and storm surge 8-ft sidewalks are an improvement over the existing sidewalks and
- accommodate multiple users, including pedestrians, fishermen, bicyclists, and other recreational users
- Increased horizontal distance between the fenders will accommodate safer navigation
- Long Service Life (75 years)
- Traffic can use existing bridge while replacement is being constructed
- No restrictions for heavy trucks

- 65-ft bridge height will not allow 2% of current boat traffic under bridge
- Potential effects on the natural environment Greater visual impacts relative to the existing bridge height
- Steeper grades for pedestrians to cross bridge relative to existing bridge grades, but still meets ADA standards Additional ROW is required to maintain access to a residential parcel east
- of 127th Street West (North Alignment Only)
- Access changes required on east end of bridge Realignment of 127th Street West to the east

 - SR 684 (Cortez Road) passing over the existing 127th Street West
 - Two local driveways relocated from Cortez Road to 127th Street West
 - Direct access to Central Avenue from SR 684 (Cortez Road) cut off
 - Requires acquisition of submerged land easement for fenders
- Minor mangrove and seagrass impacts
- **Utility impacts**