

# Sanibel Causeway Lane Expansion- City Council Presentation

December 16, 2025



**Kimley»Horn**  
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# Background

- In 2024 conducted an intersection analysis for Causeway Boulevard and Periwinkle Way, and analyzed prior studies
- Conducted multiple stakeholder meetings and Public Workshops
- Received public input that the Causeway Bridges should be restriped to allow for two outbound travel lanes (leaving the island) to mitigate island congestion (one inbound lane)
- Council directed staff to conduct a feasibility study of possible restriping of Causeway Bridge to accommodate two outbound lanes and one inbound lane (3 lanes)





# Issue, Purpose and Need

- The Sanibel Causeway serves as the sole vehicular access between the mainland and Sanibel Island and Captiva Islands
- Significant eastbound (outbound) traffic congestion on Sanibel during peak travel periods
  - Weekday afternoons and weekends
  - Negative impacts on emergency response times, quality of life, on island and regional mobility
- Explore feasibility to safely restripe the causeway bridges to mitigate on island congestion



# Existing Conditions

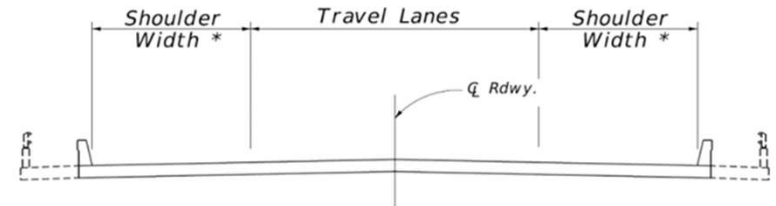
- Two-lane undivided roadway
- Spans a series of three bridges (one high span bridge and two low-level bridges) and two causeway islands connecting Sanibel Island to the Florida mainland
- Typical Section
  - One 12-foot eastbound lane (toward mainland) with 6-foot shoulder
  - One 12-foot westbound lane (toward Sanibel Island) with 10-foot shoulder
  - No dedicated pedestrian/bicycle accommodations on bridge spans
  - 40-foot pavement width

# Existing Conditions



Source: Google Street View

# Design Criteria



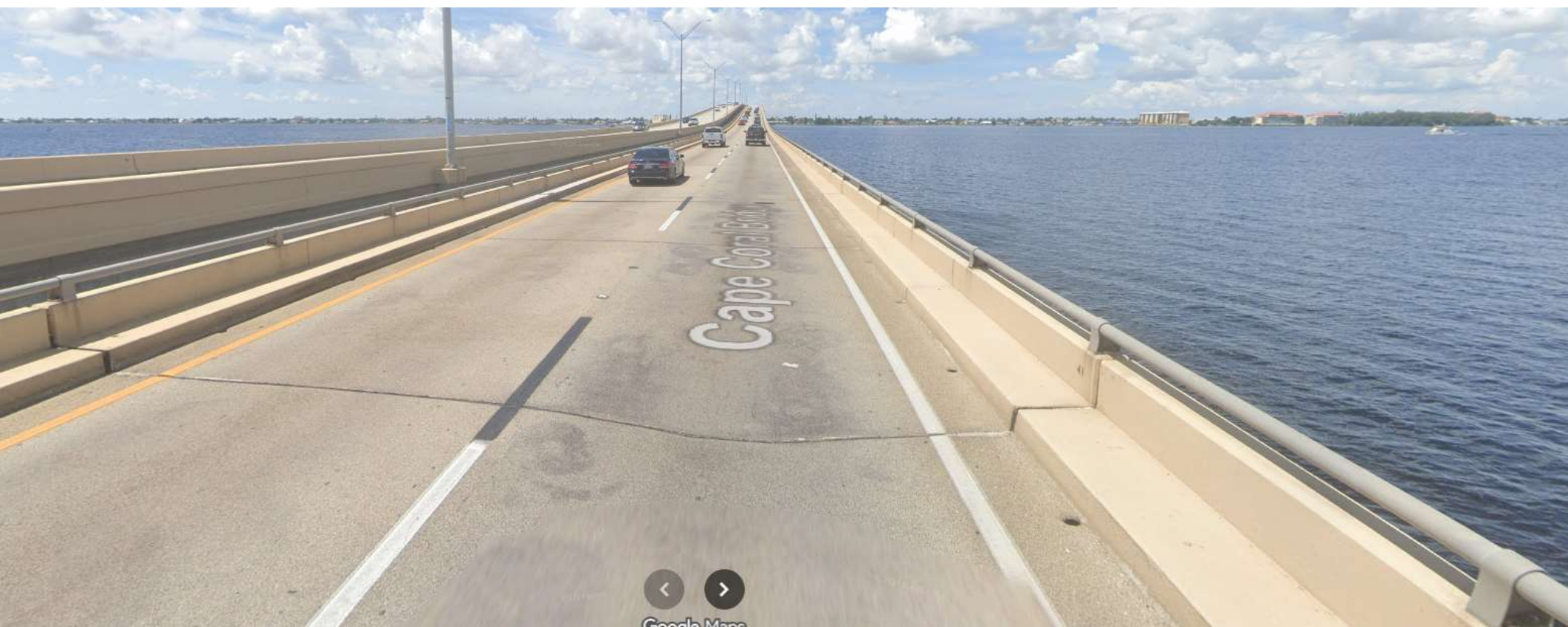
- Lee County Owned and Maintained
  - Should comply with the 2025 FDOT Design Manual (FDM)
  - Can be reduced to meet 2023 Florida Greenbook and AASHTO Green Book standards

Design Criteria Summary				
Feature	Bare Minimum Criteria (AASHTO)	Preferred Minimum Criteria (AASHTO)	Reduced Criteria (FL Greenbook)	Optimal Criteria (FDM and FL Greenbook)
Travel Lane Width	11'	11'	11'	12'
Shoulder Width	4'	6'	10'	10'
Total Width Required	41'	45'	53'	56'

# Review of other Regional Bridges

- Cape Coral Bridge
- Midpoint Memorial Bridge
- The Caloosahatchee Bridge
- Edison Bridge
- Matanzas Pass Bridge (Fort Myers Beach)

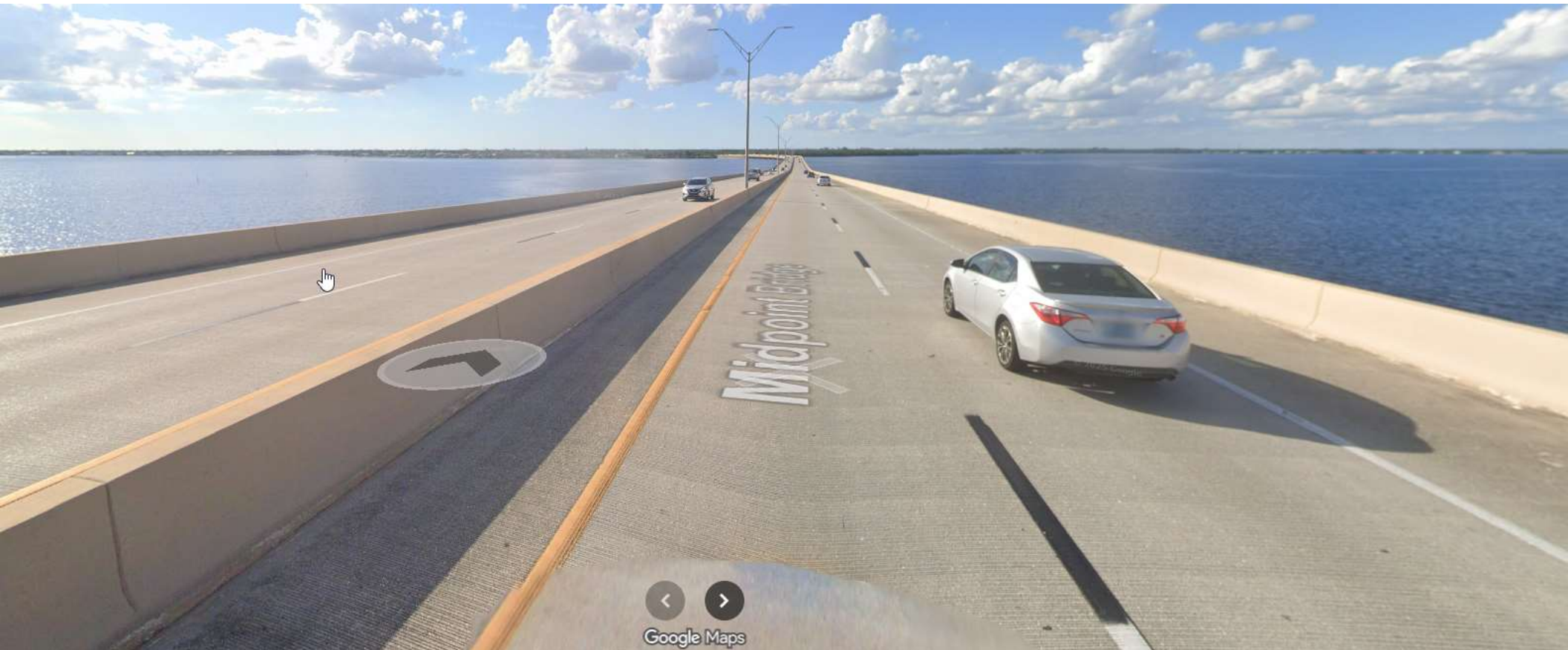
# Cape Coral Bridge



Source: Google Street View



# Midpoint Memorial Bridge



Source: Google Street View

# The Caloosahatchee Bridge



Source: Google Street View

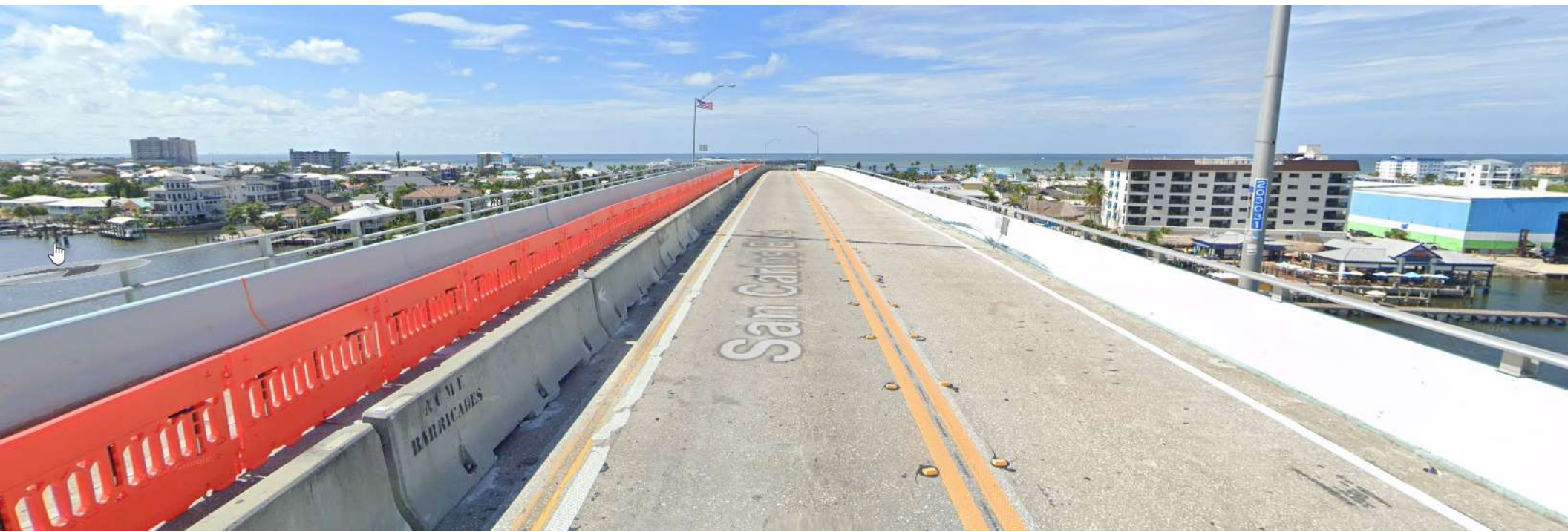
# Edison Bridge



Source: Google Street View



# Matanzas Pass Bridge (Fort Myers Beach)



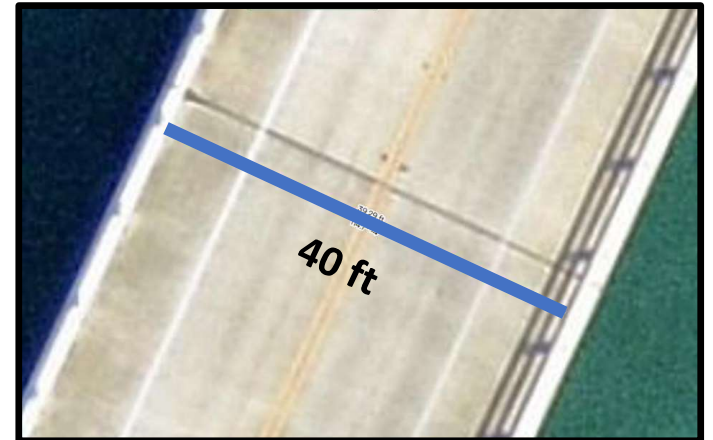
Source: Google Street View



# Potential Expansion Alternatives

- Alternative I
  - Maintaining Existing Bridge Width with Design Exceptions
- Alternative II
  - Expanding Causeway Bridge to Meet Current Criteria

**Figure 2:** Existing Available Pavement Width



# Alternative I

## Maintaining Existing Bridge Width with Design Exceptions

- Create three (3) 12-foot or 11-foot travel lanes
  - Two eastbound lanes, one westbound lane
  - Shoulder width between 2 to 3.5 feet
- Safety Concerns
  - Eliminates refuge areas for disabled vehicles and emergency responders
  - Reduces recoverable area from railing



# Alternative I

## Maintaining Existing Bridge Width with Design Exceptions

- Design Exceptions Required
  - Shoulder Width (2 or 3.5 feet)
    - FDOT
      - 10-foot minimum shoulder width on new bridge construction (FDM 260)
    - AASHTO
      - Minimum shoulder of two (2) feet, minimum lateral offset to barrier is four (4) feet.
- Bicycles
  - Shoulder width (2 or 3.5 feet) would not meet standard for Bike Lane of four (4) feet
  - Bicyclists would be in vehicular travel lane

## Alternative II

### Expanding Causeway Bridge to Meet Current Criteria

- Widening bridge to accommodate:
  - Three (3) 12-foot lanes
  - Full 10-foot shoulders
- Benefits:
  - Enhanced Safety and Reliability
  - Future Resilience
  - Compliance with Standards
- Requires significant structural modification, higher construction costs, and potential permitting challenges



# Feasibility Analysis Alternative I

## Maintaining Existing Bridge Width with Design Exceptions

- **Feasibility:** Not feasible
- **Key Issues:**
  - Safety Concerns: Substandard shoulders creates ***significant hazards*** for bicyclists, disabled vehicles, emergency response, and incident management.
  - Regulatory Approval: This design would require multiple design exceptions, which Lee County DOT is ***unlikely to approve*** due to the inherent safety risks.
  - Operational Risk: Any breakdown or crash would block lanes.
- **Conclusion:** This alternative is ***not viable*** because it compromises safety to an unacceptable level, exposes the agency to liability, and is unlikely to receive approval from Lee County DOT.

# Feasibility Analysis Alternative II

## Expanding Causeway Bridge to Meet Current Criteria

- **Feasibility:** Feasible long-term, but likely cost-prohibitive
- **Key Issues:**
  - High Construction Cost: Widening the bridge requires *significant structural modifications* and *expensive materials*.
  - Environmental and Permitting Challenges: Expansion *impacts the surrounding environment* and requires additional permits, adding complexity and potential delays.
  - Budget Constraints: Current funding allocations may not support the scale of investment required for this alternative. Estimated costs of **\$36-\$50+ million**.
- **Conclusion:** While this option meets safety and design standards, the cost and permitting challenges may make it *financially impractical* under current conditions.

# Questions / Comments?



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