



AGENDA MEMORANDUM

*Natural Resources
Department*

City Council Regular Meeting Date: December 16, 2025

To: City Council
From: Rachel Rainbolt, Conservation Officer
Holly Milbrandt, Natural Resources Director
Date: December 5, 2025

SUBJECT: Wildlife Crossing (Corridor) Signage Discussion

BACKGROUND: Wildlife-crossing signage plays an important role in raising driver awareness, enhancing public safety, and supporting efforts to reduce wildlife-vehicle collisions on Sanibel's roads. Research indicates that well-placed signs can help focus driver attention on known wildlife-crossing areas or corridors, and are most effective when paired with additional strategies, such as traffic-calming measures or seasonal, high-visibility alerts. Sanibel's unique island ecology, marked by interconnected wetlands, upland habitats, and established wildlife corridors, creates predictable movement patterns for many native species like eastern screech owls, bobcats, alligators, and box turtles. Unfortunately, these patterns frequently intersect hazardous roadway segments identified in the Wildlife Mortality Report (WMR), including Sanibel Captiva Road, Rabbit Road, and Tarpon Bay Road. Installing context appropriate signage in these high-traffic areas can help drivers anticipate potential wildlife presence, contributing to safer conditions for both people and animals.

Peer-reviewed Support:

- Well-designed or context-specific signs can improve driver awareness and momentary speed reduction (Dumalakas et al., 2025).
- Seasonal, dynamic, or risk-oriented signs receive better driver attention than standard wildlife signs (Bond & Jones, 2013; Found & Boyce, 2011).

Since 2022, the WMR has documented over 1,600 wildlife mortality events (more than 1,200 of which were native species), underscoring the ongoing need for clear, effective, and strategically placed alerts for drivers and motorists. Wildlife crossing signs serve not only as a cost-effective mitigation strategy, but also further emphasizes the City's commitment to biodiversity protection, responsible transportation planning, and post-Hurricane Ian ecological recovery. Sanibel residents and conservation organizations have historically championed efforts to promote safe coexistence between wildlife and road users through other signage initiatives, such as "Low Flying Owls" and gopher tortoise crossing signs.

Sanibel is and shall remain a barrier island sanctuary

At the November 4th, 2025 meeting, City Council approved deployment of wildlife crossing signage at the following locations, based on recommendations from staff in conjunction with findings from the WMR:

- Sanibel Captiva Road (near Tarpon Bay Road 4-way stop)
- Sanibel Captiva Road (near Rabbit Road intersection)
- Sanibel Captiva Road (near Wulfert Road/Wildlife Drive access)
- Tarpon Bay Road (near entrance to Bailey Tract)

City Council also provided direction for staff to research additional traffic-calming strategies at the following location:

- Sanibel Captiva Road (Legion Curve)

WILDLIFE CROSSING SIGNAGE DESIGN CONSIDERATIONS:

With City Council's recent approval of the four installation locations, the next step is selecting signage designs that effectively communicate wildlife presence, meet roadway safety standards, and reflect Sanibel's identity as a barrier-island sanctuary. Recommendations for wildlife crossing signage were based on the Manual on Uniform Traffic Control Devices (MUTCD) guidelines for warning signs, the Florida Department of Transportation (FDOT) and the Florida Fish and Wildlife Conservation Commission (FWC).

Key Implementation Notes for All Signs:

- Sign characteristics, such as size, color, shape, text, and reflectivity, will also be reviewed by Sanibel Police Department and Public Works prior to installation
- Mount signs at appropriate height (≥ 3 ft for ≥ 30 mph roads, ≥ 30 in for slower roads).
- Prioritize placement at WMR-verified hotspots.
- Regular maintenance and periodic evaluation are essential to maintain effectiveness.
- Public education campaigns during seasonal occurrences to complement signage.

WILDLIFE CROSSING SIGNAGE DESIGNS:

Recommendation #1: Reprint Horton "Please Slow Down for Us" Sign(s)

- **Purpose:** Alert drivers to multiple species potentially crossing the road.
- **Design Features:**
 - Series of 4x multilingual signs
 - White silhouettes of multiple species (e.g., armadillo, opossum, raccoon, snake) on green background.
 - Consider minor wording revisions to improve flow and spacing.
 - Retroreflective material for nighttime visibility.
 - Size: 3'x4' for Sanibel Captiva Road.



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Recommendation #2: General Wildlife Crossing Sign

- **Purpose:** Alert drivers to multiple species potentially crossing the road.
- **Design Features:**
 - Diamond-shaped MUTCD standard sign or horizontal rectangle caution sign.
 - Black silhouettes of multiple species (e.g., owl, turtle, rabbit, bobcat) on fluorescent yellow-green background.
 - Optional supplemental plaque: "Wildlife Corridor – Next 5 Mile."
 - Retroreflective material for nighttime visibility.
 - Size: 30"x30" for Tarpon Bay Road, 30"x30" for Sanibel Captiva Road.



Recommendation #3: Species-specific Crossing Sign

- **Purpose:** Highlight areas with seasonal activity or frequent sightings to reduce collisions and enhance driver awareness.
- **Design Features:**
 - Diamond-shaped MUTCD standard sign, horizontal rectangle caution sign, or custom-designed.
 - Supplemental plaque: "Next 1 Mile" or "Seasonal Crossing" where (alligator) movement is concentrated.
 - Placement at verified WMR/GIS hotspot locations.
 - Retroreflective material for nighttime visibility.
 - Optional flashing LED in high-incident areas, particularly near wetlands or conservation lands.
 - Size: 24"x24" for Tarpon Bay Road, 30"x30" for Sanibel Captiva Road.



OTHER TRAFFIC-CALMING STRATEGIES CONSIDERATIONS:

Current research and documented case studies indicate that communities achieving the most consistent reductions in wildlife-vehicle collisions use a combination of wildlife-crossing signage and complementary traffic-calming or driver alert measures. While signage alone remains a practical and cost-effective first step, its effectiveness is strengthened when integrated with additional strategies that account for seasonal wildlife activity, reinforce driver attention, and increase reaction time.

Peer-reviewed Support:

- Traffic-calming devices such as raised crosswalks and vertical deflection features consistently reduce vehicle speeds and increase driver scanning behavior (Elvik, 2001; Elvik et al., updated meta-analysis 2019).
- Rumble strips have been shown to increase driver attention and reduce crash risk by providing audible and tactile feedback (FHWA, 2011; Torbic et al., 2025).
- Integrated mitigation programs are more effective than single-measure approaches, reducing wildlife-vehicle collisions by 40–54% on average (Rytwinski et al., 2016).

Strategy	Description / Implementation	Benefit
Raised Crosswalks / Speed Tables	Elevated pavement areas at crossings	Physically slows vehicles, highlights crossing zones
Rumble Strips / Pavement Markers	Tactile/auditory alert before high-risk zones	Enhances driver awareness approaching wildlife corridors
Reflective Pavement Markings	Animal silhouettes or “Slow – Wildlife Crossing” on road	Improves nighttime visibility of wildlife zones
Public Awareness / Education	Community campaigns, interactive dashboards, apps	Encourages attentive driving, supports WMR reporting

RECOMMENDED ACTION:

This memo is presented for City Council discussion and direction on next steps. Staff recommendations are based on roadway segments that demonstrate the highest frequency of incidents involving native wildlife, including species with state or federally listed conservation status. These recommendations are intended to assist Council and may be accepted, modified, or declined as deemed appropriate.

Next steps:

- City Council to provide feedback on the wildlife-crossing signage recommendations, including preferred design types and content considerations.
- Staff meetings with island conservation partners to ensure proposed signage is consistent with current wildlife-monitoring data, established movement corridors, and ongoing conservation initiatives.
- Proposed signage reviewed by Sanibel Police and the Public Works to verify MUTCD compliance, evaluate roadway safety considerations, and confirm appropriate installation height, placement, and maintenance requirements for proposed sign type(s).
- Solicit proposals from qualified local vendors for the fabrication of the selected signage.

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