

What Improvements Are Planned for This Corridor?



What Else Can Be Done to Reduce Congestion?

Although CMP strategies are focused on reducing traffic congestion, they are more than just roadway improvements and adding new lanes. In fact, well-planned CMP strategies can include multiple modes of transportation and often produce low-cost projects that can be completed in a short timeframe. In addition to the improvements shown on the map above, strategies that may help address congestion along this corridor if pursued by the MPO and its transportation partner agencies include:

- Develop a pilot project for a community shuttle/circulator route connecting the Creekside Transfer Center to the commercial areas surrounding US 41/Vanderbilt Beach Rd intersection via Gulf Shore Dr
- Evaluate the feasibility of converting existing off-street sidewalk into a shared-use path to encourage non-motorized transportation and reduce short vehicle trips from surrounding hotels and condominiums
- Consider expanding traffic signal capabilities through technology and communications improvements to optimize traffic flow at US 41 during seasonal months
- Consider upgrading existing bike lanes with additional signage, pavement markings, green paint, audible pavement markings, and/or traffic separators to increase safety conditions, and extending west to Gulfshore Dr, which has been identified as a network gap priority by the most recent Bicycle & Pedestrian Master Plan based on public feedback
- Evaluate the feasibility of constructing a roundabout at Hammock Oak Dr, Vanderbilt Dr, and/or Gulf Shore Dr
- Evaluate the feasibility of a new dedicated right-turn lane at the eastbound entrance to the Vanderbilt Beach Public

What Can I Do to Help Reduce Congestion?

Common strategies that people can use to help with congestion include:

- Changing your trips to less busy time periods when possible
- Checking for alternate routes based on traffic conditions
- Using transit when possible
- Walking or biking for short trips
- Joining or starting a carpool with nearby coworkers or commuters
- Taking advantage of flex schedule or telecommuting opportunities if offered by your employer
- Practicing safe driving techniques to avoid crash incidents

Transit Routes Available:



How Do I Get Involved?

If you want to learn more about the Collier MPO's efforts to improve our transportation system, please visit our website: www.colliermpo.org

We want to hear your feedback!



COLLIER METROPOLITAN PLANNING ORGANIZATION

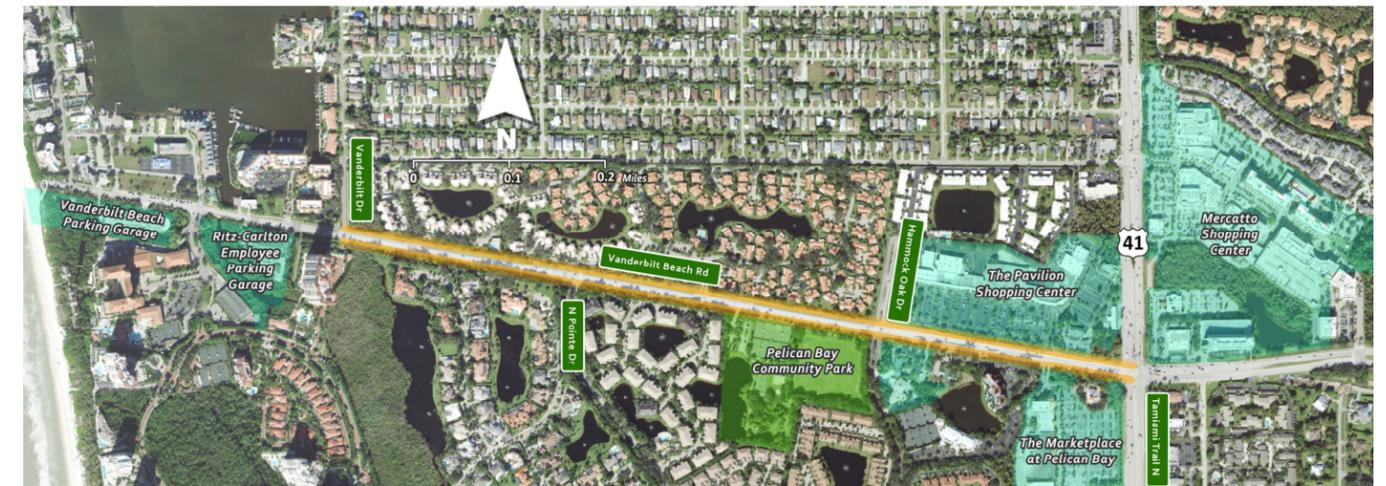
Fall 2022



Collier County's Congestion Hotspots

CR 862 / Vanderbilt Beach Rd

(From CR 901 / Vanderbilt Dr to US 41 / Tamiami Trail)



What is Congestion Management?

Congestion management describes all of the activities used to help reduce the negative impacts of traffic congestion and improve roadway performance in urban areas.

Transportation planning agencies, such as the Collier MPO, follow a detailed Congestion Management Process (CMP) when making decisions about the best ways to address traffic congestion in specific areas, and eventually how improvement strategies should be prioritized for available funding.

Once a congestion reduction strategy or policy decision has been implemented, the CMP then evaluates its effectiveness using measurable data to determine if the intended outcome was achieved or if other solutions may be needed.

Why is the MPO Evaluating Hotspot Corridors?

As a part of the ongoing effort to reduce congestion on Collier County roadways, the MPO regularly identifies corridors with high levels of recurring traffic congestion. This usually occurs every two years when the MPO's Transportation System Performance (TSP) Report is updated. This process consists of traffic data analysis and forecasting that is based on other MPO planning efforts such as the Long Range Transportation Plan (LRTP).

The corridor featured in this fact sheet was identified in the most recent TSP Report as having unmet needs related to safety, congestion, or other causes that are not likely to be addressed by currently planned improvements. The MPO is now evaluating it in greater detail to develop potential improvement strategies and better understand which strategies could be the most effective based on current conditions.



Collier County's Congestion Hotspots

CR 862 Vanderbilt Beach Rd (From CR 901 / Vanderbilt Dr to US 41 / Tamiami Trail)

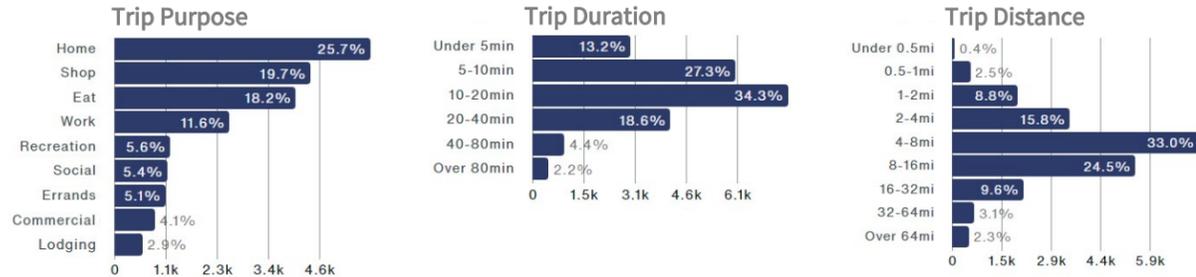


Quick Facts

Corridor Length: 1 Mile
Number of Major Intersections: 4
Number of Daily Trips (Avg. Weekday): ~22k

~2 min
 Avg. Daily Duration of Bottleneck Conditions

~1k
 Annual Vehicle Hours of Delay



Corridor Challenges

- Seasonality:** This corridor is a small roadway that is highly susceptible to spikes in traffic during months with increased seasonal visitors because of its location between coastal hotels/condominiums and shopping/dining destinations to the east.
- Beach Trips:** The public beach parking on the far west end, combined with "turnaround trips" and regular traffic from local residents and visitors, can create congestion that accumulates and eventually affects this corridor.

Corridor Opportunities

- Non-Motorized Facilities:** The existing space along this corridor provides an opportunity for upgrading and expanding the existing sidewalk into a larger share-use path. The surrounding density of hotels/condominiums and proximity to the beach could likely produce a high demand for recreational and short non-motorized trips for other purposes.
- Alternative Route Options:** The grid network of neighborhood streets east of Vanderbilt Drive can provide multiple alternative northern routes to US 41 that could be modified to incorporate elements of Complete Streets or used for re-routing in cases of severe delays or crash incidents.
- Employee Shuttles/Vanpools:** The concentration of hotels and resorts in this area could provide an opportunity to provide alternative transportation options to employees who use this corridor on a regular basis for commuting to work.

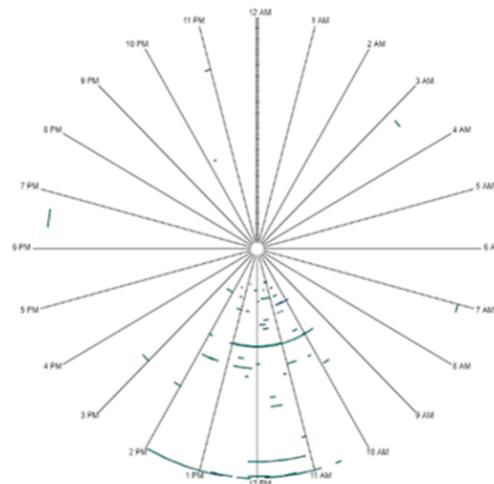
When is Congestion Usually the Worst?

Direction
 Eastbound

Time
 11AM- 4PM

Bottleneck Occurrences

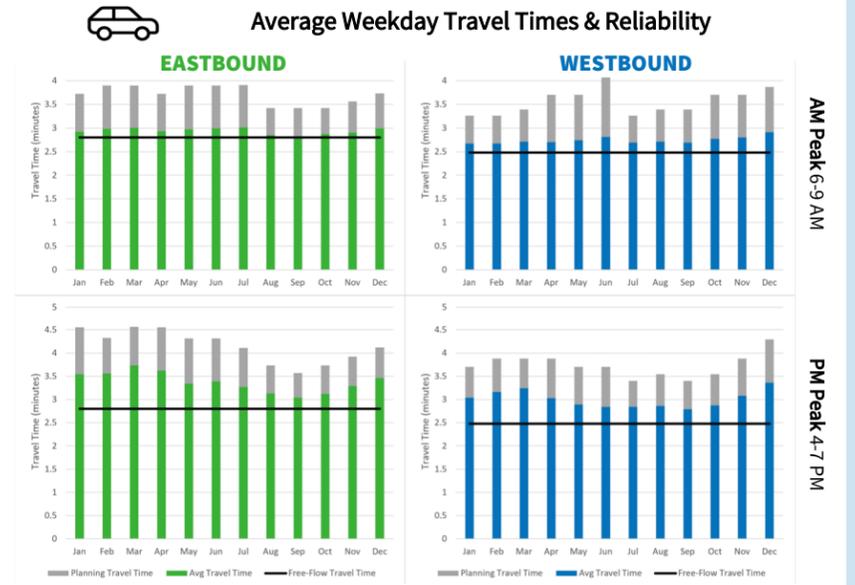
Each line in this graph represents a traffic bottleneck during 2021 in the westbound direction at Gulfshore Dr. The length of the line shows how long it lasted. The line placement shows the time of day throughout the year, with January 1 at the center of the circle and December 31 at the outside edge. Unlike roadways with a high degree of commuter traffic, bottlenecks at this location occurred more often during mid-day rather than the AM and PM peak periods typically associated with congestion. These conditions are consistent with recreational trips by seasonal visitors/retirees and regular beach activity in the area.



Vanderbilt Beach Rd at US 41 - Facing West

Congestion Throughout the Year...

The seasonal patterns of congestion occurring along this corridor during months when visitors and part-time residents are more common can be seen in the longer travel times from roughly November to June. Not only is congestion worse due to seasonal patterns, but delay is also more unpredictable. The grey lines on these graphs show the amount of additional time needed for "planning ahead" to arrive on time, which also increases. A similar pattern is shown below by the higher monthly delay costs, especially during the first part of the year. Expressed in terms of relative costs, months with higher delay costs are shown as red and orange where lower delay costs are shown as shades of green.



Estimated Traffic Delay Costs

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	\$\$	\$\$\$	\$\$\$	\$\$								
2021	\$\$	\$\$	\$\$\$	\$\$	\$\$	\$\$	\$	\$	\$	\$	\$	\$\$
2020	\$\$\$\$	\$\$\$\$	\$\$\$	\$	\$	\$	\$	\$	\$	\$	\$	\$\$
2019	\$\$	\$\$\$	\$\$\$	\$	\$	\$	\$\$	\$\$\$	\$\$\$	\$\$	\$\$\$	\$\$\$

Data Sources: All data shown or referenced on these two pages is from 2021 unless otherwise noted. Information related to congestion, delay, travel times, travel speeds, and bottleneck conditions is from RITIS HERE data. Information related to trip characteristics is from Replica.

Congestion Throughout the Day...

Recurring congestion patterns vary during the average weekday based on time period. Typically, roadway activity is higher in the morning and evening during what are known as the peak periods. The graph on the right shows how average travel speeds change throughout the day along this corridor that has a posted speed limit of 35 MPH. Reductions in speed to do not follow the typical peak pattern for most congested corridors, but rather decline more gradually as morning activity increases, remain relatively low throughout the mid-day, and then gradually recover again in the late afternoon. This reflects the lack heavy commuting traffic and high level of visitors or recreational trips to the beach using the corridor. Similarly, the circular graph to the left shows that most bottlenecks occur between 10 AM and 2 PM, and are not overly common occurrences. Trip purposes also indicate a similar pattern of mid-day visitor or non-work-related activity, with trips for shopping, eating, recreational, or social purposes accounting for nearly 50% of all activity along the corridor.

