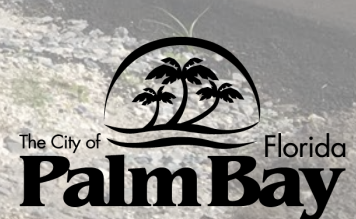


City of Palm Bay City Council Meeting Railroad Quiet Zones

July 18, 2024



What is a Quiet Zone?

- A segment of a railroad corridor where the train operator has the option to not sound its horn.
- Pre-rule crossing of October 9, 1996, then Interim Final Rule issued by Federal Rail Administration (FRA) on quiet zone on December 2003
- Jurisdiction of Quiet Zones fall under the Federal Railroad Administration (FRA).



Who applies for a Quiet Zone?

- Local City is the lead agency (Authorized Agency) to file an application.
- Support from the user rail agencies (FEC & Brightline)

QZ - STEP GUIDE

- Public Authority initiates
- Feasibility Assessment – D3 GXIs provide regulation info and preliminary review to determine next step
- Diagnostic: PA, State DOT, Railroad(s), FRA, etc.
- Notice of Intent
 - 60-day comment period
 - Engineering survey
- Notice of Establishment



Establishing a Quiet Zone

- Zone is at least half mile in distance.
- Update the FRA Inventory/Conduct Site Survey.
- Zone may require upgrades with Supplemental Safety Measures (SSMs) or Alternative Safety Measures (ASMs)
- The Quiet Zone Risk Index (QZRI) is below the Risk Index With Horns (RIWH) with established SSM.
- Use **Quiet Zone Calculator** to determine the QZRI
- Conduct field diagnostic to verify the SSMs.
- File the Notice of Establishment

City of Palm Bay

Quiet Zone Rail Corridor

- Brevard County – Total City/County/State = 49 crossings
- Palm Bay has three railroad crossings at the following:
 - Hessey Avenue
 - Palm Bay Road
 - Port Malabar Boulevard

197.30	272146T	Hessey Ave	Palm Bay	City
197.36	272147A	Palmbay Road	Palm Bay	City
198.40	272148G	NE Port Malabar Blvd	Palm Bay	City

Town of Malabar

Quiet Zone Rail Corridor

- Malabar has two railroad crossings at the following:
 - Malabar Road - State
 - Jordan Road - Private

199.94	272149N	Malabar Road	Brevard	State
201.50	272150H	Jordan Blvd	Malabar	Private

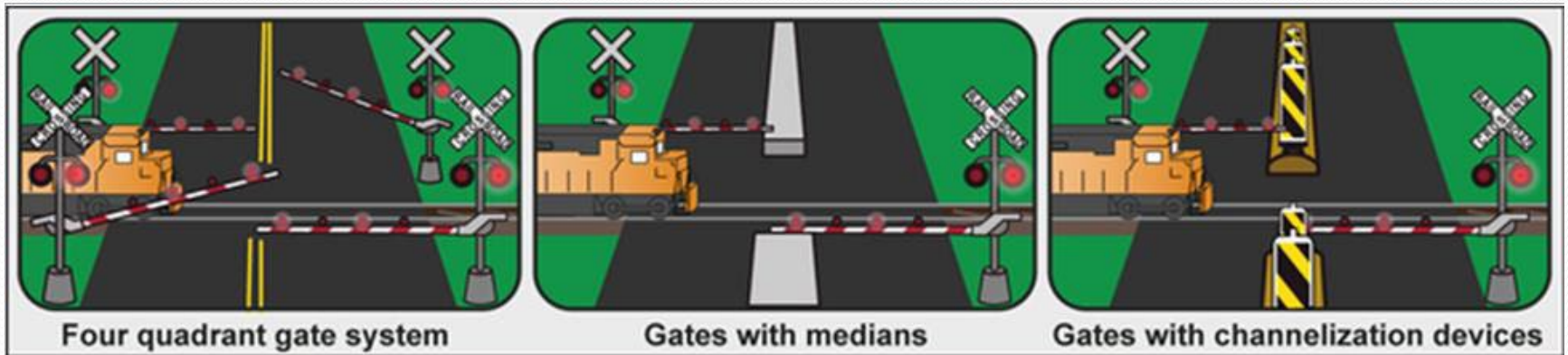
What are Supplemental Safety Measures (SSM) ?



- Four Quadrant Crossing Gates
- Median Islands
- One Way Street
- Street Closures
- Wayside Horns



Railroad Quad Gates



Source: GAO. | GAO-18-97



NOTES:

1. NEW ASSEMBLY WITH LEDS, AUDIBLE DEVICES, GATEKEEPERS, CROSSBUCKS, AND NUMBER OF TRACKS SIGN.
2. REMOVE AND SALVAGE COORDINATE SALVAGED AND SCRAP MATERIALS WITH FECR/AMF ENGINEER.
3. ADD GATEKEEPER.
4. ADD NUMBER OF TRACKS SIGN.
5. EXISTING HXP-3R2 IN SERVICE TO BE REPLACED WITH XP4.
6. ALL EQUIPMENT TO BE RECALLED FROM NEW SIGNAL ENCLOSURE AS SHOWN.
7. REPLACE THE MAIN GATES WITH THE NEW PEDESTRIAN GATES.
8. FINAL PLACEMENT OF EQUIPMENT WILL BE DICTATED BY SITE CONDITIONS.

LEGEND: GREEN ■ IN ■ RED ■ OUT

REVISIONS:

DATE	DESCRIPTION	BY
9/17/19	UPDATED DESIGN AND BORDER	
12/1/20	UPDATED DESIGN	

TranSystems

FLORIDA EAST COAST RAILWAY
OFFICE OF THE CHIEF ENGINEER SIGNALS & COMMUNICATIONS
HIGHWAY CROSSING SIGNALING DEVICES
NE PORT MALABAR BLVD 190+7100
BIRMINGHAM

SHEET NO. 45

Crossing Inventory Update

- Update the FRA Inventory for Quiet Zones
- Inventory Record Update includes:
 - Contact FRA agent
 - Increase in trains with 32 Brightline Trains
 - Identify SSM for the three crossings
 - Confirm number of trains at each crossing
 - Provide Average Daily Traffic (ADT) volume:
 - Hessey – 312 vehicles
 - Palm Bay – 9800 vehicles
 - Port Malabar – 11990 vehicle
- Perform a field diagnostic with FRA, FEC and Brightline

Quiet Zone Calculator

Risk Index

Crossing	Street	Traffic	Warning Device	Pre-SSM	<u>SSM</u>	Risk	
272146T	NE HESSEY AVE	312	Gates	0	4	23,244.46	MODIFY
272147A	NE PALM BAY RD	9800	Gates	0	4	17,001.83	MODIFY
272148G	NE PORT MALABAR BLVD	11990	Gates	0	13	22,708.72	MODIFY

* Only Public At Grade Crossings are listed.

ALERT: Quiet Zone qualifies because SSM has been applied in each crossing.

Click for Supplementary Safety Measures [SSM].

Click for ASM spreadsheet: **ASM** * Note: The use of ASMs requires an application to and approval from the FRA.

Summary	
Proposed Quiet Zone:	PALM BAY QZ TEST
Type:	New 24-hour QZ
Scenario:	PALM BAY Q_69859
Estimated Total Cost:	\$215,000.00
Nationwide Significant Risk Threshold:	15488 .00
Risk Index with Horns:	58867.5
Quiet Zone Risk Index:	20985.01
Select	

Quiet Zone Notification

Once a public authority has successfully established a quiet zone either through public authority designation or through FRA approval, it must provide written notice to several parties. These parties include the following:

- All railroads operating over the public rail grade crossings within the quiet zone,
 - The highway authority, or the law enforcement authority with jurisdiction over motor vehicle traffic at the quiet zone crossings,
 - Landowners with control over any private crossings within the quiet zone,
 - The State agency responsible for highway and road safety, and
 - FRA Administrator.
- All notices must be provided by certified mail, return receipt requested.

Where do we go from here?

1. File the Notice of Intent (NOI) for a Quiet Zone (QZ).
2. Complete the FRA inventory record update for Hessey, Ave, Palm Bay Rd, and Port Malabar Blvd
3. Schedule a field review with Diagnostic Review Team (DRT) to include FRA, FEC and Brightline for all three crossings.
4. Review period of 60 days
5. File the Notice of Establishment (NOE)
6. After 21 days from NOE submittal, the QZ is official.

Any Questions

