#### **Intersections North of I-10**

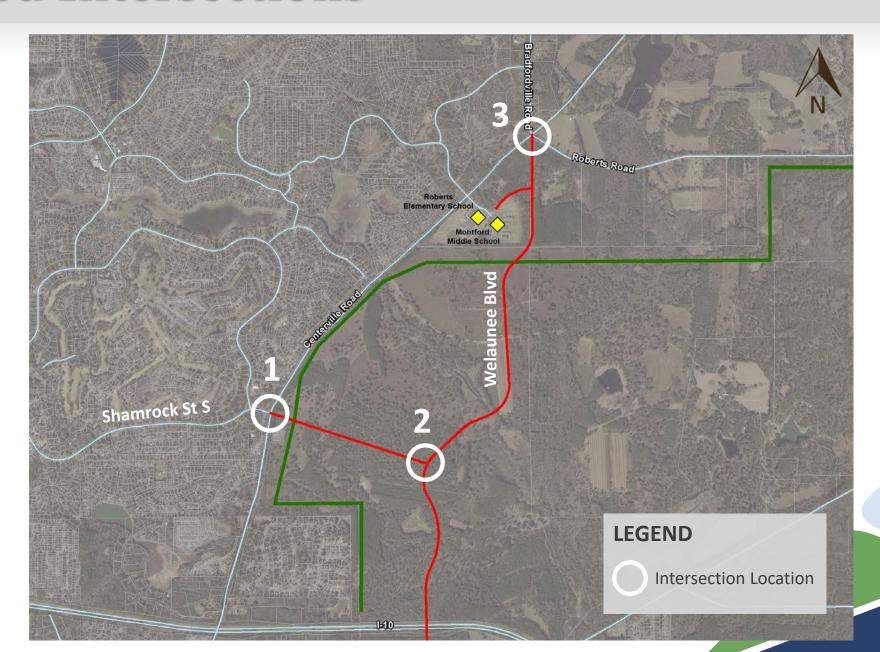
Northeast Gateway: Welaunee Boulevard Project Development & Environment Study

Leon County, Florida

**November 16, 2020** 



#### **Studied Intersections**





#### **Existing**

- T-Intersection
- Shamrock Street South Stop-Controlled
- Plans currently in place for signal at intersection in No Build Condition.

	LOS (Delay (s))
Approach	PM Peak Hour
Centerville Rd Northbound Left	A (8.5)
Shamrock St S Eastbound STOP	F (140.7)



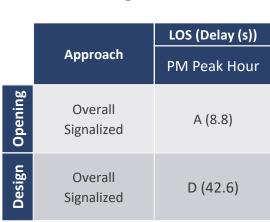




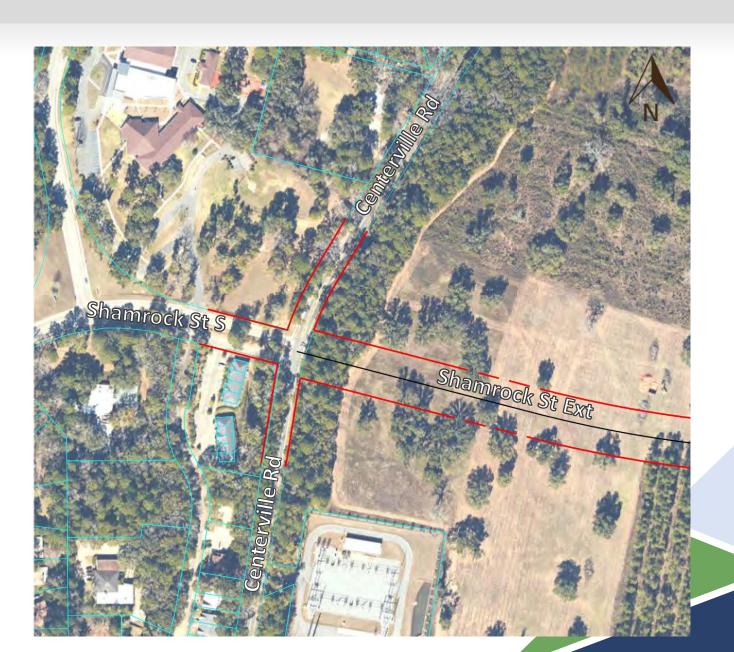


#### Signalized

- 4-Leg Intersection
- Eastbound and Westbound
  - 1—Dedicated Left-Turn Lane
  - Channelized Right-Turn Lane
- Northbound and Southbound
  - 1—Dedicated Left-Turn Lane
- Design Year 2045 Analyzed with an I-10 Interchange



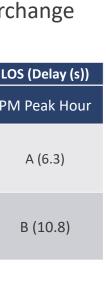


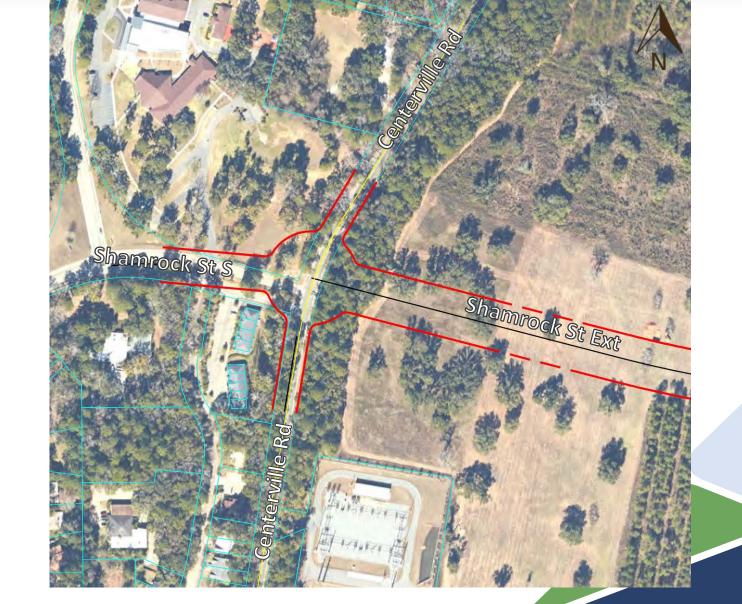


#### **Roundabout**

- 4-Leg Intersection
- 2-Lane Roundabout
- All approaches have 2-**Entering/Exit Lanes**
- Design Year 2045 Analyzed with an I-10 Interchange

	Approach	LOS (Delay (s))
		PM Peak Hour
Opening	Overall Roundabout	A (6.3)
Design	Overall Roundabout	В (10.8)







#### Shamrock St Extension and Welaunee Blvd

#### **Roundabout**

- T-Intersection
- Shared Lane for all Approaches

		LOS (Delay (s))
	Approach	PM Peak Hour
Opening	Overall Roundabout	A (4.9)
Design	Overall Signalized	В (12.8)





#### **Existing**

- Signalized 4-Leg Intersection
- Conservation Easement
- Church and Cemetery
- Additional Landowners
- Wetland and Floodplains

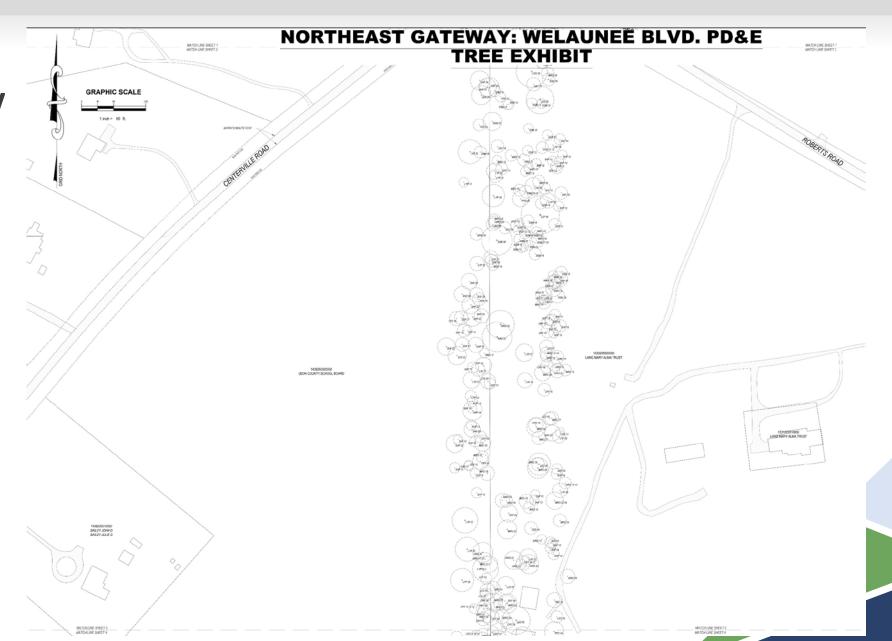
	LOS (Delay (s))
Approach	PM Peak Hour
Overall Intersection	B (14.0)



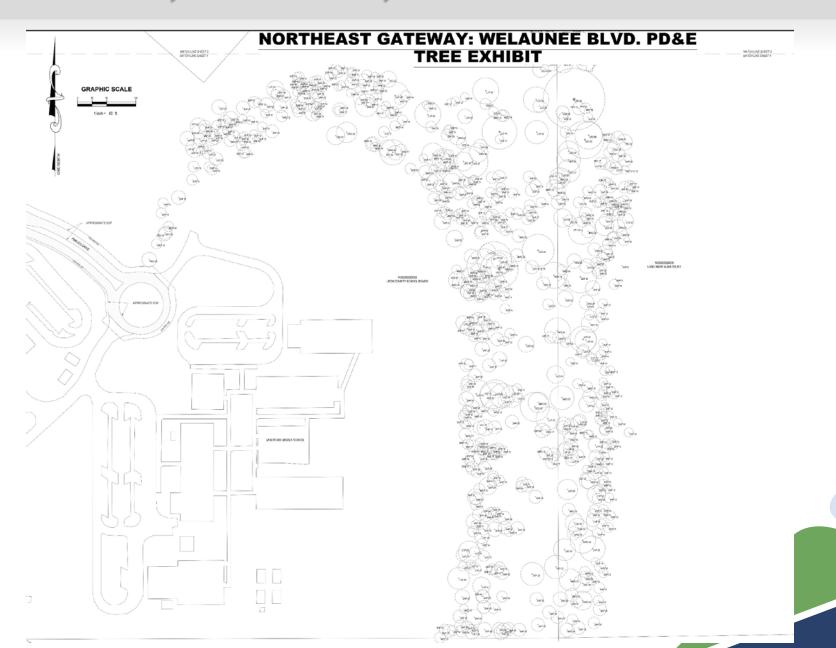














### Roberts Road Swing - Overview



- 4-Leg Intersection
  - Bradfordville Rd
  - Welaunee Blvd
  - Centerville Rd
- Roberts Rd Swings to make a T-Intersection with Welaunee Blvd

## **Roberts Road Swing**

# Roberts Rd & Bradfordville Blvd

- T-Intersection
- Several Traffic Controls Analyzed

		LOS (Delay (s))
	Approach	PM Peak Hour
bo	Roberts Rd Westbound STOP	C (16.4)
Opening	Overall Signalized	B (11.9)
O	Overall Roundabout	A (6.3)
Design	Roberts Rd Westbound STOP	E (42.1)
	Overall Signalized	C (25.6)
	Overall Roundabout	A (9.2)

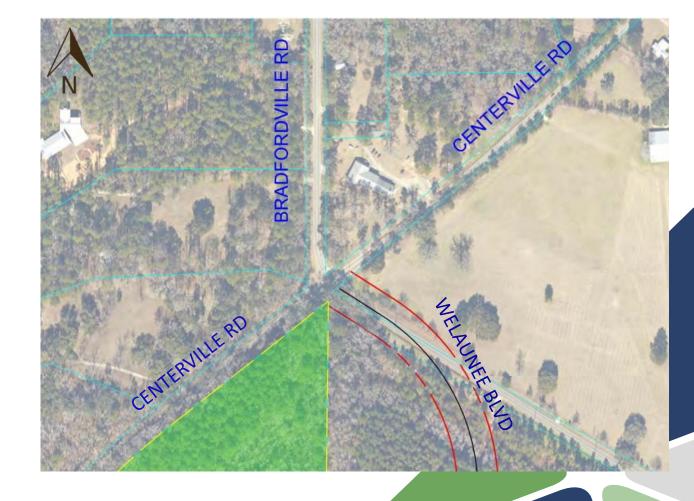
- Signalized
  - Shared Lane for all Approaches
- Roundabout
  - Shared Lane for all Approaches



## Roberts Road Swing - Signalized

- 4-Leg Intersection
- Northbound (Welaunee Blvd) & Westbound (Centerville Rd)
  - 1—Dedicated Left-Turn Lane
  - Shared Through/Right-Turn Lane
- Southbound (Bradfordville Rd)
  - 1—Dedicated Right-Turn Lane
  - Shared Through/Left-Turn Lane
- Eastbound (Centerville Rd)
  - 1—Dedicated Left-Turn Lane
  - 1—Dedicated Right-Turn Lane

		LOS (Delay (s))	
	Approach	PM Peak	
		Hour	
Opening	Overall Signalized	C (20.3)	
Design	Overall Signalized	D (42.5)	





## Roberts Road Swing - Roundabout

- 4-Leg Intersection
- Single-Lane Roundabout
- Design Year 2045 Analyzed with an I-10 Interchange
- All approaches have 1-Entering/Exit Lane

		LOS (Delay (s))
	Approach	PM Peak
		Hour
Opening	Overall Roundabout	A (9.8)
Design	Overall Roundabout	D (28.8)





## Roberts Road Swing - Roundabout

- 4-Leg Intersection
- Welaunee Boulevard partially on Lang Family property and Conservation Easement
- Acute Angle between Welaunee Blvd and Centerville Rd (Eastbound)





## Roberts Road Swing - Roundabout

- 4-Leg Intersection
- Welaunee Boulevard entirely on Conservation Easement.
- Acute Angle between Welaunee Blvd and Centerville Rd (Eastbound)





### Centerville Road Swing - Overview



- 4-Leg Intersection
  - Bradfordville Rd
  - Welaunee Blvd
  - Centerville Rd
  - Roberts Rd
- Centerville Rd Swings to make a T-Intersection with Bradfordville Rd
- Welaunee Boulevard on Conservation Easement

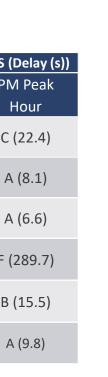


#### Centerville Road Swing

#### Centerville Rd & **Bradfordville Blvd**

- T-Intersection
- Several Traffic Controls Analyzed
- Signalized
  - Shared Lane for all Approaches
- Roundabout
  - Shared Lane for all Approaches

		LOS (Delay (s))
	Approach	PM Peak
		Hour
	Roberts Rd	C (22.4)
ත	Westbound STOP	C (22.4)
Opening	Overall	A (8.1)
be	Signalized	
	Overall	A (6.6)
	Roundabout	
	Roberts Rd	F (289.7)
	Westbound STOP	
ign	Overall	B (15.5)
Design	Signalized	
	Overall	A (9.8)
	Roundabout	A (9.6)



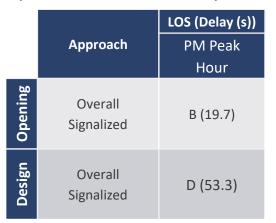




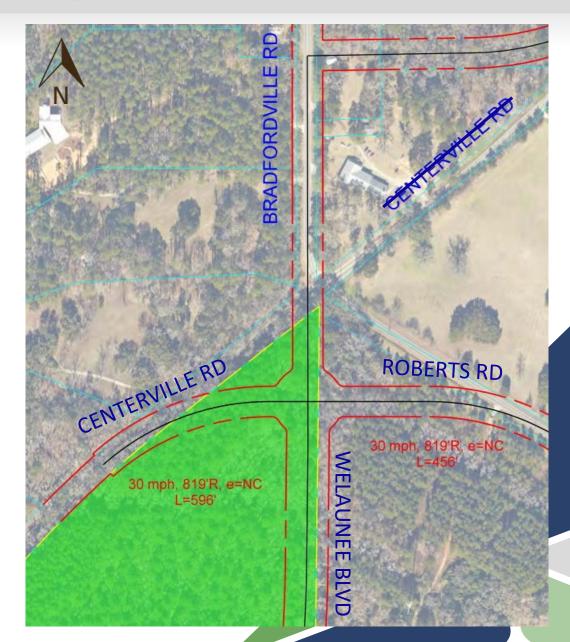
## Centerville Road Swing - Signalized

# Roberts Rd, Centerville Rd, Bradfordville Rd, & Welaunee Blvd

- 4-Leg Intersection
- Southbound (Bradfordville Rd)
  - 1—Dedicated Left-Turn Lane
  - 1—Dedicated Right-Turn Lane
- Northbound (Welaunee Blvd)
  - 1—Left-Turn Lane
  - Shared Through/Right-Turn Lane
- Eastbound (Centerville Rd) and Westbound (Roberts Rd)
  - Shared Lane





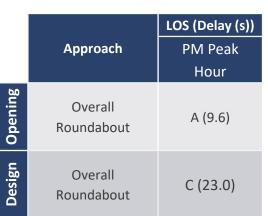


### Centerville Road Swing - Roundabout

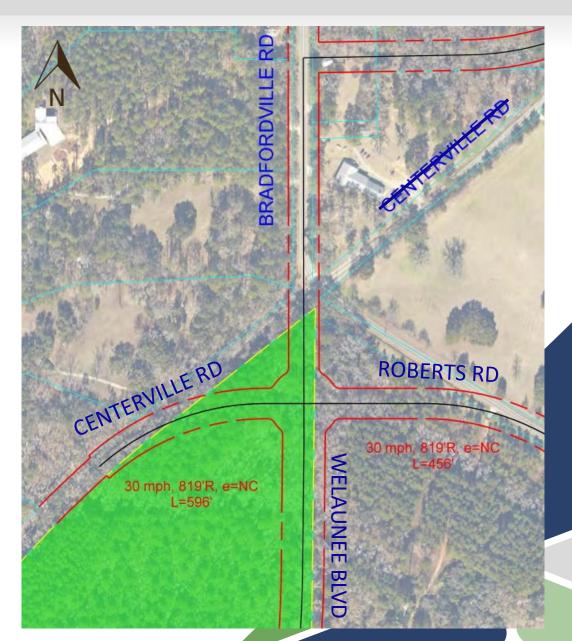
#### Roberts Rd, Centerville Rd, Bradfordville Rd, & Welaunee Blvd

- 4-Leg Intersection
- Welaunee Boulevard on Conservation Easement
- Shared Lane for all Approaches

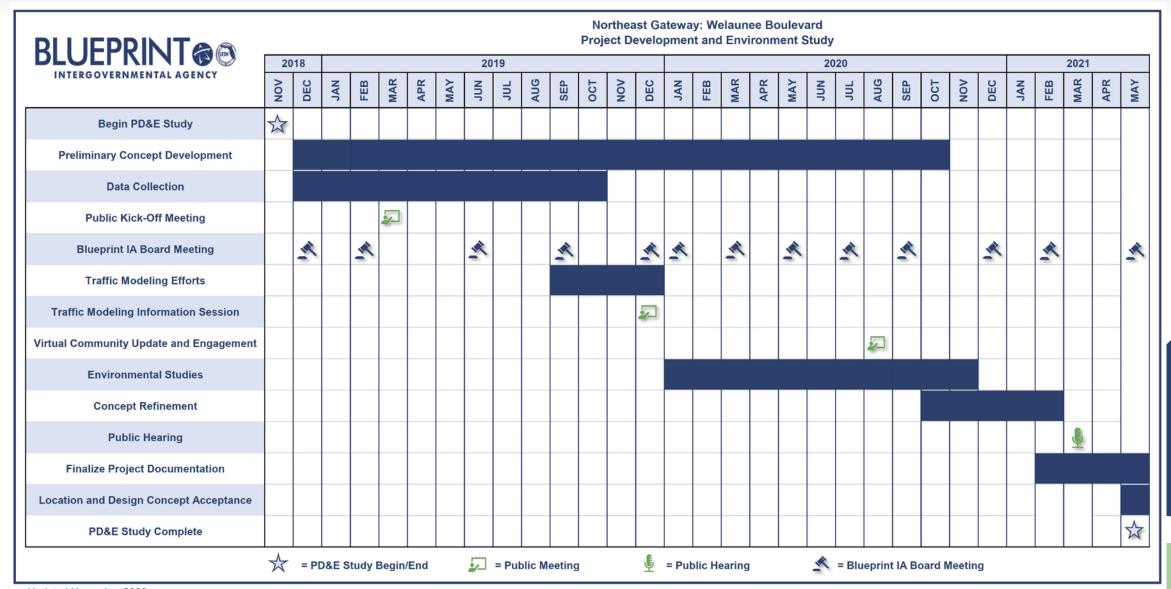
		LOS (Delay (s))
	Approach	PM Peak
		Hour
Opening	Overall Roundabout	A (9.6)
Design	Overall Roundabout	C (23.0)







## **Project Schedule**



## Continue to Stay Engaged

Future Community
Engagement Opportunities

Public Hearing Spring 2021

Stakeholder Focus Group Sessions
Ongoing

Other Informal Meetings & Briefings
Ongoing

Blueprint Intergovernmental Agency Board Meetings

December 10<sup>th</sup>, 2020

300 S. Adams St.

Tallahassee, FL 32301

3:00 p.m. - 6:00 p.m.

Updates posted to: NEGateway.com



# Thank You For Your Participation.