

Concept Development & Evaluation

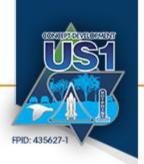
Project Update

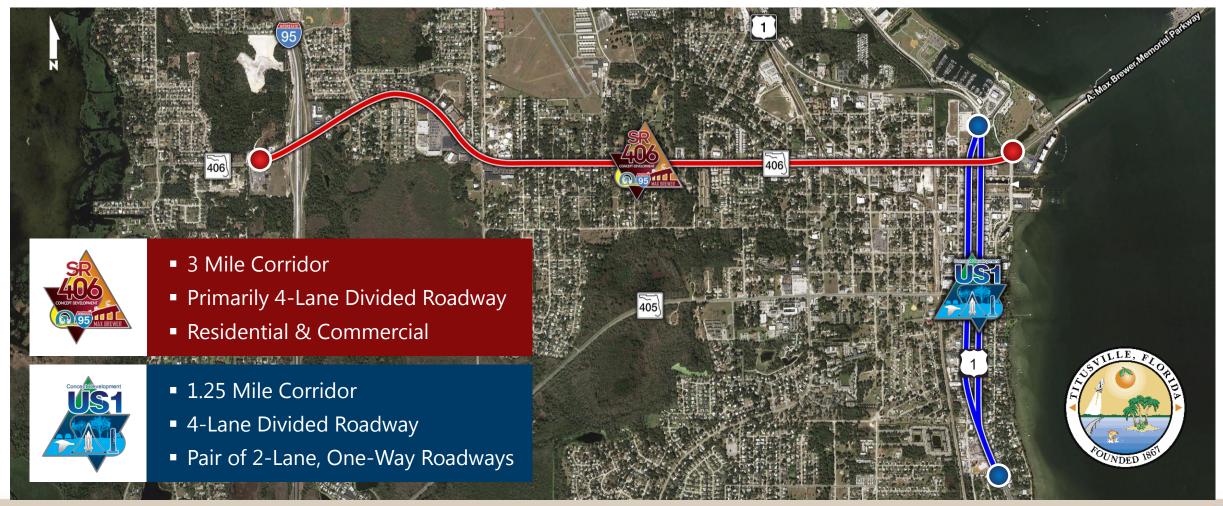
October 2018





Regional Context







Project Background





Studies Requested by City of Titusville

Purpose: Provide **improved multimodal mobility**, with consistent roadway design that will **enhance safety and connectivity** while supporting economic and community development goals.





Project Background





Corridor Planning Studies

- Studies began in January 2015
- Public Meeting in February 2016 presented the potential alternatives
- Studies completed in September 2016 producing the original alternatives to be advanced into the next phase





Project Background





Concept Development and Evaluation Studies

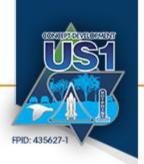
- Began in June 2017
- Refining original alternatives from planning studies into proposed alternatives





Original Planning Studies Alternatives

Advanced into Concept Development and Evaluation Study



S.R. 406

- Median Improvements throughout the S.R. 406 corridor
- Addition of bike lanes throughout the S.R. 406 corridor
- Lane Modification along S.R. 406, from Dixie Avenue to Indian River Avenue
- Roundabout at Singleton Avenue & S.R. 406

U.S. 1

- Roundabout at U.S. 1 & S.R. 406
- Roundabout at U.S. 1 & Grace Street (did not move forward during the current study)



Proposed Alternative Not Moving Forward:



U.S. 1 & Grace Street Roundabout

During the Concept Development and Evaluation Studies this roundabout was removed from the Proposed Alternatives.

Will **NOT** move forward due to:

- Low side-street volume
- Low benefit-cost ratio
- Potential of significant business relocation costs





Future Conditions: No Build

Roadway Operations & Safety Needs



Roadway Capacity

 Corridor expected to operate at an acceptable level in 2040 without any changes

Safety Needs

- Reduction in number of median openings
- Reduction in number of intersection crashes





Median Improvements and Addition of Bike Lanes





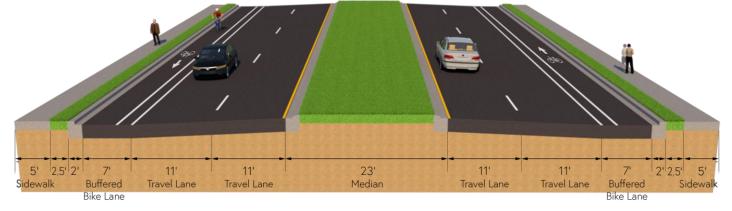


Removal of on street parking

Reduction of travel lane width

- Addition of buffered bicycle lanes
- Widen raised median
- **Reduce** the number of openings
- **Maintain** existing sidewalks, curb, and right of way







Lane Modification

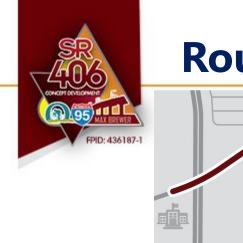
S.R. 406 from Dixie Avenue to Indian River Avenue





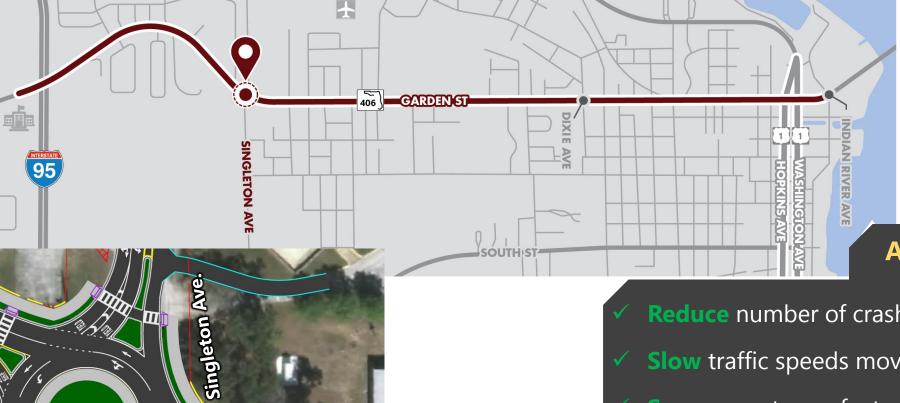
Proposed Changes

- Reduce typical section from 5lanes to 3-lanes: 2 travel lanes and 1 center turn lane
- **Reduction** of travel lane width
- Addition of buffered bicycle lanes
- Reduction of overall roadway width



Roundabout: S.R. 406 at Singleton Avenue





Anticipated to:

- **Reduce** number of crashes at intersection
- Slow traffic speeds moving into downtown
- Serve as gateway feature into downtown
- **Improve** traffic operations
 - Provide an estimated savings over the life of the project of:
 - \$6.2 million in crash cost reduction
 - \$1.1 million in delay reduction savings



Roundabout: S.R. 406 at U.S. 1

Both intersections (Hopkins Avenue and Washington Avenue)





- Reduce number of crashes at intersections
- **Slow** traffic speeds moving into downtown
- **Serve** as gateway feature into downtown
- **Improve** traffic operations
- Provide an estimated savings over the life of the project of:
 - \$8.7 million in crash cost reduction
 - \$2.1 million in delay reduction savings



Roundabout: S.R. 406 at U.S. 1

Removes closely spaced signalized intersections







Final Recommendations

Summary

- Median Improvements throughout the S.R. 406 corridor
- Addition of bike lanes throughout the S.R. 406 corridor
- Lane Modification along S.R. 406 from Dixie Avenue to Indian River Avenue
- Roundabout at Singleton Avenue and S.R. 406
- Roundabout at S.R. 406 and U.S. 1









Stakeholder & Local Outreach



Project Visioning Team (PVT)

 PVT meetings held on November 8, 2017 & June 27, 2018

Public Meeting

- Present study findings, recommendations, and receive feedback
- Held on September 20, 2018

























Next Steps



Development Phase
December 2018

Present findings to
Titusville City Council
And Space Coast TPO
October 2018

Public Comment and Response Period September 2018

Concept Development Phase

Design Phase



Right of Way Phase



Construction Phase



Planning Phase







Questions or Comments?



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Project information available at:

S.R. 406: http://www.cflroads.com/project/436187-1/

U.S. 1: http://www.cflroads.com/project/435627-1/

www.cflroads.com

