Sustainability in Transportation

Steve Acenbrak, P.E., LEED AP, PWLF

GA Environmental Conference

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Overview

- About Roswell
- Sustainability in Transportation
- Roswell projects
- Conclusion

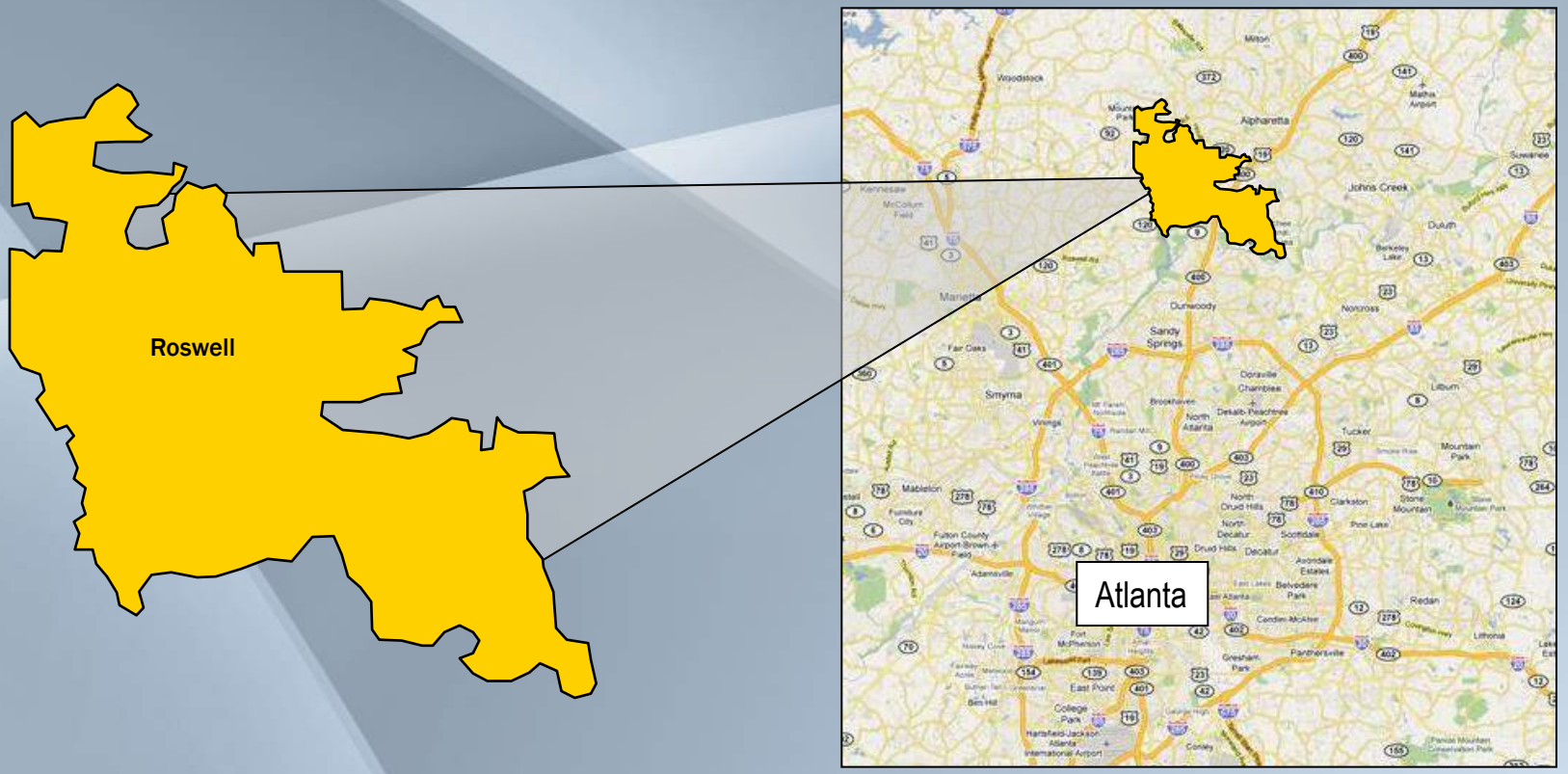
ROSWELL
GEORGIA
SINCE 1854

Atlanta Metro Area

- “Capital of the South”
- World’s Busiest Airport
- Great Climate + Great Location = Popular and Growing

Roswell: Bedroom Community

- Located in metropolitan Atlanta's northern suburbs
- Over 150 years old



Historic Past

- **Mill town**
- **Three antebellum homes**
  - Smith Plantation
  - Bullock Hall
  - Barrington Hall
- **Canton Street**

Historic Past

- **Narrow Right-of-Way**
  - Hard/Impossible to retrofit with bicycle lanes or sidewalks

Trees

- Lots of trees line narrow streets
- Helps clean the air

Demographics

- **Suburban community**
- **90-100K population**
  - 7th largest city in GA
- **About 2/3 residential, 1/3 commercial**
- **Culture**
  - Car-focused
  - Limited transit
  - Limited past emphasis on multi-modal options
  - Active recreation
    - Cycling, road and mountain
    - Running/jogging
    - Rafting/rowing on the river

Qualified Staff

- 7 PEs
- 2 PTOEs
- 1 AICP
- 1 LEED AP
- 1 ENV SP (Envision Sustainability Professional)

ENVISION™

INSTITUTE FOR SUSTAINABLE INFRASTRUCTURE
I S I

National Society of Professional Engineers®

PTOE
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

APA
AICP
The American Planning Association's Professional Institute
American Institute of Certified Planners

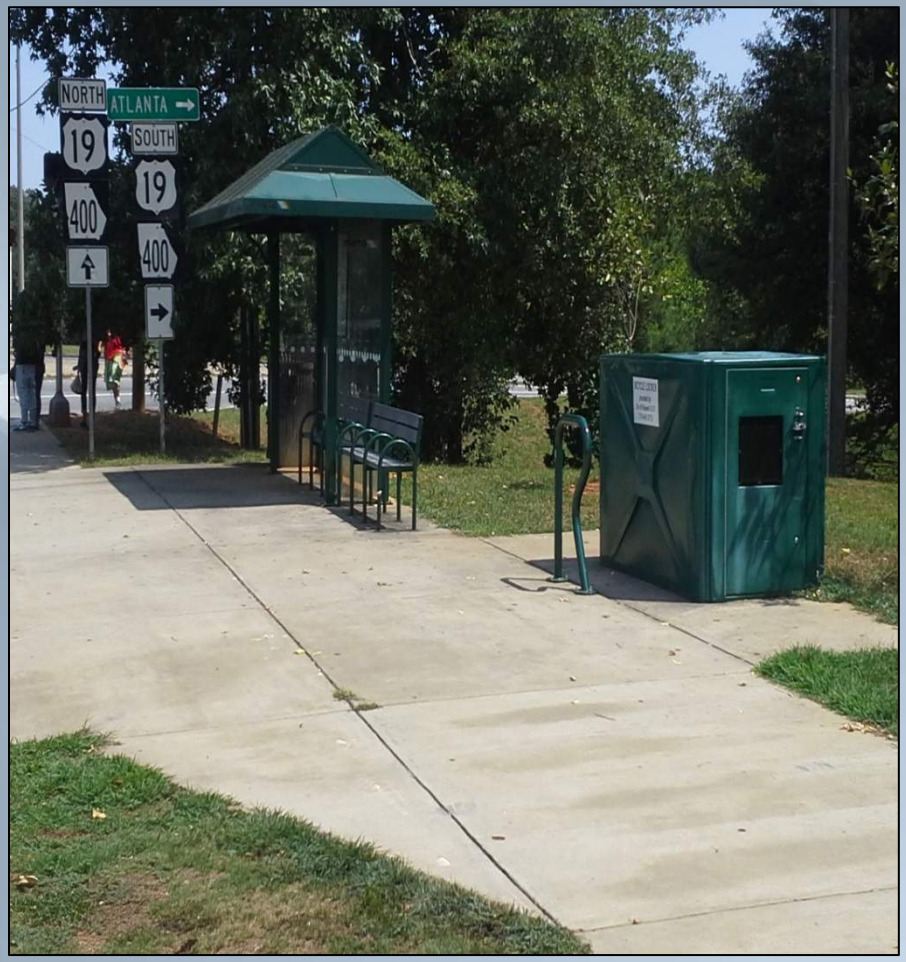
Initiatives

- Bicycle Friendly Community
- LED traffic signals
- LED street lights
- Stormwater BMPs
- Street light reduction
- Roundabouts
- ATMS
- Sidewalks and trails
- Complete Streets
- Connectivity
- PTVs
- Driver's feed back signs
- Traffic calming
- Regional detention
- Recycling asphalt
- Alternatives to dumping at the landfill

Bicycle Friendly Community

- First in the State of Georgia
- Share the road signs
- Sharrows
- Bike box

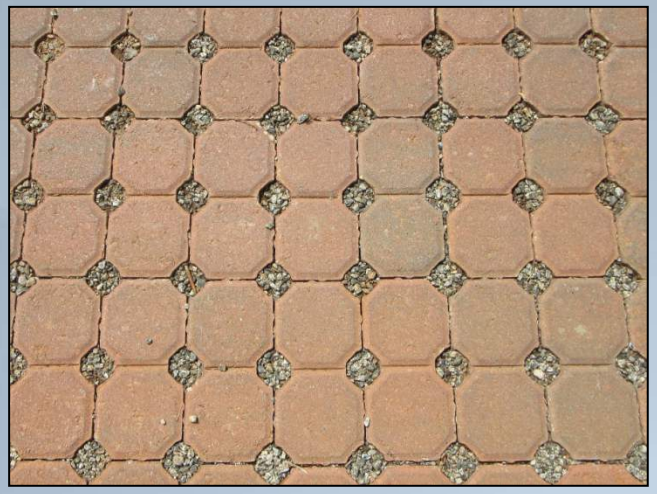
Bicycle Friendly Community



- **The City of Roswell encourages the use of non-motorized vehicles by providing dedicated continuous bike paths.**
- **Secure bicycle lockers are provided at some public transportation shelters.**

Stormwater BMPs

- Pervious pavers
  - Forest Commons, City Walk
  - East/West Alley master plans
- Tree boxes
  - In front of Roswell North ES
- Swales
- Landscaped medians
  - Mid-town medians
  - Roswell North Elementary School
  - Maintenance issue
  - Sun Valley regional detention pond



Traffic Calming

- **In heavy pedestrian or bicycle traffic areas, such as school zones, the city utilizes medians as a method of traffic calming. Some medians are landscaped to reduce the impervious areas as well as to preserve views and character.**

LED Traffic Lights
Solar Powered Signs

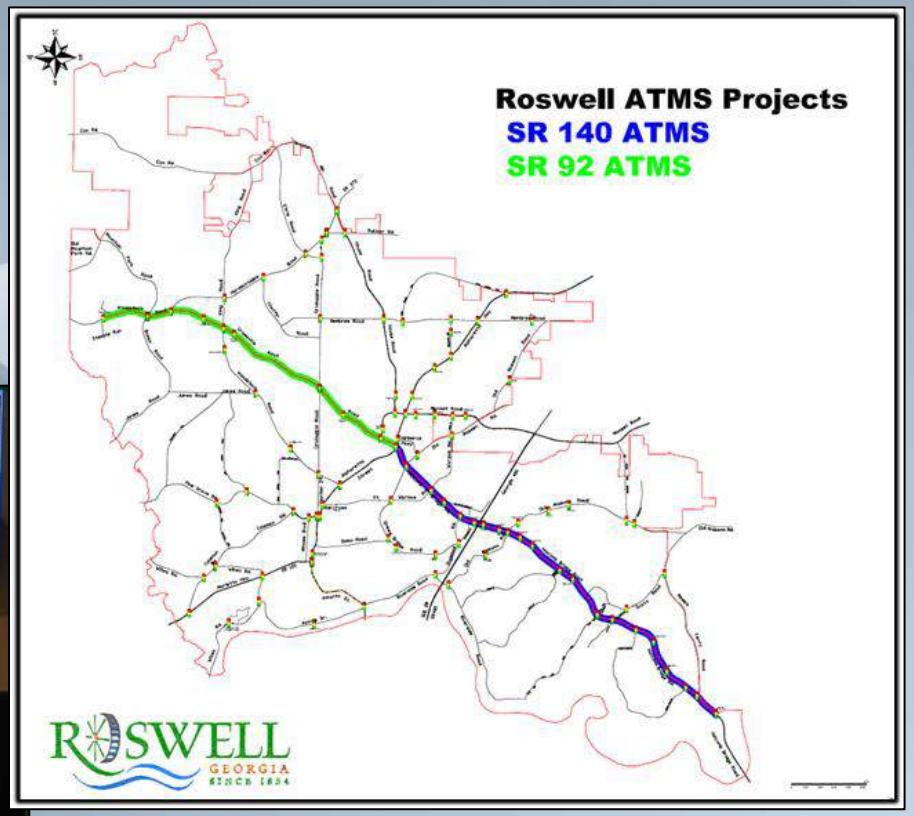
- **100% of the city's 103 traffic lights have been retrofitted with LED fixtures which reduces operation and maintenance energy consumption.**
- **Energy use is also reduced by the use of solar powered driver's feedback signs.**

Roundabouts

- Air quality
- Norcross/Grimes Bridge/ Warsaw
- Old Roswell Rd by developer
- Gateway project
- Chaffin Rd at Hardscrabble Rd

Roundabouts

Advanced Traffic Management System



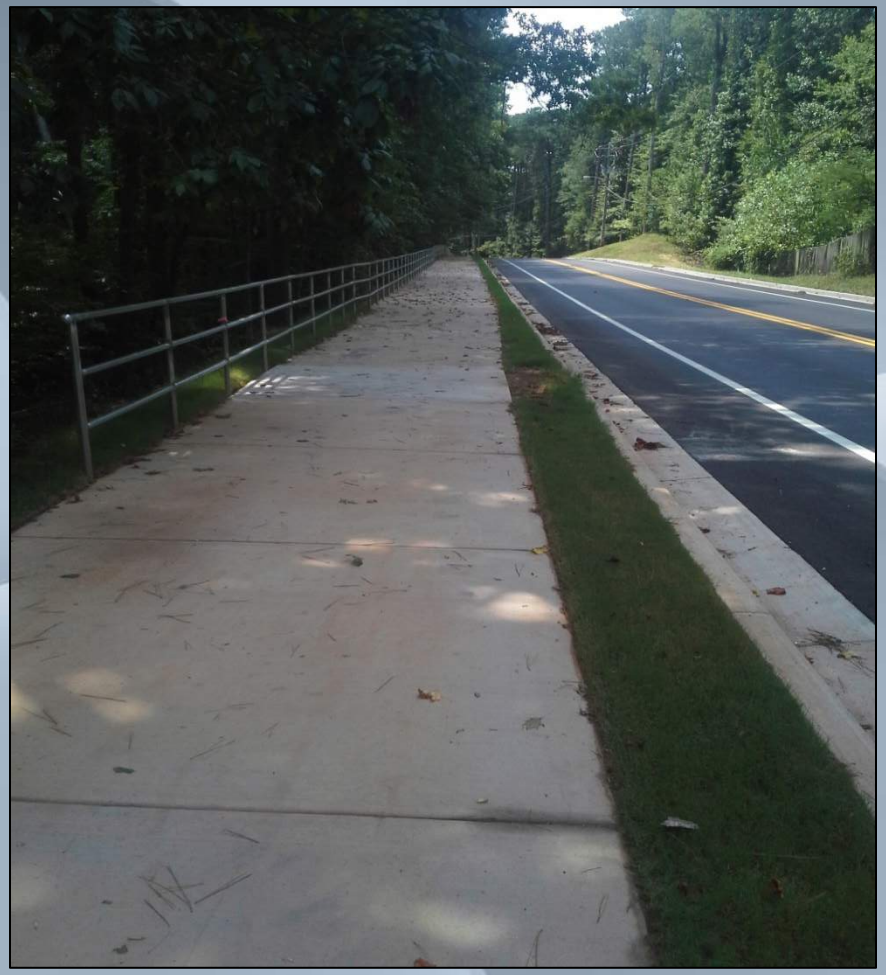
Lane Diets

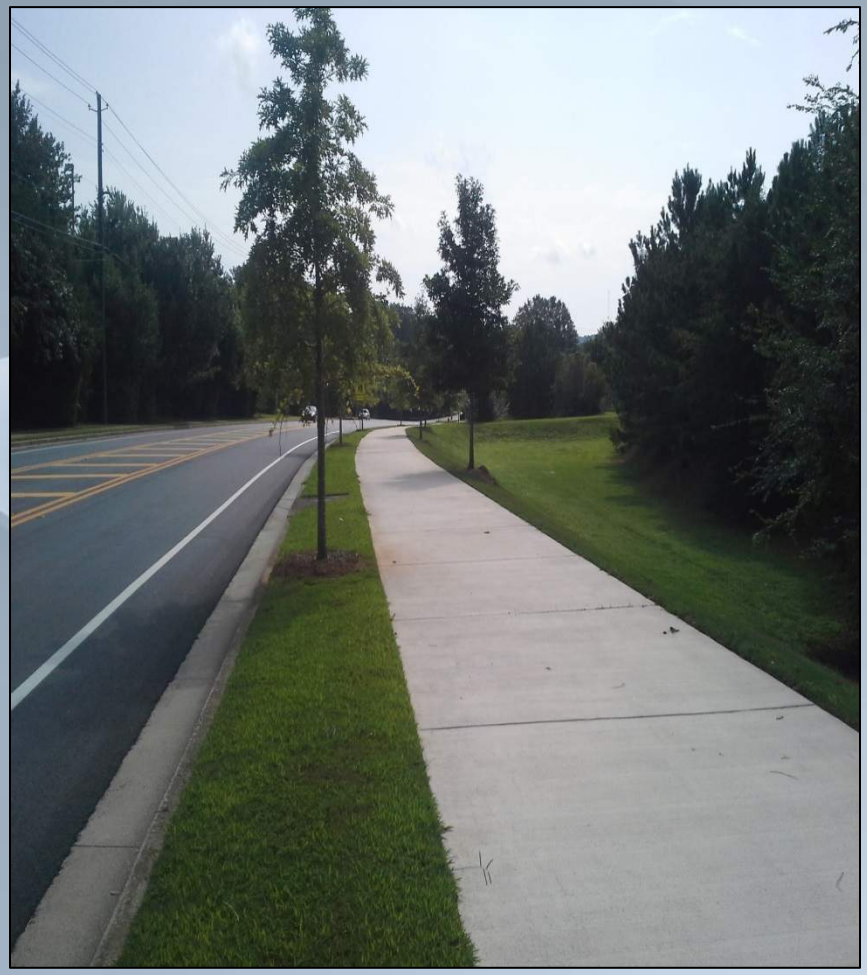
- Reconstructed portions of the outer travel lane to provide space for a 10-12 ft. wide multi-use trail
- Creates a “linear park” along the trail with seating areas and trash receptacles

Complete Streets Sidewalks/Trails

- Eves Rd
- Trails along HBR

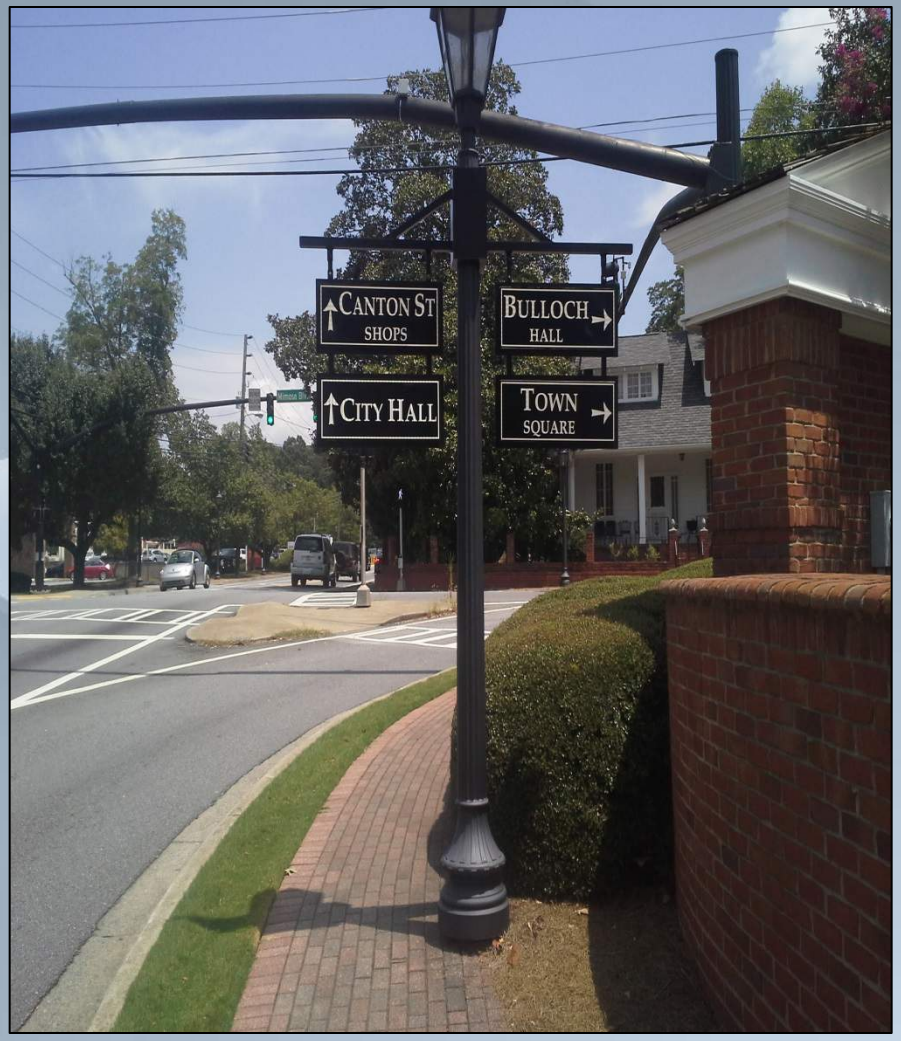
Complete Streets Sidewalks/Trails





- The City of Roswell provides extended contiguous sidewalks and multi-use trails.
- In the last three years alone, more than 20,000 linear feet of trails and sidewalks have been installed.

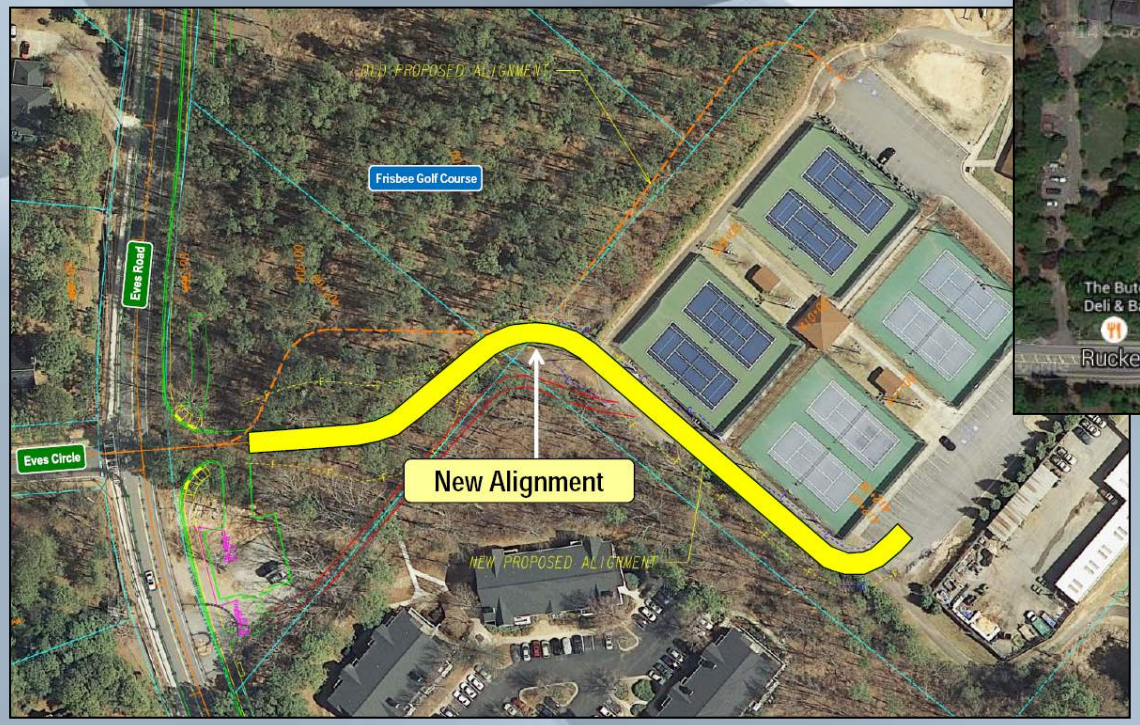
Safety and Wayfinding



- **The City strives to provide safety and accessibility by providing pedestrian street crossings with high visibility.**
- **Wayfinding is also provided by the city at strategic areas.**

Connectivity

- Budget line item
- Eves Rd to East Roswell Park connecti
- Sway Branch
- Crabapple Manor/Crabapple Registry pedestrian connection

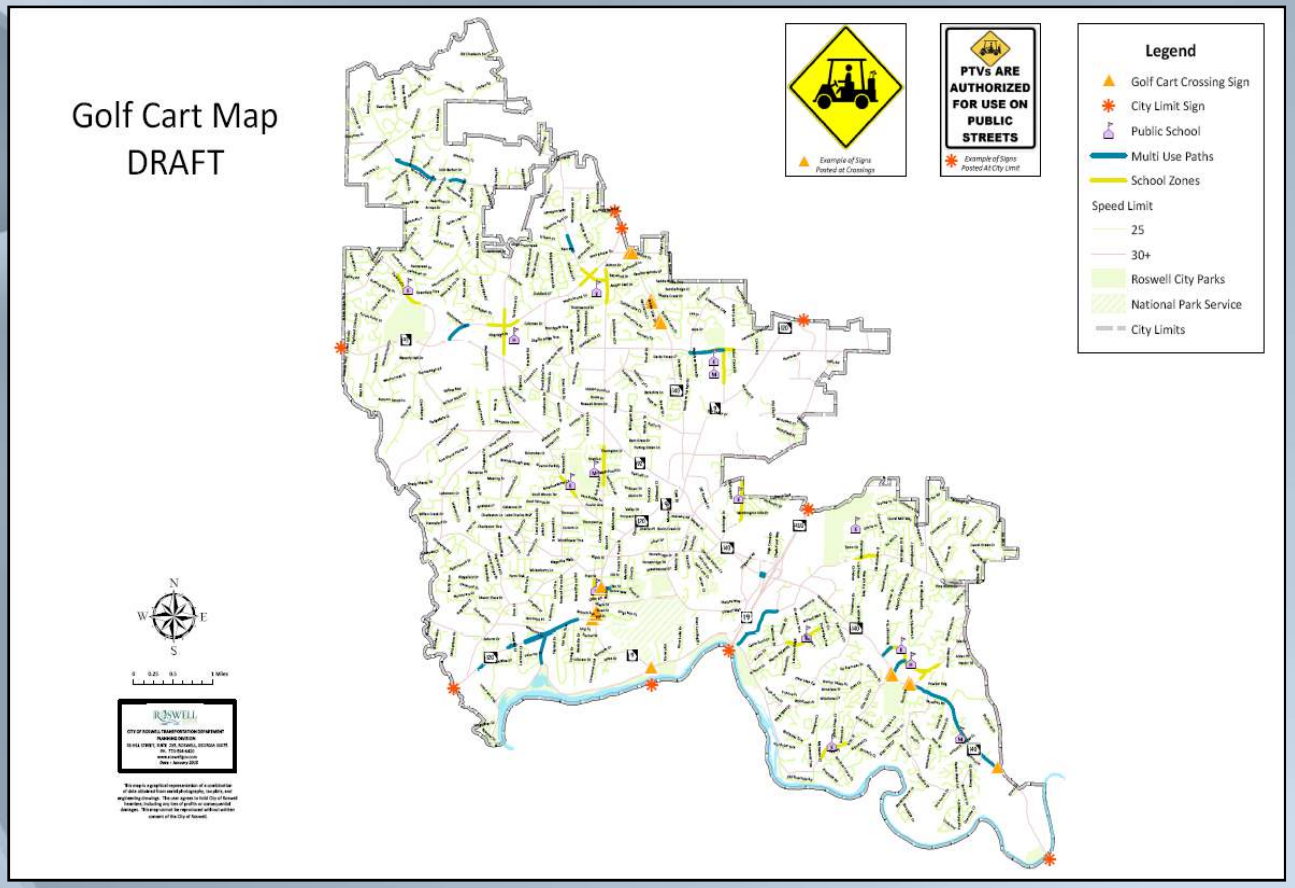


PTVs

- Brand new ordinance
- 25 mph and below
- Only designated trails and crossings
- Excludes trails within parks

PTVs

- Rechargeable battery
- No air pollution
- Slow speeds
- Fun!



Cost Savings Through Alternatives To Dumping At The Landfill

- Rising costs associated with dumping at the landfill
- Use wood splitter to make fire wood instead of dumpling at landfill

Storm Clean-Up

Crew Cutting Up Fallen Trees

Trees Cut & Ready To Be Hauled Away

Debris Piled In Dump Lot At Hembree

Old way

- Bucket Loader → Tandem Dump
- Fuel use/air pollution
- Tipping fees at landfill
- Rots in landfill

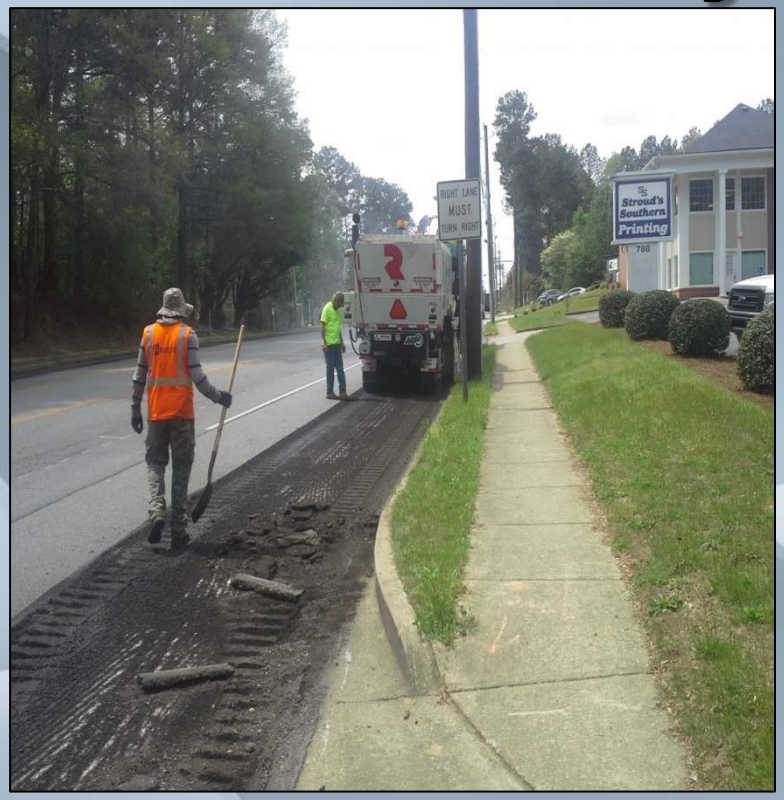
New way

- Log splitter used during slow times or bad weather
- Given to happy city employees!
- Smaller branches/logs ground to mulch

Firewood Available For Free To City Employees

- Any city employee can have a small amount of firewood
- First come, first served
- Appointment & sign out required
- Working on a written policy
- Given away almost 200 loads of firewood

Materials Recycling



- The City of Roswell Transportation Department reduces the use of virgin materials by specifying the use of Recycled Asphalt Concrete.
- Existing pavement millings are recycled to reduce the use of new materials as well as the amount of waste directed to landfills.
- Approximately 10,000 Tons are recycled each year form city's projects.
- Approximately 20,000 Tons of recycled asphalt concrete is used by the Transportation Department each year as part of the City's Roads Maintenance Program.

Reducing Energy and Resources Consumption

- Use of asphalt rejuvenators to prolong the life cycle of its roads and hence reduce energy and materials consumption.
- Limits/delays cracking
- Reduces water infiltrate into base

Mineral Bond Sealer

- HA5 is a mineral bond sealer that can extend the life of asphalt and therefore reduce the need for virgin asphalt

Closing comments

- What does it take?
- Are we going in the right direction?
- What's promising in future?

Closing comments

- **Wrap Up**
- **Questions?**

Thank you!

Presented by:

Steve Acenbrak, P.E., LEED AP, PWLF

***Director of Transportation,* City of Roswell**

770.594.6420 / sacenbrak@roswellgov.com

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