

# Sustainability in Transportation



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**Sustainable Transportation Forum**

**May 2015**



# Overview

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

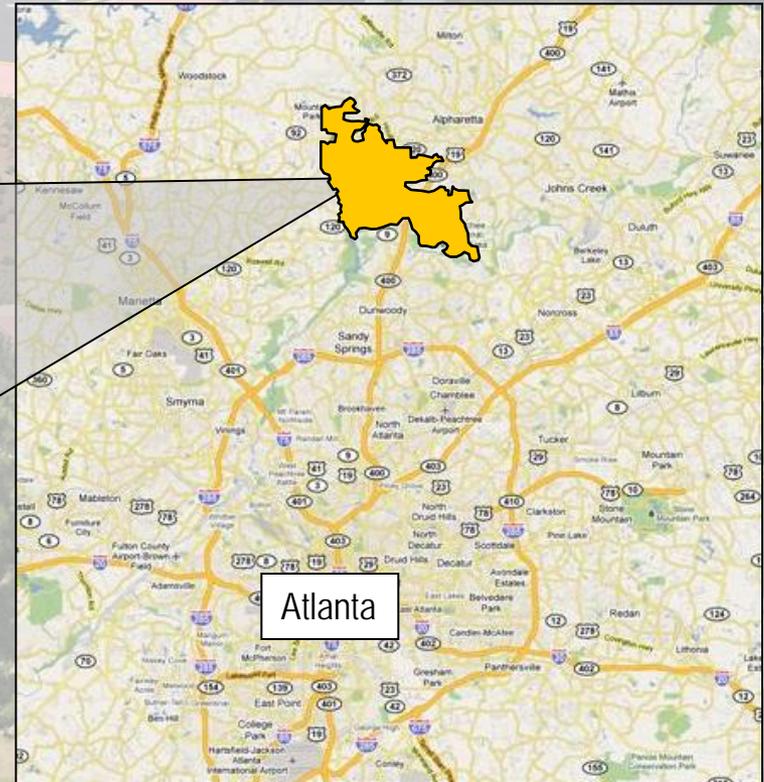
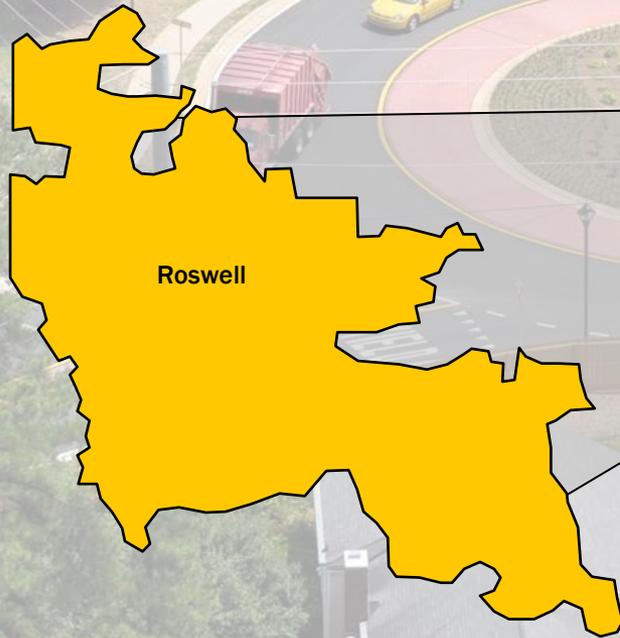
# Atlanta Metro Area

- “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



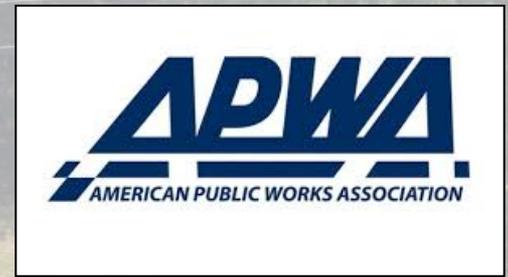
# Demographics

- Suburban community
- 90-100K population
  - 7<sup>th</sup> 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 PhD
- 1 AICP
- 1 CNU
- 1 LEED AP
- 1 ENV SP
- 1 PWLF
- 1 NHI Instructor



# Initiatives

An aerial photograph of a roundabout with a central landscaped island. The roundabout has multiple lanes and is surrounded by trees and a residential building. Several vehicles, including a yellow car, a white car, and a white truck, are visible on the road. The image is overlaid with a semi-transparent text box containing a list of initiatives.

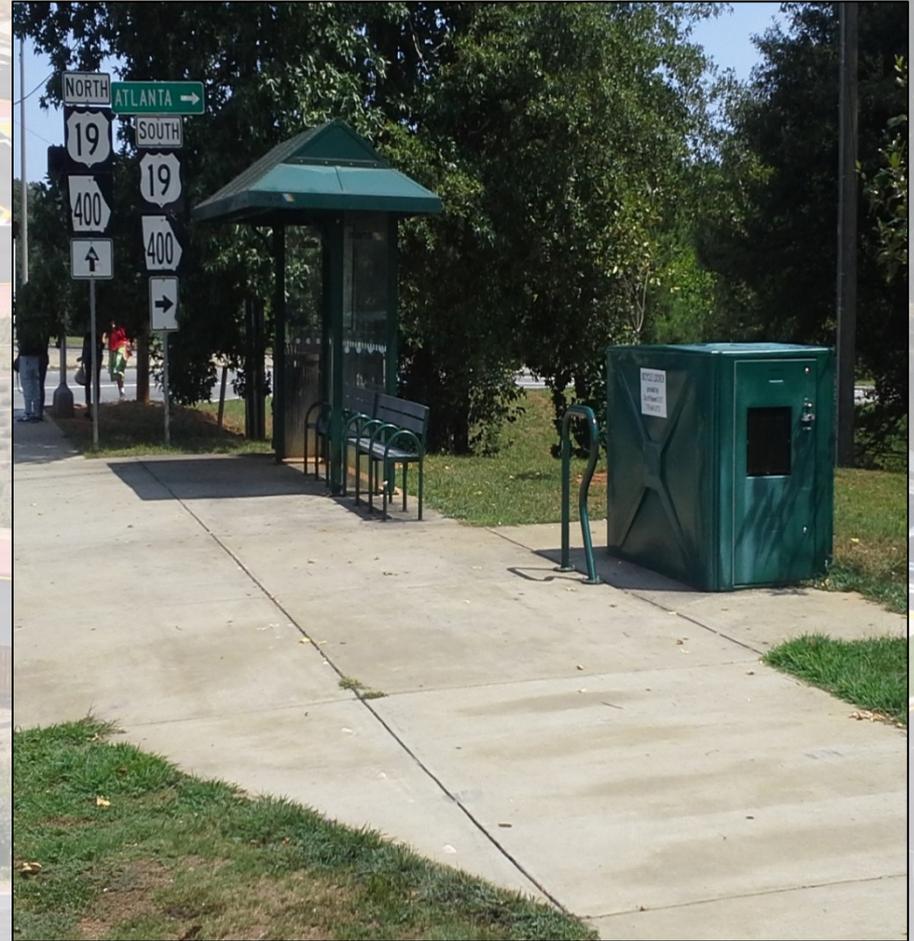
- Bicycle Friendly Community
- LED traffic signals
- LED street lights
- Stormwater BMPs
- Street light reduction
- Roundabouts
- ATMS
- Sidewalks and trails
- Complete Streets
- Connectivity
- PTVs
- Driver's feed back signs
- Traffic calming
- Regional detention
- Recycling asphalt
- Alternatives to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

# Bicycle Friendly Community

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



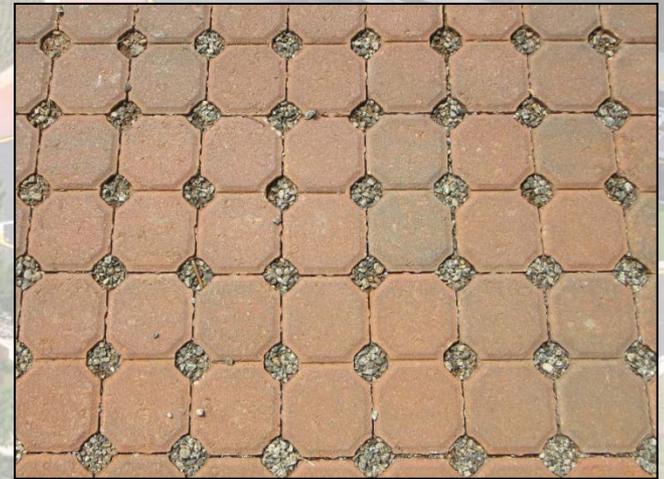
# Bicycle Friendly Community



- 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

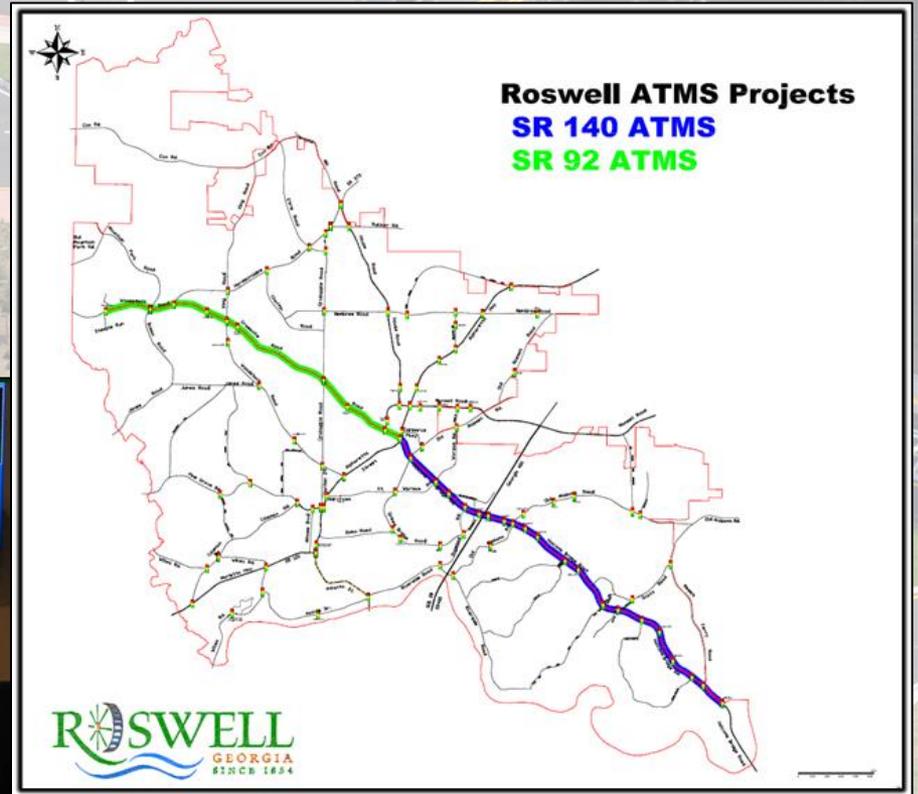
- Air quality
- Norcross/Grimes Bridge/ Warsaw
- Old Roswell Rd by developer
- Gateway project
- Chaffin Rd at Hardscrabble Rd



# Roundabouts



# Advanced Traffic Management System



# Lane Diets



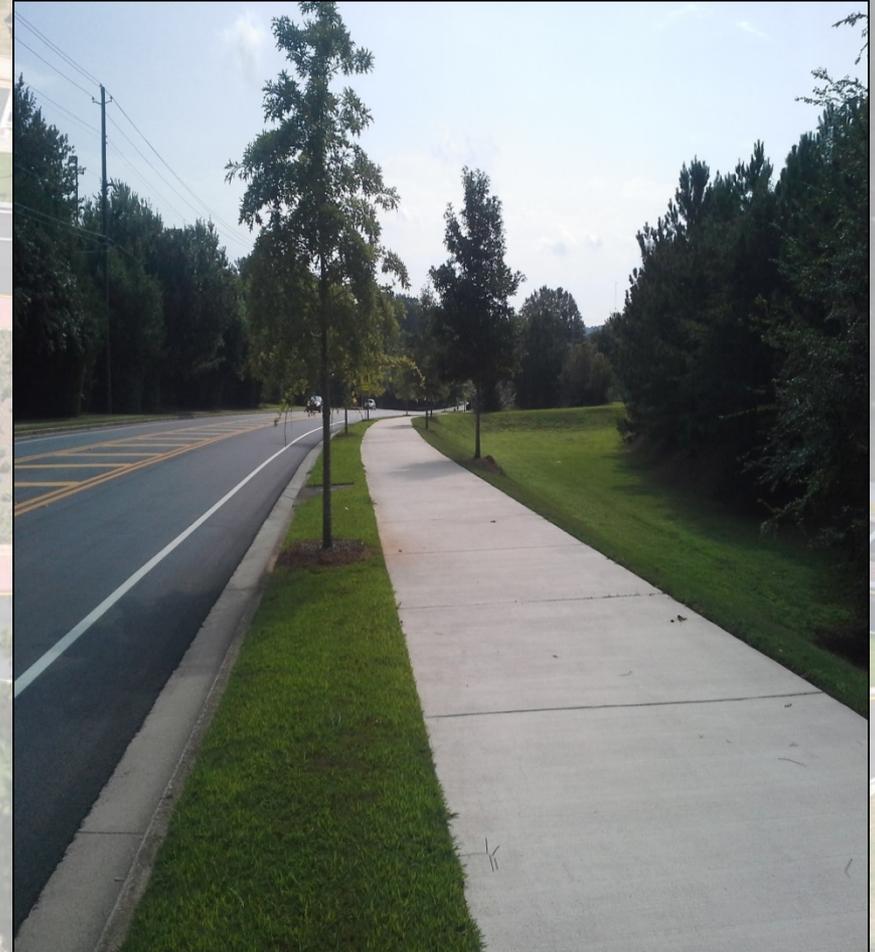
- Reconstructed portions of the outer travel lane to provide space for a 10-12 ft. wide multi-use trail
- Creates a “linear park” along the trail with seating areas and trash receptacles

# 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.

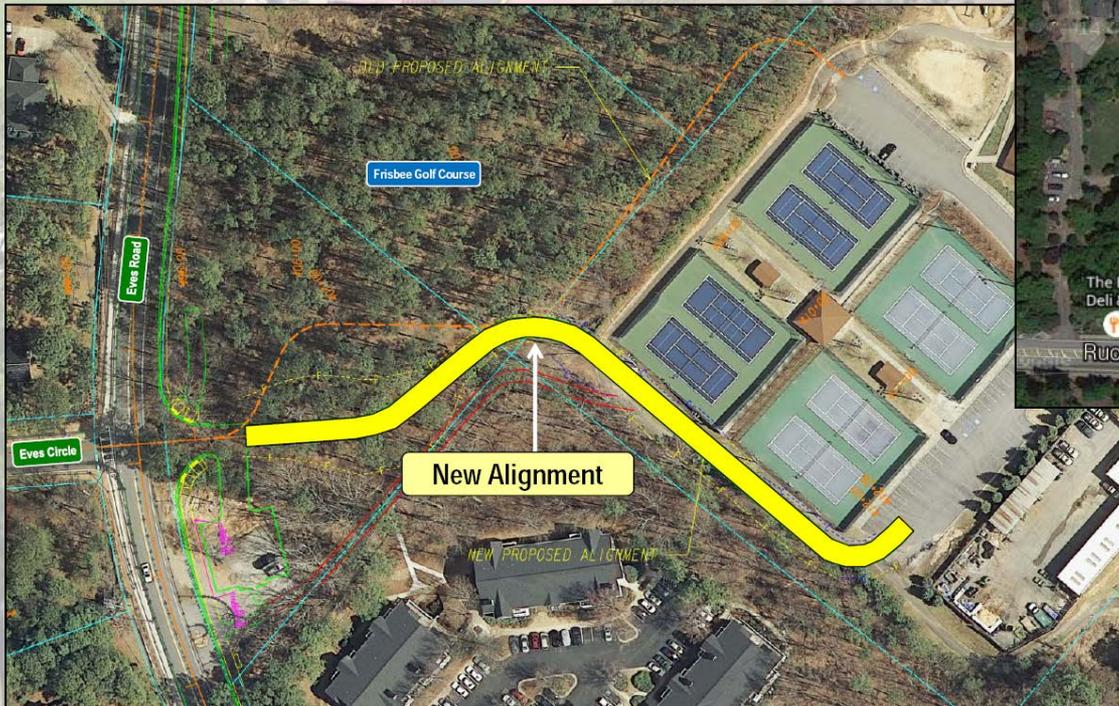
# Safety and Wayfinding



- 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 connection
- 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

**GOLF CARTS &**  
Personal Transport Vehicles (PTVs)



GOLF CART ORDINANCE IN EFFECT JULY 1

# PTVs

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

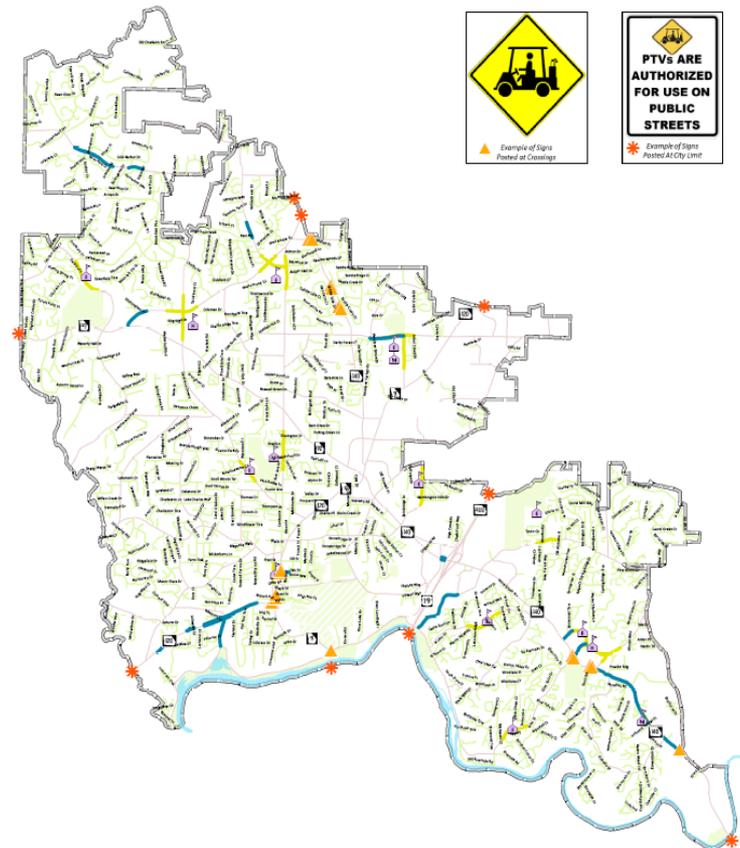
## Golf Cart Map DRAFT



0 0.25 0.5 1 Miles



This map is a general representation of a condition of the information provided. It is not intended to be used as a legal document or to provide any warranty. The user agrees to hold the City of Roswell harmless from any and all claims or damages, including reasonable attorneys' fees, that may be asserted against the City of Roswell.



Legend	
▲	Golf Cart Crossing Sign
*	City Limit Sign
Ⓧ	Public School
—	Multi Use Paths
—	School Zones
Speed Limit	
—	25
—	30+
■	Roswell City Parks
■	National Park Service
—	City Limits

# 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 dumping 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

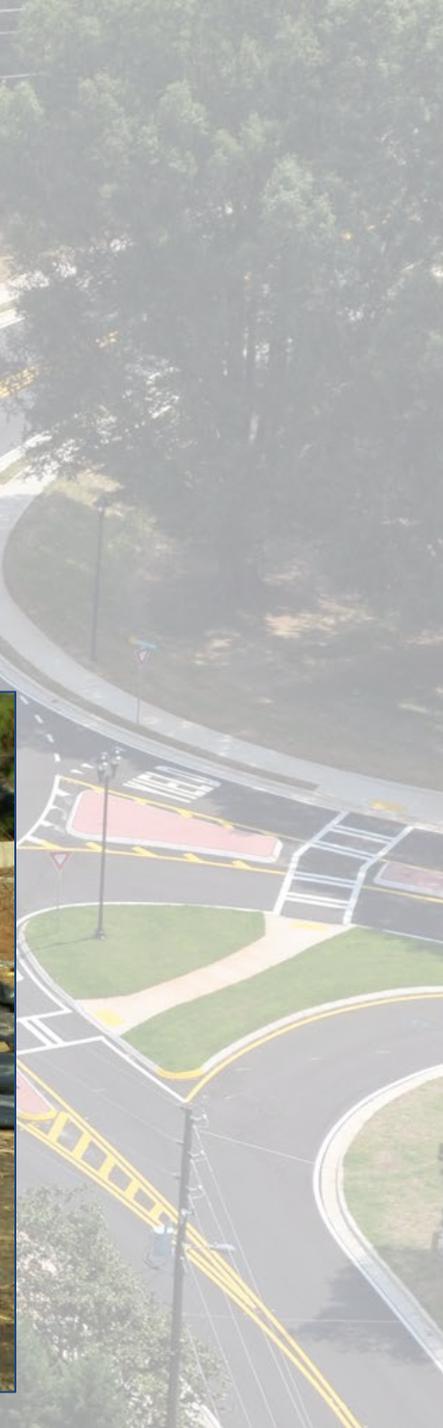
## New way

- 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 from 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

An aerial photograph of a modern roundabout. The roundabout has a central landscaped island with a grid of small plants. The road surface is dark asphalt with white and yellow painted markings, including 'YIELD' signs at the entry points. Several cars are visible on the road, including a red truck and a white car. The surrounding area is lush with green trees, and a house with a grey roof is visible in the lower-left foreground.

- 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:*

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