

1. Green Building

a. **LEED and Energy Star Certifications.** The following policies shall apply to all public buildings that are either new construction or renovation projects:

1. All new buildings constructed and owned by the City of Alpharetta which have 5000 square feet or greater of occupied space shall be LEED certified (Leadership in Energy and Environmental Design for New Construction (LEED-NC). In the event that LEED certifications add costs exceeding \$25,000, approval shall be required by the City Council.
2. All new buildings constructed and owned by the City of Alpharetta which are not LEED certified shall be certified for New EnergyStar or EarthCraft Light Commercial construction. If achieving those certification levels adds costs exceeding \$25,000, approval shall be required by the City Council.
3. All new buildings renovated by the City of Alpharetta shall be EnergyStar certified or follow LEED guidelines.

b. The following policies shall apply to all privately owned buildings that are either new construction or renovation projects:

1. The City of Alpharetta shall offer expedited plan review, plans processing and permitting for LEED, EarthCraft, and EnergyStar certified projects.
2. The City of Alpharetta shall offer expedited building and site inspections for LEED, EarthCraft, and EnergyStar certified projects.

2. Energy Efficiency

- a. **Power down / Lights out.** It is the policy of the City of Alpharetta to turn non-emergency lights out and power down electronic equipment at the end of each work day. Therefore, all employees and building maintenance staff shall be required to turn off lights and all other non-essential electronic equipment when space within any city building is expected to be out of use for four or more hours.
- b. **Consolidated Meetings.** In order to conserve resources, whenever there are four or fewer non-emergency, non- time sensitive items for consideration on a regularly scheduled meeting agenda, those

items shall be incorporated into the next regularly scheduled meeting agenda and the first meeting shall be canceled.

- c. **Lighting.** New light fixtures shall be installed with energy efficient bulbs and existing light fixtures shall utilize energy efficient bulbs when bulbs are replaced. LED lamps shall be utilized in traffic signals.
- d. **Night Sky requirements.** It is the City's intent to permit reasonable uses of outdoor lighting for nighttime safety, productivity, enjoyment and commerce while limiting the use of excess lighting which unnecessarily wastes energy and degrades the nighttime visual environment.
 - 1. *Applicability.* For all new commercial developments and buildings that require a permit, all outdoor lighting fixtures shall meet the requirements of this policy. All building additions or modifications of twenty-five (25) percent or more in terms of additional dwelling units or gross floor area shall also comply with these requirements.
 - 2. *Exempt Lighting.* The following luminaries and lighting systems are exempt from these requirements:
 - a. Lighting for pools used at night.
 - b. Underwater lighting used for the illumination of swimming pools and fountains;
 - c. Temporary holiday lighting;
 - d. Lighting required and regulated by the Federal Aviation Administration, or other federal, state or local agency;
 - e. Emergency lighting used by police, fire, or medical personnel, or at their direction;
 - f. All outdoor light fixtures producing light directly from the combustion of fossil fuels, such as kerosene and gasoline;
 - g. Security lighting controlled and activated by a motion sensor device for duration of 10 minutes or less.
 - h. Special event lighting
 - i. Amphitheater lighting
 - 3. *Prohibited Lighting.* The following lighting systems are prohibited:
 - a. Aerial lasers;
 - b. Searchlight style lights;

- c. Other very intense lighting, defined as having a light source exceeding 200,000 lumens or intensity in any direction of 2 million candelas or more;
4. *Outdoor Lighting Standards.* All nonexempt outdoor lighting fixtures shall meet the following criteria:
- a. Fixtures shall be full cutoff placed so as to allow no light above the horizontal as measured at the luminaire, except for period fixtures or as otherwise noted herein.
 - b. Fixtures shall be located, aimed or shielded so as to minimize glare and stray light spilling over property boundaries and into the public right of way in accordance with the following standards:

TABLE 'A'

At Property Lines Including Rights-of-Way	Maximum Foot-candles
At property line abutting a residential or an agricultural use	1.0
At property line abutting an office or institutional use	1.5
At property line abutting a commercial or industrial use	1.5

TABLE 'B'

Off-Street Parking Lots	Average Foot-candles	Maximum Foot-candles
Residential areas	2.0	4.0
Office-professional areas	3.0	6.0
Light industrial	4.0	8.0

- c. Flood or spot lamps must be positioned no higher than 45 degrees above straight down (half-way between the vertical and the horizontal) when the source is visible from any off-site residential property or public roadway.
 - d. All light fixtures that are required to be shielded shall be installed and maintained in such a manner that the shielding is effective as described herein for fully shielded fixtures.
 - e. Multi use development lighting must conform to the standards of its respective uses.
 - f. Illumination levels are measured from any height and orientation of the measuring device at any location along the property line, except the lighting of parking lots shall be measured at grade with the meter sensor held horizontally on the surface.
5. *Special Uses.* All lighting not directly associated with the special use areas designated below shall conform to the lighting requirements described above.
- a. Outdoor Sports or Recreation Fields. Lighting of outdoor recreational facilities (public or private), such as, but not limited to, outdoor athletic fields, courts, and tracks shall meet the following requirements:
 - 1. Facilities designed for municipal leagues, elementary to high school levels of play and training fields for recreational or social levels of play, college play, semi-professional, professional or national levels of play shall utilize luminaries with minimal uplight consistent with the illumination constraints of the design. Where fully shielded fixtures are not utilized, acceptable luminaries shall include those which:
 - a. Are provided with internal and/or external glare control louvers or lenses, and are installed so as to minimize uplight and offsite light spillover and glare; and
 - b. Are installed and maintained so as to avoid aiming no more than 2.5 times the mounting height.
 - c. Illumination levels shall not exceed 1.5 foot-candles at any location along any non-residential property line, and 1.0 foot-candles at any location along any residential property line.
6. *Curfew.* All events shall be scheduled so as to complete all activity no later than 11:000 p.m. Illumination of the playing field, court or track shall be permitted after the curfew only to conclude a scheduled event that was unable to conclude before the curfew due to unusual circumstances. Field lighting for these facilities

shall be turned off within 30 minutes after the last event of the night.

7. *Setback.* All light poles shall be set back the greater of fifty feet or one foot for every foot in height from any residential property line or right-of-way.

8. *Service Station Canopies and Parking Structures.*

a. All luminaries mounted on or recessed into the lower surface of service station canopies and parking structures shall be fully shielded and utilize flat lenses.

b. The total light output of luminaries mounted on the lower surface, or recessed into the lower surface of the canopy, and any lighting within signage or illuminated panels over the pumps, shall not exceed 30 foot-candles.

c. The total light output of illuminated areas of a service station other than as detailed in 2 above shall not exceed 15 foot-candles.

d. Illuminance levels for the interior of parking structures, where interior lighting is visible from outside the structure, shall conform to the IESNA recommendation (RP-20).

e. Lights shall not be mounted on the top or sides of a canopy and the sides of a canopy shall not be illuminated.

9. *Security Lighting.*

a. Security lighting shall be directed toward the targeted area.

b. Sensor activated lighting must be located in such a manner as to prevent direct glare and lighting into properties of others or into a public right-of-way, and the light shall not be triggered by activity off the property.

10. *Pedestrian Path Lighting.*

a. Lighting post shall not exceed 16 feet from the finished grade.

11. *Architectural Accent Lighting.*

a. Fixtures used to accent architectural features, materials, colors, style of buildings, landscaping, or art shall be located, aimed and shielded so that light is directed only on those features. Such fixtures shall be aimed or shielded to minimize light spill into the dark night sky in conformance with the luminaire standards.

b. Lighting fixtures shall not generate glare, or direct light beyond the facade onto a neighboring property, streets or into the night sky.

12. *Commercial Parking Areas.*

a. All lighting fixtures servicing parking lots, except floodlights, shall be cutoff fixtures, directed downward and not toward

buildings or other areas. The ratio of the average illumination to the minimum illumination shall not exceed 4:1.

- b. Floodlights should be aimed or shielded to minimize uplight.
- c. Light poles used in parking lots shall not exceed 35 feet in height.

13. *Street lights*

- a. The minimum level for new street lighting is 1 foot-candle, or as approved by the city engineer.

14. *Commercial Signage.* Each lighted sign shall be eligible for a 10% square footage increase subject to meeting the following requirement:

- a. The sign shall have a timer installed such that it will turn off the sign's illumination no later than two hours after close of business or midnight, whichever is latest. In the case of a business open past midnight, the timer shall turn off the sign's illumination at the close of business. The timer shall also activate the sign's illumination no earlier than one hour before sunset.

15. *Variances.* Any person may submit an application to the Board of Zoning Appeals for a variance from these requirements in accordance with the UDC provisions regarding variances.

3. *Water Use Reduction and Efficiency*

- a. **High Efficiency Fixtures** such as WaterSense certified toilets, urinals and faucets shall be used in all new public building installations.
- b. **Water Management Plans Compliance.** Alpharetta shall continue to make every effort to comply with all applicable Water District Management Plans including plans for conservation, storm water and wastewater.

4. *Trees and Greenspace*

- a. **Benchmarks.** Alpharetta shall continue to provide balanced growth by striving to achieve a ratio of 20 acres of greenspace per 1000 residents.
- b. **Special Places and Events.** Alpharetta shall continue to support the development of community gardens, farmers markets and other special places and events that promote environmentally friendly resources to the community.

5. *Transportation and Air Quality*

- a. **Commute Options.** It is Alpharetta's policy to support commute options for both municipal employees and private business employees. Therefore, Alpharetta shall continue to do the following:
 1. work with MARTA to identify available land to set aside for public

transportation alternatives and route expansion options.

2. explore the viability of an internal shuttle system that connects the business and shopping areas of Alpharetta to the MARTA system.
3. expand the Greenway path to offer greater opportunity for alternative commutes.
4. ensure that each development is built with sidewalks so that in cases where distance is not a deterrent, walking is a viable and safe option.
5. support flex time and varied work schedules so that employees can take advantage of the most favorable commuting options.
6. encourage ride sharing and car pooling by offering municipal employees the opportunity to use a city vehicle during the lunch hour for errands.

b. **Green Fleet policy.** The City shall give preference to the purchase and use of fuel efficient and lowest emission vehicles and equipment (collectively the "Fleet") that both meet the intended use of the Fleet and are reasonably cost competitive over its useful life (e.g. life cycle cost). Additionally, the City will implement strategic fleet management practices to further reduce both the emissions and environmental impact of the Fleet. Through implementation of this policy, the City shall seek to decrease total emissions and the environmental impact of the Fleet.

Section I: Green Fleet Procurement:

A. Decrease Fleet Emissions

a. The City shall procure the lowest-emission and/or Hybrid/Alternative-fuel Fleet when it is in alignment with the intended use of the Fleet and is reasonably cost competitive over its useful life (e.g. life cycle cost).

b. "Clean" fuels (such as compressed natural gas, ethanol, electricity and biodiesel) shall be used when feasible. Feasibility assessment will include considerations of vehicles or equipment able to utilize the "clean" fuel, vehicle costs, fuel availability, and the ability to utilize existing fueling infrastructure.

c. The life-cycle cost analysis, which will include fuel, maintenance, and operational costs over the projected life of the vehicle, will be performed prior to procurement and will be communicated in the corresponding bid process as appropriate.

Section II: Green Strategic Fleet Management:

A. Optimize Fleet Size

- a. The City shall seek to optimize its Fleet and consider the following for removal or reassignment:
- b. Light duty vehicles (passenger cars, light duty pick up trucks and vans) that are driven less than 4,800 miles annually; and
- c. Equipment that is used less than 240 hours annually. The availability of rental equipment to be used in place of such equipment will be taken into consideration.

B. Fleet reduction or reassignment will be performed according to the on-going operational needs of the user departments. The determination of which Fleet are to be reassigned shall be at the discretion of the Procurement Official working in cooperation with user departments.

C. Decrease Vehicle Size

1. The City shall encourage the selection of vehicles of a smaller class-size whenever possible to achieve greater fuel efficiency and lower emissions. User departments shall select the smallest possible vehicle that will achieve its intended use.
 2. Focus on Minimizing Vehicle Miles Travelled
 3. Route optimization shall be employed, when applicable, to reduce travel time, distance, and fuel usage.
 4. Encourage meetings at centralized locations to reduce necessary travel.
 5. Encourage and enable alternate meeting methods, such as conference calls, to reduce the number of necessary trips.
- c. **No Idling policy.** When using City vehicles, employees should strive to conserve fuel and reduce emissions by avoiding unnecessary idling. Therefore, except in traffic or on routine stops, employees should make every effort to prevent city vehicles from idling in excess of three minutes.
 - d. **Complete Streets policy.** The City of Alpharetta shall expand new street requirements to create complete streets where appropriate (See Exhibit 1). Complete street standards include shared use paths or bike lanes in addition to the current pedestrian sidewalk requirements. Pedestrian signals, signs, street furniture, and lighting may also be

included. The city traffic engineer has identified streets shown as “Collector” as the most appropriate category for utilization of complete street design standards, especially those streets which serve residential areas and could provide east-west bicycle access to the Greenway system. Mayfield Road is an example of a complete street candidate (See Exhibit 2).

e. **Bike and Pedestrian Friendly Design policy.** Alpharetta shall continue to encourage bicycle and pedestrian options citywide by ensuring the following:

1. the interconnectivity of developments for safer bicycle and pedestrian access.
2. the placement of bicycle racks at locations throughout the city.
3. the requirement of bicycle racks at all new community facilities including ball fields, parks and city hall.
4. the construction of sidewalks throughout the City of Alpharetta.
5. the extension of the Greenway system to the greatest extent possible.
6. the coordination of these efforts with adjoining jurisdictions.

6. Recycling and Waste Reduction

a. **Green Purchasing policies.** It is the policy of the City of Alpharetta to purchase products which are recyclable or reusable or contain recycled materials if the quality and fitness of such products are equal to un-recycled products, including a price preference not to exceed 10% over the lowest price quoted by suppliers of comparable un-recycled products as determined by the user department. The product price comparison shall include life cycle cost considerations, when applicable. Each user department shall make every reasonable effort to purchase and use recycled products or those with recycled content whenever feasible to the extent such use does not adversely affect health, safety, or operational efficiency and effectiveness as determined by each user department, including but not limited to the items indicated on Attachment 1, next page. The term "recycled products" shall be construed to mean products which contain recycled materials or are reusable or recyclable, provided however, that recycled paper products must contain recycled materials.

1. Each user department shall ensure that all purchases of copy, computer, and fax paper will contain a minimum of 30% recycled

content (10% cap on price preference is not applicable). Furthermore, each user department shall strive to purchase paper products containing a minimum of 30% recycled content whenever feasible.

2. Each user department shall consider, where feasible, the ability of products and/or their packaging to be reused, reconditioned, or recycled.
3. Each user department shall purchase, where feasible, products which minimize waste and toxic by-products in their manufacture, use, recycling, and disposal.
4. Included in this policy is a preference for EnergyStar rated appliances and equipment.

Clarification 4-20-9: Each user department shall purchase EnergyStar rated appliances and equipment subject to the following exceptions:

- a. The user department documents that the designated EnergyStar product is not cost-effective over the life of the product taking energy cost savings into account (e.g. life cycle costs); or*
 - b. The user department documents that no EnergyStar product is reasonably available that meets the functional requirements of the department.*
5. The 10% price preference shall be granted only if the fitness and quality of recycled products are at least equal to un-recycled products as determined solely by the user department. Product price comparison shall include life cycle cost considerations, when applicable.

Attachment 1: Recycled Product Listing

Plastic	Paper	Rubber
Carpet	Business cards	Dock bumpers
Construction wall coverings	Computer paper	Floor tiles
Corrugated drain pipe	Corrugated boxes	Retread tires
Culverts	Copier paper	Rubberized asphalt
Curbside recycling containers	Cover stock	Trailer bumpers
Dollies	Envelopes	Wheel chocks
Fence posts	Facial tissue	
Fire engine cab mats	Fax paper	
Garbage can liners	Legal pads	
Ice scrapers	Letterhead	
Indoor/outdoor furniture	Linerboard	
Landfill caps & liners	Loose-fill packaging	
Benches	Mailing tubes	
Lumber	Napkins	
Pallets	Newsprint	
Parking bumpers	Padded mail bags	
Plastic bags	Paper towels	
Playground equipment	Poster board	
Refuse carts	Toilet tissue	
Shower dividers	Typing paper	
Speed bumps		
Traction mats		
Truck bed mats		
Urinal screens		

Other Materials

- Acoustic ceiling tiles
- Cellulose fiber insulation
- Compost
- Fly ash/concrete mixtures
- Glassphalt
- Reflective road striping
- Re-refined lubricating oil
- Road signs
- Roofing shingles

b. Community Involvement policy. In order to be effective, recycling must be a community wide effort and not just a government initiative. However, in its leadership role, government should not only set the recycling example, but should also institute programs that will provide the community with maximum recycling participation opportunities. Therefore, the City of Alpharetta shall continue the following:

1. to offer curbside recycling to all residents.
2. to coordinate with the City of Roswell to offer regularly scheduled events at the Recycling center for items such as large household appliance, scrap lumber and technology products.
3. to offer opportunities to recycle paper products such as telephone books and newspapers.
4. to offer opportunities to recycle seasonal products such as Christmas trees.
5. to encourage waste reduction through the 'pay-as-you-throw' container program that ties cost to the quantity of trash removed.

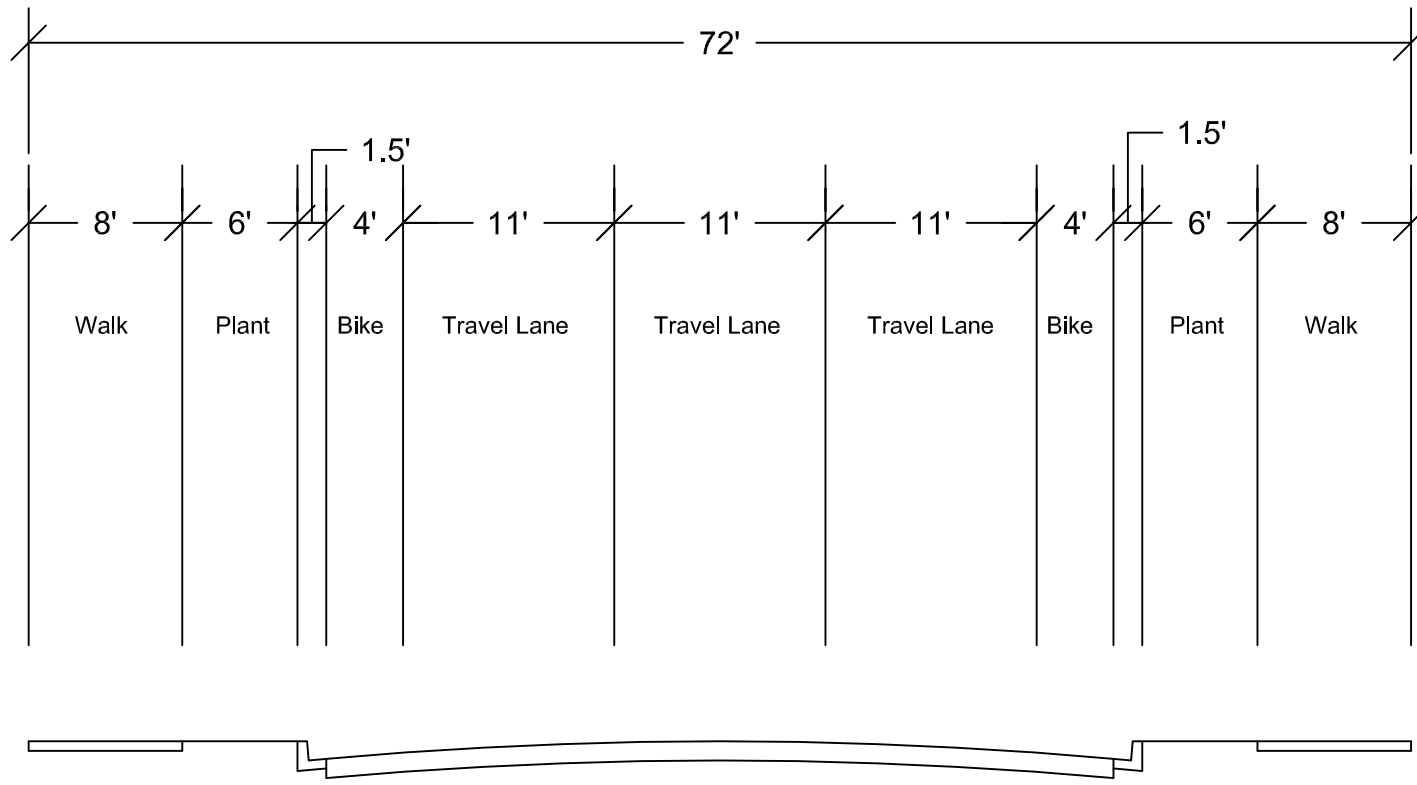
7. Land Use

a. **Incentives.** The City of Alpharetta shall encourage transit oriented development, redevelopment in historic downtown, and mixed-use development where appropriate. In order to promote desirable development, the City shall continue to identify opportunities to provide incentives such as through the Historic Downtown Incentive Zoning program and through specific zoning conditions that recognize the benefit of environmentally advantageous development projects.

8. Education

a. Information Sharing policy.

1. The City shall educate its employees about the green policy measures contained herein so that the employees will become active participants in the Green City Program, thereby, ensuring its maximum effectiveness.
2. The City shall continue to provide environmental education to school children in order to encourage recycling and conservation and to bring awareness to the Green City Program.



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Section 1

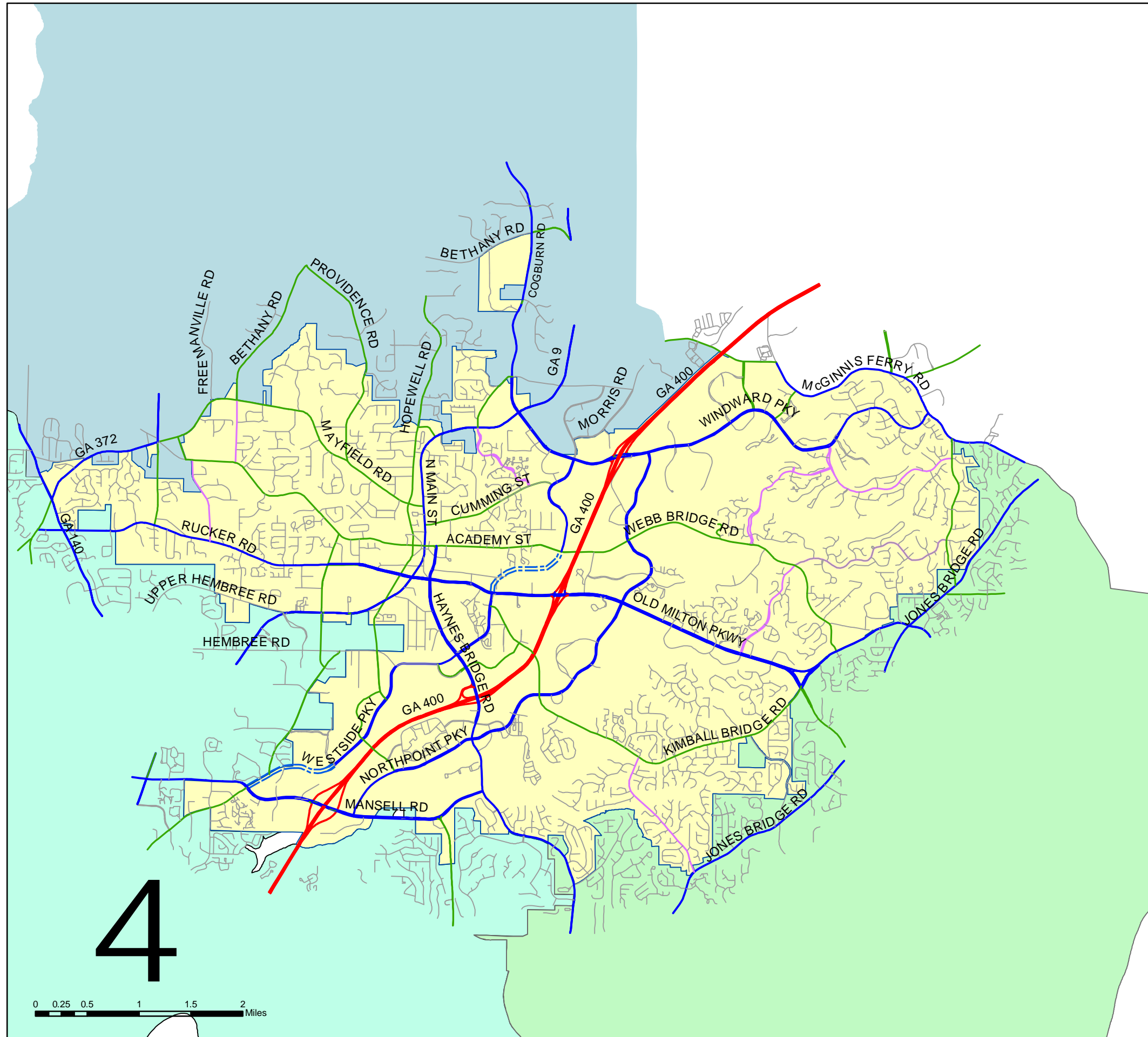
Alpharetta Complete Streets: Collector Street



Roadway Functional Classification

Legend

- Freeway
- Arterial
- Collector
- Neighborhood Collector
- Local Street
- Under Construction



DATE OF LAST MAP REVISION

Nov. 18, 2008

Department of Engineering and Public Works