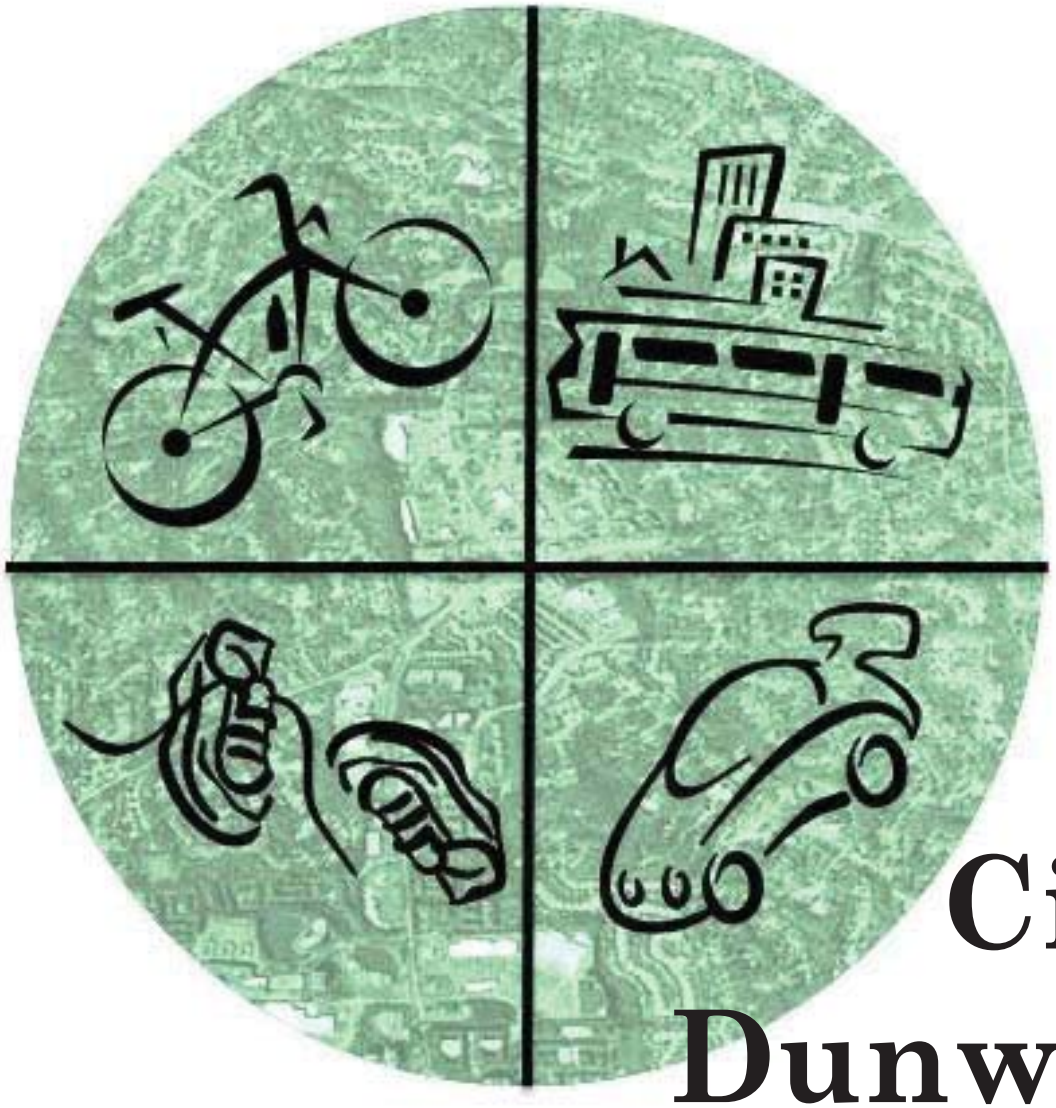

City of Dunwoody

Comprehensive Transportation Plan

March 2011

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

City of Dunwoody

Comprehensive Transportation Plan

March 2011

City of Dunwoody

Comprehensive Transportation Plan

Prepared for:
City of Dunwoody

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Date:
March 2011

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Appendices

Executive Summary

As the City's first Comprehensive Transportation Plan (CTP), this document identifies transportation strategies and projects for the City to implement based on the policy and goal statements set forth in the City's first Land Use Comprehensive Plan. The result is a comprehensive, detailed transportation master plan that meets the specific needs of the City by making operational improvements, creating a communitywide bicycle and pedestrian network, increasing network connectivity, and preserving the current investment in transportation infrastructure.

Guiding principles were developed to shape the development of policies and projects based on input received from the community, policies and goals identified in the comprehensive plan, and existing conditions. The guiding principles center around three core values: choice, connectivity, and community. Statements were developed for each core value to further provide guidance in the development of the plan, policies, and projects.

Choice:

- Provide a transportation system that emphasizes choice by increased mobility for all users, increased connectivity, and increased health enrichment options
- View the street as a public space with the intent to serve multiple functions
- Provide for equal access by all users in transportation expenditures

Connectivity:

- Create an integrated network of transportation facilities that connects people to where they want to go, both in the community and destinations near city limits
- Establish a maintenance and safety program that will enhance the existing system
- Prioritize multi-modal transportation options

Community:

- Enhance the Dunwoody community first and the Atlanta region second in transportation investments

- Provide opportunities for increased interaction within the community, increased recreational opportunities, and increased active living opportunities

The CTP seeks to provide a framework based on these principles to identify, prioritize, and implement policies and projects that will meet the specific needs of the City as identified in the Community Agenda of the Comprehensive Plan.

Major Recommendations

Transportation project recommendations include the following:

	Project Description
1 ATMS/ITS Corridor Project	
1	ATMS/ITS in Perimeter CID, Dunwoody Village, and along Chamblee Dunwoody Road
16 Intersection Improvement Projects	
1	Mount Vernon Road at Vermack Road
2	Womack Road at east driveway of GA Perimeter College
3	Mount Vernon Road and Chamblee Dunwoody Road at Nandina Lane
4	Mount Vernon Road at Mount Vernon Place
5	Mount Vernon Road at Tilly Mill Road
6	Tilly Mill Road at Mount Vernon Place
7	Womack Road at Vermack Road
8	Chamblee Dunwoody Road from Vermack Road to North Shallowford Road
9	Tilly Mill Road at North Peachtree Road
10	Chamblee Dunwoody Road at Spalding Drive
11	Vermack Road at Parliament Road/Old Village Run
12	Mount Vernon Road at Chamblee Dunwoody Road
13	Mount Vernon Road at Ashford Dunwoody Road/Trailridge Way
14	Mount Vernon Road at Tilly Mill Road
15	Mount Vernon Road at Jett Ferry Road
16	Mount Vernon Road at Dunwoody Club Drive

Project Description

10 Multi-Modal Improvement Projects

1. Chamblee Dunwoody Road from I-285 to North Shallowford Road
2. Chamblee Dunwoody Road from Mount Vernon Road to Roberts Drive
3. Peachford Road from North Shallowford Road to North Peachtree Road
4. North Shallowford Road from Cotillion Drive to Peeler Road
5. Cotillion Drive
6. Dunwoody Park from Chamblee Dunwoody Road to Peachford Road Extension/Dunwoody Park South
7. Dunwoody Park from Peachford Road Extension/Dunwoody Park South to North Shallowford Road
8. Dunwoody Park North from Dunwoody Park to new roadway
9. Ashford Center Parkway/Womack Road
10. Dunwoody Village Internal Streets

5 Center Turn Lane Improvement Projects

1. Mount Vernon Road between Ashford Dunwoody Road and Mount Vernon Place
2. Mount Vernon Road between Mount Vernon Place and Dunwoody Club Drive
3. Mount Vernon Road between Dunwoody city limit and Ashford Dunwoody Road
4. North Peachtree Road between North Forrest Trail and Peachford Road
5. Tilly Mill Road between Peeler Road and Peachtree Industrial Boulevard

7 Bicycle and Pedestrian Improvement Projects

1. Signed bike routes and sharrows
2. Mount Vernon Road at North Peachtree Road
3. On-street bike lanes or multi-use paths
4. Neighborhood Trails
5. Path connection between Ridgeview Road (north) and Ridgeview Road (south)
6. On-street bike lane or multi-use path along Spalding Drive
7. Bicycle route along Valley View Road and Ashford Gables Drive

4 New Location Roadway Projects

1. Dunwoody Village Multi-Modal Improvements
2. Peachford Road Extension
3. New street connection between Ravinia Parkway and Perimeter Center East
4. New street connection between Asbury Square and Ashford Parkway

1 Existing Roadway Reconfiguration Project

	Project Description
1	Dunwoody Village Parkway
1 Study	
1	Dunwoody Village Traffic Study

Transportation policy recommendations include the following:

- Road Maintenance/Paving Program – The City completed a Pavement Management Analysis Report in February of 2010. Policy recommendations in the CTP include implementing the recommendations from the Pavement Management Analysis Report.

- Sidewalk Improvement Program – The City of Dunwoody established a Sidewalk Improvement Policy in April of 2010. The purpose of the program is to guide prioritization and budgeting for sidewalk improvements to meet the goal of achieving a connected and accessible pedestrian network. Policy recommendations in the CTP include implementing the Sidewalk Improvement Policy and programs created through it.

- Sidewalk Design Standards – Goals of the CTP aim to make walking and bicycling as convenient and safe as possible through complete networks. The City should adopt minimum sidewalk design standards throughout the City. Recommendations include establishing standards in the Dunwoody Village and Georgetown redevelopment area, the Perimeter Center area, and along arterial and collector streets.

- Trail Connections – With the development of a Parks and Greenspace Comprehensive Plan, the City should continue to look for additional trail connections to destinations throughout the City.

- Complete Streets Policy – The City should adopt a Complete Streets Policy. Complete Streets is a concept that streets are for pedestrians, cyclists, transit riders, and cars, not just for the exclusive use of automobiles. Complete street networks are safer, more livable, and welcoming to everyone. When implementing new street connections or reconstructing existing roadways, accommodations for all users should be incorporated.

- Transit Coordination – For the City to provide viable transportation alternatives, additional transit and shuttle services should be explored between the City of

Dunwoody and PCID. It is recommended that the City engage with PCID to determine the feasibility of a circulator transit service to expand upon the existing transit service and connect Perimeter Center to other commercial areas within Dunwoody.

- Coordination with Georgia Perimeter College – The City should work with Georgia Perimeter College to study the feasibility of shuttle system linking the MARTA station and possible existing parking areas along Peachtree Industrial Boulevard and I-285 to Georgia Perimeter College and to improve on-site and driveway traffic management.

- Zoning and Development Regulations – In conjunction with an update of the City's zoning and development regulations, bicycle requirements (i.e., bicycle parking, and end-of-trip facilities) should be considered for new development.

- Education and Awareness Programs – The City should promote education and awareness of traffic laws and safety. The City should partner with advocacy groups, citizen groups, associations, and education entities to promote and implement alternative transportation programs, including walking and biking.

Introduction

Dunwoody officially became a city on December 1, 2008 as the result of a community-led movement to incorporate. Residents, however, have long identified themselves as "living in Dunwoody" with a rich and unique history separate from unincorporated DeKalb County. The City is located on the most northern tip of DeKalb County and is bordered by Fulton County on the north and west, Gwinnett County to the northeast, and I-285 to the south. The Cherokee Indian tribe of the Creek Confederation originally inhabited the City, and by 1820, Cherokee farms dotted the area around the Chattahoochee as white settlers began to arrive and create homesteads. After the war, Major Charles Dunwoody decided to build a new home near Chamblee Dunwoody Road and Spalding Drive. Railroad construction resumed and was in business in the fall of 1881. The Roswell Railroad tied into the Air-Line at Roswell Junction with a stop at Dunwoody Station. Dunwoody soon developed as a crossroads community at the intersection of Mount Vernon Road at Chamblee Dunwoody Road and has continued to flourish. The City's mission is to provide the highest quality of life for individuals who live, work, or play in the City.

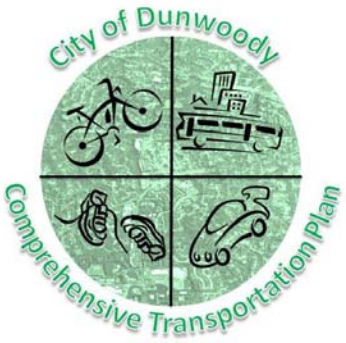
The City's population was 39,050 residents in 2009, according to Atlanta Regional Commission's (ARC's) population estimates and has experienced steady growth. The dominate land use in the City is medium-density residential with commercial nodes concentrated primarily at the southern edge of the City and the intersections of major travel corridors in the City. The City is nearly built-out, and future growth and development is likely to occur through redevelopment efforts.

Study Background

The Community Agenda of the City's Comprehensive Land Use Plan provided the foundation for developing a CTP. The Community Agenda set policy and goal statements to guide the effort in developing the transportation plan. Policies included prioritizing multi-modal transportation options (such as auto, walking, biking and transit), creating a communitywide pedestrian and bicycle network, establishing programs and road standards to encourage use of the network, increasing network

connectivity, promoting travel demand management, preserving the system through effective maintenance, and supporting regional efforts related to transit service. Identified goals include specific action items for the City to explore and implement that address the policy statements.

Purpose and Scope



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Guiding principles were developed to shape the development of policies and projects based on input received from the community, policies and goals identified in the comprehensive plan, and existing conditions. The guiding principles center around three core values: choice, connectivity, and community. Statements were developed for each core value to further provide guidance in the development of the plan, policies, and projects.

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Community:

- Enhance the Dunwoody community first and the Atlanta region second in transportation investments
- Provide opportunities for increased interaction within the community, increased recreational opportunities, and increased active living opportunities

The CTP seeks to provide a framework and guidance based on these principles to identify, prioritize, and implement policies and projects that will meet the specific needs of the City as identified in the Community Agenda of the Comprehensive Land Use Plan.

Planning Context

Transportation planning must consider many other aspects of planning and the surrounding environment. The transportation system is a product of the development pattern, natural environment, and community desires and needs.

The CTP has been developed with the premise that the City will seek to partner and coordinate with other local, regional, and state organizations. For the plan to be successfully implemented, the City will need to work with its partners to address areas of overlap to provide the best possible solution for the community.

Intergovernmental Coordination

Below are other local, regional, and state organizations that the City will need to coordinate with on transportation issues as a member of the Atlanta region.

DeKalb County

DeKalb County is Georgia's third-largest county with more than 700,000 residents. The County's Public Works Department is responsible for major DeKalb County infrastructure projects. Up until the City's incorporation, the County handled all public

services and support to the residents of Dunwoody. When the City incorporated, many of those services transitioned over to the City.

Perimeter Community Improvement Districts

A CID is a public-private partnership for financing improvements in a predetermined geographical area. Commercial property owners in that defined area elect to pay an additional tax for the purposes of funding projects to improve the public realm, such as public transportation, road construction and maintenance, parks and recreational areas, stormwater and sewage, and parking. PCIDs encompass the business area around Perimeter Mall and include areas within the cities of Sandy Springs and Dunwoody as well as unincorporated DeKalb County. The mission of PCIDs is to develop efficient transportation services and the additional property taxes collected help to plan, design, and construct transportation and infrastructure improvements projects. To date, PCIDs have contributed $14.2 million in additional property taxes for projects either completed or under way and have leveraged $88.3 million more in local, state, and federal dollars.

City of Sandy Springs

The City of Sandy Springs is the second-largest city in metro Atlanta and borders the City of Dunwoody to the north and west. With roads serving as the border between these two cities, it is important for the City to regularly engage and coordinate with the City of Sandy Springs.

Atlanta Regional Commission

ARC serves as the federally-designated Metropolitan Planning Organization (MPO) for the 18-county Atlanta region. ARC develops regional plans and policies that seek to enhance mobility, reduce congestion, and meet air quality standards, including the Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP). The RTP is the region's long-range plan that covers a planning horizon of 20 years and identifies projects across all modes of transportation, transportation demand management strategies, and emission reduction strategies. The RTP is updated every four years as required by federal mandate for areas that do not meet federal air quality standards. The TIP allocates federal funding for transportation projects in the first six years of the RTP. The TIP must be consistent with the objective of the RTP, updated annually, and financially balanced. ARC is currently developing the next RTP, Plan 2040, which will provide direction for the region on how to accommodate economic and population growth over the next 30 years. Plan 2040 will

develop regional policies and actions that allocate resources for transportation investments. Plan 2040's scope includes a comprehensive regional plan for the 10-county ARC, a comprehensive regional transportation plan for the 18-county MPO area, and an air quality assessment for the 20-county (eight-hour) non-attainment area.

Georgia Regional Transportation Authority

The Georgia Regional Transportation Authority (GRTA) assists the governor's office in developing transportation polices for the metro Atlanta region. GRTA works with state and regional agency partners to prioritize transportation plans and programs. Effectiveness is measured by improving air quality, mobility, accessibility and land use practices and by reducing congestion.

GRTA manages the Xpress commuter transportation service within the region, which offers commuters an alternative to driving. Operated only during the week, Xpress builds upon the successful express bus services operated by Cobb County Transit and Gwinnett County Transit. It provides a key link between the growing suburbs in the region and the MARTA rail and bus network in Fulton and DeKalb counties.

Georgia Department of Transportation

The Georgia Department of Transportation (DOT) plans, constructs, maintains, and improves state-owned roads and bridges. Georgia DOT also provides planning and financial support for other modes of transportation such as mass transit and airports in addition to other responsibilities. Georgia DOT's mission is to provide a safe, seamless, and sustainable transportation system that supports Georgia's economy and is sensitive to its citizens and the environment. Georgia DOT is governed by a 13-member State Transportation Board whose powers include (but are not limited to) designating which public roads are encompassed within the state highway system, approving long-range transportation plans, overseeing the administration of construction contracts, and authorizing lease agreements.

Georgia DOT coordinates with city and county officials to prioritize projects that will be developed and constructed. The City currently has three state-maintained roads: I-285, Cotillion Drive, and Peachtree Industrial Boulevard (SR 141).

Metropolitan Atlanta Rapid Transit Authority

MARTA is the transit agency that serves the City of Atlanta, Fulton County, and DeKalb County (including the City of Dunwoody) through a 1 percent sales tax levy in

those jurisdictions. Current and planned services include heavy rail and extensive bus services, park-and-ride lots, and express bus services along major travel corridors.

There is a heavy rail station in the City of Dunwoody on Hammond Drive. The station is in close proximity to Perimeter Mall and mainly serves the Central Perimeter activity center. Additionally, three MARTA bus routes currently serve the City of Dunwoody.

Related Planning Documents

The City of Dunwoody is affected by a number of studies and plans, including comprehensive plans, redevelopment plans, Livable Centers Initiative (LCI) studies, and transportation plans. To avoid duplication of efforts or conflicts with recommendations from previous and currently under way studies, the project team obtained and reviewed the available studies and plans. Additionally, the project team coordinated with the teams currently producing the Dunwoody Village and Georgetown area redevelopment plans, LCI studies, and revive285 *top end*. Previous and ongoing studies are summarized as follows.

Dunwoody Comprehensive Plan

The City adopted its first Comprehensive Plan last year. At the core of the Comprehensive Plan is a vision statement that will guide planning efforts in the City for the next 20 years:

> *The City of Dunwoody preserves the past, promotes economic vitality, protects the residential nature of its neighborhoods, presents viable options as a place to live through all stages of life and ability, and prepares for the future through:*
>
> - *Historical designation designed to save, restore, and promote our heritage properties*
> - *Continued high quality development of the Perimeter business area designed to promote the economic engine of the City while enhancing convenience to products and services for our citizens*
> - *Conservative, conscientious redevelopment of a variety of living options designed for all stages of life and ability*

- *Increased connectivity, enhanced transportation options, including bicycle and pedestrian, expanded functional green space and park ownership designed to improve the health, vitality and recreational enjoyment of our City's businesses and residents and long-term sustainability of our City.*

The Community Agenda identified 11 character areas throughout the City. Transportation goals for each character area further the vision of the City to increase connectivity and transportation options throughout the City while complementing the land use strategies identified in the plan. Transportation goals and policies established in the Community Agenda are the building blocks for the CTP. The policies emphasize creating and prioritizing multi-modal options, including a comprehensive bicycle and pedestrian network, and promoting a bike culture through programs for all ages.

Dunwoody Character Areas

Perimeter Center
Dunwoody Village
Georgetown-Shallowford Road
Winter's Chapel Redevelopment Area
Jett Ferry Gateway
Tilly Mill Gateway
Suburban Neighborhood
Multi-Family/Mixed-Use
Community Facility/Water Treatment
Institutional/Campus
Office

Redevelopment Plans

The City has undertaken two redevelopment plans. The Dunwoody Village Plan was awarded funding through ARC's LCI Program. The plan takes a look at transforming the historic center of the City into a vibrant town village by incorporating a mix of uses and improving traffic circulation. The Georgetown Plan explores potential redevelopment opportunities to transform the area between Chamblee Dunwoody Road and North Shallowford Road along I-285 into a pedestrian-oriented activity center with a mix of uses, community resources, and multiple transportation options. It seeks to take advantage of the planned transit station with the revive285 *top end* initiative.

Livable Centers Initiative

In 2000, PCID completed an LCI study focused on comprehensive recommendations for transportation enhancements, future land use, zoning, development standards, and urban design features that resulted in a strategic action plan for implementation of land use and transportation projects. In 2005, the PCID completed a five-year update to the original plan, providing further detail for each of the future land use districts proposed in the original LCI plan and new transportation and infrastructure improvements. In 2010, the PCID was awarded LCI Supplemental Funding to complete a comprehensive

10-year update, including an update to the market study completed in 2000, which is currently under way.

The 2005 LCI update reported that 39 of the 48 projects listed in the five-year action plan had been funded and were either in design, under construction, or completed.

DeKalb County Comprehensive Transportation Plan

The DeKalb County CTP, completed in May of 2007, provides transportation policy and program development for the County through the year 2030, linking transportation and other planning efforts. Until the City's recent incorporation, the County planned and managed the transportation infrastructure improvements and maintenance in the City.

Georgia DOT/GRTA revive285 top end Initiative

Revive285 *top end* is a planning initiative sponsored by Georgia DOT and GRTA to develop a solution to the traffic challenges on the I-285 corridor between I-75 and I-85. The initiative has completed a detailed analysis of alternatives and has begun the environmental documentation process. The initiative also includes transit planning, station planning, concept design, and traffic data analysis.

Existing Conditions/Needs Assessment

The transportation network in the City of Dunwoody is made up of roadway, transit, bicycle, and pedestrian facilities. The existing conditions analysis and needs assessment includes a discussion of the roadway network and traffic analysis as well as transit, bicycle, pedestrian, and safety conditions.

Roadway Network

While Dunwoody has been settled since the 1830s, most development has taken place more recently, developing the City in a modern suburban style. The street configuration in the study area is typical suburban with a hierarchical street network. Arterials carry through traffic and collectors serve subdivisions with cul-de-sacs as opposed to a traditional grid network.

Regional Context

Dunwoody is nestled between Sandy Springs to the west and Gwinnett County, a major population and employment center with 790,000 residents and 295,000 jobs, to the east. Part of the Central Perimeter, including Perimeter Mall and its 1.6 million square feet of retail space, falls within Dunwoody city limits.

Several facilities in the City of Dunwoody are part of the regional transportation network. Mount Vernon Road connects executive housing in Sandy Springs and northwest Atlanta as well as the Central Perimeter to Dunwoody from the west. To the east, Mount Vernon Road connects to Spalding Drive and Gwinnett County. Ashford Dunwoody Road connects the City of Dunwoody south to Peachtree Road. Chamblee Dunwoody and North Shallowford Roads both connect the cities of Dunwoody and Chamblee.

Access to I-285 and the national highway network is provided by Ashford Dunwoody Road. Additionally, Chamblee Dunwoody and North Peachtree Road provide access to I-285 through a split diamond interchange. Winter's Chapel and Tilly Mill roads provide access to Peachtree Industrial Boulevard (SR 141) at the southern edge of the city near I-285.

The following roads in the City of Dunwoody are part of the ARC Regional Strategic Transportation System (RSTS):

- Ashford Dunwoody Road
- Chamblee Dunwoody Road
- Hammond Drive
- Mount Vernon Road
- Perimeter Center West

The RSTS is composed of facilities in the regional transportation system that accommodate the region's most critical trip movements. ARC recommends focusing federal transportation funds on the RSTS. See Map 1: ARC's Regional Strategic Transportation System for roads in the City that are on ARC's RSTS.

Truck Routes

Designated truck routes in the City of Dunwoody include Ashford Dunwoody Road, Chamblee Dunwoody Road, Mount Vernon Road, Winters Chapel Road, and I-285.

Truck routes in the City of Dunwoody are shown on Map 2: Truck Routes.

Signalized Intersections

There are a total of 54 signalized intersections within the City. These intersections are shown on Map 3: Signalized Intersections

Area Type and Functional Classification

Roadways are classified by Georgia DOT based on area type and functional classification. Area type is either urban or rural, with different design standards required for each. The area type for all

Roadway Functional Classification
Interstate Principal Arterials
Principal Arterials
Minor Arterials
Collector Streets
Local Roads

roads in the study area is urban. Functional classification provides a hierarchical ranking based on the mobility and accessibility a street provides to users. Higher functional classifications provide more mobility and limited access. Conversely, lower functional classifications provide less mobility and excellent access to adjacent land uses. Following are descriptions of functional classes from the highest functional class to the lowest.

- Interstate principal arterials – Grade-separated facilities that provide the highest level of mobility but no access to adjacent land uses and controlled access to the intersecting road network only at interchanges. Freeways and expressways provide similar mobility and access but generally connect regional destinations and not multiple states. Examples in metro Atlanta include SR 400 and the Stone Mountain Freeway.

- Principal arterials – Carry traffic between regional activity centers, such as a central business district and bedroom communities. These facilities may have at-grade intersections and driveways. Examples in metro Atlanta include Freedom Parkway and Ponce de Leon Avenue.

- Minor arterials – Also carry regional traffic but have comparatively more at-grade intersections and driveways. North Decatur Road east of Briarcliff Road is an example in metro Atlanta.

- Collector streets – Act as the link between local roads and arterials. They have numerous at-grade intersections and driveways. Examples in metro Atlanta include Dresden Drive and Lullwater Road.

- Local roads – Provide excellent access to land at the expense of mobility. Subdivision streets with driveways for each single-family home are a good example of local roads.

Key roadways in the study area have the following area types and functional classifications:

- Interstate principal arterials
    - I-285

- Urban minor arterials

- Ashford Dunwoody Road
- Chamblee Dunwoody Road (from Roberts Drive to I-285)
- Dunwoody Club Drive
- Hammond Drive
- Mount Vernon Road
- Perimeter Center West
- Roberts Drive
- Spalding Drive
- Tilly Mill Road
- Winters Chapel Road

- Urban collectors
  - Chamblee Dunwoody Road (from Roberts Drive to Spalding Drive)
  - Cotillion Drive
  - Happy Hollow Road
  - North Peachtree Road
  - North Shallowford Road
  - Peeler Road
  - Savoy Drive
  - Vermack Road
  - Womack Road

With the exception of I-285, urban minor arterial is the highest functional classification serving the study area. The nearest east-west urban principal arterial is Ponce de Leon Avenue/Scott Boulevard, which is substantially south of the study area.

Map 4: Roadway Network and Functional Classification illustrates the roadway network and functional classifications in the study area.

Access Management

Access management is the proactive control of points where vehicles can enter, leave, and cross a road. Access management is important because motorists turning right or left from driveways or cross streets move more slowly than through traffic. These slower-moving vehicles disrupt the flow of traffic on the main line, lowering throughput. Additionally, broadside and rear-end collisions are the result of conflicts produced by the speed differential between motorists on the main road and those entering from driveways and cross streets. Reducing access has positive impacts on capacity and safety; however, the tradeoff is limited ingress and egress to adjacent land uses.

While signal timing and intersection capacity have a strong influence on throughput along arterials, reducing access can increase the capacity of a corridor and positively impact safety. According to *Benefits of Access Management: Access Spacing* prepared by the Federal Highway Administration (FHWA), roadway speeds are reduced by an average of 2.45 miles per hour (mph) for every 10 access points per mile. According to Minnesota DOT, roads with a large number of closely spaced driveways are always less safe than similar facilities with stricter access management. Urban roadways with 100 feet between driveways experience approximately 100 percent more accidents than similar roads with a driveway spacing of 250 feet. As posted speeds increase, conflict increases.

Higher concentrations of traffic signals increase travel time and crash rates. Each additional signalized intersection introduces delay and additional conflict points where crashes occur. Table 1 illustrates the relationship between signals per mile and travel time.

Table 1: Increase in Travel Time by Signals per Mile

Signals per Mile	Increase in Travel Time (percent)
2	-
3	9
4	16
5	23
6	29
7	34
8	39

Source: FHWA

Crash rates increase significantly as traffic signals density increases. Table 2 shows the relationship between signals per mile and crash rates.

Table 2: Crash Rate by Signals per Mile

Signals per Mile	Crashes per Million VMT
< 2	3.53
2 – 4	6.89
4 – 6	7.49
> 6	9.11

Source: FHWA

Access management is a delicate balance between providing mobility and access to land uses. As such, there is no one optimal set of standards for every situation. The following examples are presented as a starting point for discussion and are not recommendations. Table 3 is an example of driveway spacing by posted speed limit.

Table 3: Driveway Spacing by Speed Limit

Posted Speed Limit (mph)	Driveway Spacing (feet)	Number of Driveways per Mile
20	85	62
25	105	50
30	125	42
35	150	35
40	185	28
45	230	22
50	275	19

Source: Adapted from City of Tallahassee, Florida, and OKI Regional Government, Cincinnati, Ohio

Table 4 is an example of access management standards by the functional classification of a roadway instead of the speed limit.

Table 4: Driveway Spacing by Functional Classification

Functional Classification	Minimum Spacing Between Driveways (feet)	Number of Driveways per Mile
Urban Minor Arterial	600	9
Urban Collector	300	18

Source: Adapted from Waushare County, Wisconsin

Currently, the number of access points on major corridors in the City of Dunwoody exceeds the above examples, especially in commercial areas. Purchasing existing access rights to reduce the number of driveways is cost prohibitive. As redevelopment occurs, stronger access management could be required as part of the permitting process. Strategies such as inter-parcel access and service roads along the back of properties should be explored.

Traffic Analysis

The purpose of traffic analysis is to identify deficiencies in the existing roadway network, predict future issues, and inform the development of candidate projects to address operational and capacity problems.

Assigning letter grades is a common way of measuring the level of service (LOS) being provided by a roadway facility. While letter grades are roughly equivalent to student report cards with LOS F being failing and LOS A being the best, achieving a LOS above C is not cost effective in an urban environment because transportation investments are expensive and the excess capacity associated with LOS A and B is unused. Finally, as a result of cost constraints, LOS D is often considered an acceptable LOS in urban areas.

Table 5: LOS Grades and Descriptions

Grade	Description
A	Completely free-flow conditions. Operation of motor vehicles is virtually unaffected by the presence of other vehicles. Drivers are constrained only by the geometric features of the highway and his/her personal driving preferences. Minor disruptions to traffic flow are easily absorbed without a change in travel speed.
B	Free-flow conditions, but the presence of other vehicles begins to be noticeable. Average travel speeds should still be the same as LOS A, but drivers have slightly less room to maneuver. Minor disruptions to traffic flow are still easily absorbed without a change in travel speed. Nevertheless, there could be some brief, localized deterioration in flow.
C	Represents a range of driving conditions where the influence of traffic density becomes very noticeable. Average travel speeds begin showing some reduction. Drivers' ability to maneuver is clearly affected by the presence of other vehicles. Minor disruptions can be expected to cause queuing and serious, localized deterioration in traffic flow.
D	Represents a range of driving conditions where the ability to maneuver is severely restricted because of traffic congestion. Average travel speeds are reduced because of increased volumes. Only minor disruptions can be absorbed without the formation of extensive queuing and deteriorating traffic flow.
E	Represents driving conditions at or near capacity and is quite unstable. Vehicles can operate with minimum spacing at which uniform flow can be maintained. Disruptions cannot be readily dissipated. Disruptions will likely cause queues to form and service to deteriorate to LOS F. Passenger car mean speeds at capacity are highly variable and unpredictable.

Table 5: LOS Grades and Descriptions

Grade	Description
F	Represents forced or breakdown flow. Occurs either at a point where vehicles arrive at a rate greater than the rate at which they are discharged or at a point on a planned facility where forecasted demand exceeds computed capacity. Although operations at such points and on sections immediately downstream will appear to be at capacity, queues will form behind these breakdowns. Operations within queues are highly unstable with vehicles experiencing brief periods of movement followed by stoppages.

Source: Highway Capacity Manual 2000, Transportation Research Board

Methodology

Two methods for analyzing traffic conditions in the short and long term were used. Short-term analysis focused on intersections because operational improvements at over-capacity intersections can be implemented more quickly than additional capacity. Micro-simulation modeling was used for the short-term analysis. For longer time horizons, the accuracy of micro-simulation modeling is reduced. Therefore, Florida DOT-generalized annual average volume tables were used for the long-term analysis.

For the short term with a horizon year of 2015, an operational analysis was performed using Synchro micro-simulation software on 16 intersections throughout the City of Dunwoody. Peak-hour turning movement counts for both a.m. and p.m. peak hours were collected at the intersections for the existing conditions analysis. For traffic conditions in the horizon year of 2015, the ARC travel demand model was used to determine a growth factor along each corridor. Traffic counts were then multiplied by the growth factor to project 2015 volumes and analyzed. Results of this analysis are summarized in Table 6.

Long-term capacity analysis with a horizon year of 2030 was performed using the Florida DOT-generalized annual average volume tables to determine LOS by volume and facility type. Capacity is based on 24-hour volume counts. Twenty-four hour volume counts were collected for 25 roadway segments in the City of Dunwoody. These counts include both tube counts and volumes obtained from Georgia DOT through the State Traffic and Report Statistics database. Existing counts were used to analyze current conditions. For future conditions, forecast volumes from the ARC travel demand model were used. Results of this analysis are summarized in Table 7.

Table 6: City of Dunwoody Intersection LOS

Intersection	Existing (2010)		No-Build (2015)		Build (2015)	
	AM	PM	AM	PM	AM	PM
Chamblee Dunwoody Road at Roberts Drive	C	B	C	B	C	B
Chamblee Dunwoody Road at Dunwoody Village Parkway	A	C	A	C	A	C
Chamblee Dunwoody Road at Ashford Center Parkway/Womack Road	C	C	C	D	C	D
Ashford Dunwoody Road at Ashford Center Parkway	B	A	B	A	B	A
Mount Vernon Road at Ashford Dunwoody Road/Trailridge Way	**F**	**F**	**F**	**F**	C	C
Mount Vernon Road at Nandina Road	D	C	E	C	B	B
Mount Vernon Road at Chamblee Dunwoody Road	E	E	E	**F**	E	E
Mount Vernon Road at Tilly Mill Road/Wellesley Lane	C	B	C	C	C	C
Mount Vernon Road at N Peachtree Road	D	E	D	E	D	E
Womack Road at Vermack Road	E	E	**F**	**F**	B	B
Vermack Road at Olde Village Run/Parliament Road	B	C	B	C	B	C
Tilly Mill Road at Womack Road	C	C	C	C	C	C
Tilly Mill Road at N Peachtree Road	E	D	E	D	C	C
Tilly Mill Road at Peeler Road	C	C	C	C	C	C
Peeler Road at Old Village Lane	C	B	C	B	C	B
N Shallowford Road at Chamblee Dunwoody Road/Peeler Road	**F**	**F**	**F**	**F**	D	D

Table 7: City of Dunwoody Roadway Segment LOS

Road	Between		Existing 2010	No-Build		Build	
	Cross Street	Cross Street		2020	2030	2020	2030
Perimeter Center West	Perimeter Center Parkway	Perimeter Center Place	C	D	D	C	C
Hammond Drive	Perimeter Center Parkway	Perimeter Mall Entrance	C	D	E	A/B*	A/B*
Ashford Dunwoody Road	Hammond Drive	Ravinia	C	D	D	C	C
Ashford Dunwoody Road	Ashford Parkway	Ashford Gables Drive/Valley View Road	C	D	D	C	C
Ashford Center Parkway	Ashford Dunwoody Road	Chamblee Dunwoody Road	A/B*	A/B*	C	A/B*	A/B*
Chamblee Dunwoody Road	Cotillion Drive	Old Spring House Lane/Dunwoody Park	A/B*	A/B*	A/B*	A/B*	A/B*
Chamblee Dunwoody Road	Dunwoody Park	North Shallowford Road	C	D	D	C	C
Chamblee Dunwoody Road	Holly Oak Place	Kings Down Road	C	D	D	C	C
Chamblee Dunwoody Road	Nandina Lane	Dunwoody Village Parkway	**F**	**F**	**F**	D	D
Chamblee Dunwoody Road	Dunwoody Knoll Drive	Saint Andrews Drive	A/B*	A/B*	A/B*	A/B*	A/B*
Chamblee Dunwoody Road	Oakpoint Place	Spalding Drive	A/B*	A/B*	A/B*	A/B*	A/B*
Roberts Drive	Dunbrooke Lane	Witham Drive	E	E	**F**	D	D
Roberts Drive	Whitehall Pointe/Manor Oaks Court	Spalding Drive	C	D	D	A/B*	A/B*
Mount Vernon Highway	Trailridge Drive/Dunwoody Station Drive	Ashford Dunwoody Road	**F**	**F**	**F**	D	D
Mount Vernon Highway	Mount Vernon Way	Wellshire Place	**F**	**F**	**F**	C	D
Mount Vernon Highway	Vernon Oaks Drive	Manhassel Drive/Vermack Road	**F**	**F**	**F**	A/B*	C
Peeler Road	Olde Village Lane	Equestrian Way	C	D	D	C	C
Peeler Road	DeKalb Drive	Luray Drive	C	D	D	C	C
Peeler Road	Windwood Drive	Lakeside Drive	C	D	E	C	D
Tilly Mill Road	Tillingham Court	Womack Road	A/B*	C	D	A/B*	C

Table 7: City of Dunwoody Roadway Segment LOS

Road	Between		Existing 2010	No-Build		Build	
	Cross Street	Cross Street		2020	2030	2020	2030
North Peachtree Road	Cotillion Drive	N Forrest Trail/Dunwoody Crossing	A/B*	A/B*	C	A/B*	A/B*
North Peachtree Road	N Forest Trail/E Kings Point Circle	Brookhurst Drive	C	D	E	D	D
Winters Chapel Road	Winterhaven Court	Winterbrook Court	**F**	**F**	**F**	A/B*	C
Winters Chapel Road	Charmont Place	Fontainebleau Drive	E	E	**F**	D	D
Tilly Mill Road	Peachtree Industrial Boulevard	Chestnut Landing/Chestnut Drive	C	E	**F**	D	E

Note: Florida LOS and Quality of Service Manual does not differentiate between LOS A, B, and C for most types of low volume roadways. LOS A/B was assumed to be 2,000 vehicles per day less than the LOS C threshold.

Existing Traffic Conditions

An analysis of existing conditions is critical to understanding current traffic operations in the City of Dunwoody. This analysis identifies current intersections operating at a failing LOS and provides a baseline for comparison with future conditions.

Intersections currently operating at a failing LOS include:

- Mount Vernon Road at Ashford Dunwoody Road/Trailridge Way: Operates at LOS F during both a.m. and p.m. peak hours
- Mount Vernon Road at Chamblee Dunwoody Road: Operates at LOS E during both a.m. and p.m. peak hours
- Mount Vernon Road at North Peachtree Road: Operates at an acceptable LOS during the a.m. peak hour and at LOS E during the p.m. peak hour
- Womack Road at Vermack Road: Operates at LOS E during both a.m. and p.m. peak hours
- Tilly Mill Road at North Peachtree Road: Operates at LOS E during the a.m. peak hour and an acceptable LOS during the p.m. peak hour
- North Shallowford Road at Chamblee Dunwoody Road/Peeler Road: Operates at LOS F during both a.m. and p.m. peak hours

Roadway segments currently over capacity include the following:

- Chamblee Dunwoody Road between Nandina Lane and Dunwoody Village Parkway: Operates at LOS F
- Roberts Drive between Dunbrooke Lane and Witham Drive: Operates at LOS E
- Mount Vernon Road between Trailridge Drive/Dunwoody Station Drive and Ashford Dunwoody Road: Operates at LOS F
- Mount Vernon Road between Mount Vernon Way and Wellshire Place: Operates at LOS F

- Mount Vernon Road between Vernon Oaks Drive and Manhasset Drive/Vermack Road: Operates at LOS F

- Winters Chapel Road between Winterhaven Court and Winterbrook Court: Operates at LOS F

- Winters Chapel Road between Charmant Place and Fontainebleau Drive: Operates at LOS E

Mount Vernon Road has several intersections and segments currently over capacity. Addressing issues on Mount Vernon Road will be critical to improving traffic flow in the City of Dunwoody. Map 5: Level of Service shows LOS at major intersections and along several roadway segments in the City of Dunwoody.

Future Traffic Conditions

No-build and build scenarios were analyzed to determine future traffic conditions in the City of Dunwoody. A horizon year of 2015 was used for the short term and a horizon year of 2030 was used for the long term under both scenarios.

No-Build

The no-build scenario assumes that only planned and programmed improvements are made to the transportation system. Intersections predicted to operate at a failing LOS under the no-build scenario in 2015 include:

- Mount Vernon Road at Ashford Dunwoody Road/Trailridge Way: Will operate at LOS F during both a.m. and p.m. peak hours (the same as 2010)

- Mount Vernon Road at Nandina Road: Will operate at LOS E during the a.m. peak hour (a decline from LOS D in 2010)

- Mount Vernon Road at Chamblee Dunwoody Road: Will operate at LOS E during the a.m. peak hour and at LOS F during the p.m. peak hour (a decline from LOS E in 2010)

- Mount Vernon Road at North Peachtree Road: Will operate at an acceptable LOS during the a.m. peak hour and at LOS E during the p.m. peak hour (the same as 2010)

- Womack Road at Vermack Road: Will operate at LOS F during both a.m. and p.m. peak hours (a decline from LOS E during both peaks in 2010)

- Tilly Mill Road at North Peachtree Road: Will operate at LOS E during the a.m. peak hour and at an acceptable LOS during the p.m. peak hour (the same as 2010)

- North Shallowford Road at Chamblee Dunwoody Road/Peeler Road: Will operate at LOS F during both a.m. and p.m. peak hours (the same as 2010)

Roadway segments operating at an unacceptable LOS under the no-build scenario in 2030 include the following:

- Hammond Drive between Perimeter Center Parkway and Perimeter Mall Entrance: Will operate at LOS E (a decline from LOS C in 2010)

- Chamblee Dunwoody Road between Nandina Lane and Dunwoody Village Parkway: Will operate at LOS F (the same as 2010)

- Roberts Drive between Dunbrooke Lane and Witham Drive: Will operate at LOS F (a decline from LOS E in 2010)

- Mount Vernon Road between Trailridge Drive/Dunwoody Station Drive and Ashford Dunwoody Road: Will operate at LOS F (the same as 2010)

- Mount Vernon Road between Mount Vernon Way and Wellshire Place: Will operate at LOS F (the same as 2010)

- Mount Vernon Road between Vernon Oaks Drive and Manhasset Drive/Vermack Road: Will operate at LOS F (the same as 2010)

- Peeler Road between Windwood Drive and Lakeside Drive: Will operate at LOS E (a decline from LOS C in 2010)

- North Peachtree Road between N Forest Trail/E Kings Point Circle and Brookhurst Drive: Will operate at LOS E (a decline from LOS C in 2010)

- Winters Chapel Road between Winterhaven Court and Winterbrook Court: Will operate at LOS F (the same as 2010)

- Winters Chapel Road between Charmont Place and Fontainebleau Drive: Will operate at LOS F (a decline from LOS E in 2010)

- Tilly Mill Road between Peachtree Industrial Boulevard and Chestnut Landing/Chestnut Drive: Will operate at LOS F (a decline from LOS C in 2010)

Build

Based on the existing conditions and no-build analysis results, candidate projects to address the intersections and corridors with unacceptable LOS were developed. The list of candidate projects is shown in Appendix B.

As a result of constraints such as funding, availability of right-of-way, environmental issues, and presence of historic resources, not all candidate projects may be feasible to build. As part of the planning process, this list was reduced to a list of recommended projects and tested. In some cases, improvements to intersections or corridors to provide LOS D or better were unable to be made.

Intersections predicted to operate at a failing LOS under the build scenario in 2015 include:

- Mount Vernon Road at Chamblee Dunwoody Road: Will operate at LOS E during both a.m. and p.m. peak hours (the same as LOS E in 2010 and a slight improvement over LOS F in the p.m. peak hour under the no-build scenario)

- Mount Vernon Road at North Peachtree Road: Will operate at an acceptable LOS during the a.m. peak hour and at LOS E during the p.m. peak hour (the same as 2010 and the no-build scenario)

Tilly Mill Road between Peachtree Industrial Boulevard and Chestnut Landing/ Chestnut Drive will operate at LOS E, which is worse than the current LOS C but slightly better than LOS F under the no-build scenario.

Planned and Programmed Roadway Projects

Planned (long range)

- Widen Hammond Drive from Fulton/DeKalb County line to Ashford Dunwoody Road (four lanes to six lanes)

- I-285 managed lanes
- Revive285 *top end*

Programmed (short term)

- Diverging diamond interchange at Ashford Dunwoody Road at I-285
- Signal upgrades (completed during this writing):
  - Ashford Dunwoody Road at Mount Vernon Road
  - Ashford Dunwoody Road at Ashford Parkway (North)
  - Ashford Dunwoody Road at Ashford Parkway (South)
  - Ashford Dunwoody Road at Ashford Gables Drive/Valley View Road
  - Ashford Dunwoody Road at Ashford Green
  - Chamblee Dunwoody Road at Vermack Road
  - Chamblee Dunwoody Road at Old Spring House Lane/Dunwoody Park
  - Chamblee Dunwoody Road at Georgetown shopping center entrance
  - Chamblee Dunwoody Road at Cotillion Drive
  - Chamblee Dunwoody Road at Savoy Drive
  - Chamblee Dunwoody Road at Peeler Road
  - North Shallowford Road at Dunwoody Park/Lake Ridge Lane
  - North Shallowford Road at Pernoshal Court
  - North Shallowford Road at Peachford Road
  - North Shallowford Road at Cotillion Drive

- North Shallowford Road at Savoy Drive

- North Peachtree Road at Dunwoody Crossing

- North Peachtree Road at Savoy Drive

Perimeter Center CID Projects

- Six lane of Hammond Drive from Ashford Dunwoody Road to Peachtree Dunwoody Road with a complete streetscape package where applicable, shown planned as long range

- Complete Street improvements on Ashford Dunwoody Road from I-285 to Mount Vernon Road, including upgrading all signalized intersections to PCIDs standards, pedestrian improvements, signage, crosswalks, and roadway lighting improvements

- Complete Street improvements on Meadow Lane Road

- Implementation of Advanced Transportation Management System (ATMS) and Intelligent Transportation System (ITS) components

  ATMS interconnects signal systems, allowing many traffic signals along a corridor to be controlled by one master signal controller. Interconnected traffic signal systems offer many benefits, including reducing the level of effort involved in signal re-timing, monitoring traffic flow, implementing emergency timing plans, and special event timing plans. Having a designated master controller also improves response time to fixing errors and allows for flexibility to test various timing scenarios quickly and without much effort.

The **revive**285 *top end* initiative with the GDOT and GRTA is developing solutions to address the traffic challenges along the top end of I-285 from I-75 to I-85. Concept alternatives being considered include a combination of multiple strategies. Managed lanes, transit, and operational improvements are some of those strategies being considered and studied. The proposed transit alignment along the top end would include a transit station in the Georgetown/North Shallowford Redevelopment area.

See Map 6: Planned and Programmed Projects in the City of Dunwoody.

Transit

The City of Dunwoody falls entirely within DeKalb County, which is served by MARTA. Currently, MARTA is the only transit provider operating in the City of Dunwoody. There are also many private shuttle services between the office parks and the MARTA station.

MARTA Rail System

The Dunwoody MARTA station, which is on the MARTA North Line, is in the southwestern part of the City of Dunwoody and adjacent to Perimeter Mall. This station is served by MARTA heavy rail trains and connects Dunwoody to Buckhead, Midtown, Downtown, and Hartsfield-Jackson International Airport.

MARTA Bus System

Three MARTA bus routes serve the City of Dunwoody. Brief descriptions of the routes are as follows:

- Route 103 North Shallowford Road/Peeler Road: Originates at the Chamblee MARTA station, enters the City of Dunwoody on North Shallowford Road, and runs along Dunwoody Park, Chamblee Dunwoody Road, Peeler Road, North Peachtree and Tilly Mill Road to the intersection of Peeler at Tilly Mill roads, where it becomes a clockwise loop around Peeler Road, Winters Chapel Road, Peachtree Industrial Boulevard, and Tilly Mill Road.

- Route 132 Tilly Mill Road: Originates at the Chamblee MARTA station and enters Dunwoody on North Peachtree Road; travels up Tilly Mill Road, passing Georgia Perimeter College; and runs along Mount Vernon Road to Jett Ferry Road, where it becomes a clockwise loop around Jett Ferry Road, Dunwoody Club Drive, and Mount Vernon Road.

- Route 150: Originates at the Dunwoody MARTA station; travels along Hammond Drive to Ashford Dunwoody Road; loops around Perimeter Center East; travels along Perimeter Center West to Perimeter Center Place; returns to Ashford Dunwoody Road on Meadow Lane Road; travels up Mount Vernon Road to Dunwoody Village Parkway; and comes back down Chamblee Dunwoody Road to

Mount Vernon Road. On school days only, the route continues for selected routes along Mount Vernon Road to Jett Ferry Road, where it enters a clockwise loop along Jett Ferry Road, Dunwoody Club Road, and Mount Vernon Road.

See Map 7: Current Transit Service for current transit service in the City of Dunwoody.

Planned and Programmed Transit Projects

There are no planned or programmed transit projects within Dunwoody city limits.

Bicycle Network

Suitability

The DeKalb County CTP conducted a bike suitability analysis for roadways within the City of Dunwoody. Most roadways in the City were determined to have either medium or best conditions for bicycling. Mount Vernon Road, Peeler Road, North Peachtree Road, and Tilly Mill Road were determined to have medium conditions for bicycling. Residential streets were determined to have the best conditions for bicycling. Chamblee Dunwoody Road/Roberts Drive and Dunwoody Club Drive were determined to have difficult conditions for bicycling. Ashford Dunwoody Road was determined to have very difficult conditions for bicycling. See Map 8: Bike Suitability for Bicycle Suitability in the City of Dunwoody.

At the first community workshop in October 2010, participants were asked to draw a bike suitability map. See Map 9: Bike Suitability, CTP Community Workshop for the outcome of the discussion from the workshop.

Existing Bicycle Facilities

Currently, the existing bicycle facility network is very limited. There are existing facilities in the Perimeter area on Perimeter Center Parkway from Lake Hearn Drive to Perimeter Center West and on Perimeter Center West from the Fulton County line to Ashford Dunwoody Road.

Planned and Programmed Bicycle Projects

There are no planned or programmed bicycle improvement projects within Dunwoody city limits.

Pedestrian Environment

Sidewalks throughout the City of Dunwoody vary in width and quality. Sidewalks are generally 4 feet wide or less. Existing sidewalks are generally well maintained and in good condition. However, there are substantial gaps in the sidewalk network, which have been previously inventoried by the City. Several roadway segments in the City of Dunwoody have sidewalk on only one side of the road.

At the first community workshop in October 2010, participants were asked to determine sidewalk conditions around the City. See Map 10: Sidewalk Improvements, CTP Community Workshop for the outcome of the discussion and comments received at the workshop.

Planned and Programmed Pedestrian Projects

The City has allocated $350,000 for sidewalk construction in 2011. Design work is proceeding for the following segments:

- Happy Hollow Road from Peeler Road to Windwood Court
- Mount Vernon Road from Hidden Branches Drive to Ashford Dunwoody Road
- Valley View Road from Ashford Dunwoody Road to Ashford Club Drive

Travel Safety

Travel safety in the City of Dunwoody is a major concern. While the absolute number of crashes that occur on a given corridor is one indicator of safety, crash rates are better for establishing relative levels of safety among similar facility types. The following analysis uses crash frequency to show locations in the study area with a high number of crashes and crash rates to describe the conditions of the corridor with respect to safety and compares the corridor to similar facilities throughout the state.

Crash Frequency

Crash frequency is the raw number of crashes. Raw crash data for major corridors in the City of Dunwoody were obtained from Georgia DOT for the years 2005 through 2009, which was the most recent year available. Overall, there were 5,165 crashes

during this period, including 4,235 property damage only crashes, 930 injury crashes with 1,280 injuries reported, and no fatal crashes.

As expected, the highest numbers of crashes occur at or near major intersections. Areas in the City of Dunwoody with a high number of crashes are:

- Ashford Dunwoody Road from Ashwood Parkway to I-285, which is to be expected because this is the highest volume roadway in the study area
- Perimeter Center West from city limits to Ashford Dunwoody Road
- Hammond Drive at Ashford Dunwoody Road
- Chamblee Dunwoody Road from Roberts Drive to Womack Road
- Spalding Drive at Chamblee Dunwoody Road
- North Peachtree Road at Tilly Mill Road and Peeler Road
- North Peachtree Road at I-285
- North Shallowford Road at I-285
- Tilly Mill Road at Peachtree Industrial Boulevard

Crash Rates

This analysis uses crash rates to identify segments of major roads in the City of Dunwoody that appear most susceptible to crashes. Crash rates take traffic volume and road section length into consideration to create a ratio expressed as number of crashes per 100 million vehicle miles traveled (VMT). Crash rates can highlight areas that may appear to have a low or average number of crashes but actually exhibit a higher degree of crash danger when compared to other segments of the same functional class or other segments of the same corridor.

Injury and fatal crashes have disproportionately higher associated monetary and social costs and are therefore highlighted independently in this analysis. Consideration of fatal, injury, and total crashes on a particular road segment is referred to in terms of the severity at a location. See Map 11: Density of Dunwoody Automobile Crashes.

Because of data limitations, traffic volume counts were not available along every major roadway segments in the City of Dunwoody. Therefore, this analysis is limited to the locations shown in Table 8.

Most facilities analyzed in the study area experience crash rates well over the statewide rates for similar facilities for total accidents and injury accidents. The rate of injury crashes is especially high throughout the City of Dunwoody, and only three locations were below the statewide average. The locations below the statewide average rate for injury crashes are:

- Roberts Drive south of Spalding Drive
- Peeler Road from DeKalb Drive (Brook Run Park entrance) to Luray Drive
- Peeler Road from Windwood Drive to Lakeside Drive

The top five locations in the City of Dunwoody with the highest total crash rates in descending order are:

1. Tilly Mill Road from Tillingham Court to Womack
2. Chamblee Dunwoody Road from Oakpoint Place to Spalding Drive
3. Hammond Drive from Perimeter Center Parkway to Perimeter Mall entrance
4. Ashford Dunwoody Road from Hammond Drive to Ravinia (north entrance)
5. Perimeter Center West from Perimeter Center Parkway to Perimeter Center Place

The top five City of Dunwoody locations with the highest injury crash rates in descending order are:

1. Chamblee Dunwoody Road from Oakpoint Place to Spalding Drive
2. Tilly Mill Road from Tillingham Court to Womack
3. Chamblee Dunwoody Road from Dunwoody Knoll Drive to Saint Andrews Drive
4. Mount Vernon Highway east of Mount Vernon Way

5. Perimeter Center West from Perimeter Center Parkway to Perimeter Center Place

Table 8 shows the total number of crashes, the rate of crashes per 100 million VMT, and the average statewide crash rates for similar facility types by location.

Table 8: City of Dunwoody Crash Rates (2005 – 2009)

Location	2005 – 2009 Number of Crashes			2005 – 2009 Crash Rate Per 100 Million VMT			2007 Statewide Crash Rate Per 100 Million VMT (Similar Facility Types)			Over Statewide Crash Rate		
	All Crashes	Fatal Crashes	Injury Crashes	All Crashes	Fatal Crashes	Injury Crashes	All Crashes	Fatal Crashes	Injury Crashes	All Crashes	Fatal Crashes	Injury Crashes
Perimeter Center West from Perimeter Center Parkway to Perimeter Center Place	104	0	32	3,160.2	0.0	972.4	513.0	1.4	126.0	Yes	No	Yes
Hammond Drive from Perimeter Center Parkway to Perimeter Mall Entrance	511	0	77	5,429.8	0.0	818.2	513.0	1.4	126.0	Yes	No	Yes
Ashford Dunwoody Road from Hammond Drive to Ravinia	477	0	72	5,386.2	0.0	813.0	513.0	1.4	126.0	Yes	No	Yes
Ashford Dunwoody Road from Ashford Parkway to Ashford Gables Drive/Valley View Road	42	0	17	699.1	0.0	283.0	513.0	1.4	126.0	Yes	No	Yes
Ashford Center Parkway from Ashford Dunwoody Road to Chamblee Dunwoody Road	44	0	10	616.2	0.0	140.0	N/D*	N/D*	N/D*	No	No	No
Chamblee Dunwoody Road from Cotillion Drive to Chateau Drive	66	0	17	1,368.5	0.0	352.5	513.0	1.4	126.0	Yes	No	Yes
Chamblee Dunwoody Road from Dunwoody Park to North Shallowford Road	44	0	13	1,763.7	0.0	521.1	513.0	1.4	126.0	Yes	No	Yes
Chamblee Dunwoody Road from Holly Oak Place to Kings Down Road	16	0	7	509.5	0.0	222.9	513.0	1.4	126.0	No	No	Yes
Chamblee Dunwoody Road from Nandina Lane to Dunwoody Village Parkway	110	0	19	2,341.8	0.0	404.5	513.0	1.4	126.0	Yes	No	Yes
Chamblee Dunwoody Road from Dunwoody Knoll Drive to Saint Andrews Drive	7	0	6	1,355.5	0.0	1,161.8	475.0	1.3	114.0	Yes	No	Yes

Table 8: City of Dunwoody Crash Rates (2005 – 2009)

Location	2005 – 2009 Number of Crashes			2005 – 2009 Crash Rate Per 100 Million VMT			2007 Statewide Crash Rate Per 100 Million VMT (Similar Facility Types)			Over Statewide Crash Rate		
	All Crashes	Fatal Crashes	Injury Crashes	All Crashes	Fatal Crashes	Injury Crashes	All Crashes	Fatal Crashes	Injury Crashes	All Crashes	Fatal Crashes	Injury Crashes
Chamblee Dunwoody Road from Oakpoint Place to Spalding Drive	95	0	61	7,090.1	0.0	4,552.6	475.0	1.3	114.0	Yes	No	Yes
Roberts Drive from Dunbrooke Lane to Witham Drive	12	0	6	491.6	0.0	245.8	513.0	1.4	126.0	No	No	Yes
Roberts Drive from Manor Oaks Court to Spalding Drive	4	0	0	430.7	0.0	0.0	513.0	1.4	126.0	No	No	No
Mount Vernon Road from Dunwoody Station Drive to Ashford Dunwoody Road	38	0	14	603.9	0.0	222.5	513.0	1.4	126.0	Yes	No	Yes
Mount Vernon Road from Mount Vernon Way to Wellshire Place	27	0	18	1,493.1	0.0	995.4	513.0	1.4	126.0	Yes	No	Yes
Mount Vernon Road from Vernon Oaks Drive to Vermack Road	64	0	15	2,231.9	0.0	523.1	513.0	1.4	126.0	Yes	No	Yes
Peeler Road from Olde Village Lane to Equestrian Way	5	0	2	797.4	0.0	319.0	475.0	1.3	114.0	Yes	No	Yes
Peeler Road from DeKalb Drive to Luray Drive	0	0	0	0.0	0.0	0.0	475.0	1.3	114.0	No	No	No
Peeler Road from Windwood Drive to Lakeside Drive	4	0	0	312.7	0.0	0.0	475.0	1.3	114.0	No	No	No
Tilly Mill Road from Tillingham Court to Womack	60	0	12	9,201.6	0.0	1,840.3	513.0	1.4	126.0	Yes	No	Yes
North Peachtree Road from North of to Cotillion Drive	77	0	19	2,626.3	0.0	648.1	475.0	1.3	114.0	Yes	No	Yes
North Peachtree Road from Brookhurst Drive to Kings Point Circle	14	0	10	457.1	0.0	326.5	475.0	1.3	114.0	No	No	Yes

Table 8: City of Dunwoody Crash Rates (2005 – 2009)

Location	2005 – 2009 Number of Crashes			2005 – 2009 Crash Rate Per 100 Million VMT			2007 Statewide Crash Rate Per 100 Million VMT (Similar Facility Types)			Over Statewide Crash Rate		
	All Crashes	Fatal Crashes	Injury Crashes	All Crashes	Fatal Crashes	Injury Crashes	All Crashes	Fatal Crashes	Injury Crashes	All Crashes	Fatal Crashes	Injury Crashes
Winters Chapel Road from Winterhaven Court to Winterbrook Court	N/D	N/D	N/D	N/D	N/D	N/D	513.0	1.4	126.0	No	No	No
Winters Chapel Road from Charmont Place to Fountainbleau Way	7	0	5	191.0	0.0	136.4	513.0	1.4	126.0	No	No	Yes
Tilly Mill Road from Peachtree Industrial Boulevard to Chestnut Landing	24	0	7	791.2	0.0	230.8	513.0	1.4	126.0	Yes	No	Yes

*N/D = No data available

Crash data at the regional and county level is available from ARC. On most of the facilities analyzed, Dunwoody total and injury crash rates are above county, regional and state rates while fatality rates are lower. For reference, the regional crash rate per 100 million VMT 444 total, 105 injury and 1.2 fatal crashes. DeKalb County crash rates are slightly higher than the regional rates, with 450 total crashes per 100 million VMT, 140 injury, and 1.2 fatal.

Factors Causing Crashes

While detailed crash studies were not conducted at specific locations, the following identifies general causal factors to high crash rates:

- High traffic volumes – Generally, higher volumes contribute to more crashes. Many Dunwoody roadways have heavy travel flows relative to their capacity.
- High levels of access – As noted previously, many roadways have closely spaced driveways and intersections, which reduces mobility and increases the number of conflict points
- Lack of turning lanes – Many locations with high turning volumes lack adequate turning lanes
- Poor sight lines – As a result of intersection geometry or grade changes, some locations in the City of Dunwoody have poor visibility

Community Involvement

The City of Dunwoody recognizes the community is a partner in the process of determining the most appropriate strategies, programs, and projects to be developed as part of the CTP. Collaboration with the public is critical to understanding the transportation issues and opportunities in the City. Within the development of the CTP are opportunities for community stakeholders to voice their concerns and opinions about traffic and transportation in the City and how the CTP and subsequent implementation can bring about positive change.

Collaboration with the community was accomplished through four Advisory Committee meetings, three community workshops, and an internet-based survey. Information was also shared through a project website hosted on the City's website. The following are specific tasks involved in planning, facilitating, and conducting community involvement activities for the development of the CTP.

Advisory Committee

The Advisory Committee was established as a sounding board during plan development through the identification of transportation issues and opportunities, development of plan goals and objectives, and review of the recommended action items. Members of the Advisory Committee included community members invited by City Council members. The Advisory Committee provided an important means of gathering input and providing feedback on an advisory basis to the project team. Over the course of the CTP process, the Advisory Committee met four times to discuss transportation issues and opportunities within the City, policies and guiding principles, preliminary project recommendations, and project prioritization. Summaries of Advisory Committee meetings are included in Appendix G.

Stakeholder Interviews

Interviews with key stakeholders allow an opportunity to share project information, acquire feedback, and learn about the stakeholders' views and perspective. Stakeholder interviews were conducted to provide additional input related to issues and opportunities and recommended actions. The project team met with the City of Sandy Springs, DeKalb County, Gwinnett County, PCID, ARC, and Georgia DOT. The City of Doraville, City of Chamblee, and MARTA were also invited to meet with the project team during the CTP process. The project team also interviewed Chief Grogan

with the Dunwoody Police Department to discuss traffic accidents in the City and review project recommendations.

Community Workshops

Community workshops are an effective method for providing information to the public and for providing a means for the public to review and comment on the development of the plan and its results. Three community workshops were held over the course of the development of the plan.

The first community workshop, held on October 18, 2010, asked participates to review existing conditions, help develop and refine goals and objectives, identify issues and opportunities, and define transportation impacts on health.

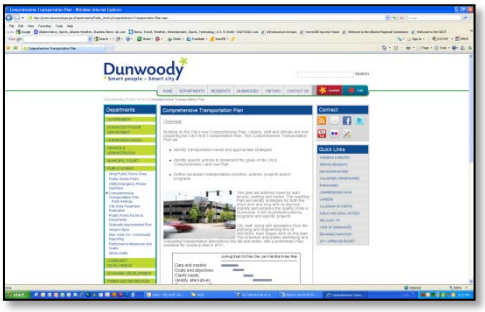
The second community workshop, held on January 25, 2011, identified alternative strategies and asked the community to provide input into the preferred plan, preliminary recommendations, and project list through interactive activities.

The final community workshop presented the final plan and recommendations, allowing for questions and understanding of the plan.

Summaries of community workshops are included in Appendix F.

Website

A CTP page was created on the City's website to keep the community updated on the project status and provide access to project documents. The webpage included a description of the planning process, the project schedule, and project documents.



Survey

As part of the City's effort to develop the CTP, the City surveyed community members to ensure that public feedback played an integral part in the plan. The survey was made available in two formats: a paper copy collected by mail or fax and an online version hosted on the City's website. The survey was available from the middle of October through the end of November 2010. Survey responders overwhelmingly favored the electronic format, which outpaced paper surveys by nearly a 6 to 1 ratio. While most of the survey's questions provided multiple answer choices, a few open-ended questions provided survey respondents the opportunity to elaborate on specific transportation needs. There were 220 respondents to the survey, the majority of which either live or work in the City. A smaller portion of those surveyed drew their interest from owning commercial property or a business in the City. Nearly half of the survey participants were between the ages of 35 and 50. Most respondents have lived or worked in Dunwoody for five or more years and commute less than 5 miles during a regular day.

Seventy-five percent of survey participants listed driving as their primary mode of travel within Dunwoody. Most other respondents combined driving with another method as their primary means of transport, while a handful of participants depended primarily on biking, walking, or public transit. When asked about the type of travel Dunwoody commuters would like to do more of, most responded walking followed by biking, although 15 percent expressed the desire to drive more. With the desire to increase pedestrian and bicycle travel within the City, survey respondents favored sidewalk and bike improvements as a way to benefit the roadway system. Other improvements gathering a high response rate included signal timing, adding turn lanes at intersections, and providing off-campus parking and shuttle service for Georgia Perimeter College students.

Respondents pointed to traffic congestion and delay as the most pressing issue facing transportation in the City. Other issues receiving numerous responses included lack of sidewalks, cut-through traffic, lack of bike paths, and street maintenance. Perhaps as a direct result of traffic congestion and delay being highlighted as the most pressing issue, respondents pointed to reducing congestion as being the City's top priority for transportation infrastructure investment. Intersection improvements, road maintenance, sidewalk maintenance, and bicycle lanes were also deemed worthy of investment. Faced with the task of rating the City's transportation system, the majority of those surveyed described the system as fair. Fewer gave the system a good rating, while

approximately 15 percent of respondents described the system as poor. Two respondents rated the transportation system as being excellent.

When determining spending priority for the transportation budget, operational improvements to relieve congestion received the highest priority, while transit was designated as the lowest priority item. Concerning various aspects of transportation in the City, pavement condition and the availability of sidewalks, alternative routes, and transportation choices all received fair ratings. However, the availability of bicycle lanes and paths was rated as poor.

Walking received the most responses for the alternative mode the City should prioritize, followed by biking and transit. Golf carts and low-emission vehicles were last on the priority list, although more than 10 percent of respondents identified these modes as a priority. Following the question of alternative modes of transportation, respondents were asked their primary reasons for biking and walking. Nearly 75 percent of those surveyed indicated that exercise, recreation, or general enjoyment of the outdoors prompted them to take to their bikes and sidewalks, while 10 percent used the alternative modes to go to a community destination. As far as future walking and biking endeavors were concerned, most surveyed would like to continue using the two modes for exercise and outdoor enjoyment, but future interest in traveling to a community destination by foot or bike drew a response rate of 30 percent.

According to the survey, the main safety concern for pedestrians in Dunwoody is separation from vehicular traffic. This concern is related to the two main reasons that prevent survey respondents from walking or biking, which were lack of sidewalks and shoulder space combined with too much traffic. Despite safety concerns, Dunwoody cyclists are willing to travel 2 or more miles as a form of exercise, but most preferred to limit the trips to 1 or 2 miles for running errands. Cyclists also desire marked on-street bike lanes as a means to improve the bicycling environment in the City. Respondents also used the survey to communicate the need for a more complete sidewalk network in the City, with most respondents indicating that they would venture out more by foot if there were more sidewalks and paths.

The survey's open-ended questions gave respondents the opportunity to address such issues as problematic intersections; impediments to transit, biking, and walking; and other challenges facing Dunwoody commuters. Several intersections were identified as problematic, although Chamblee Dunwoody Road at Mount Vernon Road gathered the highest number of responses. Mount Vernon Road also proved to be troublesome for commuters at Ashford Dunwoody Road, as well as other intersections along the route.

Respondents listed many impediments to pedestrian and bike travel in the City; however, traffic volume, unaware and speeding drivers, and lack of facilities appeared several times. The recent cuts by MARTA to bus and rail service provided an obstacle for Dunwoody transit users, but service infrequency and inconvenience also prevented people from using public transportation more often. The overwhelming response for the biggest challenge to travel around Dunwoody was simply traffic.

Survey responses and a survey summary can be found in Appendix E of this report.

Issues and Opportunities

In the early stages of the planning process, the project team worked with the Advisory Committee and the community to identify transportation issues the City faces and opportunities for improving the transportation system and community as a whole. Issues identified often also presented opportunities.

Identified Issues

Lack of pedestrian and biking opportunities
Traffic congestion and safety
Transit service
Georgia Perimeter College traffic
Cut-through traffic
Neighborhood connections
Traffic circulation in Dunwoody Village
Future growth and mobility needs

Lack of pedestrian and biking opportunities presents both issues and opportunities for the City. Traffic congestion and safety was another issue identified. Transit service is viewed as an issue because of existing service and routes; however, there is also opportunity for the City to explore additional transit service and facilities to better meet the needs of the community.

Traffic from Georgia Perimeter College presents traffic issues in and around the college as well as into and out of the City along North Peachtree, Tilly Mill Road, and Peeler Road. Likely solutions may provide opportunity for partnerships between various entities, such as the City, PCID, MARTA, local businesses, and the college itself. In studying traffic in and out of Georgia Perimeter College, conclusions drawn are similar to the traffic study completed by the college; mainly, on-site traffic circulation needs to be improved.

Cut-through traffic, both through the City in general and through neighborhoods, has been identified as an issue that presents many challenges for the City. Improving traffic

flow on the main travel routes through the City, such as Mount Vernon Road, is perceived as one way to reduce cut-through traffic in the neighborhoods.

Connecting neighborhoods through trails and pathway allows for increased opportunities for residents to engage in recreational walking and biking throughout the City without having to access main automobile travel routes. In some cases, this could also improve access to commercial nodes and/or schools.

Traffic circulation in Dunwoody Village was perceived as an issue; however, the redevelopment plan for the Village is exploring land use and transportation opportunities that will build upon the town center and destination appeal of the Village.

Other issues identified include future growth and overall mobility needs. The notion of Complete Streets provides an opportunity for the City to address many of the issues identified. Complete Street opportunities include additional walking and biking opportunities, improved traffic flow and connectivity, potential road diets, consideration for roundabouts, and transit opportunities.

Project/Strategy Identification

As part of the project and strategy identification process, a general list of candidate projects was developed based on identified issues and opportunities and the traffic analysis. Using various criteria, this list was filtered into a list of recommended projects.

Candidate Projects

Based on the existing conditions and no-build analysis results, candidate projects to address the intersections and roadway corridors operating at an unacceptable LOS were developed. In addition to addressing LOS concerns, candidate projects to enhance roadway connectivity were also identified.

Bicycle projects were identified based on connectivity to major destinations (Dunwoody Village, the Georgetown shopping center, or Perimeter Center), connectivity to existing or planned facilities in neighboring jurisdictions, and connectivity to each other. Pedestrian projects were identified based on sidewalk network gaps and opportunities to enhance connectivity.

The list of candidate projects is shown in Appendix B. As a result of constraints such as funding, availability of right-of-way, environmental issues, and presence of historic resources, not all candidate projects may be feasible to build.

Recommended Projects

Roadway and intersection improvements in the candidate projects list were tested using micro-simulation traffic modeling. In some cases, improvements to intersections or corridors to provide LOS D or better were unable to be made. Recommended projects were selected from the list of candidate projects based on the following criteria:

- Mobility – Candidate intersection and roadway projects were tested using traffic modeling software to test improvement in mobility
- Public input – The list of candidate projects was presented at a public meeting and made available online
- Connectivity – Does the candidate project improve connectivity to major destinations and other facilities?

- Constructability – Is the project affordable? Are there any known environmental issues? Are historic resources likely to be impacted by the project?

The list of recommended projects is shown in Table 10 in the Implementation section of this report.

Streets

Traffic congestion on the City of Dunwoody street network is an ongoing issue. While several of the recommended projects will mitigate congestion, eliminating congestion entirely is not possible because of financial and right-of-way constraints. As such, a Complete Streets policy is recommended to enhance non-automobile travel modes.

Complete Streets

Complete Streets is a concept that streets are for pedestrians, cyclists, transit riders, and cars, not just for the exclusive use of automobiles. Complete Street networks are safer, more livable, and welcoming to everyone. When implementing new street connections or reconstructing existing roadways, accommodations for all users should be incorporated. A detailed overview summarizes the benefits and impacts of Complete Streets can found in Appendix D.

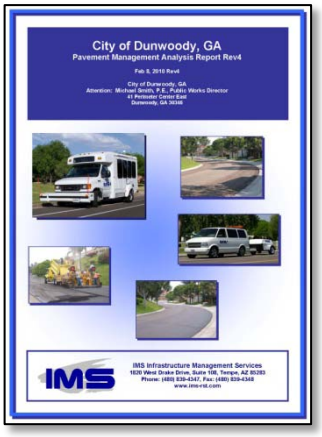
Access Management

Access management is strategies, tools, and techniques to improve the safety and efficiency of roadways without adding lanes. A citywide access management plan is a recommended strategy. Recommended access management tools include:

- Require consideration of access management in development codes
- Install medians in areas with a high number of curb cuts
- Build service roads along the back of properties to provide access and remove driveways on the main road

- Retrofit inter-parcel access and remove driveways along the main road where possible

Maintenance



Street maintenance is an ongoing process. While maintenance is sometimes deferred during times of fiscal stress, this practice will often increase the cost to maintain streets over time by allowing pavement to deteriorate. Implementing a strict pavement management system will minimize maintenance costs over the long term. The City completed a Pavement Management Analysis Report in February 2010 that listed several recommendations for effectively establishing a pavement management system for the road system in the City. This CTP recommends implementation of those recommendations.

Funding

Because there are no state or federal routes in the City of Dunwoody (with the exception of I-285, Cotillion Drive, and Peachtree Industrial Boulevard), road improvements will primarily be funded by the City. Dunwoody Village is currently the subject of a LCI study, and some projects coming out of that process may be eligible for funding through ARC. The City is also seeking to have the Georgetown redevelopment area accepted into the LCI program so that the recommended transportation projects for that area can also seek LCI transportation funding. Local Maintenance and Infrastructure Grant funds through Georgia DOT are expected to be an annual funding source that will help supplement the City's annual paving budget. Other potential funding sources are the Plan 2040 lump sum accounts for bicycle, pedestrian, and operational improvements and regional sales tax funds, if approved by the region's voters in 2012. The City must decide how to appropriate available funds in the most efficient and effective manner.

In the case of transportation projects dependant on redevelopment for completion, developers should be required to contribute to the cost of constructing the roadway. Examples of projects that could be funded through development include new location roadway projects between Chamblee Dunwoody Road and Dunwoody Village Parkway, as well as the new street connection between Peachford Road and Dunwoody Park. The City of Dunwoody should request that the developer provide 80

percent of the new roadway cost, although the exact funding percentage is up to the City and subject to negotiation between the parties.

Because projects can become more costly when funded by state or federal sources due to additional regulatory requirements, local or private sources alone may be more appropriate for funding lower-cost projects. More complex and costly projects are often better funded by state or federal sources because the amount of funding available outweighs the expense of meeting regulatory conditions.

Pedestrian

Dunwoody's size makes it ideal for a high level of walking. Although the City has an excellent foundation of a sidewalk network, there are opportunities to build upon this foundation and increase pedestrian linkages throughout the City. A good sidewalk network provides many benefits to the community and enhances quality of life for residents.

Facilitating pedestrian travel within the City increases opportunities for travel by alternative modes throughout the transportation network. Pedestrians represent a broad spectrum because every type of transportation system user could potentially be a pedestrian. Pedestrian planning is critical to developing a comprehensive approach to providing a sustainable, multi-modal transportation network.

Pedestrian planning begins with the program and policies that seek to expand or improve upon the existing pedestrian network. The City has already begun to implement such programs and policies.

Sidewalk Improvement Program

The City developed a Sidewalk Improvement Policy in 2010 that sought to identify a methodology for identifying capital improvement projects that will improve upon the City's existing sidewalk network. The goals of the program are to improve walking routes to schools, pedestrian safety, and connectivity to commercial and community

centers, parks, and transit. The program centers around three components to guide prioritization and budgeting of improvements:

1. The City Sidewalk Improvement Program prioritizes new sidewalk construction within the City.

2. The Accessibility Improvement Program prioritizes improvements to existing sidewalk crossings to meet the requirements of the Americans with Disabilities Act (ADA).

3. The Neighborhood Sidewalk Program identifies a process by which neighborhoods can fund sidewalk construction.

The City established a process for prioritizing sidewalk improvement projects based on the goals of the program and external factors, such as available right-of-way, existing drainage, utilities, and ease of construction. As part of the CTP, policy recommendations include implementing the City's Sidewalk Improvement Policy. Map 12: Existing and Planned Sidewalks shows existing and planned sidewalks in the City of Dunwoody.

Safe Routes to School

Safe Routes to School (SRTS) is a federal program administered by the state DOT to increase the number of school-age children who bike and walk to school. In 2010, the City of Dunwoody received a grant through the Georgia DOT SRTS program for pedestrian infrastructure improvements around Kingsley Charter Elementary School. The improvements include new sidewalks, increased signage, new pavement markings, and street lighting.

System Users

It is important to provide a basis for identifying whom the pedestrian network is intended to serve. In ARC's 2002 Regional Transportation and Pedestrian Walkways Plan, system users were defined and have been adapted for applicability to the City of Dunwoody.

- Adult pedestrians: Use facilities for commuting, recreation, and exercise. Adult pedestrians are aware of the rules of vehicular traffic. Adult pedestrians can have

difficulty crossing high-speed, multi-lane streets that lack median refuge islands or pedestrian signals.

- Child pedestrians: See and hear the world differently than adults. Children often have trouble judging traffic speed, gaps in traffic, or whether a car is coming, going, or standing still. Children are shorter than adults and have limited peripheral vision. Neighborhood streets with sidewalks and shared-use facilities can accommodate child pedestrians.

- Non-English reading pedestrians: Residents of various cultures who may not read English, a high percentage of which may rely on alternate modes of transportation. Those who cannot read English well may not be able to read warning signs written in English. Therefore, safety and directional signage should be shown in symbols rather than in written words in areas with a high concentration of non-English speaking residents. The Manual on Uniform Traffic Control Devices offers several options for regulating the flow of vehicular and pedestrian traffic. Symbols within those standards that are graphic rather than written should be encouraged for safety.

- Pedestrians with disabilities: ADA prohibits discrimination of pedestrians with disabilities. Pedestrians who are blind, deaf, or rely on wheelchairs have needs very specific to their type of disability. For instance, people who are deaf need visible warnings about crossing vehicular traffic. People with vision impairments need tactile indications that they are approaching an intersection or other hazard. Because they cannot see safety signs, they need audible indicators to inform them of proper times to cross the street.

Sidewalk Design Standards

Goals of the CTP aim to make walking as convenient and safe as possible through complete networks. The City should adopt minimum sidewalk standards throughout the City. Where there are expected high volumes of pedestrian traffic, minimum standards should be set accordingly. Therefore, the CTP recommends a set of standards based on the distinct areas found within the City. The standards are detailed in Table 9.

Table 9: Sidewalk Design Standards

Area/Corridor	Minimum Design Standard
Dunwoody Village	8-foot sidewalk, 4-foot buffer

Georgetown Redevelopment Area	8-foot sidewalk, 4-foot buffer
Perimeter Center	PCID design standards
Neighborhood/Residential Streets	5-foot sidewalk, 2-foot buffer

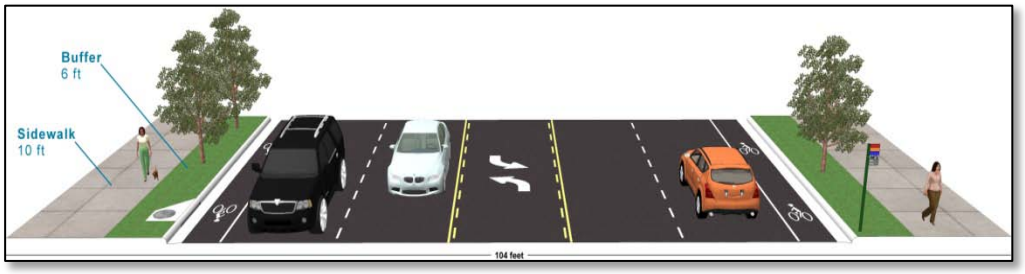


Figure 1: Mount Vernon Road, Dunwoody Village

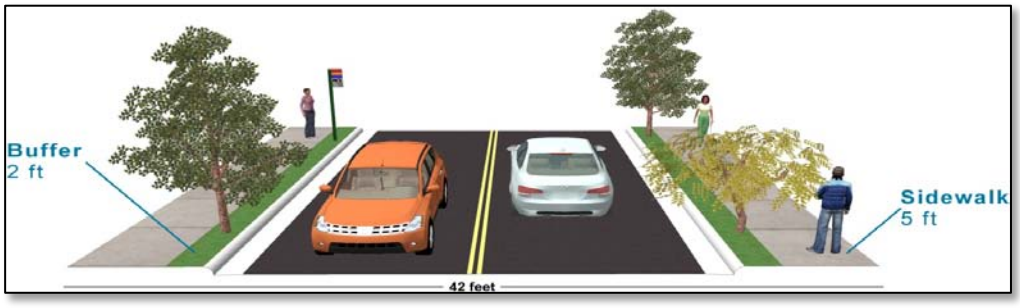


Figure 2: Tilly Mill Road, Neighborhood/Residential Streets

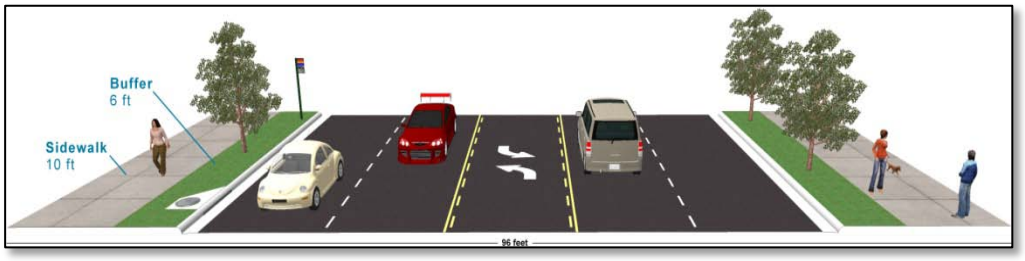


Figure 3: Chamblee Dunwoody Road, Georgetown Redevelopment Area

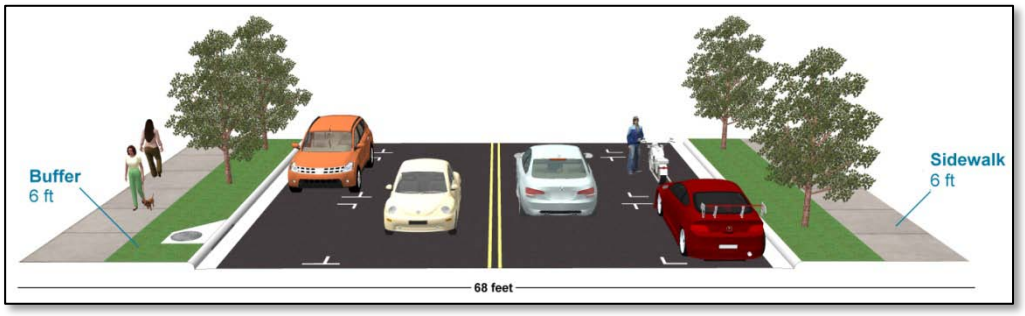


Figure 4: Dunwoody Village Parkway, Dunwoody Village

While these are recommended minimum standards, the City should seek to exceed these standards where it is practical and cost effective to do so. For example, on a high-volume street such as Mount Vernon Road, a 3- or 4-foot buffer may be desirable in some areas to create a better pedestrian environment.

Facility Location and Type Considerations

The majority of areas in need of sidewalks to provide a complete network are those where no existing sidewalk is present or where a sidewalk would provide much-needed access to a specific destination, such as to employment or community destinations. These are inventoried in the Comprehensive Plan. The City should establish a policy building upon the Sidewalk Improvement Program that calls for completing the sidewalk. Sidewalk construction projects should be prioritized such that gaps in the system are constructed first.

Regarding facility type, it is acceptable to locate sidewalks directly adjacent to automobile lanes if pedestrians are protected by a curb. However, it is preferable to incorporate a vegetative buffer, turf, or other low-growing plants to separate pedestrians from the roadway.

Pedestrian Enhancements

Creating a safe pedestrian environment is just as important as providing the sidewalk. Besides a buffer to separate pedestrians from vehicle traffic, other elements will help improve conditions for the pedestrian, making it safer and more convenient for residents to make walking trips.

The City should implement streetscape standards in neighborhood commercial nodes and business districts. Standards should address the inclusion of shade trees, benches, water fountains, access to business, and greenspaces. The City should also evaluate existing signal timing to confirm that adequate time is provide to allow pedestrians to safely cross the street. The generally accepted standard has been 4 feet per second.

Along with signal re-timing, it is recommend that the City implement pedestrian countdown signals, allowing pedestrians to know the amount of time they have to cross the street. Pedestrian countdown signals provide a clear countdown of the number of seconds before traffic changes and typically flash a caution signal to discourage walkers from entering an intersection when there is not enough time to cross. Shortening the crossing distance at intersections also aids pedestrians in crossing an intersection by decreasing the distance that they have to cross in the intersection.

Intersections should also have high visibility crosswalks that alert vehicle drivers to the pedestrian crossing. High-intensity activated crosswalk signals should be considered at intersections with high pedestrian volumes or with high numbers of pedestrian crashes.

Finally, all corners of an intersection should meet ADA requirements. ADA requirements lay out engineering design standards that must be applied to all projects to ensure access by all abilities.

Maintenance

Regular maintenance of the sidewalk system is critical to providing an attractive pedestrian environment. The City should work with neighborhoods and civic associations to monitor sidewalks and their immediate surrounding areas, including vegetation. The City should work with neighborhood and business associations to maintain predetermined standards for the pedestrian environment.

Multi-Use Trails

With the development of the Parks and Greenspace Comprehensive Plan, the City should continue to look for additional trail connections to destinations throughout the City along utility easements.

Bike

Just as the City is well-positioned to be a walking city, the City is also ideal for a high level of biking. Goals of the CTP aim to make Dunwoody a more bike-friendly community by making travel by bike safer and more convenient.

System Users

The City of Dunwoody has many types of cyclists, ranging from experienced riders who travel by bicycles as their primary method of transportation to casual and recreational riders who prefer the safest route to their destination rather than the most direct route. Because users vary and have different needs and goals when using the system, it is important to define the user as a means to determine which types of facilities are needed and where those facilities should be located.

AASHTO recognizes three types of system users to help assist planners and designers in determining impacts of different facilities and conditions.

- Type A: Advanced or experienced riders who use the bike as a primary mode of transportation. Riders are looking for convenience and speed and generally want to take the most direct route to their destinations with minimum delay and detours. These riders are comfortable mixing with vehicle traffic along roadways; however, they prefer sufficient operating space to eliminate the need for passing by either a rider or a vehicle.

- Type B: Basic or less confident adult riders who also are using the bike for transportation purposes to and from destinations; however, they are not comfortable on high-volume, high-speed vehicular roads unless there is ample roadway to allow for easy passing by the vehicle. Riders prefer designated facilities and are comfortable on neighborhood streets and shared use paths.

- Type C: Children riding either on their own or with their parents. Riders will not travel as fast as adults but still desire to reach community destinations, such as schools and recreational facilities, by bike. Residential streets, shared use paths, and streets with well-defined pavement markings between the bicycle and the vehicle can accommodate this type of rider.

Facility Types

Determining facility types is dependent on many factors, such as the type of user, roadway conditions, destination linkages, and cost of providing the facility. In the Guide for the Development of Bicycle Facilities, ASSHTO defines four types of bike facilities:

- Shared roadway (no bikeway designation): Existing roadway is adequate for efficient bike travel, and signing or striping for bicycle use is not necessary. In some instances, the roadway may be unsuitable for bicycle travel. It would not be appropriate to sign those roadways because it would encourage bicycle travel.

- Signed shared roadway: Designated bike routes that are signed for sharing the road for the purposes of providing continuity to other bicycle facilities or designating a preferred route. Signing a roadway as a shared route indicates to the bicyclist that there are advantages to using these routes over others. Signing the route also indicates to motorists of the presence of bicyclists.

- Bike lane: Lanes intended to delineate the right-of-way assigned to bicyclists and motorists. Bike lanes are often implemented along corridors where there is significant bicycle demand and where the needs of that demand can be met. The overall purpose of a bike lane is to improve the conditions for the bicyclists and provide for more predictable movements of both the bicyclist and the motorist. Bike lanes can increase the total carrying capacity of roadways carrying both vehicle and bicycle traffic. When determining roadway corridors for bike lanes, it is important to consider the needs of both the bicyclist and the motorist.

- Shared use path: Designed and constructed to serve corridors not served by roads. Shared use paths should offer opportunities that the on-street bike network cannot, such as recreational opportunity or direct routes where the roadway system is not able to provide such. The most common applications of a shared use path are along streams, utility rights-of-way, and former railroad rights-of-way. Shared use paths can also be used to provide bicycle connectivity between areas that have been closed off from development or natural barriers, such as

cul-de-sacs, railroads, or rivers and streams. Shared use paths are designed for additional users, including pedestrians, joggers, dog walkers, individuals in wheelchairs, and skateboarders, for example.

City Bicycle Network

Through the CTP, a citywide bicycle network was created that uses the existing street system and proposed trails and off-street shared paths to create an interconnected system that allows for all types of users to safely and conveniently travel across the City using the network. The bicycle network is a combination of on-street bike lanes, off-street paved trails, and adequate signage and road marking to encourage safety between vehicles, cyclists, and pedestrians. The bicycle network aims to connect residents to destinations within the City and to other parts of the bicycle network, and although the aim is to provide additional connectivity throughout the City, the network will not connect every point within the City or seek to replace vehicle travel. Bicycles are legally allowed on City streets, and it is a reasonable assumption that experienced bicyclists will use the entire City street system to connect to places of destination. The bicycle network should aim to connect less experienced and younger riders to places of destination within the City through safe and convenient means.

Many factors were considered in determining the bike network and appropriate roadways and corridors to designate as bike facilities and bike routes. Bike facilities include on-street bike lanes or side paths adjacent to the roadways. Bike routes include signage and/or sharrows as an indication of the route. Facilities and routes were chosen to make connections between destinations within the City, including commercial areas, parks, schools, housing developments, and other City destinations.

Factors for Determining the Bike Network

- Facility user type: Skill level, type of user, and preferences of the user were considered to determine who would use the designated facility. Bike facilities along Mount Vernon Road and Chamblee Dunwoody Road are more likely to be Type A riders seeking a direct route for commuting purposes, whereas bike facilities near schools and parks are likely to be attractive to Type B and Type C riders.

- Accessibility: Bike facilities should be located in areas and along corridors that are safe and convenient to access.

- Directness and connectivity: Bike facilities should provide the most direct and safe route to community destinations. Bike facilities should also connect to one another to create a complete and connected network. Important area linkages identified include the Dunwoody Village, Perimeter Center area, Georgetown shopping area, Georgia Perimeter College, Brook Run Park, and other schools and smaller commercial areas throughout the City. The bike network also includes system linkages to areas outside of the City. Coordination with neighboring jurisdictions is required to complete connections to areas outside of the City's boundary.

- Conflicts: On-street bike facilities can introduce conflicts between bicyclists and motorists, while shared use paths can introduce conflicts between bicyclists and other type of users on the path, such as pedestrians and skateboarders. Driveways and intersections may also introduce conflicts for bicyclists.

- Maintenance: Facility design should consider maintenance and upkeep of the facility. Facilities should be designed for the simplest maintenance upkeep.

- Traffic volume and speeds: When considering on-street bike lanes and facilities, vehicle traffic volumes and speeds should be considered with the roadway width. This will contribute to identifying the bicycle user type and appropriate design, markings, and signage.

- Costs and funding: Decisions to implement the bicycle network need to consider design and long-term maintenance costs. Project facility selection should consider maximizing user benefit per dollar funded.

- State and local laws/ordinances: Implementing a bike network must be consistent with state and local regulations and should not encourage users of the network to engage in behaviors that are inconsistent with state and local regulations.

See Map 13: Dunwoody Bicycle Network.

Signed Shared Roadways

Signed shared roadways or routes along the City's bike network typically include lower volume and low-speed roads that are not necessarily the most direct route. Roads may also be indicated as a route with signage or sharrows when there is not enough pavement width for an on-street bike lane. As indicated earlier, signed shared

roadways indicate to bicyclists that there are advantages to using these routes compared to alternative routes.

According to AASHTO, the following criteria should be considered when signing a route:

- The route provides through and direct travel in bicycle demand corridors.
- The route connects segments of the network that are discontinuous.
- An effort has been made, where appropriate, to adjust traffic control devices, such as stop signs and signals, to give greater priority to bicyclists on the route as opposed to alternative streets.
- Street parking has been removed or restricted in areas of critical width for improved safety.
- A smooth surface has been provided.
- Regular maintenance (such as removal of debris) has been determined to be sufficient.
- Wider curb lanes are provided as compared to other non-designated routes.

Bike Lanes

On-street bike lanes are proposed to be incorporated into the roadways along major routes through the City. On-street bike lanes are proposed to be striped adjacent to the outermost travel lane and should be a minimum of 4 feet wide. Striping should include a solid white line, and there should be adequate signage and pavement markings to deter vehicles from traveling in the bike lane. Bike lanes are to be one-way in the direction of the adjacent vehicular traffic. If on-street parking is allowed, the bike lane needs to be placed between the parking area and the travel lane and should be a minimum of 5 feet, according to AASHTO standards.

Bike Parking

Providing bicycle parking facilities is essential to the overall effort to encourage bicycling in the City. Bicycle parking should be provided at both the trip origin and trip

destination, offering safety and convenience for not only the cyclist, but also for the bicycle itself.

Long- and short-term bicycle parking facilities should be provided, where applicable. Long-term bicycle parking should be offered at locations where a bicycle would be left unattended for long periods of time, such as at apartment complexes, schools, places of employment, and even transit stations. These facilities typically include lockers, bike cages, or rooms in buildings. Short-term parking does not necessarily provide the weather and security protection that long-term parking facilities should provide. Typically, short-term parking facilities include a rack where the bike frame and one or two wheels can be locked.

AASHTO recommends several design features for bike racks. According to AASHTO, bike racks should:

- Be designed so that they do not bend wheels or damage other bicycle parts
- Accommodate high security U-shaped bike locks
- Accommodate locks securing the frame and both wheels (preferably without removing the front wheel from the bicycle)
- Not impede or interfere with pedestrian traffic
- Be easily accessed from the street and protected from motor vehicles
- Be visible to passers-by to promote usage and enhance security
- Be covered where users will leave their bikes for a long time
- Have as few moving parts as possible

Funding

Bicycle projects can be funded as standalone projects, for which the City will identify and select projects that either meet specific facility criteria, or are included in the list of bicycle projects in the CTP. Projects can also be funded as part of road improvements. Larger projects may benefit from being funded as part of a programmed road or transit improvement. A variety of funding sources are available, including federal, state, local,

and private organizations. The City must decide how to appropriate available funds in the most efficient and effective manner. One specific recommendation is that the City, through the local development regulations, require pedestrian and bicycle facilities during construction of new development, where appropriate.

Multi-Use Trails

A multi-use trail should be wide enough to accommodate two-way bicycle and pedestrian use without conflict. Ten feet to 14 feet is the suggested width for a trail that will accommodate such mixed uses. Trails built in Georgia are typically 12 feet wide, which is usually the minimum required for projects receiving Georgia DOT funding. High-demand corridors, such as Cobb County's Silver Comet Trail, are experiencing demands that warrant a wider facility. Where constructed parallel to roadways, 5 feet of separation is required to buffer the trail from the roadway. An 8-foot setback is necessary to incorporate street trees along a designated state route. These paths can be located along scenic creeks or other natural areas for recreational use as well as for transportation corridors.

Maintenance

Regular maintenance of the bicycle network system is critical to providing an attractive bicycle environment. The City should work with the neighborhoods and civic associations to monitor conditions of bike facilities and their immediate surrounding areas, including vegetation. The City should work with neighborhood and business associations to maintain predetermined standards for the bicycle environment. It is recommended that the City develop and formalize specific bicycle design standards. Streetscaping and maintenance elements should also be included in those standards.

Transit

Transit is an important component of the City's transportation system. The City benefits greatly from the public transit services provided. Transit provides not only mobility options for both workers and residents of the City of Dunwoody, but also helps relieve traffic congestion, improve air quality, reduce energy consumption, create jobs, and stimulate development around transit stations.

With an expected increase in population within the City, particularly with the under 18 age and over 65 age groups as identified in the City's Comprehensive Plan, there are many public transit opportunities. Promoting transit in the City can lead to additional opportunities for the biking and pedestrian network. When using these alternative modes in combination, longer trips can be accommodated, and navigating the City without a vehicle becomes a viable transportation option.

Pedestrian and Bicycle Access

Providing safe and convenient access to transit is essential to making transit viable. Prioritizing pedestrian and bicycle projects that link transit service to community destinations is important. Pedestrian access and connectivity needs to be inviting with adequate sidewalks, buffers from vehicular traffic, and compatible land uses that contribute to creating an inviting pedestrian environment. Streetscaping amenities should be provided along pedestrian transit routes, such as benches, bus shelters, and shade trees. It will be important to work with MARTA to provide the appropriate amenities in the appropriate locations.

When planning for bike and pedestrian routes to rail stations and bus stops, it is important that the City consider needs and abilities of persons with physical disabilities and ensure that access points to rail stations and bus stops are ADA compliant.

Transit and Land Use

As outlined in the City's Comprehensive Plan, much of the City can be characterized by low-density development that does not meet appropriate density levels needed to justify the cost of frequent transit service. The exception currently is the Perimeter Center activity area, which is served by rail and bus service. The City is developing redevelopment plans for Dunwoody Village and the Georgetown shopping area that propose additional land uses that will contribute to increase use and intensity on underutilized land. For the City to create a multi-modal transportation system that includes equal access and opportunity for pedestrians, bicyclists, and transit users, it must also consider and plan for land uses that are supportive of transit.

Transit Planning Recommendations

For the City to become a true destination with viable transportation alternatives, additional transit and shuttle services should be explored between the City and PCID. Current MARTA bus routes are designed to take individuals to and from nearby rail

stations. They are not designed as circulators to take individuals from one destination to another within a given area for short trips. It is recommended that the City continue to work with PCID to determine the feasibility of a circulator transit service to expand upon the existing transit service and connect Perimeter Center with other commercial and community destinations within the City.

The City should also work with Georgia Perimeter College regarding the feasibility of a shuttle system linking the MARTA station and possible existing parking areas along Peachtree Industrial Boulevard and I-285 to Georgia Perimeter College.

Looking into the future, there seems to be a need for transit. However, transit service provided by the City is not cost effective, and although there were some comments from the public expressing the needs for transit service that were responsive to the individual needs of residents, it was determined not to be a priority to the community at this point in time.

Special Considerations

As part of the development of the CTP, there are several special issues and considerations that the City should examine. These include traffic calming measures, parking management, and low-emission alternative vehicles.

Traffic Calming

Residents of Dunwoody have expressed that traffic is degrading the quality of life in the community. Besides the effect on quality of life, cut-through traffic can contribute to residents' perceived level of safety and the ability to use the street zone for other purposes, such as walking and biking. Traffic calming is one means to be able to maintain connectivity and traffic flow for vehicles while lessening the negative effects of excessive speed and traffic volume, particularly on neighborhood streets. The City adopted a traffic calming policy in 2009 and should continue working with neighborhoods and community residents to implement the City's adopted traffic calming policy.

Parking Management

To encourage alternatives modes of transportation, the City should consider parking standards that will encourage walking, biking, and transit. According to the Victoria Transport Policy Institute, there are several benefits to developing parking management strategies, including facility cost savings, flexible facility location and design, reduced land consumption, mobility management support, smart growth support, improved walkability, transit support, reduced stormwater management costs, and livable communities support.

While not a citywide issue, there are several parking management strategies that the City should consider where applicable.

- Shared parking – A parking facility that serves multiple users or destinations. Examples of shared parking strategies include shared spaces rather than reserved spaces, shared parking among destinations, public parking facilities, in-lieu fees, and special parking assessment. The City should consider shared parking strategies in Dunwoody Village, the Georgetown redevelopment area, and the Williamsburg/Jett Ferry commercial node.

- Parking regulations – Controls who, when, and how long vehicles may park at a particular location. Regulations may include the user or vehicle type, duration, time period restrictions, residential parking permits, special events, and restricted overnight parking. More flexible parking standards allow for parking requirements that account for specific factors. One example is determining the quality of the walking environment, whereas parking requirements could be reduced in walkable areas or communities and where walkability may allow for more shared or off-site parking opportunities.

- Parking maximums – Places an upper limit on the parking supply, either on an individual site or throughout a specific area. Parking maximums can be done in addition to or in place of parking minimums and can be considered through development and zoning regulations.

- Remote parking and shuttle service – Using off-site parking facilities and special shuttle service to connect destinations to the off-site parking facility. The City should coordinate with Georgia Perimeter College and businesses along Peachtree Industrial Boulevard and I-285 to determine if such a strategy would

work for relieving parking pressures on campus and traffic congestion around the college.

- Bicycle parking – Increase the convenience and security of bicycle commuting. The City should consider in commercial areas, such as Dunwoody Village, allowing for the substitution of vehicle parking for bicycle parking and/or off-setting vehicle parking requirements with the allowance of bicycle parking.

Low-Emission Alternative Vehicles

Polices identified in the City's Comprehensive Plan include promoting the use of zero-emission, low-speed vehicles (LSV) and neighborhood electric vehicles and considering other emerging and innovative technologies. Specific transportation goals included in the City's Comprehensive Plan call for exploring the feasibility of golf carts as a transportation mode and identifying needs (improvements, striping, and signage) for roads determined appropriate for LSV use.

There are states laws already providing for LSVs and motorized carts; however, there are many other issues that must be addressed in allowing for the use of golf carts and other low-emission vehicles on City streets, such as which streets the vehicles would be allowed on; headlight and seatbelt requirements; driver requirements; and multi-use path access. The City has drafted an ordinance that addresses these issues and others. The ordinance should be carefully reviewed by City staff and the City's legal council as well as vetted through the public process. It is recommended that motorized carts, as identified by state law, should not be allowed on any streets with a speed limit over 25 mph and can only be operated by licensed drivers. It is also recommended that the City develop a fact sheet summarizing the rules for operating motorized vehicles and low-speed vehicles on City streets.

Implementation Plan

This section contains a prioritized list of transportation projects, a discussion of the prioritization methodology and project phasing, and a list of educational initiatives.

Prioritized Project List

Table 10: City of Dunwoody Prioritized Project List on the following pages summarizes recommended projects by priority tier and project type.

Table 10: City of Dunwoody Prioritized Project List

Priority Tier	Project ID	Type	Project Description	Implementation Strategy Approach	Total Project Cost	Completion Date
1a	1	ATMS/ITS Corridors	Automated Traffic Management Systems and Intelligent Transportation Systems implementation in the Perimeter CID as well as Dunwoody Village and Chamblee Dunwoody Road, North Shallowford Road, and North Peachtree Road corridors: Signal timing, controller upgrades, and signal interconnection	City of Dunwoody, Perimeter CID, ARC, LCI, T-SPLOST*, Georgia DOT	$1,000,000	2011 - 2015
1a	2	Bicycle/ Pedestrian	Includes signed bike route and/or sharrows: North Peachtree Road, Tilly Mill Road, Peachford Road, Old Spring House Lane, Dunwoody Park, Perimeter Center East, Valley View Road, Meadow Lane Road, Vermack Road, Peeler Road, Happy Hollow Road, Womack Road, Olde Perimeter Way (private), Ridgeview Road.	City of Dunwoody, ARC, PCID	$200,000	2011 - 2015
1a	3	Bicycle/ Pedestrian	Mount Vernon Road at North Peachtree Road: Add crosswalk and refuge island	GDOT Safe Routes To School Grant	$100,000	2011 - 2015
1a	4	Intersection	Mount Vernon Road at Vermack Road: Add left turn lane from Mount Vernon Road to Vermack Road	City of Dunwoody	$500,000	2011 - 2015
1a	5	Intersection	Womack Road at East Driveway of Georgia Perimeter College Dunwoody Campus: In conjunction with the college, reconfigure on-campus traffic flow to relieve congestion as well as provide alternative access and prohibit left turns from Womack Road into the college.	Georgia Perimeter College	$150,000	2011 - 2015
1a	6	Intersection	Mount Vernon Road & Chamblee Dunwoody Road at Nandina Lane: Convert access to Nandina Lane to right in/right out. Nandina Lane remains two way. See also Dunwoody Village Master Plan, Five Year Implementation Plan, Project #3	City of Dunwoody, LCI	$150,000	2011 - 2015

Table 10: City of Dunwoody Prioritized Project List

Priority Tier	Project ID	Type	Project Description	Implementation Strategy Approach	Total Project Cost	Completion Date
1a	7a	Intersection	Mount Vernon Road at Tilly Mill Road: Change existing left/through to left only and existing right only to shared through/right	City of Dunwoody, T-SPLOST*	$200,000	2011 - 2015
1a	7b	Intersection	Mount Vernon Road at Mount Vernon Place: Prohibit left turn movements from Mount Vernon Place to Mount Vernon Road westbound. In conjunction with improvement at Mount Vernon Road and Tilly Mill Road.	City of Dunwoody	$500	2011 - 2015
1a	7c	Intersection	Tilly Mill Road at Mount Vernon Place: Realign Mount Vernon Place to form a T intersection with Tilly Mill Road	City of Dunwoody	$150,000	2011 - 2015
1a	8	Intersection	Womack Road at Vermack Road: Signalize or install a roundabout	City of Dunwoody	$1,000,000	2011 - 2015
1a	9	Intersection	Intersection improvements on Chamblee Dunwoody Road from Vermack Road to North Shallowford Road	City of Dunwoody, T-SPLOST*	$1,575,000	2011 - 2015
1a	10	Intersection	Tilly Mill Road at North Peachtree Road: Intersection improvement project. Complete concept report prior to improving the intersection.	City of Dunwoody	$3,000,000	2011 - 2015
1a	11	Intersection	Chamblee Dunwoody Road at Spalding Drive: Reconfigure intersection to increase safety (see three concepts under consideration)	City of Dunwoody, ARC, T-SPLOST*	$750,000	2011 - 2015
1a	12	Reconfigure Existing Roadway	Dunwoody Village Parkway multi-modal improvements - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #1	City of Dunwoody, LCI, Georgia DOT Transportation Enhancement	$2,400,000	2011 - 2015
1a	13	Study	Dunwoody Village Traffic Study	City of Dunwoody, ARC	$150,000	2011 - 2015

Table 10: City of Dunwoody Prioritized Project List

Priority Tier	Project ID	Type	Project Description	Implementation Strategy Approach	Total Project Cost	Completion Date
1b	14	Bicycle/ Pedestrian	On-street bike lane or multi-use path adjacent to the roadway along Chamblee-Dunwoody Road from North Shallowford Road to Mount Vernon Road and Roberts Drive to Spalding Drive. See also Dunwoody Village Master Plan, Five Year Implementation Plan, Projects #2 and #5	City of Dunwoody, ARC, T-SPLOST*	$3,000,000	2016 - 2020
1b	15	Multi-modal, Dunwoody Village Master Plan	Chamblee Dunwoody Road multi-modal improvements from Mount Vernon Road to Roberts Drive - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #2	City of Dunwoody, LCI, ARC, T-SPLOST*	$4,600,000	2016 - 2020
1b	16	Multi-modal, Georgetown/ North Shallowford Master Plan	Chamblee Dunwoody Road multi-modal improvements from I-285 to North Shallowford Road - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #1	City of Dunwoody, LCI, ARC, T-SPLOST*	$4,700,000	2016 - 2020
1b	17	Multi-modal, Georgetown/ North Shallowford Master Plan	Peachford Road multi-modal improvements from North Shallowford Road to North Peachtree Road - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #4	City of Dunwoody, LCI	$2,600,000	2016 - 2020
2	18	Multi-modal, Georgetown/ North Shallowford Master Plan	North Shallowford Road multi-modal improvements from Cotillion Drive to Peeler Road - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #6	City of Dunwoody, LCI, Georgia DOT Transportation Enhancement	$4,000,000	2021 - 2030
2	19	Bicycle/ Pedestrian	Neighborhood Trails: Residential bicycle/pedestrian connections to surrounding neighborhoods - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #6	City of Dunwoody, LCI, ARC	$2,850,000	2021 - 2030

Table 10: City of Dunwoody Prioritized Project List

Priority Tier	Project ID	Type	Project Description	Implementation Strategy Approach	Total Project Cost	Completion Date
2	20	Bicycle/ Pedestrian	New path connection between Ridgeview Road (North) and Ridgeview Road (South) Multi-use trail along Dunwoody Gables Drive	City of Dunwoody	$1,100,000	2021 - 2030
2	21	Bicycle/ Pedestrian	On-street bike lane or multi-use path adjacent to the roadway along Spalding Drive to connect to future Sandy Springs facility	City of Dunwoody, Georgia DOT	$3,100,000	2021 - 2030
2	22a	Center Turn Lane	Add center turn lane, 4' bike lanes, and 6' sidewalks with a 2' buffer to Mount Vernon Road between Ashford Dunwoody Road and Mount Vernon Place. See also Dunwoody Village Master Plan, Five Year Implementation Plan, Project #4	City of Dunwoody, ARC, T-SPLOST*, Georgia DOT	$12,000,000	2021 - 2030
2	22b	Center Turn Lane	Add center turn lane, 4' bike lanes, and 6' sidewalks with a 2' buffer to Mount Vernon Road between Mount Vernon Place and Dunwoody Club Drive	City of Dunwoody, ARC, T-SPLOST*, GDOT	$5,500,000	2021 - 2030
2	23	Intersection	Vermack Road at Parliament Road/Old Village Run: Relocate overhead utility and landscape to improve sight distance	City of Dunwoody	$50,000	2021 - 2030
2	24	Intersection	Mount Vernon Road at Chamblee Dunwoody Road: Add an additional left turn lane to Mount Vernon Road eastbound, add an additional left turn lane to Mount Vernon Road westbound, and add an additional through lane to Chamblee Dunwoody Road southbound	City of Dunwoody	$1,200,000	2021 - 2030
2	25	Multi-modal, Georgetown/ North Shallowford Master Plan	Cotillion multi-modal improvements - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #11	City of Dunwoody, LCI, ARC, GDOT	$2,050,000	2021 - 2030

Table 10: City of Dunwoody Prioritized Project List

Priority Tier	Project ID	Type	Project Description	Implementation Strategy Approach	Total Project Cost	Completion Date
2	26	New Location Roadway	Dunwoody Village Internal multi-modal Streets Phase I - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #10	City of Dunwoody, ARC, Redevelopment	$3,850,000	2021 - 2030
2	27	New Location Roadway	Peachford Road Extension - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #9	City of Dunwoody, Redevelopment	$7,400,000	2021 - 2030
3	28	Multi-modal, Georgetown/ North Shallowford Master Plan	Dunwoody Park multi-modal improvements from Chamblee Dunwoody Road to Peachford Road Extension/Dunwoody Park South - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #13	City of Dunwoody, LCI, ARC, Redevelopment	$3,250,000	Long Range
3	29	Multi-modal, Georgetown/ North Shallowford Master Plan	Dunwoody Park multi-modal improvements from Peachford Road Extension/Dunwoody Park South to North Shallowford Road - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #14	City of Dunwoody, LCI, ARC, Redevelopment	$1,850,000	Long Range
3	30	Multi-modal, Georgetown/ North Shallowford Master Plan	Dunwoody Park North multi-modal improvements from Dunwoody Park to new roadway internal to the abandoned residential development - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #15	City of Dunwoody, LCI, ARC, Redevelopment	$1,850,000	Long Range
3	31	Multi-modal, Dunwoody Village Master Plan	Ashford Center Parkway/Womack Road multi-modal improvements - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #9	City of Dunwoody, LCI, ARC	$560,000	Long Range

Table 10: City of Dunwoody Prioritized Project List

Priority Tier	Project ID	Type	Project Description	Implementation Strategy Approach	Total Project Cost	Completion Date
3	32	Bicycle/ Pedestrian	New bicycle route along Valley View Road and Ashford Gables Drive between Chamblee Dunwoody Road and New path connection between Ridgeview Road (North) and Ridgeview Road (South)	City of Dunwoody, Redevelopment, PCID	$1,600,000	Long Range
3	22c	Center Turn Lane	Add center turn lane, 4' bike lanes, and 6' sidewalks with a 2' buffer to Mount Vernon Road between Dunwoody City Limit and Ashford Dunwoody Road	City of Dunwoody, ARC, T-SPLOST*	$4,700,000	Long Range
3	33	Center Turn Lane	Add center turn lane to North Peachtree Road between North Forrest Trail and Peachford Road	City of Dunwoody	$1,100,000	Long Range
3	34	Center Turn Lane	Add center turn lane to Tilly Mill Road between Peeler Road and Peachtree Industrial Boulevard	City of Dunwoody	$1,300,000	Long Range
3	35	Intersection	Mount Vernon Road at Ashford Dunwoody Road/Trailridge Way: Add an additional left turn lane to Mount Vernon Road westbound, add an additional through lane to Mount Vernon Road eastbound, and add an additional right turn lane to Ashford Dunwoody Road northbound	City of Dunwoody, ARC, T-SPLOST*, Georgia DOT	$1,125,000	Long Range
3	36a	Intersection	Mount Vernon Road at Tilly Mill Road: Install roundabout	City of Dunwoody, ARC, Georgia DOT	$750,000	Long Range
3	36b	Intersection	Mount Vernon Road at Jett Ferry Road: Install roundabout	City of Dunwoody, ARC, Georgia DOT, Redevelopment	$750,000	Long Range
3	36c	Intersection	Mount Vernon Road at Dunwoody Club Drive: Install roundabout	City of Dunwoody, ARC, Georgia DOT, Redevelopment	$750,000	Long Range
3	37	Multi-modal, Dunwoody Village Master Plan	Dunwoody Village Internal Multi-modal Streets Phase II - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #1	City of Dunwoody, ARC, Redevelopment	$275,000	Long Range

Table 10: City of Dunwoody Prioritized Project List

Priority Tier	Project ID	Type	Project Description	Implementation Strategy Approach	Total Project Cost	Completion Date
3	38	New Location Roadway	New street connection between Ravinia Parkway and Perimeter Center East New location 2 lane roadway	City of Dunwoody, Perimeter CID, Redevelopment	$1,600,000	Long Range
3	39	New Location Roadway	New street connection between Asbury Square and Ashford Parkway New location 2 lane roadway	City of Dunwoody, Perimeter CID, Redevelopment	$600,000	Long Range

* T-SPLOST funding availability is subject to the T-SPLOST referendum being approved by voters in 2012 and as such may not be available

Note: As a policy at all intersection improvement locations, roundabouts will be considered first, and if found not feasible, then traditional intersection improvements should be implemented.

Map 14: Prioritized Project Map shows the location on a map of each project in the prioritized project list.

Additional Recommendations

Recreational greenways indentified in the Parks and Greenspace Comprehensive Plan serve a transportation purpose and complement the recommendations of this CTP. As such, implementation of the greenways is recommended.

New path connections between bicycle routes or facilities and subdivisions or major destinations should be considered and implemented as opportunities are presented.

The City should work with Georgia Perimeter College to improve on-campus and driveway traffic management as outlined in the traffic study completed by Kimley-Horn and Associates in April of 2010 and confirmed by analysis completed by ARCADIS for the CTP. Specifically, improving vehicular access to the college by mitigating existing on-campus traffic bottlenecks will alleviate the traffic queuing on Womack and Tilly Mill Roads. Consideration should be given to prohibit left turns at the east drive on Womack Road into the College as appropriate alternative access is identified and improved.

Improvements to the intersection of Chamblee-Dunwoody and Mount Vernon Roads are proposed. Candidate project recommendations included extending Ashford Center Parkway from Chamblee Dunwoody Road to Dunwoody Village Parkway as a solution to relieving the congestion at the intersection of Chamblee-Dunwoody and Mount Vernon Roads. The extension project was opposed by the community and removed from the recommended project list. A detailed traffic study in and around the Dunwoody Village should be undertaken before making improvements to the intersection.

Prioritization Methodology

The project prioritization methodology uses objective criteria to sort projects into three priority tiers. The methodology encompasses public input from the Advisory Committee, City staff, and the community meeting held on January 25, 2011.

Three criteria were used in the project prioritization methodology. For each of the three criteria, a project was awarded a score of 1, 2, or 3 based on how well it met the criteria. The criteria are as follows:

- Vision – How well does the project meet the guiding principles and corresponding statements? A project was awarded 3 points if it met a majority of the principles, 2 points if it met two principles, and 1 point if it met only one principle.

- Feasibility – How difficult is the project to construct? How obtainable is funding? A project was awarded 3 points if construction issues are likely minimal and funding is projected to be easily available, 2 points if either construction difficulty was predicted to be low or funding could be easily obtained, and 1 point if construction was predicted to be difficult or funding was not likely to be easily available.

- Partnering – Are partner agencies likely to support the project, or can the City of Dunwoody build it on its own? What is the level of public support? A project was awarded 3 points if partner agencies are likely to support the project and public support was high, 2 points if there was likely agency support or high public support, and 1 point if both likely partner agency and public support were low.

The scores for the criteria were then summed and projects were sorted in descending order. The highest scoring projects were placed in Tier 1, the second highest in Tier 2, the lowest score in Tier 3. Priority tiers were used instead of absolute ranks because actual project implementation times will vary based on project complexity, funding availability, staff availability, and agency coordination.

Phasing

Adding a center turn lane and sidewalks to Mount Vernon Road (No. 22) requires phasing and is substantially longer and more expensive than the other recommended projects. Three phases are recommended:

- Phase I: City limits to Ashford Dunwoody Road and left turn lanes at Vermack Road (No. 4) and Tilly Mill Road (No. 7)

- Phase II: Ashford Dunwoody Road to Mount Vernon Place

- Phase III: Mount Vernon Place to Dunwoody Club Drive

Education Initiatives

To ensure successful implementation of the CTP and increase walking and biking as viable forms of transportation and recreational choices, the City should consider

awareness and education initiatives to bring about the benefits associated with walking, biking, and transit. It is also important to educate the community on safety factors and proper use of facilities.

The City should consider partnerships with advocacy groups, associations, and educational entities where appropriate to promote and implement alternative transportation programs and incentives. These may include:

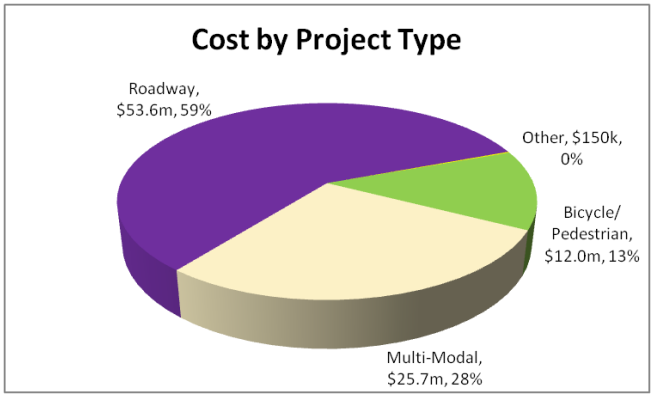
- Encourage an annual recreational bike ride around the City
- Allow use of showers at recreational centers for bike commuters
- Endorse Bike to Work and Walk to School Day
- Host valet bike parking at downtown events
- Support Bicycle and Pedestrian Safety Weeks and safety classes through the Recreation Department and City schools
- Publicize the bicycle and pedestrian network and other planning initiatives through publications and the City's website. Consider an interactive online bicycle and pedestrian network map.
- Encourage the distribution of information on safety/legal requirements and/or benefits of walking/biking (e.g., "Did You Know" posters) through local bicycle shops, grocery stores, banks, doctor/dentist offices, and park and recreational centers
- Sponsor and coordinate pedestrian safety courses amongst City law enforcement officers
- Create a citywide helmet and bicycle light promotion program
- Work with local bicycle and pedestrian advocacy groups to promote "riding tips" or "walking tips" clinics
- Provide a space for bicycling clubs, advocacy groups, and other related interest groups to meet and hold classes and workshops

- Hold ceremonies and “ribbon-cuttings” to celebrate bicycle program and infrastructure accomplishments

- Create a Bicycle Officer Program that emphasizes education over punishment. The City of Davis, California promotes safety and awareness through enforcement by its police department called the Bicycle Officer Program. Applying this type of program in the City of Dunwoody would require having an officer on a bicycle and focusing on various bicycle infractions, such as running a stop sign, running a red light, and lack of bicycle lights when riding at night. Enforcement would concentrate in the commercial and education nodes, such as Perimeter Center, Dunwoody Village, and Georgia Perimeter College. As a way to promote education traffic laws and etiquette to bicyclists, the officer could issue warning tickets as a way to prevent discouraging new or inexperienced riders. When warranted, tickets are issued; however, the City of Davis has instituted incentives as well, such as offering a discount on a bicycle light at a local bicycle shop with a ticket for a missing bicycle light.

- Roundabout education program

Funding and Implementation



Based on the assumption that the City of Dunwoody has on average approximately $300,000 available for sidewalk capital investment (through 2015) and $500,000 for roadway improvements and widening per year, as well as additional guidance from the City of Dunwoody Public Works Department, total estimated funding per priority tier was calculated. Total project cost for each tier was then subtracted from the estimated funding to determine the gap between project needs and available funding.

The City of Dunwoody will not be able to complete the plan on its own. With local funding only, the City of Dunwoody would be unable to complete all projects in priority

tiers 1a and 1b by 2030, and none of the projects in priority tiers 2 or 3 could be completed. Table 11 details total project cost, funding, and the cumulative gap.

Table 11: Funding Gap by Priority Tier

Priority Tier	Time Frame	Total Cost	Total Funding	Cumulative Gap
1a	2011 – 2015	$11,325,500	$3,300,000	-$8,025,500
1b	2016 – 2020	$14,900,000	$2,500,000	-$20,425,500
2	2021 – 2030	$43,100,000	$5,000,000	-$58,525,500
3	Long Range	$22,060,000	$5,000,000	-$75,585,500

To implement the plan, the City of Dunwoody will need to partner with other entities and agencies or explore other means of funding projects. Potential partners include PCIDs, DeKalb County, ARC, and Georgia DOT. Additionally, when redevelopment occurs, private developers could be asked to fund improvements (i.e., the street through Dunwoody Village connecting Chamblee Dunwoody Road and Dunwoody Village Parkway).

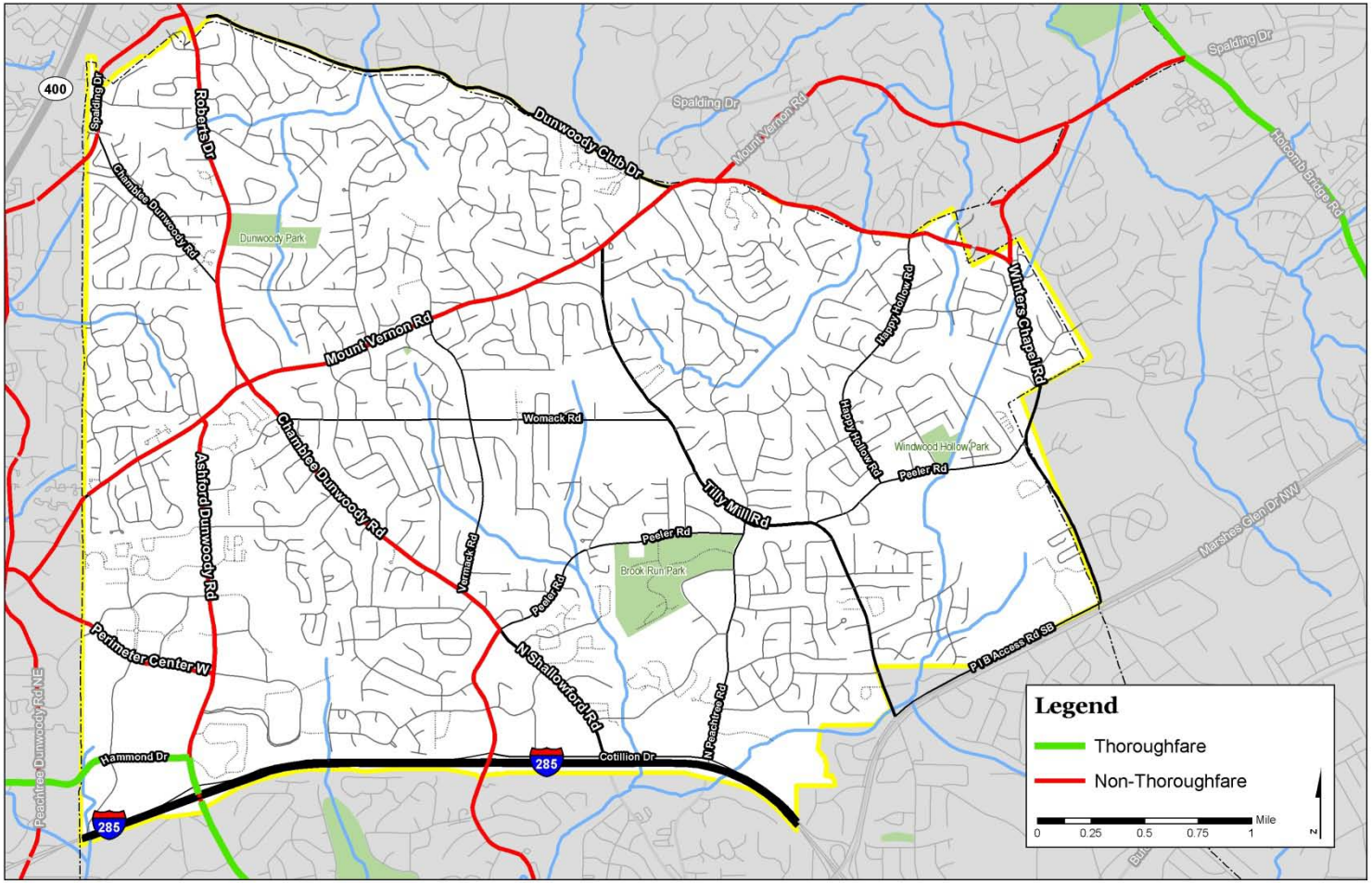
Currently, House Bill 277 allows citizens to vote on assessing a 1 percent regional transportation special local option sales tax (T-SPLOST) on themselves in the 2012 general election. Should the T-SPLOST pass in the Atlanta region, the City of Dunwoody is projected to receive $800,000 annually from the T-SPLOST. Table 12 shows the total funding and cumulative gap if the T-SPLOST passes. Even with the T-SPLOST, the City of Dunwoody will require additional funding or funding partners to complete all projects in the plan.

Table 12: Funding Gap by Priority Tier (T-SPLOST)

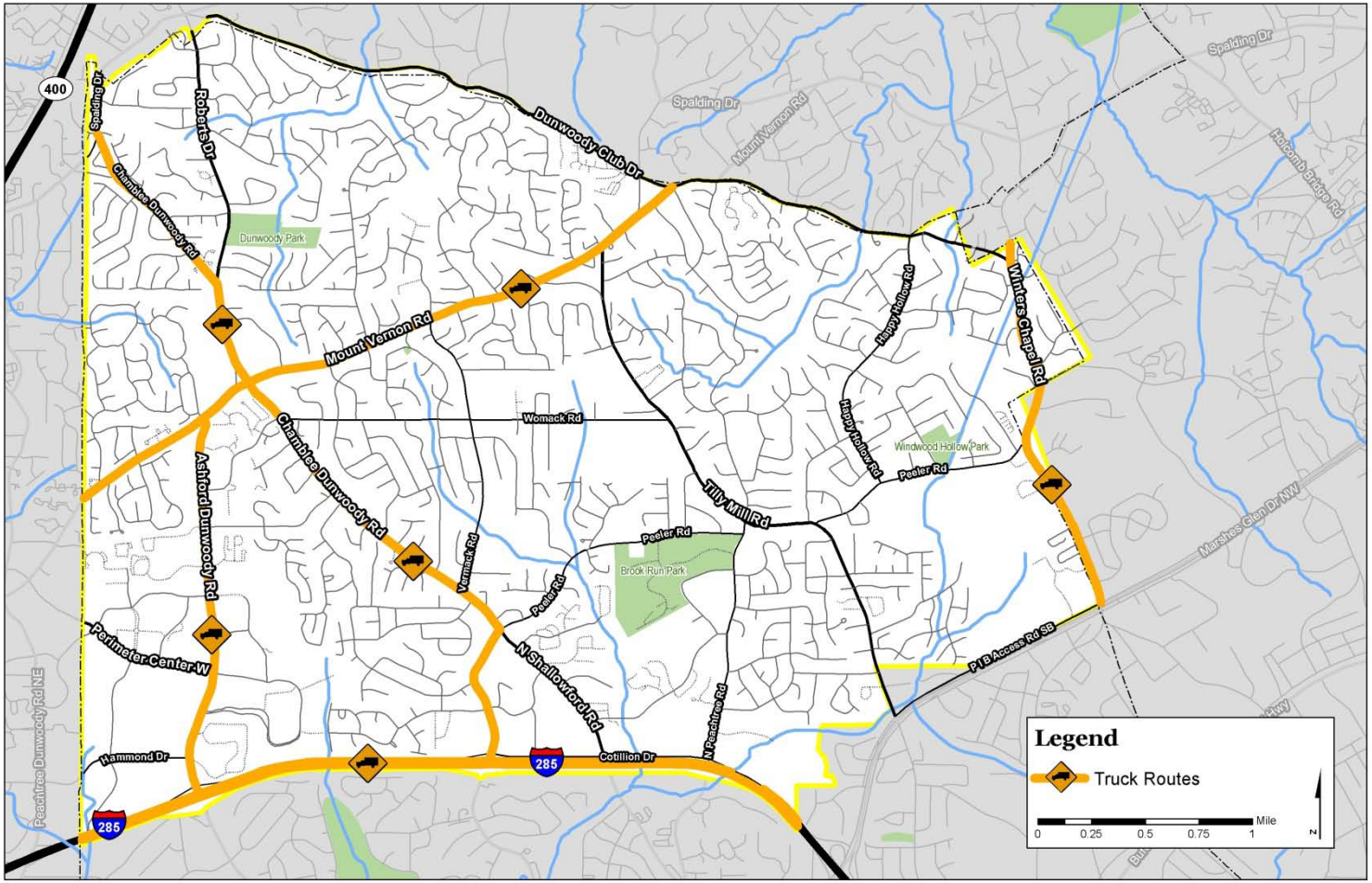
Priority Tier	Time Frame	Total Cost	Total Funding	Cumulative Gap
1a	2011 - 2015	$11,325,500	$5,700,000	-$5,625,500
1b	2016 - 2020	$14,900,000	$6,500,000	-$14,025,000
2	2021 - 2030	$43,100,000	$13,000,000	-$44,125,500
3	Long Range	$22,060,000	$5,000,000	-$61,185,500

Besides partners, there are other financing options available to the City of Dunwoody. Issuing bonds is one way to finance infrastructure improvements. A disadvantage to bonds is that the money has to be paid back with interest, which may preclude other

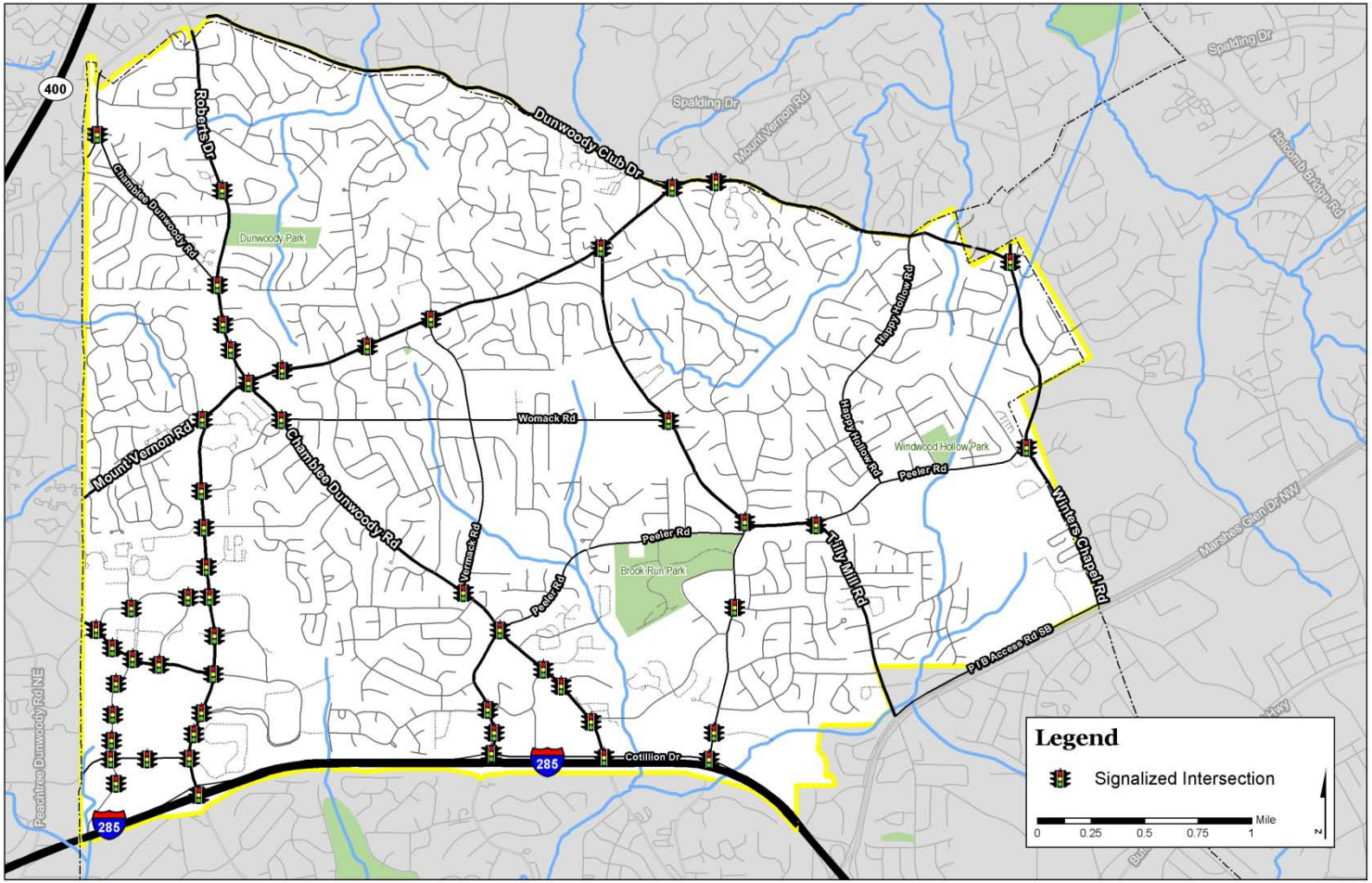
needed improvements in the future. Increasing revenues is another option for reducing the funding gap.



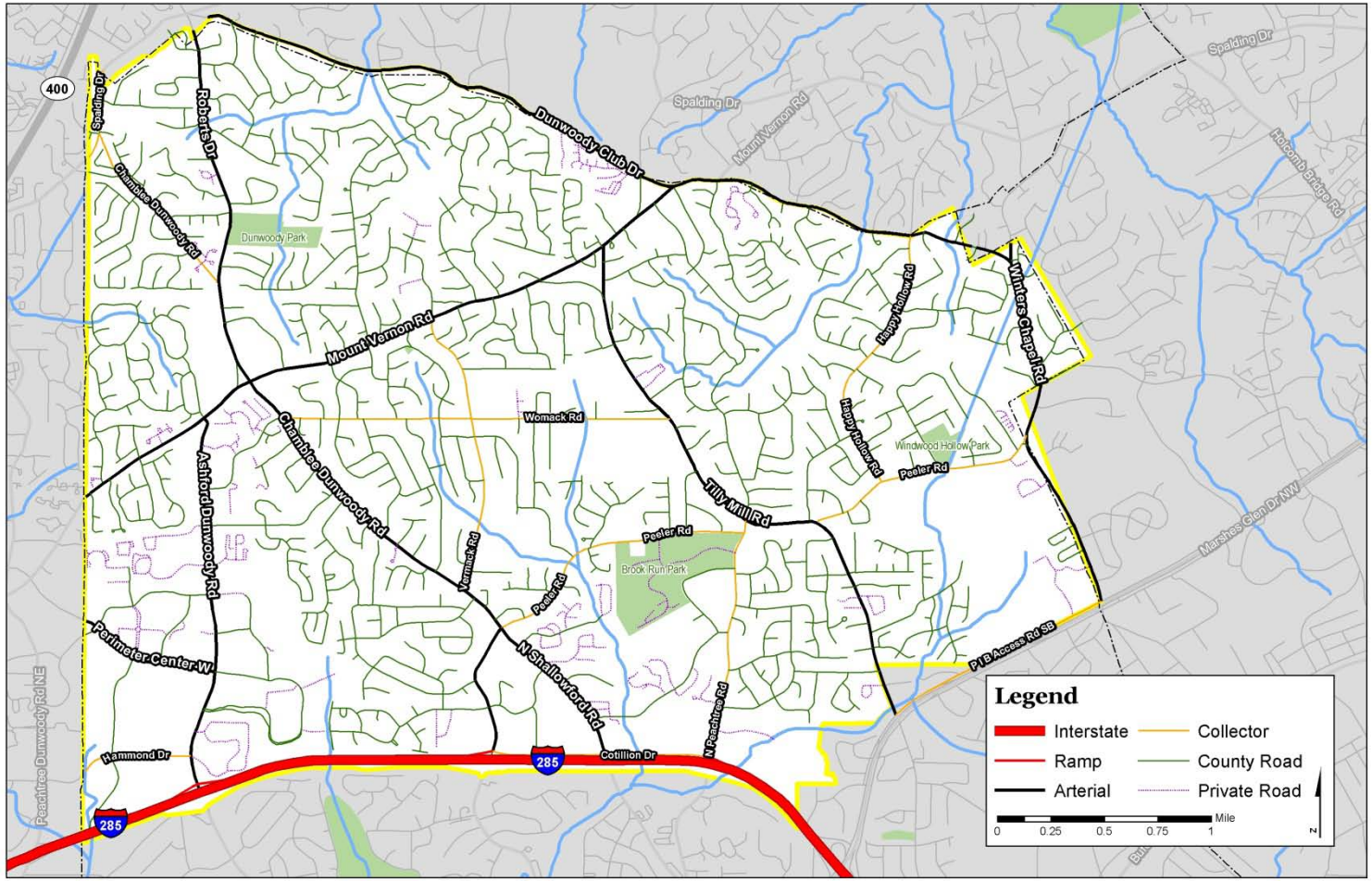
Map 1: ARC's Regional Strategic Transportation System



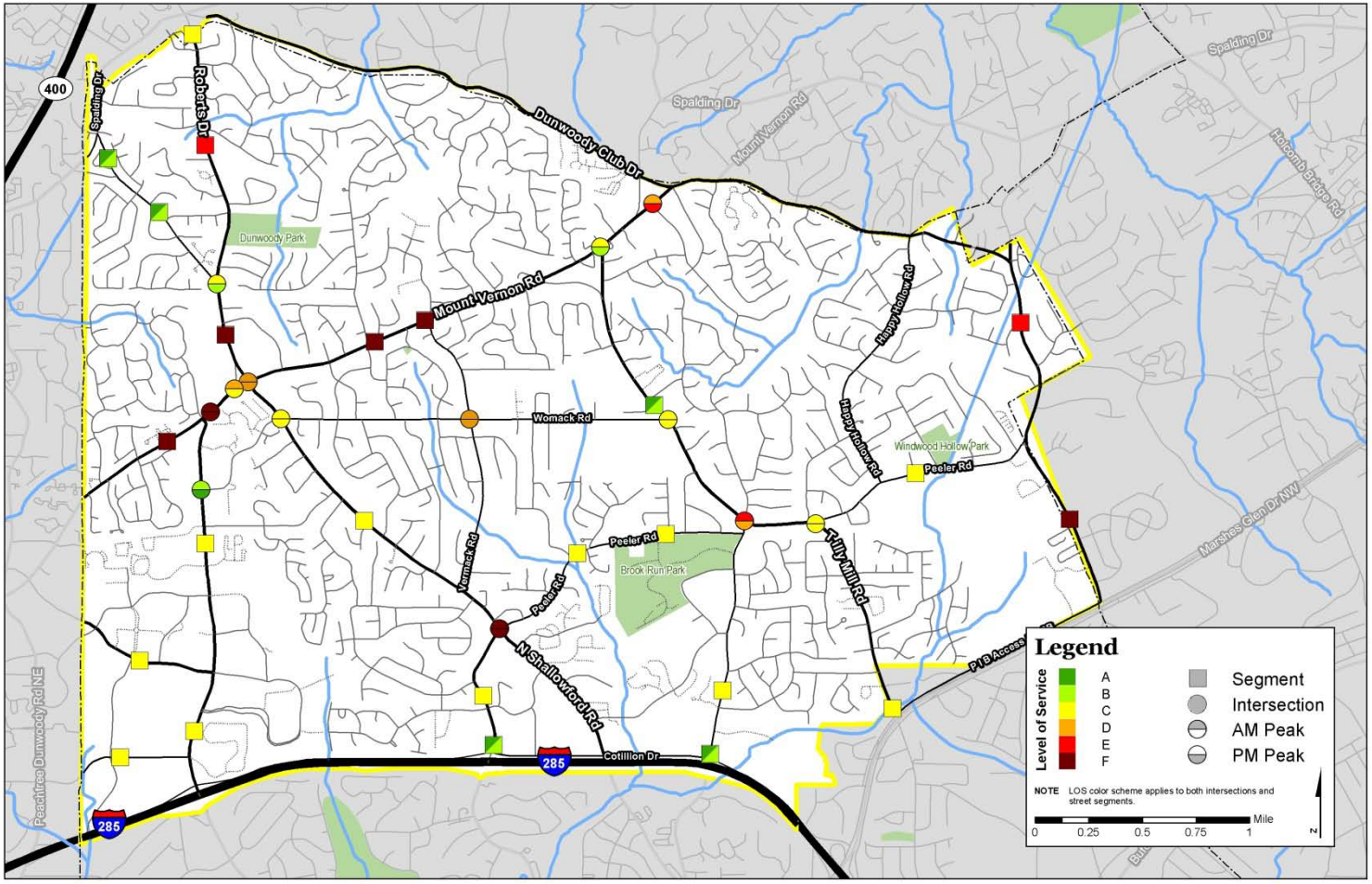
Map 2: Truck Routes



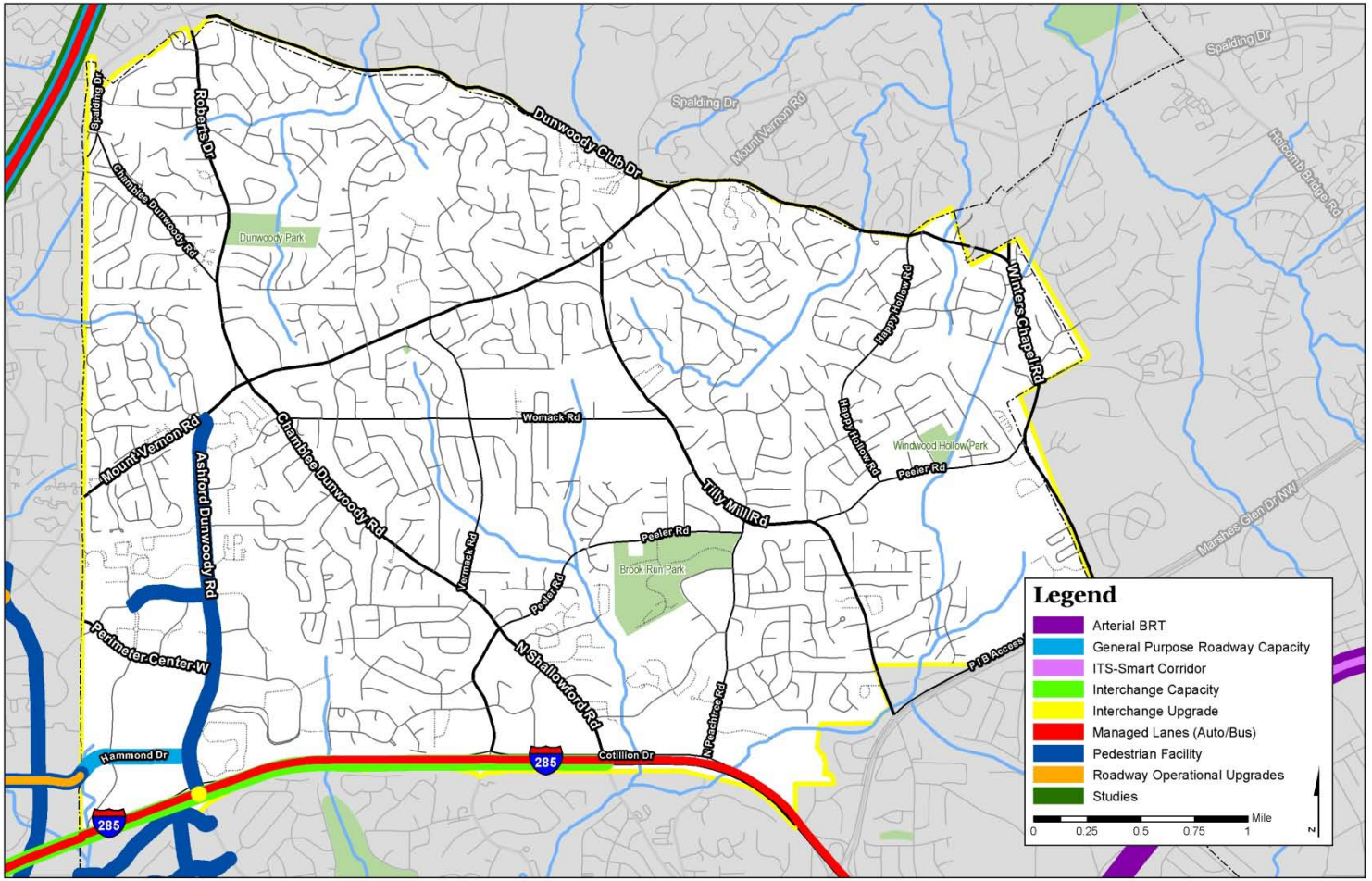
Map 3: Signalized Intersections



Map 4: Roadway Network and Functional Classification

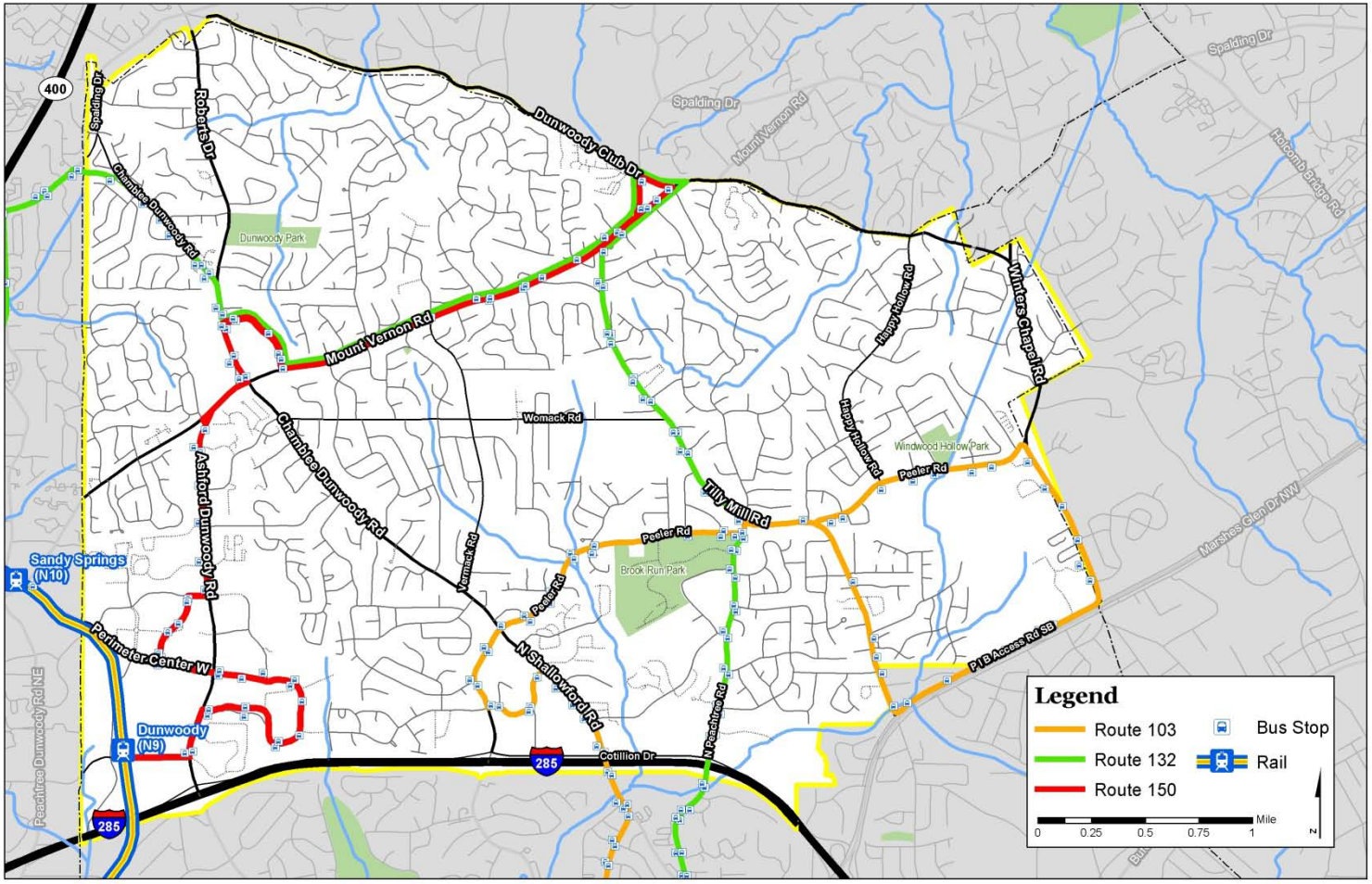


Map 5: Level of Service

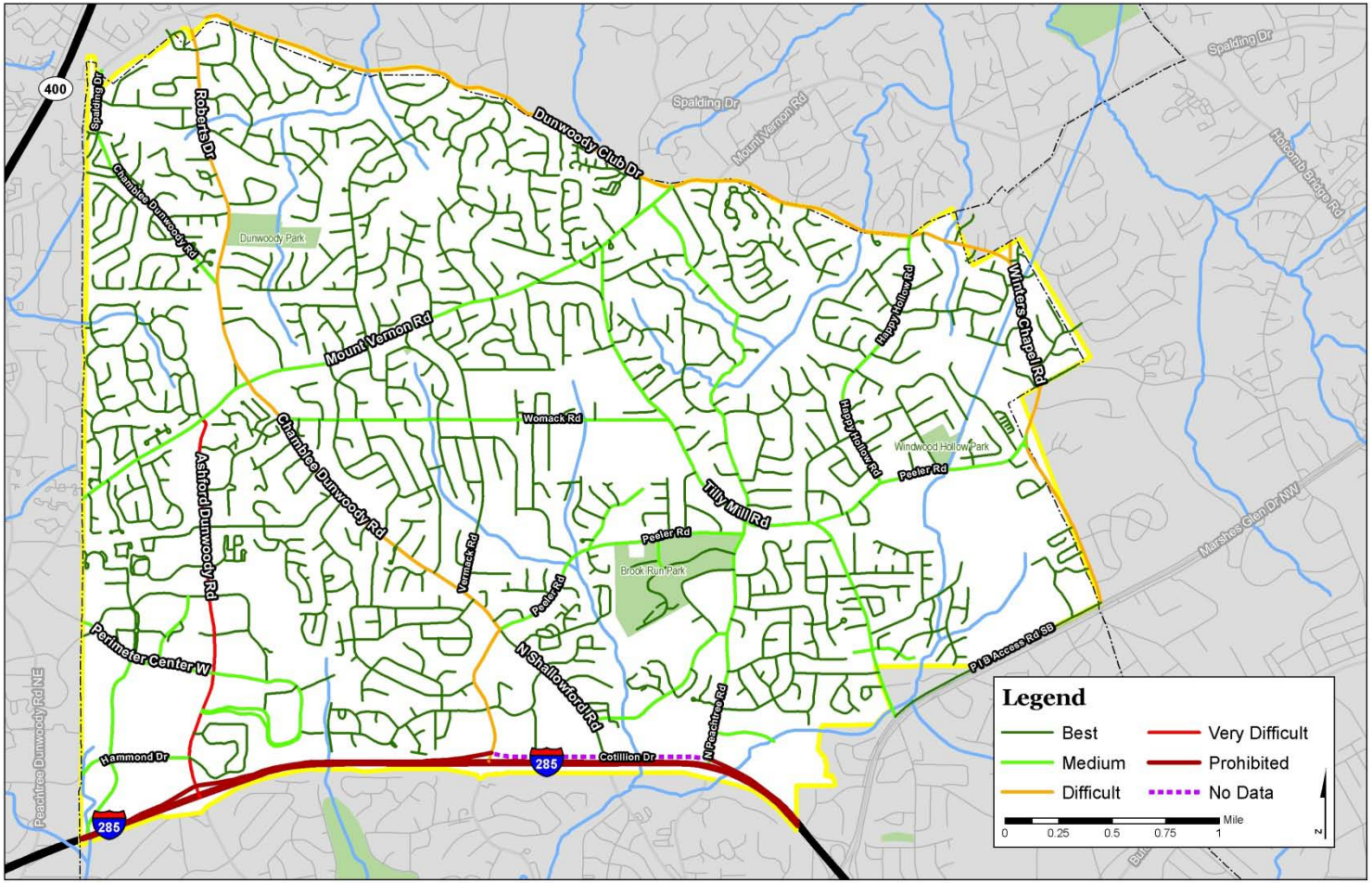


Map 6: Planned and Programmed Projects

Source: Atlanta Regional Commission, Perimeter Center CID

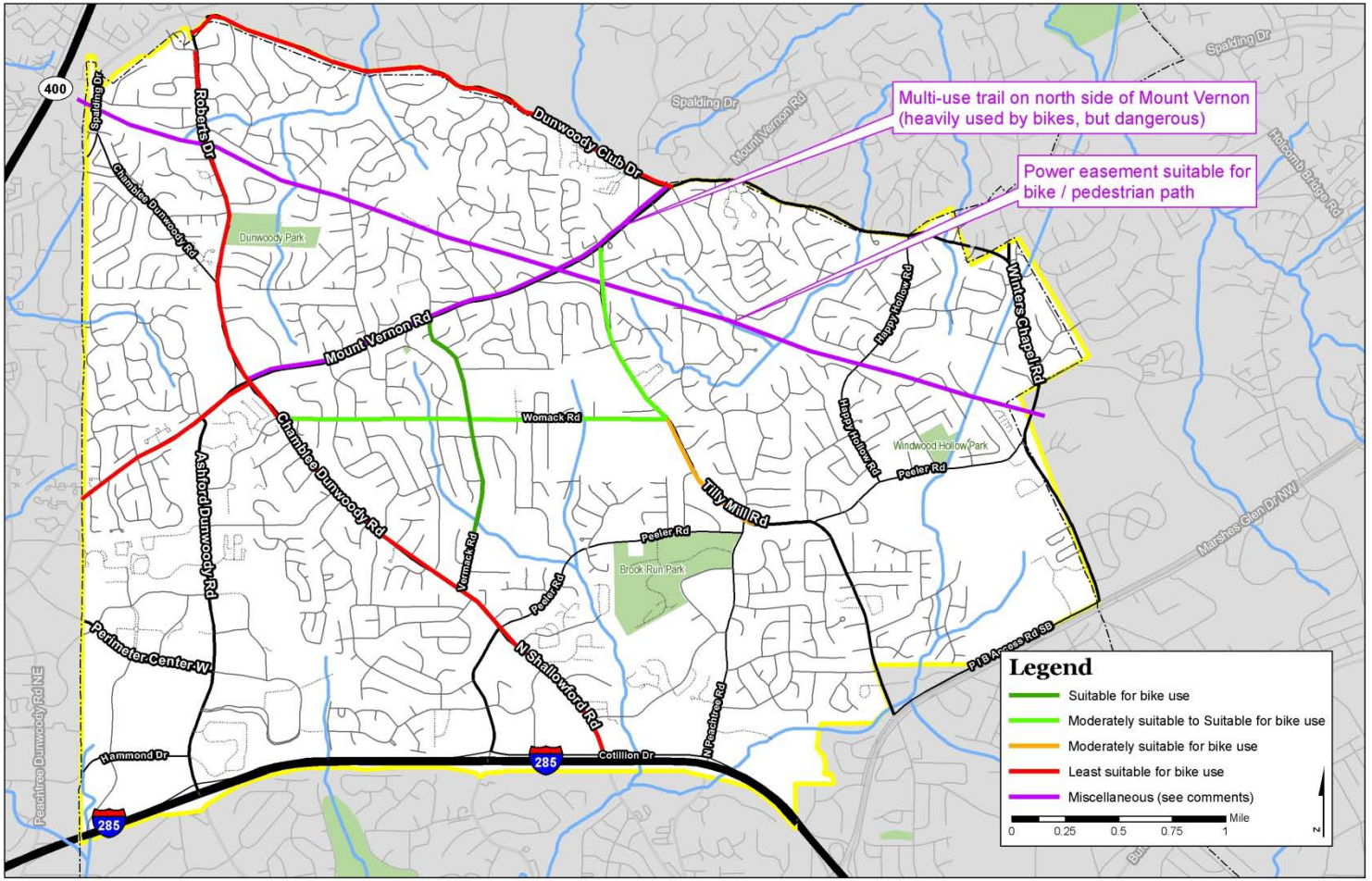


Map 7: Current Transit Service as of February 2011

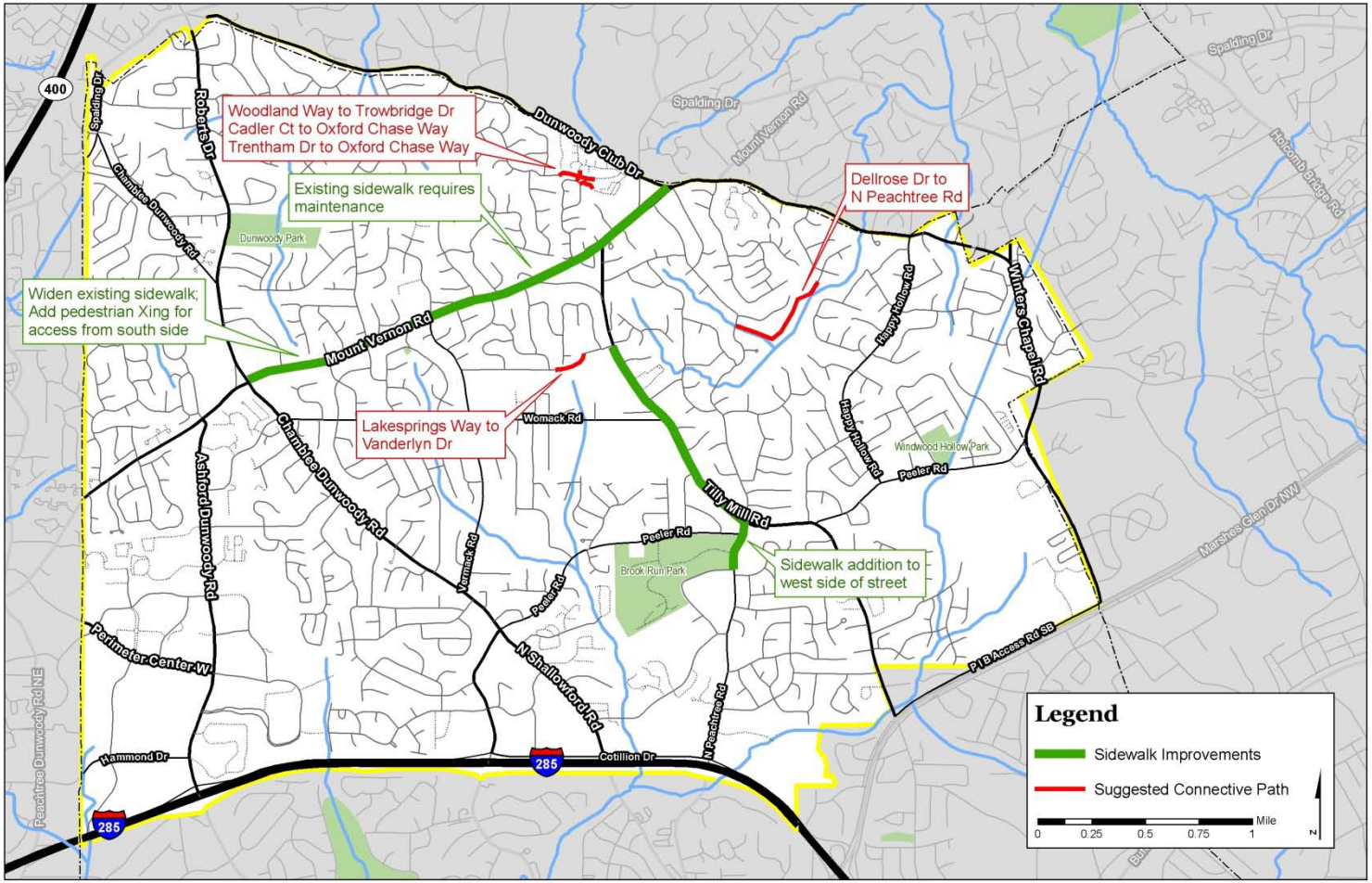


Map 8: Bike Suitability

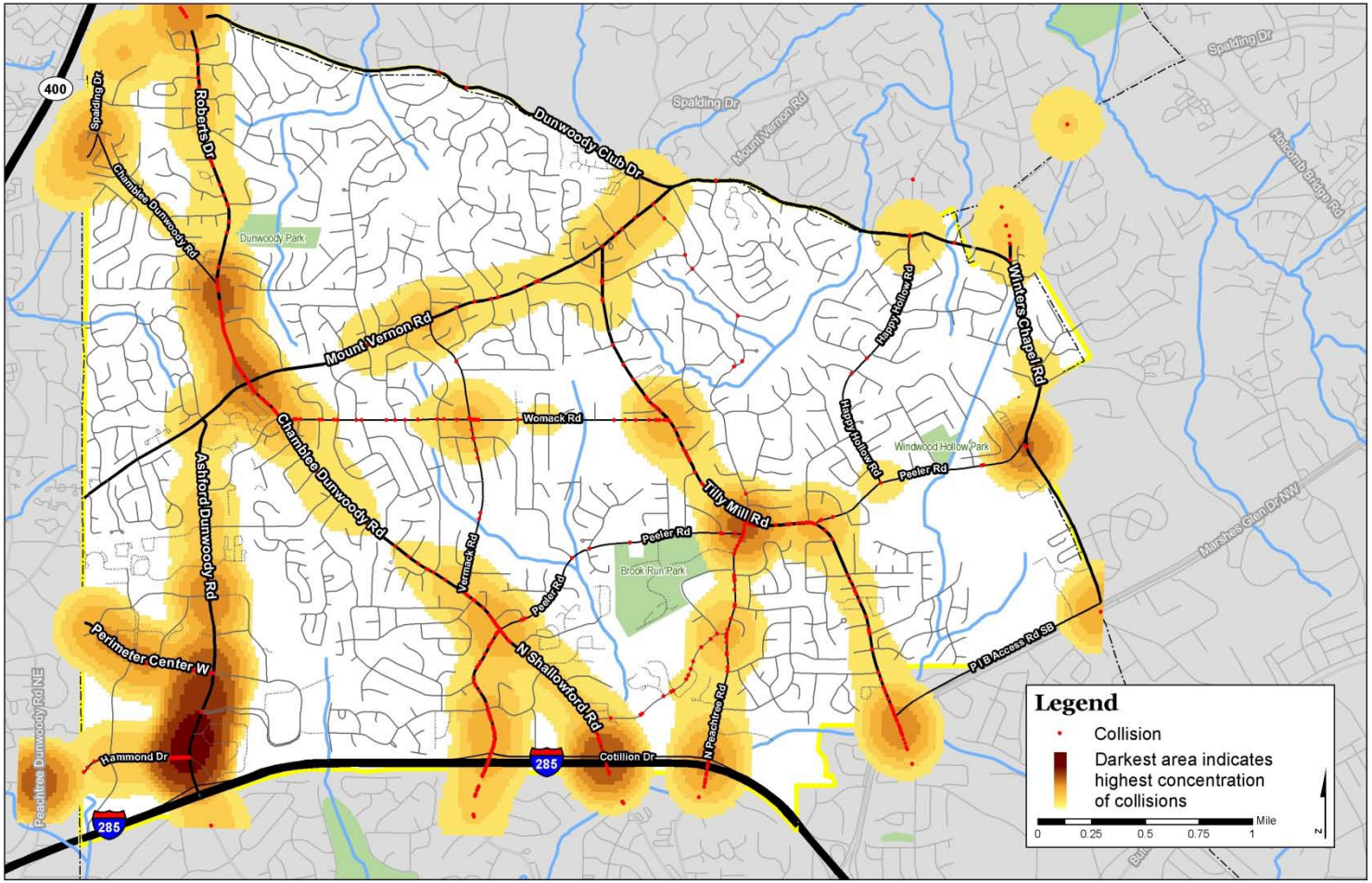
Source: DeKalb County CTP



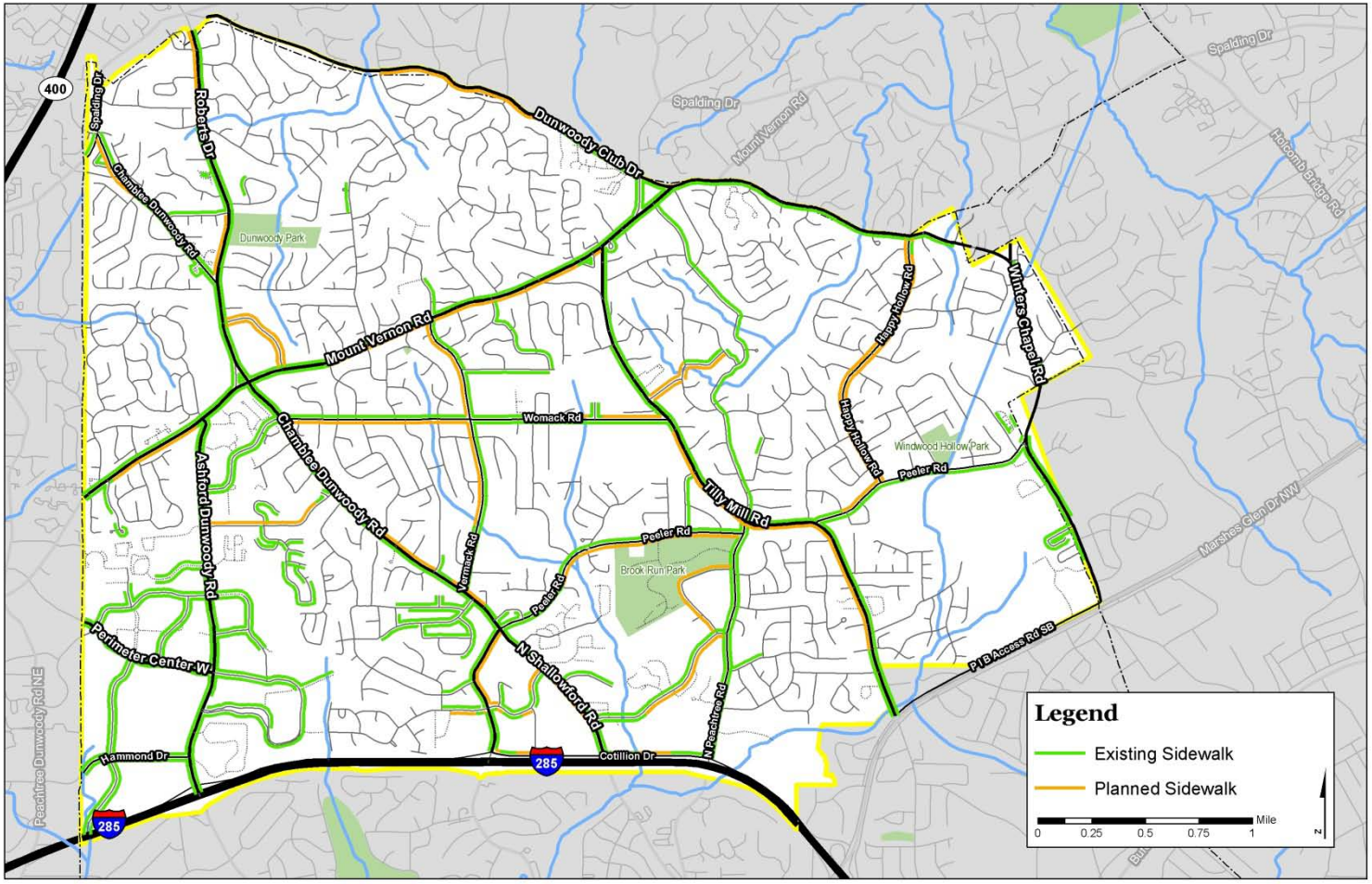
Map 9: Bike Suitability, CTP Community Workshop



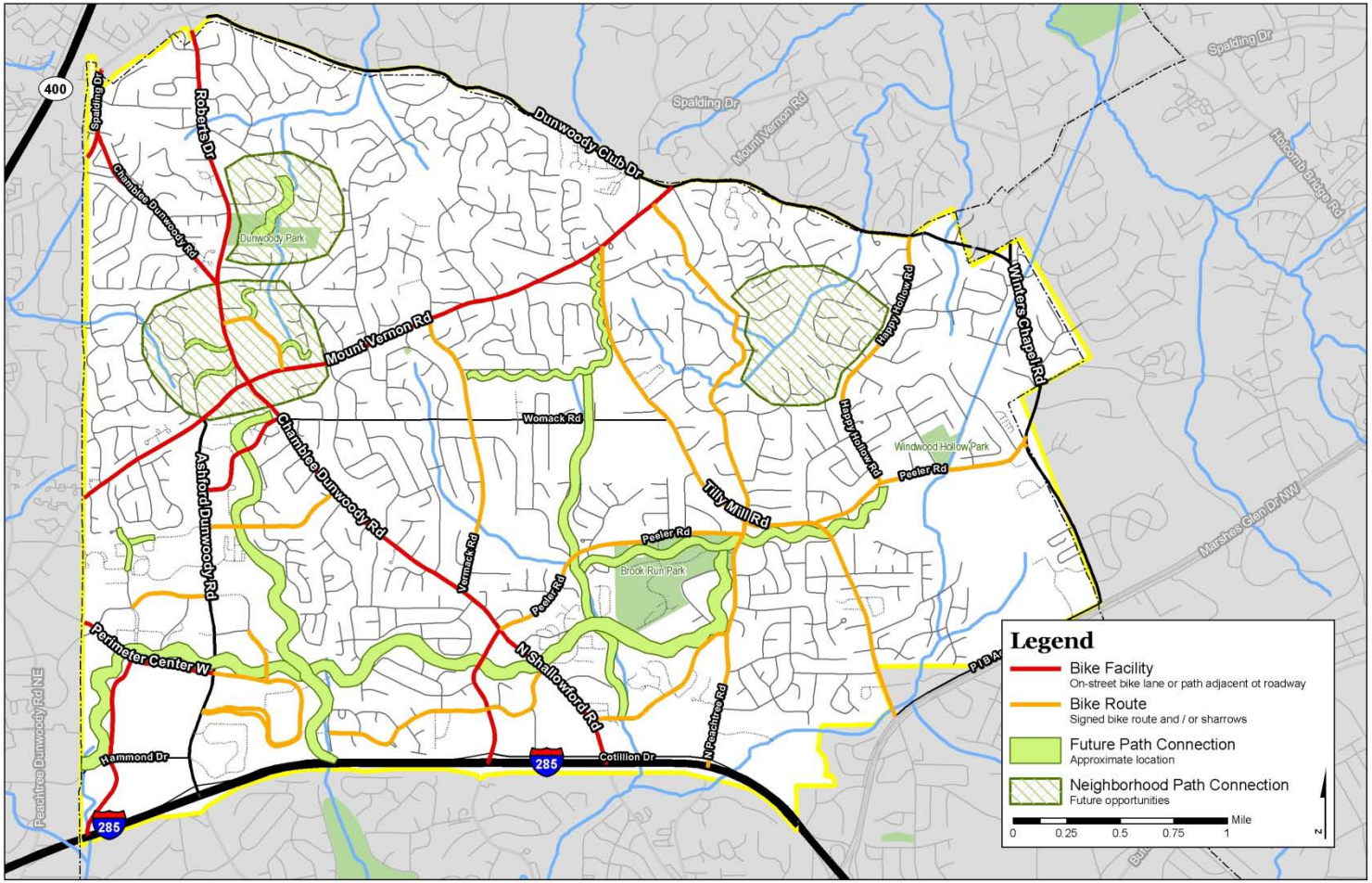
Map 10: Sidewalk Improvements, CTP Community Workshop



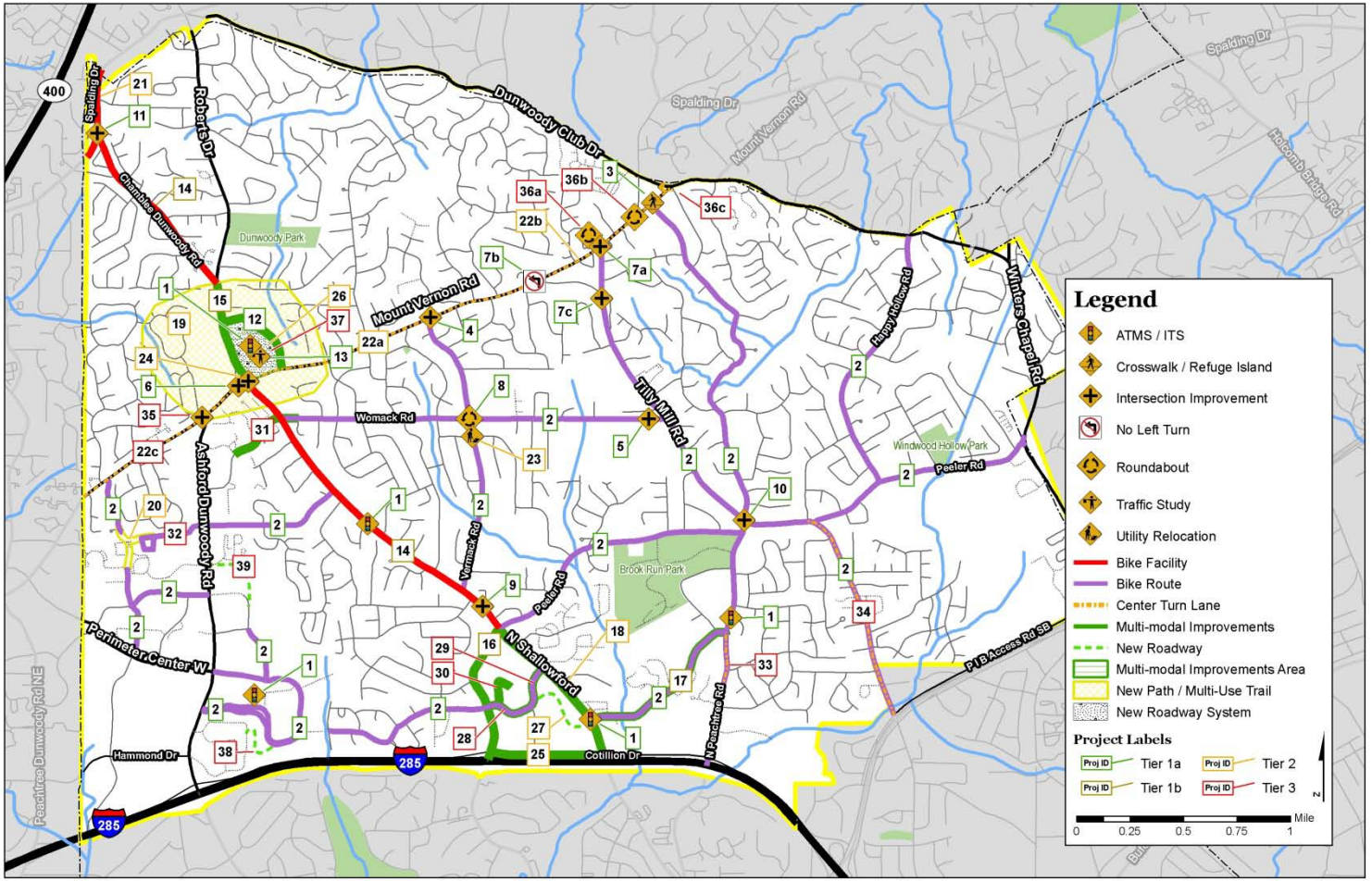
Map 11: Density of Dunwoody Automobile Crashes



Map 12: Existing and Planned Sidewalks



Map 13: Dunwoody Bicycle Network



Map 14: Prioritized Project Map

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Appendix A

Project Prioritization Matrix

Prioritization							Recommended Projects			
Vision	Feasibility	Partnering	Total	Priority Tier	Project ID	Type	Project Description	Implementation Strategy Approach	Total Project Cost	Completion Date
3	3	3	9	1a	1	ATMS/ITS Corridors	Automated Traffic Management Systems and Intelligent Transportation Systems implementation in the Perimeter CID as well as Dunwoody Village and Chamblee Dunwoody Road, North Shallowford Road, and North Peachtree Road corridors: Signal timing, controller upgrades, and signal interconnection	City of Dunwoody, Perimeter CID, ARC, LCI, T-SPLOST*, Georgia DOT	$1,000,000	2011 - 2015
3	3	3	9	1a	2	Bicycle/ Pedestrian	Includes signed bike route and/or sharrows: North Peachtree Road, Tilly Mill Road, Peachford Road, Old Spring House Lane, Dunwoody Park, Perimeter Center East, Valley View Road, Meadow Lane Road, Vermack Road, Peeler Road, Happy Hollow Road, Womack Road, Olde Perimeter Way, Ridgeview Road.	City of Dunwoody, ARC, PCID	$200,000	2011 - 2015
3	3	3	9	1a	3	Bicycle/ Pedestrian	Mount Vernon Road at North Peachtree Road: Add crosswalk and refuge island	GDOT Safe Routes To School Grant	$100,000	2011 - 2015
3	3	3	9	1a	4	Intersection	Mount Vernon Road at Vermack Road: Add left turn lane from Mount Vernon Road to Vermack Road	City of Dunwoody	$500,000	2011 - 2015
3	3	3	9	1a	5	Intersection	Womack Road at East Driveway of Georgia Perimeter College Dunwoody Campus: In conjunction with the college, reconfigure on-campus traffic flow to relieve congestion as well as provide alternative access and prohibit left turns from Womack Road into the college.	Georgia Perimeter College	$150,000	2011 - 2015
3	3	3	9	1a	6	Intersection	Mount Vernon Road & Chamblee Dunwoody Road at Nandina Lane: Convert access to Nandina Lane to right in/right out. Nandina Lane remains two way. See also Dunwoody Village Master Plan, Five Year Implementation Plan, Project #3	City of Dunwoody, LCI	$150,000	2011 - 2015
3	3	3	9	1a	7a	Intersection	Mount Vernon Road at Tilly Mill Road: Change existing left/through to left only and existing right only to shared through/right	City of Dunwoody, T-SPLOST*	$200,000	2011 - 2015
3	3	3	9	1a	7b	Intersection	Mount Vernon Road at Mount Vernon Place: Prohibit left turn movements from Mount Vernon Place to Mount Vernon Road westbound. In conjunction with improvement at Mount Vernon Road and Tilly Mill Road.	City of Dunwoody	$500	2011 - 2015
3	3	3	9	1a	7c	Intersection	Tilly Mill Road at Mount Vernon Place: Realign Mount Vernon Place to form a T intersection with Tilly Mill Road	City of Dunwoody	$150,000	2011 - 2015
3	3	3	9	1a	8	Intersection	Womack Road at Vermack Road: Signalize or install a roundabout	City of Dunwoody	$1,000,000	2011 - 2015
3	3	3	9	1a	9	Intersection	Intersection improvements on Chamblee Dunwoody Road from Vermack Road to North Shallowford Road	City of Dunwoody, T-SPLOST*	$1,575,000	2011 - 2015
3	3	3	9	1a	10	Intersection	Tilly Mill Road at North Peachtree Road: Intersection improvement project. Complete concept report prior to improving the intersection.	City of Dunwoody	$3,000,000	2011 - 2015
3	3	3	9	1a	11	Intersection	Chamblee Dunwoody Road at Spalding Drive: Reconfigure intersection to increase safety (see three concepts under consideration)	City of Dunwoody, ARC, T-SPLOST*	$750,000	2011 - 2015
3	3	3	9	1a	12	Reconfigure Existing Roadway	Dunwoody Village Parkway multi-modal improvements - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #1	City of Dunwoody, LCI, Georgia DOT Transportation Enhancement	$2,400,000	2011 - 2015
3	3	3	9	1a	13	Study	Dunwoody Village Traffic Study	City of Dunwoody, ARC	$150,000	2011 - 2015
3	2	3	8	1b	14	Bicycle/ Pedestrian	On-street bike lane or multi-use path adjacent to the roadway along Chamblee-Dunwoody Road from North Shallowford Road to Mount Vernon Road and Roberts Drive to Spalding Drive. See also Dunwoody Village Master Plan, Five Year Implementation Plan, Projects #2 and #5	City of Dunwoody, ARC, T-SPLOST*	$3,000,000	2016 - 2020
3	3	2	8	1b	15	Multi-modal, Dunwoody Village Master Plan	Chamblee Dunwoody Road multi-modal improvements from Mount Vernon Road to Roberts Drive - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #2	City of Dunwoody, LCI, ARC, T-SPLOST*	$4,600,000	2016 - 2020
3	3	2	8	1b	16	Multi-modal, Georgetown/ North Shallowford Master Plan	Chamblee Dunwoody Road multi-modal improvements from I-285 to North Shallowford Road - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #1	City of Dunwoody, LCI, ARC, T-SPLOST*	$4,700,000	2016 - 2020
3	3	2	8	1b	17	Multi-modal, Georgetown/ North Shallowford Master Plan	Peachford Road multi-modal improvements from North Shallowford Road to North Peachtree Road - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #4	City of Dunwoody, LCI	$2,600,000	2016 - 2020
3	2	2	7	2	18	Multi-modal, Georgetown/ North Shallowford Master Plan	North Shallowford Road multi-modal improvements from Cotillion Drive to Peeler Road - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #6	City of Dunwoody, LCI, Georgia DOT Transportation Enhancement	$4,000,000	2021 - 2030
3	2	1	6	2	19	Bicycle/ Pedestrian	Neighborhood Trails: Residential bicycle/pedestrian connections to surrounding neighborhoods - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #6	City of Dunwoody, LCI, Federal Funds	$2,850,000	2021 - 2030
3	2	2	7	2	20	Bicycle/ Pedestrian	New path connection between Ridgeview Road (North) and Ridgeview Road (South) Multi-use trail along Dunwoody Gables Drive	City of Dunwoody	$1,100,000	2021 - 2030
3	2	2	7	2	21	Bicycle/ Pedestrian	On-street bike lane or multi-use path adjacent to the roadway along Spalding Drive to connect to future Sandy Springs facility	City of Dunwoody, Georgia DOT	$3,100,000	2021 - 2030

Prioritization							Recommended Projects			
Vision	Feasibility	Partnering	Total	Priority Tier	Project ID	Type	Project Description	Implementation Strategy Approach	Total Project Cost	Completion Date
3	2	2	7	2	22a	Center Turn Lane	Add center turn lane, 4' bike lanes, and 6' sidewalks with a 2' buffer to Mount Vernon Road between Ashford Dunwoody Road and Mount Vernon Place. See also Dunwoody Village Master Plan, Five Year Implementation Plan, Project #4	City of Dunwoody, ARC, T-SPLOST*, Georgia DOT	$12,000,000	2021 - 2030
3	2	2	7	2	22b	Center Turn Lane	Add center turn lane, 4' bike lanes, and 6' sidewalks with a 2' buffer to Mount Vernon Road between Mount Vernon Place and Dunwoody Club Drive	City of Dunwoody, ARC, T-SPLOST*, GDOT	$5,500,000	2021 - 2030
2	2	2	6	2	23	Intersection	Vermack Road at Parliament Road/Old Village Run: Relocate overhead utility and landscape to improve sight distance	City of Dunwoody	$50,000	2021 - 2030
2	2	2	6	2	24	Intersection	Mount Vernon Road at Chamblee Dunwoody Road: Add an additional left turn lane to Mount Vernon Road eastbound, add an additional left turn lane to Mount Vernon Road westbound, and add an additional through lane to Chamblee Dunwoody Road southbound	City of Dunwoody	$1,200,000	2021 - 2030
2	2	2	6	2	25	Multi-modal, Georgetown/ North Shallowford Master Plan	Cotillion multi-modal improvements - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #11	City of Dunwoody, LCI, ARC, GDOT	$2,050,000	2021 - 2030
3	1	2	6	2	26	New Location Roadway	Dunwoody Village Internal multi-modal Streets Phase I - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #10	City of Dunwoody, ARC, Redevelopment	$3,850,000	2021 - 2030
3	1	2	6	2	27	New Location Roadway	Peachford Road Extension - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #9	City of Dunwoody, Redevelopment	$7,400,000	2021 - 2030
3	1	1	5	3	28	Multi-modal, Georgetown/ North Shallowford Master Plan	Dunwoody Park multi-modal improvements from Chamblee Dunwoody Road to Peachford Road Extension/Dunwoody Park South - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #13	City of Dunwoody, LCI, ARC, Redevelopment	$3,250,000	Long Range
3	1	1	5	3	29	Multi-modal, Georgetown/ North Shallowford Master Plan	Dunwoody Park multi-modal improvements from Peachford Road Extension/Dunwoody Park South to North Shallowford Road - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #14	City of Dunwoody, LCI, ARC, Redevelopment	$1,850,000	Long Range
3	1	1	5	3	30	Multi-modal, Georgetown/ North Shallowford Master Plan	Dunwoody Park North multi-modal improvements from Dunwoody Park to new roadway internal to the abandoned residential development - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #15	City of Dunwoody, LCI, ARC, Redevelopment	$1,850,000	Long Range
3	1	1	5	3	31	Multi-modal, Dunwoody Village Master Plan	Ashford Center Parkway/Womack Road multi-modal improvements - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #9	City of Dunwoody, LCI, ARC	$560,000	Long Range
3	1	1	5	3	32	Bicycle/ Pedestrian	New bicycle route along Valley View Road and Ashford Gables Drive between Chamblee Dunwoody Road and New path connection between Ridgeview Road (North) and Ridgeview Road (South)	City of Dunwoody, Redevelopment, PCID	$1,600,000	Long Range
3	1	1	5	3	22c	Center Turn Lane	Add center turn lane, 4' bike lanes, and 6' sidewalks with a 2' buffer to Mount Vernon Road between Dunwoody City Limit and Ashford Dunwoody Road	City of Dunwoody, ARC, T-SPLOST*	$4,700,000	Long Range
3	1	1	5	3	33	Center Turn Lane	Add center turn lane to North Peachtree Road between North Forrest Trail and Peachford Road	City of Dunwoody	$1,100,000	Long Range
				3	34	Center Turn Lane	Add center turn lane to Tilly Mill Road between Peeler Road and Peachtree Industrial Boulevard	City of Dunwoody	$1,300,000	Long Range
2	1	1	4	3	35	Intersection	Mount Vernon Road at Ashford Dunwoody Road/Trailridge Way: Add an additional left turn lane to Mount Vernon Road westbound, add an additional through lane to Mount Vernon Road eastbound, and add an additional right turn lane to Ashford Dunwoody Road northbound	City of Dunwoody, ARC, T-SPLOST*, Georgia DOT	$1,125,000	Long Range
3	1	1	5	3	36a	Intersection	Mount Vernon Road at Tilly Mill Road: Install roundabout	City of Dunwoody, ARC, Georgia DOT	$750,000	Long Range
3	1	1	5	3	36b	Intersection	Mount Vernon Road at Jett Ferry Road: Install roundabout	City of Dunwoody, ARC, Georgia DOT,	$750,000	Long Range
3	1	1	5	3	36c	Intersection	Mount Vernon Road at Dunwoody Club Drive: Install roundabout	City of Dunwoody, ARC, Georgia DOT,	$750,000	Long Range
3	1	1	5	3	37	Multi-modal, Dunwoody Village Master Plan	Dunwoody Village Internal Multi-modal Streets Phase II - As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #10	City of Dunwoody, ARC, Redevelopment	$275,000	Long Range
3	1	1	5	3	38	New Location Roadway	New street connection between Ravinia Parkway and Perimeter Center East New location 2 lane roadway	City of Dunwoody, Perimeter CID, Redevelopment	$1,600,000	Long Range
3	1	1	5	3	39	New Location Roadway	New street connection between Asbury Square and Ashford Parkway New location 2 lane roadway	City of Dunwoody, Perimeter CID, Redevelopment	$600,000	Long Range

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Appendix B

Candidate Projects

City of Dunwoody Candidate Projects

Project ID	Type	Project Description	Project Components	Preliminary Recommendation	Total Project Cost
1	Intersection	Mount Vernon Road at Ashford Dunwoody Road/Trailridge Way: Add an additional left turn lane to Mount Vernon Road westbound, add an additional through lane to Mount Vernon Road eastbound, and add an additional right turn lane to Ashford Dunwoody Road northbound	Add an additional left turn lane to Mount Vernon Road westbound, add an additional through lane to Mount Vernon Road eastbound, and add an additional right turn lane to Ashford Dunwoody Road northbound	Y	$ 1,125,000
2a	Intersection	Tilly Mill Road at North Peachtree Road: Add a right turn lane to Tilly Mill Road eastbound	Add a right turn lane to Tilly Mill Road eastbound	N	$ 500,000
2b	Intersection	Tilly Mill Road at North Peachtree Road & Peeler Road: Three Lane Tilly Mill Road north of North Peachtree Road. Realign Peeeler Road and, North Peachtree Road, and Tilly Mill Road to intersect.	Three Lane Tilly Mill Road north of North Peachtree Road. Realign Peeeler Road and, North Peachtree Road, and Tilly Mill Road to intersect.	N	Too much.
2c	Intersection	Tilly Mill Road at North Peachtree Road: Install a roundabout at North Peachtree Road and Tilly Mill Road, and extend a second lane north on Tilly Mill Road to match exising three-lane section from Cherring Drive north.	Install a roundabout at North Peachtree Road and Tilly Mill Road, and extend a second lane north on Tilly Mill Road to match exising three-lane section from Cherring Drive north.	Y	
3	Intersection	Womack Road at Vermack Road: Signalize or install a roundabout	Signalize or install a roundabout	Y	$ 1,000,000
4	Intersection	Chamblee Dunwoody Road at Peeler Road/North Shallowford Road: Add a second left turn lane to Chamblee Dunwoody Road northbound, add an additional left turn lane to Chamblee Dunwoody Road sounthbound add a right turn lane to Chamblee Dunwoody Road northbound , and add a second northbound through lane on Chamblee Dunwoody Road from Peeler to Vermack	Add a second left turn lane to Chamblee Dunwoody Road northbound, add an additional left turn lane to Chamblee Dunwoody Road sounthbound add a right turn lane to Chamblee Dunwoody Road northbound , and add a second northbound through lane on Chamblee Dunwoody Road from Peeler to Vermack	Y	$ 1,575,000
5	Intersection	Vermack Road at Parliament Road/Old Village Run: Relocate overhead utility and landscape to improve sight distance	Relocate overhead utility and landscape to improve sight distance	Y	TBD
6a	Intersection	Mount Vernon Road at Nandina Drive: Prohibit left turns and convert Nandina Drive to one-way (southbound)	Prohibit left turns and convert Nandina Drive to one-way (southbound)	N	$ 650,000
7	Intersection	Mount Vernon Road & Chamblee Dunwoody Road at Nandina Drive: Convert access to Nandina Drive to right in/right out. Nandina Drive remains two way	Convert access to Nandina Drive to right in/right out. Nandina Drive remains two way	Y	
8	Intersection	Mount Vernon Road at Chamblee Dunwoody Road: Add an additional left turn lane to Mt. Vernon Rd eastbound, Add an additional left turn lane to Mt. Vernon Rd westbound, and Add an additional through lane to Chamblee Dunwoody Rd southbound	Add an additional left turn lane to Mt. Vernon Rd eastbound, Add an additional left turn lane to Mt. Vernon Rd westbound, and Add an additional through lane to Chamblee Dunwoody Rd southbound	N	$ 1,200,000
9	Intersection	Mount Vernon Road at Chamblee Dunwoody Road: Install roundabout and convert Mount Vernon Road to a 2 lane section with turning lanes	Install roundabout and convert Mount Vernon Road to a 2 lane section with turning lanes	N	$ 750,000
10a	Intersection	Mount Vernon Road at Tilly Mill Road: Install roundabout	Install roundabout	Y	$ 750,000
10b	Intersection	Mount Vernon Road at Jett Ferry Road: Install roundabout	Install roundabout	Y	$ 750,000
10c	Intersection	Mount Vernon Road at Dunwoody Club Drive: Install roundabout	Install roundabout	Y	$ 750,000
11a	Intersection	Mount Vernon Road at Mount Vernon Place: Prohibit left turn movements from Mount Vernon Place to Mount Vernon Road westbound. In conjunction with imprvement at Mount Vernon Road and Tilly Mill Road.	Prohibit left turn movements from Mount Vernon Place to Mount Vernon Road westbound. In conjunction with imprvement at Mount Vernon Road and Tilly Mill Road.	Y	$ 500
11b	Intersection	Tilly Mill Road at Mount Vernon Place: Realign Mount Vernon Place to from a T intersection with Tilly Mill Road	Realign Mount Vernon Place to from a T intersection with Tilly Mill Road	Y	TBD
11c	Intersection	Mount Vernon Road at Tilly Mill Road: Change existing left/through to left only and existing right only to shared through/right	Change existing left/through to left only and existing right only to shared through/right	Y	$ 200,000
12	Intersection	Chamblee Dunwoody Road at Cotillian Drive: Restripe lanes utilization to improve capacity	Restripe lanes utilization to improve capacity	Y	$ 10,000
13	Intersection	Chamblee Dunwoody Road at Spalding Drive: Reconfigure intersection to increase safety (see three concepts under consideration)	Reconfigure intersection to increase safety (see three concepts under consideration)	Y	$ 750,000
14	Widen	Widen Roberts Drive between Chamblee Dunwoody Road and Spalding Drive from 2 to 4 lanes	from 2 to 4 lanes	N	$ 5,740,000
15	Widen	Widen Peeler Road between Happy Hollow Road and Winters Chapel Road from 2 to 4 lanes	from 2 to 4 lanes	N	$ 3,080,000
16	Widen	Widen Winters Chapel Road between Dunwoody Club Drive and Peachtree Industrial Boulevard from 2 to 4 lanes	from 2 to 4 lanes	N	$ 7,040,000
17a	Widen	Widen Mount Vernon Road between Chamblee Dunwoody Road and Dunwoody Club Drive from 2 to 4 lanes	from 2 to 4 lanes	N	$ 9,400,000
17b	Center Turn Lane	Add center turn lane and 6' sidewalks with a 2' buffer to Mount Vernon Road between Chamblee Dunwoody Road and Dunwoody Club Drive	Add center turn lane and 6' sidewalks with a 2' buffer	Y	$ 6,100,000
17c	Intersection	Instead of 17a or 17b, improve all key intersections along Mount Vernon Road. Projects 9a through 9c as well as Mount Vernon Road at Jett Ferry Road.		N	$ 3,750,000
18	Center Turn Lane	Add center turn lane to North Peachtree Road between North Forrest Trail and Peachford Road	Add center turn lane	Y	$ 1,100,000
19	Center Turn Lane	Add center turn lane to Tilly Mill Road between existing three lane section north of Peeler Road and Peachtree Industrial Boulevard	Add center turn lane	Y	$ 2,200,000
20	Extension	Extend Ashford Center Parkway from Chamblee Dunwoody Road to Dunwoody Village Parkway. New location 4 lane roadway	New location 4 lane roadway	Y	$ 5,800,000
21	New Location Roadway	New street connection between Ravinia Parkway and Perimeter Center East New location 2 lane roadway	New location 2 lane roadway	Y	$ 1,600,000
22	New Location Roadway	New street connection between Chamblee Dunwoody Road and Dunwoody Village Parkway New location roadway per Dunwoody Village Master Plan.	New location roadway per Dunwoody Village Master Plan.	Y	$ 2,700,000
	New Location Roadway	New street connection between Asbury Square and Ashford Parkway New location 2 lane roadway	New location 2 lane roadway	Y	$ 600,000
23	ATMS/ITS Corridors	Automated Traffic Management Systems and Intelligent Transportation Systems implementation in the Chamblee Dunwoody Road, North Shallowford Road, and North Peachtree Road corridors: Signal timing, controller upgrades, and signal interconnection	Signal timing, controller upgrades, and signal interconnection	Y	$ 3,000,000
24	Bicycle/ Pedestrian	New path connection between Old Spring House Lane and Perimeter Center East Multi-use trail	Multi-use trail	Y	$ 550,000

City of Dunwoody Candidate Projects

Project ID	Type	Project Description	Project Components	Preliminary Recommendation	Total Project Cost
25	Bicycle/ Pedestrian	Surrounding subdivisions to Dunwoody Village: Venon North Drive to Village Parkway, Meadow Creek Drive to Dunwoody Village Parkway, Hidden Branches Circle to Dunwoody Village Shopping Center, Trailridge Way to Dunwoody Village Shopping Center	Surrounding subdivisions to Dunwoody Village: Venon North Drive to Village Parkway, Meadow Creek Drive to Dunwoody Village Parkway, Hidden Branches Circle to Dunwoody Village Shopping Center, Trailridge Way to Dunwoody Village Shopping Center	Y	TBD
26	Bicycle/ Pedestrian	Subdivision connections: Brooke Farm Road to New PeachtreeWay, Kingston Court to Heatherdale Lane, Kingsland Drive to New Peachtree Way.	Subdivision connections: Brooke Farm Road to New PeachtreeWay, Kingston Court to Heatherdale Lane, Kingsland Drive to New Peachtree Way.	Y	TBD
27	Bicycle/ Pedestrian	New path connection between Ridgeview Road (North) and Ridgeview Road (South) Multi-use trail along Dunwoody Gables Drive	Multi-use trail along Dunwoody Gables Drive	Y	$ 1,100,000
28	Bicycle/ Pedestrian	New path connection between Ashwood Parkway and Wal*Mart Shopping Center Multi-use trail	Multi-use trail	Y	$ 550,000
29	Bicycle/ Pedestrian	Includes either on-street bike lane or path adjacent to the roadway: Mt. Vernon Road, Chamblee-Dunwoody Road, Perimeter Center West, Roberts Drive, Spalding Drive, Pitts Road, Perimeter Center Parkway, North Shallowford Road	Includes either on-street bike lane or path adjacent to the roadway: Mt. Vernon Road, Chamblee-Dunwoody Road, Perimeter Center West, Roberts Drive, Spalding Drive, Pitts Road, Perimeter Center Parkway, North Shallowford Road	Y	TBD
30	Bicycle/ Pedestrian	Includes signed bike route and/or sharrows: New Peachtree Road, Tilly Mill Road, Peachford Road, Old Spring House Lane, Dunwoody Park, new street connection from North Shallowford Road to Dunwoody Park, Dunwoody Village Parkway, extension of Ashford Center Parkway, Perimeter Center East, Valley View Road, Meadow Lane Road, new street connection between Meadow Lane Road and Valley View Road, Vermack Road, Peeler Road, Happy Hollow Road.	Includes signed bike route and/or sharrows: New Peachtree Road, Tilly Mill Road, Peachford Road, Old Spring House Lane, Dunwoody Park, new street connection from North Shallowford Road to Dunwoody Park, Dunwoody Village Parkway, extension of Ashford Center Parkway, Perimeter Center East, Valley View Road, Meadow Lane Road, new street connection between Meadow Lane Road and Valley View Road, Vermack Road, Peeler Road, Happy Hollow Road.	Y	TBD
31	Bicycle/ Pedestrian	New path connection between Peachford Road and Womack Road Multi-use trail to incorporate results of Georgetown Master Plan	Multi-use trail to incorporate results of Georgetown Master Plan	Y	$ -
32	Bicycle/ Pedestrian	New path connection between Old Spring House Lane and Nancy Creek Trail		Y	$ 500,000
33	Bicycle/ Pedestrian	Mount Vernon Road at North Peachtree Road: Add crosswalk and refuge island	Add crosswalk and refuge island	Y	$ 100,000
	Bicycle/ Pedestrian	Potential new path connection along pipeline easement between DeKalb County Water Works and the county line/Gwinnett County trail system. Only built if Gwinnett County builds a trail that connects with it.	Only built if Gwinnett County builds a trail that connects with it.		$ 1,500,000
34	Transit	Intracity transit shuttle connecting Dunwoody Village to Central Perimeter and the Dunwoody MARTA Station		Y	TBD
35	Alternative Transport	Develop an ordinance regarding operation of alternative vehicles (e.g. golf carts) on city streets.		Y	TBD
36	Study	Dunwoody Village Traffic Study	Dunwoody Village Traffic Study	Y	$ 150,000
37	Study	Conduct detailed study of utility easement as potential trail facility, consistent with recommendations from the City's Parks and Greenspace Comprehensive Plan	Conduct detailed study of utility easement as potential trail facility, consistent with recommendations from the City's Parks and Greenspace Comprehensive Plan	Y	$ 100,000

ARCADIS

Appendix C

Health Impact Assessment

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

City of Dunwoody

Health Impact Assessment

City of Dunwoody Comprehensive Transportation Plan

February 17, 2011

ARCADIS

Health Impact Assessment

City of Dunwoody
Comprehensive
Transportation Plan

Prepared for:
City of Dunwoody

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Our Ref.:
GA063956/Rpt 2621

Date:
February 17, 2011

Table of Contents

Purpose of the CTP

The City's first Comprehensive Transportation Plan identifies transportation strategies and projects for the City to implement based on the policy and goal statements set forth in the City's Comprehensive Plan. The result is a comprehensive, detailed transportation master plan that meets the specific needs of the City by making operational improvements, creating a community-wide bicycle and pedestrian network, increasing network connectivity, and preserving the current investment on transportation infrastructure.

Based on input received from the community, policies and goals identified in the comprehensive plan, and existing conditions, guiding principles were developed to shape the development of policies and projects. The guiding principles center around three core values: Choice, Connectivity, and Community. Statements were developed for each core value to further provide guidance in the development of the plan, policies, and projects

Choice

1. Provide a transportation system that emphasizes choice by increased mobility for all users, increased connectivity, and increased health enrichment options.

2. View the street as a public space with the intent to serve multiple functions.

3. Public expenditures on transportation should provide for equal access by all users.

Connectivity

1. Create an integrated network of transportation facilities that connects people to where they want to go, both in the community and at destinations near city limits.

2. Establish a maintenance and safety program that will enhance the existing system.

3. Prioritize multi-modal transportation options.

Community

1. Transportation investments should enhance the Dunwoody community first and the Atlanta region second.

2. Provide opportunities for increased interaction within the community, increased recreational opportunities, and increased active living opportunities.

Health Impact Assessment

A Health Impact Assessment (HIA) is defined as "a combination of procedures, methods, and tolls by which a policy or project may be judged as to its potential effects on the health of a populations, and the distribution of those effects within the population[1]"

An HIA is a tool that can be used to objectively evaluate potential health impacts of a project or policy before it is built or implemented. Transportation and land use projects and policies traditionally do not consider health impacts in the process. Therefore, an HIA can bring those potential health impacts to the attention of policy and decision makers early in the decision-making process to increase positive health outcomes and minimize adverse health impacts. Ultimately, the purpose of an HIA is to lead to more comprehensive and better informed decisions with respect to health.

An HIA is based on four core values: democracy, equity, sustainable development, and ethical use of evidence. Because health and the overall well-being of people is determined by a range of economic, social, and environmental factors, an HIA takes a participatory approach, bringing together individuals from multiple sectors to provide a more integrated approach to policy making.[2]

Different methodologies have emerged for carrying out an HIA; however, overlaps can be seen between various methods. General guidance breaks an HIA into several critical steps:

- Screening – Identify a project or policy for which an HIA would be useful
- Scoping – Identify key health issues that should be included

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[1] 1999 Gothenburg consensus statement, 2011. < http://www.euro.who.int/en/what-we-do/health-topics/environmental-health/health-impact-assessment>.

[2] World Health Organization. 2010. Why use HIA. <http://www.who.int/hia/about/why/en/print.html>.

- Appraisal – Rapidly or comprehensively identify who may be affected and how their health may be affected

- Reporting – Develop conclusions and recommendations to mitigate or remove negative impacts and to enhance positive impacts on health

- Monitoring and evaluation – Review the effectiveness of the process and evaluate health outcomes as a result of the project or policy

Based on time and effort, there are distinctions between assessments that may be performed. A rapid assessment is typically carried out quickly and can be used early in the development stage or when limited time and resources are available. Although a rapid assessment provides a broad overview of possible health impacts, collecting and analyzing existing data and research is still part of the process.

An intermediate assessment is the most frequently used HIA approach and allows for a more thorough investigation of health impacts, a review of available evidence and research, and possibly community input.

A comprehensive assessment involves an extensive appraisal stage, significant literature review, and comprehensive stakeholder involvement.

Defining Health

Health can be defined very simply as free of disease. WHO defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[3] This definition has not been amended since 1948. The first International Conference on Health Promotion in November of 1986 expanded upon the definition of health to define it as a "resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capabilities."[4]

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[3] World Health Organization. 1998. Health Promotion Glossary. <http://www.who.int/hpr/NPH/docs/hp_glossary_en.pdf>.

[4] World Health Organization. 1986. Ottawa Charter for Health Promotion. Geneva.

Health promotion then becomes the process of enabling the individual to increase, take control over, or improve their health. It goes beyond the sole responsibility of the health sector and beyond healthy lifestyles and well-being. Good health is not only an important resource for social, economic, and personal development, but it is also one of the most important resources of quality of life. Economic, social, environmental, political, behavioral, and biological factors can all factor into health in a positive or negative manner.[5]

A health impact can be defined as both positive and negative. A positive health impact has an effect that leads to good health or improving health, whether it's physical or mental health. A negative health impact has the opposite effect and contributes to poor or ill health.[6]

Health in Dunwoody

The community vision for the City draws a picture of what the community desires to become. The vision statement created for the CTP envisions creating viable options to make the City a place for residents to live through all stages of life and ability as well as increasing "connectivity, enhanced transportation options, including bicycle and pedestrian, expanded functional greenspace and park ownership to improve the health, vitality … of our residents and long-term sustainability of our City."[7]

Through community workshops, residents associated health (both positive and negative) with transportation issues and solutions, including:

- Bike and pedestrian safety
- Safety for children
- Safety and mobility for older generations
- Air quality
- Connectivity
- Exercise
- Community cohesion
- Diet
- Preventive services
- Education

[5] World Health Organization. 1986. Ottawa Charter for Health Promotion. Geneva.

[6] World Health Organization. 1998. Health Promotion Glossary. <http://www.who.int/hpr/NPH/docs/hp_glossary_en.pdf>.

[7] City of Dunwoody. 2010. Comprehensive Plan: Community Agenda.

- Alternative modes of transportation
- Obesity
- Recreational opportunity
- Emotional well-being

City of Dunwoody

Dunwoody officially became a city on December 1, 2008 as the result of a community-led movement for incorporation. Residents, however, have long identified themselves as "living in Dunwoody" with a rich and unique history separate from unincorporated DeKalb County. Dunwoody is located on the most northern tip of DeKalb County and is bordered by Fulton County on the north and west, Gwinnett County to the northeast, and Interstate 285 to the south. The Cherokee Indian tribe of the Creek Confederation originally inhabited the city, and by 1820, Cherokee farms dotted the area around the Chattahoochee River as white settlers began to arrive and create homesteads. After the Civil War, Major Charles Dunwoody decided to build a new home near Chamblee-Dunwoody Road and Spalding Drive. Railroad construction resumed and was in business in the fall of 1881. The Roswell railroad tied into the Air-Line at Roswell Junction with a stop at Dunwoody Station. Dunwoody soon developed as a crossroads community and has continued to flourish.

Demographics

Based on the community assessment of the CTP, the estimated population in Dunwoody in 2008 was 43,322 people. Based on growth trends, the City's projected population by 2030 is approximately 53,000. In 2008, an estimated 13.5 percent of the City's population were 65 years or older. This proportion of the projected population is expected to increase to 23 percent by the year 2030. Children and teenagers (19 years and younger) comprise 26.6 percent of the City's population.

Approximately 75 percent of the City's population is white; however, following regional trends, the City is diversifying, with the greatest increase in change between 2000 and 2009 occurring in the Hispanic and Asian households.

Residents in the City are wealthy and well-educated compared to the state and region as a whole. The median household income in 2008 was estimated at $98,648. The City, however, does experience some poverty, with approximately 2,000 people living below the poverty threshold. Of these, 400 are under the age of 18.

Homeowners account for nearly 60 percent of all occupied dwelling units. However, 16 percent are considered "cost burdened" because they spend more than one third of

their income on housing. Renters are struggling as well, with 30 percent of those who rent spending more than one third of their income on rent.

Health Statistics

Available at the county level, health statistics provide vital statistics about the overall health of a community.

Chronic diseases and conditions, such as heart disease, cancer, diabetes, and obesity, are the leading causes of death and disability in the United States. Cancer, cardiovascular diseases, and respiratory diseases are the top three leading causes of death in DeKalb County.[8] The leading causes of early death in DeKalb County include not only cancer and heart disease, but also intentional injury, homicide, suicide, HIV/AIDS, stroke, and infectious disease.[9] The DeKalb County Behavioral Risk Factor Surveillance System (BRFSS) survey collects information about the behaviors of adults 18 years and older. The 2009 BRFSS survey, which summarizes the 2007 findings from the survey among DeKalb County residents, reports that:

- Thirty-five percent of adult residents are overweight. Males are significantly more likely than females to be overweight. The likelihood of being overweight increases significantly with age.

- Twenty-four percent of adult residents are obese. African-American adults are significantly more likely to be obese than white adults. The likelihood of being obese increases significantly with age.

- Forty-seven percent of adult residents get the recommended amount of physical activity per day. White and African-American adults are significantly more likely to engage in physical activity behaviors than adults of other races/ethnicities. The likelihood of engaging in the recommended level of physical activity decreases significantly with age.

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[8] DeKalb County Board of Health. Leading Causes. Accessed February 14, 2011. <www.dekalbhealth.net>.

[9] DeKalb County Board of Health. Leading Causes. Accessed February 14, 2011. <www.dekalbhealth.net>.

- Twelve percent of adult residents have been told by a health professional that they have asthma. In DeKalb County, females are significantly more likely than males to have asthma. Among adults in the county who have asthma, 50 percent have had an asthma episode during the past 12 months and 23 percent have seen a health professional for urgent treatment of worsening asthma symptoms.

- Seven percent of adult residents have been told by a health professional that they have diabetes. African-Americans adults are more likely to have diabetes compared to white adults.[10]

"Leading causes of hospitalization" is an indicator of how many people were hospitalized as a result of a disease or condition. It can also be used as an indicator for morbidity, which refers to how many people are affected by a disease or condition. From 2002 to 2007, the leading cause of hospitalization in DeKalb County was pregnancy and childbirth complications; however, other leading causes of hospitalization included cardiovascular and respiratory disease.[11]

Premature death is defined as when a person dies before the age of 75. Between 2002 and 2007, 54 percent of all deaths occurred among persons under the age of 75. Injuries, both intentional and unintentional, were the leading cause of premature death between 2002 and 2007 in the county. Cardiovascular diseases were the second leading cause of premature death, followed by cancers.[12]

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[10] DeKalb County. 2009. DeKalb County Behavioral Risk Factor Surveillance System Report.

[11] DeKalb County Board of Health. Leading Causes. Accessed February 14, 2011. <www.dekalbhealth.net>.

[12] DeKalb County Board of Health. Leading Causes. Accessed February 14, 2011. <www.dekalbhealth.net>.

Mortality trends show that cardiovascular diseases accounted for 30 percent of deaths in the county between 2002 and 2007, followed by cancers, respiratory diseases, injuries, and nervous system diseases.[13]

Chronic diseases, such as certain cancers, cardiovascular diseases, diabetes, and asthma, are the most common and costly healthy problems; however, they are also among the most preventable by engaging in healthy behaviors. The top five cancers diagnosed in DeKalb County, as reported by the Georgia Comprehensive Cancer Registry, were prostate, breast, lung, colon, and skin cancers.[14]

Cardiovascular diseases affect the heart and blood vessels. African-Americans had higher morbidity rates (how people are affected by cardiovascular disease) than whites for high blood pressure and hypertensive heart disease. Obstructive heart disease (including heart disease) was higher among whites than African-Americans in DeKalb County between 2002 and 2007. Between 2002 and 2007, more females died from high blood pressure than males; more males died from hypertensive heart disease and obstructive heart disease than females; and more females died from stroke than males.[15]

The leading cardiovascular diseases for both morbidity and mortality (how many people die from cardiovascular disease) rates were heart disease and stroke in DeKalb County. Engaging in healthy behaviors and maintaining a healthy lifestyle, especially early in life, may reduce the chance of developing or dying from a cardiovascular disease. In 2009, 35 percent of DeKalb County high school students met the current recommendations for physical activity (at least 60 minutes five or more days per week), while 49.3 percent watched three or more hours of television per day on an average school day. Only 27.1 percent attended physical education classes daily in an average

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[13] DeKalb County Board of Health. Leading Causes. Accessed February 14, 2011. <www.dekalbhealth.net>.

[14] DeKalb County Board of Health. Chronic Diseases. Accessed February 14, 2011. <www.dekalbhealth.net>.

[15] DeKalb County Board of Health. Chronic Diseases. Accessed February 14, 2011. <www.dekalbhealth.net>.

week. In 2007, 47 percent of DeKalb County adults met current recommendations for physical activity (30 minutes or more five times a week).[16]

Although often overlooked as a public health issue, injuries can cause suffering, disability, and even death. In DeKalb County, intentional (meant to cause harm) and unintentional (unplanned) injuries accounted for 21 percent of emergency room visits, 4 percent of hospitalizations, and 9 percent of deaths between 2002 and 2006. Unintentional injuries, considered as falls, motor vehicle crashes, and drownings, resulted in more than 10,000 emergency room visits and hospitalizations and nearly 45 deaths every year from 2002 to 2007. Sixty-seven percent of hospitalizations and 80 percent of the deaths from falls occurred among persons age 60 or older. Between 2002 and 2006, motor vehicle crashes were the leading cause of death for persons between the ages of 1 and 34. Motor vehicle crashes accounted for 37,038 emergency room visits, 2,577 hospitalizations, and 418 deaths among residents of DeKalb County. Between 2002 and 2006, the person injured in a motor vehicle crash was most often either a driver or passenger in the vehicle; however, pedestrians injured in a motor vehicle crash were second. Bicyclists were least likely to be involved in a crash with a motor vehicle.[17]

Transportation Network Existing Conditions

The transportation network in the City of Dunwoody is made up of roadway, transit, bicycle, and pedestrian facilities.

Roadway Network

While Dunwoody has been settled since the 1830s, most development has taken place more recently. Consequently, the City has developed in a modern suburban style. The street configuration is typical suburban with a hierarchical street network. Arterials carry through traffic, and collectors serve subdivisions with cul-de-sacs as opposed to a traditional grid network.

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[16] DeKalb County Board of Health. Chronic Diseases. Accessed February 14, 2011. <www.dekalbhealth.net>.

[17] DeKalb County Board of Health. Injuries. Accessed February 14, 2011. <www.dekalbhealth.net>.

Regional Context

Dunwoody is nestled between Sandy Springs to the west and Gwinnett County, a major population and employment center with 790,000 residents and 295,000 jobs, to the east. Part of the Central Perimeter, including Perimeter Mall with its 1.6 million square feet of retail space, falls within Dunwoody city limits.

Several facilities in the City are part of the regional transportation network. Mount Vernon Road connects executive housing in Sandy Springs and northwest Atlanta as well as the Central Perimeter to Dunwoody from the west. To the east, Mount Vernon Road connects Spalding Drive and Gwinnett County. Ashford Dunwoody connects Dunwoody to Peachtree Road. Chamblee Dunwoody and North Shallowford roads both connect the cities of Dunwoody and Chamblee.

Access to Interstate 285 and the national highway network is provided by Ashford Dunwoody Road. Additionally, Chamblee Dunwoody and North Shallowford also provide access to I-285 through a split diamond interchange. Aside from I-285 along the southern border, there are no state highways in the City.

Safety

Safety is a major concern. While the absolute number of crashes that occur on a given corridor is one indicator of safety, crash rates are better for establishing relative levels of safety among similar facility types. The following analysis uses crash frequency to show locations in the study area with a high number of crashes and crash rates to describe the conditions of the corridor with respect to safety while comparing the corridor to similar facilities throughout the state.

Crash Frequency

Crash frequency is the raw number of crashes. Raw crash data for major corridors in the City were obtained from the Georgia Department of Transportation for the years 2005 through 2009, which was the most recent year available. Overall, there were 5,165 crashes during this period. There were 4,235 property damage only crashes, 930 injury crashes with 1,280 injuries reported, and no fatal crashes.

As expected, the highest numbers of crashes occur at or near major intersections. Areas in the City with a high number of crashes include:

- Ashford Dunwoody Road from Ashwood Parkway to I-285, which is to be expected since this is the highest volume roadway in the study area
- Perimeter Center West from the city limit to Ashford Dunwoody Road
- Hammond Drive at Ashford Dunwoody Road
- Chamblee Dunwoody Road from Roberts Drive to Womack Road
- Spalding Drive at Roberts Drive
- Spalding Drive at Chamblee Dunwoody Road
- North Peachtree Road at Tilly Mill Road and Peeler Road
- North Peachtree Road at I-285
- North Shallowford Road at I-285
- Tilly Mill Road at Peachtree Industrial Boulevard

Crash Rates

This analysis relies on crash rates to identify segments of major roads in the City of Dunwoody that appear most susceptible to crashes. Crash rates take traffic volume and road section length into consideration to create a ratio expressed as number of crashes per 100 million vehicle miles traveled. Crash rates can highlight areas that may appear to have a low or average number of crashes, but, when compared to other segments of the same functional class or other segments of the same corridor, actually exhibit a higher degree of crash danger.

Injury and fatal crashes have disproportionately higher associated monetary and social costs and are therefore highlighted independently in this analysis. Consideration of fatal, injury, and total crashes on a particular road segment is referred to in terms of severity at a location.

Most facilities analyzed in the study area experience crash rates well over statewide rates for similar facilities for total accidents and injury accidents.

Health and the Built Environment

Introduction

The built environment, including developed transportation systems, plays an enormous role in shaping individual lives and communities. The transportation system includes an intricate network of roads, sidewalks, bike paths, buses, and rail systems that ultimately connect individuals to places of work, recreation, service, shopping, worship, and other activities. Transportation policies can and often times do influence how communities are designed and define the way individuals interact with each other and their surrounding environment.

Dependency on the automobile has profound negative impacts on health, ranging from decreased opportunities for physical activity to an increase in exposure to air pollution and risk for accidents. Furthermore, the health costs of these impacts can be as high as several hundred billion dollars when loss of work days and wages, pain and suffering, and even premature death are considered.[18]

Some of the effects of sprawl are directly related to society's reliance on the automobile, such as air pollution, automobile crashes, and pedestrian injuries and fatalities. Sedentary lifestyles, threats to water quantity and quality, and some mental health and social capital effects can be attributed to the effects of sprawl.[19]

The 1999-2000 National Health and Nutrition Examination Survey estimated that 64 percent of adults in the United States aged 20 years or older are classified as overweight or obese. Obesity has doubled since 1980 among adults in the United

[18] American Public Health Association. 2010. The Hidden Health Costs of Transportation.

[19] Frumkin, Howard. 2002. Urban Sprawl and Public Health. Public Health Reports. 117. 202.

States, and the percentage of children and adolescents defined as overweight has more than doubled since the early 1970s.[20]

It is estimated that 17 million Americans have diabetes, with about one third unaware of their condition. About 1 million new cases are diagnosed every year in the United States, where diabetes is the seventh leading cause of death. Furthermore, it is the leading cause of new cases of blindness, kidney failure, and lower extremity amputations. However, progression of the disease can be delayed by preventing obesity, focusing on improved nutrition, engaging in regular physical activity, and improving access to services, among other things. Research has shown that lifestyles that include consistent, moderate-intensity physical activity and a healthy diet may reduce an individual's risk of developing Type 2 diabetes by 40 percent to 60 percent.[21]

More than 61 million Americans have some form of cardiovascular disease, including high blood pressure, coronary heart disease, stroke, congestive heart failure, and other conditions.[22]

Community Design and the Roadway Network

There is a growing body of research establishing a correlation between community design or the built environment and one's individual health, particularly when it comes to activity levels. In general, studies have found that communities defined as walkable

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[20] Centers for Disease Control and Prevention. 2009. Physical Activity. October 14, 2009. Accessed November 23, 2010. <www.cdc.gov/healthplaces/healthtopics/physactivity.htm>.

[21] Centers for Disease Control and Prevention. 2009. Physical Activity. October 14, 2009. Accessed November 23, 2010. <www.cdc.gov/healthplaces/healthtopics/physactivity.htm>.

[22] Centers for Disease Control and Prevention. 2009. Physical Activity. October 14, 2009. Accessed November 23, 2010. <www.cdc.gov/healthplaces/healthtopics/physactivity.htm>.

tend to lead to more physical activity and significant health benefits.[23] Walkable neighborhoods encourage active living; research shows that individuals tend to walk and bike more in communities that have a mix of uses, higher density, connected streets, and pedestrian facilities.[24] Measurable characteristics of the built environment are often used to gain an understanding of the built environment's influence on activity levels. These characteristics include population and employment density; land use mix; street connectivity (density of intersections and block size); continuity of network; recreational facilities; and street scale, design, and safety.[25] For example, pedestrians and bicyclists tend to move slower and are less protected than people in cars. Therefore, scale and aesthetic detail of the surrounding environment are particularly important to pedestrians and bicyclists.[26]

Street connectivity provides a measure of the directness or the number of alternative routes available between points of travel. A highly connected street system provides many possible routes and allows one to pick the most direct route and minimize travel time. Street connectivity can be measured by the number of intersections per square mile, block length or area, or the ratio of the straight line distance between two points and the distance along the network between those two points. One study conducted in San Francisco found that urban form did play into one's perception of whether walking

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[23] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 71-74.

[24] Active Living Research. 2005. Designing for Active Transportation. <www.activitylivingresearch.org>.

[25] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 71-74.

[26] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 119.

was an option, particularly long distances between residential and commercial areas and major arterials along the route.[27]

Continuity of network is another measure that considers the continuous nature of the network. A continuous network is one where there are no disruptions in the network. For example, a continuous sidewalk network would mean that there are no breaks in the sidewalk system and appropriate crosswalks at every intersection.[28] While there is currently little research on street continuity with overall health and physical activity levels, there is evidence that grid street networks can increase biking and walking; individuals who live in areas with a more street grid system tend to take more trips by foot, and individuals living in a walkable neighborhood tend to take twice as many walking trips as those who live in less walkable communities. Also, studies have shown that although residents in walkable neighborhoods and traditional suburban neighborhoods tend to get the same amount of physical activity, those who live in walkable communities get more of their physical activity as part of their daily routine, such as walking and biking to run errands.[29]

Physical Activity

Lifestyles that do not include regular physical activity have been a major health concern over the past several decades. Physically inactive populations are at risk both medically and financially for many chronic diseases and conditions, such as heart disease, stroke, diabetes, obesity, and osteoporosis.[30] In 2000, the Center for Disease

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[27] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 80.

[28] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 80.

[29] Active Living Research. 2005. Designing for Active Transportation. <www.activitylivingresearch.org>.

[30] United States Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. 2002. Physical Activity Fundamental to Preventing Disease. Pg 4.

Control and Prevention (CDC) found that direct medical expenses associated with physical inactivity totaled more than $76 billion.[31] The Medicare and Medicaid programs currently spend $84 billion annually on five major chronic conditions that could be improved by physical activity (heart disease, diabetes, depression, cancer, and arthritis[32]).

For individuals who are generally inactive, becoming moderately active on a regular basis can improve one's health. Physical activity performed on a regular basis can reduce the risk of developing or dying from some of the leading causes of illness in the United States, including heart disease, diabetes, high blood pressure, and colon cancer, as well as reducing the risk of dying prematurely and feelings of depression or anxiety. Regular physical activity also helps control weight; build and maintain healthy bones, muscles, and joints; and promote psychological well-being.[33] U.S. Department of Health and Human Services (DHSS) guidelines recommend that all adults should avoid inactivity. Some physical activity is better than none, and there are health benefits to gain by engaging in any amount of physical activity. Furthermore, DHSS guidelines recommend that adults get at least 30 minutes of moderate physical activity five times or more a week. Children should get 60 minutes or more of daily age-appropriate physical activity.[34]

Evidence to date indicates that the built environment, including homes, work, and community environments, has an influence on an individual's level of physical activity.

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[31] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 69.

[32] United States Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. 2002. Physical Activity Fundamental to Preventing Disease. Pg 4.

[33] Centers for Disease Control and Prevention. 2009. Physical Activity. October 14, 2009. Accessed November 23, 2010. <www.cdc.gov/healthplaces/healthtopics/physactivity.htm>.

[34] United States Department of Health and Human Services. 2008. Physical Activity Guidelines for Americans.

Things such as availability and attractiveness of bike paths, sidewalks, exercise facilities, and recreational areas and the overall perceived safety of the environment play a role in determining the type and amount of physical activity an individual will engage in.[35]

Transportation research indicates that there is potential to increase the number of walking and bicycling trips. Studies have shown that an estimated 83 percent of trips are short, for non-work purposes, and take place relatively close to home. National transportation data from the Federal Highway Administration shows that more than one quarter of trips are walkable (27 percent within 1 mile and 14 percent within 0.5 mile of home) and that 63 percent of trips are of a bikeable distance (within 5 miles of home). However, more than 90 percent of all trips take place by automobile.[36]

Research shows that individuals walk and bicycle more in communities that have a mix of uses, higher density, connected streets, and pedestrian facilities. On average, people who live in highly walkable communities take one or two more walking trips per week than those living in areas with poor walkability.[37] Research also indicates that denser communities with a mix of uses, shorter blocks, high levels of street connections, and more trails and bicycle paths tend to experience more walking and biking.

Individuals respond to the different characteristics of the build environment when it comes to physical activity. When traveling for functional trips, such as for shopping, running errands, or commuting to work, characteristics that impact the length of the trip to the destination correlate with the decision whether to walk, bike, or drive (i.e., the mix of land uses and street configuration). When seeking physical activity for

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[35] Centers for Disease Control and Prevention. 2009. Physical Activity. October 14, 2009. Accessed November 23, 2010. <www.cdc.gov/healthplaces/healthtopics/physactivity.htm>.

[36] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 70-71.

[37] Active Living Research. 2005. Designing for Active Transportation. <www.activitylivingresearch.org>.

recreational purposes, the presence, design, and overall aesthetics correlate with the decision to engage in the physical activity.[38]

Children can be active and receive the recommended amount of daily physical activity in many ways. When proper facilities and accommodations are provided, children are able to ride a bike, walk or bike to friends' houses or a nearby playground to play, walk to school, or, in some circumstances, play in the street.[39]

Access and Affordability

The CDC recognizes several health issues that relate to community design and land use. Besides physical activity, accessibility is important to all individuals; however, poorly designed communities can make it especially difficult for people with mobility impairments or other disabling conditions to freely move and access daily service needs, including healthcare and the desired physical activity needed to maintain an active, healthy lifestyle. Another health issue is the risk of injury, in particular the interaction between motorized and non-motorized transportation as it relates to community and transportation planning.[40]

Access to frequent transit service is a necessary step to increasing walking and biking and improving cardiovascular health, respiratory health, and physical activity. Both transportation and public health research supports the link between transit access and levels of transit service to benefits to public health. Furthermore, policies that support increasing the cost of driving (such as parking demand strategies) and neighborhood

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[38] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 87-88.

[39] Wendel, A. and H. Frumkin. 2008. Designing and building healthy places for children. International Journal of Environment and Health. Vol. 2, Nos. 3/4. Pg 346.

[40] Centers for Disease Control and Prevention. 2009. Accessibility & the Environment. October 15, 2009. <www.cdc.gov/healthplaces/healthtopics/accessibility.htm>.

and community design features that promote walkability increase the effectiveness of improved transit access and service.[41]

Children and the Built Environment

Children are particularly sensitive to the impacts of the built environment because their higher respiratory and metabolic rates create more exposure contaminants than adults. Children also typically spend more time as an "alternative user" of the street network because they tend to walk and bike more than drive, as adults do. This can also be said for other disadvantaged groups. Therefore, transportation options for children should also consider others who are restricted from driving, unable to drive, or unable to own a car, such as the disabled, elderly, and poor.[42]

Approximately one in 10 preschoolers and one in seven school-age children are overweight, and one of the major leading factors is inactivity. Contributing to this disadvantage is a child's ability to find safe and convenient areas to play and recreate without an automobile. The National Personal Transportation Survey reports that as few as one in seven children walk or bicycle to school. The primary reasons preventing children from walking or bicycling to school include distance to the school and traffic safety, as reported by the CDC. Research with Safe Routes to School (SRTS) indicates that as traffic safety barriers are reduced, the rate of children walking or bicycling to school increases.[43] Developing safe routes for children to walk or bike to school is one way to specifically target and increase their physical activity. Decreasing traffic distances between homes and schools by providing a direct walking path and designing roads and intersections that improve safety for pedestrians will help break

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[41] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 119.

[42] Wendel, A. and H. Frumkin. 2008. Designing and building healthy places for children. International Journal of Environment and Health. Vol. 2, Nos. 3/4. Pg 348.

[43] Ewing, R., R. Kreutzer and Lawrence Frank and Company, Inc. 2006. Understanding the Relationship Between Public Health and the Built Environment. Design, Community & Environment. Pg 108.

down the most common barriers that prevent children from walking or biking to school.[44]

Social Capital/Cohesiveness

There is a significant amount of research exploring social capital, or the relationship among social relationships, cohesiveness, and health on both the individual and societal level. Several studies have established a link between social capital and health benefits, and several health benefits have been identified with high levels of social capital, such as prolonged life, overall better health, cardiovascular health, quicker recovery from illness, and improved mental health.[45] Increased social capital is also correlated with lower rates of chronic disease in adults. Children may benefit as well from increased social capital.[46]

Time spent in the car relates directly to a loss in social capital. Conversely, walkability is positively linked to social capital. Studies have found that the strongest sense of communities are best displayed when there are positive attitudes toward walking, opportunity for social interaction, and a safe and interesting walk environment. Furthermore, the number of walking opportunities for recreational trips correlates more with a sense of community than the number of opportunities for destination walking trips.[47]

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[44] Wendel, A. and H. Frumkin. 2008. Designing and building healthy places for children. International Journal of Environment and Health. Vol. 2, Nos. 3/4. Pg 346.

[45] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 87-88, 91.

[46] Wendel, A. and H. Frumkin. 2008. Designing and building healthy places for children. International Journal of Environment and Health. Vol. 2, Nos. 3/4. Pg 346.

[47] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 95.

Research has also found that loss of public space is linked to diminishing social capital. Public spaces include not only public plazas and gathering spaces, but also sidewalks, parks, and trails.[48] Research shows that communities that develop community programs such as a walking school bus, for example, promote active transportation as a social experience while increasing social capital.[49]

Community Involvement

Community involvement is essential to the development, and ultimately success, of any public plan. Three community workshops were held during the development of the CTP. The first workshop provided a brief introduction on the CTP process and an overview of existing conditions within the City. The purpose of the first workshop was to identify issues and opportunities with the City and gain direct feedback from participants on the goals and objectives established in the comprehensive land use planning process as they relate to transportation.

Participants were also asked to review and provide feedback on key transportation issues that could impact health. Transportation issues identified by participants that could have an impact on health were bike and pedestrian safety, air quality, connectivity, safety for children, safety and mobility for older generations, and alternative modes for commuting. Next, participants were asked to identify health issues that are important to them. Responses included physical activity and exercise, recreational opportunities, air quality, childhood obesity, preventive services, education, diet, and emotional health.

Health Impacts of CTP

The recommendations for projects and policies from the Dunwoody CTP can have a variety of health impacts, particularly those that are related to physical activity, access and affordability, safety, and social capital.

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[48] Ewing, R. and R. Kreutzer. 2006. Understanding the Relationship Between Public Health and the Built Environment: A Report Prepared for the LEED-HD Core Committee. U.S. Green Building Council. May 2006. Pg 95.

[49] Wendel, A. and H. Frumkin. 2008. Designing and building healthy places for children. International Journal of Environment and Health. Vol. 2, Nos. 3/4. Pg 346.

Below is a summary of the project recommendations by category in the CTP. Health-based recommendations are identified for each as a discussion point for implementation of both recommended projects and policies and as an opportunity to increase potential health benefits while minimizing potential health negative impacts.

Intersection Improvements: Conclusions and Recommendations

Based on the traffic analysis completed for the City, several intersections throughout the City will operate at a failing level of service (LOS). Intersection improvements were recommended to improve LOS. Intersection improvements are linked to health in the following ways:

- Improves safety conditions at intersections for pedestrians and drivers of all abilities

Health-Based Recommendations

1. Decrease walking distance around large intersections.

    a. Decreasing the walking distance could make it easier for disabled users and seniors to cross or navigate intersections.

    b. Decreasing the walking distance will make it easier for pedestrians to cross intersections during the designated signal timing.

2. Provide pedestrian refuge islands or medians in large intersections to decrease the crossing distance.

    a. The addition of pedestrian refuge islands could make it easier for seniors to cross intersections.

    b. Increasing safety at pedestrian crossings and intersections could increase walking, therefore increasing physical activity.

    c. Pedestrian refuge islands and medians have been determined as an effective traffic calming measure that can lower motor vehicle speeds, which could result in fewer accidents. Therefore, there would be less risk of fatal or severe injury to not only motorists in vehicle crashes, but also to pedestrians.

    d. Pedestrian refuge islands will provide the most benefits to the greatest number of users if they are made ADA accessible, according to Universal Design Principles.

    e. CAUTION: Proper design considerations include a bicycle cut-through to avoid forcing bicyclists into traffic to go around the refuge island.

3. Where applicable, improve site distance for turning cars.

    a. Improving site distance can decrease the risk of pedestrian-auto crashes.

Center Turn Lane: Conclusions and Recommendations

Based on the traffic analysis completed for the City, several roadway segments throughout the City will operate at a failing LOS. Roadway improvements were recommended to improve LOS. Roadway improvements are linked to health in the following ways:

- Improves vehicular safety along the corridor
- Allows for greater room for bicyclists on the shoulder
- Allows for adequate room for vehicles to pass bicyclists

Health-Based Recommendations

1. Pedestrian facilities should be improved.

   Implementing or improving pedestrian facilities should be considered with roadway improvements. Improving facilities may increase pedestrian activity and, therefore, physical activity.

2. Sidewalk and streetscaping should be implemented based on design standards established by the City.

   a. Design standards allow for a more attractive pedestrian environment, which should lead to more walking and an increase in physical activity through walking.

   b. Include pedestrian amenities such as benches and water fountains in central business areas. Seniors are more likely to walk when there is the ability to rest under shade and get water at various points of their walk.

3. Opportunities to provide on-street bicycle facilities should be considered in the design or reconstruction of new or existing streets.

   a. Providing easier access to bicycle facilities should increase the attractiveness of bicycling in the community, therefore increasing the amount of physical activity through bicycling.

   b. Adding bike facilities could increase the number of people commuting to transit stations by bicycle.

4. On-street bicycle facilities should primarily follow low-volume streets with linkages along high-volume streets.

   By reducing the number of bicyclists along high-volume streets, interactions and conflicts between bicyclists and vehicles will be reduced, therefore reducing the risk of bicycle-vehicle crashes.

5. Implement traffic calming measures as needed.

    a. Traffic calming measures may include higher visibility crosswalks, traffic calming signs with roadway striping, speed humps, traffic circles, center island narrowings, chicane with on-street parkings, or realigned intersection neckdowns.

    b. Traffic calming measures can increase the sense of safety for pedestrians and bicyclists, therefore increasing physical activity.

Road Extension and New Roadway Location: Conclusions and Recommendations

Project recommendations for new roadway locations are proposed primarily in the commercial and redevelopment areas designated by the City, such as Dunwoody Village and the Georgetown Redevelopment Area. New roadway locations are linked to health in the following ways:

- Contributes to creating a grid-like street network in the City
- Provides additional connectivity for pedestrians, bicyclists, and vehicles

Health-Based Recommendations

1. Pedestrian facilities should be improved.

    Implementing or improving pedestrian facilities should be considered with roadway improvements. Improving facilities may increase pedestrian activity and, therefore, physical activity.

2. Sidewalk and streetscaping should be implemented based on design standards established by the City.

    a. Design standards allow for a more attractive pedestrian environment, which should lead to more walking and an increase in physical activity through walking.

    b. Include pedestrian amenities such as benches and water fountains. Seniors are more likely to walk when there is the ability to rest under shade and get water at various points of their walk.

3. Opportunities to provide on-street bicycle facilities should be considered in the design or reconstruction of new or existing streets.

    a. Providing easier access to bicycle facilities should increase the attractiveness of bicycling in the community, therefore increasing the amount of physical activity through bicycling.

    b. Adding bike facilities could increase the number of people commuting to transit stations by bicycle.

4. On-street bicycle facilities should primarily follow low-volume streets with linkages along high-volume streets.

    By reducing the number of bicyclists along high-volume streets, interactions and conflicts between bicyclists and vehicles will be reduced, therefore reducing the risk of bicycle-vehicle crashes.

5. Implement traffic calming measures as needed.

    a. Traffic calming measures may include higher visibility crosswalks, traffic calming signs with roadway striping, speed humps, traffic circles, center island narrowings, chicane with on-street parkings, or realigned intersection neckdowns.

    b. Traffic calming measures can increase the sense of safety for pedestrians and bicyclists, therefore increasing physical activity.

6. On-street parking opportunities should be identified and researched.

    a. On-street parking can facilitate community interactions and build social capital by pulling drivers out of parking lots and garages and onto streets.

    b. On-street parking reduces the risk of accidents by allowing delivery vehicles the ability to make deliveries to local businesses without blocking a travel lane.

    c. On-street parking provides traffic calming effects and improves pedestrian safety by forcing drivers to be more aware of surrounding activities.

d. On-street parking provides a buffer between pedestrians on the sidewalk and moving vehicles.

e. CAUTION: On-street parking may increase the risk to bicyclists. Consideration in design and construction of the interaction among moving vehicles, bicyclists, and parked vehicles may help minimize the risk.

ATMS/ITS: Conclusions and Recommendations

Project recommendations include upgrades and implementation of automated traffic management systems (ATMS) and intelligent transportation systems (ITS) along several major roadway corridors in the City. This recommendation also includes signal re-timing and signal interconnection. ATMS/ITS improvements are linked to health in the following ways:

- Improves traffic flow and congestion

Health-Based Recommendations

1. Upgrades to signal timing and signal interconnection may improve congestion and traffic flow along high-volume corridors.

   a. Spending less time in the car should reduce stress levels related to sitting in traffic.

   b. Less time spent in the car allows for more time for human interaction (building upon social capital) and more time to engage in physical activity.

Bicycle: Conclusions and Recommendations

Based on community desires, improvements to encourage bicycling are highly regarded as one way to improve the overall transportation system in the City. Bicycle improvements are linked to health in the following ways:

- Allows for opportunities to regularly engage in physical activity, improving mental and physical health, social cohesion, and financial savings

- Safe, attractive, multi-use paths and bike lanes encourage people to bicycle

- Bicycling leads to greater physical activity, which leads to lower risks of health problems, such as obesity, diabetes, heart disease, stress, high blood pressure, and some types of cancer

Health-Based Recommendations

1. Implement the proposed bicycle network as outlined in the CTP.

    a. Include a combination of on- and off-street facilities.

    b. Greater use of bicycles should lead to greater physical activity, which should lead to lower risks of health problems, such as obesity, diabetes, heart disease, stress, high blood pressure, and some types of cancer.

2. Bicycle facilities should include design features such as traffic calming to increase safety.

3. Off-street facilities should include aesthetic features such as trees and landscaping along trails and paths.

4. Opportunities to provide on-street bicycle facilities should be considered in the design or reconstruction of new or existing streets.

    a. Providing easier access to bicycle facilities should increase the attractiveness of bicycling in the community, therefore increasing the amount of physical activity through bicycling.

    b. Adding bike facilities could increase the number of people commuting to transit stations by bicycle.

5. On-street bicycle facilities should primarily follow low-volume streets with linkages along high-volume streets.

    By reducing the number of bicyclists along high-volume streets, interactions and conflicts between bicyclists and vehicles will be reduced, therefore reducing the risk of bicycle-vehicle crashes.

6. Include an adequate network of bike lanes and paths in new roadway design and redesign of existing roadways with connections to regional bike routes.

7. Include road markings, signage, and wayfinding to help guide bicyclists.

    a. Increasing signage should enhance wayfinding and reduce stress for bicyclists and increase usage by beginner riders.

    b. CAUTION: Increasing signage may also increase distractions, particularly for beginner riders, therefore increasing the risk of accidents.

8. Encourage bicycle parking at central locations and commercial centers.

    Providing parking in central locations makes bicycling more attractive and increases the chance of individuals bicycling, therefore increasing physical activity levels.

9. Sponsor bicycle education classes and seminars.

    Increased education could reduce the risk of bicycle crashes, particularly with vehicles.

10. Routes identified should provide access to transit facilities.

    a. Increasing access to transit may increase levels of physical activity.

    b. New availability of non-car options could induce transit riders to bike and not drive to transit stations, therefore increasing physical activity.

11. CAUTION: A greater number of bicyclists in the City could lead to a greater number of accidents involving bicyclists.

    a. Greater instances of bicyclists and vehicles sharing the road may result in an increase in the risk of bicycle-car accidents.

    b. An increase of bicycle accidents may not necessarily be between bicycles and vehicles.

Pedestrian: Conclusions and Recommendations

Based on community desires, improvements to encourage walking are the number one way to improve the overall transportation system in the City. Pedestrian improvements are linked to health in the following ways:

- Allows for opportunities to regularly engage in physical activity, improving mental and physical health, social cohesion, and financial savings
- Safe, attractive sidewalks and multi-use paths encourage people to walk
- Walking leads to greater physical activity, which leads to lower risks of health problems, such as obesity, diabetes, heart disease, stress, high blood pressure, and some types of cancer

Health-Based Recommendations

1. Implement the sidewalk improvement program adopted by the CTP.

   In addition to meeting the goals of the program to improve walking routes to schools, pedestrian safety, and connectivity to commercial and community centers, parks, and transit, prioritization of pedestrian improvements along routes that serve less well-traveled communities and under-served populations should be considered.

2. Pedestrian facilities and sidewalks should include design features such as traffic calming to increase safety.

3. Sidewalk and streetscaping should be implemented based on design standards established by the City.

   a. Design standards allow for a more attractive pedestrian environment, which should lead to more walking and an increase in physical activity through walking.

   b. Include pedestrian amenities such as benches and water fountains in central business areas. Seniors are more likely to walk when there is the ability to rest under shade and get water at various points of their walk.

4. Opportunities to provide pedestrian facilities should be considered in the design or reconstruction of new or existing streets.

    a. Providing easier access for pedestrian facilities should increase the attractiveness of walking in the community, therefore increasing the amount of physical activity through walking.

    b. Adding sidewalks could increase the number of people commuting to transit stations by foot.

5. Include an adequate network of sidewalks and paths in new roadway design and redesign existing roadways with connections to recreational facilities.

    Increasing access to recreational facilities will increase the use of the facilities.

6. Include signage wayfinding to help guide pedestrians.

    Increasing wayfinding may reduce stress for pedestrians.

7. Decrease walking distance around large intersections.

    a. Decreasing walking distance could make it easier for disabled users and seniors to cross or navigate large intersections.

    b. Decreasing walking distance will make it easier for pedestrians to cross during the designated signal timing.

8. Provide pedestrian refuge islands or medians in large intersections to decrease the crossing distance.

    a. The addition of pedestrian refuge islands could make it easier for seniors to cross intersections.

    b. Increasing safety at pedestrian crossings and intersections could increase walking, therefore increasing physical activity.

    c. Pedestrian refuge islands and medians have been determined as an effective traffic calming measure that lowers motor vehicle speeds, which could result in

fewer accidents. Therefore, there would be less risk of fatal or severe injury to not only motorists in vehicle-vehicle crashes, but also to pedestrians.

d. Pedestrian refuge islands will provide the most benefits to the greatest number of users if they are made ADA accessible, according to Universal Design Principles.

e. CAUTION: Proper design considerations include a bicycle cut-through to avoid forcing bicyclists into traffic to divert the refuge island.

9. Encourage street-level land uses that are oriented toward pedestrian access, including ground-level retail and development that is accessible to pedestrian travel.

   Greater land mixes, population and employment density, street connectivity, and continuity of a pedestrian (and bike) network may increase physical activity.

10. Improve bus transit stops.

    a. Improving bus transit stops may lead to an increase in commuting by transit and reduce the amount of time spent in cars.

    b. Improvements could reduce the risk of crime at a transit stop.

    c. This improvement particularly could be beneficial to low-income families, the carless, and others dependent on the transit system because it would further legitimize their bus stop within the community and make waiting for the bus easier.

Transit: Conclusions and Recommendations

Transit recommendations include the City working with the Perimeter Center Improvement Districts (PCIDs) and Georgia Perimeter College to look at the feasibility of providing local transit service within the City. This may include a shuttle service, on-demand transit call service, or another means of providing transit. Transit improvements are linked to health in the following ways:

- Ensures access to essential needs and services

- Allows people a travel option outside of driving, therefore reducing environmental and health costs associated with vehicle trips

- Typically includes walking and cycling, both of which have positive health impacts and equalize opportunities for physical activity

Health-Based Recommendations

1. Conduct a community assessment for transit use to determine transit needs.

   Promoting transit use and associated activities such as walking and biking can help reduce socioeconomic discrepancies in physical activity.

2. Consider transit service needs between existing transit stations and commercial and activity centers in the City.

3. Provide pedestrian amenities and conveniences at transit stops.

   Wide sidewalks, additional passenger waiting space, bus shelters, and seating are attractive to users and encourage transit use.

Alternative Transport: Conclusions and Recommendations

Alternative transport recommendations include the City developing an ordinance regarding operation of alternative vehicles (e.g., golf carts) on City streets. Alternative transport is linked to health in the following ways:

- Can reduce environmental and health costs associated with automobile trips

Health-Based Recommendations

1. Consider conflicts with vehicles, pedestrians, and bicyclists.

2. Consider safety elements such as operation at night, vehicle operators, etc.

Study: Conclusions and Recommendations

Further study recommendations include conducting a detailed traffic study of Dunwoody Village. Additional studies are linked to health in the following ways:

- Additional studies will allow for further opportunity to identify strategies and projects that contribute to the overall improvement of health and well-being for residents in the City of Dunwoody

Health-Based Recommendations

1. Implement recommendation in the CTP to further study traffic in the Dunwoody Village.

2. Consider health impacts in those studies.

Findings

The HIA found that the City of Dunwoody CTP includes many policy and project recommendations that will have principally positive impacts on public health by increasing opportunities for physical activity, improving safety, and providing better access to health-promoting goods and services, such as recreational centers, parks, health care services, and commercial areas. The CTP may lead to a slight reduction in vehicle use by Dunwoody residents and, therefore, a reduction in the negative health impacts related to vehicles, such as poor air quality from emissions and risk of vehicle accidents.

Immediate results of implementation of the CTP should be from increased walking as a result of implementation of the Sidewalk Improvement Program and SRTS, leading to an increase in physical activity and social capital as residents will have more opportunity to interact through physical activity.

Coordination with the other plans and studies under way with the City, including the Dunwoody Village and Georgetown Redevelopment Area master plans and the Comprehensive Parks and Recreation Plan, could also yield positive health impacts.

Negative impacts resulting from the HIA include roadway improvements that may increase risk for pedestrians and bicyclists. Many of these negative impacts can be eliminated or minimized by implementing the recommendations of the HIA during the design phase of projects.

Recommendations

The following are recommendations, in addition to the health-based recommendations listed under each project type, to further promote positive health outcomes from the CTP. The HIA and its recommendations should be considered as a tool for the City to use in evaluating the overall health and well-being of the City as it strives to meet the vision, goals and policies identified in the City's Comprehensive Land Use Plan.

Recommendation	Description
1. Consider developing a sustainable, active living policy	Policy should address social, environmental, and policy approaches that can be implemented throughout the various stages of transportation planning and project implementation. Policy statements should seek to achieve positive health outcomes: traffic safety, street connectivity, streetscape standards, bicycle network and connectivity, and walking and biking to promote physical activity, emphasizing vulnerable populations, including children, older adults, people with disabilities, and low-income households.
2. Develop active design guidelines	Design public spaces, including streets, which encourage walking, bicycling, and other forms of active transportation and recreation.
3. Consider developing a Health Impact/Complete Streets Checklist	Incorporate policy statements into staff reviews of proposed transportation projects, developments, planning processes through a checklist.
4. Where appropriate, encourage a mix of land uses	Allow for a mix of land uses that encourage walking and therefore increase physical activity. A mix of land uses may also encourage mobility among older adults.
5. Develop parking management strategies as recommended in the CTP	Parking can affect the use of the more active modes of transportation, such as walking, biking, and public transit. Parking design should seek to reduce the need for vehicle travel, particularly where walking, biking, and public transit are convenient alternatives.
6. Safety and Wellness education in schools	Continue to implement Safe Routes to School programs.
7. Consider implementing a reporting program	Establish target goals and benchmarks. Implement a monitoring and reporting system to determine the City's progress in meeting public health-related goals and objectives.
8. Consider looking at the health impacts of the City's Comprehensive Land Use Plan	Incorporate HIA's into future updates of the Comprehensive Land Use Plan.

ARCADIS

Appendix D

Complete Streets

Appendix D: Complete Streets Overview

What are Complete Streets and Complete Streets Policies?

Complete streets are designed and operated to enable safe access for pedestrians, bicyclists, motorists and transit riders of all ages and abilities across the complete street. Complete streets policies ensure that transportation agencies routinely design and operate the entire right of way to enable safe access for all users.

Benefits[1]:

- Increased safety and physical activity for children. Streets designed only for cars become barriers for children, while complete streets provide the opportunity to walk, bike and play in a safe environment. More children are likely to walk or bike to school when sidewalks or footpaths are present, when there are safe street crossings, and when school zones enforce a reduced vehicle speed.
- Allow people with disabilities increased mobility options. Providing transportation choices for everyone, including those with disabilities, improves livability by connecting citizens to their community and by reducing dependence on more costly alternatives, such as paratransit or private transportation services.
- Increased mobility for senior residents. The complete streets process offers balance for the needs of older drivers and pedestrians by slowing vehicles down where necessary, creating an easily navigated multimodal network of streets, and improving visibility. Older pedestrians also specifically benefit from the retiming of signals to account for slower walking speeds, as well as the construction of median refuges or sidewalk bulb-outs to shorten crossing distances.
- Lowers negative health issues, such as obesity and heart disease, typically associated with physical inactivity. Increasing neighborhood walkability and access to transit allows residents to incorporate moderate physical activity, or exercise, into their daily travels.
- Encourages commuters to opt for public transit alternatives. By prioritizing the creation of streets that work well for public transit vehicles, transit travel time decreases while ridership increases thus easing both congestion and air pollution.

[1] National Complete Streets Coalition. http://www.completestreets.org

- Promote low to zero emission transportation modes. Complete streets help convert short, local automobile trips to multi-modal travel, reducing carbon dioxide emissions.
- Provides economic boost. Street design that is inclusive of all modes of transportation not only improves conditions for existing businesses, but also is a proven method for attracting new development and area revitalization. Complete streets can increase both residential and commercial property value, as homeowners are generally willing to pay more to live in walkable communities. A 1999 study by the Urban Land Institute of four new pedestrian-friendly communities determined that homebuyers were willing to pay a $20,000 premium for homes in them compared to similar houses in surrounding areas.[2] Common complete streets aspects found in the studied communities included interconnected, narrow streets, sidewalks, and features such as street trees. Proximity to transit stops also provides proven increases in value for both residential and commercial properties. A report by Economics Research Associates (ERA) in 1995, documents significant increases in property values for medium density apartments and condominiums and commercial and retail properties located near rapid transit stations[3].
- Reduction in crash incidents and increased pedestrian safety. Complete street features improve safety for all users. Medians, for example, allow two stage street crossings for pedestrians and reduce left turning vehicle crashes to zero.
- Reduction in traffic congestion. Investment to expand only automobile capacity does not necessarily translate into increased traffic flow. Complete streets, while encouraging transit alternatives and promoting safe travel, allow for a reduction in vehicular volume, especially for drivers embarking on short, local trips during peak hours.
- Existing transportation budgets can incorporate complete streets projects without requiring additional funding, accomplished through re-prioritizing projects and allocating funds to projects that improve overall community mobility.
- Compared to increasing road capacity for vehicles alone, investing in pedestrian and bicycle facilities cost far less; over the width of one traffic lane, walking and cycling can move five to ten times more people than driving.

[2] *The Economic Benefits of Walkable Communities*, Ian Lockwood, http://www.lgc.org

[3] *Why Build Near Transit?*, Paul Zykofsy, http://www.lgc.org

- Possible sources for funding to mitigate costs associated with complete streets include the Congestion Mitigation and Air Quality (CMAQ) Improvement Program, Governor's Office of Highway Safety Grant Program, Land and Water Conservation Fund, Recreational Trails Program, Safe Routes to School Program, Transportation Enhancement Program
- General Complete Street Improvements – *Appendix A*

Key complete streets policy elements

- Sets a vision. A strong vision can provide inspiration for a community to follow through with their complete streets policy.
- Specifies all users. A complete streets policy must apply to everyone traveling along the road; cars, trucks, buses, as well as pedestrians of all ages, bicyclists, and transit passengers.
- Creates a network. Each street may not easily be made perfect for every traveler. Network creation allows for an interwoven array of streets that emphasize different modes and provide quality accessibility for everyone.
- All agencies and all roads. Consider all agencies that are involved in building and maintaining roads, including state, county and local agencies, as well as private developers.
- All projects. The complete streets policy approach stresses that both large and small projects present the opportunity to make meaningful improvements.
- Exceptions. The Federal Highway Administration created three common exceptions for accommodating bicycle and pedestrian travel used in complete street policies: 1) accommodation is not necessary on corridors where non-motorized use is prohibited, 2) cost of accommodation is excessively disproportionate to the need or probable use, 3) a documented absence of current or future need. Exceptions should be fine tuned per the needs of the community.
- Design criteria. Communities must ensure that their design policies and complete street polices mesh. Some cases may necessitate rewriting design policies.
- Context-sensitive. Sensitivity of how complete street policy fits into the community context is essential and can allay fears of unreasonable changes.
- Performance measures. Traditional performance measures, like vehicular Level of Service, provide a narrow focus. Complete street policies measure success in multiple ways, accounting for each type of user on the road.

- Implementation. Successful policy implementation includes the following: 1) Restructure procedures to accommodate all users on every project; 2) Develop new design policies and guides; 3) Offer workshops and other training opportunities to planners and engineers; 4) Institute better ways to measure performance and collect data on how well the streets are serving all users.

Complete Streets Policy Examples

A. ROSWELL, GA

Goals of the Complete Streets Policy:

- To ensure that the safety and convenience of all users of the transportation systems are accommodated, including pedestrians, bicyclists, users of mass transit, people with disabilities, the elderly, motorists, freight providers, emergency responders, and adjacent land users;
- To incorporate the principles of this policy into all aspects of the transportation project development process, including project identification and design approvals, as well as design manuals and performance measures;
- To create a comprehensive, integrated and connected transportation network throughout the City of Roswell that supports compact, sustainable development;
- To ensure the use of the latest and best design standards, policies, and guidelines;
- To recognize the need for flexibility to accommodate different types of streets and users; and
- To ensure that the Complete Streets design solutions fit within the context(s) of the community.

Policy:

The Complete Streets Policy should apply to all new construction and reconstruction of roadways under the jurisdiction of the City of Roswell. Specifically,

- Roadway projects should accommodate all users of the transportation system; including pedestrians, bicyclists, users of mass transit, people with disabilities, the elderly, motorists, freight providers, emergency responders, and adjacent land users;
- Roadway projects should make sure of the latest and best design standards, policies, and guidelines; and

- Complete Streets solution shall be developed to fit within the context(s) of the community and those solutions shall be flexible so that the needs of the corridor can be met.

Exemptions

- Ordinary maintenance activities designed to keep assets in serviceable condition (ie mowing, cleaning, sweeping, pothole repair, and other regular maintenance)
- Projects involving a roadway where bicyclists and pedestrians are expressly prohibited by law from using.
- There are extreme topographic or natural resource restraints, including Federal and State Lands or Waterways
- The project is along a roadway that is not a City of Roswell owned street. In such cases, the City shall encourage the appropriate agencies to design and construct their project(s) based on this policy.

B. DECATUR, GA

- The City's CTP states the following: "CTP employs a Complete Streets philosophy that defines the street by more than just its mobility and accessibility functions, but by its role as a critical community character shaper."
- To reach implementation, the City incorporates Complete Streets throughout the CTP. Street recommendations revise corridors as public spaces. As part of the CTP, five intersections and seven corridors where examined in detail to identify improvements necessary to transform these areas into complete streets.

C. CHICAGO, IL[4]

- The complete streets policy for the City of Chicago states the following: "The safety and convenience of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers shall be accommodated and balanced in all types of transportation and development projects and through all phases of a project so that even the most vulnerable—children, elderly, and persons with disabilities—can operate safely within the public right of way."
- To reach implementation and increase understanding of this policy, the Chicago Department of Transportation worked with the Chicago Metropolitan Agency for Planning to conduct training sessions for city planners, engineers, and project managers, which resulted in greater awareness of complete streets issues and potential design considerations.

[4] Complete Streets: Best Policy and Implementation Practices. Barbara McCann and Suzanne Rynne.

D. CHARLOTTE, NC[5]

- Among its goals for the city's first comprehensive transportation plan, Charlotte sought the promotion of a balanced, multi-modal transportation system that serves the mobility needs of all segments of the population, accommodates all travel modes, and promotes community economic development needs.
- Implementation of these goals has been achieved through Charlotte's Urban Street Design Guidelines (USDG), which was created by interviewing developers, interest groups, city staff, and residents to ensure all concerns were addressed. The USDG led to a new street classification system as an overlay to standard federal classification. Once a street became classified, both design and future land-use decisions became reflections of that classification. An important, and pivotal, aspect of the USDG is the approach to determining multimodal levels-of-service, which combines traditional vehicular levels-of-service with bike and pedestrian measures. The extra, nontraditional analysis helped to increase support levels, especially amongst engineers.
- Charlotte's six step USDG:
    - Define the existing and future land use and urban design context.
    - Define the existing and future transportation context.
    - Identify deficiencies.
    - Describe future objectives.
    - Recommend street classification and test initial cross-section.
    - Describe trade-offs and select cross-section.

E. SEATTLE, WA[6]

- Similar to Dunwoody, Seattle created a strong foundation for Complete Streets policy through clear articulation in its Comprehensive plan, specifically focusing on an urban village strategy. Pedestrian Designation was used by the city, which applied a zoning overlay to neighborhood business districts to ensure design stipulations supportive of pedestrian friendly buildings.

[5] Complete Streets: Best Policy and Implementation Practices. Barbara McCann and Suzanne Rynne.

[6] Complete Streets are for Everyone. Barbara Gray and Grace Crunican. http://www.i-sustain.com

- Seattle used synergy opportunities between Complete Streets projects and other infrastructure replacement projects to implement its policies. During a sewage line replacement for 8th Avenue NW, the city was able to address speeding and pedestrian crossing problems by adding a median, turn lanes, and bike lanes, while reducing the number of lanes from four to two.

Improvements Costs[7]

Infrastructure improvements and retrofits have costs associated with planning, design, obtaining rights of way, and construction. The following table outlines costs provided by the Federal Highway Administration that relate to Complete Streets. The costs are only estimates and will vary by geographic region. Also, this is by no means an exhaustive list of elements that could be included in a Complete Streets program. Therefore, the following is not a set of policy recommendations or an exact determination of costs, but merely a tool intended to be used for informational purposes. Some features, such as narrower lanes or road diets, may impact automobile capacity.

Development of a Road Design Guideline Manual	The State of Massachusetts's Engineering Department estimated that development of a manual would take from 5 to 7 years at a cost of up to $950,00. Also, most manuals produced by State and Local Governments are public documents, and may be adopted in part, or as a whole, as a means to reduce financial expenditures.
Lower automobile speeds - 25 to 35 mph	Signs range in costs from $50 to $150
Narrow lanes to 10 or 11'	No cost or reduced cost due to less asphalt needed
Road Diet - Convert 4 lanes to 3 lanes with center turn lane	The cost for restriping a mile of four-lane street to one lane in each direction plus a two-way, left-turn lane and bike lanes is about $5,000 to $20,000 per mile, depending on the amount of lane lines that need to be repainted.
Tighten Curb Radii	$2,000 to $20,000 per corner, depending on site conditions
Accessible Pedestrian Signals	$20,000 to $140,000
Raised Medians	The cost for adding a raised median is approximately $15,000 to $30,000 per 100 ft, depending on design, site conditions, or possibility of inclusion in utility improvements or other street construction projects.
Addition of Bike Lanes	The cost of installing a bike lane is approximately $5,000 to $50,000 per mile.

[7] Cobb County Complete Streets Implementation Plan. Atlanta Regional Commission. September 2009.

Right Turn on Red Restrictions	$30 to $150 per sign plus $200 per sign installation. Electronic signs have higher costs.
Sidewalks and Walkways Installation	The cost for concrete curbs and sidewalks is approximately $15/ linear foot for curbing and $11/ square foot for walkways.
Marked Crosswalks and Enhancements	Approximate installation costs are $100 for a regular striped crosswalk, $300 for a ladder crosswalk, and $3,000 for a patterned concrete crosswalk
Curb Ramps	The cost is approximately $800 to $1,500 per curb ramp (new or retrofitted).
Landscaping	Can be funded by HOA, Cid or a commercial entity
Curb Extensions	From $2,000 to $20,000 per corner, depending on design and site conditions
Crossing Island	Costs range from $4,000 to $30,000. Inclusion of landscaping would increase the cost.
Sidewalk widening or Sidewalk retrofits	Widening a sidewalk can cost $62,000 to $100,000 or more per mile.

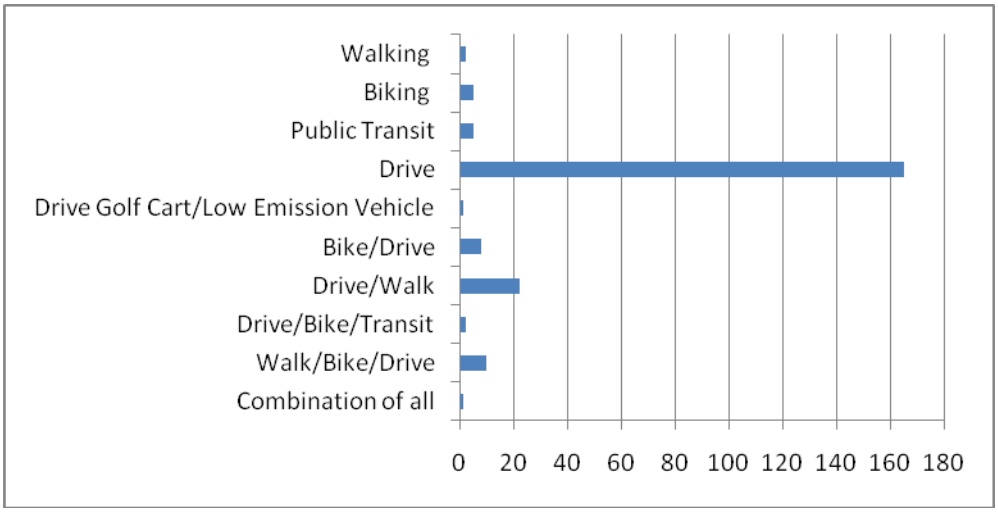
ARCADIS

Appendix E

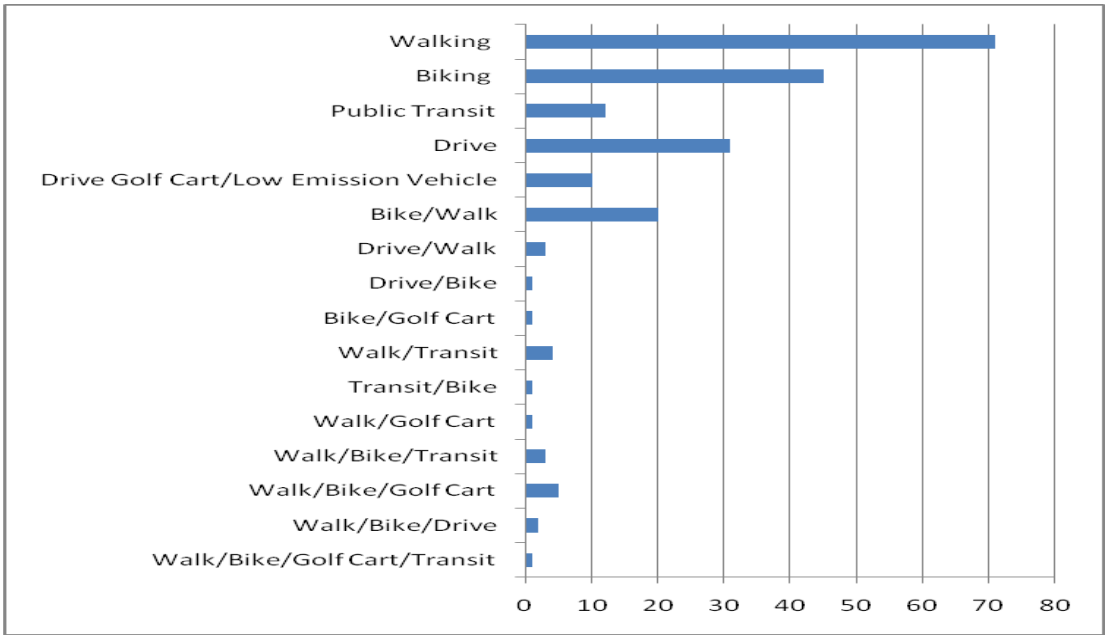
Survey Results

Appendix E: Transportation Plan Survey Results

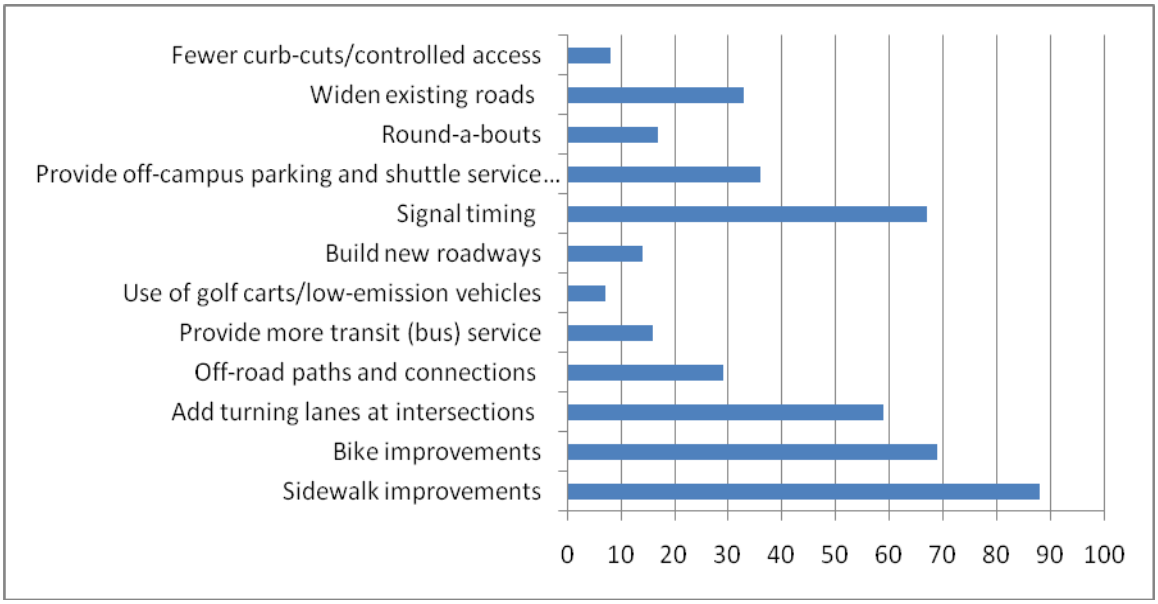
1. How do you primarily travel within the city of Dunwoody?



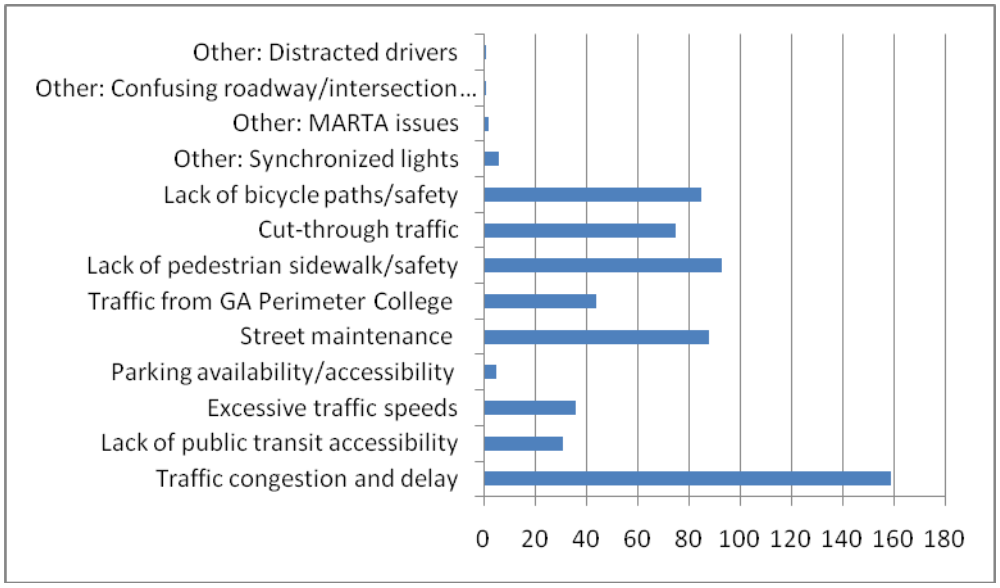
2. Which type of travel would you like to do more of in the City of Dunwoody?



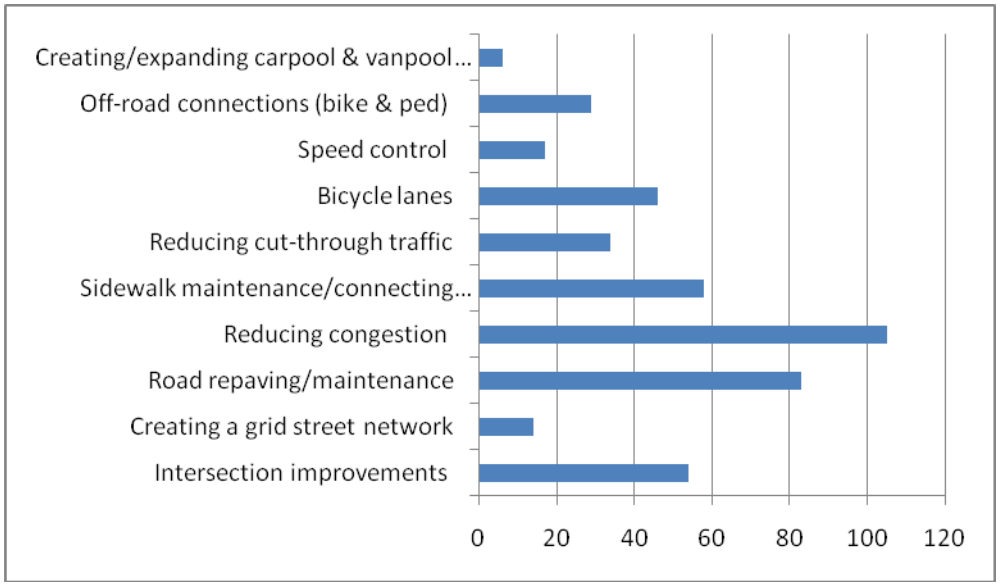
3. What are the two most important ways to improve the roadway system?



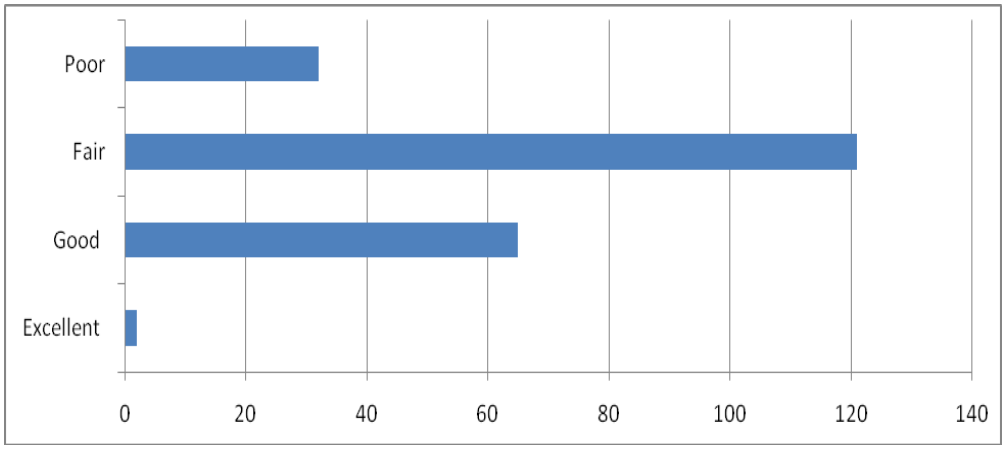
4. What transportation issues are the most pressing in the City of Dunwoody?



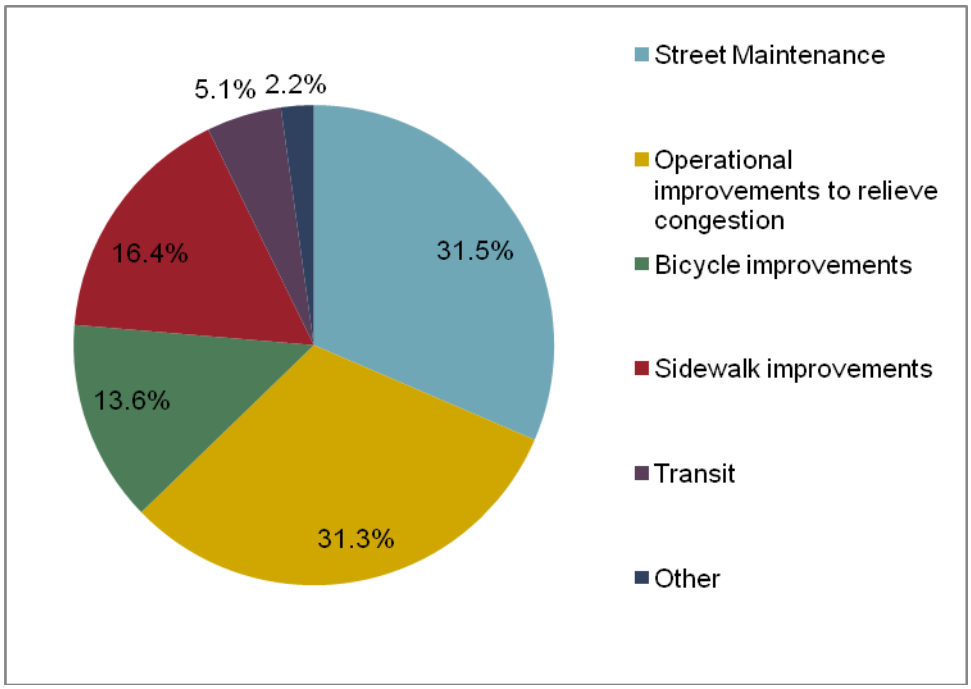
5. What should be the City's top priorities related to transportation infrastructure investment?



6. How would you rate the overall transportation system?

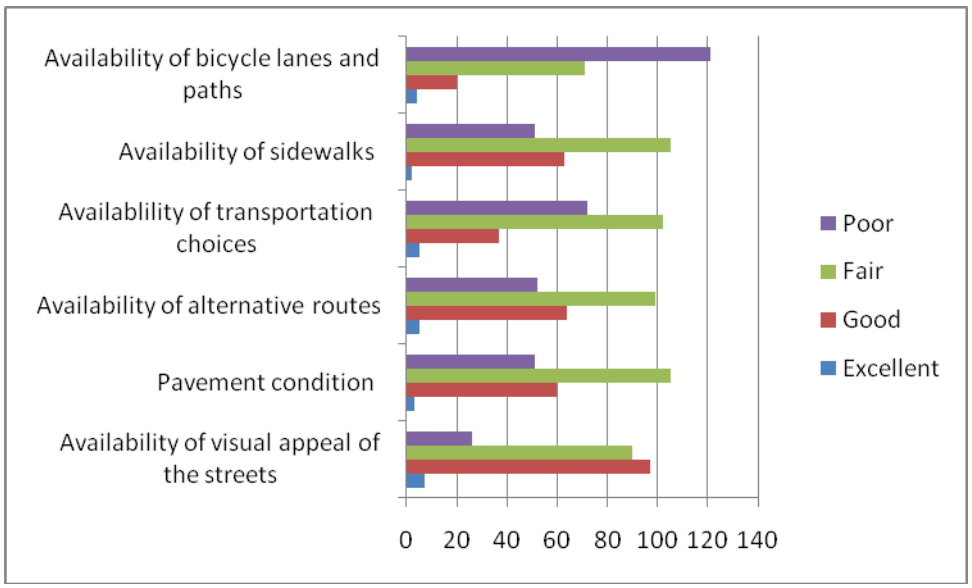


7. How would you allocate funding to each of the following categories?



8. How would you prioritize transportation spending?

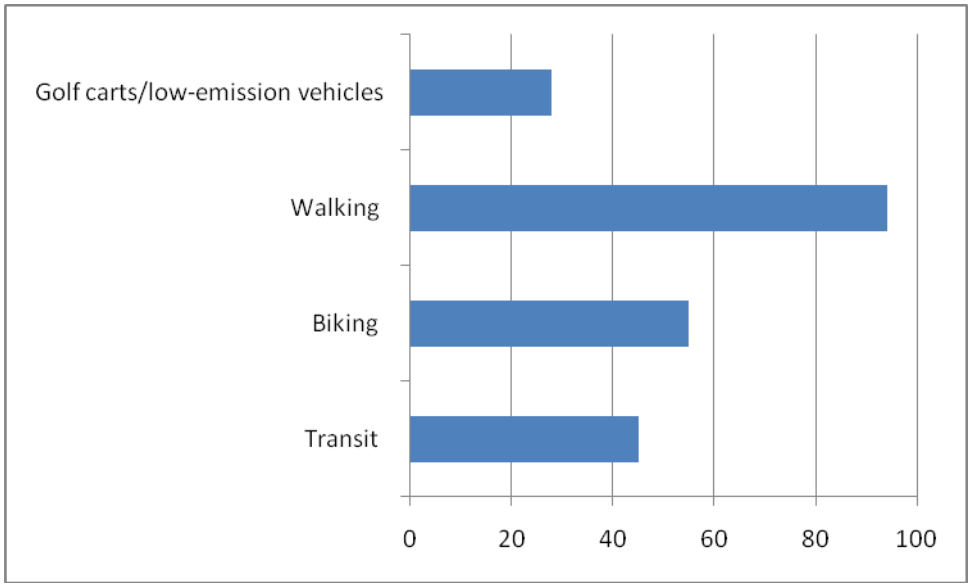
9. How would you rate the following aspects of transportation in the City?



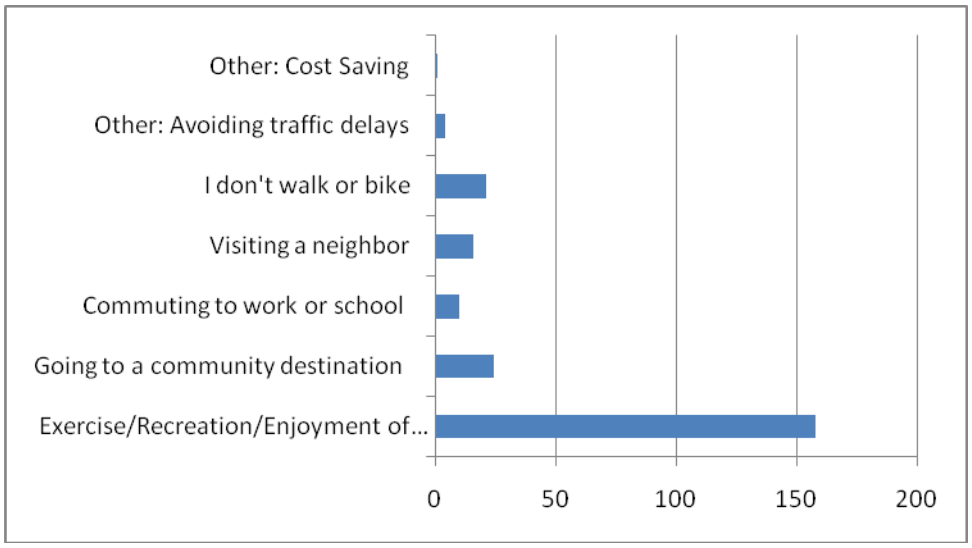
10. If you had to trade off between various desirable features of the street environment, which of the following would you choose over the other? Rate them 1-10 with 1 being your top priority.

	Total										
	1	2	3	4	5	6	7	8	9	10	Average
Widen sidewalks	45	24	21	17	16	16	14	16	7	7	4.1
Pedestrian signalization	21	23	29	27	24	28	17	11	10	3	4.5
Dedicated turn lanes	30	25	19	23	18	14	11	16	12	12	4.6
Dedicated bike lanes	26	22	31	17	23	12	18	12	13	13	4.7
Recreational bike paths	11	26	16	21	17	25	20	18	14	7	5.2
Trees	13	14	21	25	25	25	16	28	16	3	5.3
Increase the number of vehicle lanes	26	13	8	10	17	17	11	10	19	44	6.1
Street furniture	3	13	13	19	15	18	33	28	20	20	6.4
Decrease the number of vehicle lanes	11	13	9	10	13	13	10	20	22	44	6.8
On-street parking	7	5	13	13	13	13	22	19	41	30	7.0

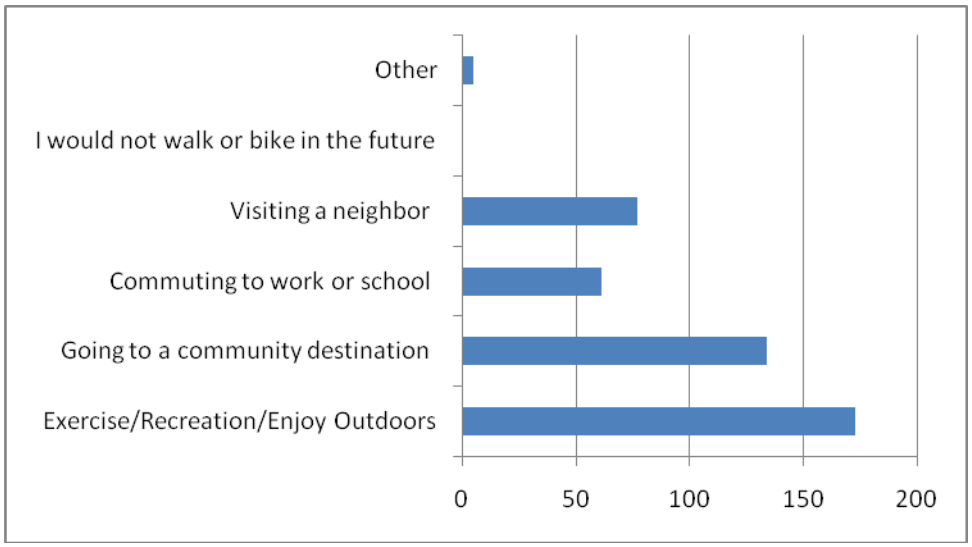
11. What alternative modes should the City prioritize?



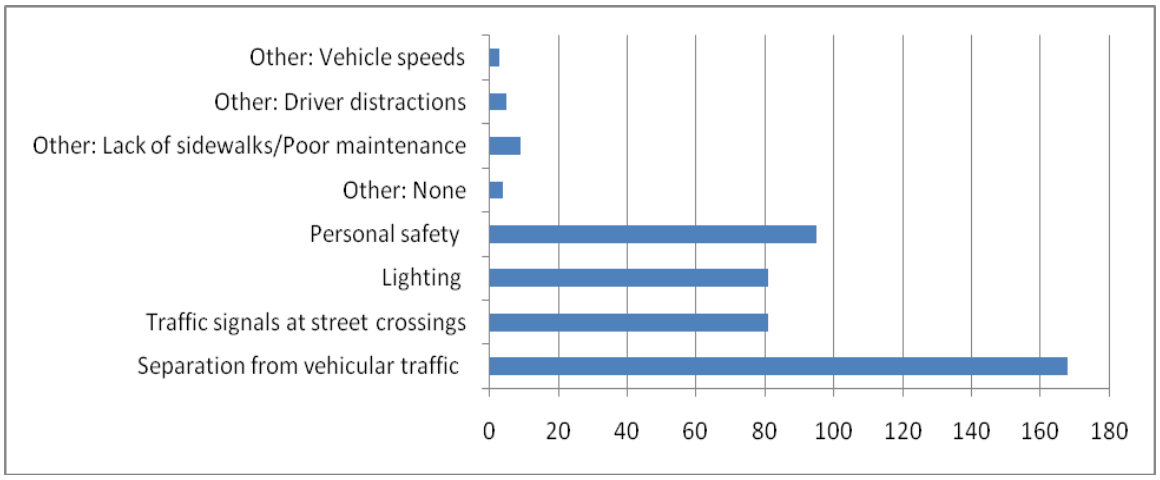
12.Why do you primarily bike or walk?



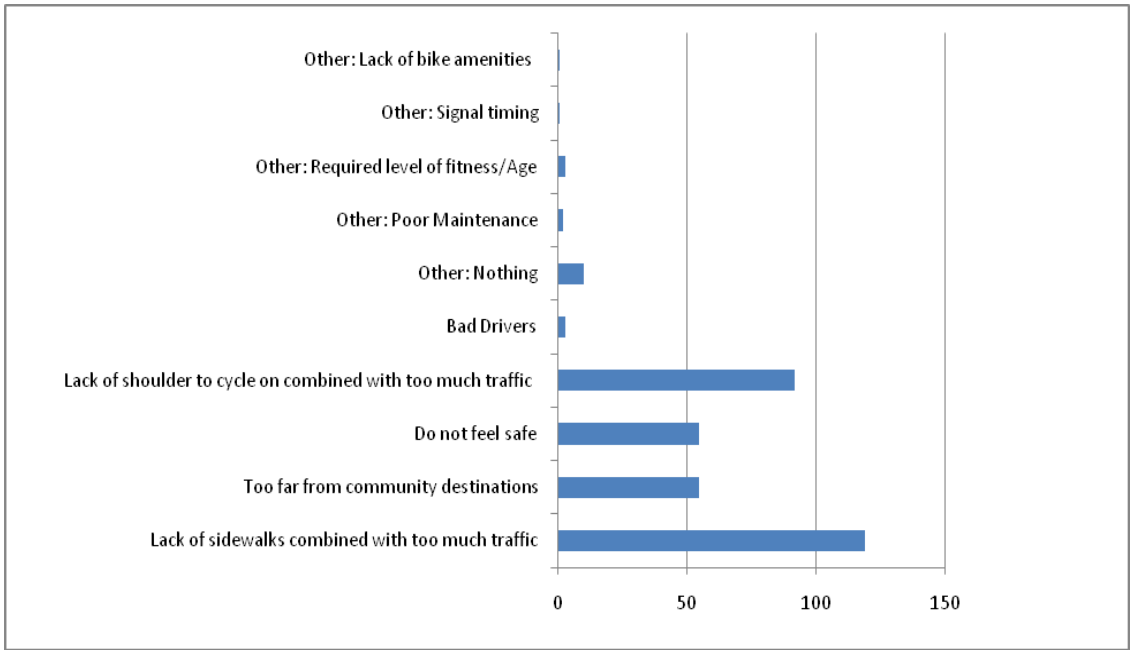
13. Where would you like to walk or bike in the future?



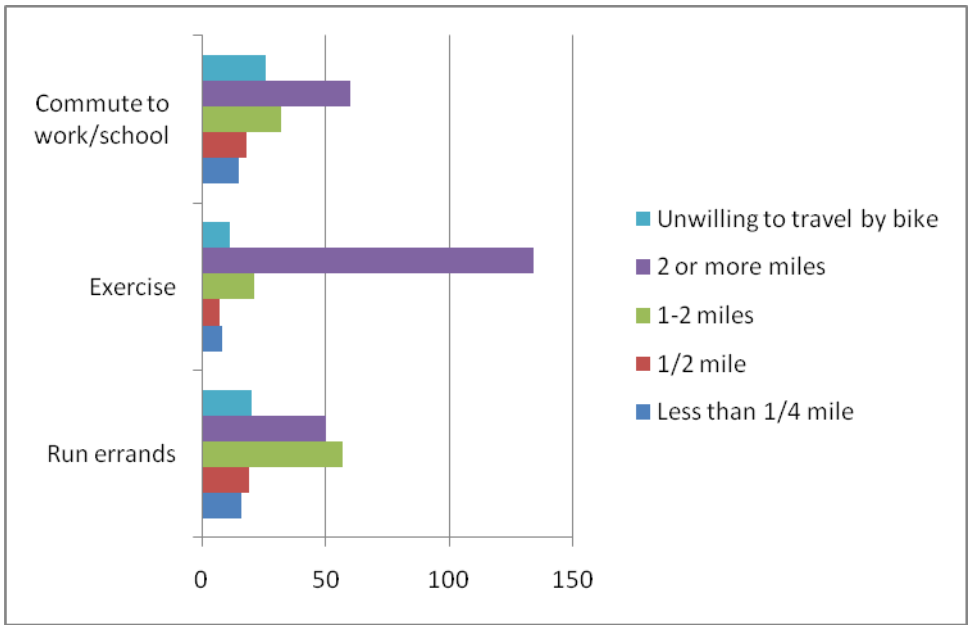
14. When you walk, what are your safety concerns?



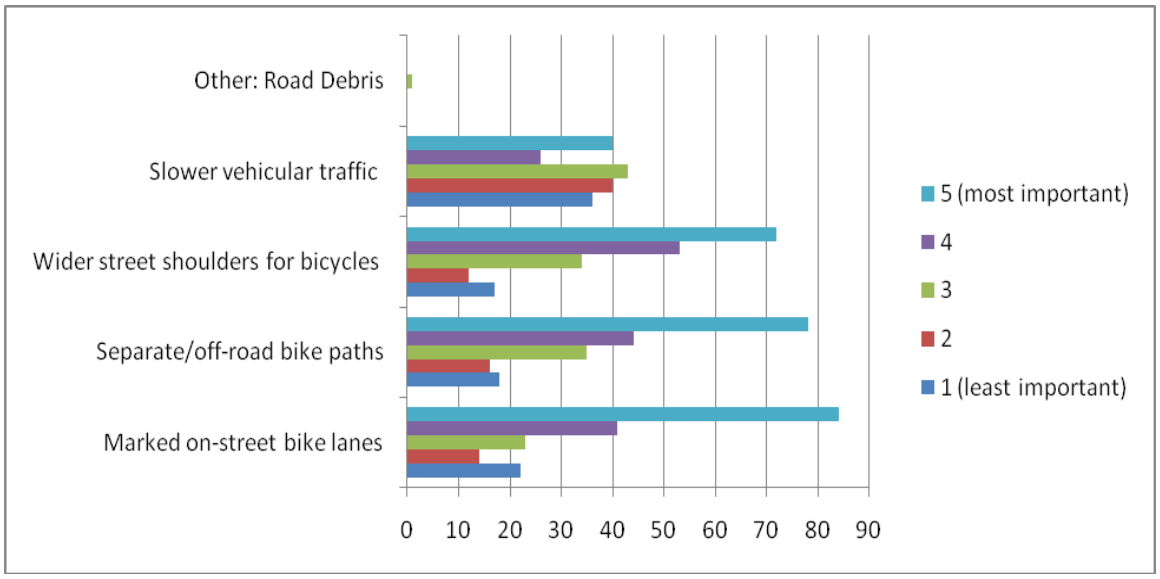
15. What currently prevents you from walking or bicycling?



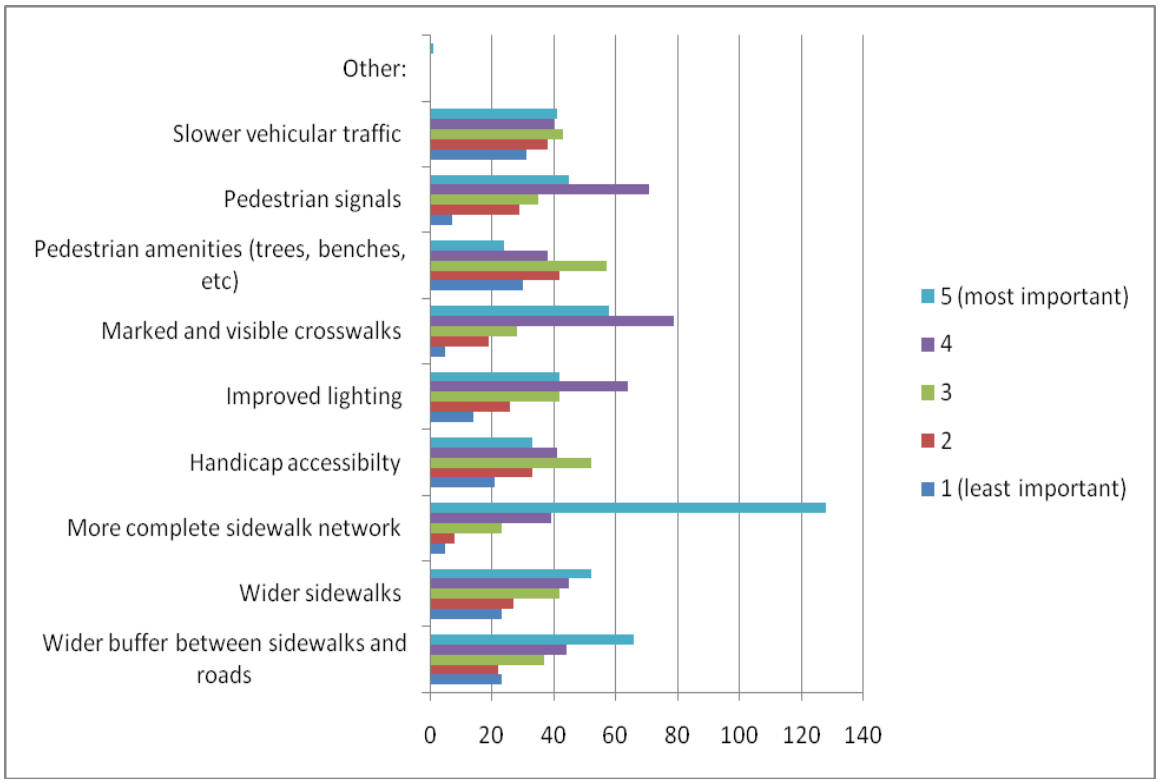
16. How far are you willing to travel by bicycle to:



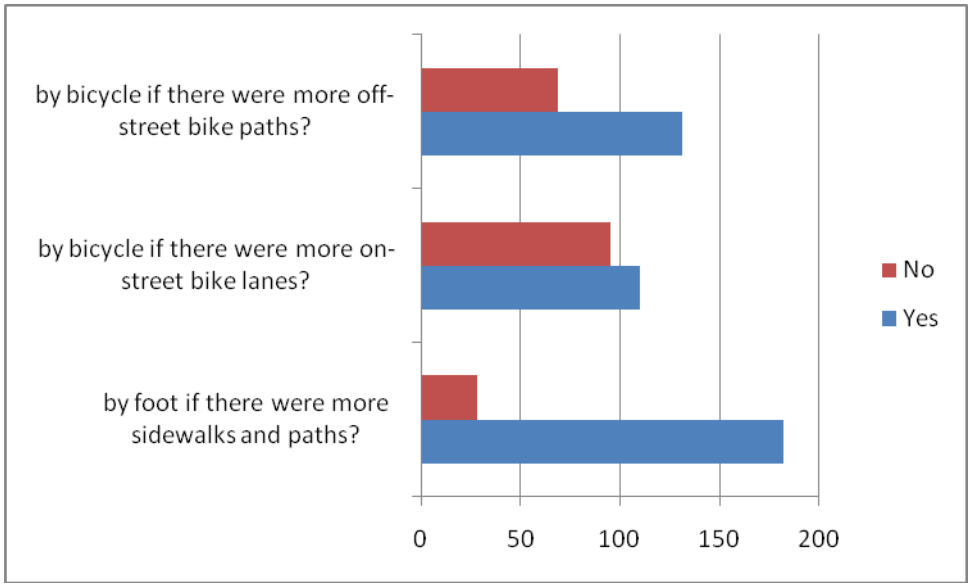
17. What measures are needed to improve the bicyclingenvironment in the City?



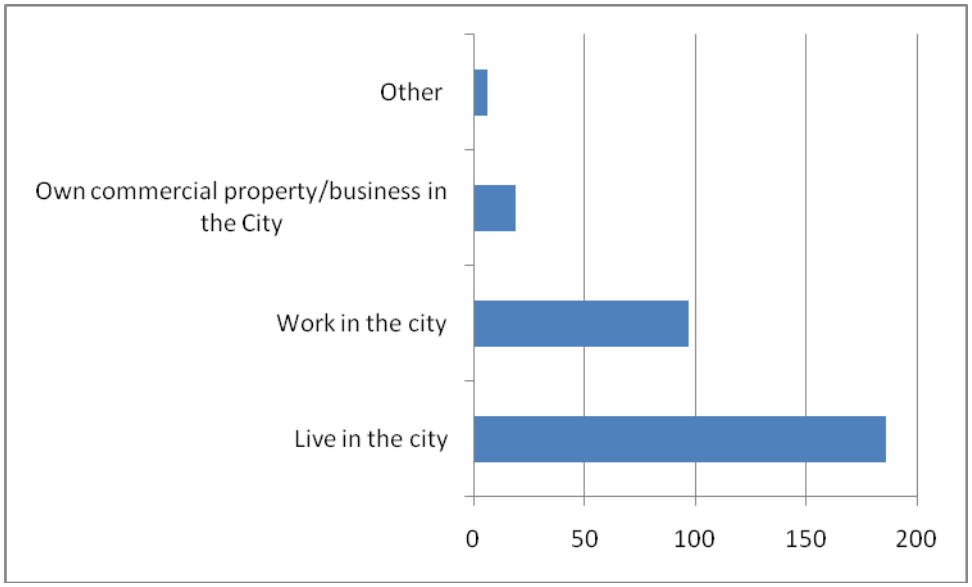
18. What measures are needed to improve the pedestrian environment in the City of Dunwoody?



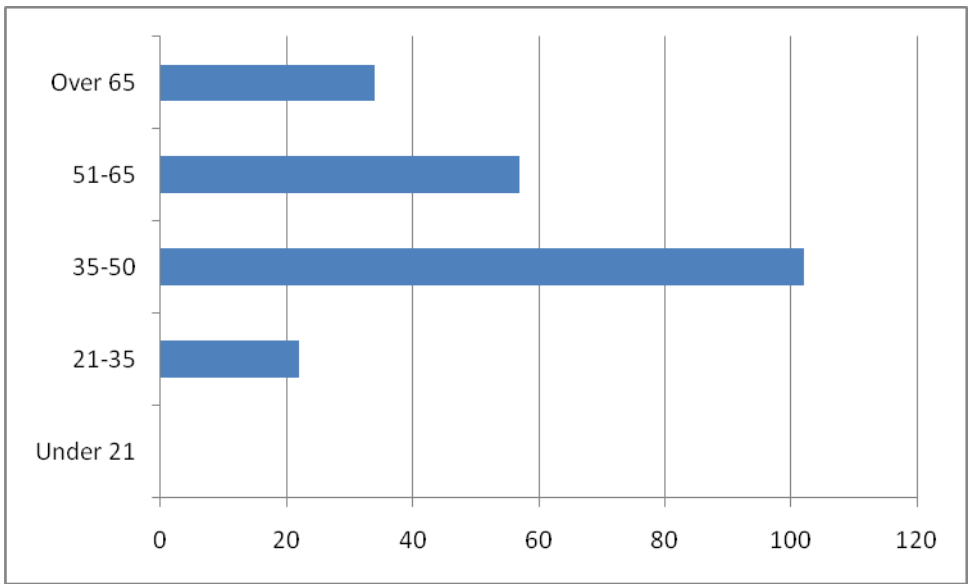
19. Would you venture out more:



20. What is your interest in the Dunwoody Comprehensive Transportation Plan (CTP)?



21. What is your age?



Open- Ended Survery Questions:

1. What are the two most problematic intersections in the City of Dunwoody?

Chamblee-Dunwoody and Mt. Vernon	Ashford-Dunwoody and Mt. Vernon
Abernathy and Glenwood parkway	Roswell and Abernathy
Mt Vernon and Chamblee Dunwoody	Mt Vernon and Ashford Dunwoody
Hammond Dr and Peachtree Dunwoody	All around Perimeter Mall
Ashford Dunwoody and Hammond Dr.	Abernathy and Peachtree Dunwoody
by Perimeter Mall	equally so
Tilly mill and n peachtree	
Mt. Vernon - Chamblee-Dunwoody	Dunwoody Club - Mt. Vernon
Mt. Vernon and Ashford Dunwoody	Mt. Vernon and Abernathy
Abernathy/Glenlake Pkwy	
Chamblee Dunwoody & Mt. Vernon	Chamblee Dunwoody & Spalding Dr.
Mt. Vernon/Chamblee Dunwoody	Mt Vernon/Nandina
Dunwoody High school/Perimeter College intersection at high school	End of Peeler Rd near Tilly Mill Rd.
Anything along Mt Vernon Drive	Tilly Mill & N. Peachtree
Vermack and Womack	Tilly Mill at Georgia Perimeter College
Chamblee Dunwoody/Mt. Vernon	
Chamblee Dunwoody/Mt Vernon	Dunwoody Club/Happy Hollow

Till Mill and North Peachtree	Mt Vernon and Chamblee Dunwoody
mt vernon/nandina/cham-dunwoody	cham-dun/no. shallowford
Chamblee Dunwoody/Mt. Vernon	Chamblee Dunwoody/Vermack
Chamblee-Dunwoody Rd and Mt. Vernon Rd	Tilly Mill Rd and Womack Rd
Ashford-Dunwoody & Perimeter Ctr W	Abernathy and Crown Pointe Pkwy
Tilly Mill and Womack	Chamblee-Dunwoody and Mt Vernon
mt vernon and chamblee dunwoody rd	mt vernon and tilly mill
mount vernon and chamblee dunwoody	peeler and north peachtree
Chamblee Dunwoody at Mt Vernon Road	Jett Ferry and Mt Vernon Road
mt vernon and ashford dunwoody	ashford dunwoody and abernathy
Chamblee Dunwoody & Mt. Vernon	Mt. Vernon & Jett Ferry
ashford-dunwoody and mt vernon	womack and any intersection
North Peachtree / Tilly Mill	
hammond drive/400	
Womack Rd & Vermack Rd	
Mt Vernon@ Chamblee-Dunwoody	Ashford Dunwoody@Perimeter Center E/W
Nandina land -turn off Mt vernon dangerous since people jockey to get ahead of people in line who get stuck behind someone trying to beat the traffic turn light at Mt.Vernon and Chamblee dunwoody road	
Mt Vernon and Chamblee Dunwoody	
Tilly Mill and Womack	Tilly Mill and Mt Vernon Place
Tilly Mill / North Peachtree (two intersections) bad due to back-ups and bus turns and school traffic	Tilly Mill / PIB (dangerous due to confusion)
Mt Vernon at Chamblee Dunwoody	Dunwoody Club at Jet ferry
mt vernon at vermack/manhassett	mt vernon at chamblee-dunwoody
Winters Chapel Road and Peachtree Industrial	
Peachtree Dunwoody and 285	Ashford Dunwoody and 285
tilly mill - n peachtree	mt vernon - tilly mill triangle
Tilly Mill and Womak	Chamblee Dunwoody and Mt. Vernon
winters chappel/peachtree industrial	all of ashford dunwoody espically in front of the mall
tilly mill / north peachtree	mt vernon / chamblee dunwoody
Chamblee-Dunwoody and Mt. Vernon	Mt. Vernon and Ashford-Dunwoody
Nandina at Chamblee-Dunwoody re left turns that impead traffic	left turns out of Publix without utilizing the protected left turn light
Nandina Way and Mt. Vernon Road	Womack and Vermack
Roberts/Spalding backs up traffic into Dunwoody	Tilly Mill @ Womack and N. Peachtree with college cars
north peacthree and tilly mill	womack and vermack

Ga perimeter-tilly mill/womack, tiily mill/N P'stree	
Chamblee Dunwoody Road at Mt Vernon Road	Mt Vernon Road at Jett Ferry Road
Tilly mill & n peachtree	Vermack & womack
Any intersection exiting Dunwoody Village S.C. onto C-D	Jett Ferry-Mt.Vernon-N. Peachtree area
Chamblee-Dunwoody&Ashford Pkwy/Womack	Chamblee-Dunwoody&Vermack
Dunwoody Station Drive / Mt. Vernon	Mt. Vernon/Chamblee Dunwoody
Womack and tilly mill	Tilly and n peachtree
Ashford-Dunwoody and Mt. Vernon	Mt. Vernon and Chamblee Dunwoody
Chamblee Dunwoody at Mount Vernon	Womack at Tilly Mill
Mt Vernon at Ashford Dunwoody	Ashford Dunwoody at Hammond
Chamblee Dunwoody & Mt Vernon	Ashford Dunwoody & 285
Mount Vernon/Chamblee Dunwoody Road	Ashford Dunwoody Road/Mount Vernon
Chamblee Dunwoody @ Mt. Vernon and around the shopping centers there.	Chamblee Dunwoody @ Peeler & N. Shallowford
Spalding Drive at Roberts Drive	Chamblee Dunwoody Rd at Mt. Vernon Rd.
Hammond Drive and Ashford Dunwoody	Hammond Drive and Peachtree Dunwoody
Jett Ferry/Mt Vernon/Dwdy Club	Mt Vernon/Chamblee Dwdy
Mt Vernon & Chamblee Dunwoody Roads	All of Mt Vernon Road
Chamblee Dunwoody & Mt Vernon	Tilly Mill & Mt Vernon (& everything in between)
Stop sign at Womack and Vermack	Tilly Mill at N. Peachtree
Mt. Vernon and Ashford Dunwoody	Mt. Vernon and Chamblee Dunwoody Rd.
Vermack and Womack - Need lights by highschool	Need light by Tilly Mill and Mt Vernon
Ashford Dunwoody and Mt. Vernon	Womack and Tilly Mill
Mt Vernon Way at Mt. Vernon	Spalding @ Roberts Drive
Mount Vernon at Nandina	Chamblee Dunwoody at Roberts Drive
Manhasset and Mt Vernon	Chamblee Dunwoody and Mt. Vernon
chamblee dunwoody & mt vernon	abernathy & mt vernon
Tilly Mill @ Womack	Chamblee-Dunwoody @ Mt. Vernon
Ashford Dunwoody-I285 and Hammond	North Peachtree and Tilly Mill
Where do I start - ALL of them	
Mt Vernon & Chamblee Dunwoody	Chamblee Dunwoody & Vermack
Johnson Ferry and Ashford Dunwoody	Ashford Dunwoody and I-285
Tilly Mill/Peeler/ North Peachtree Road	Mt. Vernon/Chamblee Dunwoody
Chamblee Dunwoody and Mt. Vernon (including turning into/out of DUMC and the Blockbuster shopping center)	
Mt. Vernon & Chamblee Dunwoody	Ashford Dunwoody & Perimeter Center

Hammond and Ashford-Dunwoody	Perimeter Center West and Ashford-Dunwoody
Perimeter Center Pkwy & Lake Hearn Dr	Perimeter center Pkwy @ Perimeter mall
Mt Vernon and every cross street	Abernathy/Perimeter Center from Ashford Dunwoody to GA400
chamblee dunwoody road at spalding	womack and vermack
Mt Vernon/Nandina at Chamblee Dunwoody	Tilly Mill at N Peachtree
Peeler and North Peachtree	Dunwoody Club and Mt. Vernon
Chamblee Dunwoody and Roberts Merge	Mt Vernon and Ashford Dunwoody
womack/vermack	jett ferry/mt vernon
Mt. Vernon/Chamblee Dunwoody	Mt. Vernon/Ashford Dunwoody
Ashford Dunwoody/Perimeter C West	Ashfrod Dunwoody/Hammond Dr.
Mt. Vernnon and Chamblee dunwoody pavement	
Abernathy Rd @ Mt. Vernon	Abernathy Rd @ Perimeter Cir
Chamblee-Dunwoody and 285 (Kroger strip-mall)	Peachford and Shallowford
Mount Vernon at Ashford Dunwoody	Tilly Mill at Womack
N. Peachtree and Tilly Mill	Vermack and Womack
Ashford Dunwoody Road/Mount Vernon	Mount Vernon/Chamblee Dunwoody Road
Mt. Vernon/Chamblee Dunwoody	Chamblee Dunwoody/Roberts Dr.
Mt. Vernon and Vermack	
Chamblee Dunwoody - Mt Vernon	Chamblee Dunwoody - Womack
Ashford Dunwoody @ Mount Vernon bottleneck	
Mt. Vernon & Chamblee Dunwoody	Chamblee Dunwoody & Roberts
Chamblee-Dunwoody & Mt Vernon	Mt. Vernon and Dunwoody Village Parkway
Mt Vernon & Dunwoody Club	Mt Vernon and Chamblee Dunwoody
Womack and Vermack	Tilly Mill and Peeler
Ashford-Dunwoody and I-285	Mt. Vernon Rd and Chamblee-Dunwoody Rd
MT VERNON AND CHAMBLEE DUNWOODY	PEELER RD TILLY MILL
Jett Ferry and Dunwwody Club Dr	Mt Vernon and the turn to Dunwoody H S
Chamblee-Dunwoody/Mt Vernon	Ashford-Dunwoody/Hammond
North Peachtree & Tilly Mill	Womack & Tilly Mill
tilly mill and jett ferry	chamblee dunwoody and mt vernon
Mt. Vernon Rd. and Dunwoody Parkway	Peeler Rd. and North Peachtree
Mt Vernon and Chamblee Dunwoody	Tilly Mill and North Peachtree
na	na
4 point stop by DHS	traffic lights at top of Vermack/Mt Vernon
Chamblee Dunwoody & Mt. Vernon	Womack & Tilly Mill
North Peachtree and Tilly Mill	North Peachtree and Peeler
chamb-Dun and Roberts	chamb.-Dun and roberts

Mt Vernon and Chamblee Dunwoody	
Mt. Vernon and Chamblee Dunwoody	
Ashford Dunwoody and I-285	Hammond and Glenwood
Mount Vernon Road and Chamblee Dunwoody Road	
Mt. Vernon & Tilly Mill	Mt. Vernon & Vermack
Tilly Mill- Mt Vernon	Vermack-TillyMill
Chamblee Dunwoody Rd @ Mt. Vernon	
chamblee dun.and mt, vernon	mt.vernon and ashford dun.
tilly mill, n peachtree	mt vernon, jett ferry
Chamblee-Dunwoody and Mt. Vernon	Peeler Rd. and N. Peachtree Rd.
Chamblee Dunwoody and Mt. Vernon	Chamblee Dunwoody and Peeler/N. Shallowford
Perimeter Center East at Ash-Dun Road	Cham-Dun Road at Mount Vernon
Mt Vernon @ Chamblee-Dunwoody	North Peachtree @ Tilly Mill
I-285 and ashford dunwoody	ashford dunwoody and chamblee dunwoody
Mt. Vernon at Ashford Dunwoody	North Peachtree at Tilly Mill
Tilly Mill/North Peachtree Roads	Mount Vernon/Chamblee Dunwoody
Chamblee-Dunwooody Rd and Mt. Vernon	Abernathy Rd and Mt. Vernon
Mt. Vernon Rd. from one end of city to the other, needs more lanes	Tilly Mill and Womack at Ga. Perimeter College
Ashford Dunwoody - Perimeter Center	
tilly mill and new peachtree	chamblee dunwoody and mt. vernon
Womack/Vermack	Ch-Dunwoody/Mt Vernon
tilly mill womack	vermack and womack
Chamblee/Dunwoody-Womack	Chamblee/Dunwoody-Vermack
Womack Rd/Chamblee Dunwoody Rd	Mt. Vernon/Chamblee Dunwoody Rd
ChambleeDunwoody/Mt. Vernon	Mt. Vernon Road/Dunwoody Club Drive
North Peachtree and first baptist of atlanta church/apartments across street	
Womack and Vermack	Vermack and Mount Vernon
Chamblee Dunwoody and Mt. Vernon	
Chamblee Dunwoody/Mt Vernon	Chamblee Dunwoody/Ashford Dunwoody
Chamblee-Dunwoody and Mt. Vernon	Perimeter
Mt Vernon and Chamblee Dunwoody	Ashford Dunwoody and Meadowlake
Vermack and Womack	Vermack and Chamblee-Dunwoody
Vermack/mt. vernon	chamblee-dunwoody/mt. vernon
Womack/Tilly Mill	Chamblee Dunwoody/Mt. Vernon
Peeler/Chamblee Dunwoody	Ashford Dunwoody/Mt.Vernon
Georgia Permiter College	Ashford Dunwoody and Chamble Dunwoody
womack/vermack	chamblee dunn/womack
Roberts dr	Mt. Vernon & Vermack

Chamblee Dunwoody and Womack where it turns into Ashford Center Parkway	Chamblee Dunwoody and Womack where it turns into Ashford Center Parkway
Vermack/Womack	Tilly Mill/Mt. Vernon
vermack and womack	stratham and mt vernon
Mt/ Vernon	Chamblee DUnwoody
chamblee dunwoody & mt vernon	womack & tilly mill
North Peachtree/Tilly Mill	Chamblee-Dunwoody/Mt. Vernon
Mt vernon at Tilly Mill where it backs up	Chamblee Dunwoody turning lane from Mt Vernon
mt vernon and chamblee dunwoody	ashford dunwoody and mt. vernon
Mt. Vernon/Chamblee Dunwoody	Womack/Chamblee Dunwoody
N. Peachtree @ Tilly Mill	Chamblee Dunwoody @ Mt. Vernon
Ashford Dunwoody/Mt Vernon	Nandina turning left onto Chamblee Dunwoody

2. What do you see as the impediments to walking and biking in the City of Dunwoody?

Cars don't stop for pedestrians, neighborhoods don't have sidewalks
no/inadequate sidewalks
Not enough signals to cross busy streets. Even if they are there they may not work correctly.
Dunwoody is not pedestrian or bike friendly. It is illegal to ride your bike on the sidewalk but this survey asks a question that indicates that widening the sidewalks is a solution to get people to ride more. There should be more sidewalks but there should also be more room to ride your bike on the street.
an infrastructure based on the needs of cars
No bike lanes or bike paths
Traffic and lack of bike lanes
I'll bike in pretty much any condition, but I don't have to like it. I would ENJOY it more if I had my own lane and people drove slower.
Sidewalks generally OK, but more would be even better! Lack of bike lanes on busy roads
Lighting is poor,sidewalks are too narrow and too few for walking. Streets are too dangerous for biking.
some of the road need paving, too many potholes, bad road management
Cars drive too fast. Narrow roads for bicycling with no shoulders or bike lanes. Sidewalks right up against the road
speed,lack of safety (need sidewalks and lighting)
Traffic patterns prevent pedestrian or bicycle safety. Need wide paths separate from the roads. Also, make Dunwoody Village a walking environment - no cars!
Some of us have children so young we do not feel safe in anything but a car. Plus it is too far to work, school, or errands to bike. Some errands cannot be done on a bike. Some of us prefer cars to bikes. Get over it!!!
Danger from Cars.

It is actually easy to walk around....few extra sidewalks and crosswalks would be fine....but overall, it is easy and safe.
traffic
There aren't enough pedestrian and bicycle friendly pathways. Creating bike paths and sidewalks along busy road ways is not a solution. Pedestrians and bikes need to be separated from cars. I walk from my home to Dunwoody Village and hate having to walk along Mt. Vernon with the traffic noise and pollution. It's not a pleasant experience.
I see people not following traffic lights. I have seen pedestrians and bicyclists ignore lights as well. However, I have had to run to get out of a car's way when I was in the cross walk and had the walking light. Cars will also stop in the cross walk instead of behind it while stopped at a red light. There are some areas that are also very dark, not good with less daylight going into winter.
Better paths and signage.
Lack of sidewalks and lack of bicycle lanes
The roads are very narrow and there is not enough space for cars and bikes.
no sidewalks and bike patns
Roads in terrible condition
None for me personally. If I want to get out I do. But I think there is a huge opportunity to make Dunwoody more attractive to pedestrians, both physically (better network of sidewalks) and aesthetically (more attractive sidewalks, landscaping, etc)
The road network is poorly designed. I cannot walk to Perimeter Mall from Georgetown, even though the two are just 1.5 miles apart. More direct roads or pathways desperately needed, like in New York City.
1) Lack of bike racks for locking up once you get somewhere. 2) Pot holes in major roads make riders swirve around to dodge them while riding in traffic. 3) Many major roads through Dunwoody are very narrow and don't provide space for both cars and bikes at the same time.
traffic and lack of sidewalks
Off road bike/walking like the Alpharetta Greenway would be a huge plus for the community
With children, the proximity to traffic (narrow streets and sidewalks) and crossing main roads. I feel the need to stay in subdivisions to avoid cars and stay safe.
lack of design and infrastructure for such
need more sidewalks, BUT people need to walk on the sidewalk when there IS a sidewalk!! Don't want anymore bycycle anything
On Winters Chapel Road, the lack of sidewalks is terrible and very unsafe. We also need better lighting for safety.
For biking, the many deteriorating roadways
traffic and hills
costs, lack of gov action, lack of good vision
Traffic and narrow roads
none - keep bikes off the main roads and don't add bike paths on main roads
lack of infrastructure - no bike lanes and insuffucuent sidewalks
No specific bike lanes and lack of sidewalks

Walking is fine---bikes need to stay off of major streets, they are a real hazzard...we need off-road places for bikers to ride, not on streets---this is taking "green" too far...
Driver awareness, not enough sidewalks along with lack of connectivity on ones present, and pedestrian anger encountered on a bike for sharing sidewalks with walkers.
Too much traffic and too few pedestrian areas
The speed of automotive traffic in relation to the biker being safe
The streets are narrow with lots of curves (in many cases), so there does not appear to be room to add bicycle lanes. They are needed, though.
Car speeds
traffic and not enough sidewalks/paths
Lack of designated space, Speeding cars, distracted drivers
traffic and speed of traffic. i would not let my children walk or ride a bike to school (even though it is 1 1/2 miles) b/c the traffic is too dangerous to navigate based on the current route they would need to take.
sidewalks; signals for traffic
lack of sidewalks outside of PCID, and aggressive, inattentive drivers
Lack of crosswalks: Womack; Mt Vernon
Hills
too dangerous from cars, trucks and buses; also the streets/paths are not always connected (parts without side walk), not always safe
Lack of complete sidewalk system on main thoroughfares.
Traffic
To much traffic.
scary cars
paths and sidewalks that connect
Traffic
Inadequate sidewalks and bike lanes
Traffic speed and narrow bike lanes and sidewalks
Cars
traffic and distance from desireable locations
The impediment to walking is the lack of sidewalks. The impediments to bicycling is striping of theright side of teh road which creates little shoulder
Hills and traffic congestion
Lack of bike paths & moving pedetrians further from street.
Discourtious drivers and poor bike lanes and not enough sidewalks.
There are not enough sidewalks and almost no bike paths. Car drivers also are not aware of walkers and bikers and often do not yield to them.
Too much mall, 285 traffic around my area and not enough sidewalks in other places.

No Excuses
lack of sidewalks
City center/shopping too far Would love to bike, but am NOT willing to take width from streets for bike lanes
more paths
walking isnt too bad in Dunwoody- Cycling is the opposite. Riding a bike on Mt Vernon is death waiting for you and there arent any other roads to get across town. We need some dedicated bike paths like Alpharetta and Roswell.
Too much traffic going too fast, lack of continuous sidewalks/bike paths
Traffic/Safety for being hurt by cars. Lack of complete sidewalk network.
We live in a suburban area where people travel by car. Biking and walking are purely recreational for most who do it. It's not how we get around.
Vehicle speeds, not enough bike and ped connections.
Lack of sidewalks
No bike paths insufficient network of sidewalks
#1 is drivers who don't follow the law at crosswalks and who speed. #2 is inadequate street trees for shade (Tilly Mill is particularly lovely for walkingebcause of the shade in summer)#3 is NO WHERE FUN TO GO! Outdoor plazas, greenspaces and gathering spaces, plus local shops, funky restaurants--all that would help!
Speedy traffic, hills
Heavy traffic and speed
Lack of sidewalks, lanes; aggressive drivers
No bike lanes
Too many rely soley on their cars for short errands. Sidewalks are not well maintained, which make using them dangerous.
None.
Motorist do not respect the rights of cyclist and often behave in beligerant and aggressive ways.
Regarding bicycling: inadequate infrastructure (lack of bike paths, signs ("Share the road"), bike lanes, bike boxes (eg, at stop light, dedicated area for bicyclists to wait, ahead of other traffic); aggresiveness of drivers, driver lack of respect for cyclists, perception that police force is not respectful of - and in some cases is downright antagonistic towards - bicyclists.
Slim shoulders to bike in
Traffic and few sidewalks around my home
NO BIKE LANES
The one factor I see impeding people is the terrain. It is very rolling around this city as Mt. Vernon is essentially a ridge that cuts through the town. However, couple that with the complete lack of sidewalks/bike paths it doesn't really invite a person to even attempt other modes of transportation. But people are starving for them. Drive on a Sat/Sun and there are people jogging and riding bikes everywhere. Also, you can see where people have created their own trails where no sidewalks exist. Build them and they will walk.
The automobile drivers. They are on the telephone, or driving too fast, or do not yield to pedestrians, or try to intimidate bicycle riders.

need continuous path of sidewalks, too many just dead end then you are left to make your own path to continue forward
Insufficient sidewalks and crosswalks.
Distracted drivers who are driving while texting or on cell phones. Also, Traffic congestion, lack of bike lanes and diminishing road quality. On the edges of roads the road quality is bad with potholes and tree root humps. This is dangerous for cyclists with increasing traffic congestion. Cars can force cyclist into a potholes which can cause cyclist to crash.
na
Not enough complete sidewalks, making walking dangerous when we have to walk in the street. Cyclists need cycle lanes. Driving is made very difficult when they are on the road with other traffic.
Lack of connectivity, no continuous sidewalks, lack of lighting at some intersections
There needs to be a crosswalk in front of Brook Run Park
Lack of sidewalks and on busier roads the lack of sidewalks on both sides of the street
Lack of turn lanes clogs traffic at intersections
Too much vehicular traffic as it is now... compounded with more bikes.
afraid i will run into biker while driving so i have to stay behind them which makes all of us late and impatient.
nimby from property owners
Lack of designated bike lanes (and space for them)
Lack of good quality sidewalks. Lack of bike lanes.
Speeding traffic, no safe place on the streets to ride; no recreational trails or paths
Affluence spawns lack of interest.
Priority given to automobiles
hills and distance from residences to commercial.
Traffic
Not enough sidewalks and bike lanes. Traffic is dangerous.
traffic
safety; traffic
no dedicated bike paths
There is definitely not a large enough sidewalk network. As well as it is not encouraged within the community...I think a community based advertising campaign to encourage good health and green living.
Incomplete network of paths to get around; no separation form vehicular traffic
Not enough sidwalks especially in older neighborhoods, need to focus on building more sidewalks, and on both side of road on busy streets like Mt Vernon
poor sidewalks or not enough sidewalks
Sidewalks are too close to street and in bad disrepair so are not safe for traveling on with children
Traffic control
Very few sidewalks in our neighborhoods. The kids can't walk anywhere without being in the street...to a friends house or to school.
too tight and congested

We don't have walking destinations. We also need complete sidewalks in Dunwoody Village to promote walking between shopping/dining areas. If we had green space in Dunwoody Village it may encourage people to walk/stay.
vehicle speeds lack of sidewalks
traffic ... it's not safe
the condition of existing side walks on major streets like Womack, it is inconsistent. Need sidewalks on all major roads to be wide and flat.
The cars that will run you down. Pedestrians are supposed to have the right of way- Dunwoody is the most dangerous city I have ever tried to walk or bike in. When we moved here last year, the one thing I kept telling my realtor was that we wanted a walkable city. Looking outside in, you have sidewalks, you have crosswalks, I just never thought that people would be in such a huge hurry-
crazy drivers
distracted drivers
Traffic and rude drivers
none, if you're a risk taker
Aggressive drivers
In my neighborhood, the cut through traffic volume is high and speed is high. My kids can't ride their bikes without me due to safety. I even feel uncomfortable riding or walking. We have no sidewalks. If we had sidewalks, we could bike and walk safely! I would definitely bike more if there were off street byways to get around. I would love being able to use golf carts as long as special paths were created.
too much vehicle traffic, roads not up to par for bicyclist to travel safely with vehicle traffic. Pedestrians are always at risk in georgia due to vehicles don't give right of way...not taught, not enforced. Take a look at how Canada does their pedestrian traffic. Crosswalks are CLEARLY marked and at least in British Columbia drivers will come to an absolute halt if you even think about approaching a crosswalk. They would be ashamed if they did not stop.
Dunwoody is not a pedestrian-friendly city. We rely on cars too much and don't recognize when someone is walking. Without bike lanes, cycling should be prohibited on city streets. It's a danger to both the cyclist and driver, especially on narrow, curving streets without a shoulder.

3. What do you see as the impediments of riding transit in the City of Dunwoody?

Marta train should come right into Dunwoody and have stops in neighborhoods.
NO MARTA access ! Why bother to take the survey unless you plan to stop cutting the bus routes ?
The train schedule is not as good now with the cutbacks but that is a MARTA issue.
Marta having cut some of the bus lines was definitely not helpful. Perhaps smaller shuttles could be hired to fill in the gaps.
reduced bus routes stops that don't/didn't reflect current destinations of commuters and visitors
Freqency of buses
lack of regular busses/taxis

Well, MARTA cut some bus routes so that is an impediment for sure. When I did ride the bus, the pain in the butt was the inconsistent arrival time of the buses. They left the station on time, but could never consistently meet the scheduled arrival times for 55 Glenlake.
I do not thank that Dunwoody needs a "transit system". The city is too small and would not be able to support it.
Residents of Atlanta and Dunwoody are not transit minded. They are automotive minded. Thias is born out by the lack of use of MARTA buses to accesss Perimeter Mall. MARTA all but removed bus lines except to transport people from outside of Dunwoody into Dunwoody.
Not enough routes, too many college students driving cars, no place to park at the college, need more routes to college from train station!!!! No impediments to riding transit in Dunwoody, more safe!!!
Needs to go around in a loop to get to local destinations. Needs to be smaller local buses stopping within 20 mins frequency.
none
does not go anywhere practical.
MARTA. Enough said.
Need more access for GPC students.
None....easy access to buses
It's only on Tilly Mill, Mt. Vernon, and Ashford-Dunwoody. People who live in Dunwoody won't ride mass transit. It would have to be free, and maybe not even then. I rode MARTA to work for over 20 years and only 3 or 4 others were ever on the bus, except perhaps GPC students in the evening.
Desire
too many buses in dunwoody and those buses don't have people on them.Cut back on marta buses on the streets at night.
Not necessary
Buses get stuck in traffic right along with cars. A light rail connecting the villages and the commercial areas is the only transit I would have interest in.
not accessible
current bus system has to take the same roads as cars. either separate fast lanes for transit or expand MARTA trains
No direct transit routes. Again: a trip from Georgetown to Perimeter takes over an hour via MARTA because the only bus line goes to Chamblee, then have to ride the train all the way down to Lindbergh to switch lines. Compare to less than a 5 minute drive on I-285. Ideally, there would be additional subway lines through the City because they provide faster, reliable service during rush hours.
What transit?
Doesn't go where I want to go
Scheduling and difficult to run multiple errands especially when picking up children and grocery shopping.
no feasible options
Everyone has a car, and you can get where you're going more conveniently in a car. I don't see people giving up their cars to bycycle or walk much of anyplace.
I will not ride public transit under any condition. I do not like public transit.

I do not know about transit in Dunwoody. It appears to me that it is faster to drive your car than figure out MARTA, and MARTA is cutting services in general as well.
inconvenient route for my commute. takes too long
support
traffic
reduce mass transit in Dunwoody
not convenient - need direct "express" routes linkiong major retail centers
Lack of good connections and limited stop sites...
Not enough connections to other buses/locations. For example, Emory is unreachable by direct route from here.
we are a car oriented community
It's faster to take your car around Dunwoody than to wait for a bus. Buses are undesirable when compared to light rail.
None
That there is no rail and no dedicated bus lane. Sitting on a bus in gridlock is worse than sitting in a car where I can at least listen to the radio or divert to a shortcut.
Scheduling & convenience
accessibility
none for me as proximity to a station was paramount in my house choice. For much of Dunwoody, poor proximity and disdain for public transit are main impediments
non-convienient
not going to destination; long wait time for bus
People in Dunwoody will not ride public transit. It is beneath them.
I have cars
None
need more routes/stops
Too slow and cumbersome
Not enough adequate covered waiting areas.
Not enough routes
Timing and routes
cars
schedule
NA
Why do the handicapped get door to door service from marta that is not available at any cost to the rest of us? No other transit goes where I need to go...
Extremely high up front costs
Not sure it serves enough of the city itself?
Don't ride transit.
N/A
Not enough transit service

There is transit in Dunwoody?
not interested in government transportation
Marta does not go where I want to go. Marta is not in front of my house. You must first drive to Marta, what is the point unless you are going somewhere where there is no parking.
Pehaps a system of small vans running at regular intervals might be inviting.
Bus is the only option INSIDE Dunwoody and they're geared to connect to rail or other cities. Would LOVE to have more extensive bus or small bus network inside the city.
na
N/A - dont know enough to comment
Marta doesn't feel like "small" town kind of transportation, not enough information on where the bus goes. Would be nice to have more of a "trolley" kind of system.
Availability to inner Dunwoody neighborhoods.
This is a bigger Metro issue than simply Dunwoody. We have busses and the Marta is not far away for those of us who use it.
Local shuttles to MARTA.
no real need, Dunwoody is small
COST! The 150 does a great loop around Dunwoody but would cost me 16 bucks roundtrip for my family! We would ride a free shuttle ALL the time if our city had one.
Is there transit? Lack of transit in the city.
Limited routes
huh?
None
The large size of buses would further hinder bike and pedestrian traffic.
Lack of transit into neighborhood
Inadequate infrastructure (for example, City of Dunwoody shuttle service to Dunwoody Village, Perimeter Mall, etc.)
Marta is not that great
Buses do not go where I want to go
NONE
Lack of marked and comfortable bus stops. Frequency of the buses on the route. Routes not really clearly communicated.
No public transit is offered.
Poor scheduling. Insufficient stops.
Needs to be more convenient and viable option to decrease traffic congestion. For running errands, shopping and getting to work.
key routes were cut like the 105 which served Kaiser patients
na
Atlanta is far behind the northeast in terms of the acceptability of mass transit. You pay a premium to live near a metro station in the DC Suburbs. Here many people don't even advertise Marta access.
long waits for Marta

Acess
There doesn't seem to be any! There are buses, but they don't seem to run frequently.
Don't want more mass transit in Dunwoody. This is a residential community that should be supported by locals.
transit stops without shelter, and too close to busy traffic lanes, lack walking access
Wouldn't use transit
Convenience.
Weak network, infrequent service
Affluence Lack of nearby transit stops
low need if walking,biking and traffic is improved.
Don't know
Lack of access
Not available enough times of the day
There is so little transit to ride!
Not much available. Unreliable schedules.
complicated, time consuming, and lengthy routes with too many transfers
no availability
Transit not feasible in residential neighborhoods
make it as easy to get to marta as possible
Marta bus stops are too far
No one will use them.
Lack of community support
It's Marta, who in Dunwoody rides that except to the airport.
freedom to come and go to many different places
forget about it...it's easier to walk than wait for a bus
I don't have any idea how or where transit serves Dunwoody. A Dunwoody only bus that went on a set loop would be interesting, paticularly for tweens
it's not convenient
I assume that there is a wait longer than getting in the car.
Not going to happen, Dunwoody is way too upper-middle class for any of us who all own 2 cars to ever ride the bus. As a mother of 3 kids, I would not allow them to take the bus, generally speaking, the people that ride the bus are seedy (as most of them can not afford a car-) and to be perfectly honest, the fact that the bus comes through our town and drops people off in it, does not thrill me. Also, you want to see some crazy driving watch the buses haul through this little town.... YIKES!
lack of connection to the Sandy Spring MARTA station from Mt Vernon
service is too infrequent and routes are too convoluted
Time waiting for the transit
most of the traffic is caused by people commuting through Dunwoody, so transit within Dunwoody would not help.
Lack of bus routes
No interest by the general population.

There is no transit routes to where I need to go.
The area is too small to support a mass transit system.

4. What is the biggest challenge to traveling around in the City of Dunwoody?

Lack of public transportation
excessive vehicle speed
Traffic issues
Too much traffic
time it takes to travel short distances
No bike lanes
Traffic
Lack of bike lanes for me. And drivers who think bikers don't belong on roads.
Traffic during peak periods on weekdays.
Traffic congestion
Poor Roads, too much traffic, people dont know what to do at 4-way stop sign!!!
Rush hour cut-through traffic & parents driving their kids to & from school
speed, lack of respect for driving rules, stoplights etc.
congestion
High-density residential development with associated traffic.
Car traffic is heavy, too fast, and dangerous. Minimal facilities.
Just peak period congestion.
traffic
Trafic on Mt. Vernon Road and GPC traffic on Tilly Mill Road
Traffic jams. If people stopped running lights and turning where they aren't supposed to turn, things would run a little smoother.
road conditions
light timing and bad intersections
The commuters from Gwinnett and Fulton who use Dunwoody streets as cut throughs when I-285 is congested.
congestion
traffic
too many lights not timed well.
Mt Vernon vehicle traffic
No public transport. See question 21.
traffic at rush hr especially around the village on Chamblee Dunwoody, Roberts and Mt.Vernon
Congestion
Congestion in morning and afternoon on Tilly Mill and Mt Vernon and Chamblee Dunwoody.
distance to destination

None, really. We don't realize how lucky we are! Traffic may be bad at certain times, but really not that bad.
BIkers
Not enough lanes (need to widen streets to more lanes)
congestion
traffic
the car
traffic
traffic congestion
traffic congestion
traffic
Congestion
Left turns out of Nandina and Publix parking lot; cut through traffic off of GA-400; bikers riding on major streets
No good traffic flow. Limited routes to get places.
Traffic
Commuter traffic from Gwinnett County during morning and afternoon rush hour. Also the traffic in and out of our mega churches during weekday mornings and on Sunday.
Lack of bike ways
traffic and indirect routes
Traffic congestion
traffic
Georgia Perimeter
TRAFFIC
inattentive, aggressive drivers
All those extra people the Chamber of Commerce is bringing in.
congestion
traffic congestion
Timing of traffic lights - getting from Roberts to Chamblee Dunwoody @ 285 takes a ridiculous amount of time
Traffic
To much traffic, long traffic lights
congestion
The traffic - mornings and lunch time
Heavy traffic due to narrow streets & timing of lights
Timing traffic
one lane roads I.e Mt Vernon, Chamblee Dunwoody Road are widely used roads and are always backed up
Traffic
No big challenge
cars

traffic congestion due to lack of connectivity and volume
Traffic signals are not programmed or have wrong programming
Poor traffic signal timing!
No challenge driving. As far as walking and biking go, see answer to # 20.
Cut through traffic
Traffic
Traffic congestion - WIDEN MT. VERNON!!!
Traffic
traffic
the freaking roads need to be paved. Quit wasting money on master plans or anything else until you fill the potholes!!!!!
Mt Vernon is consistently backlogged
TRAFFIC CONGESTION!
Traffic if you travel at the busy times
Traffic Congestion.
Traffic conjestion, bottleneck crossroads, poor traffic light timing
traffic
Not knowing whether or not the college area is going to be a nightmare--it seems unpredictable to me. Also, kids have so little freedom because safe options just don't exist for them. When I was a kid, I traveled all over my city by myself from age 10 on! When our kids learn to drive now, they don't even know how to get to Kroger.
traffic congestion
Heavy traffic
traffic
No bike lanes
Narrow, congested roads and few alternative routes.
Waiting in traffic.
Traffic flow on Mt. Vernon.
Congestion, especially Mt Vernon
Traffic
Rush hour and school traffic
slow traffic and poor traffic light timing
TRAFFIC CONGESTION-PEOPLE CUTTING THROUGH TO GET TO HIGHWAYS
Unsynched traffic lights. No turn lanes on Mt. Vernon. Basically too many cars.
Student traffic and too many teenagers have their own car
traffic
Relentless traffic congestion.
Distracted drivers and traffic congestion. Cell phones and texting reported as equal to 0.08 alcohol intoxication.
lack of complete sidewalk network
na

walkers/runners have difficulty finding safe routes.
Traffic signal timing in terms of driving. Safety in terms of pedestrian/cycling
too much traffic from those who do not live in Dunwoody
ch-dun and Roberts need better ligt sequencing in 8-9 a. & 5-7 p.
Traffic build up from cut throughs to 400 and from 400
Heavy traffic around Perimeter Mall
Flow of Traffic
Not enough east/west thoroughfares
Traffic congestion
I don't have any issues with doing so now.
rush hour traffic and lunch time crowd...
traffic congestion and alternate means to travel
traffic, especially at lunchtime and after work hours
The traffic flow patterns.
unsynchronized traffic signals and auto gridlock
Too many vehicles
density of traffic
Bad timing of lights at major intersections, particularly on Mt. Vernon
The traffic congestion and poorly coordinated timing of traffic signals
Traffic
Lack of syncronized traffic signals, two lane roads, lack of turn lanes
traffic
too much traffic
traffic
traffic
Congestion is particular areas-Mt. Vernon Rd. and lack of sidewalks
Traffic
traffic
One lane roads causing traffic back ups
traffic pattern and level of traffic
traffic and few sidewalks
can't go out at 4:45-6;00 on Mt. vernon takes forever
dedicated turn lanes and the timing of traffic lights
GA Perimeter traffic
Pot holes on the road.
too much traffic, no sidewalks
irratic speeds and driving of others
traffic on Mt. Vernon

The Drivers. Also, Mt. Vernon outside the Dunwoody United Methodist Church has to be the most dangerous stretch of road, there is a middle turn lane for people to turn into LOCATIONS and people drive into it 1/2 a mile a head of time to turn left on Chamblee Dunwoody or going the other way, left to continue on Mt. Vernon. It is mis-painted, there should be lines showing people where the "street" turn-lanes should be- I have seen at least 5 accidents there in the last year and I have almost been hit a few times. SUPER dangerous-
traffic
It is impossible to walk to restaurants, library, grocery stores, etc., due to sprawl.
Traffic during peak hours and off peak hours
Getting into traffic - making a left hand turn onto any major street (due to congestion/back-ups); no police direction or involvement in traffic control
Traffic congestion
Not enough lanes for car traffic. Lack of sidewalks.
sitting in traffic at certain times of the day. Mostly if you figure out the patterns you can avoid some of them. East-West traffic is the worst.
Congestion combined with poor driving habits.

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Appendix F

Community Workshop Summaries

Appendix F: Community Workshop #1

October 18, 2010

Transportation Policies and Goals

Participants were asked to review the transportation policies and goals identified in the city's comprehensive plan. Using a dot, participants were asked to indicate the importance of implementing these specific policy statements in the comprehensive transportation plan.

Policy Statements

Prioritize multi-modal transportation options	
Create a community-wide pedestrian/bike path network	
Provide safe and secure parking to support multi-modal transit service	
Increase network connectivity to accommodate demand between adjacent neighborhoods and developments without accessing the major thoroughfare system	
Promote the use of zero-emission low speed vehicles (LSV) and neighborhood electric vehicles (NEV) and consider other emerging and innovative techniques	
Establish pedestrian and bicycle friendly programs and road standards	
Promote travel demand management (TDM) strategies to reduce trips	
Preserve the current transportation investment through effective maintenance of the transportation system	

Support GRTA, MARTA, ARC, and GDOT effects related to express transit service and regional bus rapid transit (BRT) initiatives to connect Dunwoody to surrounding communities	 (synchronize lights)

Goal Statements

Prepare a bicycle and pedestrian plan	 (Mt. Vernon in particular, connect to the river)
Explore trade-offs and implications of roadway capacity along high demand corridors	
Improve two lane roads for efficient operations and safety, but maintain two-lane roads as integral to City character	
Prepare appropriate local ordinances to allow bicycle use of sidewalks , as provide by State of GA law	  (opposition to the use of bikes on sidewalks)
The City will promote a grid network of streets and multiple connections between subdivisions when re-development opportunities arise	
Find appropriate mechanisms for traffic mitigation along Womack Road	
Consider innovative, long range schemes for relieving congestion in the Dunwoody Village area	
Explore feasibility of golf-cart use as transportation mode and identify needs for roads determined appropriate for this potential	
Bikeways along streets should be separated from the automobile lanes. At signalized intersections, provide a separate pedestrian-bicycle phase and 'no turn on red' restrictions to avoid conflicts with motor vehicles	

Where possible, demarcate pedestrian and bikeway crossings at all intersections with contrasting roadway materials	

Participants were asked to add other issues and opportunities missing from the list. Using a dot, participants were asked to indicate if they agreed with the issues and opportunities

Off-street (greenway) walk/bike trails	
Support east-west light rail transit	
Fund sidewalks	
Local public transit (for example, with S. Springs)	
Establish policy for access for all users (ie visually impaired, youth, ADA standards, aging, etc)	
Look at the whole picture – even for small projects. Example: ped. crossing sign located at the west county link of Mt. Vernon- it is between two street lights. Lighting is therefore poor. Add tree shadows and it is hard to see pedestrians. Floppy sign in the middle of the crossing dangerous to bikes because of cars trying to pass narrow areas. Another example- City placed 'Share the Road' sign in the middle of the pedestrian path on the south side of Mt. Vernon near Ashford-Dunwoody,	

Transportation Issues and Opportunities

Participants were asked to review issues and opportunities identified either in the city's comprehensive plan, by the Advisory Committee, or by the Project team. Using a dot, participants were asked to indicate which issues and opportunities they felt should be top priority for the city to address in the comprehensive transportation plan.

General Issues and Opportunities

Walking	
Biking	 (safely)
Complete Streets	
Traffic Congestion & Safety	
Transit Service and Facilities	 (Perimeter Mall- seems like all improvements benefit traffic coming and going to the mall to the detriment of other traffic. Need to address non-mall traffic.)
Perimeter College Traffic	
Cut-through Traffic	
Project Prioritization	
Connectivity between Neighborhoods	
Future Growth & Long-term Mobility Needs	
Traffic Circulation in Dunwoody Village	

Specific Issues and Opportunities

Support Safe Routes to School	
Fill in the sidewalk gaps, improve safety and lighting	

Consider utility easements for trails/paths	 (Colonial Pipeline ROW would make a good bike/ped path)
Lack of sidewalks on Happy Hollow Road	
Implement bike-friendly re-striping efforts	 (critical)
Engage PATH Foundation and consider connections to surrounding cities	
Identify bike corridors and where bike lanes are appropriate	 (Mt. Vernon)
Park connectivity	
City should consider a Complete Streets Policy	
Road diets should be considered on Tilly Mill Road and Ashford Center Parkway	
There are existing lanes with excess storage, and travel lane widths that could be used for other uses	
Consider 3-lane segments	
Do not want more 4-lane roads	
Round-a-bouts	
Look at traffic light synchronization	
Transit to/from the College	

Bus routes should be oriented to moving people around Dunwoody, not just to the rail stations	
Use golf carts- low emission vehicles as alternative mode	

Curve and safety of Happy Hollow Road were both identified as an issue by participants at the meeting.

Health Impact Assessment

Participants were asked to review key transportation issues that could impact health. Using a dot, participants were asked to indicate if they agreed that the transportation issue could have an impact on their health.

Balance between Transportation Modes	
Safety for Children	
Bike and Pedestrian Crashes	
Bike and Pedestrian Safety	 (imperative on Mt. Vernon)
Safety and Mobility for Older Generations	 (visually impaired)
Air Quality	
Connectivity	
Infrastructure that Encourages Active Living	
Alternatives Modes for Commuting	

Participants were asked to review health and social issues. Using a dot, participants were asked to indicate which health issues are important to them.

Physical Activity	

Childhood Obesity	
Emotional Health	
Community Cohesion	
Exercise	
Diet	 (bring in local farmers with produce for the Farmer's Market)
Access to health care services	
Substance abuse	
Preventive services	
Education	
Recreation opportunities	
Air Quality	

Mapping Stations

Bike Suitability

- Most roads not suitable for cycling. They should be good for:
  - Health
  - Environment
  - Children
- Blue routes are really yellow or red (suitability map)
- Pedestrian crossings with signs in the middle of the street are deadly for bicyclists because cars crowd bikes while passing between the sign and bicyclists.
- The biking is not 'difficult' – it is nerve wracking because cars don't give you enough space or see you.
- Create comprehensive bike path, route, and lane systems that connect to our neighbors.
- Gas-line through Branches as a possible connection.

Roadway Improvements

- Signal upgrade at Ashford Dunwoody & Mt. Vernon- a total waste of money, nothing has changed. Signage on NB Ashford Dunwoody still confusing. People still turn from wrong lanes and ignore traffic from Trail Ridge Way.
- Lights around Ashford-Dunwoody, Chamblee-Dunwoody, and Roberts badly need synchronization
- People are incorrectly making an automatic left turn onto Mt. Vernon at Ashford Dunwoody sub. Very dangerous for the cars coming out of the neighborhood who have the right of way.
- Throughout the city, left turn storage is inadequate for the queues that form.
- Round-a-bouts should be considered in Dunwoody
    - Jett Ferry and Dunwoody Club Drive
- Signal timing
- Improve signage at Trailridge @ Mt. Vernon
- Signal needed at Peeler
- Curve sign on Happy Hollow Road

Sidewalk Improvements

- Finish one side first throughout the City before double siding (agree!)
- And the first thing to double-side is Mt. Vernon (people are trying to get to the Village to shop).
- Sidewalks needed on Happy Hollow
- Crosswalk needed at Peeler

Key Summary Points

Based on the input received to date, key issues and opportunities are emerging that relate to improving mobility in the City of Dunwoody. Participants responded strongly to the following transportation notions, whether they were policy or goal statements or issues and opportunities:

- There is a strong desire to create a community-wide pedestrian and bicycle network and culture.
    - Programs
    - Road standards
    - Planning
    - Develop appropriate local ordinances
    - Safety
    - Complete Streets
- Increasing network connectivity between neighborhoods and developments is important.
    - Avoid the major thoroughfares
    - Create a grid system (when development/redevelopment opportunity arises)
    - Complete Streets
- Improving traffic safety and operations is pertinent.
    - Traffic light synchronization
    - Crosswalks
    - Signage
    - ADA accessibility
    - Lighting

When asked about the impacts of the transportation system on one's health, responses were consistent focusing on the benefits of walking, biking, connectivity, exercise, and safety to one's health.

Appendix F: Community Workshop #2

January 25, 2011

Meeting Purpose

- To review the traffic analysis and preliminary project recommendations with the Community and gain feedback on the recommendations.

Meeting Format

- Presentation given by ARCADIS
- Question and answer period
- Open house and discussion with project team

Presentation

- Recap of CTP Activities
  - Data gathering and existing conditions has been completed.
    - Note: the survey closed on November 24th to maximize community input into identifying issues and opportunities
  - CTP Advisory Committee Meetings
    - 1st meeting- transportation issues and opportunities
    - 2nd meeting- vision statement, strategies, and preliminary recommendations
    - 3rd meeting- evaluation of candidate projects and preliminary recommendations
  - Review of the Vision Statements
  - Review of Survey Results
    - 220 survey respondents
      - Majority of respondents either live or work in the city
      - Have lived in the City for more than five years
      - Commute less than 5 miles during a regular day
      - Nearly half of the respondents were between the ages of 35 and 50
    - Most respondents primarily drive in the City but would like to do more walking and biking
    - Respondents identified sidewalk improvements followed by bike improvements and signal timing as the two most important ways to improve the roadway system
    - The most pressing transportation issue in the City was traffic congestion and delay
    - The City's top priorities related to transportation infrastructure investment were identified as reducing congestion and road repaving/maintenance
    - Walking was the alternative mode the City should prioritize

- The two most important ways to improve the roadway system identified were sidewalk improvements, followed by signal timing and bike improvements

- Traffic Analysis
  - Methodology
    - Short-term analysis focused on intersections
    - Horizon year 2015
    - 16 intersections counted
  - Long-term analysis focused on annual average volume tables
    - Horizon year 2030
    - 24-hour volume counts collected for 25 roadway segments in the city
  - Existing conditions
    - Intersections currently operating at a failing LOS (during peak periods):
      - Mount Vernon Road at Ashford Dunwoody Road/Trailridge Way
      - Mount Vernon Road at Chamblee Dunwoody Road
      - Mount Vernon Road at North Peachtree Road
      - Womack Road at Vermack Road
      - Tilly Mill Road at North Peachtree Road
      - North Shallowford Road at Chamblee Dunwoody Road/Peeler Road
    - Roadway segments currently over capacity (24-hour):
      - Chamblee Dunwoody Road between Nandina Lane and Dunwoody Village Parkway
      - Roberts Drive between Dunbrooke Lane and Witham Drive
      - Mount Vernon Road between Mount Vernon Way and Wellshire Place
      - Mount Vernon Road between Vernon Oaks Drive and Manhassel Drive/Vermack Road
      - Winters Chapel Road between Winterhaven Court and Winterbrook Court
      - Winters Chapel Road between Charmant Place and Fontainebleu Drive
  - Candidate Projects Evaluated
    - Candidate list of projects developed to address intersections and corridors with unacceptable LOS
    - Not all candidate projects may be feasible to build

- Constraints – funding, availability of right-of-way, environmental issues, historic resources, and community desires

- Review of candidate projects- roadway
  - Mt. Vernon Road
  - Tilly Mill Road/Peeler Road/North Peachtree Road intersection
  - Nandina Lane
  - Chamblee Dunwoody Road/Spalding Drive intersection
  - Ashford Center Parkway Extension
- Review of candidate projects- bike and pedestrian
  - Bike Facility
  - Bike Route
- Additional Study
  - Dunwoody Village traffic study
  - Utility easement as potential trail corridor
  - Intra-city transit study
  - ATMS/ signal timing
- Policy Recommendations
  - Road maintenance/paving program
  - Sidewalk standards and program
  - Trail connections for new developments
  - Complete streets policy
  - Transit coordination
  - Coordination with Georgia Perimeter College
  - Zoning and development regulations (addressing parking, sidewalks and bicycle/scooter/motorcycle parking)
  - Education and awareness
  - Development of ordinance for golf carts/AEV's
- Education and Awareness
- Partner with advocacy groups, associations, and educational entities to promote and implement alternative transportation programs
- Encourage an annual recreational bike ride around the city
- Use of showers at recreational centers for bike commuters
- Encourage Bike to Work and Walk to School Days
- Host valet bike parking at downtown events
- Sponsor Bicycle and Pedestrian Safety Weeks and safety classes through the Recreation Department and City schools

- Publicize the bicycle and pedestrian network and other planning initiatives through publications and the City's website
- Sponsor and coordinate pedestrian safety courses amongst City law enforcement officers
- Roundabout education

Comments and Questions

- Along Mt Vernon Road, would it be necessary to have one or the other of the options (intersection improvements, continuous center turn lane)? Is it possible to have a center turn lane along certain parts of the road, but not the entire length of the corridor?
  - A- yes that is an option.
- The traffic associated with the Spalding/Chamblee-Dunwoody Road intersection is heading to/from GA 400. Specific recommendations for that intersection should be presented and vetted with the neighborhoods impacted directly by an intersection improvement.
- Does the 72' ROW needed along Mt. Vernon Road for improvements include bike lanes?
  - A- yes
- Please consider more transit options for those with disabilities.
- Pedestrians with disabilities have a hard time navigating roundabouts.
- There was concern expressed for the costs associated with the extension of Ashford Center Parkway.
- Dunwoody Village Parkway is envisioned by the community through the redevelopment plan to include greesnpace. The desire for Dunwoody Village Parkway is not to be a cut through to avoid the intersection of Chamblee Dunwoody Road and Mt. Vernon Road.
- Can mid-block crossing be considered as an alternative to address the issues with pedestrians navigating through a roundabout?
  - A- yes
- Has there been any communication with Dunwoody Police? Project team should consider meeting with officers to gain their perspective from the field.
  - A- project team has not met with the Dunwoody Police Department at this time but will consider it.
- Have you given consideration to helping residents get out of their subdivisions along Mt. Vernon Road, particularly west of Chamblee-Dunwoody Road? There are no traffic signals and it is very difficult and dangerous to make a left turn out of subdivisions onto Mt. Vernon Road.
  - A- the proposals evaluated seek to address these issues
- Many of the candidate project recommendations include a center turn lane; however, currently along Tilly Mill Road, the center turn lane is used as an illegal passing lane.

Survey

- Participates were asked to complete a survey about the candidate project recommendations
    - Of 24 people who signed in, we received 11 questionnaires.
    - All respondents support the Vision Statements (either agreeing, somewhat agreeing, or no response)
    - All respondents agree that reducing congestion should be the City's top priority for determining transportation infrastructure investment (either agreeing or somewhat agreeing)
        - Comment: eliminate cut through traffic by using electronic passes similar to GA 400 passes to Dunwoody residents
    - Most respondents agreed that the City should focus on pedestrian improvement projects; however there were a few who somewhat disagreed.
        - Comments in agreement: create interconnected sidewalks to shorten walking distances. Include trails like the Silver Comet, improvements need to include safety issues for those with disabilities, paths need more input from nearby residents who may have privacy and other concerns
        - Comments in disagreement: drivers far outnumber pedestrian and bikers- moving vehicles should be top priority, focus on traffic improvements, information has not been distributed well enough to the community- posting on city website is not enough
    - Mt Vernon Road- Alternative 1 received the most hits (intersection improvements, bike lanes, and upgraded sidewalks), followed by Alternative 2 (continuous center turn lane), and one hit for Alternative 3 (widen to four lanes).
        - Comments included add turn lane at intersection of Mt. Vernon and Dunwoody Club and Saffron Drive, roundabouts are dangerous for disabled pedestrians, do not add bike lanes, Mt. Vernon and Chamblee Dunwoody needs a roundabout,
    - North Peachtree Road- Alternative 1 received the most hits (add center turn lane between North Forrest Trail and Peachford Trail), followed by no comment, and then do nothing.
        - Comments included no to Alternative 1 because there is not enough room and a sidewalk has just been installed so why waste that money just to widen the road
    - Tilly Mill Road- - Alternative 1 received the most hits (add center turn lane b/w existing three lane section and PIB, followed by other alternative/comments, and do nothing.
        - Comments included not familiar with the problem, doubt this section is that bad, deal with traffic from GA Perimeter College exiting onto Tilly Mill- college should pay for it.
    - Tilly Mill Road/Peeler Road, North Peachtree Road- Alternative 2 received the most hits (install a roundabout) followed by other alternatives/comments, Alternative 1 and do nothing.

- Comments included a roundabout would mean traffic on Peeler would not be able to access N. Ptree because traffic would flow continuously, no, roundabout maybe, but not another northbound lane, put in a traffic light, doesn't address the problem with Peeler Road/N Ptree problem.

- Nandina Lane- Alternative 2 received the most hits (R in/R out, remains two way), followed by Alternative 1 (one way).
- Chamblee Dunwoody Rd at Spalding Drive- Alternative 1 received the most hits (roundabout) followed by other alternatives/comments (mostly not familiar with the intersection), Alternative 2 (pocket park) and then Alternative 2 (left turn lane).
    - Comments included meet with nearby residents, do nothing, and make traffic light 4 or 5 way, allowing cars to exit Spender Trace safely and Spalding traffic to make safe turns
- Ashford Center Parkway Extension- overall it seemed to receive a positive response
    - Comments included need to do traffic impact study for Womack, like it but do not change the library, excellent idea- relocate the library to Brook Run Park, do we want main thoroughfare through the village, depends on the impact to the neighborhood and where the library goes, not crazy about this idea- loss of library, cultural center, and parking facilities, current road is forever filled with potholes- what do you think will happen to increased traffic on the road, no- assumes moving the library to the village and would increase traffic on Dunwoody Village Parkway- the citizens would balk at this idea- find another solution.
- Bike Facilities- split almost evenly with those supporting bike lanes on the proposed roadways and those who do not support bike lanes (4 overall responses in support, 5 not in support)
- Sidewalk standards- overall support for the standards, only comment was to make the minimum 5' in the village and Georgetown and 4' in the residential areas
- Most respondents agreed that the candidate projects are addressing the biggest challenges to traveling in Dunwoody. Those that did not agree commented that transit should be considered and not considering the needs of the physically disabled.
- Overwhelming the respondents said the City should prioritize roadway improvements projects and congestion relief first.
- Other general comments received:
    - Utility easement should not be included in the final plan (not- respondent indicated that he/she is a property owner along the power easement)
    - Roundabout needed at Mt. Vernon and Chamblee-Dunwoody for traffic flow and aesthetics
    - Not happy with the proposed plan of bike/walk trails through my and my neighbor's backyards.

- There seems to be excessive reference to bike improvements and this seems unrealistic.
- How many of the people responding to the survey were special interest groups, such as cyclists? Would sidewalks and bike lanes encourage children to walk/ride to school or would they still go in a vehicle.
- At major intersections, please consider underground walkways- at least evaluate the cost. (example provided of roundabout with underground walkway
- Project 19 – no..build it and they will come. Why make it easier for cut thru traffic or growing enrollment at GP. Plus the center turn lane will be used illegally as a thru lane or passing lane. They already do this on Tilly Mill

Next Meeting

- Tentatively scheduled for Tuesday, March 1st 6pm to 8pm. Location TBD.

Appendix F: Community Workshop #3

March 1, 2011

Meeting Purpose

- To review the t project recommendations with the Community and gain feedback on the recommendations and priority of projects.

Meeting Format

- Open house and discussion with project team

Attendees

- All participants live in the City.
- Under 21: 2
- 21-25: none
- 35-50: 6
- 51-65: 4
- Over 65: 6
- Did not indicate: 1

Comments Received

- Community members were asked to respond to a short questionnaire regarding the project recommendations.
- **Question 1**: Are there currently any projects in the plan that should NOT be included?
    - Greenway
    - #8b (Mount Vernon Road @ Mount Vernon Place) - needs reconstruction, not just prohibition. Study all turning moving and Mount Vernon, Tilly Mill, and Mount Vernon Place
    - #4- Adding bike lanes on Chamblee-Dunwoody would put the highway closer to the homeowners as well as put bikes on the highway with tanker and freight trucks traveling at a high rate of speed (45-55mph). That is a dangerous situation.
    - #10 (Chamblee Dunwoody at Peeler Road/North Shallowford Road) - Adding a lane to the Peeler intersection that continues to Vermack Road would create problems. Anyone turning left from the side would have a dangerous task. Those headed south on Chamblee Dunwoody and turning left onto Vermack would never be able to turn. The lightly traveled pedestrian crosswalk would now have 3 lanes with one that never stops.
    - #5A- Center turn lane on Tilly Mill from N. Peachtree/Peeler to Cherring- where is the land for the 3rd lane coming from? Most homes along this stretch are already on "building line". There is only enough R/W left for a sidewalk. Can't be done for $900K.

- #23- connections with Heatherdale and Kings Glen
- #3 (Mount Vernon at North Peachtree Road- adding crosswalk and refuge island) and #4 (on-street bike lanes/multi-use paths) should be de-prioritized to priority #3.
- I think there is too high priority being given to walking trails and bike paths. Considering the project cots- roads are used by a greater percentage of the populations and many need repair, as well as addressing the increasing traffic and need for moving the vehicles efficiently and safely. Dunwoody is a city in an increasingly urban setting. It is not likely to revert to a small town feel with wide tree-lined street (i.e. Williamsburg style town).
- #25 (path connection between Old Spring House Lane and Nancy Creek Trial) - intrusive to residential property owners- traffic from Perimeter mall through quiet neighborhood.
- #6 (extension of Ashford Center Parkway) - does Dunwoody Village really want increased traffic?
- #5a (Tilly Mill Center Turn Lane) - no explanation but referenced on map.
- Greenspace along powerline is not popular
- #10 (Chamblee-Dunwoody @ Peeler Road/North Shallowford Road) - description is incomprehensible- map doesn't help.
- Is the emphasis on bike lanes, etc realistic? How many use it?
- #10 (Chamblee-Dunwoody @ Peeler Road/North Shallowford Road) – do not add an extra (center) lane between Peeler to Vermack on Chamblee-Dunwoody Road.
- I'm just concerned about the use of roundabouts without signal lights. If roundabouts are to be included, they must have signal lighter, either button or pressure –plate activated.
- Less about pedestrians/bikes- these will not help and may even add to traffic
- 8b (Mount Vernon Road @ Mount Vernon Place) – why? People are fine there.
- Subdivision connection- this would only benefit residents of these private communities, they should be funded privately.
- Roundabout at Vermack/Womack intersection- not sure if it would improve pedestrian safety. Need to improve safety for walkers at this site. I like the idea of sidewalks on both sides of Vermack
- No greenways
- Path between Peeler and Winters Chapel.
- No bike lanes on Chamblee Dunwoody- Safety concern

- **Question 2:** Are there any projects that SHOULD BE in the plan that are not currently included?
  - Connect Perimeter Center East to Old Spring House Lane
  - Dunwoody Elementary School needs pedestrian connections and trails-Village Creek, Old Village Lane, and Old Village Run
  - Sidewalks for Winter's Chapel and PIB access road
  - Neighborhood collector street sidewalks- 5' one-side of the street.
  - Sidewalks down Happy Hollow Road

- Sidewalks on the Westside of Tilly Mill between Womack and Cherring to accommodate students going to/from GPC.
- Spend the $900K for $5A on sidewalks on Tilly Mill instead
- Improve southbound flow (of Peeler Road) in the morning at intersection; east junction of Tilly Mill and Peeler Rd (between Coldstream and Cherry Hill). Extend left turn lane on Peeler Road, northward, to allow more volume of left hand turns. It is not clear if this is included in project 5A.
- Intersection of Peeler at N. Peachtree- nothing shown, need roads, maintenance, sidewalks before worrying about bike lanes and greenspace. No indicating of handling public transportation- bus stops, etc. Will the City provide citizen training on navigating roundabouts? Include non-city travelers?
- More public transportation for the old and the young. Parents' having to drive kids everywhere does not help with keeping cars off the roads. If they had a safe method of transit (maybe working with MARTA to adds stops or something). Then parents would be more willing to allow them to use it.
- A clear focus on Brook Run
- Fund a project to change non-Dunwoody residents when using Brook Run
- Put a drive-thru at the old Blockbuster

- **Question 3**: What percentage of the City's transportation budget should be dedicated to: Road Improvements, Bicycle Improvements, Pedestrian Improvements, and Transit Improvements?
  - Out of 16 responses, roadway improvement was mentioned the most (all but 2) as rated with the top percentage for spending in the transportation budget.
  - Pedestrian improvements were listed twice at the top (with the highest percentage).
  - Transit and bicycle improvements also rated in the bottom two (it was a tossup).
- Question 4: Please share with us any additional comments.
  - Somehow you need to communicate the transportation plan more. There are a lot of trails the people don't know are going through their yard. Communication is key.
  - All board members should be here.
  - The surveys said that the people of Dunwoody wish to have more walking and biking but something such as the bike paths or the possible new greenway would be majorly for recreation and just adds traffic hazards while not keeping nay of the traffic flow.
  - You are headed in the right direction. Vision, prioritizing, funding. Be wise on the money spent on studies. Too much money on the studies means some consultants make a lot of money, but we never can afford to implement the plans. I like the idea of roundabouts. I believe they are more efficient in many cases than 4-way stops and signals.
  - Commuter from other cities and counties are not paying the taxes for the better roads and Dunwoody citizens and voters shouldn't have to pay to make it easier from their commutes.

- Why are we making these roads wider and better for commuters from Gwinnett, Fulton, and Cobb? It's the old saying- "if you build it, they will come," thereby increasing commuter traffic to/from GPC and PCID. Need more input from Dunwoody citizens.
- I live at the Vermack/Chamblee Dunwoody intersection. I know the traffic. If put in the extra lane, the negatives will outweigh any positives. Simplifying the travel through our city will only promote more traffic. Change for the sake of change is not always a positive. Ask those in the immediate vicinity for feedback and suggestions. Adding the extra lane would also promote higher speeds for those turning when it's already too fast. Let's not increase the # of cars in a residential area which is what improving traffic does.
- Consider narrower cross-section, limiting left turn lanes to major intersections and include bike lanes.
- Move Ashford Center Parkway extension to Dunwoody Village to long-term.

Next Steps:

- City Council review and discussion of the plan: March 14, 2011
- City Council adoption of the plan: March 28, 2011.

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Appendix G

Advisory Committee Summaries

Appendix G: Advisory Committee Meeting

September 20, 2010

Transportation Issues and Opportunities

**comments/discussion from the Advisory Committee Meeting are noted in blue italics*

Walking and biking

Plan, policies, design criteria, projects, programs

Safety, lighting, Support Safe Routes to School (Kingsley Elementary School), fill in the gap (roads without sidewalks)

DeKalb County Greenways Plan and DeKalb County Transportation Plan should be reviewed

Consider utility easements for trails/paths and I-285 corridor

Lack of sidewalks on Happy Hollow Road

Bike friendly re-striping efforts

Evaluate potential Bike/Ped traffic-consider where people live and destinations they are trying to get too, tools are available for identifying pedestrian demand

Engage PATH Foundation-consider connections to surrounding cities

Identify bike corridors and where bike lanes are appropriate

Consider park connectivity

Look at ways to make it safer for families to bike

Complete Streets (designing streets for all intended users, not just cars)

Policies

City should consider Complete Street policy

Potential road diet on Tilly Mill Road and Ashford Center Parkway,

Road Diet vs Traffic Calming- road diets do not necessarily focus on slowing travel speeds

Acceleration/Deceleration lanes- are there existing lanes with excess storage

Consider existing road structure throughout the City and travel lane widths (e.g. N. Shallowford Rd)

Traffic congestion and safety, including:

North Peachtree/Tilly Mill/Peeler intersection

Womack and Tilly Mill intersection

Tilly Mill Road/Mt. Vernon Place intersection

Chamblee Dunwoody Road/Spalding Road intersection

3 lane segments (one travel lane each direction and center turn lane) may be acceptable in some areas for short distances

Do not want to see more 4-lane roads

Small bottlenecks around Dunwoody at intersections- consider realignment or turn lanes

Round-a-bouts should be consider at many intersections throughout the City

Womack/Tilly Mill

N. Peachtree/Tilly Mill

Chamblee-Dunwoody/Vermack

Chamblee-Dunwoody/Mt. Vernon (Dunwoody Village)-Nandina

Tilly Mill/Mt. Vernon Place (safety concern based on roadway geometry)

Spalding Drive/Chamblee-Dunwoody (concern with peak period turning movements)

Other congested areas

Mt. Vernon @ St. Luke's Presbyterian Church (Vermack Rd)

Mt. Vernon to GA 400- corridor

Ashford Dunwoody/ Mt Vernon

Tilly Mill/Peeler (fatal accidents)

Need to get crash data

Look at traffic light synchronization

Transit service and facilities

Circulator/vanpool (look at Gaithersburg, MD)

Access to MARTA rail stations

Bus routes are oriented towards serving train stations not moving people around Dunwoody

Transit to/from the College

Final Mile concept-How do we get people from train station to their final destination within Dunwoody

Perimeter College traffic

Potential options with challenges that have been created- widen roads, move college, more housing, shuttle service.

Shuttle service assumed to be the most likely solution. Off-sight parking at First Baptist Church on N. Peachtree or service to MARTA station. Could PCID, City and GPC support circulator from Perimeter station to Dunwoody Village to College.

Look at Atlanta Art Institute as an example, enrollment not negatively impacted by lack of cheap and abundant parking

Garner support from Clean Air Campaign for shuttle service

Cut-through traffic

Commuters from North Fulton/Gwinnett/Cobb

Neighborhood cut-through-Branches area, Dunwoody Club Forest, Village Mill neighborhood (student related volumes)

To/from work- into Perimeter/over to GA 400

If there was better traffic flow on Mt. Vernon, there would be less cut-through traffic in neighborhoods

Project priorities

Connectivity between neighborhoods (at least for alt. modes)

Local circulation/network for pedestrians/bicyclists- trail connections

Branches residents could access Publix Shopping Center via a pedestrian trail

Safe/alternative route for kids to get to school

Golf carts/low-emission vehicles: take into consideration on-street vs. off-street, legal issues, and what the vehicle needs to include. Considered to be a very low priority (by the Committee) and include in the long-range planning (engineering should not prevent it). Consider as possible connection between neighborhoods although there will likely be less support than for just bike/ped connectivity

Future growth and long-term mobility needs

Traffic circulation in Dunwoody Village

Origins and Destinations Study

Need to study driver behaviors in the City with parents taking children to school

Appendix G: Advisory Committee Meeting

November 4, 2010

Meeting Purpose

- To review with the Advisory Committee what was heard at the 1st Community Workshop and discuss the approach to developing policies and projects by the project team.

Recap of CTP Activities

- Data gathering and existing conditions has been completed.
  - Note: the survey will remain open until November 24th to maximize community input into identifying issues and opportunities
- Meetings with the Dunwoody community and Advisory Committee have helped to clarify needs, and goals and objectives
- Project team is now beginning to identify alternatives by developing policies and identifying projects.

1st Community Workshop:

- Based on the input received to date, key issues and opportunities are emerging that relate to improving mobility in the City of Dunwoody. Participants responded strongly to the following transportation notions, whether they were policy or goal statements or issues and opportunities:
  - There is a strong desire to create a community-wide pedestrian and bicycle network and culture.
  - Increasing network connectivity between neighborhoods and developments is important.
  - Improving traffic safety and operations is pertinent.

Developing Vision Statements

- Based on input received from the community, policies and goals identified in the comprehensive plan, and existing conditions gathered, the project team has developed guiding principles to shape the development of policies and projects:
  - *Choice*:
    - Provide a transportation system that emphasizes choice by increased mobility for all users, increased connectivity, and increased health enrichment options.
    - View the street as a public space with the intent to serve multiple functions.
    - Public expenditures on transportation should provide for equal access by all users.

- *Connectivity*:
  - Create an integrated network of transportation facilities that connects people to where they want to go, both in the community and destinations outside the city limits.
  - Provide multi-modal transportation options.
- *Community*:
  - Transportation investments should enhance the Dunwoody community first and the Atlanta region second.
  - Provide opportunities for increased interaction within the community, increased recreational opportunities, and increased active living opportunities.

- **Committee Discussion**
  - Choice:
    - The balance comes down to money and plan execution. How do we ensure that the words get translated into action when it comes to funding.
    - The benefit of being a small, compact city is that you should know the transportation needs well.
    - Policies developed should include when projects and/or elements of projects will be considered. (ie: when is a bike route/facility considered in a road project and with what type of road project).
  - Connectivity:
    - In the first statement, what is meant by "outside the city?" Rewrite to say destinations near the city limits. An example of connectivity outside the city would be a regional multi-use trail that would connect with adjacent communities.
    - Thru-traffic should be addressed- it doesn't need to be enhanced, but also do not want to create a bottleneck of people passing through due to only serving the needs of the community.
  - Community:
    - Perimeter is part of Dunwoody and should be taken into consideration as there could be large increases in population in the Perimeter area alone over the next 20 years. There should be one Dunwoody.
    - Where does Perimeter College fit in?

- **Strategies and Preliminary Recommendations**
  - Sidewalks: policy statements will focus on filling in the gaps first before building new sidewalks.
    - *Discussion:* reference ADA standards, low maintenance, reference other cities and their policies (who maintain the grass strip in the ROW, unifying standards, hardscapes), consider what happens in the buffer zone, design overlay, a standard look could become a community identifier, consider different standards for different areas, and trees are nice but they should not create maintenance issues.

- Complete Streets Policy: development of a complete streets policy will be included in the recommendations.
    - *Discussion:* Lay the foundation for developing the complete streets policy- what is the additional cost to a project to retrofit with complete streets? Compare property values, costs, community value and benefit. What have studies shown? Provide examples from other communities, include graphics to help explain complete streets.
- Bike facilities: Bike routes and bike facilities will be determined in the plan. Bike routes include signage and/or sharrows. Bike facilities include a bike lane or site path/trail.
    - *Discussion:* Will the plan include separate bike and pedestrian chapters, similar to the Decatur transportation plan? Would like to see end of trip facilities, education, and enforcement considered. User types (A,B,C) and guidelines should be include in defining bike facility and bike route.

- **General Discussion**
    - Would like to see bike and pedestrian counts and number of people in vehicle included in traffic counts. ARCADIS confirmed bike and pedestrian counts are included.
    - Engage with the Town and Gown group between the City and GA Perimeter College.
    - Include discussion on public transportation and connection. Consider a demand responsive service.

- **Next meeting**: Wednesday, January 12, 2011 from 6 pm to 8pm.

Appendix G: Advisory Committee Meeting

January 24, 2011

Meeting Purpose

- To review with the Advisory Committee the survey results, traffic analysis, and discuss the candidate project list of recommendations

Recap of CTP Activities

- Advisory Committee Meetings
  - 1st meeting- transportation issues and opportunities
  - 2nd meeting- vision statement, strategies, and preliminary recommendations
- First Community Workshop
  - Goals and objectives; issues and opportunities

Survey Results:

- 220 survey respondents
  - Majority of respondents either live or work in the city
  - Have lived in the City for more than five years
  - Commute less than 5 miles during a regular day
  - Nearly half of the respondents were between the ages of 35 and 50
- Most respondents primarily drive in the City but would like to do more walking and biking
- Respondents identified sidewalk improvements followed by bike improvements and signal timing as the two most important ways to improve the roadway system
- The most pressing transportation issue in the City was traffic congestion and delay
- The City's top priorities related to transportation infrastructure investment were identified as reducing congestion and road repaving/maintenance
- Walking was the alternative mode the City should prioritize
- The two most important ways to improve the roadway system identified were sidewalk improvements, followed by signal timing and bike improvements

Traffic Analysis

- Methodology
  - Short-term analysis focused on intersections
  - Horizon year 2015
  - 16 intersections counted
- Long-term analysis focused on annual average volume tables
  - Horizon year 2030
  - 24-hour volume counts collected for 25 roadway segments in the city
- Existing conditions
  - Intersections currently operating at a failing LOS (during peak periods):

        - Mount Vernon Road at Ashford Dunwoody Road/Trailridge Way
        - Mount Vernon Road at Chamblee Dunwoody Road
        - Mount Vernon Road at North Peachtree Road
        - Womack Road at Vermack Road
        - Tilly Mill Road at North Peachtree Road
        - North Shallowford Road at Chamblee Dunwoody Road/Peeler Road
    - Roadway segments currently over capacity (24-hour):
        - Chamblee Dunwoody Road between Nandina Lane and Dunwoody Village Parkway
        - Roberts Drive between Dunbrooke Lane and Witham Drive
        - Mount Vernon Road between Mount Vernon Way and Wellshire Place
        - Mount Vernon Road between Vernon Oaks Drive and Manhassel Drive/Vermack Road
        - Winters Chapel Road between Winterhaven Court and Winterbrook Court
        - Winters Chapel Road between Charmant Place and Fontainebleu Drive
- **Committee Discussion**
    - **Mt. Vernon Road**
        - How do you improve safety with a 3- lane section along Mt. Vernon Road? Concern with the 3-lane section proposed along Mt. Vernon Road- excessive speeds will overtake the safety benefits.
        - 3-lanes is a good solution in the long term. Along Mt. Vernon-need a more predictable system- use the bike lane to make the vehicle lane width consistent along the roadway.
        - 3-lane section along Mt. Vernon may only be needed in the commercial areas. Do not need 3-lane segment through the long residential sections.
        - Strategy along Mt. Vernon should be to determine which areas along the roadway are bottlenecks and consider a 3-lane section through those areas.
        - In the design process of improving Mt. Vernon Road, there will be the debate about who (neighborhoods) gets the left turn lane. Some left turns are already prevented.
    - **Intersection of Tilly Mill/Peeler/North Peachtree Roads**
        - Need to consider refuge islands
        - What about a bike lane? Bike lanes will be hard to add with two northbound lanes.
        - What happens with the complete streets/road diet proposal along Tilly Mill Road?
        - How does northbound from North Peachtree to North Peachtree work with the roundabout?

- With the roundabout, how is the traffic handled at the intersection with Peeler Road- signalization? This needs to be looked at.

- **Nandina Lane**
  - Left turn movements need to be prevented as that is the point of conflict.
  - Adding a pork chop would create a pedestrian refuge
  - Prefer keeping Nandina Lane as a two way street; however, prevent the left turn movements.
- **Ashford Center Parkway Extension**
  - There needs to be consideration to keeping Dunwoody Village Parkway from becoming a cut through.
  - The road extension is a great idea, but still need to consider improvements at the intersection of Chamblee-Dunwoody and Mt. Vernon.
  - Overall positive reaction from the Committee. City/public function can be centralized in the village area which would increase foot traffic. It provides greater connectivity.
  - Were you able to model the impacts on Ashford-Dunwoody Road and Mt. Vernon Road if the extension was built?
- **Bike/Ped Projects**
  - Add trail connection along the water line easement for future connection to the river.
- **Additional Study**
  - The Plan document needs to discuss transit alternatives in more length. What transit options could be real game changers?
- **Policy Recommendations**
  - Add scooter/motorcycle parking
- Other general project comments on the candidate project list:
  - Womack and Vermack is currently the most dangerous pedestrian intersection.
  - Tilly Mill Road at Mt. Vernon Place- there is currently a visibility problem. Is there an opportunity to improve the site distance with the intersection improvement? Consider making it a three-way stop.
  - Along Mt. Vernon Road there are elevation changes where roundabouts are being proposed- can roundabouts be done effectively when there are elevation changes?
  - With the proposal to add a 3-lane section along North Peachtree Road and Tilly Mill Road, how does that impact the school crossing? This area is residential and adding a third center turn lane will change the character of the area. Consequences are increases in speed. The homes very close to the road. How much of this bottleneck is related to the school?
  - Add Valley View Road, Ashford Gables Drive to Ridgeview Drive to the proposed bike network.
  - Add new street connection from Georgetown Plan to the project list.

- The idea of a shuttle will hit a wall. Add language about a flat fare Dunwoody on-demand town car service for residents.
- What is the City's policy on road widening? It needs to be applied consistently across the city.

- **Next meeting**: Monday February 21, 2011 from 6 pm to 8pm.

Appendix G: Advisory Committee Meeting

February 22, 2011

Meeting Purpose

- To review with the Advisory Committee the draft project priority recommendations

Recap of CTP Activities

- Advisory Committee Meetings
  - 1st meeting- transportation issues and opportunities
  - 2nd meeting- vision statement, strategies, and preliminary recommendations
  - 3rd meeting- review of candidate project list and policy recommendations
- Community Workshops
  - 1st Community Workshop- goals and objectives; issues and opportunities
  - 2nd Community Workshop- review of candidate project list and policy recommendations
- City Council Retreat- presented candidate project list and received feedback
- Draft Report- submitted to the city staff for review and comment
- Recommend Project List- developed from the candidate project list and feedback received from City Council, city staff, Dunwoody community, and Advisory Committee

Discussion on Prioritized Project List:

- **The method for prioritization included three subjective criteria: vision, feasibility and partnering. Tim described the considerations within each of these three criteria, and stated that the projects were then categorized into three priority tiers.**
- Question- are projects going to be prioritized within each tier?
  - A- No, projects will not be prioritized within each tier.
- The cost of the adding bike lanes to the determined bike facility roads seems a bit high.
  - Explain the cost difference between bike lanes and a side path. Tim noted that the subject group of projects involves widening those streets to provide bike lanes – not just restriping the existing pavement.
  - Explain the preference of bike lanes over a bike path adjacent to the roadway
  - Do not include Pitts Road in the cost estimate- that road is in Sandy Springs
- Survey says congestion was most important, yet there seems to be a lot of bike project proposed in Tier 1.
- Why are the bike projects in Tier I before addressing congestion?
  - Is the CTP addressing moving cars or moving people? The plan should address moving people. (Opinions on both sides were shared.)
  - The plan has got to address congestion.
- All studies should be included in Tier 1**.**

    - There should be a study completed of how much traffic is internal to Dunwoody and how much is passing through Dunwoody.
- The biggest needs have to be addressed:
    - Mt Vernon/Chamblee Dunwoody Road/Nandina lane. (at the Dunkin Donuts)
    - Traffic around the college
- Funding should be prioritized to address more of roads and congestion
    - Bike projects should be in a lower tier
    - Funding in Tier 1 should not be 50/50 roads projects to bike projects
- The plan is under-investing in alternative modes, especially transit.
- On-demand transit service is very expensive to operate and provides benefit for that one trip. There is more benefit from bike and pedestrian projects to the community as a whole.
- The improvement project at Tilly Mill Road and North Peachtree and the addition of a center turn lane to Tilly Mill Road need to be moved into Tier 1.
- The PCID is currently undertaking a circulator system study in the Perimeter area and is working with MARTA to address how to make the Dunwoody station more pedestrian friendly.
- There should be an inventory of the drainage grates in the city to make sure they are all perpendicular to the roadway, as it is a bike safety issue.
- Ask the Dunwoody community specifically what percentage of the City's transportation budget should be dedicated to roads, to bikes, to pedestrians, and to transit over the next 10 years.
- Modify the project of adding a center turn lane to Mt. Vernon Road to only be the additional of left turn lanes at appropriate intersections.
- The improvement project to Mt. Vernon of adding a center turn lane should be moved to Tier 1.
- Move the new path connection between Ridgeview Road (north) and Ridgeview Road (south) to Tier 3.
- Should the Ashford Center Parkway Extension really be a Tier 1 project?
- Move the intersection improvement project at Chamblee Dunwoody Road and Spalding Drive to Tier 1.
- Move the Dunwoody Village Parkway project to Tier 1.

Prepared For:

Dunwoody
Smart people – Smart city

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