



Community Transportation Plan

Appendix E: Quality Growth Audit



**City of Decatur
Community Transportation Plan**

Decatur Quality Growth Audit:

**Linking Policies and Practices to a
Multimodal Transportation Vision for the City of Decatur**

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Executive Summary

The evolution of a city is a reflection of the policies, regulations and priorities embraced by their residents and leadership. They are articulated in zoning and subdivision ordinances, plans and practices. In recognition of the incremental effects of such elements on the City of Decatur, the City has included a Quality Growth Audit as part of the *Community Transportation Plan*. The primary purpose of the audit is to provide an assessment of the community's current policy, budgetary and regulatory effects on pedestrians, bicyclists, motorists, and transit users.

The *Decatur Quality Growth Audit* evaluates existing plans, policies and practices based on the community's vision for the future and accepted principles of Active Living, Quality Growth, Context Sensitive Solutions, and Universal Design. Decatur's transportation vision, as represented by its plans, prior visioning efforts and community involvement during the *Community Transportation Plan* process, is a multi-modal system that provides safe, efficient and equitable access to city resources. Decatur strives to enhance mobility and accessibility in and through the city, to promote active living by design and to increase economic activity through creation of a live/work/play community.

By applying the audit tool, it is possible to identify areas in which Decatur promotes a sustainable, connected transportation system and those areas that need improvement. The results of the audit, in conjunction with other recommendations from the *Community Transportation Plan*, can be used by local decision makers to explore changes in policies, practices, and regulations. This report represents the first stage in a two-part process. This first stage involves a non-biased and evidence-based review of existing documents and practices. The second stage requires the City's officials and staff to review the results of stage one and implement changes based on community priorities and available resources.

The audit is divided into six categories, including access and connectivity, design standards, parking, safety, land use and community design, and policies and procedures. The key findings and recommendations from each section are described below.

Access & Connectivity

The City does plan for effective connectivity (between cities and within Decatur), providing access for its citizens and visitors. In order to continue to build on this accessibility and connectivity, civic leaders should foster relationships with local and regional partners and increase communication between the City of Decatur and potential partners. The multi-modal system should focus on wayfinding, operation and programming, and design and maintenance of all transportation infrastructures. The city should prioritize transportation connections to public facilities when using bond funds and consider extending the Safe Routes to Schools program to other Decatur schools. While annual funding is provided in the Work Plan for sidewalk construction and repair, there is no formal program to ensure that crosswalk markings and other pedestrian facilities are in good repair. Work Plans should be updated and Public Works Standards could be developed to include details of priority, frequency, and procedure for sidewalk and pedestrian facility installation and maintenance (markings, signals, and curb ramps).

Design Standards

Roadways and sidewalks should be designed for all users, in a way that encourages pedestrian circulation by children, people with disabilities, and older adults, as well as those using nonmotorized transportation, such as bicycles. Universal Design principles can be applied to create environments that are usable by people of varying ability levels, including small children, older adults, and people with short- and long-term disabilities. Simple alterations, like wider entrances and no-rise doorways, or wider sidewalks can make environments more easily accessed. An update of the Code of Ordinances could incorporate more specific and detailed design standards that address individual street types. Engineering studies should be conducted to determine appropriate bicycle facilities needed throughout Decatur, and ordinances should be created accordingly to create Complete Streets. Landscaping ordinances should be established to provide

appropriate guidelines for commercial, multi-family residential, industrial, and transit districts. An integrated approach should be taken when developing landscaping standards: the standards should address lighting, signage, plantings and street furniture. The City should ensure that rights of way provide sufficient space for utilities so that the free flow and safety of traffic is not unduly impaired and that utility installation does not prevent reasonable maintenance of the roadway, structures, traffic control devices and other facilities. Public Works Standards should be developed for the proper installation and maintenance of pedestrian, bicycle and transit-related facilities.

Parking

Managing parking supply and pricing can provide incentive to use alternative transportation modes in place of single-occupancy automobiles. Communities can encourage active modes by restricting the number of spaces, clustering parking off-site (encourages walking to a final destination), or developing a pricing scheme for parking. Decatur ordinances should provide both minimum and maximum parking space requirements in order to prevent excessive supply and explore flexible parking options. The public and private provision of bicycle parking can also support non-motorized forms of travel for work, errands, entertainment and recreation.

Safety

Transit stops should be protected from traffic and crime, as well as be easily identifiable and easily accessible by all users. All measures that make streets pedestrian-friendly are particularly relevant to areas in the vicinity of transit stops. An update to the Decatur Code of Ordinances should include standards for bus stops and for pedestrian facilities and the streetscaping that surrounds them.

Today only about 15 percent of students walk to school and their parents cite dangerous traffic conditions as the reason their children cannot walk to school. The Federal Safe Routes to School Program provides funding for communities to establish safe routes to school through physical improvements and education programming. To support the program, school zones could have lower speed limits and safe routes should be clearly marked and advertised to encourage year-long use and increase driver awareness. Designated “safe routes” should receive priority for physical improvement funding from the *Community Transportation Plan*.

Land Use & Community Design

Mixed-use development promotes alternative modes of transportation by shortening distances between different land uses. Although current regulations allow multiple uses in and around downtown, mixed use is not specifically mentioned. The Land Use Map should be updated to designate areas for potential mixed-use development. Placing this development near transit stations could contribute to further reductions in automobile use. The Decatur Code of Ordinances should be updated to include incentives for compact development within one-half mile of transit stops.

Policy & Procedures

The Comprehensive Plan, Strategic Plan, Bicycle Master Plan, and ultimately the Community Transportation Plan address short-term and long-term goals for roads, sidewalks, bicycle paths, and even transit, but do not adequately address goods movement. Additional study will be needed to properly address goods movement, and truck delivery ordinances should be updated based on this goods movement study.

There should be a direct connection between budgetary provisions and planning activities. To improve accountability and transparency, the City of Decatur should designate “responsible parties” in the work plans and institute a monitoring program to track progress on tasks set forth in community plans. Events and programming in Decatur illustrate that City staff and officials are actively supporting alternative modes of transportation, but additional programming and marketing that targets a larger segment of the population should be investigated.

The complete report identifies specific regulations and practices that influence transportation in the City of Decatur and provides detailed recommendations to achieve the community’s vision for the future.

Purpose of the Audit

Quality Growth is a community-specific vision for creating more livable, sustainable communities with an identifiable “sense of place.” It takes a holistic approach to growth, recognizing in part that land use and transportation interact and shape the character and structure of a community. A connected transportation network improves access and thus encourages land development while also providing mobility. Land development patterns can encourage the use of alternative travel modes as a result of lot coverage, density, design, accessibility, zoning and other regulations. Quality growth involves the integration of land use and transportation in decision-making so that they grow concurrently; and it goes one step further, emphasizing a *multi-modal* transportation system integrated into the urban landscape.

For Decatur, quality growth entails expanding the range of transportation opportunities for residents and visitors by providing safe and efficient routes for all modes, and thereby promoting active living by design. To support this ideal, local government policies and regulations should create a transportation system that balances the demands of all users. Decatur has the necessary elements (transit, attractive destinations, compact design) for a healthy transportation system, but needs a comprehensive plan to make it all work together—the purpose of the *Community Transportation Plan*.

The specific role of the quality growth audit is to provide an effective and comprehensive way to assess the community’s current policy, budgetary, and regulatory effects on pedestrians, bicyclists, motorists and transit users. The quality growth audit for Decatur evaluates existing plans, policies, and practices against the accepted principles of Active Living, Context Sensitive Solutions, and Universal Design. The audit involves a review of recent visioning exercises and working with stakeholders to define quality growth from a transportation perspective; developing a checklist for the evaluation of existing plans, policies, regulations, and practices; and identifying and prioritizing recommended changes and actions based on the findings of the audit. The quality growth audit is a tool for identifying areas in which Decatur promotes a sustainable, connected transportation system and those areas that need improvement. The results of the audit, in conjunction with other recommendations from the *Community Transportation Plan*, can be used by local decision makers to explore changes in policies, practices, and regulations.

Decatur's Vision and Goals

Decatur's transportation vision, as represented by its plans, prior visioning efforts, and community involvement during the *Community Transportation Plan* process, is of a multi-modal system that provides safe, efficient, and equitable access to city resources. The vision set forth in the City's *Strategic Plan* is to enhance vehicular and non-vehicular mobility in and through Decatur. Specific goals include: to better utilize mass transit by improving MARTA bus stops and routes; to reduce levels of local traffic by investing in sidewalks and bicycle routes; and to provide public access to Agnes Scott and Emory shuttle services. Optimization of MARTA was part of the vision of the 1982 *Town Center Plan*. The *Town Center Plan*'s overall goal was to maintain the small-town feel while allowing for economic development in the downtown, and improving the transportation system was recognized as necessary for this. Since the plan's adoption, the City has been actively pursuing improved access and parking in the downtown, and exploring downtown housing opportunities linked to transit and new transit opportunities. An additional dimension of the City's transportation vision is the pursuit of "active living by design" and "complete streets" as established by the *Comprehensive Plan*. This vision requires designing a multi-modal network for safe and efficient mobility of *all* users. Specific goals include better coordination of signal timings, encouragement of non-vehicular traffic through improvements in pedestrian and bicycle facilities, and improved access to transit. The *Comprehensive Plan* further acknowledges the important role of land use in shaping an effective and connected multi-modal transportation network. Many of these goals have been embraced by recent plans, including the *Decatur-Avondale LCI*, the *Downtown Decatur MARTA Plaza Redevelopment Plan*, and the *Bicycle Master Plan*.

In accordance with the City's pre-established vision for its transportation system, the *Community Transportation Plan* was conceived to address lingering issues. The stated vision of the *Community Transportation Plan* is to "create a safe and efficient multi-modal system that promotes the health and mobility of Decatur citizens and visitors, creating better access to businesses and neighborhoods." The vision is being addressed through three goal sets: Safety, Accessibility and Mobility, and Active Living. These themes reflect the nature of the city as a small community that promotes alternative modes for recreation and traveling to destinations while still accommodating traditional traffic within and through the city.

Decatur's transportation vision expressed through plans and community input can be summarized as follows:

- To enhance **mobility and accessibility** in and through Decatur and maximize connections between residents, visitors, businesses, institutions, and government by creating a place where everyone has the option of walking, biking, or taking a bus or transit to get around.
- To promote **active living** by offering a balanced transportation system that removes barriers to activity and assures a high quality of life for everyone in the city by increasing pedestrian and bicyclist opportunities and safety for those traveling in the city.
- To increase **economic activity** in the city, particularly in the Downtown core, by establishing a live/work/play community.

Audit Methodology

The *Decatur Quality Growth Audit* was structured to assess the City's existing plans, policies, codes, and practices, and to identify the potential barriers both to an efficient and equitable multi-modal transportation system and to achieving the vision developed by the community. This report represents the first stage in a two-part process. The first stage involves a non-biased and evidence-based review of existing documents and practices, while the second stage requires the City's officials and staff to review the results of stage one and implement changes based on community priorities and available resources. Furthermore, the audit is a cyclical process that should be repeated when significant changes in vision or conditions warrant a review.

The audit involves the following steps:

Stage 1:

1. **Define "Quality Growth"** through the community's expressed vision and goals, as it pertains to transportation. For the *Decatur Quality Growth Audit* the definition of quality growth was defined through community outreach and an inventory of existing plans. These sources included:
 - *2000 Strategic Plan*
 - *Comprehensive Plan Update 2005*
 - *Town Center Plan*
 - *Preservation Corridor Master Plan*
 - *Interim Bicycle Master Plan*
 - *Avondale Livable Centers Initiative (LCI) Final Report*
 - *Citywide Comprehensive Athletic Facility Master Plan*
 - Infill Housing Standards
 - Comments received from the Community Transportation Plan public involvement process

Based on these plans and recent community involvement, quality growth in relation to the transportation system for the City of Decatur centers on a multi-modal transportation environment that promotes active living, connectivity, equity, and economic development.

2. **Develop questions** that determine the effect of current policies and design standards on pedestrians, bicyclists, transit users, and motorists. For the *Decatur Quality Growth Audit*, 21 questions were drafted to address:
 - Access & Connectivity
 - Design Standards
 - Parking
 - Safety
 - Land Use & Community Design
 - Policy & Procedures
3. **Identify documents to be audited.** For the *Decatur Quality Growth Audit* the following documents were identified as the primary mechanism that shape land use and transportation decisions:
 - *2000 Strategic Plan*

- *Comprehensive Plan Update 2005*
 - *Code of Ordinances*
 - *Georgia Department of Transportation Policy Design Manual*
 - *Short-term Work Plan (2005)*
 - *Interim Bicycle Master Plan*
 - Atlanta Regional Commission Plans
 - *Avondale LCI*
 - Infill Housing Standards
 - *Athletic Facility Master Plan*
 - Downtown Decatur Streetscape Design Guidelines
4. **Conduct the audit.** Each question is linked to one or more of the documents to be audited. The audit also includes commentary regarding each question's relevance to quality growth and recommendations and strategies for amending the City's codes and policies. For several questions, additional resources are identified that provide additional information about the issue.

Stage 2:

5. **Implement changes to plans, policies, and regulations.** The audit provides *recommended* courses of action, but it is at the discretion of local policymakers to pursue initiatives that best achieve the quality growth goals articulated by the community. City of Decatur staff and officials need to consider community priorities and resources to determine how best to address the recommendations contained in this report.
6. **Periodically repeat the audit process** to account for changing conditions and recognize quality growth achievements.

The Audit

The following questions have been developed to identify barriers to achieving a multimodal transportation vision for the City of Decatur. They address the categories of: Access and Connectivity, Design Standards, Parking, Safety, Land Use and Community Design, and Policy and Procedures.

For each question, commentary is provided as a rationale for addressing the issue, the documents being audited are identified, and a symbol illustrates whether the document supports the vision or creates obstacles. ● indicates that the document being considered does support the quality growth aspect of the question; ○ indicates that the document does not; and ◐ indicates that the document partially supports the principles of quality growth, but fails in some aspects. In addition, an explanation is provided of the results of the document review with recommendations, and if appropriate, additional resources are identified that provide examples of successful approaches.

In some cases the concepts and recommendations suggested are better illustrated visually. In those instances a 🖼️ will appear. This indicates that additional information and images are provided in the gallery to address this subject.

ACCESS & CONNECTIVITY

1. Does the City plan for multi-modal inter-city (between cities) connectivity?

Commentary:	Multi-modal routes between urban centers and interregional destinations provide alternatives to personal vehicles and traveling on congested roads and encourage the use of alternatives methods or transportation. Minimizing barriers, such as public transportation system schedules and ease of transfer and disconnected bicycle facilities, would make travel between modes of transportation more convenient and likely increase the use of public transportation. The relationships and coordination among the cities, counties, state, and MARTA are important for service delivery and for creating an effective multi-modal transportation system. Coordination is important across all entities to assess the transportation needs of Decatur residents, workers, and visitors; establish a plan to provide for those needs; and implement the appropriate programs that facilitate the movement of people throughout the City.		
Source Document(s):	Comprehensive Plan	ARC Plans	
Audit:	○	○	
Review:	Decatur documents identify concerns about inter-city connectivity, namely transit connections with other urban centers, but these issues are not explicitly reflected in work plans or the current Atlanta Regional Commission's Transportation Improvement Program (TIP). Coordination with MARTA on the Avondale Livable Centers Initiative (LCI) efforts and the Downtown MARTA Plaza Redevelopment has been successful overall, both centering on important intercity rail stations, but more could be done to address city-to-city connections through region-wide bicycle and pedestrian efforts and targeted public transportation planning. The City is well-served by rail transit running east to west, but is lacking fixed transit running north to south. Admittedly, transit expansion along north-south routes is limited by existing right-of-way and road alignments. Therefore, the City and neighboring communities must explore innovative strategies to improve non-motorized and transit options for north-south travel.		

Recommendations:	<p>Foster relationships with local and regional partners. Increase communication between City of Decatur and potential partners, such as the Georgia Department of Transportation, the Atlanta Regional Commission, MARTA, GRTA, City of Atlanta, DeKalb County, Emory University, and the Centers for Disease Control and Prevention. Such relationships can lead to the identification of shared interests and unique transportation solutions that can overcome some of the physical and financial constraints. Relationships can be fostered by:</p> <ul style="list-style-type: none"> ▪ hosting annual roundtables to discuss issues of mutual interest; ▪ assigning staff to track the work of and build contacts with specific entities; ▪ or regularly providing information about activities in the City of Decatur to potential partners.
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2. Does the City provide for integrating multimodal use and connectivity within city limits?

Commentary:	<p>One example of the multimodal nature of travel is evident in ARC travel survey data, which shows that 6 out of 10 transit riders accessed public transit by walking (bus access was dominated by walking). Approximately one-third of users accessed the rail system by vehicle. Because of the dependence on multiple modes for accessing transit, routes to transit stops should provide for all modes (with special attention to people with disabilities).</p> <p>A successful multimodal transportation system provides mobility for more than one mode of transportation by efficiently connecting systems and coordinating operations. It is customer-oriented and community serving, which means that it is designed and operated to get users where they need to go, when they need to go. Enhancing an integrated multi-modal network would allow Decatur residents and workers to move safely and seamlessly between car, bus, rail, bike, and sidewalk. Achieving a fully integrated system would involve expansion of bicycle and pedestrian infrastructure (recommended in multiple plans), public transportation service and infrastructure improvements, and a supportive land use pattern. Furthermore, proper linkages between modes are necessary. Future system improvements should be planned with the entire transportation network in mind and not be siloed into “bicycle,” “pedestrian,” “transit,” or “roadway” improvements.</p>		
Source Document(s):	Comprehensive Plan	Strategic Plan	Bicycle Master Plan
Audit:	○	○	○
Review:	Goals stated in the Strategic Plan, Comprehensive Plan, and Bicycle Master Plan indicate a desire to improve connectivity and mode choice throughout the city, but do not explicitly address the issue of integrating the different transportation systems into one multimodal network.		
Recommendations:	<p>Creating a multi-modal system requires a multi-faceted strategy for transportation infrastructure and services, including:</p> <ul style="list-style-type: none"> ▪ Wayfinding and Education: Develop signage and educational strategies that help people travel via multiple modes. Nodes where several forms of 		

	<p>transportation meet are critical areas for signs and messaging that direct users to destinations and amenities.</p> <ul style="list-style-type: none"> ▪ Operations and Programming: Ensure that the operational schedules of the various systems are complementary and meet the needs of users. The recommendations from question 1 can help accomplish this task. Furthermore, use programmed events to promote alternative forms of travel by providing information about MARTA schedules and bike parking facilities. ▪ Design and Maintenance: A multimodal system requires attention to details that create seamless transitions. These include prominent, descriptive signage; bicycle parking and/or storage lockers at MARTA stations and parking structures; inviting bus pick-up area and bus stops; and benches and other street furniture along corridors. Following are several recommendations: <ul style="list-style-type: none"> ▪ Provide additional design guidance around key nodes, like MARTA train stations. For example, the Avondale LCI, using an overlay district around the station, includes specific provisions for bicycle and pedestrian access. Similar standards can be applied to other relevant locations. ▪ Work with MARTA to develop standards to improve access and safety to bus stops. ▪ Help ensure that all transportation projects and major maintenance efforts support a multimodal system by assigning a staff member the responsibility to monitor and comment on project designs. Furthermore, Requests for Proposals (RFPs) for transportation improvements should explicitly require adherence to multimodal principles.
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3. Do people have walking/biking access to public facilities (parks, playgrounds, schools, government facilities, community/senior centers, medical facilities, etc.)? And are there plans and requirements for future access to public facilities and open space (existing and new)?				
Commentary:	Communities should be planned, designed, and managed to ensure that people of all ages and abilities can walk and bike easily, safely, and regularly. Local level policies and programs, supported by positive national and state policies, should be implemented to make communities more livable places that encourage physical activity. Walking and cycling offer opportunities for moderate, pleasant exercise to improve physical and mental wellbeing. Walking and cycling also provide vital links to public transportation and a “no-emissions” alternative to motor vehicles. Increasing walking and cycling also improves public space and increases social interactions. Physical activity also improves public health by reducing the risk of obesity, heart disease, diabetes, and other illnesses.			
Source Document(s):	Comprehensive Plan	LCI Plans	Recreation Plan	Bicycle Master Plan
Audit:	○	●	○	●
Review:	The Bicycle Master Plan currently includes recommendations for providing more bike lanes, connecting more residential areas to downtown, and improving bicycle facilities along high-demand downtown routes. The Avondale LCI addresses this issue well. The Recreation Plan reiterates the need for city-wide sidewalks and bike lanes or paths, and also recommends			


	park improvements to ensure compliance with the Americans with Disabilities Act (ADA) and facilitate pedestrian/bicyclist access to and throughout parks. Improving connectivity to public spaces is not a specific focus of the Comprehensive Plan, although well-planned expansion of pedestrian and bicycle facilities (which is a goal) would improve connectivity.
Recommendations:	<ul style="list-style-type: none"> ▪ Prioritize transportation connections to public facilities (especially schools, parks, and transit stops/stations) when using bond funds. ▪ Extend the Safe Routes to Schools program to all Decatur schools. ▪ Site new public facilities in places where multimodal transportation infrastructure already exists or where it can be supplied. ▪ Providing wayfinding signage for walking and biking routes to public facilities. 📷

4. Do regulations require the provision and maintenance of pedestrian facilities (sidewalks, crosswalks, curb ramps, et cetera) on all new or existing public streets?			
Commentary:	While a sidewalk on both sides of the street is preferable, a minimum of one per street is necessary for pedestrian flow (1). Furthermore, procedures should be in place to ensure that sidewalks are in good repair (smooth transitions and minimal cracks), crosswalk markings are visible, pedestrian push-buttons function properly, et cetera.		
Source Document(s):	Code of Ordinances	Short-term Work Plan	
Audit:	○	○	
Review:	Although there are no provisions that cover all streets, a subset of streets is covered by provisions in Subdivision Regulations and Code of Ordinances. Annual funding is provided in the Work Plan for sidewalk construction and repair. However, there is no formal program to ensure that crosswalk markings and other pedestrian facilities are in good repair.		
Recommendations:	<ul style="list-style-type: none"> ▪ Work Plans should be updated and Public Works Standards should be developed to include details of priority, frequency, and procedure for sidewalk and pedestrian facility installation and maintenance (markings, signals, and curb ramps 📷). ▪ Guidelines provided in GDOT's <i>Guidebook for Pedestrian Planning</i> (2) can be used to prioritize construction and repair projects. Using an adaptation of this framework, scores can be assigned to streets based on two sets of factors: potential and deficiencies. Using an aggregate score based on these two sets of factors would enable the City to determine priority. When prioritizing streets, the following routes should be considered first: within a half-mile of schools and all transit stops; leading to parks and sports facilities; in shopping districts and other commercial areas; along recreational corridors; adjacent to public buildings; and around retirement homes, medical complexes/hospitals. ▪ To ensure sidewalks are maintained in good condition, implement a sidewalk monitoring and reporting system and develop a sidewalk handbook, since sidewalk maintenance is the shared responsibility of land owners and the City. Residents should be encouraged to report damaged sidewalks to the Department of Public Works. If sidewalks are poorly maintained (i.e. leaves and debris), the responsible party should be notified and should receive a sidewalk handbook describing proper maintenance.(3) 		

Resources:	1. FHWA. (2006). University Course on Bicycle and Pedestrian Transportation (for Planners and Designers), Chapter 13. < http://safety.fhwa.dot.gov/ped_bike/ > 2. Georgia Department of Transportation. (2006). <i>Georgia Guidebook for Pedestrian Planning</i> . < http://www.dot.state.ga.us/bikeped/pedestrian_plan/ > 3. City of Portland, OR. (accessed May 2007). Sidewalk Handbook. < http://www.portlandonline.com/transportation/index.cfm?c=38721 >
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5. Do regulations require the provision and maintenance of multi-use paths/bike lanes in accordance with a bikeway master plan?			
Commentary:	While the provision and maintenance of formal bike lanes or paths is preferable, streets lacking these features should be maintained to allow for bicycle travel. This involves (but is not limited to) replacing unsafe drain covers, repairing potholes, and cleaning debris from shoulders. Multi-use paths should be maintained on a regular basis, but this may initially require prioritizing lane repairs.		
Source Document(s):	Short-Term Work Plan	Comprehensive Plan	
Audit:	<input type="radio"/>	<input checked="" type="radio"/>	
Review:	Multi-use path/bike lane provision is not included in the Short-Term Work Plan, in accordance with the Decatur Bikeway Plan. However, the Bicycle Master Plan (completed after the 2005 Short-Term Work Plan) addresses construction of new shared paths/bike plans and the maintenance of existing and future bicycle facilities (Sections II and VI respectively). In particular, purchase of a new street sweeper in FY2005–2006 would allow all streets to be swept monthly to keep them free of debris that could be dangerous for cyclists.		
Recommendations:	<ul style="list-style-type: none"> As recommended in the Bicycle Master Plan, a shared path or on-street bicycle facility should be included with any roadway reconstruction, resurfacing or new construction when feasible. Accordingly, the Comprehensive Plan should be updated to support this goal. A routine maintenance program should be established for all multi-use paths and bike lanes based on visual inspection reports and community feedback (residents should be encouraged to report problems with bicycle facilities through the City Public Works Department's existing reporting system). Streets lacking formal bike paths/lanes should also be maintained to allow for bicycle travel. The maintenance items should include, but not be limited to, sweeping, litter removal, repainting of striping, replacement of unsafe storm drain grates and repair of gutter cracks. The Short-Term Work Plan and budget should reflect a commitment to improved bicycle facilities. To reduce damage to bicycle facilities and protect the rights of bicyclists, Section 98-16 of the Code should be updated to prohibit stopping, standing, parking a vehicle in a bicycle lane or in any other way obstructing its use. The Police Department should actively enforce such code, once adopted. 		

6. Do regulations require inter-parcel connectivity where appropriate, such as in the central business district and in mixed-use developments?

Commentary:	Inter-parcel connectivity means that parcels fronting a particular roadway would be connected via a frontage road or a travel way that is delineated from parking areas. This allows for short trips between developments without using the major road, thereby reducing traffic congestion (1). Inter-parcel connectivity also allows drivers, pedestrians and bicyclists to move easily between adjacent lots. With connected lots, redundant curb cuts previously needed for access could be eliminated. Fewer curb cuts and internal parking lot connectivity improves safety and aesthetics for pedestrians and bicyclists.		
Source Document(s):	Code of Ordinances		
Audit:	<input type="radio"/>		
Review:	Inter-parcel connectivity is not addressed.		
Recommendations:	<ul style="list-style-type: none"> Inter-parcel connectivity should be required for at least all new development or redevelopment in the downtown core and in mixed-use areas.  The City could also survey existing downtown lots to determine where increased connectivity would be beneficial to traffic flow and safety. As a related issue, maximum access point densities (number of driveways/curb breaks per mile) should be established for all districts in order to limit interruptions in pedestrian/bike facilities. 		
Resources:	1. CQGRD. <i>Camden County Quality Growth and Development Report</i> . October 25, 2005.		

DESIGN STANDARDS

7. Are roadways and sidewalks designed for all users, especially to encourage pedestrian circulation for children, people with disabilities, and older adults?

Commentary:	At a minimum, all sidewalks should comply with all ADA standards (1). They should be at least 5 feet wide in residential areas or 12 feet in commercial areas with a 5-foot minimum planting strip between the sidewalk and street. Maximum grades should be restricted to 8 percent, with 5 percent being desirable. Street lighting should be provided to facilitate lateral movement of pedestrians and to allow drivers to see them. In commercial districts, low level lamps should be provided in addition to high angle lamps; in pedestrian-oriented areas (like shopping districts), lighting from storefronts should be provided to encourage evening trips.		
	Universal Design principles can be applied to exceed ADA standards. These principles have been developed to create environments that are usable by people of varying ability levels, including small children, older adults, and people with short- and long-term disabilities. Simple alterations, like wider building entrances and no-rise doorways, or wider sidewalks, can make environments more easily accessed. 📷		
	Furthermore, roadways and particularly intersections should be designed to safely facilitate automobile, pedestrian, and bicycle movement. Perpendicular curb cuts (as opposed to just one) should be provided at all intersections to accommodate older pedestrians and those with disabilities or pushing strollers. FHWA recommends curb cuts be at least 3' 4" wide at the base and flared. Cut-throughs should be provided at intersections with medians. Signal push buttons should not only be provided but also be accessible to all pedestrians, including children and people with disabilities (i.e. no more than 42 inches above the sidewalk, easy to push) (2). In addition to providing signals, pedestrians should be informed of how they operate and how to activate them; otherwise they may become frustrated (3).		
Source Document(s):	Code of Ordinances	GDOT Policy Design Manual	
Audit:	○	○	
Review:	The GDOT Manual meets the minimum requirements described above for ADA compliance (except for the 12 feet minimum in commercial areas). Neither set of standards addresses street lighting for pedestrian benefit. Furthermore, Chapter 7 of the GDOT Manual addresses intersection design, but does not provide specific standards for curb ramps or pedestrian/ bicycle signals. The Code of Ordinances is also limited to vehicular design standards, specifically, the intersection angle.		
Recommendations:	<ul style="list-style-type: none">▪ An update of the Code of Ordinances (Chapter 90, Article III) should incorporate more specific and detailed sidewalk design standards that address all street types, including street lighting and the placement of utility poles (see Question 10).▪ More specific maintenance requirements should be addressed in Section 86-2 of the Code.▪ Additional design standards should be incorporated into the Code of Ordinances (Section 90-251) to address pedestrian safety and		

	<p>handicapped accessibility at intersections – for example, standards should require that two perpendicular curb cuts be provided (5).</p> <ul style="list-style-type: none"> Standards should also be established for pedestrian signal installation and maintenance. Public Works Standards should be developed in accordance with the design standards.
Resources:	<ol style="list-style-type: none"> 1. US Department of Justice. (1994). <i>ADA Standards for Accessible Design</i>. March 2007. <http://www.ada.gov/stdspdf.htm> 2. FHWA. (2006). University Course on Bicycle and Pedestrian Transportation (for Planners and Designers), Chapter 17. March 2007. <http://safety.fhwa.dot.gov/ped_bike/> 3. FHWA Course, Chapter 15. 4. Georgia DCA. (2003). <i>Model Code: Alternatives to Conventional Zoning</i>. March 2007. <http://www.dca.state.ga.us/development/PlanningQualityGrowth/index.asp> 5. ITE. (2006). <i>Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities</i>. January 2007. <http://www.ite.org/css/>

8. Are design standards established for bicycle lanes (width, surface, separation from motorized vehicle lanes) and are they sufficient?


Commentary:	<p>Bike lanes adjacent to a curb or parking lane should be a minimum width of 5 feet (or 4 feet if a gutter pan runs along the curb), should be clearly marked, and should transition smoothly from the street surface. Lanes that are shared with bikes or adjacent to on-street parking should have a total width of at least 12 feet. Streets with higher motor vehicle speeds and traffic volumes should also be wider. In locations where a manhole or stormwater inlet is present, lane widths should be adjusted to account for bicycles swerving. The lanes should be follow normal full-depth pavement design standards since motor vehicles will at times use them. On two-way streets, bicycle lanes should be striped on each side whereas on one-way streets the bicycle lane should be on the right-hand side (unless roadway conditions warrant otherwise). Where bicycle lanes do not currently exist, streets can be retrofitted by adjusting on-street parking and/or altering lane widths (1).</p>		
Source Document(s):	GDOT Policy Design Manual	Code of Ordinances	
Audit:	<input type="radio"/>	<input type="radio"/>	
Review:	There are no official design standards established by the City of Decatur or contained in the GDOT Manual regarding bike lanes.		
Recommendations:	<ul style="list-style-type: none"> Conduct engineering studies to determine the appropriate design for the bicycle facilities needed throughout Decatur, as identified in the <i>Community Transportation Plan</i>. Develop design standards based on the results of the engineering studies for bicycle paths and bicycle lanes, and incorporate into Chapter 90, Article III of the Code of Ordinances. Standards for bicycle paths should include width, clearances and shoulders, maximum grade, grade separation and barriers to block motor vehicle traffic. Standards for bicycle lanes should include variable lane widths, location of the lane (with respect to parking lane and motor vehicle lane) and pavement markings. (1-5) Public Works Standards should be created for installation and maintenance of the facilities in accordance with the Ordinances and best practices. 		
Resources:	1. FHWA. (2006). University Course on Bicycle and Pedestrian Transportation (for Planners and Designers), Chapter 19. < http://safety.fhwa.dot.gov/ped_bike/ >		

	<p>2. Georgia DCA. (2003). <i>Model Code: Alternatives to Conventional Zoning</i>, Section 2-6. March 2007. <http://www.dca.state.ga.us/development/PlanningQualityGrowth/index.asp></p> <p>3. Toole Design Group, LLC. (2006). <i>Bicycle Facility Design Toolkit</i> (with City of Baltimore Bicycle Master Plan). March 2007. <http://www.liveearnplaylearn.com/Publications/BaltimoreCityBicycleMasterPlan/tabid/98/Default.aspx></p> <p>4. Smart Growth Leadership Institute. (2005). <i>Code and Zoning Audit Tool</i>. Nov 2006. <http://www.epa.gov/dced/scorecards/SGLI_code_audit_draft_111405.pdf></p> <p>5. ITE. (2006). <i>Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities</i>. January 2007. <http://www.ite.org/css/></p>
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9. Do landscaping ordinances establish appropriate guidelines for landscaping, lighting, signage, and street furniture for commercial, multi-family residential, industrial, and transit districts?

Commentary:	It is important to differentiate landscaping and buffers. Typically, buffers are intended to create a visual or environmental divide between land uses that are not entirely complimentary. But landscape ordinances do more than block undesirable views (such as parking lots); they also aesthetically enhance areas, create shade for pedestrians and parked cars, and provide additional public spaces (1). Furthermore, well-designed landscaping along roadways can create a traffic calming effect by visually narrowing the street width and forcing drivers to be more cautious. The physical separation between the roadway and sidewalk can stimulate pedestrian confidence and comfort.		
Source Document(s):	Code of Ordinances	Streetscape Design Guidelines	LCI Plans
Audit:	○	○	○
Review:	Besides the Streetscape Design Guidelines, landscaping requirements are not included in the Code of Ordinances. The Streetscape Design Guidelines do not provide standards for placement of plantings, lighting, or street furniture and are not customized to different districts. Avondale LCI prescribes different landscaping requirements based on street typology but they are not specific enough.		
Recommendations:	<ul style="list-style-type: none"> ▪ The Code of Ordinances should be amended to include landscaping standards appropriate for respective districts (zoning ordinances) or to correspond with the street typology (Chapter 86, Article I). ▪ An integrated approach should be taken when developing landscaping standards; the standards should address lighting, signage, plantings and street furniture. Furthermore, they should encourage use of non-invasive, native, or adaptive plants (2). ▪ While landscaping requirements for parking lots are provided in Sec 86-131 of the Code, they could be adjusted to further promote a pedestrian/cyclist environment. 📷 (See examples in the Parking section of the gallery.) 		
Resources:	<p>1. CQGRD. <i>Camden County Quality Growth and Development Report</i>. October 25, 2005.</p> <p>2. "Seattle Right-of-Way Improvement Manual." March 2007. <http://www.seattle.gov/transportation/rowmanual/manual/table_of_contents.asp></p> <p>The Seattle Right-of-Way Improvements Manual (Chapters 4 and 6) addresses appropriate pedestrian-friendly streetscaping for downtown and neighborhood streets and introduces the idea of "Green Streets."</p>		


10. Does the City provide sufficient space for utilities/services along transportation corridors?

Commentary:	The City should ensure that rights of way provide sufficient space for utilities so that the free flow and safety of traffic is not unduly impaired and that utility installation does not prevent reasonable maintenance of the roadway, structures, traffic control devices and other facilities, and that maintenance and operations of the utility do not jeopardize traffic, road structures, or maintenance (1). Installation of underground utilities, particularly in the downtown and along pedestrian routes, can be used as a solution to eliminate utility poles as obstacles to pedestrian travel. Design guidelines and review standards should be enacted that specify the appropriate placement of underground utilities. To be effective, these design guidelines must be applied in a clear and consistent manner, so that developers can address requirements from the earliest stages of a project. State and local officials should evaluate the decision-making process for utility installations looking beyond the costs and giving appropriate weight to factors such as safety, environmental effects, and community aesthetics (2).		
Source Document(s):	Code of Ordinances	GDOT Policy Design Manual	
Audit:	<input type="radio"/>	<input checked="" type="radio"/>	
Review:	Current roadway design standards emphasize placement of utilities to avoid conflicts with cars, which often impedes pedestrian movements (see GDOT Manual, Section 6.11). The Downtown Decatur Special Pedestrian Area Regulations is an example of where utility placement is already explicitly addressed through required "clear zones". Placement of underground utilities is only required in all new Planned Unit Developments and High-Density Single-Family (HDSF) residential developments.		
Recommendations:	<ul style="list-style-type: none"> Ordinances should require a minimum width of usable sidewalk space (enough to allow passage of a wheelchair). (3)  Provision of underground connections should be required for all substantial renovations of commercial, mixed use or high-density residential projects, especially in the downtown (4). 		
Resources:	1. "Cobb County Utility Permitting Procedures." Cobb County Department of Transportation. January 2007. < http://dot.cobbcountyga.gov/utilities.htm > 2. FHWA. (2006). University Course on Bicycle and Pedestrian Transportation, Chapter 5: Utilities Relocation and Accommodation. < http://safety.fhwa.dot.gov/ped_bike/ > 3. "Six Steps to a More Walkable Seattle." Seattle Pedestrian Advisory Board. March 2007. < http://www.seattle.gov/spab/default.htm > (Discussion of usable sidewalk space and solutions) 4. Georgia DCA. (2003). <i>Model Code: Alternatives to Conventional Zoning</i> , Section 2-3-18. March 2007. < http://www.dca.state.ga.us/development/PlanningQualityGrowth/index.asp > (Sample utilities ordinance)		

PARKING

11. Is parking being used as an incentive/disincentive to encourage active transportation modes?			
Commentary:	Guaranteeing drivers an abundance of free parking discourages using alternative transportation modes in place of automobiles. Communities can encourage active modes by limiting the number of spaces, clustering parking off-site (encourages walking to a final destination), or developing a pricing scheme for parking. Parking management is an important tool for better utilization of the existing parking supply and better planning for future parking demand. For example, shared parking can be used to optimize existing supply.		
Source Document(s):	Short-Term Work Plan	Avondale LCI	
Audit:	○	●	
Review:	According to the Work Plan, a parking management study was listed as a task in the short-term work plans for 2000, 2001, and 2002 but not accomplished because “downtown development is ongoing—not (an) appropriate time for (a) parking study.” The LCI plan calls for a new parking structure with 800 spaces to replace the MARTA lot spaces being displaced and provide additional spaces for mixed-use buildings near the station. Considering that the south MARTA lot is currently only filled to about 50% of its capacity, the structure’s capacity could exceed the parking demand (1).		
Recommendations:	<ul style="list-style-type: none"> ▪ The Parking Management Study that was started as part of the <i>Community Transportation Plan</i> should be continued to determine average occupancy rates for each parking lot or structure (public and private) and to consider future development needs. ▪ The study should pay particular attention to opportunities for flexible parking strategies, like shared parking, to better utilize the existing parking supply. The <i>Community Transportation Plan</i>’s Parking Management section provides initial recommendations for parking strategies (see Question 12). ▪ The recommendations from the Parking Management Study should be codified. ▪ Employer-based incentives and programming to manage parking demand should be investigated. ▪ Wayfinding signs should be provided to guide drivers toward nearby parking for both public and private facilities. 		
Resources:	<p>1. Avondale Livable Centers Initiative, Final Report.</p> <p>2. The City of Raleigh, North Carolina is in the process of updating their own parking standards according to the work of Donald Shoup, who is a parking management expert, author of <i>The High Cost of Free Parking</i> and other works, and a professor of urban affairs at UCLA. For additional information about Raleigh’s parking study and policy changes, the City of Raleigh’s Planning Department can be contacted (www.raleigh-nc.org/planning/index.htm). The City of Madison Wisconsin’s Park and Walk program (www.cityofmadison.com/parking/10hr2.html) uses parking placement, reduced pricing, and extended time limits to encourage visitors to park in certain downtown locations and then walk from destination to destination.</p>		

12. Do parking regulations provide for and encourage reductions of on-site spaces? Do land use regulations include a minimum *and* maximum parking requirement?

Commentary:	<p>Planners and policy makers now realize that minimum parking requirements in land use codes have been excessive. The “seas” of unused parking spaces within parking lots are a testament to this point. Smart growth means excessive parking requirements are reduced and maximum parking thresholds are established for various commercial and other uses (1). Maximum limits restrict the total number of spaces that can be constructed rather than establish a minimum number that must be provided. They are set the same way as minimum parking requirements, typically based on square footage of a given land use. Portland, San Francisco, and Seattle are cities that established maximum parking requirements in order to promote alternative forms of transportation, limit impervious surface, and reduce costs for parking construction and maintenance (2). Flexible parking strategies, such as joint or shared parking, provide opportunities to reduce the number of required on-site spaces without reducing parking supply. In shared parking, the goal is to pair land uses that have different peak parking demands. For example, pairing an office building with an entertainment facility or church reduces the number of vacant spaces throughout the week. Partners in shared parking would be required to submit a shared parking agreement that details use, maintenance, liability, et cetera (3). Then, excess parking spaces (particularly front lots and those adjacent to sidewalks) in prime downtown locations could be converted into public spaces like parks or plazas (4,8). </p>		
Source Document(s):	Code of Ordinances	Infill Housing Standards	
Audit:	<input type="radio"/>	<input checked="" type="radio"/>	
Review:	<p>Decatur ordinances (Zoning Section 8.2 and Zoning district regulations) only use minimum requirements. Further, they do not address space reductions in general or specific space requirements around transit and mixed-use districts. New Infill Housing Standards reduced residential requirements from 2 to 1 spaces per unit. Concerning flexible parking strategies, the ordinances allow joint parking in certain circumstances, but the restrictions on it do not encourage its use.</p>		
Recommendations:	<p>Based on the results of the parking management study, the City should consider the following:</p> <ul style="list-style-type: none"> ▪ The Code of Ordinances should provide both minimum and maximum parking space requirements in order to prevent excessive supply. (5,7) ▪ The Code should provide guidance for alternative parking strategies and incentivize their use. (6,7) 		
Resources:	<p>1. Jerry Weitz and Associates, Inc. (2001). “ARC Smart Growth Audit”. <i>Community Choices: Quality Growth Toolkit</i>. 2. Forinash, C., Millard-Ball, A., Dougherty, C. and J. Tumlin. Smart Growth Alternatives to Minimum Parking Requirements. 2nd Urban Street Symposium, June 2006. <http://www.urbanstreet.info/2nd_sym_proceedings/Volume%202/Forinash_session_7.pdf> 3. “Model – Shared Use Agreement for Parking Facilities.” South Carolina Department of Health and Environmental Control. March 2007. <http://www.scdhec.net/environment/baq/docs/ModelOrdinances/SharedParkingAgreement.pdf> 4. EPA. (2006). Parking Spaces/Community Places: Finding the Balance through Smart Growth Solutions. January 2007. <http://www.epa.gov/piedpage/pdf/EPAParkingSpaces06.pdf> 5. Gibbons, Jim. (1999). NEMO Technical Paper Number 5: Parking Lots. UConn Cooperative Extension System. 6. City of Portland Metro Region. (2006). Metro Shared Parking Handbook. December 2006. <http://www.metro-region.org/article.cfm?articleid=435> Metro Handbook contains community examples and a model ordinance for smart growth parking</p>		

	<p>strategies.</p> <p>7. Duany Plater-Zyberk & Company, <i>SmartCode v8.0</i>. <http://www.smartcodecomplete.com/learn/downloads.html> Provides example parking guidelines and procedures for determining shared parking requirements (Article VI, Tables 11 and 12).</p> <p>8. <i>Finding a Place for Parking</i> provides a framework for providing parking without diminishing public spaces. It offers “10 Questions to Help Us Get the Most Out of Parking”. <http://www.pps.org/info/placemakingtools/issuepapers/place_for_parking></p>
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13. Is bicycle parking required in zoning regulations for commercial, retail, and industrial projects? Are strategies in place for retro-fitting bike parking near existing structures?

Commentary:	<p>According to the Bicycle Facility Design Toolkit (1), lack of convenient, safe and weather protected bicycle parking is a major disincentive to bicycle use. Bicycle parking should be provided in public spaces and also a requirement at private commercial/retail properties to facilitate bike riding for more than recreation. A good bicycle rack will: support the bicycle frame in at least two places, allow the frame and wheel to be locked using a U-lock or cable lock, prevent the wheel of the bicycle from tipping over, be durable and securely anchored, and allow front-in or back-in parking. Short-term (bike racks), medium-term (bike lids), or long-term (bike lockers) parking accommodations should be provided based on user demands. Bike parking should also be spaced appropriately and should not impede pedestrian flow. Provision of secure bicycle parking (like lockers) should be a priority at transit stations, since non-automobile modes account for a significant number of transit access trips.</p>		
Source Document(s):	Code of Ordinances		
Audit:	○		
Review:	Bicycle parking is currently not required in zoning regulations.		
Recommendations:	<ul style="list-style-type: none"> ▪ The proposed bicycle parking ordinance referenced in the <i>Interim Bicycle Master Plan</i> (VI-7) and draft <i>City of Decatur Bicycle Parking Guidelines</i> would properly address this issue. Bicycle parking should at least be provided at all public facilities, especially in the downtown. ▪ Bicycle racks prescribed in the <i>Streetscape Design Guidelines</i> should be consistent with those suggested in the draft bicycle parking guide. ▪ Public Works Standards should be created for proper installation (1) and the Public Works Department should identify inadequate or incorrectly installed bicycle parking in public places and ensure that it is fixed. ▪ Signage and maps should be used to inform residents and visitors of bicycle parking locations. ▪ Like publicly supplied car parking, the City should explore publicly supplied and centralized bike parking in the downtown. Such facilities could allow bikers to park their bikes and move about the core of the City by foot. A centralized bike “lot” would require signage like that supplied for car lots. 		
Resources:	<p>1. Toole Design Group, LLC with City of Baltimore. <i>Bicycle Facility Design Toolkit</i>. April 2006. <http://www.liveearnplaylearn.com/Publications/BaltimoreCityBicycleMasterPlan/tabid/98/Default.aspx></p>		

SAFETY

14. Are transit stops safe (protected from automobile traffic and crime) and easily identifiable?			
Commentary:	The built environment plays a significant role in deterring transit use. While higher crime rates are not usually a direct result of transit presence, a heightened perception of danger can still develop. This is mostly due to environmental factors like isolated stops (lack of “eyes on the street”) or poor lighting. Also, those accessing transit (particularly bus) are often pedestrians and so there is a heightened concern over accidental injury from passing vehicles. Regulations should ensure that all transit stops are clearly marked, bus shelters are provided where appropriate, and bus stops are separated from the street and well-lit.		
Source Document(s):	Code of Ordinances	Streetscape Design Guidelines	Avondale LCI
Audit:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Review:	All measures that make streets pedestrian friendly are relevant to areas in the vicinity of transit stops. These measures are addressed in questions 3, 4, 5, and 7. Currently, these issues are not addressed in Decatur’s documents specifically for bus stops. Safety at MARTA rail stations is already being addressed by the Avondale LCI and downtown MARTA Plaza redevelopment.		
Recommendations:	<ul style="list-style-type: none"> Coordinate with MARTA to develop standards for bus stops within the City of Decatur and to provide bus shelters in the downtown and high-demand areas. The measures could include provision of bus shelters, public phones and passenger assistance alarms, and improved signage (1). An update to Chapter 86 of the Code of Ordinances should include the standards for bus stops and for pedestrian facilities and streetscaping that surround them. 📷 		
Resources:	1. Institute of Transportation Engineers (ITE). (2006). <i>Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities</i> . January 2007. < http://www.ite.org/css/ >		

15. Has the City designated and established safe routes for children to walk or bike to school?

Commentary:	In 1969, approximately half of all students walked to school; today, only about 15 percent walk. The decline in walking or biking to school has contributed to increased congestion and air pollution, worsening pedestrian and bike safety, and a rise in certain childhood health problems. Parents often cite dangerous traffic conditions as the reason their children cannot walk to school. The Federal Safe Routes to School Program provides funding for communities to establish safe routes to school through physical improvements and educational programming (1).		
Source Document(s):	Comprehensive Plan	Code of Ordinances	LCI Plans
Audit:	○	○	○
Review:	The audited documents do not fully reflect the City's participation in the Safe Routes to School Program. The <i>Safe Routes to School in the City of Decatur Schools</i> report, which was released in April 2007, reveals that a pilot program conducted at Clairemont Elementary and Glenwood 4-5 Academy increased walking/biking to those schools by well over 50 percent. The success of the program was due to a combination of physical route improvements, increased presence of crossing guards, education efforts, and encouragement programs.		
Recommendations:	<ul style="list-style-type: none"> Assuming funds becomes available through GDOT, expand Safe Routes to School Program to all city schools. The Comprehensive Plan and Code of Ordinances should be updated to encourage and/or require pedestrian and bicycle access to schools. Physical measures should be consistent with traffic calming guidelines and the recommendations of questions 4 and 7 (related to sidewalks) and 5 and 8 (bicycle facilities). School zones and designated safe routes could receive lower speed limits (currently set at 25 mph for school zones) and be established as speed enforcement zones in Sections 98-148 and 149 of the Code. Safe routes should be clearly marked and advertised in order to encourage year-long use and increase driver awareness. Designated "safe routes" should receive priority for physical improvement funding from the <i>Community Transportation Plan</i>. For example, safe routes could receive special consideration in the traffic calming prioritization system proposed as part of the plan. The City should maintain and enhance relationships with the Decatur schools to facilitate educational and promotional programs on safe and active travel. 		
Resources:	1. FHWA. Safe Routes to School Program. January 2007. < http://safety.fhwa.dot.gov/saferoutes/index.htm >		

LAND USE & COMMUNITY DESIGN

16. Does the City use the capacity of its infrastructure (transportation network) in planning for development? Specifically, are developers required to submit detailed transportation impact assessments as part of the city's approval process?			
Commentary:	Development should be pursued in areas well-served by multiple transportation modes and in a way that encourages active transportation.		
Source Document(s):	Code of Ordinances		
Audit:	<input type="radio"/>		
Review:	It is not evident from the Code that the capacity of the transportation network (especially beyond roadways) is given substantial consideration in development decisions.		
Recommendations:	Update the RFP process to require a transportation impact assessment be completed for new development. This study should go beyond a traditional traffic impact assessment and quantify effects on pedestrians, bicyclists, and transit users in addition to motorists. Such a study would emphasize the positive impacts of mixed-use developments and TODs.		
Resources:	1. Georgia DCA. (2003). <i>Model Code: Alternatives to Conventional Zoning</i> . January 2007. < http://www.dca.state.ga.us/development/PlanningQualityGrowth/index.asp > Section 7-6 contains requirements for a traditional traffic impact study. Additional requirements such as pedestrian and bicycle LOS analysis should be added.		

17. Does the land use plan designate areas, where appropriate, for mixed-use development? Do regulations allow for and provide incentives to promote transit-oriented development (TOD)?			
Commentary:	Mixed-use development promotes alternative modes of transportation by shortening distances between different land uses. Dense, mixed-use development in close proximity to transit stops allows residents easy access to both jobs and walkable retail. Designating specific areas for mixed-use development can benefit both the city and the private developers by conveying a clear picture of desired development patterns. By designating specific areas, the city can focus on providing additional services and infrastructure needed to support and complement the (proposed) mixed-use development.		
Source Document(s):	Comprehensive Plan	Code of Ordinances	
Audit:	<input type="radio"/>	<input type="radio"/>	
Review:	Although current regulations allow multiple uses in/around downtown, mixed-use is not specifically mentioned. Oakhurst, Avondale, the Downtown, Suburban Plaza, and the College Avenue Corridor have been identified as nodes for core development (thus perfect for mixed-use), but they are not officially designated as such on the land use or zoning map. Ordinances encouraging TOD (like overlay districts with density bonuses or mixed-use designation) are not incorporated into the code. Nevertheless, Avondale LCI provides an example of TOD in Decatur.		
Recommendations:	<ul style="list-style-type: none"> The Land Use Map should be updated to designate areas for potential mixed-use development. Placing dense, mixed-use development near transit stations contributes to reduction in automobile use. 		

	<ul style="list-style-type: none"> ▪ Zoning Ordinances and Infill Development Guidelines should be updated to provide more specific design guidelines for mixed-use (similar to DDSPA regulations). Ordinances should encourage mixed-use buildings. ▪ The Code of Ordinances should be updated to include incentives for transit-oriented development, like density bonuses for compact development within a ½ mile of transit stops. ▪ Like the current bond issue that is identifying gaps in the existing sidewalk network, the City should continue to monitor for gaps as new development creates new destinations that need to be connected to existing neighborhoods or other community centers.
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POLICY & PROCEDURES




18. Do city plans include a transportation element that addresses long-range needs for roads, sidewalks, bicycle paths, transit, and goods movement?

Commentary:	Georgia's minimum planning standards require a community facilities and services element, which includes consideration of transportation needs. However, a separate transportation component or element is not required. "Smart" comprehensive plans provide detailed assessments of travel needs via multiple modes (1). One aspect of this is urban goods movement, which is defined as "transportation of, and terminal activities associated with, the movement of things as opposed to people" within and through an urban area by all modes (this includes some personal shopping trips as well) (2). While Decatur does not contain a major truck route, county truck routes do cross through Decatur on US and state roads. Small truck delivery in the City is a significant goods movement concern for efficient traffic flow.		
Source Document(s):	Comprehensive Plan	Strategic Plan	Bicycle Master Plan
Audit:	○	●	●
Review:	The Comprehensive Plan, Strategic Plan, and Bicycle Master Plan address short-term and long-term goals for roads, sidewalks, bicycle paths, and even transit, but do not adequately address goods movement. The Strategic Plan suggests working with business owners to limit the hours and location of small truck delivery to reduce traffic congestion in the downtown.		
Recommendations:	<ul style="list-style-type: none"> While the <i>Community Transportation Plan</i> recommends solutions for the long-term transportation needs of the City, a mechanism must be in place to guide implementation of the plan's recommendations. The future Land Use Plan should be consistent with recommendations from the <i>Community Transportation Plan</i>. The Comprehensive Plan should be updated to include analysis and goals for goods movement—additional study will be needed to properly address this issue. Freight study should document patterns of freight movement, local generators or recipients of freight, traffic congestion due to freight movement, and projected growth in freight movement due to infill development and regional growth. This effort must keep in mind that the City deals with long-haul freight (largely in the form of rail traffic) and local serving freight (deliveries to local businesses and residences). Update ordinances for truck delivery based on goods movement study. 		
Resources:	<ol style="list-style-type: none"> 1. Jerry Weitz and Associates, Inc. (2001). "ARC Smart Growth Audit". <i>Community Choices: Quality Growth Toolkit</i>. 2. Urban Goods Movement Task Force, <u>Departmental Action Plan and Report to the Secretary</u>, Washington, DC: US Department of Transportation, 1973. 		

19. Are budgetary provisions consistent with Decatur's goals?			
Commentary:	The City's annual operating budget should be directly tied to the recommended projects and programs to ensure sufficient allocation of funds for indirect costs and staff time. In other words, there should be a direct connection between planning activities and budgeting.		
Source Document(s):	Short-term Work Plan		
Audit:	○		
Review:	The Work Plan was audited in place of the City Budget.		
Recommendations:	The work programs should be updated to reflect the grant and bond funding that have recently been made available (GDOT's Transportation Enhancement Grants for streetscape improvements and bicycle lanes, bond funding for recreation improvements, and a grant from the Governor's Office of Highway Safety for educational programming).		

20. Does the comprehensive plan designate which department(s) are responsible for planning and carrying out tasks? Are there corrective measures in place when tasks are not completed (on time or within budget)?			
Commentary:	Designating tasks to specific departments assists in maximizing services to the city's residences and businesses and minimizes inefficiency and redundancy. Corrective measures should be established to ensure accountability for task completion and budget spending.		
Source Document(s):	Comprehensive Plan	Short-term Work Plan	Strategic Plan
Audit:	○	○	○
Review:	The Comprehensive Plan does not address responsibility and accountability for planning activities. The Short-term Work Program designates a "responsible party" but should go further and specify department(s) or individuals within the City to plan and/or carry out each task. The Strategic Plan outlines tasks to be completed for each recommended project, including a schedule for their implementation and responsible parties—although at times, these assignments are vague and do not designate who should <i>initiate</i> the task. A monitoring plan was also recommended in the Strategic Plan to track completion of goals; however there is no evidence that one was officially instituted.		
Recommendations:	<p>The City can improve transparency by establishing timelines, designating responsibilities, and monitoring project performance. This can be accomplished by:</p> <ul style="list-style-type: none"> ▪ Providing more specific designations of "responsible party" in the work plans. ▪ Utilizing the monitoring program to periodically assess progress on tasks in the short-term and long-term work programs (which should correspond to goals in the Strategic Plan) and to enact corrective measures for not completing tasks on time or within budget. ▪ Including performance benchmarks and scheduled progress reports (at least at the midpoint and completion date) in plans. For example, the Bike and Pedestrian Plan makes recommendations for route expansions and LOS improvements, but lacks a mechanism for monitoring them. 		

21. Does the City promote alternative forms of transportation for residents, employees, city staff, and visitors?

Commentary:	The City should implement the appropriate programs that will provide for safe and adequate movement around the city and promote alternative forms of transportation.			
Source Document(s):	Comprehensive Plan	Strategic Plan	Bicycle Master Plan	City Employee Policies
Audit:	○	○	○	○
Review:	Events and programming in Decatur, like last year's "Walk and Roll to School Day" and the Cash for Commuters program, illustrate that City staff and officials are actively supporting alternative modes of transportation. However, additional programming that targets a larger segment of the population should be investigated.			
Recommendations:	<ul style="list-style-type: none"> ▪ Work with Decatur employers to provide commute options through a parking voucher program, subsidized MARTA passes, or promotion of the City's rideshare program. Emory University's incentives program for alternative transportation is a great model (1). ▪ All commute options provided by Decatur (rideshare program, "Car-free Days", etc.) should be highly visible on the City's website. ▪ Target City employees with flexible commute options and use of alternative transportation during business hours (2, 3). <p>Residents <i>and</i> visitors can be reached through:</p> <ul style="list-style-type: none"> ▪ Developing a "wayfinding" strategy for the City that includes better demarcation of transit stops and routes, biking and walking routes to downtown attractions, parking locations, and multi-modal connections (see Question 2).  ▪ Use innovative marketing of transportation opportunities and programming: in addition to using the website and mailings, visual reminders (banners, signs, pavement markings, public art) throughout the Downtown could reach a larger segment of the population.  ▪ Adopt a City-wide policy that requires that all advertisements for special events highlight directions for walking, biking, and taking transit to the event. ▪ At the public meetings held for the <i>Community Transportation Plan</i>, pedestrian-only zones in the downtown were a frequent point of discussion. "Pedestrian malls" could be created permanently or periodically through street closures. A local example is Broad Street in the Fairlie Poplar District of Atlanta, which is closed every Friday during summer months for outdoor concerts and dining. In Decatur, a "festival street" may be appropriate on East Ponce, bounded by Commerce. Movable planters could be used to reduce the number of lanes and widen sidewalk space, or close the street altogether. The street could then be used regularly or for special occasions to accommodate street vendors, entertainment, and social interaction. With a closure of East Ponce, traffic would be diverted onto Commerce Street, which would require upgrades to accommodate increased traffic volumes.  (See Gallery for a more detailed explanation of festival streets.) 			

Resources:

1. "Alternative Transportation." Emory University Transportation Services. 15 March 2007. <<http://www.epcs.emory.edu/alttransp/index.html>>
2. The cities of Phoenix, Arizona and Corvallis, Oregon both require city employees to use alternative modes when at work (when applicable). Phoenix also provides all city employees with a 100 percent bus subsidy and encourages flexible work hours (<http://phoenix.gov/ENVPGM/airqual.html>).
3. Corvallis's Public Works Department provides a list of other sustainable transportation policies that were recently employed throughout the city (http://www.ci.corvallis.or.us/index.php?option=com_content&task=view&id=1825&Itemid=2099).
4. Chapter 24 of FHWA's Course on Bicycle and Pedestrian Transportation provides other examples of supporting educational programs.

Conclusion

As this audit indicates, there are several topics where the City of Decatur has adopted policies and processes that support the community's vision and accepted best practices. In some arenas, the policies do not meet the vision and principles. This occurs due to a variety of reasons, including some beyond the City's immediate control. Several broad issues were observed during the audit that should be addressed to achieve the City's desired future.

- There is a disconnect between plans and policies—goals should be codified to improve transparency.
- While there is an expressed desire to facilitate active lifestyles and encourage use of non-motorized transportation modes, walking and biking are presented primarily perceived as fitness or recreation activities rather than as alternative modes of transportation.
- Roadway design guidelines (based on GDOT Design Guidelines) are not consistent with smart growth principles. They should emphasize “complete streets” (designed and operated to enable safe access for all users) and “road diets” (creating narrower roadways through lane number or width reduction).
- New development or re-development should be designed with multimodal use in mind.

Several deficiencies noted in the initial stages of the audit are being addressed by the Community Transportation Plan and are summarized in this section. As noted above, roadway design standards are not in line with smart growth principles. However, this is being addressed in the *Community Transportation Plan's* street typology, which includes reduced street widths, pedestrian/bike facilities, and other features that are customized to a roadway's urban environment. The recommendations of street typology should be incorporated into the Code of Ordinances (Chapter 90, Article III, Division 2) to replace the car-oriented functional classification system that is currently in use.

Another issue that has been emphasized in public feedback is the need for traffic calming in the neighborhoods and downtown. While an important aspect of building complete streets, traffic calming is not formally addressed in Decatur's current regulations. As called for in the Comprehensive Plan, a traffic calming scheme and prioritization process has been formulated as part of the *Community Transportation Plan*. The proposed *City of Decatur Residential Area Traffic Calming Program* should be included in the Comprehensive Plan and actively promoted to residents. Further, basic traffic calming techniques such as pedestrian bulb-outs, lane width reduction, on-street parking, and streetscaping have been incorporated into intersection redesign concepts, also included in the *Community Transportation Plan*.

Railroad crossing safety is another top priority for Decatur residents and one which is being actively pursued by city government. Decatur recently incorporated safe railroad crossings into its Safe Routes to Schools pilot program by posting officers at crossings, an effort that should be continued with or without the Safe Routes program. Three railroad crossing intersections were also prioritized for analysis under the *Community Transportation Plan*. Geometric design changes, bicycle and pedestrian facility improvements, and signal timing adjustments have been recommended for the intersections of College/Candler/Trinity, McDonough/Howard/College, and Howard/College/Atlanta and could greatly improve safety and connectivity. Additional efforts, possibly through the non-profit Operation Lifesaver, can be used to educate citizens, especially children, on safety while crossing railroad tracks.

Parking management, the final issue, has been cited as a priority for Decatur as early as the 1982 *Town Center Plan*. In particular, on-street parking encourages shopping or entertainment trips and can provide traffic calming effects that create a pedestrian-friendly environment, necessary for a thriving downtown. The proposed *Decatur Street Typology* addresses on-street parking in the downtown core and along mixed-use corridors, which typically experience higher levels of pedestrian traffic than other roadways. Further, intersection redesigns that are proposed in this plan include the addition of on-street parking in appropriate locations.

Through the audit, it became apparent that the Code of Ordinances relies heavily on City manager and City engineer to review development plans and provide standards on a case-by-case basis. Because of the city's slow rate of development (due to near build-out) and knowledgeable and experienced staff, this system currently works very well for the City. However, it would be prudent to standardize this knowledge for future staff, either through amendments to the Code or more importantly formal Public Works Standards. Planning staff could also formulate and utilize a "Decatur Smart Growth Development Checklist" during proposed development reviews (see Resource Documents 3, 4, 13, and 16).


Resource Documents

This section contains numerous documents that provide examples of designs, codes, policies, and practices that pertain to the topics addressed in the audit.

1. "Alternative Transportation." *Emory University Transportation Services*. March 2007.
<<http://www.epcs.emory.edu/alttransp/index.html>>
2. "Center City Circulation Report." *SDOT Policy Planning and Major Projects*. March 2007.
<<http://www.seattle.gov/transportation/ppmpcentercity.htm>>
3. City of Edmonton, Planning and Development. (2006). "Smart Choices Development Checklist." May 2007. <<http://www.edmonton.ca/smartchoices>>
4. City of New Westminster Planning Department. (2004). "Smart Growth Development Checklist." May 2007. <<http://www.city.new-westminster.bc.ca>>
5. City of Portland Metro Region. *Metro Shared Parking Handbook*. December 2006.
<<http://www.metro-region.org/article.cfm?articleid=435>>
6. City of Portland. *Sidewalk Handbook*. May 2007.
<<http://www.portlandonline.com/transportation/index.cfm?c=38721>>
7. City of Raleigh, North Carolina. *Parking Study*. <www.raleigh-nc.org/planning/index.htm>
8. "Cobb County Utility Permitting Procedures." Cobb County Department of Transportation. January 2007. <<http://dot.cobbcountyga.gov/utilities.htm>>
9. Duany Plater-Zyberk & Company, *Smart Code v. 8.0*.
<<http://www.smartcodecomplete.com/learn/downloads.html>>
10. EPA. (2006). *Parking Spaces/Community Places: Finding the Balance through Smart Growth Solutions*. January 2007. <<http://www.epa.gov/piedpage/pdf/EPAParkingSpaces06.pdf>>
11. "Finding a Place for Parking." *Project for Public Spaces*. April 2007.
<http://www.pps.org/info/placemakingtools/issuepapers/place_for_parking>
12. FHWA. (2006). *University Course on Bicycle and Pedestrian Transportation (for Planners and Designers)*. March 2007. <http://safety.fhwa.dot.gov/ped_bike/>
13. Fleissig, W. and Jacobsen, V with Congress for New Urbanism and US EPA. (2002). "Smart Scorecard for Development Projects." May 2007.
<http://www.epa.gov/dced/scorecards/Scorecard_expfleissigjacobsen.pdf>
14. Forinash, C., Millard-Ball, A., Dougherty, C. and J. Tumlin. *Smart Growth Alternatives to Minimum Parking Requirements*. 2nd Urban Street Symposium, June 2006.
<http://www.urbanstreet.info/2nd_sym_proceedings/Volume%202/Forinash_session_7.pdf>
15. Georgia Department of Community Affairs. (2003). *Model Code: Alternatives to Conventional Zoning*. January 2007.
<<http://www.dca.state.ga.us/development/PlanningQualityGrowth/index.asp>>

16. Georgia Department of Transportation. (2006). *Georgia Guidebook for Pedestrian Planning*. <http://www.dot.state.ga.us/bikeped/pedestrian_plan/>
17. Gibbons, Jim. (1999). *NEMO Technical Paper Number 5: Parking Lots*. UConn Cooperative Extension System.
18. ITE. (2006). *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities: An ITE Proposed Recommended Practice*. January 2007. <<http://www.ite.org/css/>>
19. ITE. (2006). *Context Sensitive Solutions in Multi-modal Urban Corridor Planning: Arlington, VA* (white paper). January 2007. <<http://www.ite.org/css>>
20. "Model - Shared Use Agreement for Parking Facilities." *South Carolina Department of Health and Environmental Control*. March 2007. <<http://www.scdhec.net/environment/baq/docs/ModelOrdinances/SharedParkingAgreement.pdf>>
21. "Park and Walk." *City of Madison*. March 2007. <<http://www.cityofmadison.com/parking/10hr2.html>>
22. "Seattle Right-of-Way Improvement Manual." March 2007. <http://www.seattle.gov/transportation/rowmanual/manual/table_of_contents.asp>
23. "Six Steps to a More Walkable Seattle." *Seattle Pedestrian Advisory Board*. March 2007. <<http://www.seattle.gov/spab/default.htm>>
24. Smart Growth Leadership Institute. (2005). *Code and Zoning Audit Tool*. Nov 2006. <http://www.epa.gov/dced/scorecards/SGLI_code_audit_draft_111405.pdf>
25. Toole Design Group, LLC with City of Baltimore. *Bicycle Facility Design Toolkit*. April 2006. <<http://www.liveearnplaylearn.com/Publications/BaltimoreCityBicycleMasterPlan/tabid/98/Default.aspx>>
26. US Department of Justice. (1994). *ADA Standards for Accessible Design*. March 2007. <<http://www.ada.gov/stdspdf.htm>>

Gallery

Throughout the audit several topics were marked with . This icon identifies concepts that can be better understood with visual depiction. For example, concepts like interparcel connectivity, wayfinding and education signage, and curb cuts can be better illustrated through the images and drawings contained in this gallery. These images are

Pedestrian Facilities at Intersections

This section provides examples for the layout of intersections that support pedestrian mobility and safety.



Figure 1. Poorly designed curb ramp forces individual into the intersection (from PBIC Image Library, Dan Burden)



Figure 2. Well defined curb extension, perpendicular curb ramps and crosswalks set back from intersection (from PBIC Image Library, Dan Burden)



Figure 3. Example of median island with pedestrian cut-through (from PBIC Image Library, Dan Burden)

Bus stops

Provision of more comfortable and safer bus stops could encourage higher rates of transit use.



Figure 4. Adding sidewalk and a bench makes this bus stop more inviting. (From Pedestrian and Bicycle Information Center Image Library, Dan Burden)



Figure 5. Additional bus shelters throughout Decatur could contribute to higher ridership, particularly on days with bad weather. Note the lighting and trash receptacle as well. (From Pedestrian and Bicycle Information Center Image Library, Dan Burden)



Figure 6. Simple bus shelter with creative seating. (from Glatting Jackson)



Figure 7. More amenities can be provided at high-demand bus stops. This enclosed stop includes internal lighting and an emergency phone. (From Pedestrian and Bicycle Information Center Image Library, Dan Burden)

Educational Signage



Figure 8. Sidewalk panels that provide educational information about the community history or the natural environment make walking routes more interesting.



Figure 9. Banners with motivating slogans like these can combine the promotion of increased levels of physical activity with environmental concern.

Interparcel Connectivity and Access Management

Interparcel connectivity is a component of better access management. It involves consolidating vehicular access points and removing barriers to free movement of vehicles and pedestrians between adjoining parcels. The first image provide an example of restricted access in Decatur.



Figure 10. Lack of interparcel connectivity behind Decatur City Hall creates an unwelcoming pedestrian environment and requires multiple access points.

The images below show examples of improvements in access management and the creation of more pedestrian/bicycle-friendly environments.



Figure 11. Illustration of how consolidating driveways improves pedestrian environment and aesthetics (from Glatting Jackson)

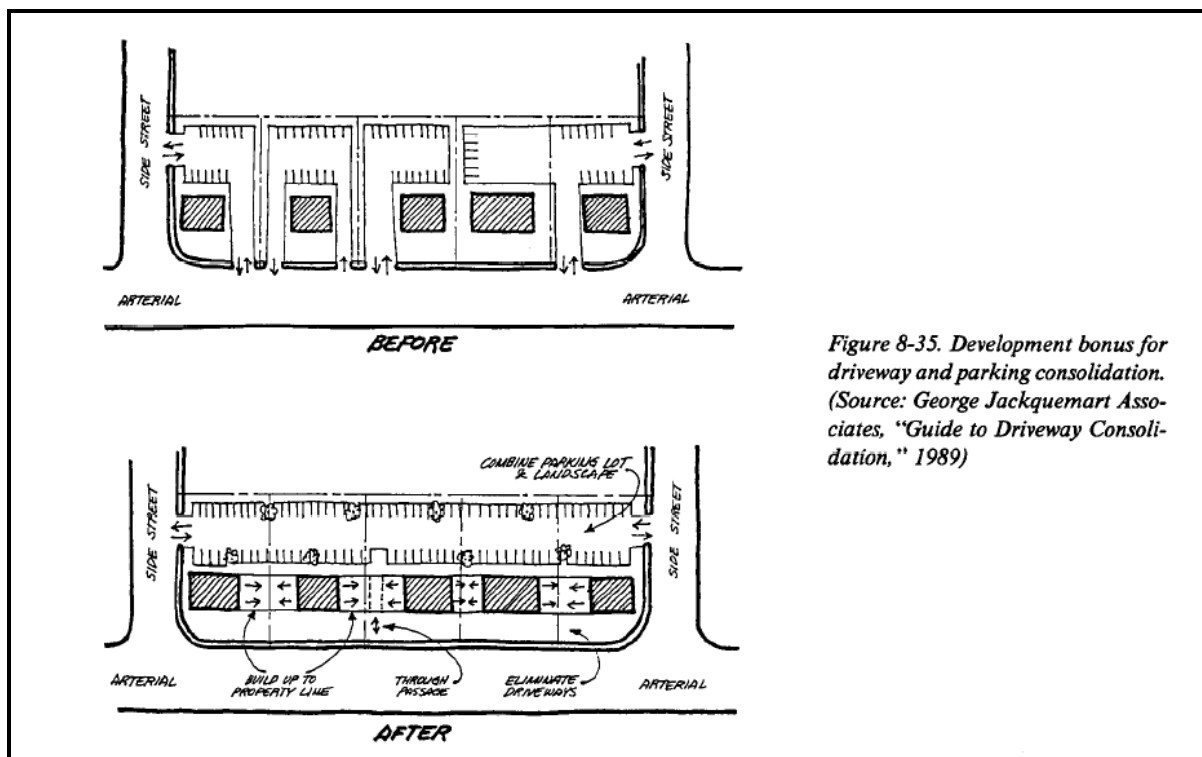


Figure 8-35. Development bonus for driveway and parking consolidation. (Source: George Jacquemart Associates, "Guide to Driveway Consolidation," 1989)

Figure 12. Improved pedestrian and bicycle environment by connecting parcels and consolidating entry points.

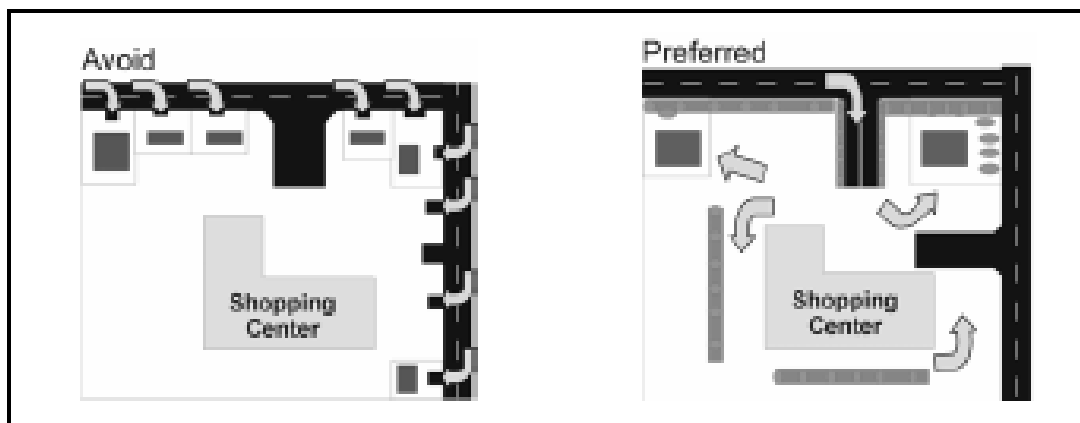


Figure 13. Improved access management (from *Effective Strategies for Comprehensive Corridor Management* at www.cutr.usf.edu)



Figure 14. Good example of pedestrian path through a parking area. (From www.leics.gov.uk/index/highways/road_improvements/htd/highway_req_development_part3.htm)

Interparcel connectivity is also important in a residential setting, as cul-de-sacs and neighborhood boundaries often create barriers to schools, parks, and other destinations. The images below provide examples of pedestrian and bicycle cut-throughs.



Figure 15. Cut-throughs in residential setting (from Pedestrian and Bicycle Information Center Image Library, Dan Burden)



Figure 16. Bike and pedestrian path connecting a cul-de-sac to a local school (From www.saferoutesinfo.org/guide/engineering/connectivity.cfm)

Public Art

The following images provide examples of innovative forms of public art.



Figure 17. Creative bicycle rack (and the proper type)
(From Pedestrian and Bicycle Information Center Image Library, by Dan Burden)



Figure 18. Public art in the form of benches
(From Pedestrian and Bicycle Information Center Image Library, Reed Huegerich)



Figure 19. Public art (and proper lighting) in a Seattle tunnel creates a more inviting environment
(From Pedestrian and Bicycle Information Center Image Library, Dan Burden)



Figure 20. Painted light post (From www.livingstreets.org.uk)

Street Closure for Pedestrian Malls

In downtown Atlanta's Fairlie Poplar district, Broad Street is transformed every Friday during summer months into a large outdoor patio and concert hall. It is just one example of potential gains in public space through street closure.



Figure 21. Broad Street during SunTrust Lunch on Broad (from CAP/ADID, www.atlantadowntown.com, Michael Brown)



Figure 22. Bollards (left) and movable planters (right) can be used for temporary street closures (from PBIC Image Library, Dan Burden and Michael King)

Pedestrian malls can also be created on a temporary basis if streets are designed for multiple functions. For example, a “festival street” is a street that can be closed for farmer’s markets, arts festivals, concerts, and other community events.¹ They include special provisions for booths, vendors, and music such as electric outlets, water connections, and public announcement plug-ins. Portland, Oregon recently completed construction of two festival streets in the Old Town Chinatown district (see Figure 23). The festival streets are described as streets without curbs, where bollards or trees delineate the boundary between sidewalk and roadway. Cars can drive and park on the festival streets, but the streets are designed so they can be temporarily closed to traffic for neighborhood events. The street surface is often composed of a scored concrete bounded and/or pavers. (from www.portlandonline.com)



Figure 23. Conceptual drawing of festival street in Old Town Chinatown (left) and completed festival street during Under the August Moon Festival held in 2006 (from www.portlandonline.com/ and www.pdc.us respectively)

¹ From Charlier Associates.



Figure 24. Festival street used for Texas Blueberry Festival - note the lack of curbs (by Bruce Partain, Nacogdoches County Chamber of Commerce)

Universal Design

Decatur residents and visitors represent a diverse population that varies in age, income, culture, and ability. Users include older adults, children, people with disabilities, non-English speakers, and others whose mobility can be affected by short- or long-term limitation in ability. Specifically, in the City of Decatur approximately 13 percent of residents are over the age of 65. According to the National Institute on Aging (2006), almost 80 percent of people over age 65 have at least one chronic health condition, and 50 percent have at least two chronic health conditions, which often lead to disability, which requires accommodations in the built environment to allow for mobility. Furthermore, there were more than 3,500 children under the age of 17 in the City of Decatur (Census, SF1, 2000). Low levels of physical activity and failure to meet the required activity levels have significant health consequences for children such as obesity, low bone density, and low physical fitness (Trost et al., 2001; Bailey & Martin, 1994). Thirty five percent of children in the US do not meet the minimum physical activity requirements, while 14 percent are totally inactive (CDC, 1997; US Department of Health and Human Services, 2000). Active forms of travel can help children get the recommended levels of physical activity.

Older adults, children, and people with long- and short-term disabilities have specific needs in order to effectively function within the community. Historically, specialized design for each of these groups has often resulted in segregation and stigmatization of these populations and increased the costs. A better solution can be found in the principles of Universal Design, which is design of “products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design” (Mace et al, 1991). Such a design philosophy can accommodate all people with different age and ability levels by the same design to become as inclusive as possible. Seven principles of Universal Design advocate equitable use, flexibility in use, simple and intuitive use, perceptible information, tolerance for error, low physical effort, and size and space for approach and use (CUD, 1997).

The Principles of Universal Design

- **Equitable use** means that designs need to be useful and marketable to people with different levels of ability. The main goal is to provide one design to accommodate all users. If it is not possible, then equivalent options should be available. It is crucial not to stigmatize individuals with specialized design that segregates or isolates them. Furthermore, accessible entrances at the back of the buildings can be a source of stigmatization and embarrassment. Instead, all buildings

should accommodate all users at the main entrances (Figure 25). In addition, playground features should be designed to be usable by various heights and ability levels so that children and adults, whether able bodied or using a wheelchair, can get involved in the children's play (Figure 26).



Figure 25. Examples of buildings that have inaccessible entrances (top photographs). Special attention needs to be paid to front entrances usable by all ability and age levels (bottom photographs).



Figure 26. Inclusive playgrounds with accessible and reachable design

- **Flexibility in use** recommends that products, buildings and environments should accommodate a wide range of individual preferences and abilities through various methods of use. Access and use should be possible by both left and right handed users. Products and environments should be compatible with the user's pace to accommodate the use by various ability levels. For example, traffic lights should be timed to give people, especially older adults, children, and people carrying loads or using assistive technology, enough time to cross the streets comfortably and without any

hazard. In addition, traffic and pedestrian signals may be designed to provide more information to assist pedestrians and drivers in achieving a safe environment within a shared right-of-way.

- Universal design also advocates for products and environments that enable **Simple and Intuitive Use**. This means that places should be simple enough to understand regardless of an individual's experiences, knowledge, language skills, or concentration level. The Decatur transportation system should be designed to eliminate complexity, organize information based on importance, and be consistent with an individual's expectations and intuition. Putting clear signage at appropriate places for the streets, stops, transit destinations, miles walked or remaining for trails, and maps is important for all users.
- **Perceptible Information** should be provided in diverse modes (e.g., auditory, visual, tactile) to match the skills of different users. For example, signs should use contrasting colors for the information and the background (e.g., white on black) to improve legibility, and signage and maps should have big enough letters and Braille for vision impaired users. Furthermore, travelways should use varying texture and color for pavement of streets, sidewalks, and bike paths to provide navigational guidance to older adults and others with vision loss, as well as provide additional locational information for the general public.

Sidewalks, trails, transit stops, and public pedestrian routes can better serve elderly, people with visual impairments, and people using wheelchairs by adding common types of information that can be perceived with several senses. For example, raised tactile surfaces, materials with contrasting sound properties, grooves, contrasting colors, and audible pedestrian signals can be used as detectable warnings and for wayfinding. Raised tactile surfaces contain textures detectable with the touch of a foot or sweep of a cane to warn for upcoming hazards or changes in the pedestrian environment. Raised tactile surfaces include truncated domes, patterned panels, and other textured designs. In United States, surfaces with truncated domes are required at transit stop platforms to indicate drop offs (Figure 27). However, these types of design can easily be employed at trails and sidewalks.

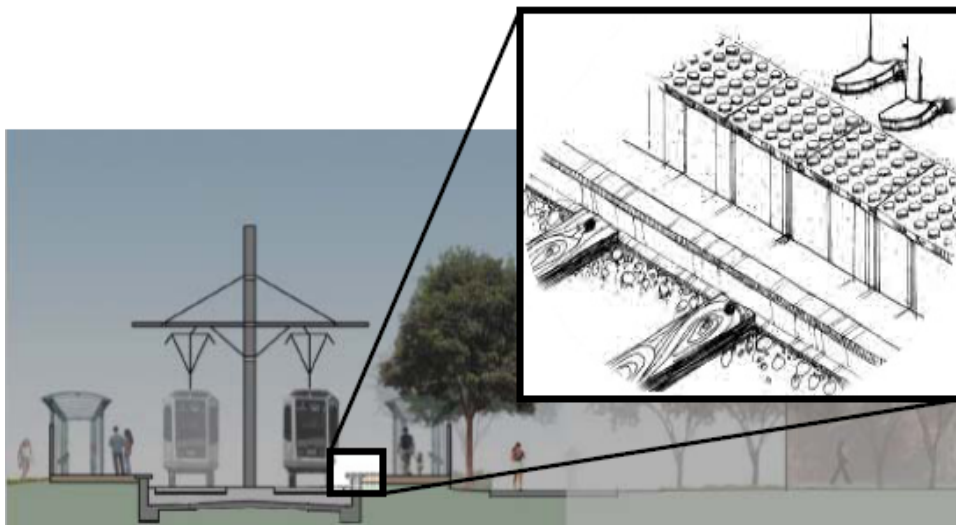


Figure 27. The use of raised tactile surfaces at transit stations (Beneficial Designs, Inc., 1999)

- **Tolerance for Error** requires designs that minimize hazards and accidents through warnings and the elimination, isolation, or shielding of hazardous elements. The design should seek to minimize

unconscious actions for tasks requiring attention, and to encourage users to be aware of their environments. Sidewalks and crossings are important to maximize mobility and minimize hazards for individuals who use wheelchairs, walkers and canes as well as those with an irregular or unsteady gait.

- According to the **Low Physical Effort** principle, products, buildings, and environments should be designed to be used efficiently and comfortably without the need of an extra operating force, awkward body position, unnecessary repetitive actions, or sustained physical effort. For example, the connectivity of neighborhoods through a web of streets and trails will decrease the time and effort spent reaching destinations compared to conventional community development with dead-end streets and cul-de-sacs. Another opportunity to provide amenities that require low physical effort can be found in seating features. For instance, a bench with a higher seat and handles can support elderly for sitting down and standing up and can also be used by able bodied users. Adjustable seating at public spaces can provide flexible use for wheel chair users as well as for all others (Figure 28).

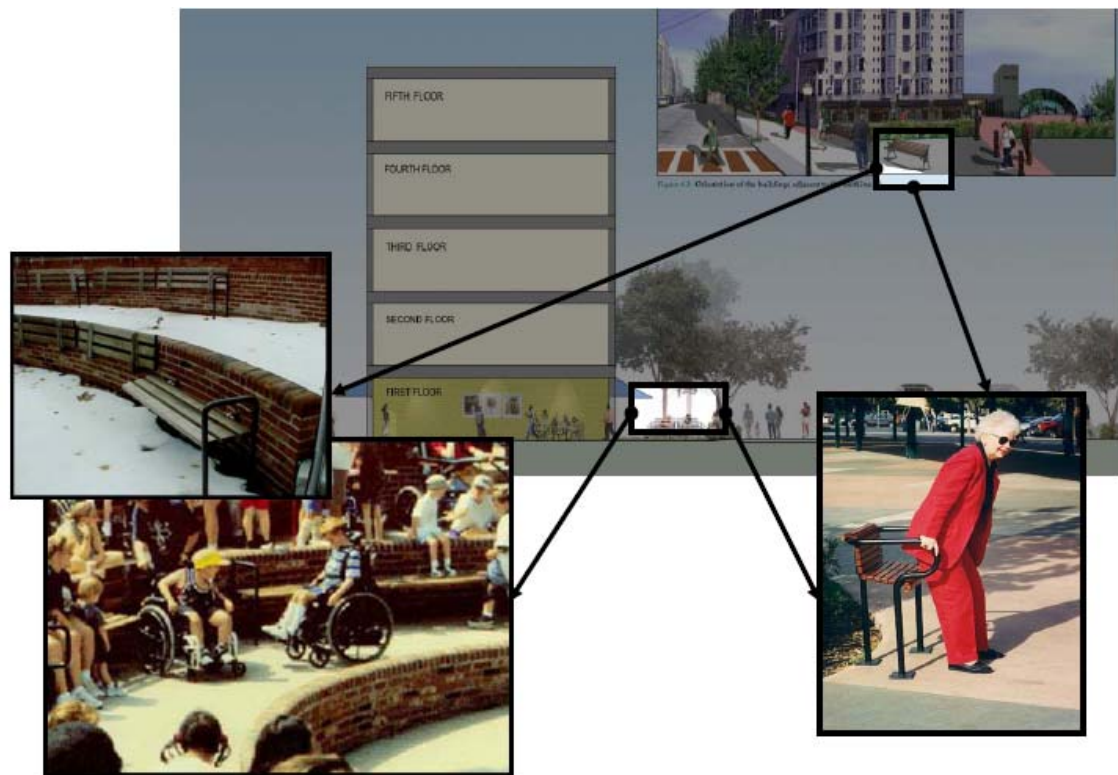


Figure 28. Seating features to accommodate special needs and be inclusive for all ability levels

- The principle of **Size and Space for Approach and Use** states that a design should be an appropriate size for the intended use (i.e., sufficiently large or small) and provide enough space for approach and use by people with different body sizes, assistive devices, or personal assistants. Components should be reachable by all heights and can be operable by all hand and grip sizes. Several Decatur design guidelines require adherence to applicable Americans with Disabilities Act (ADA) standards. However, there are points where ADA is not sufficient to enable mobility to wheelchair users due to recommended widths of the sidewalks and cross slopes. The

width of the sidewalks should be such that two wheelchair users can stroll together, side-by-side or with able-bodied companions and would not be limited by the presence of others (Figure 29).



Figure 29. Wide paths or sidewalks with adequate use for everyone

Wayfinding Signage

Often, pedestrian and bicycle routes to destinations differ from those used by automobiles. For this reason, wayfinding signage should differentiate between these routes and include details like distance estimates (compare Figures 30, 31 and 32).



Figure 30. Traditional wayfinding signage found in Atlanta (from www.atlantadowntown.com)



Figure 31. Pedestrian directional signage in England designates walking routes and approximate distances to destinations (from Pedestrian and Bicycle Information Center (PBIC) Image Library, Michael Cynecki)



Figure 32. Bicycle route designation and directional signage (from PBIC Image Library, Michael King)

Wayfinding signage could also be used to direct drivers toward public parking facilities as shown below (this could supplement the parking location map that is available on the Decatur website).



Figure 33. Directional signage to public parking (from PBIC Image Library, Dan Burden)

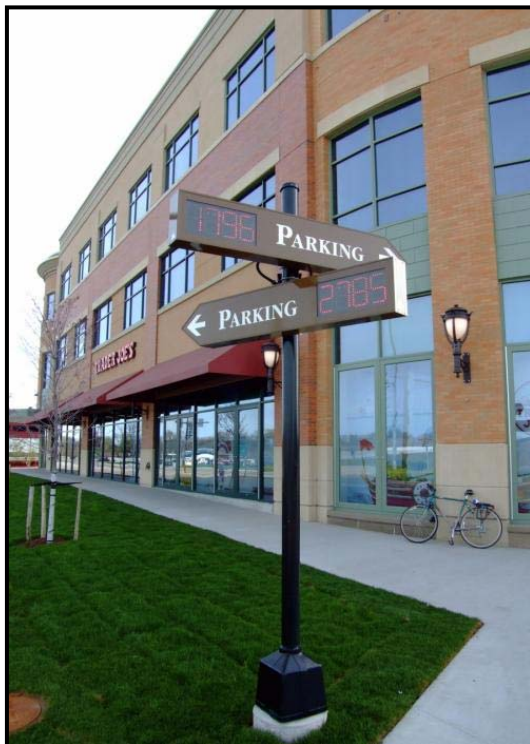


Figure 34. Parking location and availability (from Congress of New Urbanism, www.cnu.org/search/imagebank, Stephen Filmanowicz)