Columbus

MISSISSIPPI

Comprehensive Plan

KPS GROUP

The Code of Mississippi describes a *Comprehensive Plan* as a statement of public policy for the physical development of a city or county that is adopted by resolution of the governing body, and consisting, at a minimum, of goals and objectives for a 20-25 year period and plans for land use, transportation, and community facilities.

This document has been posted for public review on the plan's BlogSpot:

http://www.columbusplan.blogspot.com/

The BlogSpot may also be accessed through the City of Columbus Website:

http://www.thecityofcolumbusms.org/

The legend below applies to the maps contained within the document

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1 INTRODUCTION TO THE PLAN

The City of Columbus is one of the many jewels of Mississippi, with a diversity of people, places, assets and activities born from history and the work and dedication given to Columbus by those who call this place home. The Comprehensive Plan illustrates and provides an overall strategy for how Columbus intends to shape itself over time.

The City of Columbus is preparing this plan as a guide to decisions regarding land use, development, transportation and capital improvements. The plan will help Columbus residents; property owners, merchants, builders and developers invest in the city by providing an expectation of the city's future. Through this plan, Columbus will inform and guide decisions to bring about a desired, sustainable future condition of the city. The plan is long-range, general, and focused on physical development. It is intended to be a living document whose relevance will continue even as circumstances change.

Through the Columbus Comprehensive Plan, city officials wish to:

- *Illustrate the ways in which the city should develop over time.*
- *Provide a guide to development decisions and a basis for making and revising zoning and other regulations regarding type, intensity and timing of development.*
- *Ensure that as development occurs, the city's most significant natural and historic features will be conserved and enhanced, even as property values are protected.*
- *Provide a pattern for land use and development that strives for a sustainable community with a diversified tax base to support desired facilities and services.*
- *Coordinate land use recommendations with those for transportation, community facilities and other infrastructure improvements.*

In response, the City Council, Comprehensive Plan Advisory Committee and the citizens of Columbus intend to continually refer to this document in order to:

- *Visualize what can be reasonably expected to occur in Columbus—to provide some assurance and security regarding development investment decisions.*
- *Review and evaluate development proposals—to test the fit with Columbus's vision and expectations.*
- *Review rezoning requests—as an essential part of determining appropriateness.*
- *Provide guidance on improving development regulations.*
- *Identify and advise regarding priorities for infrastructure investments—roads, greenways, parks, schools and other public facilities.*

The Columbus Comprehensive Plan recognizes the value of the city's underlying natural resources, its history and traditional community values. The plan will guide development in a manner compatible with diverse and interrelated natural features, desired outcomes, and residents' visions and desired quality of life. It is intended that planned activity centers will concentrate a diversity of functions at appropriate locations, structured by an overall citywide open space network and accessibility system. It is also intended that development will be located, planned and designed to be compatible with this organizational system, and will be supported and encouraged by city government to provide opportunities for creativity, efficiency, stability, image and diversity.

Using and Refining the Plan

The Comprehensive Plan is a combination of vision, maps, development policies and design guidelines. It will provide a framework for guiding public and private decisions that will affect the growth, development and redevelopment of Columbus. The plan will be based on the community's vision for its own future—a long-term vision that may not be achievable in the near future. Nevertheless, the plan will look ahead, focus on the physical form of the city, and strive to shape development of public and private properties within Columbus's planning area.

As noted in the town meetings that formed the backbone of the planning process, the plan is a general, long-range *guide* to future development—intended to assist public officials and private citizens alike as they consider making investments that may have long-term implications for the community. To do this, the plan—and the planning process—must be continuously monitored and renewed as changes continue to occur in physical, social, political, and market conditions.

The plan will be implemented through the actions of developers and other private citizens, by city staff, other boards and commissions, and the City Council. Major public actions in support of plan implementation will include adoption, revision and enforcement of various parts of the city's growth management system: development regulations, capital improvement planning and budgeting, and decisions about the appropriateness of development proposals. Guidance provided by this monitoring and renewal process will assist the city in refining and detailing the Comprehensive Plan through consideration of amendments as needed.

Only through continuing use, evaluation, detailing, reconsideration and amendment can the plan fully serve Columbus, and only then can the people of Columbus use it wisely as a creative tool toward achievement of its comprehensive vision for the community.

2 STRATEGIC CONCEPT

The choice for Columbus is not one of "growth" or "no growth" but of *how* growth and development should be channeled – in a manner compatible with the vision the people of Columbus set for their community. That is the role of Columbus's continuing planning process; that is the task of the Comprehensive Plan.

Comprehensive planning provides a systematic approach to determining a citywide vision for the future, by setting long-range goals for the physical character of the city and devising policies, programs, and projects to move the city toward fulfillment of those goals. The focal point of this process in Columbus will be dialog between citizens and elected and administrative officials. Its purpose is to reach consensus on policies, programs, and projects relating to that physical character and to the responsibilities and areas of influence of city government.

COLUMBUS TOWN MEETING

The planning process got underway in earnest when residents came together to exchange ideas during the Columbus Town Meeting on March 12, 2009. The meeting was held at the Trotter Center in Downtown Columbus. Participants responded to a series of questions designed to elicit comments and suggestions that would help the consultants and city officials as they considered the future of their community and its planning area. What follows below is a summary of those responses (see the Appendix for a complete listing) in each of several categories. The responses, within each category, have been organized for convenience, but no attempt has been made to rank their importance.

Assets

Those attending the Town Meeting were asked first about what they considered assets of Columbus—those special features they hold in especially high regard and that set the community apart from other places.

Columbus is a regional center – a county seat, which provides employment, education and retail opportunities. The town has numerous natural assets, historic and cultural features and the nationally recognized heart of its community, Downtown Columbus. Local people appreciate the community's quality of life – its schools, churches, parks, natural features and spaces and access to jobs and health care.

Overall, Columbus is perceived as a family-oriented community with a diversity of natural, cultural and historic assets and opportunities. Residents enjoy the city's atmosphere and the fact that the community is still small enough for most everyone to know one another. They also appreciate the diversity of retail opportunities in Downtown and along Highway 45.

Participants noted Columbus' industry and their regional partnerships, accessibility from Highway 82, and proximity to Columbus Air Force Base. Columbus contains many historically significant places and structures, with the Mississippi University for Women located in its core. They also referred to Columbus's proximity to amenities, destinations and facilities that retirees look for when choosing a place to live.

Local people felt that Columbus's "sacred cows" (physical community elements that should be respected and not be tampered with) included: the existing neighborhoods, the historic homes, Downtown, their churches and the Mississippi University for Women. The people of Columbus also cherish the rural setting in which their community is located and the quality of their natural environment.

Issues

Regardless of their affection for Columbus, meeting participants made it clear that work remains to be done to bring various conditions up to the standards they would like to enjoy throughout the community.

Participants noted that there are deficiencies in drainage facilities, noise, the condition of some of the city's outlying commercial areas and the highway corridors that serve them, the appearance and condition of various neighborhoods, and issues with traffic. They mentioned the need for sidewalks, bike paths, better street lighting and street signage.

Residents perceive problems with past annexation strategies. As growth continues in the future, citizens expressed a desire to use the ideals and visions set forth in this plan as a basis for future annexation. Participants noted in particular problems with street construction standards, the presence of dilapidated housing, and absence of truck routes.

Outside Forces

There are always factors not subject to local control—forces that operate perhaps at county, regional, state or national levels—that affect every community, each in its own way. Local residents agreed that is the case with Columbus. Local people are moving away. Continued presence of Columbus Air Force Base is certainly not under local control.

Residents also mentioned the regional industry potential of Lowndes County and the employment base for those jobs, discussing the skills, level of education required and City partnership opportunities.

Why People Choose to Live/Work/Invest in Columbus

When those at the Town Meeting were asked to share their personal reasons for living, working or investing in Columbus, the list grew quickly. Columbus is a unique town. It is a friendly and relaxing place. Columbus has access to good schools and three universities. It is certainly historic, and provides affordable, comfortable neighborhoods. Local people also felt that Columbus offers opportunities to its residents due to the vibrancy of its downtown, the opportunities for jobs, reasonable home prices and the ability for residents to help effect change for the better. In short, the people of Columbus value their community because it embodies all of the virtues of traditional towns in America.

Visions for Columbus

Building upon discussions of assets, issues, outside influences and the reasons people are drawn to the city, Town Meeting participants were asked to envision Columbus as they would like it to be in a decade or so. Following a few minutes in which they thought about this, each person was asked to share with the others one significant aspect of that future that is absent from Columbus today.

The participants envisioned Columbus as a more walkable, connected place, with more people out and about town. They imagine Columbus taking greater advantage of its natural resources and opportunities. They envision Columbus of the future as still enjoying the historic character it has today – yet better maintained and protected. The positive qualities of the community would encourage its children to stay or return after college to raise their families. Retirees would have even greater opportunities and services available to them.

Local people see Columbus becoming cleaner and more attractive with community gateways and experiences that make good first impressions through the right kinds of growth and development patterns. Good development will create more jobs and shopping opportunities, along Highway 45 and on Main Street. Economic development efforts and investments in infrastructure and technology will bring industries to build on the community's historic and natural assets.

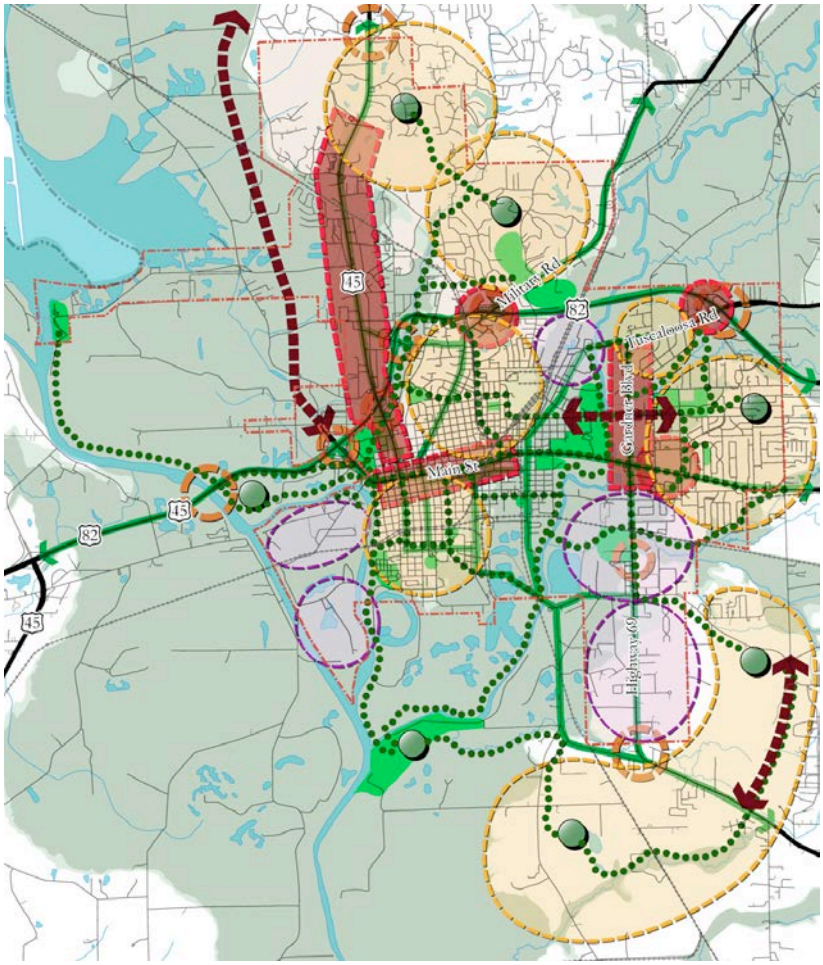
The participants envisioned city government as instrumental in bringing about their vision, by promoting and advertising the city and through the support of community leaders who continuously steward the vision of Columbus. The community would invest in the improvement and expansion of its schools, plus development of more parks, recreational and cultural facilities.

It was clear to participants that accomplishment of these tasks will require additional growth management on the part of city government. In general, business investments should be focused downtown and strategically along Highway 45. Upgrading the image of the community will require taking charge of its gateways and development along the major roads through town.

CITYWIDE STRATEGIC CONCEPT

The strategy for improving the quality of life of Columbus is based on the strong value system expressed by local residents and the responses they shared with one another during the Town Meeting.

Creating and seizing upon opportunities community-wide begins with the city's core, major institutions and activity centers. It builds on the overall image of the city and its physical setting. The citywide strategy supports commerce, industry, recreation and institutions in locations that will be accessible to people living and working in the community and its trade area, as appropriate. It protects the city's traditional neighborhoods and streets while upgrading the street network and pedestrian and bicycle facilities. The strategy also focuses on upgrading recreational facilities and expanding neighborhood centers with greater connectivity between them all. Overall, the strategy intends for Columbus to grow in a sustainable manner – environmentally, economically and socially – so that future generations may enjoy the kind of community Columbus is today, with the same or greater natural and manmade resources that supports the community's high quality of life.



Strategic Concept

The community-scale activity centers support, and are supported by, the city's neighborhoods. Each of the neighborhoods will have a center or a focal point of a type and scale appropriate to its place in the community and the desires of its residents.

This strategic concept is designed to build on the spirit of the people of Columbus, their history and their successes. The intent is to capitalize on the city's resources, to build upon its history, traditions and institutions in combination with the advantages of the city's location and setting. The concept expresses the consensus citywide vision that emerged from the Columbus Town Meetings: to provide a general, overall framework for the city's Comprehensive Plan.

Elements of the Concept: Major Goals

Overall

- *An overall strategy will guide and balance development and conservation.*
- *The city will have a plan and program for directing public and private investment that supports its desired image, health, safety and welfare.*
- *The City will have a plan and program to provide and support greater connectivity, pedestrian, bicycle and recreational activities.*
- *The city's growth management system will favor new development that can be supported by cost-effective expansion of city infrastructure and facilities.*
- *Higher densities and intensities of development will be located around major roads and intersections and activity centers already served by city water and sewer.*

Legibility and Image

- *Columbus will be a legible city—its edges and districts will be clear and visitors will be able to find their destinations with ease.*
- *City gateways will be attractive and well-defined.*
- *The community's major streets will reflect a positive image through design, maintenance and the quality of development alongside them.*

Green Infrastructure

- *The city's "green infrastructure" will be conserved and respected by the Comprehensive Plan and the city's growth management system.*
- *The city's park and recreation system will be enlarged, as the city grows, to include passive and active parks and outdoor recreation facilities.*
- *There will be greater connectivity between the existing and proposed park facilities and greater connectivity to the surrounding neighborhoods and communities.*

Downtown Columbus

- *Downtown will remain the civic heart of the community.*

- *Main Street and its surrounding historic buildings will be preserved and reinvestment will reflect Downtown Columbus's importance within the community's overall vision for itself.*

Neighborhoods

- *Neighborhoods will have a strong sense of place, each with a focus area of appropriate function and size.*
- *The city will plan for and create incentives to direct new and infill residential development where it will provide for and achieve the city's vision for housing.*

Commerce and Industry

- *Commercial development will be directed toward downtown and major intersections along Highways 45, 82, and 182.*
- *Clean industries that build appropriately on Columbus's industrial history will be recruited to expand employment opportunities for residents.*
- *Commerce and industry will be directed to select, highly accessible locations and to sites used previously for industrial or other intensive purposes.*

Mobility and Access

- *Streets will be interconnected to support mobility, access and emergency response.*
- *The city's pedestrian network will be expanded.*
- *A greenway and trail system will interconnect neighborhoods with schools, park and recreation facilities and other community destinations.*
- *The quality, safety and capacity of the city street system will be upgraded through improvements to selected streets, railroad crossings, intersections and pedestrian crossings.*
- *Access to major streets will be managed carefully to conserve their capacity and assure safety for motorists, pedestrians and bicyclists.*

GREEN INFRASTRUCTURE

Like all communities, Columbus is dependent upon infrastructure for its well-being. Most people, when considering "infrastructure," will first envision roads, utilities and perhaps a variety of buildings as well. But, a community's "green infrastructure" is often overlooked. Columbus's green infrastructure consists of the Tenn-Tom Waterway, Columbus Lake and the Luxapallilla Creek; local ponds, wetlands and floodplains; the community's tree canopy; its prime agricultural soils; and its parks and recreational lands. These resources affect the economy, overall quality of life and the health and safety of residents. If the city's green infrastructure is not respected, quality of life in Columbus may suffer.

Natural resources have limits, and development decisions typically affect far more than the property owner, because development ultimately affects the surroundings. Depending upon the approach to development, the character of the land can present varying ranges of opportunities and hazards. For example, as floodplains are filled in, flooding is shifted to more locations and little can then be done to eliminate the problem. Once cut, woodlands take decades to return. When wetlands are filled and paved, their habitats are likely gone forever, and extinct species cannot be replaced.

The public officials and citizens of Columbus take their green infrastructure seriously. As a part of the planning process they have carefully reviewed the mutual impacts of development and natural resources on one another. They have also considered how these natural areas together provide a framework within which to organize, locate and interconnect development.

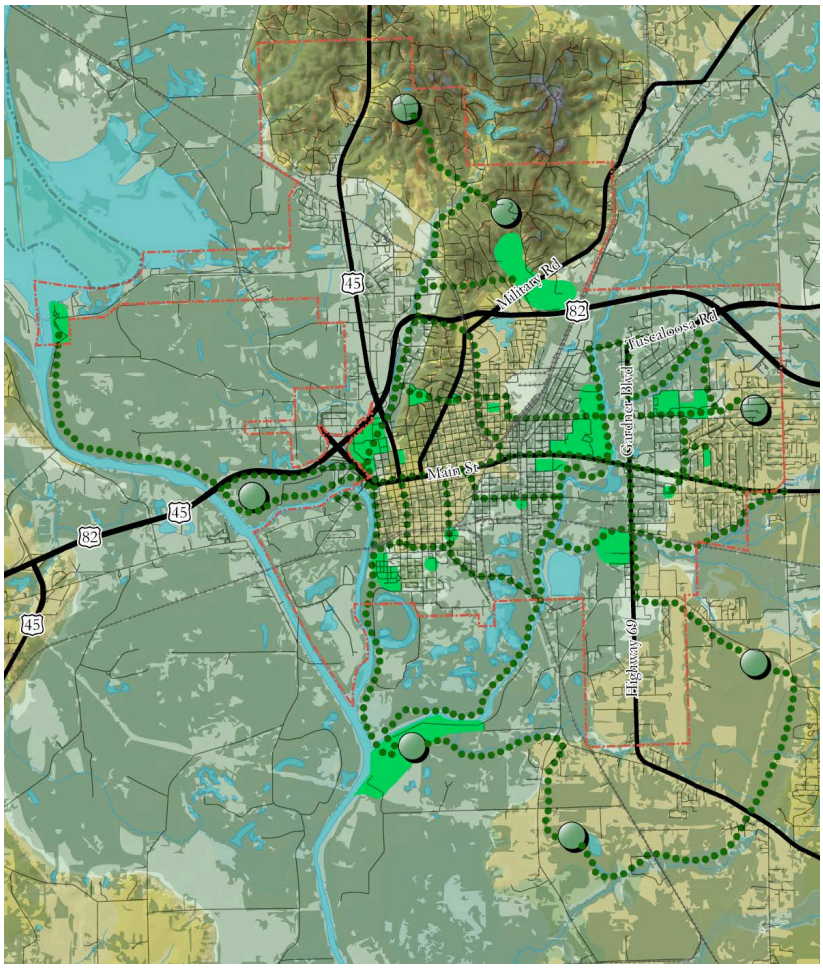


Figure 2.2: Green Infrastructure

The first step in this process is to discern the pattern of the city's green infrastructure and its constituent parts – the resources, sites and areas that may be critical to the community. The pattern in Columbus is internally very consistent – Columbus' watercourses form a network along which lay floodplains, ponds and wetlands. The existing tree canopy

frames Columbus's historic setting. The tree canopy also extends into Columbus' historic neighborhoods and parks. The Green Infrastructure map depicts the general pattern of these resources and places.

Green Infrastructure Policies

Conserve green infrastructure and landscape form

The city's landscape includes woodlands, open spaces, parks, floodplains, wetlands and area waterways. Development should be planned and arranged within the landscape with these areas clearly in mind. Green infrastructure elements should be reserved for greenways, parks, or simply conservation areas. These should be linked together into an overall open space system, and development should be planned and designed so that buildings look into these areas rather than back up to them.

Preserve or create new green elements appropriate to new development

In close-in locations where higher intensity development is expected, new green elements should be provided through "greening" the street and parking areas and other landscape improvements. In areas further from the center of town, development should be of lower density and increased natural open space. In these locations, site clearing should be kept to a minimum and "conservation subdivisions" may also be considered.

Conservation Subdivisions are used to preserve green infrastructure features (e.g. floodplains, wetlands, tree canopy and steep slope areas). The conservation subdivision approach allows a developer to achieve the same net number of residential units – that would otherwise be allowed on the site in accordance with zoning requirements – while preserving critical natural areas on the property as common open space, which may then be enjoyed by homeowners.

Ensure green infrastructure accessibility

The city's green infrastructure should be visually and physically accessible. There should be a park, greenway, trail or other natural open space within sight of most homes in the community. Parks and conservation areas with public access should be provided. Parks and open spaces should accommodate both active and passive recreation uses. Walking trails, play areas, and picnic facilities should be staple components of all parks.

Conserve floodplain

Development should be managed so that natural areas may be protected and can provide open space throughout the community. New growth should be directed to in infill locations and to sites adjacent to existing development rather than in disconnected sites where the cost to provide infrastructure extensions would outweigh the benefit of new growth.

ACTIVITY CENTERS

Significant nodes or concentrations of people, activity and development are designated in this plan as *activity centers*. Each center is or should be located, planned and designed to relate to, support and affect community form, environmental quality, neighborhoods and the transportation network in a positive way. Columbus' activity centers come in a variety of types and sizes, but most will display several of the following characteristics:

- Anchor or focus of activity: *Regardless of its type, every center or corridor contains some activity or function for which it is known.*
- Compact, densely developed core: *There is a relatively high density of development toward the center and less toward the edges.*
- Vehicular accessibility: *The center is readily accessible by car, by virtue of its being located along a major road or near an important intersection.*
- Internal vehicular circulation: *Once having arrived, a motorist may easily access most any other location on the same side of a major street without having to re-enter that street.*
- Pedestrian and bicycle accessibility and orientation: *The center is readily and safely accessible by pedestrians and cyclists. The center is planned and designed with the overall needs of pedestrians in mind, as appropriate to its type. For example, Downtown Columbus reflects the highest integration of pedestrian and bicycle facilities.*
- Positive sense of place: *The average person has a good feeling about the overall character and image of the place and its relation to the surrounding environment, feelings of safety, and sense of arrival and departure.*
- Visual coherence: *The visitor senses that things fit together—signage, landscaping, parking, sidewalks, buildings and public spaces.*
- Well-defined edges: *The arrangement of uses and the design of the streetscape, buildings and landscaping make it clear where the center begins and ends.*

Activity Center Policies

Preserve and enhance the city's open space system

All activity centers should be carefully planned, organized and placed appropriately within the city's green infrastructure. They should be strategically placed away from the most valuable or threatened natural resources. The natural environment should continue to be valued as an important ingredient of all the city's activity centers, which in turn should be designed to conserve and utilize natural systems to assist in filtering stormwater drainage.

Activity Centers

Downtown Columbus

Commercial Centers

- Main Street
- Highway 45 Corridor
- Highway 82 and Military Road
- Gardener Blvd
- East Columbus Shopping Centers
- Marina

Employment Centers

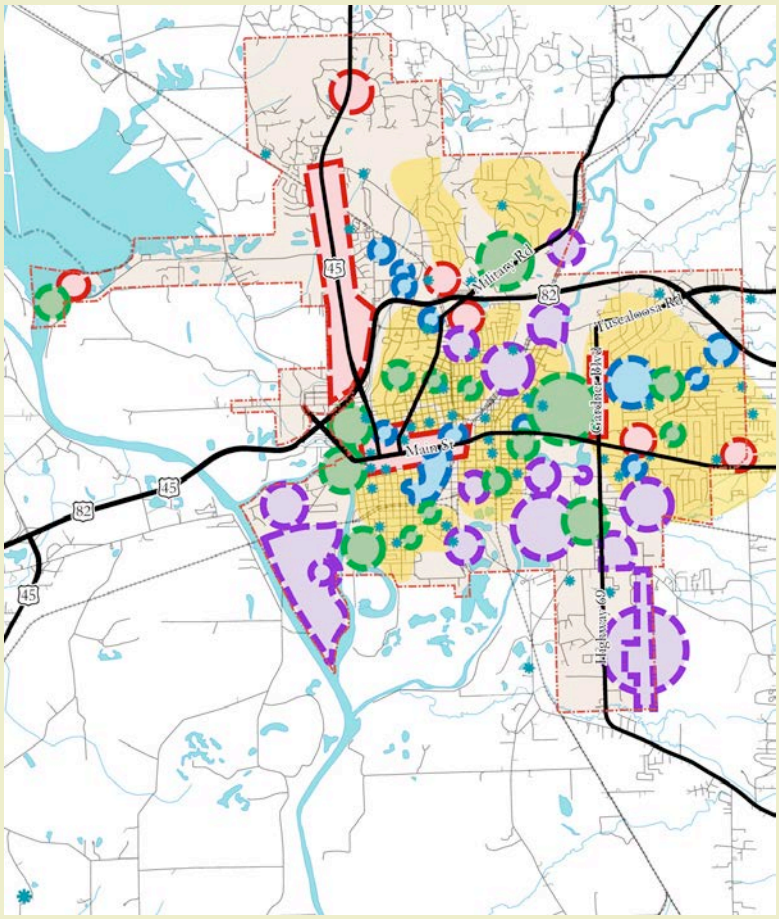
- Airport, Hwy 69 S
- Waterworks Road
- Island Industry
- Tenn-Tom Port

Municipal Centers

- City Hall
- City Properties
- City School System
- Mississippi University for Women
- Local Churches

Recreation Centers

- Riverwalk
- Cemeteries
- Marina Park
- City School athletic fields and playgrounds
- Propst Park
- Soccer Complex
- Community Recreation Facilities
- County Fairground



Design each activity center to relate to its context

Each activity center should have an appropriate scale and mix of uses defined by its type and the scale at which it functions—regional, citywide or neighborhood. Each of these centers should be integrated into the community, with appropriate connections and transitions made to adjacent land uses.

Streets and service drives should be located and designed appropriate to the users, mindful of the impact on roadway capacity and safety. Vehicular access should be designed to allow motorists access to adjacent centers and neighborhoods, discourage through traffic, but will accommodate service access and delivery.

Create discernable, compact activity centers

Each activity center should be planned and designed to have a sense of identity and place, as does Downtown Columbus, that is distinguishable from one activity center to the next – perhaps by including a unique feature or activity. Activity centers should be compact and densely developed. Their edges should be well defined. Each center should look and feel as if it has been designed, or at least considered, as a whole, in context with its surroundings. Design elements, such as building setbacks, height, scale, materials, landscaping, signage, and streetscape design should link individual developments within an activity center together. Differences should be harmonious – not abrupt and overwhelming – to provide an interesting, diverse environment.

Design for pedestrian accessibility

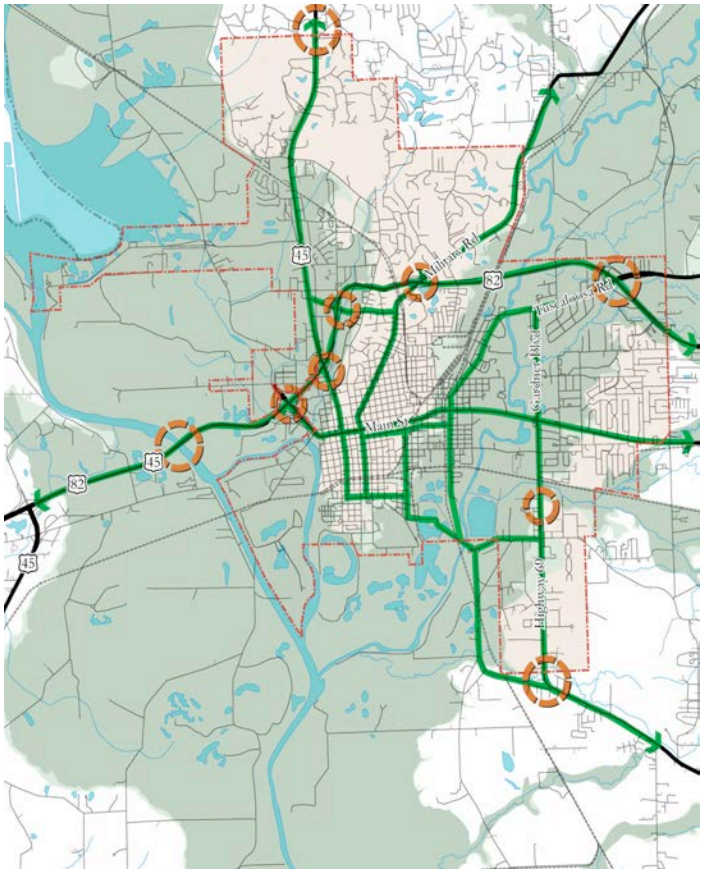
Design can greatly influence the number of people willing to walk or ride as an alternative to driving. “Complete streets” and other appropriate linkages between residential and nonresidential uses should be provided. Pedestrians and vehicles should be separated from one another, and the length of pedestrian crossings of parking areas kept to a minimum. Human scale should be created through building mass and form, as well as scale and detail. Building location, setbacks and orientation should enhance pedestrian comfort, as should lighting and landscape design.

Activity Centers

The following highlights fundamental characteristics of the activity centers indicated in the Strategic Concept. Additional considerations regarding land uses are included in Chapter 3.

Downtown Columbus	Employment Support Centers	Community Commercial Centers
Typical Appropriate Uses		
• Residential: Adjacent (horizontal) Integrated (vertical) • Retail commercial • Office / service commercial • Dining and Lodging • Institutional/Civic • Passive recreational	• Industrial • Office and services • Warehouse and distribution • Wholesale commercial • Light industrial	• Retail commercial • Office / service commercial • Small restaurant(s) • Residential Adjacent (horizontal) Integrated (vertical) • Small Institutional/Civic
General Development Principles		
• Positive sense of place • Visual coherence • Compact, dense core • Mixed uses • Civic spaces • Pedestrian oriented • Pedestrian accessible • Intense center of activity • Well-defined edges	• Positive sense of place • Visual coherence • Pedestrian accessible • Internal vehicular circulation • Access management • Well-defined edges	• Positive sense of place • Visual coherence • Moderately intense center of activity • Pedestrian oriented • Pedestrian accessible • Internal vehicular circulation • Access management • Well-defined edges
General Design Guidelines		
• Buildings built to sidewalk • Street trees • Off-street parking to rear or side of buildings • Avoid drive-in/drive-through uses • Intensity decreases to edges	• Street trees • Intensity decreases to edges (and/or) • Landscape buffers at edges	• Buildings close to and connected to sidewalk • One or two stories • Parking to rear or side of buildings • Drive-throughs located away from view • Street trees • Intensity decreases to edges • Greenway connections

GATEWAYS AND IMAGE CORRIDORS



Columbus enjoys access from a number of state and county roads. These major streets act as gateways to the city's activity centers and neighborhoods, making a lasting impression on residents, business and industry, and visitors. The following:

- Highway 82
- Highway 45
- Main Street
- Military Road
- Highway 69
- Tuscaloosa Road

are some of these "image corridors." They should be safe, comfortable, shaded and interesting. This is not simply a matter of aesthetics; the economy of the city is tightly linked to its physical character, and its image must be enhanced and maintained to remain competitive.

City gateways on these routes also form a critical part of the city's image. They should be taken greater advantage of and enhanced. Gateway signage and associated improvements need not be located at the city limits. Rather, they should be strategically placed along image corridors, at sites where existing vegetation, topography, strong views of the city or countryside, adjacent development, or other features can dramatically enhance the gateway experience. The more heavily traveled the road, the more important the gateway. Therefore, a greater level of investment in gateway improvements and greater attention to the location and quality of development should be expected on Highway 82 and Highway 45.

By taking appropriate care with development along these corridors and adjacent to its major gateways, Columbus will set itself apart and further ensure marketability and prosperity by attracting visitors, residents and investors. Development planning and design should incorporate the following policies to assure that Columbus will reflect a positive image to visitors and provide recognizable, attractive transitions from outside to inside the city:

Gateway and Image Corridor Policies

- *A cohesive and coordinated land use pattern for each image corridor and gateway should be planned, designed and implemented.*
- *Sense of place should be enhanced with strong, well-designed development.*
- *Appropriate lighting and tree plantings should be used at gateways and along image corridors.*
- *Scattered or strip patterns of commercial development should be phased out over time through redevelopment or reuse and through commercial infill in strategic locations to create a more cohesive land use pattern.*
- *Commercial buildings should face the street.*
- *Commerce should be easily accessible to adjacent residential areas.*
- *Each building should be designed to form part of a larger physical composition of the area in which it is located. Adjacent buildings should relate in scale, height and configuration.*
- *To provide human scale, larger buildings should be divided into separate volumes, both horizontally and vertically.*
- *Buildings should face and be relatively close to the street, with most off-street parking located behind and/or beside buildings.*
- *Development should be planned and designed to maximize street frontage of buildings and minimize street frontage taken up by parking lots.*
- *Buildings should frame and reinforce pedestrian circulation, so that pedestrians may walk along building fronts rather than along or across parking lots and driveways.*
- *Pedestrian and bicycle circulation should be an integral part of the experience, provided through street and site design, and should be connected to the citywide network of pedestrian and bicycle facilities.*
- *Driveway access to major roads should be limited. Adjacent businesses along the same side of a major street should be connected by frontage roads, alleys or cross access drives.*
- *Sign types should be appropriate to their context. In denser, pedestrian-friendly areas, building signs should be encouraged. In more vehicle-oriented locations, such as along Highway 45, freestanding signs are appropriate, though their size and height should be carefully managed to avoid visual confusion.*

Gateways and Image Corridors

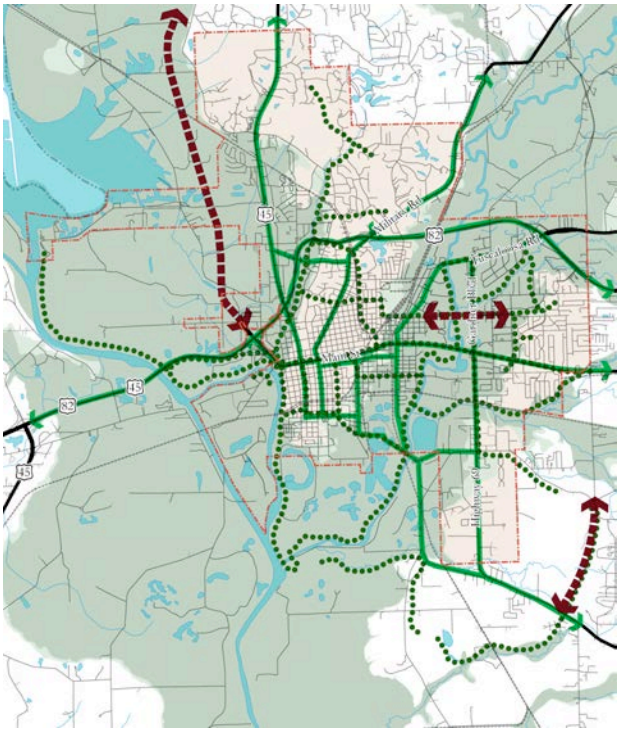
General Development Principles

- Positive sense of place
- Visual coherence
- Pedestrian accessibility
- Internal vehicular circulation
- Well-defined edges
- Access management

General Design Guidelines

- Street trees
- Parking to side or rear
- Intensity/density decreases to edges
- Transition to adjacent housing

CONNECTIVITY AND ACCESSIBILITY



Columbus is a well-interconnected community, both internally and externally. A large number of state and county roads traverse the community providing a high level of mobility – the ability to get from one part of the community to another or to nearby communities. Further supporting this is a relative lack of dead-end streets or cul-de-sac in most of the community. Generally, Columbus' street network should continue to develop as it has historically and avoid building additional cul-de-sac.

While the city's street network is highly interconnected, its sidewalk system needs improvement. The majority of existing sidewalks are located in the central portion of the community, mostly extending outward from Main Street. Developing a more walkable community is an important element in the community's vision, and therefore Columbus intends to construct sidewalks on select streets to expand the existing pedestrian infrastructure while also requiring sidewalks in future development. In addition to sidewalk improvements, the City will look to create and interconnect their system of trails and bikeways to interconnect neighborhoods, parks and natural areas. These improvements will increase pedestrian access between residential areas and community destinations – schools, parks, churches, and business areas.

Another important element in the city's transportation system is the provision of safe, convenient access to individual properties. Unfortunately, the provision of access to property competes with the efficient movement of vehicles around and through the community. To create balance in meeting these needs and to assure safety, Columbus should adopt access management policies and techniques for application especially along Highway 45, but also on other major roads.

Finally, to improve the movement of truck traffic through Downtown Columbus and reduce the impact on local traffic and business and pedestrian activity, Columbus shall formulate and enact a truck routes plan, designating the appropriate corridors for truck traffic to move through Columbus, adopting and enforcing ordinances to that effect.

Connectivity and Accessibility Policies

Develop an interconnected citywide street network

Residents and visitors should be able to travel *conveniently* throughout the city by other than a few major roads. There should be multiple ways in and out of subdivisions to disperse traffic and support emergency response. This requires additional street connections within and between neighborhoods and nearby activity centers. Through the city's growth management system, connectivity within the citywide street network will be maintained as it grows along with new development. Others may be constructed by city government.

Design neighborhood streets to connect but calm traffic

Street networks in subdivisions should, *by design*, discourage through traffic while still providing interconnectivity. Cul-de-sac are a conventional approach to discouraging through traffic; but dead-end streets do worsen connectivity issues and can increase response times for fire and police services. There are a number of design tools available to reduce and calm through traffic that should be implemented and the number of cul-de-sac in future development reduced while still providing safe, calm neighborhood streets.

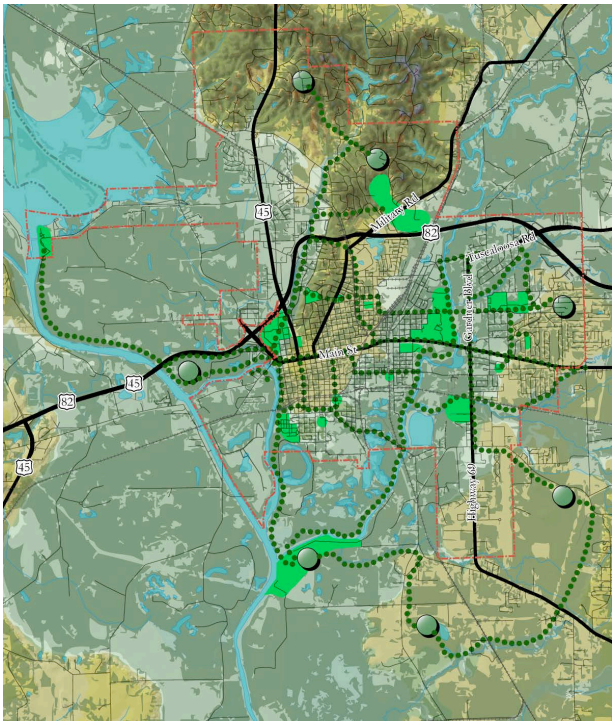
Expand pedestrian infrastructure

In addition to public improvements in existing sidewalks, sidewalks are required in new development according to density, use and location. Sidewalks should be provided on both sides of streets in activity centers and in high and medium density residential neighborhoods. In lower density neighborhoods, sidewalks should be provided on one side of each street or the neighborhood connected to nearby destinations by a greenway trail. Sidewalks should be provided in any type of development within one-half mile of Downtown Columbus, a school, park or community commercial center. Columbus should plan for ways to extend the existing Riverwalk trail and take greater advantage of its natural assets. Accessibility issues can be tied to economic development and tourism possibilities with a well constructed, maintained and marketed series of trails.

Manage access along major roads

Along major roads, especially those with higher design speeds and traffic counts, the number of driveways should be kept to a minimum and adequate spacing assured between driveways and intersections. This will increase safety and maintain the traffic-carrying capacity of the road. Along the city's major corridors, adjacent developments should be connected by shared drives, cross access, frontage roads, alleys or a combination of these access management techniques; and median openings should be kept to a minimum.

PARKS AND GREENWAYS



During the planning process, local participants reflected on the desire to add both active and passive recreational spaces to Columbus. In response, the Strategic Concept calls for development of both public and private green spaces for recreation and social interaction, as well as greenways and trails that conserve and take advantage of Columbus' green infrastructure, enhance opportunities for pedestrian and bicycle access and provide quality of life amenities in locations that conveniently serve both existing and future neighborhoods.

This portrays a network of greenway corridors at the edges of the developed portions of the community, generally following the River, creek, floodplain, smaller streams and a few major roads into the center of Columbus. The map also illustrates seven *general* locations for future neighborhood or community parks.

Parks and Greenways Policies

Reserve usable *open space in new developments*

As new development occurs, especially medium and high density residential projects, *usable* open space should be reserved and provided for the recreational use of residents. Land areas that are wet or inaccessible or that may be small or poorly configured should be avoided for neighborhood recreational space, although they may be appropriate for conservation purposes or to complement community open spaces.

Provide green space convenient to neighborhoods

There should be a park, greenway or other type of green space within sight of most any home in Columbus. During community meetings, participants noted that visual access to open land was a benefit of living in Columbus and should be maintained as new development occurs. This may be achieved by reserving land in new residential development for recreational use, by public acquisition of land for new parks and recreation facilities, and by preserving wooded stream corridors as greenways.

Create a green infrastructure network

Through careful planning of new development, Columbus' green infrastructure should be conserved and evolve into a citywide system of natural corridors that preserve plant and animal habitat, support watershed protection and lend opportunities for passive recreation.

Connect community destinations with greenways and trails

The development of greenway trails through public and/or private investment supports conservation while also increasing recreational opportunities and connectivity between neighborhoods, activity centers, parks, schools and other destinations. Trails may be located in greenway corridors or adjacent to major roads.

3 LAND USE

The following land use plan results from analysis of existing land uses, environmental and man-made conditions, Columbus's vision and the principles illustrated in the Strategic Concept. Street design is addressed together with land use in this chapter, reinforcing that these subjects are integral to one another and must be evaluated and planned for simultaneously. Simply, different land uses and intensities of development require and support different types and levels of transportation infrastructure.

The Future Land Use map illustrates *generally* how different parts of the community should function and relate to one another. It portrays a pattern of various activity centers, their relationships with each other and with the city's neighborhoods. These centers and the interconnections between them are critical to integrating the city's land use, transportation, community facilities and infrastructure. Building on this structure, Columbus intends to invest, reinvest and develop so that new growth is suited to the capacity of the land and to the city's ability to economically provide infrastructure and quality services and facilities.

LAND USE CONCEPT

The land use concept is built around the following policy themes:

Protect Green Infrastructure of Columbus

Columbus intends to protect and enhance important and fragile ecosystems within the developed portions of the city. The city will strive to conserve and use its natural and open lands for agriculture, parks, and trails.

Grow as a City of Neighborhoods Supported by Activity Centers

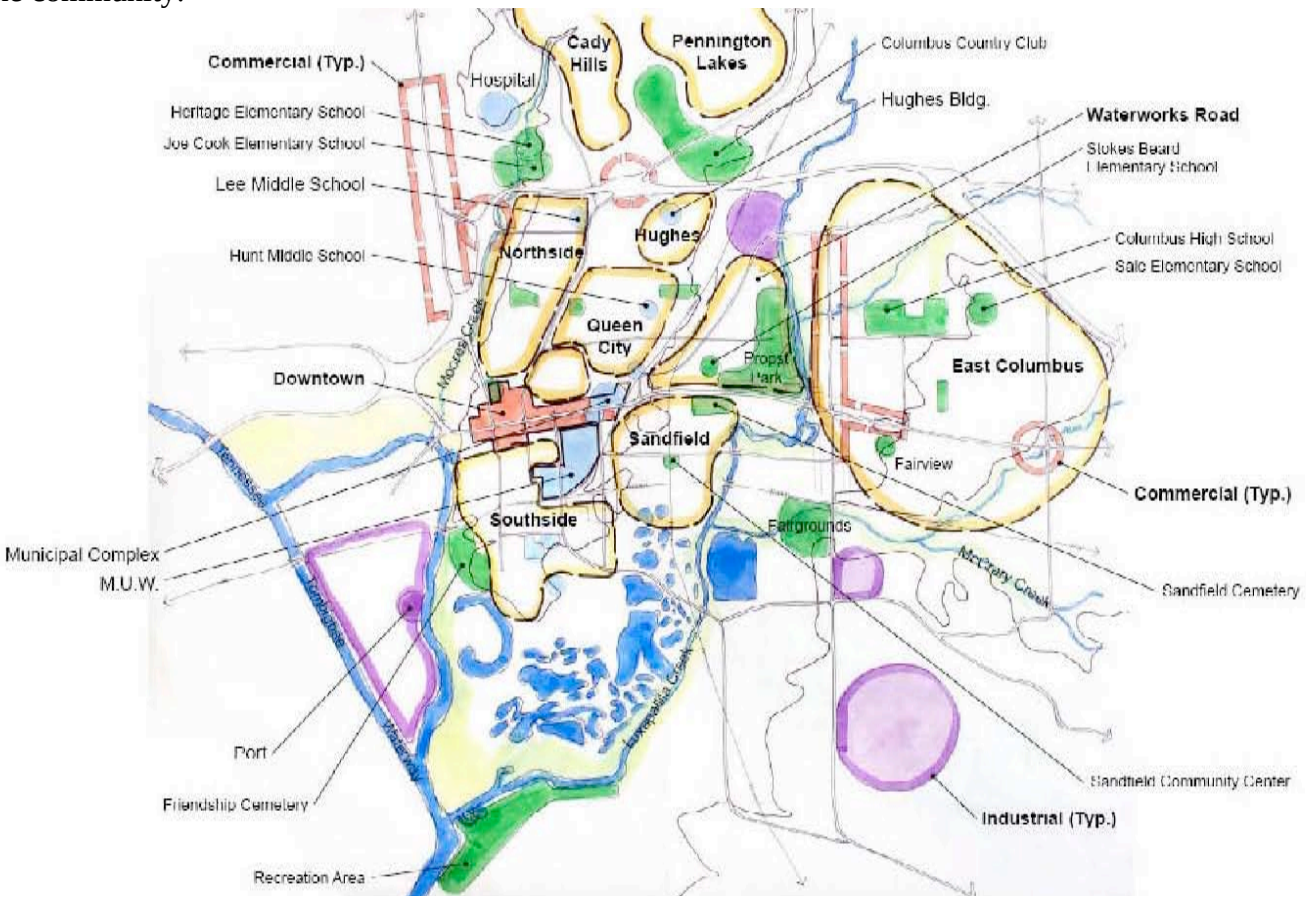
Columbus intends to grow in ways that support its existing neighborhoods and activity centers. Generally, this means that Columbus intends to:

- *Maintain and enhance Downtown Columbus as the symbolic and cultural heart of the city.*
- *Concentrate larger scale and commuter-oriented commerce into activity centers at major intersection along Highway 45, Main Street, Highway 182E and Gardner Boulevard.*
- *Direct community-oriented commerce to Downtown Columbus and to the intersections of its primary roadways.*
- *Locate high employment industries and businesses in the existing industrial activity centers, including the airport, and locations currently and previously used for support commercial and industrial uses.*

- *Concentrate higher density residential development around activity centers.*
- *Guide residential development in ways to form true neighborhoods.*

Maintain and Enhance Community Character

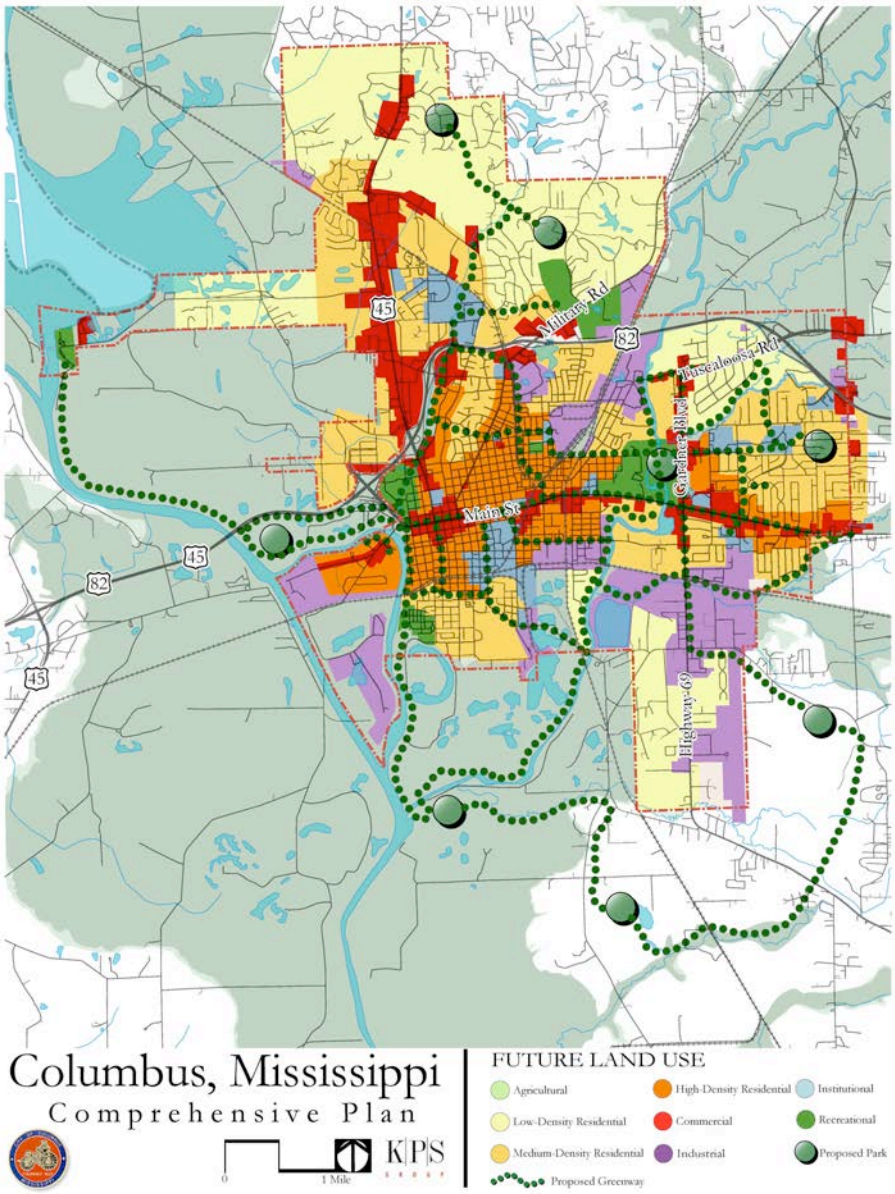
Columbus intends to maintain and enhance the physical qualities of the community – its natural and man-made environments – as an overarching consideration. This policy is incorporated in all parts of this plan. This means Columbus intends too reinvest in the city's historic development pattern and in its older neighborhoods and commercial areas. Conserve and improve the city's natural setting as well as its streets, parks and public facilities to encourage and sustain private reinvestment in already developed portions of the community.



FUTURE LAND USE PLAN

The essential *functions* of the city – its neighborhoods, institutions, business and industrial areas, parks and farmland – are presented in the Future Land Use map. The land use categories indicated on the map *should not be interpreted as zoning districts*, but rather as general guidelines indicating desirable land use patterns for Columbus. The pattern is intended to serve the following purposes:

- *Avoid and resolve land use conflicts*
- *Identify and sustain desirable land use patterns*
- *Forecast infrastructure needs*
- *Provide a foundation for zoning*



The designation of land uses on the Future Land Use map should not be interpreted to propose, approve, deny nor preclude any specific action without full consideration of all policies, principles, standards or intentions expressed in this plan document and its implementing regulations. Specific site conditions, such as topography, geology, soils and hydrology, must be considered when choosing sites for new developments, especially those of larger scale, and when planning and designing their uses and densities. These realities, plus attitudes toward development on the part of public officials, other agencies, area residents, property owners and developers should play a large part in determining appropriate development location and design. Similarly, provision for adequate community facilities and infrastructure – streets, parks, fire protection services, and water and sewer systems, should be assured before making any significant development proposals or decisions.

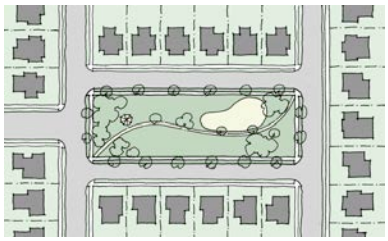
The industrial, commercial and neighborhood centers and future parks identified in the Strategic Concept are intended to serve as magnets for the types of development described in the Future Land Use Plan.

Land Use Types and Characteristics

Recreational uses are privately held open space and recreation uses as well as the following types of public parks:

Community Parks, serve a range of passive and active recreation needs appropriate to their location and context. They may provide a mixture of activities and uses such as active sports fields; play areas, trails, informal practice fields, picnic areas, outdoor classrooms and gathering places such as a community center. They should be carefully integrated into the natural environment, ideally with a significant portion of the land area held in a natural, tree-covered condition. Park facilities and buildings should foster a positive community image, and sense of pride.

Neighborhood Parks provide residential areas with opportunities for active and passive recreation. Neighborhood parks provide a place for unstructured, informal gatherings and neighborhood events, and may include features such as shaded paths, playground structures and open space for active play.



Sports Parks provide sports and practice fields and similar facilities for use by the community. They may include area for passive recreational uses as well. They should be located in areas with a high level of vehicular access but should also be accessible by foot to nearby neighborhoods. Because of the amount of traffic they tend to draw for sporting events and requisite field lighting, these types of facilities should be carefully located and arranged to cause as little disruption to adjacent neighborhoods as possible.

Residential. The current development patterns of Columbus range from high density to low-density development. The historic district around downtown has densities between 3 to 4.5 dwelling units per acre. This pattern of homes fits the high density and medium density categories as described below. Using these historical development patterns coupled with the goals and objectives identified in the activity centers, a future land use pattern is shown on the Future Land Use map. Residential uses are distributed according to relative gross density—the ratio of dwelling units to property devoted to those uses. Residential gross densities are: High Density at more than 4 dwelling units per acre (orange); Medium Density at 2-4 homes per acre (gold); Low Density at 1 home per 0.75 to 2 acres (light yellow); and Very Low Density 1 home per 2 or more acres (light green).

Very low density residential and agricultural uses are located around the edges of the city. They include farms and single-family detached houses on lots of two acres or more. Conservation of green infrastructure and good farming land is a primary consideration in these areas, making use of large lots and very low overall impervious surfaces. With deep front setbacks and dominated by generous amounts of open space, the character of these areas varies from estate subdivisions to more rural residential and purely agricultural areas. These areas are characterized by long block lengths and limited inter-connectivity. Typical streets will include swales, rather than curb and gutter, to address stormwater runoff. These areas need not contain sidewalks but may be connected into the central parts of the community through greenway trails.

Low density residential uses are single family detached houses on relatively large lots (0.75 to 2 acres) and are planned for development in closer-in locations as compared to the *very low density residential uses*. This development type and density should take careful account of the city's green infrastructure, including steep slopes, flood plains, wetlands and heavily wooded areas. Conservation subdivisions and low overall impervious surface ratios should be used to preserve green infrastructure elements and to ensure access to natural open space. Development in these areas includes moderately deep front yards. Blocks are generally 500 ft or greater in length, providing a moderate level of connectivity with the city street network. Sidewalks of five feet in width should be provided on at least one side of each street and placed five feet or more from the road edge. Stormwater runoff should be addressed by vegetated swales, valley gutters or raised curbs. Local streets may be designed to accommodate occasional on-street parking on one side.

Medium density residential uses are single family detached housing on moderately sized lots (2-5 homes per acre) and are located around activity centers in relatively close-in locations. Front and side yards are modest. Additional green space is provided in common open spaces, neighborhood parks, and in the streetscape, replacing green elements that may be displaced through development. These neighborhoods are highly connected to the city street network and have short block lengths (400 ft or more). Local streets accommodate occasional on-street parking. Five foot wide sidewalks are provided on both sides of streets, separated by a buffer strip of similar width planted with regularly spaced street trees. With higher densities, alleys may be encouraged for access to the rear of lots and also to provide a discrete location for utility lines, garbage pick-up and even mail delivery. This also allows lots to be narrower while still meeting the desired lot size and providing additional open space in the front or back yards.

High-density residential uses are intended to occur within or at the edges of the activity centers and neighborhood centers shown on the map. High-density residential uses include small lot single-family detached homes, city houses, and multi-family housing. These provide a logical transition between activity centers and the medium and low density residential uses beyond. Green space is provided in common open spaces and within the

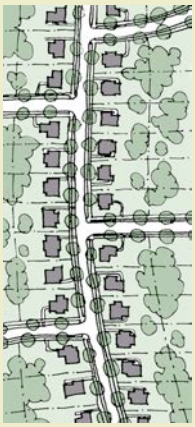
streetscape, replacing green infrastructure elements that may be displaced through development. High-density residential areas have a high level of connectivity to the city street network, featuring short block lengths. Local streets should be designed to accommodate on-street parking and sidewalks on each side of the street. Sidewalks are generally separated from the street by a tree lawn of five feet or more in width. Mid-block alleys provide access to internal parking areas and a discrete location for garbage pick-up and utility lines.

Redevelopment and Infill opportunities are intended to help achieve many of the goals and objectives of the Comprehensive Plan and the vision for Columbus. The historical development patterns as mentioned above may range from the high-density to low-density patterns throughout Columbus. These historical patterns may be used to help create multiple opportunities to provide new and redeveloped housing adjacent to Columbus's existing parks, employment, municipal and commercial activity centers. These opportunities can capitalize on the existing infrastructure and provide for a greater diversity and density of population to support and use the existing activity centers. Redevelopment and infill in these areas can provide for new housing and neighborhood parks, which can meet the needs and match the character of the existing neighborhoods.

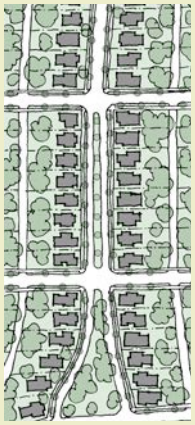
Typical Residential Uses and Street Design

Very Low Density

Low Density



Medium Density



High Density

The illustrations above depict how the road network and the design of streets change within different residential contexts. Lower-density areas feature longer blocks and fewer streets; the roadside is more naturalistic, with vegetated swales that capture runoff. As density increases, more streets are necessary to accommodate increased residential traffic; and sidewalks connect pedestrians to nearby destinations. Vertical curb and gutter address drainage and establish an edge between the roadway and roadside. Regularly spaced street trees enhance curb appeal, shade sidewalks and provide a sense of green where front yards tend to be smaller. Alleys provide rear access for parking, utilities and service while decreasing automobile dominance of front yards.

Commercial. Types of commercial uses include retail, office, dining, entertainment and lodging accommodations. These are to be concentrated in Downtown Columbus and other commercial activity centers as identified in the Strategic Concept. Shopping and dining uses should be concentrated at the heart of each commercial center with other appropriate uses, such as offices, support businesses, high-density residential and institutions, located in second stories of buildings or flanking the core uses. By focusing shopping, dining, and in some cases entertainment uses at the core of each commercial center, those who live and work in or adjacent to the center will be attracted to the convenience and variety, especially if they can get to multiple destinations within the center easily – by having to drive less (especially on busy, major roads), being able to park in one location and accomplish multiple errands, and having a safe and attractive environment in which to walk.

Commercial activity centers should have a high level of connectivity by virtue of their location along major streets and within a dense street network. In commercial centers that are focused on the shopping and dining needs of the community, buildings should be close to the street with direct access from sidewalks, and parking located to the side or rear of buildings. Shared and cross access between adjacent businesses should be the norm, which may involve access from alleys or shared driveways at the rear of lots.

In commercial centers that focus on traffic from outside the community, including business areas fronting Highway 45, access management is critical and may include frontage drives to avoid additional driveways directly accessing the highway. These areas, too, have sidewalks and while buildings may be set back from the sidewalk by parking areas, buildings are located within 70+/- feet of the sidewalk so they maintain visibility from the highway without the need for large or tall signage.

Support Commercial. These uses include professional and business offices, business support services, wholesale businesses and similar commercial uses located at the periphery of concentrated commercial cores. Institutional uses, light manufacturing and storage may also be appropriate in these locations. These uses tend to be destination-oriented as distinguished from the convenience retail and walk-in commerce at the heart of the community's activity centers. By flanking shopping and dining areas, the employment and patronage generated by support commercial uses support core retail and service activities. These areas are located along Highway 45 at the edges of the activity centers shown in the Strategic Concept map. Support commercial development on Highway 45 continues the overall access management pattern intended along the highway.

Industrial and Employment Centers. These uses include assorted industries including manufacturing, storage, aviation, and similar activities. These uses are intended to be located in and around the city's existing industrial areas and airport. Historically, these uses developed along the railroad, a pattern that should be continued regardless of whether the individual industries require rail access. These areas typically do not include sidewalks but may have them on selected streets, where necessary to provide pedestrian access between neighborhoods, activity centers, parks, schools and other community destinations.

These areas have a high level of access by virtue of their location along major streets. Where located near the core of city, they continue the level of connectivity in the area and have moderate block sizes. Those further from the heart of city may have much larger block sizes to accommodate much larger facilities.

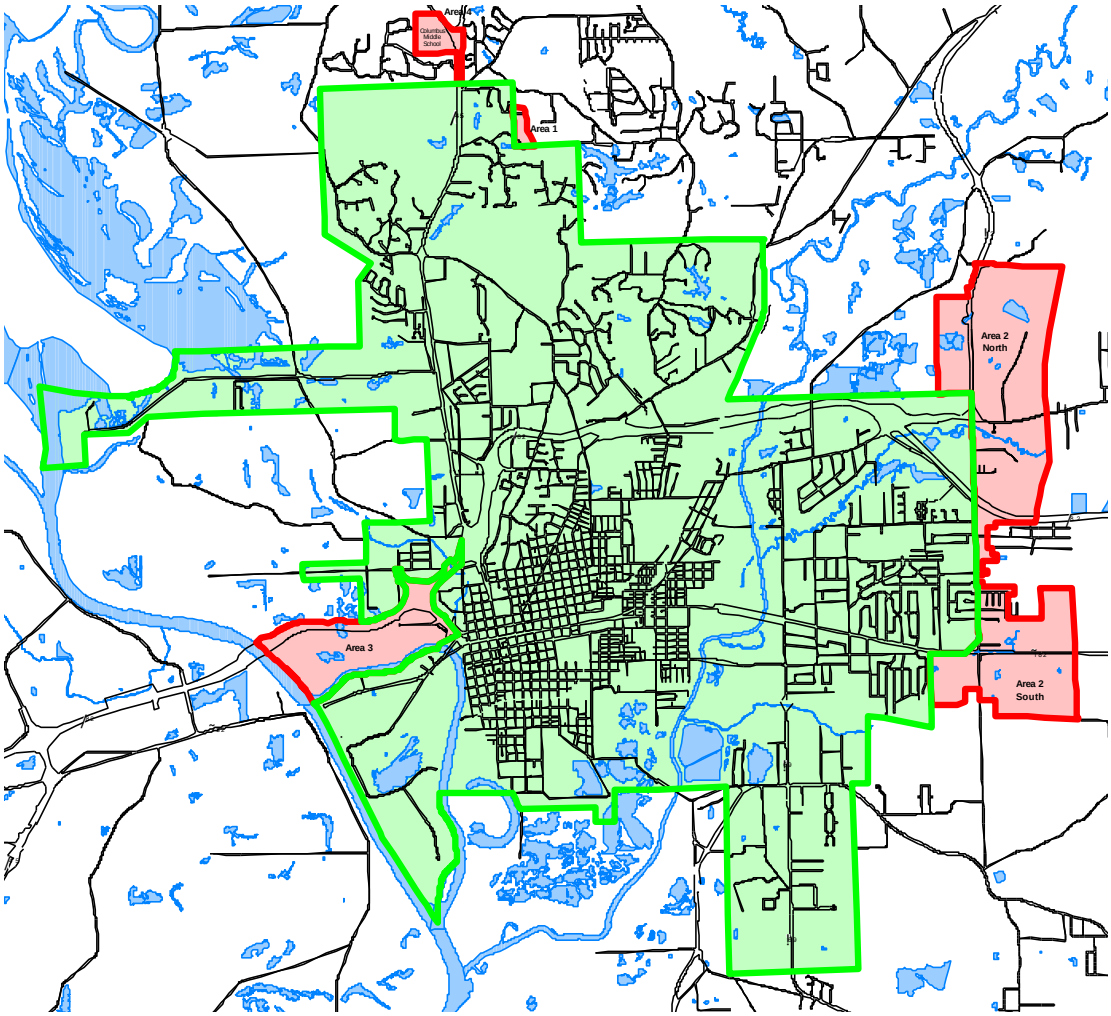
Institutional. Institutional uses include academic, medical, governmental and community service uses and lands. More recently, the trend toward larger places of worship and major medical centers (as opposed to older, freestanding hospitals and neighborhood churches) has expanded the traditional definition. Only property currently developed for institutional uses is shown in the Future Land Use map. New institutional uses, especially larger institutions that may draw traffic from outside the community, should be located in high visibility places where access is suitable and adjacent land uses are compatible. Smaller scale institutional uses may be located in neighborhood centers. New institutions are also appropriate at the edges of other intensive activity centers.

Front setbacks, pedestrian facilities, block lengths and street design are all determined by the location in the community. For close-in locations, buildings are accessible from sidewalks and block sizes are consistent with surrounding development. Away from the center of city, a more rural pattern is appropriate. In all cases, parking is located to the side and/ or rear. For churches, parking can be shared during weekdays with adjacent businesses.

ANNEXATION ANALYSIS

Although this plan's focus is primarily on the present corporate limits of the City, such should not be interpreted as being contrary to the City's annexation efforts. The City of Columbus has been studying annexation for nearly ten years now, and has an annexation effort underway contemporaneously with the development of this plan. Annexation is an important planning tool for a municipality, and should not be overlooked as a mechanism useful and necessary for the implementation of this comprehensive plan.

Columbus is seeking to annex a fairly compact area, as depicted by the red areas in the map below. The green represents the present corporate limits:



The annexation Columbus has configured is a part of a larger area the city has studied for years. Wisely, the city is pursuing annexation in phases, with the timing of the various phases being undetermined.

Annexation is typically a difficult, lengthy and costly process for a city to undertake, particularly with opposition to an annexation. As part of the process, a city must prove that an annexation is reasonable. Every annexation in Mississippi must be approved by the local Chancery Court, and subsequently by the Mississippi Supreme Court if an appeal is taken.

Over time, the courts have developed a twelve point legal test to determine if an annexation is reasonable, which is the ultimate area of inquiry of the court when considering an annexation. These twelve factors have become known as the *Twelve Indicia of Reasonableness* and are as follows:

1. The municipality's need to expand its boundaries.
2. Whether or not the area sought to be annexed is reasonably within the path of growth of the municipality.
3. The potential health hazards from sewage and waste disposal in the area sought to be annexed.
4. The municipality's financial ability to make improvements and furnish municipal services promised.
5. The need for zoning and overall planning in the area sought to be annexed.
6. The need for municipal services in the area sought to be annexed.
7. Whether there are natural barriers between the municipality and the area sought to be annexed.
8. The past performance and time element involved in the municipality's provision of services to its present residents.
9. The impact (economic or otherwise) of the annexation upon those who live in or own property in the area proposed for annexation.
10. The impact of the annexation upon the voting strength of the protected minority population.
11. Whether the property owners or other inhabitants of the areas sought to be annexed have in the past, and for the foreseeable future unless annexed will, because of their reasonable proximity to the corporate limits of the municipality, enjoy the economic and social benefits of proximity to the municipality without paying their fair share of taxes.
12. Any other factors that may suggest reasonableness.

The reasonableness of an annexation is determined based on the *totality of the circumstances*, meaning that each of the above twelve indicators are considered collectively, not as individual tests. While the twelve point legal test clearly covers topics that are related to planning issues, the scope of this Comprehensive Plan does not include determining the feasibility of annexation.

Aside from the overall feasibility of an annexation in accordance with the above test, there are a number of factors that align a properly configured annexation with this Comprehensive Plan:

- Annexation will allow the city to control and guide growth along its edges. Within the unincorporated areas of Lowndes County, there are no zoning

guidelines and development can occur in whatever fashion the landowner/developer wishes. Having zoning control of the area will aid the city in protecting its gateways, edges and image through the application of zoning, code enforcement and other municipal services.

- Annexation will allow the city to manage growth on the periphery of the city, outside the context of activity centers as recommended by this plan. Although the land use patterns recommended in this plan are desirable, it is not realistic to believe they will be the only land use patterns emerge over the horizon of the plan. Planners have no crystal ball and land use regulation and patterns are necessarily influenced by market forces. Annexation areas, whether annexed or not, will develop if the market supports development. By bringing these areas into the city, the city can control the development and avoid the unregulated development patterns that exist within the unincorporated areas, including urban sprawl.
- Annexation and subsequent application of appropriate land use regulations can avoid future infrastructure problems. Development occurring in unincorporated territory is not held to municipal standards concerning street widths, right-of-way width, sidewalks, and other important infrastructure elements. As with areas the city annexed in 1994, annexation <u>after</u> development creates a situation whereby the city inherits substandard infrastructure, and <u>rebuilding</u> the infrastructure to municipal standards is simply not practical or cost effective in most cases.
- Annexation of territory prior to development can avoid the infrastructure problems mentioned above, as well as enable the city to extend the design characteristics of this plan into annexed areas. Doing so will ensure consistency in the built environment.
- Annexation enables the city to deliver services to areas around the perimeter of the city which need services. From the standpoint of community appearance, quality of life, environmental, transportation and other physical and social attributes of the community, the corporate boundary is no more than an imaginary line. Areas immediately outside the city and lacking in services can negatively influence the areas within the city. To those visiting the city, there is only one opportunity to cast a good impression, which is an important marketing tool.
- In addition to land use and infrastructure advantages, annexation can enable a city to capture population and tax base which has spilled beyond the corporate limits. Such is the case with Columbus. A city's tax base is critical to its financial ability to continue providing services. Without the financial ability, the city must either reduce programs and services or increase taxes to generate additional revenues, neither of which is conducive to implementing this plan.

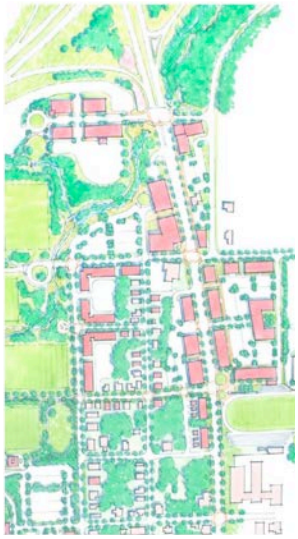
Annexation can have a multitude of other positive affects for the City of Columbus, one of which relates to financial matters. If an annexation area is compact and serves to recapture a lost tax base, the result could be that of a net positive cash flow for the city.

The increased revenue could then be put toward new programs or projects that otherwise may be financially out of reach for the city. Without a doubt, in today's economy government has to operate more efficiently to avoid undesirable tax increases. Budgets

are prioritized and often projects of lesser importance experience delay. Although this plan contains certain capital improvements and projects that would be beneficial to the community, the reality is that Columbus must do what it can when it can within its budgetary constraints to implement this plan. Annexation may very well accelerate the process.

DOWNTOWN COLUMBUS

Main Street is Columbus's "100% location." It is the most recognizable physical environment in the community, to locals and to those outside the community. Downtown is easy to get to from most anywhere, and it is charming, well maintained and busy. The core of downtown has a well-established development pattern with most all buildings built side-by-side and up to the sidewalk's edge. Most parking is provided on street and in rear lots. There are always a few parking spaces available on the street. These characteristics make it a very comfortable, pedestrian-oriented environment. Regardless of the errand, the charm of downtown encourages visitors to linger – to stroll, window-shop and interact with neighbors. This is the ideal environment for Columbus's best retail, dining and entertainment uses. Concentrating retail and dining uses in this environment will help ensure long-term success. Dining and entertainment can keep downtown busy at night as well as during the day. Commercial support uses and loft dwellings are most appropriate in upper stories, leaving the majority of ground level spaces available for shopping and dining.



To the north along Highway 45 and the 5th Street corridor, there is inconsistency in the types of uses that have developed over time and little harmony between individual developments. However, there are many opportunities for redevelopment and infill here. As these areas are reinvested in, they should conform more to the pattern of downtown and its historic neighborhoods, with parking on the street or to the side or rear, and building entrances facing and accessible from public sidewalks. Offices, commercial support uses, live-work spaces and high-density residential uses are appropriate in these areas.

CONCLUSION

Columbus intends to direct land uses as outlined in this chapter toward lands suitable for them and compatible with adjacent land uses in accord with the Future Land Use map and the policies of this document. The city intends that development and reinvestment should be planned, sited and designed in a manner compatible with the city's green infrastructure, in support of development creativity, efficiency, stability, image, diversity and control in accord with the Columbus Strategic Concept.

4 TRANSPORTATION

The city's street network must develop to accommodate as well as enable and sometimes lead the development portrayed in the Future Land Use map and as further detailed throughout this plan. In addition to proposing improvements to resolve or improve existing street issues, the proposed greenway system identifies recommended pedestrian improvements to better connect the city's neighborhoods to its business areas, schools, churches and parks.

Enhance Connectivity and Access

Columbus is mostly a well-interconnected community, due in part to the state and county roads that traverse the city but also because, for much of the city's past growth, development occurred within a grid of local streets that connected to the city's major streets. To improve connectivity and access, Columbus intends to:

- *Maintain the high level of overall connectivity as Columbus grows*
- *Connect neighborhoods to business areas, parks and open spaces, schools and churches with a combination of streets, sidewalks and greenway trails*
- *Improve connectivity between East Columbus and the rest of the City*
- *Improve access around the northeast side of the city*
- *Assure calm, safe neighborhood streets*

The overall goal of long-range planning for transportation in Columbus is to develop a system that will accommodate the present and projected future need for mobility - both the movement of people who live or work or simply travel in the area and the transport of goods moving in or through the area. The planned system should be capable of meeting the need for mobility in the City of Columbus through 2035.

The transportation system should ensure adequate access to all parts of the planning area and provide for access to employment centers, educational institutions, public facilities, Downtown Columbus and other major activity centers. It is essential to preserve, maintain and optimize the use of existing streets and highways. Planning for the allocation of available resources must provide for long-term maintenance needs of existing facilities in order to ensure their continued serviceability. Equally important is the need to identify and apply appropriate measures for improving the operational efficiency of existing streets and highways in order to maximize capacity and optimize performance.

The safety of motorists, bicyclists, pedestrians and other users of the regional transportation system is also a key priority for the city's transportation system. Safety improvements should be made where needed to reduce the probability of traffic accidents or to eliminate potentially hazardous conditions. There is also a pressing need to provide

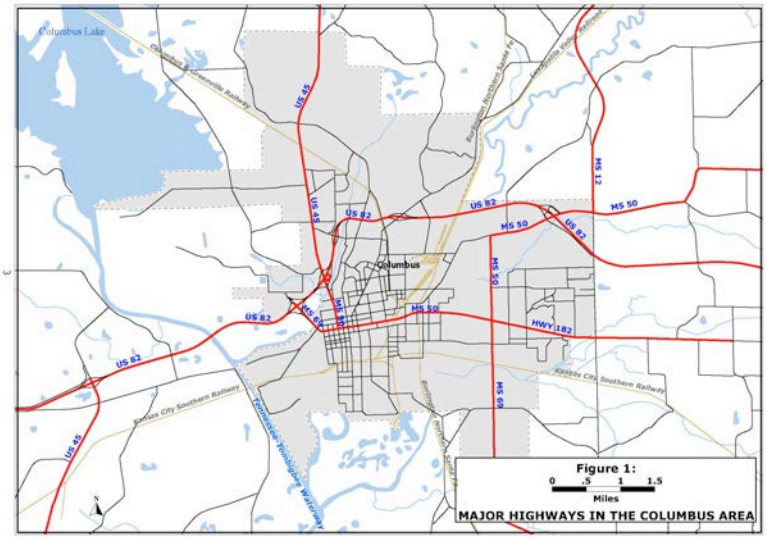
for sidewalks, bicycle lanes, pedestrian crossings, pavement markings, signage, lighting and other facilities and features intended to ensure the safe movement of people by means of non-motorized modes.

Collectively these needs call for the allocation of scarce fiscal resources to effect orderly improvement and expansion of the regional transportation system. Transportation improvements must also support the integrity of neighborhoods and promote community cohesion by minimizing adverse impacts of transportation improvements on existing circulation patterns and protecting the cohesiveness of discrete residential and commercial areas.

Planning for roadway improvement projects should seek to reduce noise and vehicular emissions and enhance the overall environmental quality of the region. Improvements should include new facilities and services, as well as operational enhancements that will reduce traffic congestion. Plans should facilitate the availability of desirable alternatives to personal vehicle use in order to increase average vehicle occupancy and decrease vehicle miles traveled. Columbus intends that its transportation planning support the regional growth and development goals and policies of the city and facilitate cooperation between the city and Lowndes County.

Major Routes

Major transportation routes within the City of Columbus include U. S. Highway 82, U. S. Highway 45, Mississippi Highway 69, Mississippi Highway 50 and Highway 182.
U. S. Highway 82 runs east and west through the northern portion of Columbus and was built as a bypass for the road now designated Highway 182 which runs through the middle of the city. US 82 operates as a controlled-access urban expressway in the Columbus area, and is the only roadway in the vicinity of Columbus bridging the Tennessee-Tombigbee Waterway.
U. S. Highway 45 is the principal north-south route traversing the Columbus area.



Highway 182 includes surviving discontinuous portions of old US 82, the traditional east-west route across Columbus, most of which have been subsumed by state routes 50 and 69.

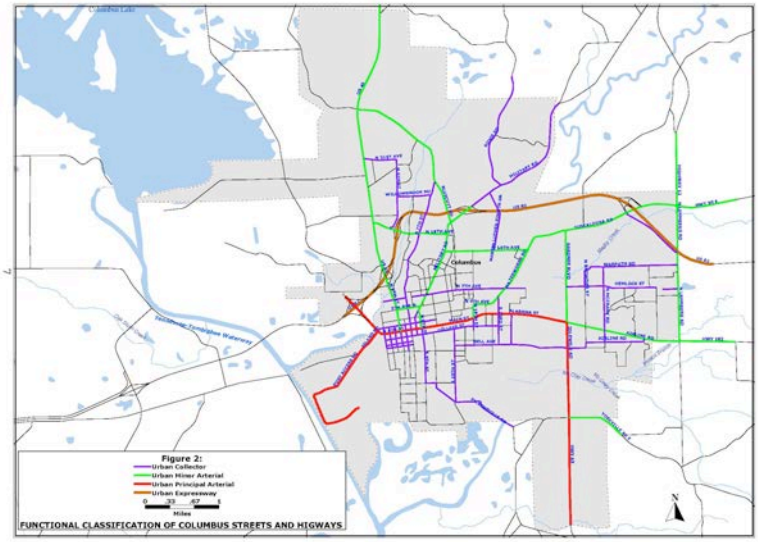
Roadway Functional Classification

Functional classification is a system used to identify the type of service they are intended to provide in the overall movement of trips through a roadway network. The transportation system plays a dual role in providing both access to property and travel mobility. Access is a fixed requirement, necessary at both ends of any trip. Mobility, the ability to move along a selected path between trip-ends, can be provided at varying levels that are generally described in terms of *operational level of service*, an overall measure of operating conditions on a given facility. Each roadway functional class is associated with a different level of relative emphasis on access and mobility.

Expressways and arterials emphasize mobility at the expense of access and generally are used for longer trips at higher speeds. Local streets provide unrestricted direct access to residential property and other trip-end locations, but they offer very limited mobility. Collectors provide a certain amount of both access and mobility, striking a balance of functions suitable for many shorter trips. A given trip may well make use of more than one functional class in moving through the system, progressing from local to collector to arterial and back again.

The Columbus street and highway network includes some 60 miles of major roadways classified as urban expressways, arterials or collectors by the Mississippi Department of Transportation (MDOT).

Each type of facility provides separate and distinct traffic service functions and is best suited for accommodating particular types of travel demand. The design of each type of roadway varies in accordance with the characteristics of traffic to be served by the facility.



Urban collectors represent the largest single class, accounting for approximately 46 percent of all major (i.e., non-local) roadway route-miles. *Urban minor arterials* represent the second largest class at 32 percent of the total. *Urban expressways* and *urban principal arterials* together account for the balance of roughly 22 percent.

Columbus Planning Area Major Roadway Route-Miles by Functional Class

Functional Class	Route-Miles	Percent of Total
Urban Expressway	5.07	8.74
Urban Principal Arterial	7.67	13.23
Urban Minor Arterial	18.67	32.20
Urban Collector	26.57	45.83
Total	57.98	100.00

Source: Mississippi Department of Transportation, Golden Triangle Travel Demand Model.

Existing Traffic Volume

Annual average daily traffic (AADT) estimates for 2006 have been used to calibrate the *Golden Triangle Travel Demand Model* developed for MDOT. Daily traffic volumes are estimated annually by the MDOT Planning Division for more than 60 count locations in the City of Columbus. Fourteen of these had volumes of 10,000 or more vehicles per

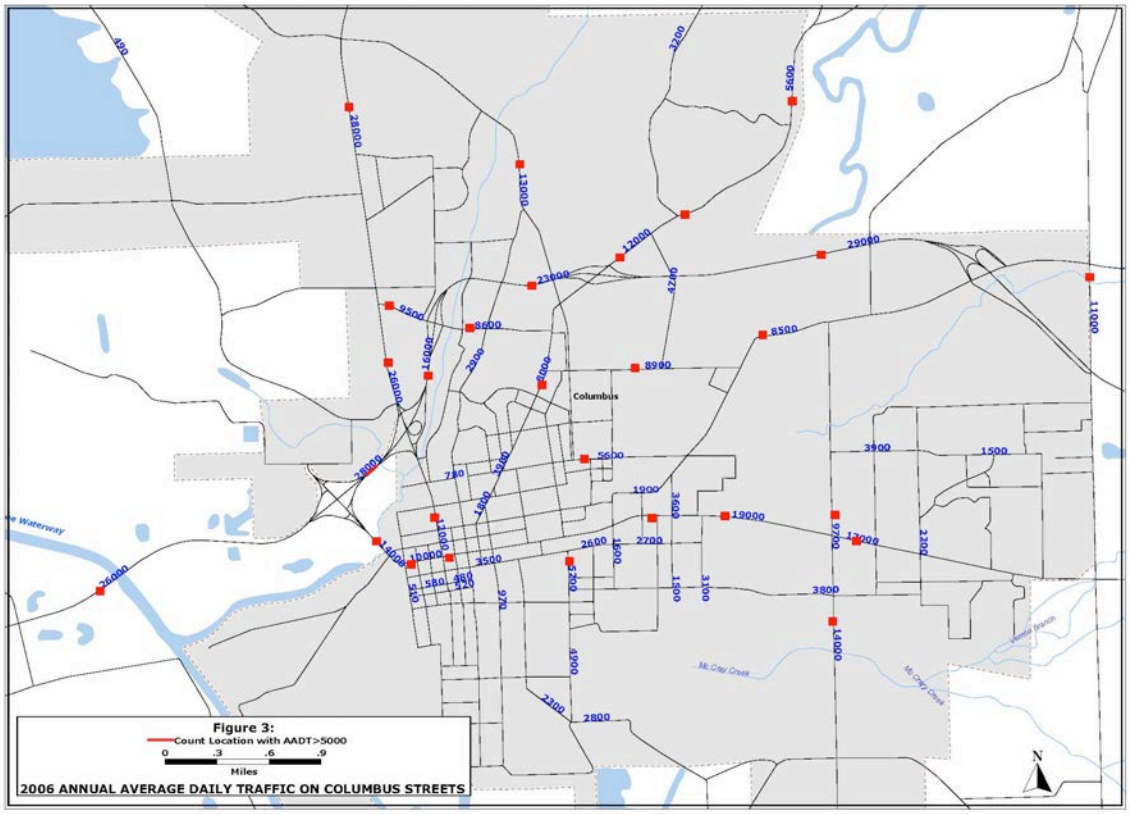
day; nine more had volumes in excess of 5,000 vehicles per day. (Count locations with AADT>5,000 are highlighted in Figure 3). As one would expect, the highest volume of traffic recorded in 2006 was on US 82, the only route classified as an urban expressway. US 45, an urban minor arterial, was a close second at 28,000 vehicles per day. The highest volume recorded on a route classified as an urban principal arterial was 19,000 on Alabama Street (Highway 182 E). The greatest volume on a road which is not a designated state or federal highway was 13,000 on Bluecutt Drive. The greatest on an urban collector was 12,000 on Military Road (MS 12). Other locally maintained routes with AADT in excess of 5,000 vehicles included North 18th Avenue, North 14th Avenue, Waterworks Road, North 7th Avenue and South 15th Street. Two routes had estimated traffic volumes which exceeded the theoretical vehicular capacity of the roadway: Alabama Street (Highway 182 E) east of Gardner Boulevard and Military Road (MS 12) north of US 82.

Columbus Planning Area Roadways with 2006 Annual Average Daily Traffic Volume Greater than 5,000 Vehicles Per Day

Roadway	Location	Functional Class	Lanes	Capacity	2006 AADT
US Highway 82	West of Sand Road	Urban Expressway	4	72,000	29,000
US Highway 45	North of N 31st Ave	Urban Minor Arterial	4	30,000	28,000
US Highway 45	North of US Highway 82	Urban Minor Arterial	4	30,000	26,000
US Highway 82	West of MS Highway 12	Urban Expressway	4	72,000	23,000
Alabama St (Highway 182 E)	West of Gardner Blvd	Urban Principal Arterial	4	28,000	19,000
Alabama St (Highway 182 E)	East of Gardner Blvd	Urban Minor Arterial	2	15,000	17,000
US Highway 82	East of US Highway 45	Urban Expressway	4	72,000	16,000
Main Street (MS 50)	East of N 5th Street	Urban Principal Arterial	4	30,000	16,000
Idlewild Road (MS 69)	South of Airline Rd	Urban Principal Arterial	2	15,000	14,000
Bluecutt Drive	North of N 7th Street	Urban Minor Arterial	2	14,000	13,000
Military Road (MS 12)	North of US Highway 82	Urban Collector	2	11,000	12,000
N 5th Street (MS 50)	North of N 3rd Avenue	Urban Minor Arterial	2	15,000	12,000
Main Street (MS 50)	West of S 22nd Street	Urban Principal Arterial	2	15,000	11,000

Main Street (MS 50)	West of N 3rd Street	Urban Principal Arterial	4	30,000	10,000
Gardner Blvd (MS 50)	North of Alabama St	Urban Minor Arterial	2	14,000	9,700
N 18th Avenue	West of US Highway 82	Urban Minor Arterial	4	28,000	9,500
N 14th Avenue	West of M L King Jr Dr	Urban Minor Arterial	2	14,000	8,900
N 18th Avenue	West of N 7th Street	Urban Minor Arterial	4	28,000	8,600
Waterworks Road	West of Gardner Blvd	Urban Minor Arterial	2	14,000	8,500
Military Road (MS 12)	North of N 11th Ave	Urban Minor Arterial	2	14,000	8,000
Military Road (MS 12)	North of Ridge Road	Urban Collector	2	11,000	5,600
N 7th Avenue	East of N 18th Street	Urban Collector	2	11,000	5,600
S 15th Street	South of College Street	Urban Collector	2	11,000	5,200

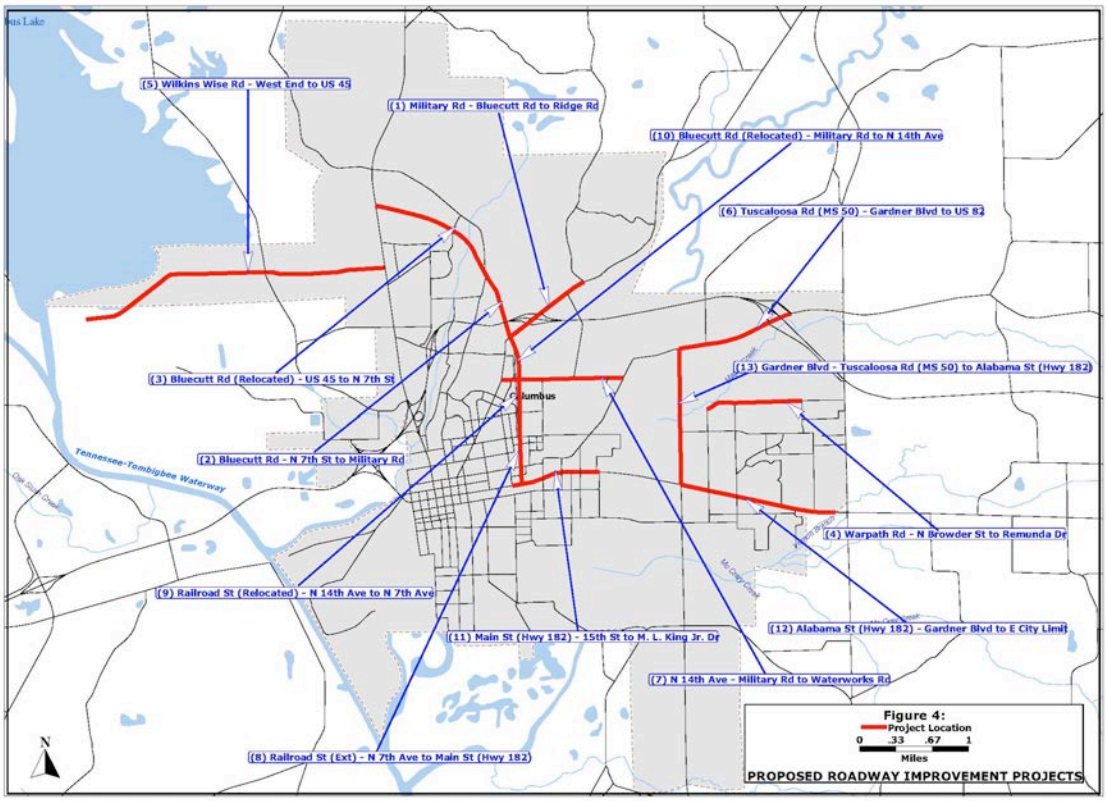
Source: Mississippi Department of Transportation, Golden Triangle Travel Demand Model.



Roadway Improvement Projects

The primary factor applied to the evaluation of proposed transportation improvements is the adequacy of roadway capacity with respect to projected travel demand. The principal

determinants of roadway capacity are the number and width of travel lanes. However, other variables, such as on-street parking, shoulder width, vehicle mix and frequency of access also affects the capacity of the roadway and the operational level of service. The following proposed roadway projects have been identified as needed improvements to provide adequate capacity and acceptable levels of service on Columbus streets. These improvements, shown also in Figure 4, are intended to achieve desirable levels of mobility and accessibility in support of future land use and development in the city to the year 2035.



- *Military Road – Reconstruct and widen between Bluecutt Road and Ridge Road; Improve intersections at Bluecutt Road and Ridge Road.*
- *Bluecutt Road – Reconstruct and widen between North 7th Street and Military Road.*
- *Bluecutt Road – Relocate between US 45 and North 7th Street.*
- *Warpath Road – Reconstruct to 2-lane standards between North Browder Street and Remunda Drive.*
- *Wilkins Wise Road – Widen to 4 lanes between west end and US 45.*
- *Tuscaloosa Road (MS 50) – Widen between Gardner Boulevard and US 82.*
- *North 14th Avenue – Reconstruct to 2-lane standards with curb and gutter between Military Road and Waterworks Road.*
- *Railroad Street - Extension between North 7th Avenue and Main Street (Highway 182).*
- *Railroad Street – Relocate between North 14th Avenue and North 7th Avenue.*
- *Bluecutt Road – Relocate between Military Road and North 14th Avenue.*

- *Main Street (Highway 182) – Reconstruct and widen between 15th Street and Martin Luther King Jr. Drive.*
- *Alabama Street (Highway 182) – Reconstruct and widen between Gardner Boulevard and the eastern city limit.*
- *Gardner Boulevard – Widen to 4 lanes between Tuscaloosa Road (MS 50) and Alabama Street (Highway 182).*

ROADWAY IMPROVEMENT PROJECTS

More detailed data on the projects recommended for implementation can be found in the Columbus – Lowndes County Transportation Plan TP 2020. Outside the improvement recommendations of that plan, roadway construction and improvement throughout the city should adhere to the minimum right-of-way and pavement width standards as found in the typical sections illustrated in Figure 4.1 through 4.3. Flexibility in roadway design should be encouraged where development requires streets to have features such as center turn lane or where other attributes such as bike lanes are desirable.

Any expressway construction that may occur would be under the jurisdiction of the Mississippi Department of Transportation. The design of the roadway, minimum pavement width, and required right-of-way will be determined by state and federal highway construction guidelines; therefore, it is not necessary to specify cross sectional details.

Figure 4.1 Typical Section Arterial Streets

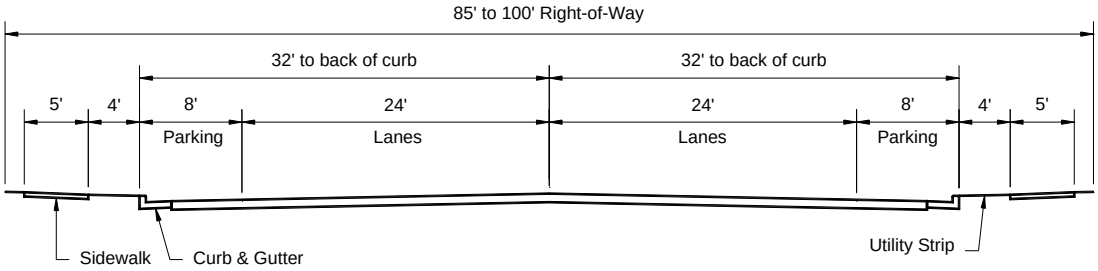


Figure 4.2 Typical Section Collector Streets

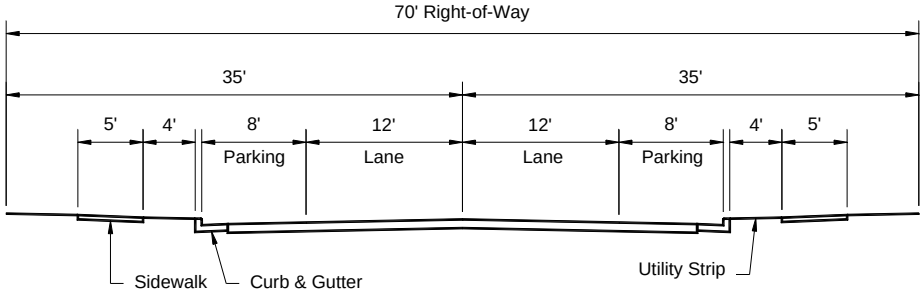
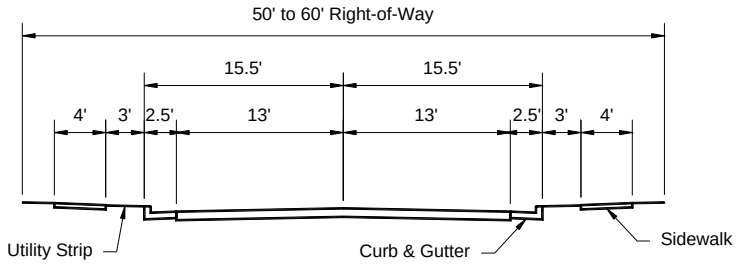


Figure 4.3 Typical Section Minor Streets



Mobility and Connectivity

The purpose of the transportation system is to provide the infrastructure necessary to move people and goods in, around and through the city. Mobility is best served by providing alternative paths for travel from one part of the city to another. This is only possible if there are options for traveling extended distances along arterial routes, if collectors provide access to different arterials, and if local streets offer choices for outlet to collectors and arterials. As a general rule, major streets (collectors and arterials) should be interconnected in a way that promotes the availability of alternative paths for travel. Proper connectivity of streets will enable motorists to avoid making trips that are longer than they ought to be, and unnecessary travel on high-volume expressways and congested arterials. Ideally local streets should be provided not just a single point of access but two or more. In addition to the benefit of reduced congestion on connecting streets, due to the dispersion of traffic, multiple access can help minimize delays incurred by emergency responders by providing alternative routes.

Whenever possible, for the sake of system continuity, local streets should be accessible from two or more connecting streets. New developments should provide both internal circulation for motorized vehicle operators, as well as bicyclists and pedestrians, and direct connections to adjacent land uses. This can not only reduce congestion and mitigate potentially dangerous conditions at a single point of access but enhance emergency access to the development.

Streetscape and the Use of Streets

Depending on the way they are designed and utilized, the city's streets can serve other important purposes in addition to moving people and goods. In terms of actual acreage, transportation represents one of the principal public land uses in Columbus. For that reason, if for no other, the city's streets should have an aesthetic quality that harmonizes with the visual image of the city and reinforces the community's identity. Lighting, landscaping, drainage, signage, pavement markings and other important features essential to both the appearance and functionality of streets must be provided for in the design. It is also extremely important to provide sidewalks, crosswalks and other pedestrian amenities, as well as designated bicycle paths with signs and striping, wherever possible

and appropriate. Properly designed city streets will meet the mobility needs of not just motorists but users of non-motorized modes as well. This includes pedestrians, bicyclists and individuals with disabilities who utilize wheelchairs or other aids.

POLICY

The objectives outlined above can be advanced by implementing the following policies with regard to transportation planning and the design, construction and reconstruction of streets in the City of Columbus:

- *Wherever feasible require developers to accommodate direct roadway access between new and existing developments in order to maintain the connectivity of the transportation network as new development occurs.*
- *Implement measures to discourage through traffic on primarily residential streets by providing more attractive and efficient alternatives and using design, signage and enforcement to reduce operating speeds on local streets.*
- *Provide plantings and other natural landscaping along the edges and medians of major roads to enhance the appearance of public rights-of-way.*
- *Incorporate street trees and drainage elements in plans for new and improved thoroughfares as appropriate for the function and environmental context of the street.*

Access Management

Access management is an essential tool for maintaining the functionality of major streets. Full control of access on interstate highways, which can only be entered or exited at points of interchange with surface streets, makes it possible to maximize the vehicular capacity of the road. However, the more restricted is access to a roadway, the more limited is access to adjacent land. Obviously full control of access is not consistent with the operational characteristics of other functional classes – principal arterials, minor arterials and collectors – which must provide varying degrees of access to one another as well as adjacent land uses. Nevertheless, some limitation is necessary in order to ensure the proper functioning of streets and to avoid chaotic and potentially hazardous traffic conditions. Proper access management can also serve to enhance the value of property located along a route while safeguarding public investment in infrastructure.

The City of Columbus intends to apply the following access management policies to transportation planning and the design, construction and reconstruction of streets in the city:

- *Separate points of conflict. The distance between major intersections and driveways should be regulated. As a general rule, driveways should not be located within the area affected by the flow of traffic at an intersection.*

- *Restrict turning movements at unsignalized access points, including intersections and driveways. The use of fully directional unsignalized streets and driveways should be limited. Intersections at which all turning movements are permitted should provide access to all adjacent and nearby developments via shared-use driveways and cross-access easements.*
- *Regulate shared-use driveways and inter-parcel connectors whenever possible in order to limit the number of driveways, since the capacity of a route is inversely related to the number of access-points located on it.*
- *Regulate design standards that address the spacing of access points, length of turn lanes and tapers, and the dimensions of driveways for application throughout the city on arterial streets and collectors.*
- *Regulate traffic signal spacing in order to maintain the carrying capacity of major streets and the safety of motorists using them. Signals should only be installed where warranted by analysis and where traffic studies indicate spacing and interconnection can be accomplished without unduly reducing roadway capacity in the corridor.*
- *Regulate left and right turn lanes for all arterial streets, collectors wherever feasible, and major points of access to commercial and other activity centers.*
- *Regulate safe access to streets for pedestrians and bicyclists through the implementation of appropriate design elements and traffic signal operations that accommodate bicycle and pedestrian movement in areas of significant activity.*

Pedestrian Mobility and Access

In order to achieve desired levels of walkability, the City of Columbus intends to connect neighborhoods, commercial areas, schools, churches, parks and other destinations with pedestrian facilities that will accommodate young and old alike. Whenever possible, the designs for new or reconstructed streets should include sidewalks. Opportunities for adding sidewalks and bicycle paths to existing streets should also be identified and exploited where strategic public investment is feasible. Sidewalks are especially important in both business areas and residential neighborhoods where pedestrian activity is significant. In general, perhaps excepting industrial areas, the need for sidewalks increases with the density of development and intensity of activity, as well as proximity to parks, schools, churches and other places of assembly.

Where possible sidewalks should be installed on both sides of the street. Where it may be initially feasible to provide a sidewalk on only one side of the street, well-marked pedestrian crosswalks should be provided at appropriate locations. Right-of-way widths and the proximity of existing structures to the curb line will limit the placement and width of sidewalks on existing streets. Where street frontage is undeveloped on one side of a thoroughfare, that side of the street would likely offer the better opportunity for installation of a sidewalk. The city will, funding being available, also attempt to repair or replace existing sidewalks in older areas according to need.

AVIATION

Aviation plays a vital role in economic development of Columbus, and the city acknowledges the importance of airports in improving city functions and increasing national competitiveness, both of which drive local economic growth. The airport serves as a gateway to the city for prospective businesses, and reflects the city's values and commitments to regional and national connectivity.

Two airports serve the City of Columbus: the Golden Triangle Regional Airport (GTRA), 12 miles west of downtown Columbus, and the Columbus-Lowndes County Airport (CLCA) located within the Columbus city limits. GTRA's primary function is to provide regional commuter service as well as corporate aviation, general aviation, and support Columbus Air Force Base training exercises. CLCA's primary function is general aviation, as well as some corporate aviation. Though GTRA provides a strong corporate aviation presence, the CLCA should also expand corporate aviation facilities to give prospective businesses another access point into the city southeast of downtown. Strategically, planned growth provides gateways for development on both sides of the City and grants prospective businesses more opportunity for convenience in site selection when close proximity to a local airport is an important consideration. The services of both airports should grow as the City of Columbus continues to expand and develop to support CLCA as an important component in promoting economic development. In support the city should:

- *Update the CCLA Airport Layout Plan*
- *Address current infrastructure issues*
- *Develop a capital improvement program to maintain existing infrastructure and construct proposed improvements*
- *Acquire property necessary for future improvements*
- *Zone property surrounding the airport to protect airspace and runway protection zones*

As part of CLCA airport layout plan update, the City should consider:

- *Runway extension to expand corporate aviation activities potential*
- *General aviation apron expansion, corporate hangar construction, general aviation hangar construction, and other related airside infrastructure improvements*
- *Airside improvements and associated safety areas, approaches, terminal area, navigational aids, and other airport development*
- *Proposed improvements in two phases: future and ultimate – the former generally as items required in the near future to support operations and growth and the latter to provide the City and FAA with a long range planning tool to reserve land use, zoning, and airspace*

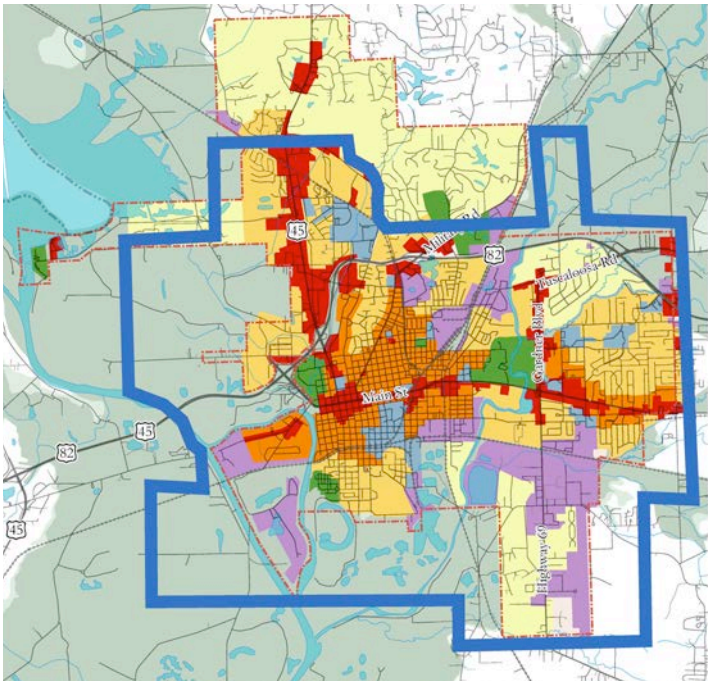
CONCLUSION

Columbus intends that new and infill development extends and improves mobility, safe access and connectivity for both motorists and pedestrians. New streets are to be designed appropriate to their location in the community and the types of development projected in those locations. The city further intends that existing transportation infrastructure be improved where necessary to increase safety, avoid congestion and provide a comprehensive citywide pedestrian system.

5 INFRASTRUCTURE

In addition to transportation, the public utilities and infrastructure of Columbus consists of the city's electric, water, wastewater, drainage, municipal parks, greenways and trails. The city intends is that the public utilities and facilities encourage and support existing and planned future land use and development patterns and provide for the quality of life envisioned in the City's Strategic Concept to all its citizens.

UTILITIES: WATER, WASTEWATER AND ELECTRIC



Water System Coverage

Columbus intends to make water, wastewater and electric services available where consistent with the uses and densities outlined in the Future Land Use map. Electric services are provided citywide. However, those areas identified as "agricultural" or "low density residential" in the Future Land Use map typically would typically be inappropriate for extension of wastewater services at public expense. Similarly, areas designated only for "agricultural/very low density residential" uses would be a very low priority for extension of water lines. City decisions regarding extension of service, then, form an important part of the city's growth management system by reinforcing adherence to the future land use element of this Comprehensive Plan.

Electric power, water and wastewater services for the City of Columbus are provided by Columbus Light and Water Department (CLWD). The department serves over 12,000 customers, including 9,500 residential electrical customers and 10,500 water and wastewater customers. The city also distributes water to Columbus Air Force Base (CAFB) and transmits all wastewater collected there back to Columbus for treatment. CLWD is comprised of a five (5)-member Utilities Commission board charged with setting policy, approving the budget and rate structures. Members of the Utilities

Commission are appointed by the City Council in accordance with the City's Code of Ordinances.

Existing Conditions

Electric power is provided through two delivery points with about 450 miles of overhead and underground lines serving approximately 29 customers per mile. Recent improvements have been made to replace equipment and increase capacity for heavier loads on north side of Columbus. Overall, the electric power system provides reasonably efficient service.

Water service is supplied from eight ground water deep wells, each averaging over 1,400 gallons per minute of flow capacity. The water supply is treated for removal of iron at two existing water treatment plants. Treated water is pumped through the water distribution system through various main pipelines ranging from 6 to 20 inches in diameter. Four elevated tanks and ground storage facilities located at each water treatment plant provide over 6.8 million gallons of storage.

Public water systems are regulated by the Mississippi State Department of Health and must comply with minimum standards set by the Department. According to their latest annual report, the Columbus water system is around 42% of design capacity. Typically a system reaches 75% to 80% of capacity before any mandated upgrades to the system are required. Water supply and treatment are in compliance with State regulations.

Wastewater service is provided through sanitary sewer collection system with over 350 miles of gravity and low-pressure sewer mains. There are also over 50 lift stations pumping wastewater from flat or low lying areas into gravity mains via force mains. Collected wastewater is transmitted to the Reynolds Rigdley Wastewater Treatment Facility for treatment and final discharge to the Luxapalila Creek. The WWTF averages 6 million gallons per day of wastewater for treatment and has a design capacity of 10 MGD.

Wastewater treatment facilities and collection systems are regulated by the Mississippi Department of Environmental Quality and, like public water systems, must comply with minimum standards set by the department. Compliance and enforcement monitoring for water quality is provided through testing of treated wastewater for compliance with permits issued through the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES). The State's role is to set discharge limits for treated wastewater in order to provide adequate water quality to all waters of the State. Permits are typically issued every five years and Columbus has met permit limits since the permit system began 30 years ago.

Recently, the State has been faced with stricter limits ordered by EPA to reduce nutrients such as nitrogen and phosphorous. The city's NDPES permit was recently reissued, which included stricter limits. The stricter limits will more than likely require upgrades

to the wastewater treatment facility within the next five years, unless it may be demonstrated that treated wastewater is not the cause of detriments to water quality in the Tennessee-Tombigee River basin. The city is currently performing a water quality study with an eye to revising the permit to limits that provide adequate water quality, without burdening ratepayers with additional costs for unnecessary upgrades.

Utilities Policy

In support of planned development city wide, Columbus Light and Water Department intends to provide the highest quality service and facilities that meet the City's current and future needs through the most effective, efficient, economic and environmentally methods available. To that end CLWD's objectives are to:

- *Review existing policies and standards annually for effectiveness for addressing current and future needs.*
- *Continue necessary planning for providing and maintaining adequate utility systems for existing customers and for future growth.*
- *Continue existing annual Capital Improvements Programs to fund needed improvements throughout existing areas and to support planned growth.*
- *Further enhance management programs for operations and maintenance.*
- *Seek outside funding sources to supplement local reserves for implementing improvements.*
- *Continue to educate CLWD staff through training and leadership programs for a more efficient work force.*
- *Continue to enhance educational opportunities to the public through conservation and efficiency programs.*

In support of these objectives, CLWD intends to implement the following policies:

- *Review all service policies annually for an effective and feasible approach to existing operations, future growth and developments.*
- *Utilize standards of quality for materials consistent with the latest engineering and regulatory standards to maximize efficiency with design and developments.*
- *Address service policies to new developments effectively to streamline regulatory requirements and standards required for CLWD's assuming maintenance after a development is complete. Aging infrastructure shall be refurbished before street improvements are implemented.*

Planning

- *Review current and future needs categories and budgets on an annual basis to refine and prioritize operations and capital improvements.*

- *Update records annually to assist planning for maintenance, operations and capital improvements. Utilize program resources such as studies, modeling, surveying and mapping.*
- *Review capacity assessment for all utilities for existing and future services.*
- *Review outside funding sources annually for supplementing local reserves*
- *Review annexation opportunities for anticipated needs for capacity, maintenance and operations.*

Capital Improvements Programs (CIP)

- *Review CIP five year revolving plan on an annual basis for priorities or changes required for most feasible approach.*
- *Review funding opportunities on an annual basis and at each end of CIP plan to assist with implementation.*

Operations and Maintenance (O&M) Management Programs

- *Refine current O&M programs into more detailed format enable staff to streamline routine O&M procedures for more efficient inventories for life expectancy and equipment or material replacements.*
- *Refine internal mapping with a formal Mapping Program with short and long term plans.*
- *Refine internal maintenance with a formal Maintenance Program with schedules for annual activities.*
- *Implement strategies for adequate record keeping for all programs in order to operate in the most efficient manner.*

Education and Training

- *Refine staff education and training opportunities for more a more efficient work force.*
- *Refine public education opportunities to assist the public to understand CLWD's role and the make the latest conservation programs available to public for more efficient use of utility resources.*
- *Establish a formal Education Program for specific operation needs with annual reviews and adequate funding. Sufficient records shall be kept to track training on an annual basis.*

DRAINAGE SYSTEM

Flooding is a critical issue for Columbus. The city is plagued with repetitive localized flooding caused by a storm drainage system that cannot handle the frequent intense storms. A significant portion of the city has been developed within the floodplains of the Tombigbee River and Luxapalila Creek and is at risk of widespread riverine flooding. Both issues must be addressed by developing flood damage reduction projects and implementing policies require appropriate development practices.

"V"-shaped swales have often been used along highways and rural roads to capture and channel stormwater. "Bio-swales" use plants to filter the runoff and recharge groundwater before runoff discharges into area waterways. They can also be used in denser, closer-in neighborhoods, serving not only as a drainage element, but also as a landscape feature and a buffer between the roadway and sidewalks.

While the probability of being flooded by the Tombigbee River and Luxapalila Creek is relatively low, riverine flooding damage from these two major conveyances would be devastating were they to flood. Unfortunately, no amount of storm drainage improvements can prevent or significantly reduce the risk of riverine flooding that could occur. Managing riverine flooding through floodplain development policies is addressed, but the Comprehensive Plan mostly focuses on issues related to managing localized flooding problems, which are frequent and result in repetitive economic loss to the community.

The city had a Comprehensive Plan prepared in 1971. One component of the comprehensive plan was a Master Drainage Plan that identified problem areas and recommended preliminary solutions that would need detailed design to be completed prior to construction. There have been no updates since that time, and the city has not been financially able to implement most of the recommendations over the 40-year period. The City has annexed a considerable amount of land outside of the original drainage planning area that has not been studied. More development has occurred in the previously studied areas, which has increased runoff, making some of the recommendations in the Master Drainage Plan out of date. The city intends to update the 1971 Master Drainage Plan to account for these changes and to determine costs so projects may be properly programmed within the city's financial ability. Any projects programmed to be implemented from the 1971 Master Drainage Plan should be evaluated carefully, given the changes in development that have occurred over the past 40 years.

Extension of the storm sewer system, installation of roadside drainage improvements, construction of detention and retention facilities and the proper design of drainage patterns in new development are essential to public health and safety as Columbus grows. A variety of locations in the city experience problems with stormwater runoff, especially after heavy rainfalls. Storm water runoff can be very difficult to correct after

development has occurred. Therefore, assuring safe drainage patterns must begin when subdivision and site plans are prepared and reviewed.

Improvement to the design of new streets is an essential element of improving the overall drainage system. Roadside drainage improvements should vary with the location and character of new development. For example, vegetative swales are most appropriate to carry stormwater runoff along the streets of low-density residential areas and other development areas away from the center of city. “Bio-swales” can also cleanse runoff as it proceeds to area creeks and streams. Roadside swales also suit the character of rural and low-density residential development. Streets that serve medium and higher density neighborhoods and activity centers should be provided with curbs and gutters. These channels direct run-off to the storm sewer system and then on to area drainage ways and streams. Vertical curbs are best suited to areas where on-street parking may occur.

The city’s drainage infrastructure is not confined to street rights-of-way, drainage easements or other parts of the municipal storm sewer system. On-site improvements are also an important element of abating runoff issues as new development occurs. In some developments, detention or retention basins may be needed to reduce stormwater runoff on neighboring lands. Imperviousness of parking areas, which exacerbates runoff issues, can be reduced by including pervious paving and landscaping capable of absorbing rainwater. The city’s landscaping regulations should allow designers options for how to protect landscaping from vehicular encroachment, in addition to typically required curbs, so that stormwater may proceed into the landscaped areas.

There are also a number of ways that residential developments can be designed to reduce their impact on drainage issues. In neighborhoods, greenways, parks and other open spaces can be designed to serve recreational and stormwater functions. Homeowners can create rain gardens and install rain barrels that capture runoff from roofs, which can then be used for watering plants and lawns. Residential driveways can also be designed with less impervious surface by using ribbon driveways.

Top: Parking lot using interlocking pavers.

Middle: Residential rain garden collects stormwater runoff from roof.

Bottom: Ribbon driveway for a single-family residence.

Where necessary, stormwater drainage improvements should be integrated into the overall plan for a development so that they can be incorporated into recreational spaces or to serve as landscape features – not simply become obstacles to development of the property.

Improvements to address existing problems should be investigated to determine the most practical and effective solution in each case. The solution to some stormwater problems may not be located on the properties where the symptoms of the problem are occurring. In these cases, it is necessary for the city to work with landowners to determine the most appropriate solution. Priorities should then be established and placed accordingly into the city's capital improvements budget.

To reduce the impact of future drainage issues, contemporary standards for roadside drainage improvements, grading and erosion should be included in the city's subdivision regulations. Parking and landscaping requirements in the zoning ordinance should also be updated to ensure they support the city's goals for reducing storm water runoff. The city should also prepare and adopt a manual on low impact development practices to demonstrate and encourage site planning, design and construction techniques that reduce runoff from development.

The City of Columbus intends to improve and mitigate localized flooding conditions as follows:

Planning

- *Plan, provide, and maintain a safe and efficient storm water drainage system.*
- *Provide and maintain quality drainage infrastructure that ensure satisfactory levels of service while accommodating future development.*
- *Update the 1971 Master Drainage Plan.*
- *Account for new development that may change the results of the documented findings.*
- *Expand the plan's evaluation area to include the current city limits and unincorporated drainage planning area.*
- *Perform flood reduction studies to address drainage problem areas not addressed in the Master Drainage Plan.*
- *Develop and implement an annual Capital Improvement Program for a revolving 5-year planning period.*
- *Include funding in the City's capital improvement program for maximizing drainage improvement opportunities.*
- *Allocate capital improvement program funding for new improvements, rehabilitation of infrastructure, and storm water management.*
- *Re-evaluate the current Floodplain Management Policy for improved regulations of future development.*
- *Update the current Drainage Policy to include No-Impact Development Policies regarding storm water runoff.*

Programs

- *Prepare and implement a Drainage Infrastructure Management Program.*
- *Propose and implement a city wide Vegetation Management Program.*

- *Prepare and implement a Storm Water Quality Program primarily focused on public education and community outreach.*
- *Explore the community benefits of a Voluntary Home Buyout Program for flood hazard areas should it become necessary.*
- *Schedule routine inspections of all drainage infrastructure.*
- *Document existing conditions (i.e., what type of facility, its condition, etc.).*
- *Plan remediation for any issues found.*

Infrastructure Management

- *Program the periodic clean out of storm sewer inlets, pipes, and culverts to allow full flow conditions.*
- *Request citizen support in identifying drainage problem areas.*

Vegetation Management Program

Establishing a vegetation management program can be a vital component of the City's broader strategy to reduce the risks and costs associated with flood damage. Ultimately, a vegetation management program will enhance the City's flood damage reduction efforts by providing a more efficient storm water drainage system while protecting the environment.

A well-designed vegetation management program will contribute to cleaner water and air. The end result is an open ditch drainage system that is more in harmony with nature and of greater value to the community. In general, the benefits of a vegetation management program are beautification of the project area, protection of channel slopes by strengthening against erosion, and also reducing mowing cycles that saves taxpayer dollars in the long run.

The City intends to establish a vegetation management program to include:

- *Establish and maintain turf and native grasses along open ditches.*
- *Plant wildflowers.*
- *Plant and maintain trees.*
- *Utilize herbicide safely, sparingly, and only when necessary to selectively target certain species of undesirable plants.*
- *Selectively clear to maintain optimal channel conveyance capacities, streambed and environmental integrity, and develop ideal tree canopies.*

Turf and Native Grass

Turf grass is the quickest way to establish erosion protection and reduce the need for future repairs. Establishment of native grasses ensures optimal biodiversity within the open ditch drainage system.

Wildflowers

Wildflowers are another viable method to promote vegetation and offer more benefits than just being visually appealing. Aside from beautifying the local landscape, wildflower promotion can offset the first mowing cycle, which can save the City's maintenance dollars and allow the funds to be allocated to other areas of need. Offsetting the first mowing cycle prevents tons of cut organic material from entering the City's drainage system, which will improve water quality. In addition to the cost savings and water quality improvements, wildflowers provide sustainable landscape and wildlife habitat. Not only does the community benefit in many ways, but so do the creatures that depend on the local waterways for survival.

Columbus Urban Forest

The city intends to establish and promote of trees along the city's open ditch drainage system and other rights-of-way to provide numerous long-term benefits, including:

- *Reforestation is a cost-effective means of reducing maintenance costs.*
    - *Areas with healthy mature tree canopies have little or no undesirable underbrush or groundcover, which reduces the frequency of mowing operations.*
    - *The mature tree canopies shade out and prevent the growth of conveyance-hindering underbrush, which reduces the associated removal operations.*
    - *Trees reduce the conveyance of silt into waterways, reducing the number of silt-removal operations that the City must undertake.*
    - *Stream banks are also stabilized which further reduces maintenance operations.*
- *Trees slow and reduce storm water runoff.*
- *Trees improve and protect water quality.*
- *Trees clean our air by reducing and filtering pollutants.*
- *Trees beautify our community and improve quality of life.*
- *Trees provide habitat for wildlife.*
- *Plentiful trees help reduce the "heat island" effect.*

To achieve these benefits, the city intends to take the following steps to enhance its urban forests:

- *Plant trees to enhance capital improvement projects and as part of the vegetation management program.*
- *Preserve significant trees on its rights-of-way or to rescue moveable trees in advance of construction projects whenever possible.*
- *Partners with individuals and organizations to plant trees in appropriate places on City rights-of-way, and to encourage tree planting of trees in every development project.*

6 PLAN IMPLEMENTATION

As stated in the Introduction, the major theme of this Comprehensive Plan is to take charge of growth and the character of the City of Columbus. The city has prepared this plan to guide decisions regarding land use, development and conservation, zoning and capital improvements. The plan is also intended to help Columbus residents, property owners, merchants, builders, and developers invest in the city by providing a reasonable expectation of its future physical layout and character.

The city's Comprehensive Plan is to be carried out through a combination of direct public and private investment, supported by the City Council, public boards and commissions. Plan recommendations will be translated into action through revision, administration and enforcement of the Zoning Ordinance, Subdivision Regulations and other regulations; through an access management program in cooperation with other agencies; through budgeting and capital improvement programming; and through public and private decisions in support of planned, cost-effective growth and infill policies.

Plan Implementation Strategy

1. *Keep the public sector focused*
2. *Get the private sector interested and involved*
3. *Get other agencies playing on our team*
4. *Take direct action with our own money*
5. *Shape the actions of others with good laws*
6. *Provide incentives for others to take the lead*
7. *Use every power and dollar to support the plan*

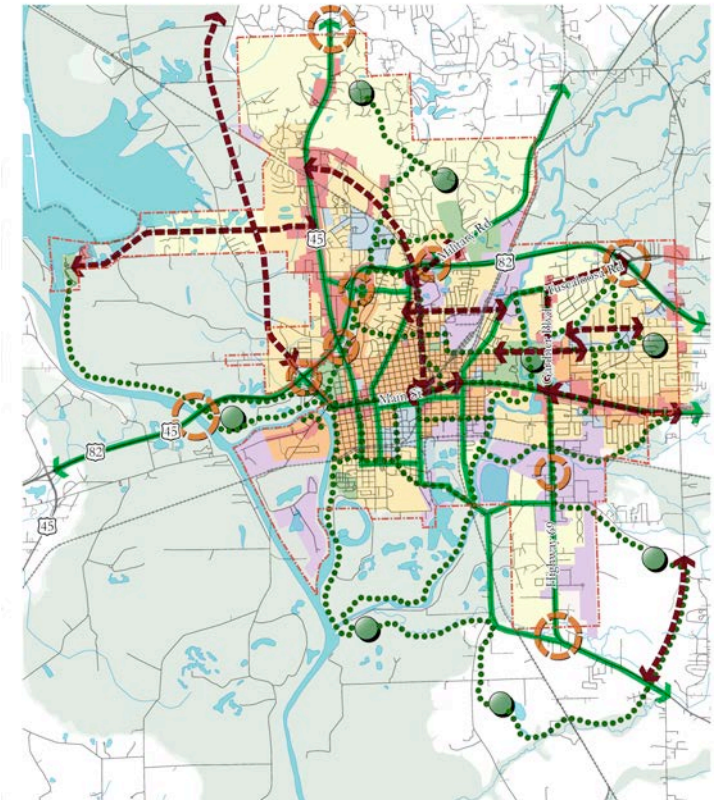
The city has used its grant of the police power to adopt and enforce growth and development regulations. The city has used its taxation power to plan for and implement a budgeting system that includes capital investments for infrastructure facilities and services that it uses to help shape growth and development. All of these tools will continue to be used together to shape Columbus in accord with this Comprehensive Plan.

Under each subsection of this chapter, a chart is provided that identifies current issues and multiple strategies to address them. The charts are a means to organize issues that have been identified as through the Comprehensive Plan process. The strategies listed in each chart are possible implementation strategies for the listed issues. There is no single answer to any one issue. Each strategy applies to multiple issues and should be implemented to solve and address many of the issues raised. Each of the strategies are defined and discussed, though may be referenced with multiple issues, will only be defined in one section of the plan.

Near the end of the Chapter a completed table of goals and policies for the City has been provided. The goals and policies have been coordinated with the Land Use Plan, the proposed capital improvements and the plan implementation strategies.

PUBLIC INVESTMENTS

Throughout the planning process, the need for specific public investments to support implementation of the Strategic Concept has arisen. These may be divided into several categories, including: greenways and sidewalks; parks and open space; municipal facilities and infrastructure; transportation; and downtown and commercial corridor revitalization. Following are brief descriptions of the overall intent for each category and a list of the specific projects and or studies. It should be noted that project lists will change from year to year as implementation continues. The intent is that the listings be updated regularly for use during the city's annual budgeting process. Citywide recommendations are shown on the Public Investments map.



Public Investments

Gateways

- Improve gateways along Hwy 82 with signage and landscaping
- Refurbish existing gateways as needed

Greenways and Sidewalks

- Preserve greenway corridors
- Construct trails
- Build sidewalks in critical areas and expand in later phases

Parks and Open Space

- Acquire land to build neighborhood parks
- Improve, maintain city parks and open spaces

Transportation Improvements

- Improve access conditions on Hwy 45
- Hwy 45 Bypass
- Southern Collector
- New Connector road across Propst Park

Specific Improvements along the following:

- Military Road
- Bluecutt Road
- Warpath Road
- Wilkins Road
- Tuscaloosa Road
- North 14th Avenue
- Railroad Street
- Main Street
- Alabama Street
- Gardner Blvd

Gateways and Corridors

Physical improvements are recommended at the entrances to and key image corridors through the city as described in the Strategic Concept. Signage and landscaping improvements are recommended at the locations identified in the Public Investments map. Corridor overlay or special district requirements should be included in the zoning and sign ordinances.

The scale and extent of design improvements should vary from location to location, appropriate to their context. Gateway improvements shall incorporate wayfinding information—directing visitors to important locations, such as Main Street or the airport, for example. Over time, existing gateway signage will age and eventually require replacement. At that time, new signage may be installed in an optimum location and of a standard city design.

Issues	Strategies
• Perception • Signage • Wayfinding	• Complete Street Policies • Street Tree Planting • Character Studies • Historic Preservation • Wayfinding Plan • Sign Ordinance • Building Setbacks • Landscape Ordinance • Maintenance Policies • Capital Improvement Projects List

Strategies:

*Complete Street Policie*s, as mentioned earlier, refer to the recently adopted complete streets ordinance for the City of Columbus. The ordinance describes the design standards for all new streets in Columbus. The design standards provide a desired look, performance and multiple design elements that support and shape, character and feel of the streetscape. Streetscapes can be used to define gateways and support a range of additional green infrastructure and transportation issues.

Street Tree Plantings can be used to create unique areas and districts. The use of different tree species, their spacing and/ or placement can be used to highlight street intersections, provide a design element that can uniquely identify and create signature places and also provide for greater tree coverage and urban forest elements. Shaded, tree lined streets provide a unique look and feel for a community and their thoroughfares, that can capture and strengthen the use of sidewalks, building patterns and help correct bad driver behaviors.

Character Studies allow the city to define, locate and understand the character and designs of historical and cultural buildings, places and areas. Such studies can be used to provide standards for building materials, styles, unique features and the historical context of the specific areas, objects and places.

The Historic Preservation Ordinance provides for the Columbus Historic Preservation Commission to preserve, promote and develop the historical resources of the city by, among other powers, review of applications for proposed erection, alteration, demolition or moving of any landmark or building located on a landmark site or within a historic district, and the approval or denial of certificates of appropriateness for such work.

The *Wayfinding Plan* will be a tool the city can utilize to identify major destinations and corridors for visitors and residents to use. The plan will define the standards for the specific sign elements including graphics and text used, to create a comprehensive and complete family of signs that will lead visitors to and from key destinations. The plan will incorporate key citywide design elements and support gateway design and signage.

The Sign Ordinance provides for a design and regulation policy for all signage in the city. The ordinance will continue to be utilized to govern the size and aesthetics of the signs, and to make sure they conform to the local historic and current character of the buildings and places they are located. Special gateway and image corridor area overlays or other special provisions should be included in the ordinance for purposes of traffic and highway safety as a means of focusing motorist attention on the roadway while appropriately displaying and providing appropriate access to adjacent commercial uses.

Building Setbacks set forth in the zoning ordinance prescribe the minimum and/or maximum distances a building can be placed from front, rear and side property boundaries. Setback regulations vary from district to district, providing a means to help set the scale of a streetscape and protect adjacent properties and to create spaces at critical locations. One example of the effect of their use is the historical development pattern of Columbus, with small front yards where residences have porches and are set close to the street and sidewalk. This placement of buildings creates a unique place and has a different character from many of the new subdivisions. Building setbacks can be used to reinforce design principles, retain the existing character and to help create places and gateways through the density, placement and character of the architecture.

A Landscape Ordinance can be used to provide regulation and design minimums that developments must adhere too. These regulations can provide for the enhancement of structures and sites as they are seen from public rights-of-way, streets and sidewalks; providing buffers, screens and edges that can define spaces, beautify areas, and provide vegetative screens to undesirable views and elements such as dumpsters. Landscape ordinances can also include guidelines for plant specie diversification and regulations for sustainable planting guidelines, such as the use of native and drought tolerant species. Landscape ordinances are critical to provide guidelines that address visual issues, plant species and green infrastructure needs such as heat island effects, pervious areas, rain gardens, and bio swales.

Maintenance Policies for public rights-of-way shall be reviewed regularly. As the city employs new tools and strategies to accomplish the goals and vision of the comprehensive plan, maintenance policies and guidelines must be revised as appropriate to maintain the desired performance and aesthetics for the city.

A Capital Improvements Projects List shall be compiled with this Comprehensive Plan as a guide. The list shall identify key projects identified though the planning process. The list shall be an ongoing and developing tool to provide guidance for the plan document and review of the plans implementation. The list will provide a specific listing of projects and proposed time frame for completion.

Greenways and Sidewalks

During the planning process, Columbus residents expressed a desire for more pedestrian accessibility throughout the city. Development of a citywide greenway and sidewalk system will maximize both on- and off-road pedestrian access between the city's neighborhoods and destinations, such as Downtown Columbus, schools, business areas, and parks and recreational facilities. Greenways that include off-road pedestrian trails will be an important element in meeting the community's accessibility goals in locations far from the heart of town. They will also be helpful in connecting already developed residential areas that presently lack sidewalks.

Sidewalks and trails are more than just amenities for exercise and recreation. They contribute to a safer environment. Adequate pedestrian facilities provide a safe alternative to children driving or being driven to school or sports and recreational activities, which also has the added benefits of lessening congestion on local streets, reducing driving demands on parents (scheduling and fuel costs), and promoting a healthier, more active lifestyle. Recommended sidewalk and greenway projects necessary to create a comprehensive citywide pedestrian system are shown on the Public Investments map.

Because there are few existing sidewalks outside the historic core of the community, the city intends to act strategically to begin developing an effective pedestrian system. Priorities will be established to facilitate construction of sidewalks and trails, initially, that will have the greatest benefit and that will create a logical foundation for future expansion. High priority connections, such as sidewalks adjacent to the schools, are indicated on the Public Investments map and should be incorporated project by project into the city's capital improvements plans and annual budgets.

The city intends that local monies be used to leverage Safe Routes to School grants, Transportation Enhancement grants and similar funding mechanisms that require local matches. Meanwhile, streets built as part of new subdivisions, redevelopment and infill projects and commercial developments of medium or higher density and/or are located close to Downtown Columbus, schools or parks, should include sidewalks. Similarly, easements or dedications in new subdivisions should be required that will allow the city to develop an interconnected greenway trail network.

Issues	Strategies
• Lack of Sidewalks • Connectivity • Bike Lanes • Trails	• Sidewalk Master Plan • Park Master Plan Defined in a previous section • Complete Street Policies • Historic Preservation • Building Setbacks • Landscape ordinance • Maintenance policies • Capital Improvement Projects List

Strategies:

A Sidewalk Master Plan can be utilized to identify all of the current sidewalk issues the city has. The plan can be developed to identify important activity centers and public uses that should be interconnected to other activity centers and the existing neighborhoods. The plan should identify the location and condition of the current sidewalks. The plan shall describe the future sidewalk needs, and typical construction standards. The plan will also create a prioritized list for inclusion with the city's capital projects list for completion.

Transportation Projects

To achieve the city's desired levels of accessibility and mobility will require implementation of the transportation improvements noted in the plan. These improvements, shown on the Public Investment map, should be included in the city's capital improvements plan. Implementation of access management improvements along other improvements on or abutting state roads will require coordination and support from MDOT.

Issues	Strategies
• Connectivity • Congestion • Access Management • Street Standards	• Access Management Plan • Truck Route Plan Defined in a previous section • Complete Street Policies • Wayfinding Plan • Sign Ordinance • Building Setbacks • Landscape ordinance • Maintenance policies • Capital Improvement Projects List

Strategies:

An Access Management Plan should be prepared to provide for coordination, design and planning of desired points of access to roadways and parcels of land. The plan may be part of the overall transportation plan or a stand-alone document. Access management plans help cities reduce issues of congestion, mitigate possible points of conflict and can create safer, calmer roadways and connections for drivers and pedestrians.

A Truck Route Plan can be a powerful tool for the city to coordinate with MDOT, local and regional distributors and drivers. The plan will describe and provide for enforcement of an optimal driving path for specified trucks to move through and about town. The plan will include local access provisions so that local business and deliveries are not interrupted or impeded, while potential conflicts between truck traffic and general traffic patterns of the city may be mitigated.

Water, Sewer and Drainage Infrastructure

As discussed in chapter 5, the City of Columbus has a great deal of assets associated with its current infrastructure. Some of them include the water and wastewater facilities, the current capacity at which the facilities operate, and the level at which the facilities are maintained. The current system has capacity to accommodate growth within the city. This capacity can be a tool the city uses to encourage infill and redevelopment with in the existing city service areas. The following are recommendations to continue and build on the existing level of service the water and waste water facilities bring to the City of Columbus.

Water Improvements

- *Water Loss Reduction Program – Continue replacing outdated water meters with new, Automatic Reading Meters (Smart Meter)*
- *Fire Protection Improvements – Upsize existing water lines less than 6-inches in diameter in remaining areas for improving fire flows*
- *Geographic Information System Improvements – Continue to enhance ongoing mapping program for a more efficient work force*
- *Hydraulic Model Improvements– Continue to fine tune water demand models for future growth and fire protection capacity assessments*
- *Supervisory Control and Data Acquisition (SCADA) Improvements – Continue further enhancement of newly installed SCADA system to replace the existing outdated system for controlling water treatment plant and distribution system pumping operations*

Wastewater Improvements

- *Wastewater Treatment Facility Renovation – Final phase of renovations started in 2008 to renew the life of the facility*
- *Water Quality Study – Complete three year study to maintain existing permit limits for final discharge to Luxapallila Creek*

- *Collection System Improvements – Continue efforts to rehabilitate dilapidated areas of existing gravity sewers, manholes and lift station in older sections of the system*
- *Inflow/Infiltration (I/I) Reduction Program – Continue to identify major areas of extraneous water (storm water and ground water) entering the existing system to prioritize efforts for repairs and/or replacements of dilapidated areas for a more efficient system*
- *Supervisory Control and Data Acquisition (SCADA) Improvements – Continue further enhancement of newly installed SCADA system for controlling wastewater treatment plant and collection system pumping operations*

Drainage Improvements

Many areas of Columbus have drainage issues. The city intends to evaluate these problems and the cost to correct them, set priorities and allocate funding accordingly. Amendments to the city's development regulations and encouragement of low impact development techniques in future residential and non-residential development will help the community avoid or lessen future issues related to stormwater runoff and erosion.

Issues	Strategies
• Existing drainage issues • Plan for future needs	• Update to the Drainage Plan As defined in a previous section • Complete Street Policies • Landscape Ordinance • Historic Preservation • Maintenance Policies • Capital Improvement Projects List

Strategies:

An Update to the Drainage Plan will provide for coordination, design and planning of the city's drainage issues and policies. The plan shall include the recommended policies and strategies mentioned for the planning, program and maintenance of drainage issues in Chapter Five of the Comprehensive Plan.

The additional strategies mentioned above have each been described in earlier sections plan. Each may be utilized to achieve and provide multiple ways to address existing drainage issues. Within each strategy, drainage issues should be referenced, provided for and described, such as within the landscape and/ or zoning ordinance to limit the amount of impervious surfaces permitted. Other examples may include the inclusion of rain gardens and/or bio swales within the construction of complete streets, pervious paver systems for parking lots and a detailed plan for the required capital improvements to address specific needs.

Parks and Open Space

Columbus maintains multiple park and recreation facilities. As the city's population grows, the community will need more parks and open space for both passive recreation and sports. A combination of exactions from new development and capital improvements by the city will be necessary to meet parks and open space goals. The Strategic Concept and Future Land Use maps identify general locations for future neighborhood or community parks. As residential development occurs in these areas in the future, the city intends to coordinate with subdividers to set aside land for park space as the area develops. These general locations, also shown in the Public Investments map, are intended to create a distribution of city parks to provide a public park within walking distance of most neighborhoods. This also requires that all park and recreation sites be considered with regard to how they may be physically connected to adjacent development through sidewalks and trails.

Issues	Strategies
• Lack of park space • Connectivity • Trails/ Sidewalks • Diversity of Uses • Neighborhood Parks/ Pocket Parks	• Park Master Plan Defined in a previous section • Complete Street Policies • Sidewalk Master Plan • Landscape Ordinance • Maintenance Policies • Capital Improvement Projects List

Strategies:

A Park Master Plan will provide a comprehensive tool to track, plan and maintain the existing and needed parks for the City of Columbus. The plan should categorize and summarize all of the existing park and recreation facilities, while planning for and recommending the needed parks and facilities the city desires. The plan should identify and prioritize the city's needs, and then used as a supporting document to compliment the city's connectivity, sidewalk, streets and capital improvement projects. The park plan should also be developed in cooperation with the city's school system to allow for comprehensive coordination of use of all existing public open spaces and facilities. The plan should be developed in cooperation and with the support of the Columbus-Lowndes Recreation Authority.

The plan should focus on the immediate and long-term needs of the City of Columbus – not only on citywide park and recreation needs, but also neighborhood and community needs. The plan, in conjunction with the city's subdivision and zoning standards, can help to establish minimum open space and useable green space standards for development.

The city should engage the all neighborhood and community groups regarding specific needs and strategies to accomplish their local park and recreation needs. These should include a variety of implementation tools including the aforementioned ordinances, complete street policies, sidewalk master plan, landscape ordinance and the capital improvement projects list. The plan should include provisions to allow for community groups and neighborhood associations to establish and/or maintain neighborhood parks on city-owned properties. The plan should call for and demonstrate policies for establishing the groups mentioned above and how the process, execution and maintenance of park and open space projects shall work.

GROWTH AND DEVELOPMENT REGULATION

Several the key elements of the city's growth and development management system – such as the zoning ordinance, subdivision regulations and sign regulations, among others, – are based on the police power. These address land use, site planning, the size and location of buildings and other structures, aesthetics, and signage. Each of these regulations protects the health, safety and welfare of the community – the so-called "valid public purposes" of the municipality. Each must also respect the principles of due process, non-discrimination in their application, profitable use of land, freedom of speech, and the balancing of individual costs against anticipated public benefits.

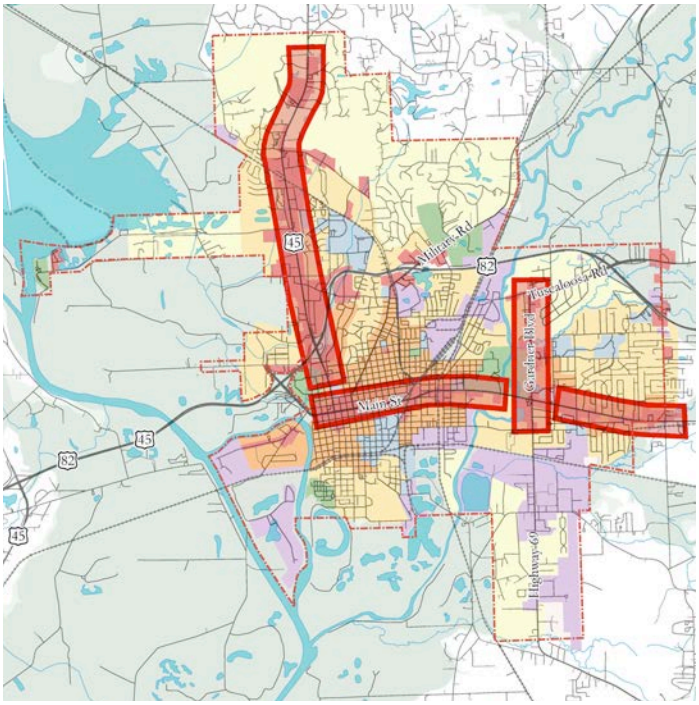
Comprehensive Plan	Zoning Ordinance
• *Provides general policy guidance*	• *Provides specific regulations*
• *Describes conditions desired in the long term – not necessarily existing or recommended use(s)*	• *Describes what is and what is not currently allowed today*
• *Includes recommendations that involve other agencies and groups*	• *Deals with development issues under city control*
• *Intentionally flexible to allow responses to changing conditions*	• *Fairly rigid, requires formal amendment to change*
• *General land use categories*	• *Zoning districts*
• *General land use locations*	• *Parcel-specific designations*

Zoning Ordinance and Map

Columbus has adopted and enforces a Zoning Ordinance to regulate development within a variety of zoning districts. The Comprehensive Plan and its Future Land Use Map should not be confused with the Zoning Ordinance and Zoning Map. The Comprehensive Plan has been prepared as a *guide* to public and private investment in land development and infrastructure. In contrast, the *zoning ordinance* is a regulatory tool used by the city to influence and direct development of the community in ways that reflect the direction and desired form called for in the Comprehensive Plan.

In addition, planned developments, requiring preparation and approval of overall master development plans and similar modifications in accord with the Comprehensive Plan, are intended to allow innovative approaches to development, in recognition of the fact that livability – and good design – cannot be mandated, but can be encouraged, by good laws.

As a part of the plan implementation system, Columbus intends to revise its Zoning Ordinance to reflect and incorporate the land development policies of this plan as appropriate to time, place and circumstances. The following are recommended to enhance the Zoning Ordinance to better implement the land development policies of the Comprehensive Plan:



- *Establish an Institutional zoning district*
- *Establish special zoning district(s) or overlay district(s) for Highway 45, Main Street, Alabama Street and Gardner Boulevard.*
- *Include conservation subdivisions as permitted uses in single-family zoning districts*
- *Incorporate site plan review guidelines for administrative and other required site plan review procedures*
- *Update landscape requirements (buffering, screening, and parking lot landscaping requirements) in the Zoning Ordinance*
- *Update the planned unit development provisions of the ordinance into a complete Planned Development District with planned development district regulations that include planning and design criteria to guide development in accord with the Comprehensive Plan*
- *Update parking regulations and include provisions to encourage shared parking in non-residential districts*
- *Incorporate access management regulations to suit the functional classification and design speed of roads*

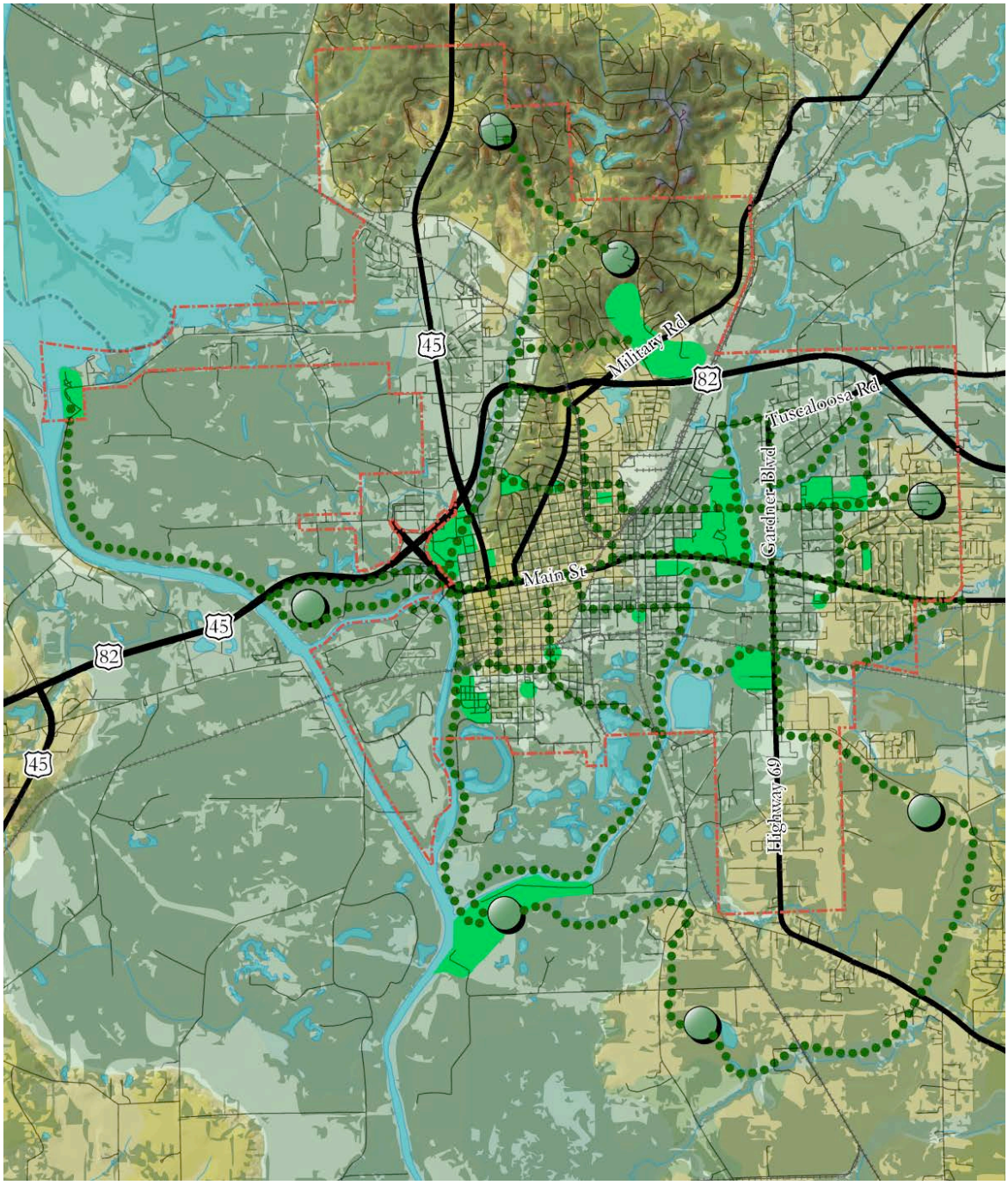
Subdivision Regulations

The city's Subdivision Regulations provide a system for division and development of land, mandate minimum requirements for improvements within subdivisions, and establish minimum design standards for those improvements. At the same time, the Subdivision Regulations should be utilized as a means for meeting the city's goal to create neighborhoods of distinct character, consistent with the community's historic development and "green infrastructure," as called for in the Comprehensive Plan.

This plan sets up a logical framework to accommodate growth while preserving the community's strongest assets. It also recommends standards for various design elements appropriate to context. Infrastructure requirements and design standards need not be uniform across the entire planning jurisdiction. Instead, the city's physical elements should take their cue from a combination of natural site characteristics and existing and planned development patterns. Consider, for example, the differences in character between the historic parts of the city, areas at the edge of town in low, flat lands, and the hilly area in the north of the city. Each is different, and development in each may warrant different design standards to be suitable to the neighborhood. In the case of street networks, the right-of-way width, interconnectivity, alignment, number and size of the travel lanes and edge treatments – including drainage improvements, lighting, buffer areas, street trees and pedestrian facilities – should suit the land and the land use type and intensity of development.

Also to be considered in the development of land is the city's green infrastructure. As noted in the Strategic Concept, the green infrastructure includes surface water resources, floodways and floodplains, wetlands, steep slopes, parks and protected areas, and tree canopy. Development character and overall gross densities as called for in the plan should recognize and respond appropriately to those resources and conditions. Through use of planning and design standards geared toward each particular area and its resources, the city's subdivision review process will provide opportunity to further implementation of the Comprehensive Plan.

All open spaces are not equal. Open space should not be viewed simply as the space left over once development is complete. There should be a function for each open space (e.g., resource protection or passive recreation), strong access and good connectivity of its parts for the benefit of the public and, in certain cases, wildlife. This argues strongly for placing open space and natural resource protection standards in the subdivision regulations rather than relying solely on zoning requirements, for it is at the time of subdividing land that open space may be secured or lost. By placing concerns for green infrastructure and open space early in the process of planning and design of new development, the intentions of the Comprehensive Plan more likely will be met. Open space can be used to improve natural drainage and infiltration, which better protects resources when incorporated as the preferred strategy, prior to property being set out for development.



The following are recommended to enhance the Subdivision Regulations in order to more completely implement the land development policies of the Comprehensive Plan:

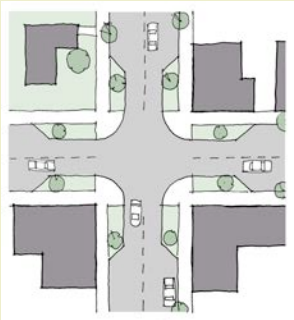
- *Use narrow residential streets to provide an attractive, calm and safe neighborhood environment*
- *Maintain and extend the city's strong level of street connectivity to disperse traffic and avoid congesting the city's limited number of collectors and arterials*

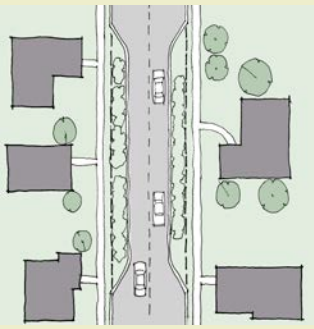
- *Conserve natural drainage patterns to reduce the need and added costs of earthwork, clearing and drainage*
- *Require property owner association management of common open space.*
- *Interconnect streets to assure alternate routes for residents and emergency response and to disperse traffic.*
    - *Activity centers and medium and high-density residential neighborhoods should have a highly connected street network with shorter block lengths (no more than 500-600 feet).*
    - *Industrial developments, agricultural areas and low density residential neighborhoods require less connectivity and may have longer block lengths.*
- *Plan and design streets to discourage speeding.*
    - *Design elements that calm traffic include: short block lengths, street curvature, roundabouts, narrow streets, on-street parking, vertical curbs, street trees, sidewalks and pedestrian-scale lighting.*
    - *Streets should be designed so that after-the-fact traffic calming interventions, such as speed bumps, are not needed.*
- *Require sidewalks in activity centers and medium and high density neighborhoods and any neighborhoods close to parks, schools or other community destinations.*
- *Incorporate development review criteria (see following) to assist review of application*
- *Include provisions that encourage development to tie into the municipal sewer system*

Multiple Issues, Specific Designs

Examples using Street Designs

The Comprehensive Plan details multiple strategies for multiple issues. Many of the issues presented have numerous possible solutions, processes and potential strategies where the issue can be referenced and mitigated. This can be easily seen with issues regarding streets. Good street design can solve and help mitigate many of the issues raised during the planning process, such as perception, connectivity, sidewalks and drainage. The following are a few simple graphics to illustrate examples of ways street design can mitigate multiple issues.





Above Left: Using bulb-outs at corners in pedestrian oriented intersections, provide for traffic calming by reducing the pavement width, increase pedestrian safety by increasing the area for the pedestrian to occupy, while also decreasing the distance a pedestrian must walk to cross the street. The bulb-out also provide space for trees, signage, benches and other streetscape elements that can create the desired image for the street and provide for street beautification to create a more positive street experience for both drivers and pedestrians.

Above Right: Putting some streets on “Street Diets” allow for the removal of unused and undesired amounts of pavement that can encourage bad driver behaviors. By removing and reducing street widths, landscape areas can be constructed that not only help encourage and slow traffic, but can also be designed to receive and treat storm water runoff before it is released into the main system. The landscape areas also add to the overall look and feel of the street reinforcing positive perceptions.

Issues	Strategies
• Support existing green infrastructure • Opportunities for new residential construction • Commercial Corridors • Connectivity	• Green Infrastructure Management • Residential Development Policies • Commercial Development Policies • Access and Accessibility Policies Defined in a previous section • Complete Street Policies • Building Setbacks • Sidewalk Master Plan • Landscape Ordinance • Historic Preservation • Maintenance Policies • Capital Improvement Projects List

Development criteria for activity centers and neighborhoods may be added to the Zoning Ordinance and Subdivision Regulations for use in review by city staff. The following should be considered at that time.

Strategies:

Green Infrastructure Management. In support of policies of the Comprehensive Plan, consider use of a checklist such as the following during the review process for all development projects requiring site plan approval:

- *Favor infill and redevelopment projects with appropriate areas designated for higher densities, to gain useful open space and watershed protection with no net loss of development opportunity.*
- *Design relatively narrow residential streets to reduce impervious surface coverage.*
- *Limit impervious parking area to that actually required for the intended use to help make shared parking solutions attractive.*
- *Reduce overall imperviousness of parking lots by permitting pervious materials, bio swales and landscape areas.*
- *Require naturally vegetated buffers along streams, floodplains, steep slopes and wetlands.*
- *Incorporate existing vegetation into community open spaces, streetscapes, parking lot landscaping, buffers, and other open spaces, to the degree practicable.*
- *Replace "lost" vegetation in intensive development areas by incorporating new landscaping into streetscape, community open spaces and parking lots.*
- *Maintain all "blue line" streams at least at their current lengths.*
- *Prohibit new stormwater discharge of unmanaged stormwater into wetlands, aquifer recharge areas and critical water bodies.*

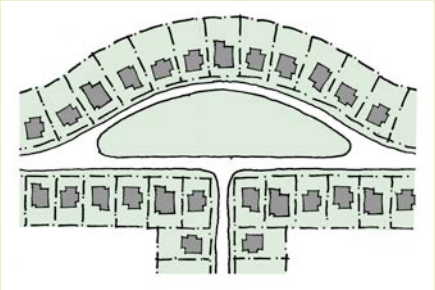
- *Require slopes be planted to prevent erosion.*
- *Limit clearing and grading to the minimum needed for building areas, access and fire protection.*
- *Incorporate native species into landscaping to reduce irrigation and maintenance requirements*

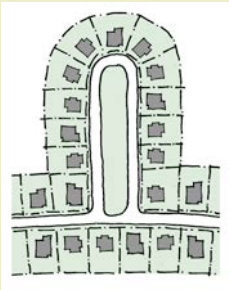
Residential Development and Neighborhoods. As another example of using the policies of the Comprehensive Plan as an overall guide, consider use of a checklist such as the following during the development review process for any residential development requiring a master development plan or site plan approval to encourage the development of viable neighborhoods:

- *Plan and design neighborhoods appropriate to their context—to reflect their location in the community and their relation to the natural environment.*
- *Favor infill and redevelopment projects with appropriate areas designated for higher densities, to gain useful open space and watershed protection with no net loss of development opportunity.*
- *Plan neighborhoods to conserve topography and natural drainage systems thereby reducing costs of earthwork, clearing and drainage, while maintaining the natural beauty of the site.*
- *Organize development so that density is lowest furthest from activity centers and major roads.*
- *Provide outdoor places, in addition to private yards, in neighborhoods so that children have somewhere to play safely away from their own homes, yet nearby.*
    - *At least 15% of the total site should be dedicated to*

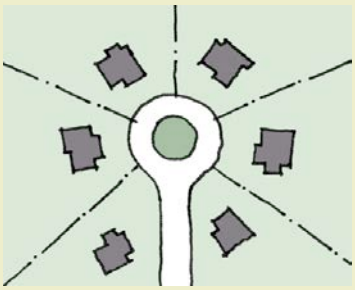
Greening the Cul-de-Sac

While dead-end streets should generally be avoided for the sake of maintaining connectivity, in some circumstances, the use of cul-de-sac is unavoidable. Because there can be increased density and impervious surface cover as a result of residential cul-de-sac, alternative designs that can preserve vegetation and other natural features should be encouraged, such as eyebrows and closes. Conventional cul-de-sac can also be "greened" by incorporating a planting circle in the cul-de-sac bulb. These options also afford opportunities for useable green space for neighborhoods as well. A close, for instance, can form a neighborhood green, a desirable amenity that also boosts neighboring home values.





Above left: Using *eyebrows* in residential subdivision layouts can avoid grading without losing developable, accessible lots. Above right: Short *closes* may be designed as relatively narrow streets, requiring less pavement. Longer closes must have sufficient street width for fire trucks.



A planting circle in a conventional cul-de-sac must be designed to accommodate moving trucks and emergency vehicles, including the use of a mountable curb.

pedestrian-accessible, usable open space with appropriate focal points.

- *There should be at least one special gathering place, such as a neighborhood green or other* usable *community open space, near the center of each neighborhood. The gathering space should have easy vehicular* and *pedestrian access from all parts of the neighborhood.*

- *Organize the street layout to provide appropriate access for motorists while assuring convenience and safety for pedestrians.*
  - *Neighborhood sidewalks should be buffered from the street by a planting strip at least 4-5 feet wide.*
  - *Pedestrian accessibility should be enhanced through off-road linkages between cul-de-sac and adjacent streets, as well as trails within greenways or other open space systems, as appropriate.*
- *Design and build neighborhood streetscapes to create an attractive, appropriately scaled and interactive public space for residents.*
  - *Overhead utilities should be placed at the rear of lots, either in easements or alley rights-of-way, rather than an in the streetscape. Otherwise, utilities may be placed underground. Overhead utilities, however, are more acceptable in rural or low-density areas.*
  - *For streetscapes that foster more community interaction and that retain property values longer, streets should be lined with trees and porches rather than garages and large driveways.*
- *Provide light fixtures—generally twelve feet in total height—along all areas accessible to pedestrians. Taller street lights should be avoided or shielded to avoid glare on adjacent homes and minimize light pollution.*

Commercial Development. As just one example regarding activity centers, use the policies of the Comprehensive Plan as an overall guide, and consider use of a checklist such as the following during the development review process for any commercial activity center requiring a master development plan or site plan approval:

- *Establish commercial overlay districts to help guide development and redevelopment in keeping with the vision and comprehensive plan for the city.*
- *Design building façades to provide visual interest and avoid monotony.*
- *Design the street level portion of the building elevation facing public streets and spaces to have a minimum of 50% unobscured windows, doors or display areas.*
- *Orient buildings toward public sidewalks or other pedestrian circulation systems.*
- *Complete street frontage on existing roadways with curb, gutter and sidewalks. Sidewalks may extend to the curb but should be wide enough to include regularly spaced tree wells at the street edge.*
- *Design all streets to promote traffic patterns compatible with pedestrian safety and to provide direct routes between nearby destinations.*
- *Design parking lots with clearly marked, through pedestrian paths.*

- *Devote at least five percent of the area of a parking lot to landscaping.*
  - *Parking lot landscaping should include trees evenly distributed throughout the parking lot to provide shade and to break down the scale and monotony of the parking lot.*
  - *Require parking lots to manage the storm water runoff created, through bio swales, retention ponds, use of pervious surface materials and best management practices.*

Accessibility and Access Management. With the policies of the Comprehensive Plan as an overall guide, consider use of the following during the development review process to assure appropriate consideration of any arterial or collector streets that may be included in the development:

- *Provide distance between major intersections and driveways sufficient to separate points of traffic conflict. As a general rule, the higher the design speed of the roads involved, the further driveways should be located from intersection and from one another.*
- *Restrict turning movements at unsignalized driveways and intersections by limiting the use of full directional unsignalized streets and driveways. Full movement intersections should serve multiple developments through joint use driveways and cross access easements.*
- *Adopt and apply design standards for access spacing, the length of turn lanes and tapers, and driveway dimensions to development along arterials and major collectors.*
- *Install traffic control devices only when appropriate studies indicate their spacing and interconnection can be accomplished without significant adverse impacts on corridor capacity.*
- *Require left and right turn lanes for all public streets and major access points to activity centers.*
- *Require joint-use driveways to reduce the proliferation of driveways and to preserve the capacity of arterial and collector corridors.*

LAND USE PLAN: GOALS AND POLICIES

The Use of Land

City Specific goals and policies

GOAL 1: Use and build on the existing plans and studies for Columbus.

Policy 1.1 The Comprehensive Plan and Proposed Development

Measure development against the Comprehensive Plan to see if it fits within the existing and desired fabric of the city as expressed within the plan.

Timing: Ongoing review and approval of public and private development, measuring how the proposed development does and does not fit with ideals and vision expressed in the Comprehensive Plan.

Action:

- Required all new development to submit a short project description that addresses how the development will or will not meet and/ or exceed the City's goals and policies. Each submittal shall be presented to, reviewed and acknowledge by the planning commission and available for public review, prior to any public hearings.

Policy 1.2 The Comprehensive Plan and Development Management

Maintain consistency between the goals and policies of the Comprehensive Plan with the Zoning Ordinance and the Subdivision Regulations.

Timing: Ongoing review and updates by the City Council and city staff to coordinate existing and proposed city ordinances and to keep them up to date with the ideals and vision of the Comprehensive Plan.

Action:

- Identify and review all existing city ordinances. Update and revise ordinances as needed per the Comprehensive Plan

Policy 1.3 Additions and Revisions to the Comprehensive Plan

Prepare additional plans as needed to identify, protect, develop and integrate land use and development. Examples of plans can be specific area plans for Downtown, Parks and Openspace, bikeways and sidewalks, Truck routes, Overlay districts and tree planting plans.

Timing: Identify needed plans and ordinances per the Comprehensive Plan. Prioritize and delegate responsibilities as needed to ensure plan completion either through city staff or hired consultants.

Action:

- Manage and update the Comprehensive plan through specific time set aside for Comprehensive plan update and review.
- Connect the review process to the annual City budget process to provide the necessary identification, planning and capital improvements as determined by the City.

Policy 1.4 Planning and the Comprehensive Plan

Keep the Comprehensive Plan up to date and in harmony with supporting ordinances and regulations as needed to ensure compatibility with the citizens of Columbus and their desired vision for the city.

Timing: Ongoing review and updates by the City Council and city staff to coordinate existing and proposed city ordinances and to keep them up to date with the ideals and vision of the Comprehensive Plan.

Action:

- Identify and review all existing city ordinances. Update and revise ordinances as needed per the Comprehensive Plan

GOAL 2: Promote a compact development pattern within a well-defined city boundary.

Policy 2.1 Compact Urban Form

Create discernable, compact activity centers and an orderly land development pattern, providing for a range of land uses.

Timing: Ongoing review and approval of public and private development, measuring how the proposed development does and does not fit with ideals and vision expressed in the Comprehensive Plan.

Action:

- Review and update ordinances and plans to ensure development can support, provide for and allow for the desired patterns and activity centers.
- Require all proposed development to submit Goal and Policy Statements.

Policy 2.2 Density

Promote the development of a variety of housing types and densities for persons of all income levels and ages based upon orderly and appropriate development patterns as defined in the Comprehensive Plan and Zoning Ordinance.

Timing: Review the current zoning and subdivision ordinances to make sure they will allow a variety of development types and densities. The ordinances shall be fair and equitable across the city.

Action:

- Review and update ordinances and plans to ensure development can support, provide for and allow for a variety of housing types and densities.

Policy 2.3 Infill

Promote infill and redevelopment of existing sites and facilities, in order to capitalize on existing services.

Timing: Review the current zoning and subdivision ordinances to make sure they will allow for infill and redevelopment.

Action:

- Review and update ordinances and plans to ensure development can support, provide for infill and redevelopment.
- Provide incentives for encourage desired development. The city shall review and update their permit process to allow for specific development types to be expedited through the city's internal review and approval process, coordinating the planning, inspection and public review process to encourage private development.
- Review and map all public utilities and service areas. Overlay the public service boundary to identify all immediately accessible development parcels. Review the identified parcels to ensure they are properly zoned and regulated in keeping with the ideals and vision of the Comprehensive Plan.

Policy 2.4 Annexation

Pursue annexation of properties contiguous to the current boundary in accord with the Comprehensive Plan.

Timing: Study and identify areas for annexation.

Action:

- Use a simple checklist to answer questions regarding the property in question for annexation. Does the property meet all the prescribed needs and is a good candidate to be annexed?

Policy 2.5 Property Values

Balance property values with opportunities for development.

Timing: Review and implement City ordinances to make sure they address property value issues such as weed control, design and character, neglect and blight

Action:

- Develop ordinances to properly fine and place liens on nuisance property's as allowed by law.
- Develop and enforce ordinances to address issue of blight and neglect on existing properties, using State and municipal laws, and the international building code.
- Develop and publish a means for the city to take control of blighted properties and turn them over to private development under current State and Municipal laws. Incentive the development desired and approved by the ideals and vision of the Comprehensive Plan.

Development oriented goals and policies

GOAL 3: Maintain and enhance the City's character and sense of place as defined by its neighborhoods, districts, corridors, and edges.

Policy 3.1 Preservation

Promote the preservation of older and existing residential neighborhoods, structures and facilities.

Policy 3.2 Activity Centers

Promote development in activity centers, which shall capitalize on their locations and context with the city, as defined in the plan.

Policy 3.3 Activity Centers and their Context

Design activity centers to relate to their context, using the principles found within the plan and the city's zoning ordinance and subdivision regulations. Downtown shall be promoted as the civic heart of the community.

Policy 3.4 Urban Design

Promote and create incentives for new construction and redevelopment that contribute positively to the type of neighborhoods, districts, corridors and edges described in the plan while emphasizing the special identity of each area.

Policy 3.5 Buffers

Require the provision of adequate buffering techniques to assure compatibility between adjacent land uses.

Transportation

GOAL T-1 Organize the city with a framework of transportation alternatives that balance access, mobility, safety and emergency response.

Policy T-1.1 Land Use Patterns

Implement and support land use patterns, parking policies, and demand management plans that support effective transit, an efficient roadway system, and sidewalks and bikeways to support alternative transportation modes.

Policy T-1.2 Gateways

Plan, design and build gateways to the city, neighborhoods, activity centers and commercial corridors that provide a welcoming introduction.

Policy T-1.3 Image Corridors

Create quality development and landscaping along all streets, especially upon streets identified as image corridors to beautify the streetscape, and develop and maintain the character and unique appearance of Columbus.

Policy T-1.4 Connectivity

Interconnect activity centers, neighborhoods, schools, recreation, and cultural facilities with bicycle and pedestrian facilities.

Policy T-1.5 Roadway Capacity

Conserve capacity and ensure safe travel through access management practices on major roads.

Policy T-1.6 Mass Transit

Support the future development of regional transit through creation of discernable, compact activity centers.

Policy T-1.7 Alternate Transportation

Establish a dependable, system of bicycle routes and walking trails throughout the city to serve as an alternative transportation system and to promote and provide connections to neighborhoods, schools, parks and activity centers.

Residential

City Specific goals and policies

GOAL R-1: Promote a variety of housing types and densities throughout the urban area.

Policy R-1.1 Land Use Patterns

Encourage a variety of housing types and densities, including mixed-used developments that are well served by public transportation and close to employment centers, services, and amenities. In particular, the city will promote the siting of higher density housing near public transportation, shopping, and in designated neighborhoods and districts.

Policy R-1.2 Housing Supply

Encourage public and private, for-profit and non-profit sectors to take actions to develop and maintain an adequate supply of single- and multiple-family housing.

Policy R-1.3 Land for Residential Development

Encourage residential development in all neighborhoods and districts in order to maximize the potential land available for development of housing and thereby positively influence housing affordability.

Development oriented goals and policies

GOAL R-2: Promote safe, diverse, quality living environment.

Policy R-2.1 Context

Promote development of neighborhoods compatible with the context of their surroundings.

Policy R-2.2 Neighborhood Focus

Plan, design and build neighborhoods with a central focus area appropriate to the needs of each neighborhood. Focus areas may be but are not limited to neighborhood and community parks and gathering spaces.

Policy R-2.3 Connectivity

Design neighborhoods with walkable interconnected streets and development patterns. Neighborhoods will provide pedestrian, bike and vehicular linkages to adjacent schools, parks, commercial centers, additional activity centers and adjacent neighborhoods.

Policy R-2.4 Street Design

Design neighborhood streets appropriate to the scale and character of each neighborhood.

Policy R-2.5 Open Space

Design neighborhoods with adequate open space per the city's zoning ordinance and subdivision regulations.

Policy R-2.6 Stability

Conserve the character of stable, desired residential neighborhoods through neighborhood planning, neighborhood organizations, and supportive regulatory techniques.

Commercial

GOAL C-1: Promote quality commercial design throughout the city and in all appropriate activity centers.

Policy C-1.1 Scale of Commercial Centers

Assure that commercial centers are sized and scaled to reflect the center's context and the neighborhood or area it will serve.

Policy C-1.2 Access

Design all commercial areas to accommodate convenient access by pedestrians, bicycles and automobiles. All commercial areas, either in a center or along a corridor shall adhere to the city's access management standards.

Policy C-1.3 Design Standards

Assure that all commercial areas and activity centers comply with the city's design guidelines, in accord with their scale, density, context and location within the city.

Open Space

GOAL OS-1 Protect and enhance natural habitat/ecosystems (wildlife, wetlands, and riparian areas) within the developed landscape of Columbus.

Policy OS-1.1 Protection and Enhancement

Preserve, protect, and enhance the resources and values of natural areas by directing development away from sensitive natural features -- such as wetlands, riparian areas and wildlife habitat. When it is not possible to direct development away from natural areas, these areas will be protected in the developed landscape.

Policy OS-1.2 Floodplains

Preserve and protect natural areas in the 100-year floodplain.

Policy OS-1.3 Open Lands System

Promote a system of publicly owned open lands to protect the integrity of wildlife habitat and conservation sites, protect corridors between natural areas, preserve outstanding examples of Columbus' diverse natural heritage, and provide a broad range of opportunities for educational, interpretive, and recreational programs to meet community needs.

Policy OS-1.4 Conservation Tools

Use a variety of means to protect open lands, conservation easements, and/or development rights for the purpose of defining and protecting community edges.

Policy OS-1.5 Access

Promote the provision and maintenance of access to public open land areas.

GOAL OS-2: Provide a variety of recreational opportunities in the form of a interconnected framework of open lands including parks, trails, community separators and natural areas.

Policy OS-2.1 Connections

Promote development of a permanent interconnected open space system to include streams, natural areas, open space corridors and major streets, there by linking neighborhoods, parks, activity centers, commercial centers, and schools.

Policy OS-2.2 Residential Open Space

Provide and promote development of functional open space and recreational areas at neighborhood and community wide levels for active and passive recreation.

Policy OS-2.3 Urban Public Space

Encourage a system of small pocket parks, public plazas, and sidewalk gathering places that include appropriate street furniture within the design of Downtown and all commercial and mixed-use activity centers.

KEEPING THE COMPREHENSIVE PLAN UP TO DATE

Comprehensive planning is often viewed as an occasional activity, whereas budget preparation and adoption is an annual responsibility of the City Council, as mandated by Mississippi statute. As a result, the Comprehensive Plan, regardless of the pace or intensity of growth and development, tends to become dated. The danger is that the connections between the Columbus Comprehensive Plan and the city's capital improvements budget can weaken over time. This can be avoided by coordinating an annual plan update with the budgeting process. Coordinating the planning and annual budget processes will increase the likelihood that public investment decisions will be in accord with the plan.

Suggested Linking of Plan Updating and the City's Budget Process. A Comprehensive Plan update included in the annual budgeting process is suggested to assist the mayor and council in determining capital budget priorities, with consideration of plan and development regulation amendments, and coordination of public investment toward reaching the vision set out in the Strategic Concept. To coordinate development policies and their implementation through such a process, each city department, board and commission (and non-city groups that may be eligible for funding assistance from the

city) would review the Comprehensive Plan and submit a report to the mayor early in the budget season, which would include the following:

- *All tasks essential for accomplishing elements of the Comprehensive Plan during the coming year that are or should be the responsibility of the respondent.*
- *Suggested changes in city programs – including but not limited to regulations, capital investments, operation and maintenance, and intergovernmental coordination – the respondent perceives to be in the best interests of overall plan implementation.*
- *Suggested changes in city policy toward growth and development as described in the Comprehensive Plan.*
- *Suggested changes in the respondent's responsibility or authority that would better enable implementation of any parts of the Comprehensive Plan.*
- *A preliminary budget proposal, including capital equipment and investments needed by the respondent to deal with the above, and the portion of those costs it is requested that the city bear.*

In this modified budget system, the mayor's office would collect this information for consideration in drafting a capital budget and suggested Comprehensive Plan amendments for the coming year. Following discussions with department heads and others as appropriate, the mayor's office would forward a draft capital budget and suggested plan amendments to the Comprehensive Plan Advisory Committee, whose members would review it in light of the Comprehensive Plan. The committee would report to the mayor's office the findings of its review of proposed capital investments, recommendations for plan amendments, and adjustments to development regulations.

Continuing the process, the mayor's office would prepare a proposed capital budget and revenue forecast, presenting these to the City Council, which would act, as it deems appropriate, regarding recommended changes to the Comprehensive Plan and subdivision regulations and consider appropriate zoning ordinance and subdivision regulation amendments. The City Council would hold hearings to discuss proposed amendments to city regulations prior to adoption.

Keeping the Comprehensive Plan up to date is an important task. Through this suggested process, the plan would be refined and detailed on a regular basis, and the opportunities for coordination of plan and capital budgeting would become more apparent.

CONCLUSION

As the comprehensive plan is implemented, the city intends to respect a combination of private property rights and the public responsibility for the health, safety and welfare of the community as a whole. Government plays a crucial role in the development process. While deeply respecting the rights of private property owners, local government sets the rules for implementation of those rights under state law. In so doing, the city intends to preserve land values; deal with the larger picture in accordance with the public interest as discerned through the planning process instead of just the immediate site and situation of a landowner and developer; maintain a high quality of life for both new and current residents; and protect the health, safety and welfare of the citizens of Columbus. Protecting and promoting the city's public health, safety and welfare in this way obviously may produce tensions with landowners. The City of Columbus recognizes those tensions as a positive and integral part of government – the balancing of public and private rights and responsibilities – and has consciously built that balance into the planning process and this plan document.

The city intends that all parts of this vibrant, successful community grow together. For that reason, development must proceed no faster than the community is able to provide public facilities. In many areas of the country, residential growth has been so rapid that communities have not been able to provide transportation, schools, utilities, commercial life, religious life, and job opportunities fast enough to keep up with residential growth. As a result, new residents must leave their home place to find such opportunities, and often they must do so on roads that barely permit such travel. The City of Columbus seeks to avoid such situations, and this desire is reflected in this Comprehensive Plan.