



COLUMBUS COMPREHENSIVE PLAN

City of Columbus

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The Columbus Comprehensive Plan prescribes development policies for the city of Columbus and an area that may become part of the city of Columbus over the next 20 years. Nothing in this plan is intended to discourage annexation of land not identified in expansion areas so long as such annexation is consistent with the general policies associated with the expansion districts identified.

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PREFACE: THE ROAD TO PLAN DEVELOPMENT

COLUMBUS: THE HISTORICAL CONTEXT

Laid out in 1797, Franklinton was one of the first villages in the Northwest Territory and the oldest community in central Ohio. It was founded by Lucas Sullivant, a surveyor assigned by the U.S. Government to survey the northern portion of the Virginia Military District. The location of Franklinton was quite strategic. It was located at the fork of two major waterways, as well as at a major stopover point on an Indian trail to Lake Erie from the Ohio River. In fact, several Indian settlements existed as late as the early 1700s in the area that would become Columbus.

In 1812, a group of Franklinton businessmen subdivided 1,200 acres east of the Scioto River and offered 20 acres to the state of Ohio for construction of a statehouse and penitentiary. Joel Wright was selected as architect of the new town. With assistance from Joseph Vance of Franklin County, he laid out a town reflective of his New England background. The city was named Columbus at the suggestion of General Joseph Foos, in honor of Christopher Columbus.

After 22 years of floods, epidemics, and a dispute over the city's designation as state capital, Columbus became a city in 1834. Canals joined the city to Lake Erie and the Ohio River, while stagecoaches provided land transportation to the rest of the state. As late as 1860, Columbus was still confined to a compact area not much larger than today's downtown.

Construction of the railroads changed the shape of the city. By the 1880s, Columbus had grown from two to more than 11 square miles and housed over 50,000 people. While industry prospered downtown, working-class neighborhoods were established in German Village, Franklinton, the Near North, and the Near East. Watercourses helped shape the city's emerging form. The city's development pattern began to extend outward along north-south and east-west rail lines. Streetcar lines and inter-urban electric rail lines reinforced this pattern, by allowing people to live further from the core of the city.

In 1904, an 18-member commission was created to address the need for a citywide park system. Two years later, at the urging of this commission, City Council authorized the expenditure of \$5,000 for the employment of experts to study how streets, alleys, boulevards, parks, and public grounds might be extended or changed to make the city more beautiful. In 1907, a Plan Commission composed of an architect, landscape architect, and sculptor from New York City, a civic advisor from Rochester, New York, and an architect from Philadelphia, was formed. Within a year, the group had prepared the first known plan for the city.

The 1908 Plan was a response to two mounting concerns. The first was what the Plan described as "the unromantic practical necessities of a rapidly growing and prosperous manufacturing city" — water supply and wastewater collection and disposal. The second was the city's "humiliating position" relative to other cities in its consideration of parks, parkways, and playgrounds. In both cases, the underlying goal was to secure Columbus' position as one of the nation's great cities and to establish a civic environment that recognized its function as Ohio's governmental and education center.

The Plan Commission recommended that the State Capitol be surrounded by a civic center of great public buildings and open spaces. A parkway was to encircle the city three miles from its center. Diagonal streets would radiate from the parkway, breaking what the plan called the "Maltese Cross" development pattern along the railroads. The streets of Columbus would be adorned by monuments, sculpture, and street furniture, and would be rid of overhead utility poles and wires. Small parks and playgrounds were called for in the neighborhoods, while linear parks were to be developed along the Olentangy and Scioto Rivers.

Some of the recommendations of that Plan have left their mark on current city form, most notably the open space system along the Olentangy River. A 1919 Riverfront Plan provided more specific detail for downtown riverfront improvements. It is likely that this plan and its recommendations were influenced greatly by the destruction caused during the disastrous 1913 flood. Plans for the civic center were not fully

realized and most of the land surrounding the capitol was developed privately. The advent of the automobile sparked such urban expansion that the perimeter parkway and diagonal boulevards were never built as intended. Years later, an auto-oriented version of the same concept would emerge, with the city encircled instead by two circumferential freeways and radial interstate highways.

Columbus' first City Planning Commission was organized in 1921, and its first zoning code and maps were adopted in 1923. This period saw the establishment of planning commissions across the country as cities attempted to minimize the negative impacts of industrialization. During its first twenty years, the Planning Commission focused on amending the zoning maps. It was not until 1950 that a planning director was appointed and the zoning ordinance was comprehensively revised. Thus, long-range planning had been conspicuously absent between 1908 and 1950, despite unprecedented metropolitan growth. Major commercial activities had become decentralized, continuous residential development extended as far as 10 miles north of downtown, and industry dispersed with the decline of the railroad.

A number of events during the 1950s allowed planning to ascend on the civic agenda. First, Columbus embarked on an aggressive annexation program in which the city more than doubled in size in just a decade. Second, the post-war housing boom made land use planning a necessary part of public facilities planning. Third, a number of federal programs, namely urban renewal and the interstate highway system, radically changed the character of the city. Such federal projects were accompanied by large-scale local projects, such as the development of Hoover Reservoir and the expansion of Port Columbus. Backed by strong civic leadership and a unified business community, the city passed a number of bond issues in the 1950s to undertake large-scale public works projects. These bond issues were necessary to fund a large amount of deferred infrastructure maintenance.

During the early 1950s, the city embarked on its first capital improvements program as well as its first master plan update in nearly half a century. Working with the Franklin County Regional Planning Commission and Franklin County, the city sponsored the preparation of master plan reports by Harland Bartholomew and Associates of St. Louis, which were completed in 1954. Although some of these reports were officially adopted, only the thoroughfare plan was implemented to any significant extent.

As the planning efforts of the 1950s waned, the need for a metropolitan approach to planning was acknowledged. The Blue Plan was completed in 1969. Its land use plan was designed to justify federal expenditures on major transportation projects.

Following that effort, The Columbus Plan: 1970-1990 was envisioned as a development guide and implementation program with both functional system plans and physical area plans. Eleven area plans were completed in 1971 and 17 area plans were completed in 1972.

In the late 1970s, planning efforts focused on developing community plans and implementation programs for 27 subareas. Information profiles were prepared for all 27 areas, but the analysis and action phases of the program were never finished.

The 1980s saw a renewed interest in comprehensive planning. Area commissions, civic associations, and business and trade groups began to raise the need for land use planning. This was generally in response to local concerns about traffic, incompatible development, housing, parks, public services, and quality of life. In other cases, the call for planning came from the business community's desire to solidify or strengthen the city's position within the region, particularly in downtown Columbus. It also had become difficult to achieve consistency in day-to-day development decisions without the guidance of a plan. Simply put, the city had finally become too big to manage without a plan.

THE NORTHWEST DEVELOPMENT TASK FORCE

The call for the Columbus Comprehensive Plan originated with the Northwest Development Task Force. The Task Force was created in 1985 as a result of a controversy surrounding a proposed shopping center in northwest Columbus. The Task Force was officially formed with seven members: two representatives appointed by Mayor Dana G. Rinehart, two City Council members appointed by City Council President Jerry Hammond, and three residents appointed by a neighborhood group previously formed to oppose the shopping center proposal.

The Task Force was charged with the responsibility of developing a plan for the northwest area. Instead, the task force chose to focus on citywide development issues, recognizing that development patterns were set for the area. In October 1986, the Task Force presented its final report. Recommendations included the development of a comprehensive plan for the city. The Task Force recommended that the plan require that development in Columbus promote the character of each area of the city, serving the needs of families and businesses. The Task Force also recommended that the plan be consistent with the plans of surrounding municipalities to foster aesthetic and functional compatibility, and that it also involve resident input, be followed closely after its adoption, and be revised in an orderly manner.

CONSULTANT STUDY

In 1987, The Ohio State University offered to assist the city in answering the call for the Columbus Comprehensive Plan. The University, in consultation with the city of Columbus, decided to hire a consultant to prepare a work program outlining the planning process and how it should be approached. Ohio State selected the nationally known planning firm of Sedway Cooke Associates to perform this task as a \$50,000 gift to the city.

The firm advised Columbus on how a comprehensive plan should be developed. A work program was presented to the city in April 1988. Among the suggestions were forming three committees: steering, citizens, and technical. A 28-month planning process was recommended. The program also called for \$1.3 million in consultant assistance. The city embraced the program but felt the Sedway Cooke proposal relied too heavily on consultants and the cost for consultant services was too high.

PROGRAM APPROVAL

In May 1989, Columbus City Council approved the Plan's approach. The method is embodied in a document entitled Columbus Comprehensive Plan: The Program, based on the Sedway Cooke Associates work program.

The program revised the planning process timetable from 28 months to 18 months. Much of the technical work was conducted by city staff, rather than through heavy reliance on consultants. City departments were given responsibility for a variety of Plan tasks.

In addition, the 1989 budget included funding for two new Planning Division staff members to assist the three planners already assigned to the process.

Consultant assistance in the areas of transportation, noise and air quality analysis, community design, and comprehensive planning was also needed. Funding for four consulting firms to perform work in these five areas was granted by City Council as well.

The 18-month planning process began in July 1990.

CHAPTER 1: INTRODUCTION

PLAN PURPOSE AND FUNCTION

Columbus' continuous growth over the past decade has resulted in the benefits of a strong and expanding economy, yet has produced as well concerns with such problems as increased traffic congestion, impacts of commercial growth on residential areas, and a need for greater consideration of the effects of growth on the natural environment. The Northwest Development Task Force examined impacts such as these and others which significantly affect the city's ability to maintain its quality of life. The Task Force's recommendations called for a citywide comprehensive plan to deal with these and other issues.

The Plan is intended to serve as a guide with which to protect and enhance the quality of life in Columbus. It accomplishes this by fostering orderly, manageable, and cost-effective growth and establishing a framework for future land use decisions. This will enable residents to truly enjoy the qualities that make Columbus a great place to live. The horizon year is 2010 and the planning area is defined by the sanitary sewer facility planning area.

The Columbus Comprehensive Plan is intended to serve as a decision making tool for public and private decision makers including the city administration, boards and commissions, and City Council as well as businesses, community groups, the development community, non-profit organizations, and individuals. The Plan is designed to decrease uncertainty about the city's direction in the next 20 years. The Plan is a policy framework, not law, and it should be viewed and used as such. Many of the recommendations of the Plan will ultimately have the force of law when they are codified. Implementation activities are described in the accompanying document, "Making the Plan Work: Plan Implementation Program." Additionally, the Plan will be revised and amended at regular intervals as well as at such time as changing conditions warrant a Plan update.

The function served by the Columbus Comprehensive Plan is to identify goals for the future physical development of the city and set policies to achieve these goals. On a smaller scale, the Plan documents serve as an information source.

The Plan, in its entirety, provides a picture of where the city is now, where the city is headed, and the goals and policies that will be used to guide future development.

RELATIONSHIP TO OTHER LONG-RANGE PLANNING EFFORTS

The Comprehensive Plan acknowledges other long-range planning efforts that will continue after plan completion. Throughout this planning process, there has been significant interaction between these efforts and the Columbus Comprehensive Plan.

Stephen R. McClary, Planning Administrator, served on the Central Ohio Transit Authority (COTA) Long Range Plan Steering Committee, the Stormwater Management Advisory Committee, and the Comprehensive Housing Affordability Strategy Planning Committee. Comprehensive Plan staff members actively interact with all other efforts.

As the Plan is periodically updated, pertinent recommendations emerging from these efforts will be incorporated, as appropriate, into the Plan. Related efforts of note include the following:

- Area Planning
- Water Beyond 2000
- Stormwater Management Study
- COTA Long Range Plan
- Comprehensive Waterways Management Plan
- Big Darby Project
- Comprehensive Housing Affordability Study

- Comprehensive Historic Preservation Implementation Study

OVERVIEW OF PLANNING PROCESS

The process used to formulate the Columbus Comprehensive Plan is embodied in the document Columbus Comprehensive Plan: The Program. Each stage of the planning process is briefly described below.

CONSULTANT SELECTION

Four consulting firms assisted city staff with the Plan:

- LDR International:
- Comprehensive Planning
- Frank Elmer Associates:
- Community Design
- Greiner Engineering, Inc. - Ohio:
- Noise Quality Analysis
- The Corradino Group:
- Transportation and Air Quality Analysis

ISSUE IDENTIFICATION

The Columbus Comprehensive Plan process began with the identification of issues by the Columbus community. This phase of the process generated a broad range of ideas and input from various community interests.

Input-gathering efforts included a series of six issue forums held at various locations around the city. A month-long series entitled "Help Columbus Grow" was aired by WBNS-10TV. The station, in conjunction with The Kroger Company, provided mail-in forms at area Kroger stores to encourage the community to express ideas about Columbus' future. Issues were also gathered at the 1990 Home and Garden Show by WBNS-10TV. In addition, Columbus Comprehensive Plan workshops provided opportunities to solicit additional ideas from the community.

GOALS-SETTING PROCESS

Initiated and developed by the Plan's Community Advisory Committee, the Plan's goals represent community ambitions in the areas of growth, neighborhoods, transportation, recreation, natural resources and the environment, historic preservation, downtown, aesthetics, and plan implementation. The goals, first adopted by the Plan's Steering Committee and then City Council, provide direction to the Plan and will guide the physical future of the community.

DATA COLLECTION AND ANALYSIS

While issues were being gathered, empirical data was collected and analyzed by city staff, consultants, and the five committees. Historical development trends were reviewed, and existing conditions were analyzed. Existing plans and programs were reviewed. Future trends were projected and analyzed during this phase of the process. Regulatory controls were reviewed at this time as well. A series of maps was produced depicting existing physical conditions.

DEVELOPMENT FACTORS

The second phase of the Columbus Comprehensive Plan process involved the identification of significant development factors, which are defined as conditions and circumstances representing barriers or opportunities for future growth, development, and redevelopment.

A development factors report was prepared to summarize and discuss the most salient development factors in a concise, readable format. It synthesized much of the most important data gathered during the Data Collection and Analysis Phase, but did not represent all data necessary to complete the Plan.

ALTERNATIVE DEVELOPMENT CONCEPTS

This phase of the planning process focused on the presentation of four alternative development concepts. The four concepts were territorial expansion, community revitalization, high density corridors, and fringe villages/in-town centers.

The first concept embodied a development scenario characterized by investment in territorial expansion of the city. It depicted a pattern of development likely to occur if the city continues to develop in its current manner.

The community revitalization concept focused attention on development and investment in the central city neighborhoods. Revitalized neighborhood areas would include a mix of land uses, including residential, employment and retail/office uses. Higher densities within this scenario would make mass transit a viable option.

High density corridors would link the downtown with outlying neighborhoods. This alternative would create sufficient densities to support increased mass transit. It would aid in revitalizing existing corridors and their surrounding neighborhoods due to better transportation and increased public investment.

The fringe village/in-town center concept focused on redevelopment and new development within concentrated areas. Both in-town centers and fringe villages would provide a mix of land use options including residential, retail and employment. This concept would reduce continued automobile dependence and allow residents to work, shop and live within the same neighborhood.

All four of these alternatives were presented to the public at a workshop. The five Plan committees spent a considerable amount of time evaluating the elements of each of the alternatives in order to decide which elements to merge into a hybrid concept.

ALTERNATIVE EVALUATION

In this stage, Plan work focused on combining elements of the four alternatives into one concept. This concept sought to present a balanced approach. The concept proposed citywide plan recommendations for various types of development districts. The kinds and amounts of districts evolved as elements of the concept were discussed and evaluated. They included districts for expansion of development, revitalization, transit, wellfield protection, scenic greenways, ravines, fringe villages, etc.

PLAN PREPARATION

In this stage, decisions about the plan format were made. The Plan and executive summary were prepared by Planning Division staff, with continuous input from the five committees. The Plan was then presented to the committees, the public, and elected officials.

IMPLEMENTATION

Making the Plan Work: Plan Implementation Program is a companion to the Columbus Comprehensive Plan. It identifies 22 specific implementation tasks to be conducted over the next three years to bring Comprehensive Plan recommendations into action.

COMMUNITY INVOLVEMENT PROGRAM

The most important element of the Columbus Comprehensive Plan process was the Community Involvement Program. The program was designed to offer every segment of the Columbus community a chance to participate in the Plan's development.

The cornerstone of this program was the continuous involvement of five committees. The Steering Committee was the decision-making body of the planning process. It was comprised of civic, business and community leaders, and elected officials, who guided the planning process.

Three technical review committees provided technical assistance to all the Comprehensive Plan work. These committees were made up of people with technical expertise appropriate to their area of review, including city staff and selected individuals from other organizations, such as COTA, the Mid-Ohio Regional Planning Commission, the Building Industry Association, and others.

The Community Advisory Committee was made up of representatives of area commissions, neighborhood business associations, civic councils, and other interested citizens who initiated and reviewed work from a neighborhood perspective. Six members of this committee also served on the Steering Committee to foster greater communication between the two groups. Each committee met at least monthly, with all meetings open to the public.

In addition to the committees, people learned about and became involved in formulating the Plan in other ways. Government Television Channel 3 aired a variety of shows about the Plan throughout the process. Comprehensive Plan staff members spoke to members of community organizations to update them on the Plan's progress and to gather additional input. Community workshops were held at strategic times during the process to gather additional community input. Citizens were invited to place their names on the Comprehensive Plan mailing list to receive periodic updates on the Plan's progress, as well as notification of upcoming workshops.

Through all of these public involvement opportunities, many segments of the Columbus community actively participated in the development of the Plan. Being an integral part of the planning process gave participants a sense of ownership of the Plan.

The Columbus Comprehensive Plan Community Involvement Program was recognized by the Ohio Planning Conference of the American Planning Association with its 1992 Metropolitan Planning Award.

Members of the Columbus community will continue to have an opportunity to get involved as the Plan is implemented and periodically updated.

CHAPTER 2: CONDITIONS AND TRENDS

The Columbus Comprehensive Plan was developed using a traditional planning process which began with data collection and analysis, followed by the identification of barriers and opportunities for growth and development. This chapter summarizes patterns of demographic, economic, and geographic growth relevant to the time period of the Plan and significant barriers or opportunities for future growth, development, and redevelopment. Material in this section was previously released in two documents produced for the Columbus Comprehensive Plan — Growth Statement 1990 and Development Factors.

PATTERNS OF CHANGE

DEMOGRAPHIC TRENDS

Population growth trends in the Columbus area mark the region as atypical. While Ohio and much of the northeastern United States struggled to maintain population, the Columbus Metropolitan Statistical Area (MSA) demonstrated steady growth in the early 1980s, followed by a spurt in the last five years of the decade. This resurgence has been fueled in recent years by migration into the area, a reversal of a trend of outmigration that dominated the local scene from 1974 to 1985. This net immigration combined with natural population growth to produce a 10.7% growth rate for the Columbus MSA for the 1980-1990 period, representing an additional 133,592 people and a 1990 total population of 1,377,419. Franklin County's growth rate for the decade was 10.6%, an increase of 92,328 people for a 1990 total population of 961,437. The city of Columbus reached a total population of 632,910 in 1990, with a population increase of 68,039, or 12%, over the decade. Population increases are projected to continue for the next twenty years, with the Columbus population reaching 719,862 by 2010.

Other population trends in Columbus follow established national patterns. Household size has been shrinking since 1960. The Columbus household size fell from 3.14 in 1960 to 2.38 in 1990. This trend, combined with population increases, provided a substantial increase in the number of households. Columbus households increased by 39,483 from 1980 to 1990, a growth rate of 18.1%, which contributed to the Franklin County increase of 55,582 households, for a total county growth rate of 17.2% for the period. This continuing increase in households encourages a strong market for housing and durable goods. On the other hand, smaller households represent less flexibility for employment choices and, in some cases, greater burdens on social services.

The Columbus population is also following the national trend of the aging of America. The post-World War II baby boom is becoming middle-aged and, by the year 2010, when all of the baby boomers will be over 50, 31% of the central Ohio population will be over 50, compared to 22.4% in 1990. Currently, this trend is providing a stimulus to the local economy, because middle age represents the peak earning years in most occupations. However, an older population also presents a skewed labor market with a shortage of labor force entrants and an increased demand for health services. Economic migration, typically dominated by younger people, can offset some effects of an aging population, but changes in labor force participation will also have to occur.

The aging of the population will also lead to slower rates of population growth in the future, as more and more people leave child-bearing years behind. The population will be moving from nurseries to nursing homes, with attendant shifts in demand for social services. As the number of empty-nesters and smaller households increasingly dominates the housing market, shifts toward smaller, although not necessarily less expensive, housing units can be expected. Cyclic variations notwithstanding, the residential construction market should be less active than it has been in the past.

ECONOMIC TRENDS

In spite of the recent slowing of employment growth and concerns over recession, the long-term economic trends for the area continue to be positive. The central Ohio area saw substantial growth in the 1980s. The rate of employment growth was far ahead of the state rate and comfortably higher than the national rate. From 1979 through 1989, employment in Columbus grew by almost 26%, well ahead of the national

growth rate of 20%. The rest of Ohio, excluding Columbus, grew by only 5% during the period. Unemployment was markedly lower than the state rate, and lower than the national rate in eight of those years.

The prime growth sectors of the local economy over the last ten years have been general services, with 62,200 new jobs; retail trade, with 42,100 new jobs; finance, insurance and real estate with 21,500 new jobs; and federal, state and local government, with 12,900 new jobs. There has been a substantial shift in the local and national economies to increased levels of services-producing employment. In the Columbus MSA, 25.4% of all employment was goods-producing in 1979, falling to 19.2% in 1989.

The employment growth rate for the 1989-2000 period is projected at 13.6%, with a total of 95,100 new jobs in the Columbus MSA. The majority of this growth will come in general services with 39,600 new jobs; retail trade with 26,900 new jobs; and finance, insurance, and real estate with 11,100 new jobs. Only 17.1% of total employment will be involved in goods-producing sectors in the year 2000. This continues the area's historic shift to the production of services and away from production of goods.

Experience clearly indicates the ability of a services-dominated economy to sustain continuing growth and expanding personal income but one result has also been lower average wage rates. Average annual wages, adjusted for inflation, reached \$17,148 in the Columbus MSA in 1989, for a 1979-1989 growth rate of 3.9%. The U.S. average annual wage was \$18,763, having grown by 5.8% in the same period. The wage advantage remains with goods production where the average annual wage is one-third higher than the overall averages.

The two-income family is becoming increasingly common, in part due to social trends but also as an adaptation to the wage structure of the economy, both locally and nationally. The continuing decline in household size, however, implies that, in an increasing number of households, there are not two adults to enter the labor force and the option of a second wage does not exist. The shift away from manufacturing with its higher wages and its value-added effect should not be taken as a given, and economic development policy should continue to encourage manufacturing employment when possible.

GEOGRAPHIC TRENDS

Population is moving away from the older city, defined as the Columbus municipal boundary in 1950. The move to the suburbs has not crippled Columbus, as has been the case in other cities, because of annexation policies that have allowed the city to capture growth. In addition, the concentration of employment in Columbus is higher than the concentration of population, so the city is able to tap into the region's widespread prosperity. However, the older city has seen substantial population loss from 1960 to the present. In the 1980s, the older city lost over 18,000 people while central Ohio was experiencing a population surge. The concern is that this general decline increases the possibility for pockets of poverty, marked by generally lower incomes and neighborhood decline.

Projections for population growth continue to favor the northwest part of the county, with continuing growth in the far north and in the trans-Scioto corridor. Substantial growth is also forecast for the northeast and the eastern fringe of the county, extending into Fairfield County. Columbus should continue to capture a reasonable share of this growth.

Much of the city's continuing prosperity is based on capture rates — capturing a consistent proportion of new residential development, platting activity, annexations, and so on. There are signs that these proportions may not be reliable in the future. Platting activity and annexations in particular seem to be less reliable than they have in the past. The capture rate for single-family residential platting fell from 72% for the 1980-84 period to 53% for 1985-89. Development patterns have favored single-family residential development in portions of Columbus served by suburban school districts. While Columbus annexed over three-fourths of all territory annexed in Franklin County in the 1950s and 1960s, it captured only 44.7% of all annexations in the 1980s. Another barometer, employment capture, seems threatened by the development of employment centers in suburban jurisdictions. Trends toward infill development, reinforced by the Columbus Comprehensive Plan, may redirect growth and salvage capture rates.

A final long-term issue is the tension between declining population and labor force growth and the needs of an expanding economy. Long-term population projections show declining rates of growth, reflecting the aging of the population and declining fertility rates. The forecast for employment for the next ten years reflects a lower growth rate than the area has experienced in twenty years, and the growth rate for the 2000-2010 period is even lower. Even with these lower forecast levels, employment will exceed the labor force in 2010. It is possible that long-term population trends could put a brake on economic expansion, although a more reasonable assumption for the future is that continuing economic expansion will result in higher than forecast population growth, softened somewhat by increased labor force participation rates.

Overall, the performance of the city and the region has been excellent. The area has demonstrated a strong and expanding economy, and forecasts indicate that this expansion will continue. Although there is some concern about the future, the overall prospect is very good.

BARRIERS AND OPPORTUNITIES

A NATIONAL PERSPECTIVE

Barriers and opportunities to Columbus growth, development, and redevelopment extend beyond local boundaries. National and international influences will have an impact on future growth from both a physical and an economic standpoint.

Increasing awareness of environmental issues and related legislation and administrative action will substantially influence future growth. Recent concern about wetlands legislation and guidelines is an example of regulatory action affecting the inventory of land available for development. A nationwide concern for preservation of farmland and forests will also influence development patterns. The theme that weaves these trends together is one of quality of life. The term defines both an approach to the environment and living patterns within it.

The demand for community services and amenities is increasing not only in Columbus, but also nationwide. Traditional suburban development patterns do not deliver the services and infrastructure available in urban areas. Public sources for dollars necessary for these improvements are fast disappearing. Columbus can take advantage of these trends and make available for future development areas well served by existing infrastructure and other community services.

Future development will need to consider more concentrated growth, especially in redevelopment areas where infrastructure and community services exist. Many communities nationwide are revising their land use controls to permit greater flexibility allowing a mix of residential, employment, retail, and recreation land uses as interrelated communities. A land redevelopment agency, serving as the city's agent in land assembly and redevelopment activities, can contribute to various public purposes such as provision of affordable housing, encouragement of industrial development, and infill development.

A rekindled interest in statewide planning across the country suggests a move toward regional cooperation in solving many urban problems. Taking into consideration the future growth objectives of surrounding communities may well be one of the most important emerging trends to consider. Increased regional planning in the central Ohio area would be valuable in this regard. State planning is not currently in place in Ohio, but the move toward this approach in many other states suggests its time may be near.

PHYSICAL BARRIERS AND OPPORTUNITIES

WATERWAYS

Various aspects of the region's waterways represent barriers and opportunities to Columbus future growth, development, and redevelopment.

The Scioto River is the primary waterway in the area with Big Darby Creek, the Olentangy River, Alum Creek, Big Walnut Creek, Blacklick Creek, and Little Walnut Creek as tributaries. These waterways and several minor tributaries form three drainage basins and ten subbasins upon which the region's sanitary sewer system is based. Development outside these basins would require pump stations or separate sewer systems.

Waterways define floodplains which pose significant development limitations in the Columbus region, particularly in southern Franklin County. Floodplain limitations are most significant in the southeast, where Alum Creek, Big Walnut Creek, Blacklick Creek, and Little Walnut Creek are in close proximity to each other. A large floodplain adjacent to the Scioto River extends from the confluence with the Olentangy River south beyond the city limits.

The scenic aspects of the waterways are important as well to Columbus' future. Scenic rivers are evaluated according to the outstanding qualities the waterways possess. They are designated to identify and preserve scenic areas adjacent to rivers for future generations.

SOILS

Soil conditions in the Columbus 2010 Planning Area present growth and development challenges and limitations over the next 20 years. The nearly 100 soil types in Franklin County fall into ten soil associations, each with unique qualities and limitations. While erosion can be a significant problem near waterways or on steep slopes, poor drainage is the most significant development barrier that soils present in the Columbus area. Hydric soils, characterized by their exposure to water over extended periods of time, cover about 16% of Franklin County and forty of the remaining soil types have hydric characteristics in certain locations. Hydric soils are most prevalent in western Franklin County with additional concentrations in the northeast and southeast portions of the county.

Poor surface and subsurface drainage is a severe limitation associated with hydric soils. High water tables lead to soil saturation, which prevents surface water from percolating through the soil. Hydric soils often have no outlet for excess surface water to flow into the natural drainage system. Hydric soil is one of three characteristics associated with wetlands, a subject that has received significant attention in recent years. The presence of wetlands and their long-term impact on Columbus' physical future are difficult to anticipate. It is likely, however, that creativity will be critical in viewing wetlands as an opportunity or a barrier.

NATURAL FEATURES

Scenic rivers, unique geologic features, nature preserves, and rare species' habitats present additional challenges and opportunities when planning future development. Corridors along the northern portion of the Scioto River and the Hoover Reservoir are areas where rare species, woodlands, and nature preserves are most extensive. Unique geologic features in the area of Griggs Dam Caves, Hoover Reservoir, and Big Darby Creek support habitat for several rare and endangered animal species. These areas also possess some of the rarest plant species in Ohio.

The northwest portion of Hoover Reservoir is the only significant city-owned nature preserve. On its 2,200 acres are more than 150 species of birds, prairie sites, rare plants, and rare woodlands. Several sites along the Scioto River and O'Shaughnessy Dam may qualify as nature preserves. Many of the MetroParks in the Columbus 2010 Planning Area are also natural areas with significant populations of state and federally listed rare plants and animals.

SANITARY SEWER SYSTEM TREATMENT CAPACITY

The historical relationship between the territorial expansion of Columbus and the sanitary sewer system is undeniable. Treatment capacity represents a continuing issue for expansion of the city. Centralized wastewater collection and treatment is one of the most important services for higher-density urban development. Columbus operates a regional sanitary sewerage system made up of eleven major intercepting sewers or trunks, numerous smaller sewers, and two treatment plants. Two additional trunk sewers, Rocky Fork and Upper Scioto West, are programmed for completion in the next few years.

The gravity system serves generally the Scioto River and Big Walnut Creek drainage basins. Urban development outside the gravity-fed central system would require additional treatment facilities or pump stations. The sanitary sewer service area, as defined largely by natural boundaries, serves as the Columbus 2010 Planning Area, the geographic scope for the Columbus Comprehensive Plan.

The Jackson Pike and Southerly Wastewater Treatment Plants, joined by an interconnector sewer, operate separately and together to treat the system's wastewater. The plants are designed to accommodate expansion ultimately allowing for a service area population of 996,031.

WATER SUPPLY

An adequate supply of water is vital to the growth and vitality of Columbus and the metropolitan area. Current water consumption within the regional water distribution system operated by the city of Columbus stands at 131 million gallons a day with projections of 175 million gallons a day in 2010. While surface and groundwater resources are plentiful, locating additional water supply sources for Columbus is critical. "Water Beyond 2000" is a comprehensive water treatment and supply feasibility study conducted for the Columbus Division of Water with the aim of locating and developing additional water sources for Columbus.

TRANSPORTATION AND RECREATION CORRIDORS

A number of potential barriers and opportunities exist in the Columbus 2010 Planning Area related to transportation and recreation corridors. Corridors are defined here as narrow strips of land dedicated to specific purposes. They are important within the urban fabric because they can provide opportunities for establishing transportation linkages between activity centers and allow for recreational activities such as bicycling or trail walking which involve movement over relatively long distances.

Long-term planning for corridor development is crucial because corridors can be blocked for particular uses simply by losing a small section to a conflicting use. Several corridor types warrant attention — railroad and existing thoroughfare rights-of-way, land adjacent to streams, and selected parcels of undeveloped land.

AFFORDABLE HOUSING DISTRIBUTION

Few things influence the way a community is perceived by its residents and visitors as dramatically as does its housing stock. The type and affordability of housing and its location related to employment opportunities and amenities directly affects a community's quality of life. In comparison with many metropolitan areas, Columbus offers affordable housing that contributes to the city's attractiveness as a business location. However, closer examination reveals significant need in the amount and distribution of housing affordable to persons of low and moderate income, as defined by the Comprehensive Housing Affordability Strategy for the City of Columbus and Franklin County. (Low and moderate income households are defined as those households whose income falls between 50 and 95% of the median income for the area, as determined by HUD, with adjustments for smaller and larger families and for certain areas.)

A 1989 report of the Columbus and Franklin County Housing Commission estimated that 93,400 households in the county qualify for housing assistance. An immediate need for 12,800 affordable units was identified. A 1990 Columbus area survey of apartment complexes with 20 or more units identified affordable rental units by market area. Concentrations of these types of affordable rental units in Columbus are located on the northeast, far east, and west sides. Many rental units in the central city neighborhoods are duplexes or smaller apartment buildings which, though not included in the 1990 survey, provide a significant supply of affordable housing units. Owner-occupied units meeting the definition of affordable are concentrated on the city's near northeast, near east, south, and west sides. The highest concentration of high-cost owner-occupied housing is in the northwest, far north, and far northeast.

Proximity of housing to employment opportunities and community amenities is especially important to low-income people. Affordable housing, particularly owner-occupied housing, in Columbus is not well linked to employment opportunities. Major employment centers in the far north, southeast, and northwest are not accessible by public transportation for the majority of low income residents. Mass transit lines are oriented to the downtown and few crosstown routes exist. Time of service is also limited. The result of this

poor linkage is a reduction in job opportunities. While affordable housing is well linked to the downtown area, many jobs available there are either highly skilled positions requiring extensive education or low-paying clerical and service jobs. Many neighborhoods with a high proportion of affordable housing are located in the central city. They are well served by nearby parks, recreation facilities, and cultural opportunities.

HISTORIC RESOURCES

Columbus has a number of intact historic resources which contribute to a rich urban fabric and provide a daily reminder of the city's physical and cultural heritage. Historic resources are defined as districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, or culture. Twenty-one districts are listed on the Columbus Register of Historic Properties and 28 are listed on the National Register of Historic Places. Forty-six districts are eligible for listing on one or both registers. Most districts are located within the 1950 Columbus boundary. Columbus has three national landmarks — the state Capitol, the Ohio Theatre, and the Eddie Rickenbacker home. Hundreds of additional properties are eligible for one or both registers. Eleven Columbus archaeological sites are listed on the National Register of Historic Places with many more identified, but not examined.

Preservation represents a significant investment in older areas of the city and provides an impetus for growth and renewal in areas experiencing population loss and decay. Potential rural resources include churches and farmsteads in more recently annexed parts of the city.

FINANCIAL BARRIERS AND OPPORTUNITIES

PATTERNS OF GROWTH

In the last 40 years, Columbus has added 152 square miles resulting in a nearly fivefold increase in land area. The growth has taken Columbus' corporate limits into two adjacent counties and has transformed a modest, compact city of 41 square miles into a sprawling community of more than 199 square miles. The Columbus corporate limits surround "islands" of incorporated and unincorporated land and demonstrate narrow growth corridor "tentacles" to the east, west, and south. These irregular boundaries create jurisdictional confusion and diseconomies in provision of public services.

Between 1954 and 1969, Columbus captured more than 78% of the land annexed in Franklin County. In the 1980s, Columbus gained only 39% of the land annexed in the county. An examination of annual Columbus/suburban annexation activity discloses a less positive picture of Columbus' growth potential.

Imbalances in development patterns, as a result of market preference to locate north and east, are an important concern for future growth and the costs of capital investments and service delivery. A cost-effective growth pattern is, in general, one which promotes compactness and staging of private and public investment closely together.

FINANCIAL RESOURCES

Columbus has enjoyed substantial economic growth over the past ten years. Employment growth has been higher than state and national averages, while unemployment rates have been below state and national figures. Long-term forecasts indicate continued economic expansion in central Ohio. Projections for Columbus city government revenue growth, however, are not as optimistic.

About 83% of city revenues come from income tax collection. Other revenue sources include property taxes, user fees, and state and federal grants. It is Columbus' policy to use 75% of income tax revenues for the operational costs of city services. The remaining 25% is used to finance capital improvements. Enterprise operations, such as the city's sewer and water divisions, are self-sustaining and provide their own operational and capital investment funding through customer bills.

Income tax revenues grew by 174% from 1980 to 1990. The 1990 receipts represent a 4.75% increase over 1989. When this percentage is adjusted for inflation, there is essentially no growth, despite some of the

lowest unemployment rates in history. The last time the city had a no-growth year in income tax revenues was 1960. A variety of factors contribute to the low number including a drop in corporate income taxes and an increasing service sector orientation in the economy. Estimates in 1990 indicated that, without a significant economic upturn, the city would have a cumulative general fund shortfall of more than \$400 million by the year 2000.

Capital investments are funded through the city income tax and, in some cases, through matching funds from the state and federal governments. In recent years, the debt and equipment enhancement of the Solid Waste Reduction Facility took an increasingly large portion of the income taxes set aside for capital improvements. The transfer of the facility to the Franklin County Regional Solid Waste Management Authority has eased, but not eliminated, the burden.

Environmental mandates, including those related to stormwater management, will also have a significant impact on future city finances. The cost will be high and it is likely that much of the cost will be paid by the capital improvements portion of the general fund.

The provision of capital investments and services will become more challenging as more demands are made on the available resources.

JURISDICTIONAL BARRIERS AND OPPORTUNITIES

The Columbus Comprehensive Plan is a plan for the existing city of Columbus and an area of logical growth. As the major city in the central Ohio region, Columbus holds a dominant position in many senses. Columbus also is aware of and sensitive to the relationships between and among its decisions and those of neighboring jurisdictions and other political entities.

Probably the most discussed relationship of mutual interest is that between the city of Columbus and Columbus Public Schools. Among the common issues are development of various types and its associated revenues and potential for new pupils, tax abatements, the effects of school policies on developer and home buyer interests, and joint use of facilities. Important as well is the relationship between the city of Columbus and suburban school districts. About 41% of Columbus territory falls in suburban school districts, a proportion which will continue to decrease if the win-win agreement remains in force. This 1986 agreement between Columbus and most outlying suburban school districts in Franklin County provides that territory annexed to Columbus will become part of the Columbus School District as well.

Columbus' neighboring jurisdictions include municipalities, townships, and counties. Relationships vary, but in all cases the decisions of those jurisdictions have impact on Columbus and Columbus' decisions have impact on them. The Comprehensive Plan has been conducted in a manner designed to maximize communication between Columbus and its neighbors. Plan implementation activities will build on this model and increase the opportunities for communication and other activities of mutual interest.

CHAPTER 3: COLUMBUS 2010 GOALS

One of the first tasks of the Columbus Comprehensive Plan was to formulate a set of goals to guide the planning process. A seven member sub-committee of the Community Advisory Committee led this effort by drafting a set of working goals. These goals were reviewed by the five committees, and their suggestions incorporated into the finalized goal statements. The goals were approved by the Columbus Comprehensive Plan Steering Committee on November 28, 1990, amended March 27, 1991, and adopted by City Council on April 8, 1991.

The paragraphs that precede the goal statements were written by a sub-committee of the Community Advisory Committee in an effort to clarify the intent of the goals. Each paragraph is followed by the corresponding goal statements.

VITALITY AND DIVERSITY OF NEIGHBORHOODS

Columbus is fortunate to have a rich diversity of neighborhoods. These neighborhoods should be maintained, enhanced, and protected. Standards and guidelines should be established to control development and foster those unique characteristics that provide neighborhood identity. These guidelines should ensure an optimum level of community facilities and permit an appropriate mixture of land uses within each neighborhood. Efforts must also be made to provide Columbus residents of all income levels a choice of neighborhoods in which to live. Neighborhoods should be encouraged to provide a variety of housing options. All neighborhoods should be accessible to individuals with disabilities. Public safety services should be strategically located to ensure effective emergency response times. A wide range of revitalization incentives should be made available to all neighborhoods and designed to generate the support of the local community rather than cause displacement through gentrification. The strength of any city is in its neighborhoods, and great care should be taken to ensure the long term vitality of all Columbus neighborhoods.

1. Support individuality and encourage diversity within and among neighborhood communities.
2. Provide revitalization opportunities for neighborhoods regardless of geographic location.
3. Maintain and develop guidelines which establish accepted standards in the community and its individual neighborhoods.
4. Provide for sufficient distribution of public safety facilities to ensure timely emergency response to all Columbus neighborhoods.

GROWTH: HOW MUCH AND WHERE

It is essential Columbus continue to attract an equitable share of the region's growth. Growth, however, can occur in several ways. Revitalization of older neighborhoods, infill development within the central city, and new development on the city's fringe are all forms of growth. Unplanned urban sprawl results in ever-increasing costs of services and infrastructure provision. Columbus must strive to ensure growth occurs where a proposed use is compatible with the site and its surroundings. Residential, commercial, and industrial growth should all be fostered. By directing development to areas already served by infrastructure and city services, Columbus can enjoy cost effective and well-managed growth.

1. Support the continued prosperity of the City of Columbus by attracting an equitable, manageable and cost effective share of the region's growth in population, housing units and business expansion.
2. Direct growth to those areas physically suited for the intended land uses, provided that adequate infrastructure is available or is programmed to accommodate such uses.
3. Where possible, direct redevelopment to those areas adequately served by infrastructure and services.
4. Ensure a continued variety and availability of appropriate compatible residential, commercial and industrial settings.

TRANSPORTATION

The environmental and economic costs of operating individual vehicles are increasing. It will become necessary to expand the current transportation options to provide an integrated, safe, and efficient system for the movement of people and goods. Cost-effective infrastructure alternatives must be explored. Opportunities to expand and coordinate this system with transportation links throughout the nation and around the world should be encouraged.

1. Provide Columbus with a balanced, coordinated transportation system which enables individuals and goods to move safely, efficiently and affordably.
2. Prepare for participation in regional and national transportation linkages.

RECREATION

The quality of life of any city is largely dependent upon its parks and recreation system. Columbus has an extensive system of parks and recreation facilities. Acquisition of these facilities must keep pace with development. Columbus should seek creative ways to provide and maintain parks and recreation facilities that are accessible to all residents. Natural areas of the city should be reserved for passive or active recreational use. This would include areas preserved for their scenic beauty as well as for more active uses, such as ball fields and playgrounds. It will be important to anticipate the recreational needs of an aging population as seniors become more active during the next twenty years.

1. Reserve and protect the natural areas of Columbus for appropriate recreational uses.
2. Increase and maintain recreational sites and facilities.

NATURAL RESOURCES AND ENVIRONMENTAL QUALITY

Compatibility of uses as well as individuality should be stressed, along with compatibility between the natural and built environments. Additionally, a balance of green space should be encouraged in both existing and newly developed areas. Environmental issues are increasingly important on the local, state, and national levels. Provisions for improving environmental quality should be made. The presence of numerous natural resources such as rivers, woodlands, wetlands, wildlife, groundwater and air quality must be identified, protected and enhanced. The price of ignoring environmental issues is immeasurable, but the benefits of an environmentally sound development plan are great.

1. Maintain and improve the environmental quality of Columbus.
2. Protect, expand and enhance the natural features of Columbus.
3. Promote the greening of Columbus.

HISTORIC PRESERVATION

The identification and preservation of notable landmarks as well as areas of historic, architectural, archaeological or aesthetic value are key components in retaining Columbus' identity. The unique character of many Columbus neighborhoods is defined by the historic texture of their buildings. Rehabilitation of historic structures and their creative reuse can provide the Columbus community a variety of living, working, and recreational environments. They also provide opportunities for economic development and reinvestment or growth.

1. Preserve the cultural and physical history of Columbus.

AESTHETICS

The visual appeal of a community provides the unique character that sets it apart from other places and, therefore, should be given emphasis. Compatibility of uses as well as individuality should be stressed, along with compatibility between the natural and built environments. An attractive city reaps economic as well as social benefits from its appearance. Visitors will return, new businesses will be attracted, and residents will take pride in a city that strives for visual excellence.

1. Encourage development and redevelopment that is aesthetically compatible with the built and natural environment.

ROLE OF THE DOWNTOWN

Downtown Columbus should be the primary cultural, entertainment, and commercial center for the region, and a major retail and residential center. Downtown Columbus should continue to have the greatest concentration of commercial and government office space in the region, provide a major amount and

mixture of retail space, and provide a range of housing choices and styles for persons wishing to live downtown. Cultural and entertainment facilities and programming should be located downtown, to the extent possible, especially where such facilities and programming are unique and serve the entire region.

1. Maintain and strengthen the role of the downtown as the primary commercial, cultural and entertainment center, and a major retail and residential center.

MAKING THE PLAN WORK

To ensure the success of the Columbus Comprehensive Plan, a variety of implementation strategies must be employed. Columbus must establish an equitable method of funding the development and maintenance of community facilities and infrastructure. Effective involvement in planning and development issues by all segments of the Columbus community will bring about wide based support and commitment. Inter-jurisdictional cooperation will foster cohesiveness and compatibility of objectives. The Plan must be reviewed and updated to ensure its continued applicability.

1. Establish a rational funding framework for the development and maintenance of public facilities and infrastructure.
2. Provide sufficient implementation strategies and resources to enable the community to realize goals of the Columbus Comprehensive Plan.
3. Increase citizen participation in planning and development.
4. Provide a mechanism for the continual review and updating of the Columbus Comprehensive Plan.
5. Encourage cooperation with communities within the region.

CHAPTER 4: CITYWIDE RECOMMENDATIONS

LAND USE

The land use element of the Columbus Comprehensive Plan provides a long-range guide for the development and use of land in the Columbus 2010 Planning Area. To differing degrees, all sections of the Comprehensive Plan contain policies which relate to the use of land. Infrastructure and community facilities recommendations made by the Columbus Comprehensive Plan have a direct impact on land use decisions. The land use recommendations reflect the constraints and opportunities created by the lack of, or the provision of, infrastructure and facilities.

This section includes general strategies regarding citywide land use issues, annexation policies, and development standards for both central city and suburban pattern development and redevelopment.

GENERAL RECOMMENDATIONS

The Columbus Comprehensive Plan recommends the following strategies for citywide land use issues:

- **Encourage a mix of lifestyles and income levels in all neighborhoods.**
- **Encourage the provision of affordable housing throughout the city, with emphasis on sites accessible to employment centers.**
- **Public incentives such as tax abatement, building and zoning code revisions, and other tools should be used to create a mix of housing opportunities throughout the city.**
- **Require compatibility of adjacent land uses.**
- **Maintain mutually supportive mixed uses and pedestrian orientation within neighborhoods.**
- **Explore, in cooperation with other city departments and organizations including the Urban Land Institute, Building Industry Association and Columbus Board of Realtors, the use of neo-traditional planning techniques as guidance for new development.**
- **Provide technical and financial support to assist in the revitalization of neighborhoods and activity centers in all parts of the city.**
- **Encourage maintenance and/or provision of infrastructure, parks and other services in coordination with revitalization efforts in an area.**
- **Encourage land uses that generate substantial amounts of traffic to locate on arterial streets.**
- **Establish appropriate building height restrictions for developments adjacent to airports.**
- **Preserve structures of historic value in all neighborhoods.**
- **Protect natural resources throughout the city.**
- **Maintain an appropriate mix of land uses in all communities.**
- **Recognize the need to provide for necessary public facilities of the type generally considered undesirable by local residents.**
- **Develop citywide policies that will encourage the success of retail development in downtown Columbus.**

ANNEXATION POLICIES

The city's current annexation policy has two primary goals. The first is to round out corporate boundaries in the fringe areas of the city, limiting additional expansion to areas that can be adequately served and show a potential for growth. The second goal is to fill in the "islands" of unincorporated land created through past annexations.

Prior to the 1950s very little annexation activity occurred in Franklin County. Since 1954, nearly 236 square miles of land area have been annexed to municipalities within Franklin County, with the city of Columbus gaining 64% of the territorial growth. With nearly two out of every three square miles of annexed territory, the city of Columbus has captured a substantial proportion of the region's growth since 1954.

An examination of annual Columbus/suburban annexation activity shows that the percentage of land annexed by the city of Columbus each decade since 1950 has been declining steadily. Primary reasons are the preference of developers for single-family housing construction in suburban school districts and the city reaching the northern limits of its sewer system.

Despite Columbus' diminishing share of the area annexed each year in Franklin County, the interest of property owners in annexation to the city of Columbus remains strong. In 1990 Columbus received more petitions for annexation than in any one year during the decade of the 1980s, reflecting a continued interest in Columbus services. The prevailing motivation for annexation by developers in suburban fringe areas and by individual homeowners has been to obtain sewer and water services.

Future annexation activity for Columbus can be classified into two categories - infill and fringe area annexations. Given the projected rates of population growth in central Ohio and the vast amount of undeveloped land in Columbus, it could be argued that additional annexation is unnecessary. However, growth does not occur simply because an area is undeveloped and the market does display geographical preferences. Columbus should continue to maintain its "open door" policy in locations anticipated to be high growth corridors and which can be served in a cost-effective manner.

Infill annexations are logical from an overall service point of view. The islands of township land often lead to confusion about the jurisdiction of police and other services and create the unusual circumstance where city workers must leave Columbus to reach outlying areas of the city. Most of these areas are found in the northeast and southwest quadrants. The quality of development in potential infill areas varies tremendously. Some of these areas would represent significant revenue generators for Columbus, while others contain substandard residential pockets with street and utility infrastructure that were not constructed to city standards. Three potential fringe growth areas have been identified and categorized as Expansion Development Districts. The areas do not have and are not currently programmed for sewer service. Sanitary sewer service will be programmed at such time as a plan, budget, and timetable for an appropriate level of capital improvements and service provision is in place. More information about Expansion Development Districts is provided in Chapter 7.

There are several areas within the Columbus 2010 Planning Area and outside the Expansion Development Districts that are of high annexation potential. These areas are either currently served with sewer services or are programmed to be served. Annexing these areas could encourage the development of revenue-generating uses.

The Columbus Comprehensive Plan recommends that the city of Columbus:

- **continue to round out its corporate boundaries to make the city more serviceable.**
- **discourage urban density territorial expansion in areas that should be protected due to significant environmental attributes of the area and discourage development in these areas.**
- **recommend appropriate zoning for the annexed area based on the proposed land use of the area.**
- **review annexation requests based on the serviceability of the area and proposed land use for the area.**
- **aggressively pursue and accept annexation of unincorporated land surrounded by city land.**
- **examine costs and revenues of all future annexations.**

DEVELOPMENT STANDARDS

The Columbus Comprehensive Plan views Columbus as dynamic and growing and recognizes that each community within the city has its own character and structure including neighborhoods, activity centers, and community facilities. Each community also should have a reasonable balance of land uses and have its own identity and sense of place within the larger urban fabric.

The Plan promotes a balance of suburban development and in-town community development by siting areas for new development in the fringe and at the same time encouraging redevelopment of existing older areas. The Plan seeks to focus capital improvements to improve quality of life and to help reverse the outmigration of residents to new suburban neighborhoods. At the same time, the Plan seeks development

opportunities in the fringes of the city that portray high quality of life characteristics. The Plan recognizes that neo-traditional planning principles can be appropriately applied in both central city and suburban pattern neighborhoods.

In central city pattern neighborhoods, activity centers, special districts, and community facilities create a sense of place. In the suburban development pattern, the sense of community and the sense of place are diminished. To compensate for the lack of a sense of identity in the suburban pattern, architectural designs that create the aura of a special place need to be incorporated.

Older neighborhoods and communities usually need continuing maintenance to accommodate the effects of changes in lifestyles and deteriorating infrastructure. Some areas have not been adequately maintained and need new development, redevelopment or rehabilitation. Additionally, it is more difficult to rebuild an older section than it is to develop vacant land in the suburbs. Land assembly, demographics of the remaining population, and disrupted communities make development in older neighborhoods more difficult.

A balance needs to be struck between in-town and suburban development patterns. Suburban development should accommodate a mix of lifestyles and age groups, as should redevelopment within the existing city. There also needs to be greater effort placed on achieving an appropriate land use mix in a community.

The following recommended development standards will be implemented through extensive revisions of appropriate city codes. These standards should help to achieve high quality development and redevelopment in both the central city and suburban development patterns. A distinction has been made between development standards for the central city and suburban development pattern. The development standards for the central city pattern focus on maintaining the special characteristics of neighborhoods to preserve the sense of identity within a community, while the standards for the suburban development pattern focus on the provision of amenities to create a sense of identity for the newly developing communities.

CENTRAL CITY PATTERN

HISTORIC RESOURCE PROTECTION

- ❑ Mature trees shall have priority in site plans for infill and new development.
- ❑ Uncharacteristic materials and colors are discouraged.
- ❑ Architectural design should be compatible with the surrounding neighborhood.
- ❑ Historic topography, such as sloped yards, should be preserved. Steps from sidewalks to front yards and porches and retaining walls must be maintained or replaced, if missing.
- ❑ Garden, lawn, property line buffer hedges, and other original historic landscaping features should not be removed unless vegetation is used to replace it according to a plan of similar character.
- ❑ Neighborhood building scale, general building heights, and proportion should be preserved.
- ❑ Characteristic projections, such as porches and decks, and roof shapes should be maintained.
- ❑ Infill and demolition should not disrupt the historic directional expression of front facades, front and rear setbacks, and the rhythm of spacing between buildings and fenestration.
- ❑ New construction in historic neighborhoods should look new, reflecting current design practices, while using design elements that relate to the local architectural character.
- ❑ Renovation and rehabilitation must be sensitive to the characteristics of the structure.
- ❑ Demolition of historic structures is strongly discouraged, except in cases of a greater than 50% loss of the structure due to extreme lack of maintenance, fire, or other disaster or extreme hardship to the owner.
- ❑ Encourage preservation of residential structures by preference for the renovation and rehabilitation of existing dwelling units, particularly single family units, over infill construction of new residential buildings.
- ❑ Monuments, fences, lamp posts, benches, parks, street patterns, and paving contribute to the character of historic districts and should be maintained and preserved.

NATURAL RESOURCE PROTECTION

- ❑ Older neighborhoods built with planned orientation toward natural resources features should be preserved.
- ❑ Second growth or reforestation of wild natural resources in developed areas should be encouraged.
- ❑ The remaining natural stands of trees should be preserved.
- ❑ Existing trees should be preserved except when the tree is damaged or diseased or when an undesirable species has potential to damage surrounding infrastructure. In those cases, the trees should be replaced elsewhere on site.
- ❑ Remaining natural resources, including river valleys and banks, ravines, natural drainage ways, parkland, and open space should not be developed for more intensive uses.
- ❑ Natural resources damaged due to utility access should be replaced with trees and other landscaping of the original type at the expense of the responsible party.

LANDSCAPING AND STREETSCAPING

- ❑ Important characteristics of the existing landscape and streetscape quality should be maintained, repaired and provided, where practical. Such elements include sloped front yards and other characteristic topography; street trees; building orientation toward the street; sidewalks, streetlights, and historic street furniture; passive neighborhood parks; and use of a limited number of large tree species in each neighborhood.
- ❑ Infill uses should not disrupt the character of the neighborhood. Neighborhood elements, use density, setbacks, and lot coverage ratio should be consistent with the neighborhood.
- ❑ Front yards should be regarded as important visual spaces that define neighborhood character.
- ❑ Street tree plantings should be extended from existing neighborhoods to provide visual linkages with nearby activity centers and other neighborhoods.
- ❑ The addition of street lights, landscaping on public and private property, and other additions such as bus stops or street furniture should not disrupt the neighborhood sense of place and should be compatible with the character of the neighborhood.

ARCHITECTURE AND APPEARANCE

- ❑ Architectural review should be created in central city neighborhoods to guard against disruptive building designs and development patterns.
- ❑ New infill projects, proposed additions, and use changes should be reviewed in terms of each project's relationship to architectural continuity and compatibility with the other buildings on the street and in the area, setbacks and lot coverage ratio as compared to the neighborhood standards, continuation of the neighborhood topographical features, fenestration, and appearance of building density.

GRAPHICS AND SIGNAGE

- ❑ Current in-character signage should remain and new out-of-character signage be prohibited.
- ❑ Graphics and signage guidelines should be developed to enhance historic and neighborhood character.
- ❑ Location of all street graphics should be in accordance with a coordination plan developed for each community. Preference for location will be given to existing signage.
- ❑ Street name signs should be of consistent size, color and location throughout all communities.

LIGHTING

- ❑ All forms of outdoor lighting should be in character with the neighborhood.
- ❑ Lighting should be planned to co-exist with street trees.
- ❑ Street lighting is important to a sense of neighborhood security.
- ❑ Appearance review at the neighborhood level should be the means for selecting and maintaining locally appropriate street and parking lot lighting.
- ❑ Natural open space used for passive or active recreation should have adequate lighting.
- ❑ In areas canopied by tree foliage, ground lighting should be considered, where appropriate, to illuminate the area below.
- ❑ Adequate lighting should be provided along commercial buildings to increase the sense of safety.
- ❑ Neighborhood entry markers should be well lit.

TRAVEL AND ACCESS

- ❑ Consider policies to slow traffic and discourage heavy non-local through traffic on local streets within neighborhoods.
- ❑ Bus stops should be conveniently located within each community.
- ❑ Brick streets and slate sidewalks should be maintained where they exist.
- ❑ Consider policies, including the closing of sections of alleys, to discourage use of alleys by through traffic.
- ❑ Narrow streets that are characteristic of neighborhoods should be maintained.

SUBURBAN PATTERN

HISTORIC RESOURCE PROTECTION

- ❑ Whenever practical, historic resources such as remnants of stone fences; wells; barns, outbuildings, and other historic structures; foot bridges; large trees along old fence lines; or cemeteries should be integrated into development plans.
- ❑ Names of new subdivisions should incorporate the historic resource when possible.
- ❑ The relocation of historic resources should be discouraged.

NATURAL RESOURCE PROTECTION

- ❑ Construction practices should be used that prevent erosion and drainage problems.
- ❑ Preservation of natural resources including wetlands, natural habitats, river valleys and banks, ravines, natural drainage ways, forested areas, and floodplains should be encouraged.
- ❑ Hardy trees that require moderate to low amounts of water should be used in landscaping and streetscaping programs.
- ❑ Natural resources disrupted by utility service access should be reclaimed.
- ❑ Measures should be taken to preserve and protect mature trees and appropriate existing vegetation during the development process.
- ❑ Encourage management of natural resources to promote visual coherence of the environment.

LANDSCAPING AND STREETSCAPING

- ❑ When large tracts of land are developed, emphasis should be placed on the creation of sub-neighborhoods with integrated landscaping and streetscaping plans.
- ❑ Landscaped medians should be encouraged.
- ❑ Within residential areas, street trees should be planted along arterials.
- ❑ The street scheme within a neighborhood need not be identical to the street schemes found along arterials.
- ❑ Landscaping and streetscaping of residential, retail, and office uses should be visually compatible.
- ❑ Commercial buildings located on arterials should be visible to the public but sufficiently landscaped to provide a pleasing appearance.
- ❑ Encourage integrated landscaping in large parking lots.
- ❑ Streetscapes may include sidewalks, textured or raised crosswalks or pedestrian bridges over busy arterials, walk lights at crosswalks, scramble crosswalks, bicycle pathways, landscaping in small parking lots, pedestrian-scale signage for activity center uses, names for bikepaths and pedestrian walks that incorporate neighborhood and activity center place names, and street furniture that offers rest stops.
- ❑ Park-like settings to serve as community focal points are appropriate around monuments, public buildings such as post offices, and other government buildings.

ARCHITECTURE AND APPEARANCE

- ❑ Projects should fit the scale of the community.
- ❑ Sense of place in existing residential and activity centers should be defined through the addition of focal point architectural detail, lighting, street tree species, and location of mailboxes.
- ❑ Land use compatibility should be achieved in all new developments.

- ❑ Retail uses located in neighborhood settings should be sited closer to the right-of-way to promote more human scale and add visual interest to the streetscape and should minimize parking in front of the buildings.
- ❑ Canopies, banners and awnings may be used to visually integrate groups of otherwise unrelated buildings.

GRAPHICS AND SIGNAGE

- ❑ Graphics and signage guidelines should be developed to enhance historic and neighborhood character.
- ❑ Non-commercial graphics as artistic expression should be permitted under appropriate circumstances. Space for artistic display should be encouraged.

LIGHTING

- ❑ The height of light fixtures should be graduated with more pedestrian scale lights nearest to residential uses. Light spillage off site should be discouraged.
- ❑ Lighting fixtures should be coordinated between neighborhoods and activity centers to contribute to a sense of community.
- ❑ The selection of standard street light fixtures should be expanded.
- ❑ Each neighborhood should have one type of standard street light fixture.
- ❑ Street light fixtures in suburban residential areas should be scaled and spaced to reflect lower density, large lot development.

TRAVEL AND ACCESS

- ❑ On local streets, on-street parking should be encouraged to slow traffic and provide a buffer for pedestrians on the sidewalk.
- ❑ Relatively short automobile trips, such as those to and from schools and community shopping, should be accommodated without the need to use an arterial street.
- ❑ Within neighborhoods, reduced pavement width at intersections should be permitted whenever possible to make pedestrian crossing safer.
- ❑ Suburban pattern streets developed on a project basis should have multiple entry/exit points. The number and location of access points should be based on the relationship of the development to other existing neighborhoods, the project's place within the community and the size of the development.
- ❑ Curb cuts should be limited, particularly along arterials and/or collector streets providing access to community services.
- ❑ Visual variety within transportation corridors that contributes to the sense of place and community should include entry marker towers, split roads with median strips, statues and monuments, historic landmarks, bridges compatible with neighborhood character, and scenic views of natural areas.
- ❑ Street patterns that combine pedestrian, bicycle, and automobile access can be used in residential areas and mixed use districts to establish a sense of neighborhood.
- ❑ Public transit must have multiple linkages, multiple destinations and access multiple communities to strengthen the bonds between community units, and to draw neighborhoods into their communities.
- ❑ Public transit should emphasize access to major employment and retail centers.

INFRASTRUCTURE

The infrastructure systems of the city of Columbus — streets and highways, public transit, pedestrian facilities, bikeways, sanitary and storm sewers, water system, and street lights — represent a tremendous public investment and provide the many conveniences expected by both city residents and visitors alike. Provision for and maintenance of these systems is one of the primary functions of local government.

Infrastructure is necessary whenever development and redevelopment occur. When adequate public infrastructure investments are planned and programmed to accompany development activities of the private sector, “growing pains” can be minimized. It is one of the principal aims of this Plan to ensure that the city of Columbus coordinate and plan infrastructure investments, as well as investments in other municipal functions and services, to meet the needs of this growing community and enhance the quality of life for all.

GENERAL INFRASTRUCTURE RECOMMENDATIONS

A number of general recommendations apply to all of the various types of infrastructure for which the city of Columbus has responsibility including water and sewer services, transportation, and city street lights. These are later augmented by additional recommendations applying to transportation systems and utility systems in general, as well as more specific recommendations for each particular type of infrastructure system.

The infrastructure systems of the city of Columbus represent a sizable public investment by the taxpayers of the city and should be protected as valued public resources. It is, therefore, the recommendation of the Columbus Comprehensive Plan that:

- **the city of Columbus make the rehabilitation and maintenance of existing infrastructure systems a top priority in the capital and operating budgeting process.**
- **the city of Columbus strive to complete infrastructure facilities, wherever practical, in existing areas of the city where infrastructure is found to be deficient.**
- **the city of Columbus strive to provide consistent levels of infrastructure service citywide.**
- **the city of Columbus base decisions on expansions to city infrastructure systems using public and/or private funds on 1) a careful analysis of both construction and maintenance costs, benefits to the city, and system-wide ramifications, and 2) the degree to which the expansion promotes the goals and objectives of this Plan.**
- **the city of Columbus strive to establish the most equitable methods of infrastructure financing possible.**
- **whenever possible, the various city departments coordinate the timing of all infrastructure improvements to occur simultaneously in a specific geographic area in need of such improvements.**
- **the city of Columbus closely monitor all federal and state statutory and regulatory requirements which impact infrastructure systems.**
- **the Planning Division serve as the coordinating entity for the capital improvement process to ensure that infrastructure and other types of capital investments are programmed to achieve the goals and objectives of this Plan.**

GENERAL TRANSPORTATION RECOMMENDATIONS

Several general transportation recommendations are made below. These are augmented by both the general infrastructure recommendations (applying to all transportation and utility systems) and specific recommendations applying to each particular type of transportation system.

- It is the recommendation of the Columbus Comprehensive Plan that the city of Columbus:
- create a balanced, coordinated transportation system by expanding existing transportation options.
- take a long-range perspective regarding future changes in transportation needs and technologies.
- carefully consider the interface with regional, state, and federal transportation systems when making modifications to local transportation systems.
- maximize the use of available state and federal transportation funds to realize the goals and recommendations of this Plan.
- protect from encroachment corridors which hold potential for future transportation use and sites with potential for joint public/private development supportive of such use.
- avoid transportation improvements that encourage inappropriate development within Environmental Conservation Districts, Noise Overlay Districts, Scenic Greenways Districts, Wellfield Protection Districts, and Ravine Protection Districts.
- improve truck, rail, and air transportation terminals to make the Columbus area competitive as a free trade zone for shipping and handling freight.
- work with the Mid-Ohio Regional Planning Commission to identify transportation improvements that will contribute to the improvement of air quality.
- coordinate transportation infrastructure planning and development with the Mid-Ohio Regional Planning Commission, the Central Ohio Transit Authority, Franklin County, the Ohio Department of

Transportation, and local jurisdictions to ensure implementation of the Columbus Thoroughfare Plan and related Columbus Comprehensive Plan recommendations.

STREETS AND HIGHWAYS

The system of streets and highways is perceived by many to be the lifeblood of an urbanized area. Within Columbus, the roadway system expedites circulation as it connects residences to job sites, retail businesses, recreational opportunities and other destinations. It provides the means of transporting many of the various commodities needed and desired by society. Roadways provide pathways for the bus system and enable emergency vehicles to reach their destinations quickly. This system is clearly one of our most important public investments and will remain so throughout the twenty-year planning period.

FUNCTIONAL CLASSIFICATIONS

Roadways are designed for and serve a number of different functions, and are classified accordingly. In general, there are four major classifications — freeways, arterials, collectors, and local streets — differentiated by the degree to which they provide ease of mobility and access to adjacent land uses. Categories are often further divided into subclassifications, i.e. major arterials and minor arterials.

Freeways carry traffic in very high volumes for very long distances at highest speeds. The high speeds are possible due to the generous width of roadway surface, absence of traffic signals, and strict control of ingress and egress — provided only at a limited number of entrance and exit ramps. Non-emergency parking is strictly prohibited. Their only role is mobility with no direct access to adjacent land uses.

Arterial streets carry traffic in high volumes for long distances at moderate to high speeds. Their principal role is mobility. They generally face commercial development which has access to the arterial only at a limited number of curb cuts. Parking is usually permitted only during off-peak hours, if at all.

Collector streets, as the name suggests, collect traffic from local streets within residential areas and deliver that traffic to arterials. They serve the dual role of providing both mobility and access. These streets carry considerably less volume, have lower posted speed limits, and are narrower than arterials. They often have residential driveway curb cuts. Parking is usually permitted.

Local streets are narrow, relatively short streets whose primary purpose is to provide direct access to abutting properties. Mobility and high design speeds are not required. Curb cuts are numerous. Posted speeds are low and parking is almost always permitted.

The various classifications form a hierarchy of roadways as shown on the 1993 Columbus Thoroughfare Plan. Freeways are generally few in number and are separated by several miles while local streets are plentiful and can be found only a block apart. This hierarchy enables the motorist to have safe access to the system via a local street, and then move up the hierarchy, as necessary, reaching higher speeds in order to travel longer distances.

THOROUGHFARE PLAN (SEE APPENDIX)

The streets and highways element of this Plan is, in part, comprised of a Thoroughfare Plan which designates the functional classification of roads and includes right-of-way requirements for these various classifications. The thoroughfare recommendations are closely related to recommendations for land use, community facilities, and other transportation systems as these roadways will need to effectively serve all future development and redevelopment as part of a balanced, coordinated transportation system.

The principal purpose of the Thoroughfare Plan is to serve as a tool for local officials to help in developing an orderly and efficient roadway system. It assists in developing roadway improvement priorities by providing an overview of the needs of the community. In addition, it will be used to keep development away from needed future roadway expansions, connections, and extensions.

The Thoroughfare Plan can help maintain a balance between land use development and the establishment of an adequate roadway system to service that development. It can also help to bridge the gap between the functions of development review (Zoning Code, Graphics Code, driveway rules and regulations) and

transportation planning because it is presented in a form that can be easily used in the development review process. The Thoroughfare Plan can be used to protect needed rights-of-way for roadways and serve as a basis for requiring that roadway improvements identified be funded before full development of an area takes place.

The following roadway types are shown on the accompanying Columbus Thoroughfare Plan map:

Type “F” Arterial - (Freeway or expressway) - shall have the right-of-way and pavement widths as determined to be necessary to accommodate traffic needs.

Type “6-2DS” Arterial - an arterial street having a minimum right-of-way width of 220 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate an 88-foot pavement consisting of six moving lanes with median divider on mainline sections and parallel service roads.

Type “6-2D” Arterial - an arterial street having a minimum right-of-way width of 160 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate an 88-foot pavement consisting of six moving lanes with median divider on mainline sections.

Type “6-2” Arterial - an arterial street having a minimum right-of-way width of 120 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 72-foot pavement consisting of six moving lanes on mainline sections.

Type “4-2DS” Arterial - an arterial street having a minimum right-of-way width of 196 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 72-foot pavement consisting of four moving lanes with median divider on mainline sections and parallel service roads.

Type “4-2D” Arterial - an arterial street having a minimum right-of-way width of 120 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 72-foot pavement consisting of four moving lanes with median divider on mainline sections.

Type “4-2” Arterial - an arterial street having a minimum right-of-way width of 100 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 56-foot pavement consisting of four moving lanes on mainline sections.

Type “3-1” Arterial - an arterial street having a minimum right-of-way width of 80 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 52-foot pavement consisting of three moving lanes and two parking or additional moving lanes in one direction.

Type “2-1” Arterial - an arterial street having a minimum right-of-way width of 60 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 36-foot pavement consisting of two moving lanes and two parking or additional moving lanes in one direction.

Type “C” Arterial - (Collector Street) - a street having a minimum right-of-way width of 60 feet wherever possible. Such streets shall, wherever possible, be designed to accommodate a 36-foot pavement consisting of two moving lanes and two parking or additional moving lanes in two directions.

In urban areas where extensive development has taken place and no right-of-way has been acquired for future widening, the stated minimum right-of-way and pavement width may not apply. Any additional right-of-way and pavement required for such roadway will be determined at the time of roadway improvement and on the basis of neighborhood concerns. For such roadways the arterial type shall serve as a functional classification of the roadway.

RECOMMENDATIONS

In addition to the Columbus Thoroughfare Plan, a number of specific recommendations are offered which address issues related to streets and highways within the Columbus 2010 Planning Area. The following discussion of roadway adequacy is needed to define terms used in the recommendations which then follow.

Roadway Adequacy

The ability of an urban street to carry traffic is determined by analysis of its capacity (measured by a volume-to-capacity ratio) and its level of service as defined below:

Volume-to-Capacity Ratio (signalized intersections): In urban areas, intersections control the traffic flow. Capacity is the maximum rate at which vehicles can traverse a point or uniform section of a lane or roadway during a specified time period. It is evaluated in terms of the ratio of average arrival flow rate (demand) to capacity, referred to as the volume-to-capacity ratio (V/C). A volume-to-capacity ratio represents a measure of a roadway's capacity or its ability to carry traffic in terms of the volume of vehicles on an intersection approach or designated group of lanes serving a particular traffic movement divided by the calculated capacity of the intersection approach or designated group of lanes. A V/C ratio of 0.90 to 1.0 indicates that the intersection or group of lanes is approaching capacity and that consideration may be given to the need for roadway improvements. A ratio of 1.0 or greater indicates that an improvement is needed unless deemed undesirable due to other considerations.

(Delay) Level-of-Service: Level-of-service (LOS) refers to a street intersection's capacity or its ability to carry traffic in terms of the average stopped delay per vehicle for the different movements within an intersection. This measure of adequacy is associated with signalized intersections, usually within urban areas. Level-of-service (which ranges from A to F) is defined as a qualitative measure describing operational conditions within a traffic stream, and the perception of these conditions by motorists and passengers. The level-of-service generally describes conditions at an intersection in such terms as speed and travel time, freedom of maneuver, traffic interruptions, comfort and convenience, and safety. The table below defines average stopped delay per vehicle for various levels-of-service.

Transportation Demand Management

- The city of Columbus should encourage and pursue strategies to avoid roadway congestion. Such strategies may include, but are not limited to, institution of congestion-reduction features in site design, negotiation of demand management agreements in development review and approval, differential tolls or fares for peak and off-peak hours, and establishment of auto restricted zones and/or parking management techniques.
- In cooperation with the Mid-Ohio Regional Planning Commission, the Central Ohio Transit Authority, Franklin County, and neighboring jurisdictions, the city of Columbus should pursue and support strategies to mitigate roadway congestion by shifting trips away from single occupancy vehicles and away from peak hours. Such strategies include, but are not limited to, 1) ride sharing programs, 2) employer provision of local circulators or shuttles to fringe parking lots or public transit stops, 3) employer provision of emergency short-term car rental services, a car fleet, or taxi vouchers, 4) establishment of alternative work hours (including staggered work hours, flextime, and compressed work weeks), and 5) implementation of trip reduction requirements in areas of severe congestion.
- The city of Columbus should continue to support institutional mechanisms to implement transportation demand strategies. Typical institutional mechanisms include transportation management associations, traffic management teams, and regional traffic management.

Transportation System Management

- The city of Columbus should maximize existing roadway capacity and safety and reduce peak hour congestion by implementing traffic operational improvements to the extent feasible. Traffic operational improvements generally include low capital cost projects such as improved signal timing, intersection signing, markings, channelization, and on-street parking restrictions.
- The city of Columbus should implement low cost improvements to improve capacity and safety on the arterial street system including, but not limited to, 1) minor widenings and the reconstruction of intersections to provide adequate lanes for turning movements, and 2) traffic signal system design for improved transit flow and exclusive bus lanes.
- Access to the roadway system should be limited to adequate, properly designed and safe entrances.
- The city of Columbus should improve guidelines on the manner of access to public streets that reduce the frequency of driveway entrances, particularly on arterials designated on the Columbus Thoroughfare Plan.

Adequate Transportation Facility Location and Design

- The internal circulation pattern for streets within a development should be reviewed to ensure an appropriate functional hierarchy of streets and appropriate linkages between major activity areas within and abutting the development.
- Patterns for neighborhood streets should be designed to discourage through traffic and high speeds.
- Design standards on vertical and horizontal curves, pavement widths, curbs, sidewalks, and bikeways should be set forth in the subdivision regulations.
- The city of Columbus should require curbs and gutters in all street construction or reconstruction projects, except when engineering considerations make this requirement unworkable.
- The Columbus Departments of Public Service and Development should study the advantages and disadvantages of both curvilinear and grid street patterns in terms of achievement of transportation goals as well as other goals of this Plan.
- Future arterials should be located and designed so as not to sever or fragment existing neighborhoods or land which could be developed for defined neighborhoods.
- The Departments of Public Service and Development should undertake a study to weigh the circulation benefits of continuing one-way arterial pairs through residential neighborhoods against the probable economic, environmental and safety costs to the neighborhoods, and develop policies on the use of one-way arterial pairs within residential neighborhoods.

Discouragement of Inappropriate Through Traffic

- Access to nonresidential development should be strongly discouraged on local streets through residential areas.
- Primary access for higher intensity development through lower intensity development should be strongly discouraged.
- Through traffic in neighborhoods should be discouraged through the use of traffic management techniques including traffic controls and roadway design.
- Truck traffic should be discouraged on local and collector streets except for the purposes of local delivery.

Adequate Circulation and Continuity

- The city of Columbus should balance the desire of neighborhoods to prohibit all through traffic with the desire of the larger community to have an adequately functioning transportation network.
- Adequate street stubs for future roadway connections should be provided in subdivision development.
- Developers should dedicate adequate right-of-way for the ultimate planned width of streets running through and abutting their development.

Adequate Off-Street Parking

- Adequate off-street parking should be provided for developments except in downtown Columbus and along designated transit corridors.

Historic, Environmental, and Aesthetic Considerations

- Adverse impacts to historic and environmentally sensitive areas should be minimized where no prudent alternative exists to the improvement or construction of roadways through such areas.
- New streets should be designed to prevent and control soil erosion, minimize destructive secondary impacts of clearing and grubbing, minimize stormwater run-off, and avoid unnecessary changes in drainage patterns.
- Design of all new and improved roadways should be compatible with the surrounding development, complement adjacent development, and provide an aesthetically pleasing visual experience to the user and to adjacent areas.

Transportation Planning and Programming

- The city of Columbus and surrounding jurisdictions should review their roadway improvements programs for consistency with one another and such programs should continue to be coordinated through the transportation planning process of the Mid-Ohio Regional Planning Commission.

- A consistent method and criteria for establishing major roadway improvements and bridge replacement priorities should be developed considering such factors as safety and accident information, traffic volumes, existing deficiencies (prior to improvements to serve new development), and creation of a better road network connecting the city of Columbus to major cities in surrounding counties.

PUBLIC TRANSPORTATION

Public transportation plays an important role in a coordinated, balanced transportation system. It is a relatively inexpensive alternative to the automobile for some and the only transportation option available to others. In addition, public transportation enhances environmental quality by using less energy and generating less pollution.

The Columbus Comprehensive Plan recognizes the significant relationships between land use patterns and the cost-effectiveness of various modes of transportation. In general, public transportation functions best in situations of higher densities. While there are limits to the density increases that can be accomplished in established urban areas, new development can be focused in a manner which enhances the performance of transit operations. Fringe villages recommended as part of this Plan will contribute to transit success in those areas.

The Central Ohio Transit Authority, in conjunction with the Mid-Ohio Regional Planning Commission, is engaged in the Multi-modal Transportation Corridor Study, a long-range study to chart its future. The twenty-year horizon of the study allows COTA to seriously examine the role of light rail transit and other high-technology systems. While it was not appropriate for the comprehensive planning process to prejudge the outcome of the COTA/MORPC effort, the Columbus Comprehensive Plan does provide a strong endorsement for improved public transit operations in Columbus and central Ohio.

The 1993 Columbus Thoroughfare Plan includes a number of roadway improvements anticipated over the next twenty years. The Columbus Comprehensive Plan recognizes that the need for some of these improvements can be avoided by choosing to invest in capital-intensive public transportation improvements. Nothing in this Plan should therefore be interpreted to preclude light rail or other public transportation technology as a future transportation option in Columbus and central Ohio.

It is the recommendation of the Columbus Comprehensive Plan that:

- **The city of Columbus and the Central Ohio Transit Authority should review existing public policies to determine if such policies lead to a truly balanced transportation system that does not favor the private automobile over all other modes.**
- **Through COTA's long-range planning efforts, the underlying operational assumptions of the public transit system should be reviewed and the system in the year 2010 and beyond should be defined.**
- **COTA's planning efforts should identify major transit corridors for busway and/or light-rail development.**
- **The city of Columbus should continue to contribute to COTA plans and coordinate their recommendations with land use, transportation, and other recommendations of the Columbus Comprehensive Plan in recognition of the long-range importance of establishing major transit corridors and associated station locations for mass transit.**
- **The city of Columbus and COTA should work with the private sector to provide amenities and programs to encourage transit use wherever public transit operates. Such amenities and programs include, but are not limited to, 1) transit easements in major commercial developments, 2) roadway surface improvements, such as bus pads, 3) sidewalks to transit stops and curbs to protect the pedestrian at transit stops, 4) bus turnouts in major developments, 5) attractive, functional bus stops and shelters, 6) adequate street lighting at bus stops and along major pedestrian routes to such stops, 7) adequate turning radii for bus turnarounds in major developments, 8) line-of-sight improvements, 9) bicycle parking facilities at transit stops, 10) accessibility features for the disabled, 11) pedestrian crossings of streets to get to transit stops, 12) appropriate street furniture, street trees and landscaping of transit stops and centers, 13) park-n-ride facilities where appropriate (including near Eastland and Westland Shopping**

Centers, near Sawmill and Smoky Row Roads, near Morse Road at I-270, and near North High Street at I-270), and 14) trip reduction programs for major developments.

- The city of Columbus should encourage joint public/private development opportunities which contribute to the success of public transit operations.
- The city of Columbus, in coordination with COTA, should restructure parking policies, roadway improvements policies, land use policies, and transit operational policies to support the concentration of development densities and the expansion of transit services over the next twenty years which will enable the cost-effective operation of public transit in major transit corridors.
- The city of Columbus, in coordination with the Central Ohio Transit Authority, should pursue a balanced transportation system in downtown Columbus through an overall parking management philosophy accompanied by a commitment to improved circulation through public transit. Consideration should be given to techniques to discourage growth in the amount of downtown parking including maximums on parking space permitted in association with new development, a surcharge on daily parking, and tax incentives to encourage development of parcels currently used as surface parking.
- The city of Columbus, COTA, Franklin County, and the Mid-Ohio Regional Planning Commission should coordinate local transit development with future regional and statewide public transportation systems (such as Cleveland-Columbus-Cincinnati rail proposals). The city of Columbus, in coordination with COTA, should encourage the reservation of appropriately located land in downtown and far north Columbus for potential use as multi-modal transit terminals serving Ohio intercity conventional or high-speed rail.
- Corridors which hold potential for future public transit use (such as abandoned rail rights-of-way) and adjacent sites with potential for joint public/private development opportunities should be protected from encroachment.

PEDESTRIAN FACILITIES

Pedestrian facilities — sidewalks, grade-separated walkways, crosswalks, wheelchair ramps — are traditionally provided with the aim of increasing pedestrian safety, efficiency, and accessibility. Additional benefits, including financial benefits, result from the provision of such facilities as well. Each pedestrian trip taken in lieu of an auto trip eases the economic cost of traffic congestion as well as permitting an obvious cost saving to the individual. Walking is a time-saver for short distances and good pedestrian facilities encourage use of public transportation for longer distances. Energy and energy costs can be conserved. Economic development can be spurred by good pedestrian facilities because of the resulting proximity of walkers to commercial areas.

Pedestrian facilities increase a sense of community, improve neighborhood security, provide opportunities for relaxation and exercise, assist in the reduction of pollution levels, and add to the aesthetic quality of an area. Particularly important to elderly and handicapped people, young people, and others without access to or inclination for cars is the independence that the presence of good pedestrian facilities allows them in exercising transportation options.

City of Columbus regulations and codes deal with pedestrian issues only briefly and in a cursory manner. Regulations for land subdivision call for provision of sidewalks where streets have curbs and gutters, except where lots are 100 feet or more wide. Such sidewalks must be at least four feet wide and must be located in the right-of-way or as close to it as possible. In effect, only residential subdivisions are covered by this requirement.

The Traffic and Transportation Commission makes recommendations to the Public Service Department and City Council on issues related to the movement and control of pedestrian traffic. The Public Service Department is responsible for establishing and designating crosswalks for safety and bus loading zones. That department also oversees sidewalk construction. On long residential blocks, the city may require mid-block crosswalks or walkways between residential plots in subdivisions to serve schools, parks, or recreation areas.

The Streets, Parks, and Public Properties Code establishes sidewalk width as a proportion of street width. It specifically calls for no sidewalks on streets or alleys less than twenty feet wide. The Zoning Code requires,

for some zoning districts, preparation of site plans and project descriptions which deal with existing and proposed pedestrian facilities.

Development standards in several areas of the city provide specific pedestrian facility guidelines beyond normal code requirements. These can be enforced only through limitation texts in the zoning process.

The only explicit city of Columbus policy related to pedestrian facilities — other than regulations and code requirements — is a policy administered by the Division of Engineering & Construction which requires property owners to maintain sidewalks and drives in front of their property. Implicit policies — primarily in review of applications for rezoning, site plans, and street construction plans — aim to assure high quality development. Staff members encourage pedestrian facilities as one part of good circulation systems. Additionally, it is a city policy to construct wheelchair ramps with all new or reconstructed curb projects where ramps are not already in place.

Although a number of codes, regulations, development standards, and policies address pedestrian facilities in various areas within the city of Columbus, citywide recommendations are needed.

It is, therefore, the recommendation of the Columbus Comprehensive Plan that:

- **Adequate pedestrian facilities should be provided for all existing, expanded, and new developments regardless of the type of use, intensity, or zoning classification to emphasize continuity of the system, and such requirements should be made consistent throughout Columbus city codes.**
- **In the development review process, city staff should ask that limitation texts, where used, include provisions for pedestrian facilities, including sidewalks, wheelchair ramps, crosswalks within developments, and pedestrian access to nearby transit service.**

It is, additionally, the recommendation of the Columbus Comprehensive Plan that the city of Columbus:

- establish an effective, equitable approach to retrofit developed areas without pedestrian facilities with such facilities, except in In City Estates neighborhoods. This approach may involve requirements as part of development-related permits as well as assessments, voted bond, or other methods.
- encourage private financial participation in provision of pedestrian facilities.
- require consistent design of pedestrian facilities including the provision of ramps for handicapped persons at corners and at major driveways.
- coordinate the construction of pedestrian facilities with the construction or reconstruction of public streets whenever possible.
- encourage creative approaches to providing pedestrian facilities in situations where traditional walkways are difficult or impossible to provide.
- allow provision of sidewalks and other pedestrian facilities along unimproved streets.
- provide and encourage provision of amenities as part of pedestrian facilities.
- develop flexible plans and design review criteria for the construction of downtown pedestrian facilities that include attention to consistent quality in pavement surfaces and use of upper-level pedestrian connections in appropriate locations where they do not block light and views or discourage pedestrian use of sidewalks.
- examine the pedestrian environment and make more site-specific recommendations as part of the area planning process conducted by the Planning Division.

BICYCLE FACILITIES

Bicycling offers a healthful, ecological alternative to transportation by automobile and is a recreational activity enjoyed by many. While bicycle transportation is certainly not for everyone, a greater proportion of the population would take part if necessary facilities were available to enhance bicycle safety and convenience. Certainly bicycling has its place in a balanced, coordinated transportation system.

The availability of facilities encourages the use of bicycles. These include bicycle parking, bicycle lockers, and of course, bikeways. A bikeway is defined as any road, path, or way which is in some manner

specifically designated as being open to bicycle travel, regardless of whether it is designated for the exclusive use of bicycles or is to be shared with other transportation modes. Bikeways can be paths, lanes, or routes. A bike path is physically separated from motorized vehicular traffic by an open space or barrier. A bike lane is a portion of a roadway which has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles. Bike routes are designated by signage along existing roads to indicate their appropriateness for bicycle travel, usually with no other bicycle-related improvements.

It is not the intent of the Columbus Comprehensive Plan to determine specific locations for bikeways. However, several recommendations are offered to encourage the use of bicycles in Columbus and promote further planning for bicycles as an effective means of transportation.

It is the recommendation of the Columbus Comprehensive Plan that:

- the Public Service Department develop a bikeways plan for the city of Columbus and represent bicycle interests to both government and the private sector.
- the Columbus bikeways plan 1) pay special attention to establishing east-west bikeway connections, 2) take full advantage of opportunities to provide bicycle facilities within greenways, 3) connect major activity centers by bikeways, 4) address use by bicyclists when improvements are made to arterial roadways, 5) develop signage which helps the bicyclist know the destination points of each particular route, 6) promote bicycle safety issues, 7) address bicycle parking standards and incentives while encouraging provision of bike parking, 8) address bikeway maintenance issues, and 9) champion the education of motorists and bicyclists concerning the shared use of roadways.
- the bikeways plan for the city of Columbus be developed concurrently with 1) an update of the 1977 Mid-Ohio Regional Planning Commission Regional Bikeway Plan Update, and 2) revisions, where necessary, of suburban bikeway plans throughout central Ohio.
- the responsibility and function of the Columbus Traffic and Transportation Commission be expanded to include bicycle issues and that, if necessary, additional members be appointed so that it can serve as an effective advisory body on bicycle issues to the Public Service Department and City Council.
- the city of Columbus, following accepted standards, provide bicycle parking at all its government buildings.

GENERAL UTILITY RECOMMENDATIONS

SUBURBAN SEWER AND WATER CONTRACT NEGOTIATIONS

The centralized water and sewer systems represent a significant investment by the citizens of Columbus and other central Ohio communities and have experienced tremendous growth in recent years. The city of Columbus has successfully used these systems to encourage development within municipalities through the negotiation of suburban water and sewer service contracts. The Columbus Comprehensive Plan, by establishing its Columbus 2010 Planning Area based on the capacity of the sanitary sewer system, has suggested an outer limit for urban-density development in central Ohio in the next twenty years.

In addition to the Columbus 2010 Planning Area, several Plan recommendations are appropriate concerning the future negotiation of suburban sewer and water contracts. These recommendations are designed to encourage planned, cost-effective development and thus, protect the integrity of our utility system investments.

It is the recommendation of the Columbus Comprehensive Plan that the city of Columbus, in its negotiation and amendment of suburban service contracts, observe and encourage Franklin County to support the following principles and policies:

- **Encourage urban development within municipalities by offering water and sewer services.**
- **Oppose development within the Columbus 2010 Planning Area which would not utilize Columbus water or sewer services directly, or through a governmental entity served through contract by Columbus.**

- **Protect growth areas through 1) anti-merger clauses, 2) prohibitions against annexation of areas outside contract service areas, and 3) avoidance of contiguous suburban service boundaries that would block the future growth of Columbus.**
- **Negotiate service boundaries with reasonable room for growth, but not so large as to encourage configurations of municipal boundaries unserviceable by appropriate city services.**
- **Consider service area expansions only when a substantial portion of an existing service area has been developed.**
- **Discourage the extension of services that would jeopardize future system capacity to existing areas.**
- **Avoid service area extensions that encourage spot developments not economically beneficial to Columbus including leapfrogging development, development requiring sanitary sewer pump stations, and environmentally unsound systems.**

SEWER FACILITIES

SANITARY SEWERS

The availability of centralized sanitary sewer service is perhaps the most important determinant of where urban-density development occurs. While potable water, transportation facilities, storm sewers, and street lights can be provided with relative ease in most locations, the constraints of the existing gravity-fed sanitary sewer system place limitations on Columbus' growth and the growth of most suburban neighbors.

For this reason, the Sewer Facilities Planning Area forms the basis for the Comprehensive Plan Columbus 2010 Planning Area. This boundary shows the area for which the sanitary sewerage collection and treatment facilities were designed. While service beyond these boundaries may, in some instances, be possible, such service may lessen the ability of the system to accommodate wastewater generated within the Planning Area. In addition, development patterns within the Planning Area which differ substantially from the types and densities assumed when the Planning Area was defined may have an impact on the system's ability to serve other sites. It is therefore critical that the capacities of the sanitary sewerage system be carefully understood to assist decisionmaking regarding future development and redevelopment.

It is the recommendation of the Columbus Comprehensive Plan that:

- the city of Columbus continue its work to create a computer model of the entire sanitary sewerage collection and treatment system to help evaluate basin-wide, and systemwide impacts of proposed land use changes and associated system extensions and expansions.
- the city of Columbus investigate the development of an automated monitoring and control system.
- the city of Columbus continue its policy of discouraging construction of sanitary pump stations except when determined to be in the best interest of the city, while preferring gravity sewer extension as the means of providing sanitary sewer service. When permitted, pump stations should be subject to requirements regarding approval, design, ownership, maintenance, and operation as stipulated by the city of Columbus through the Division of Sewerage & Drainage.
- within five years, the city of Columbus through the Division of Sewerage & Drainage, working in consultation with the Planning Division, undertake a study of the circumstances under which the city would extend sanitary sewer services beyond the Columbus 2010 Planning Area.

In 1990, the Division of Sewerage & Drainage updated its facilities plan for intercepting sewers based on projections established by the Mid-Ohio Regional Planning Commission. At the time, these were believed to be the most reliable forecasts of population and business distribution available and were predicated on a continuation of existing demographic trends. The Columbus Comprehensive Plan, however, recommends a significant departure from past trends.

It is, therefore, the recommendation of the Columbus Comprehensive Plan that:

- the city of Columbus base the next update of its 1990 "Intercepting Sewers Facilities Plan for Columbus Facilities Planning Area" on projections developed through the Columbus Comprehensive Plan process.

STORMWATER MANAGEMENT

Stormwater management will continue to demand attention at the federal, state, and local levels throughout the Columbus Comprehensive Plan's twenty-year planning horizon. Some recommendations are appropriately addressed within the context of this document, while others require attention elsewhere due to their highly technical nature and/or demand for interjurisdictional cooperation and planning.

The Department of Public Utilities has completed a study to recommend an appropriate approach to stormwater management. A key recommendation of that effort was implementation of a Stormwater Management section within the Division of Sewerage & Drainage to assume the responsibility for a comprehensive stormwater management program. This section has been established. The program requires a balanced approach which entails organization, funding, planning, maintenance, regulation and enforcement. It includes responsibility for administration of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting process and funding the total program through collection of an equitable stormwater service fee.

Within the Columbus Comprehensive Plan process, attention focused on recommendations for improving stormwater management in the development review process and assuring an adequate funding base for the planning, construction and maintenance of stormwater facilities. These recommendations relate directly to the manner in which the city cooperates with private interests to assure that the management of stormwater receives sufficient attention and funding in all phases of the development process.

The Columbus Comprehensive Plan encourages consideration of the following stormwater recommendations in its comprehensive approach to stormwater management:

- Adequately assess the stormwater capital and maintenance needs, including floodwalls and other types of flood protection, within the existing city of Columbus and place a higher priority on these needs in the capital budgeting process.
- Improve communication and cooperation between and among the Divisions of Development Regulation, Sewerage and Drainage, and Engineering and Construction, and the Department of Recreation and Parks, to promote coordination of activities directly or indirectly affecting stormwater runoff.
- Promote zoning, subdivision, and building regulations that effectively control development with significant stormwater impacts.
- Require best management practices for pollution control in developing areas which may include use of wetlands and natural buffering, limiting proportions of a site that can be covered by impervious areas, etc.
- Develop stormwater master plans for the entire city to most cost effectively provide for stormwater quantity and quality control.
- Monitor and comply with all federal, state and local laws, rules and regulations relative to stormwater discharges and quality.
- Include stormwater management costs, both capital and operational, in service plans and budgets required for the "opening" of expansion development districts or sub-districts.

WATER FACILITIES

Columbus and central Ohio are fortunate to have abundant water supplies and an excellent centralized water treatment and distribution system. The availability of water is one characteristic of this region which provides an advantage over many other areas of the country in terms of attracting and retaining businesses and jobs.

The Division of Water has undertaken two studies recently to evaluate both the supply and distribution of water in central Ohio. Neither, however, was reflective of the policy implications of the Columbus Comprehensive Plan, which had not yet been completed. In 1991, a study was completed evaluating future water consumption growth potential in the Columbus metropolitan area and analyzing the existing water distribution system of the city of Columbus. This study, prepared by The Pitometer Associates, made specific recommendations to eliminate existing water system deficiencies and provide efficient extensions to accommodate future growth.

The four-phase Comprehensive Water Treatment and Supply Feasibility Study, more commonly known as Water Beyond 2000, projected future water demands and identified potential water supply alternatives. The study team narrowed alternatives, recommended a water supply system, and is focused on its development.

The Columbus Comprehensive Plan recognizes the considerable planning performed to date by the Division of Water and makes the following recommendations based on past and ongoing water studies as well as the direction provided within the comprehensive planning process.

It is the recommendation of the Columbus Comprehensive Plan that:

- **the city of Columbus continue its program to rehabilitate older trunks and grid mains the carrying capacity of which has been reduced by tuberculation.**
- **the Division of Water continue to work closely with the Division of Fire to ensure that flows adequately meet fire protection requirements throughout the system.**
- **the city of Columbus promote public education to reduce water consumption during peak summer demands and throughout the year.**
- **the city of Columbus reevaluate recommendations made in the Pitometer study and coordinate final recommendations of the Water Beyond 2000 study in consideration of development and land use patterns embraced by the Columbus Comprehensive Plan.**

ELECTRIC FACILITIES

The Columbus Division of Electricity is a full service electric utility started in the late 1800s. While its early role was to provide power for street and alley lighting, that role has expanded significantly over the years to include the sale of low-cost electricity to residential, commercial, industrial and governmental customers.

As of 1991, the Division was responsible for maintaining nearly 33,000 street lights covering hundreds of miles of freeway and neighborhood streets. The sale of electricity to thousands of customers helps support the street lighting program. The Division operates much like a private business in that it sells a product to raise revenue to support itself. Because Columbus is served by two electric companies, the municipal system and a private utility, competition exists which contributes to lower electric rates for all consumers.

The Division of Electricity's ability to provide quality service requires a complex power delivery system. The Division owns and operates eight electrical substations and a sophisticated system of power lines, both overhead and underground. It receives electricity from several sources: the Solid Waste Reduction Facility, the O'Shaughnessy Hydroelectric Plant, and from wholesale power purchases through American Municipal Power-Ohio, Inc., a consortium of 75 public power companies.

As Columbus faced rapid growth, new pressures were placed upon the Division's ability to have its street lighting program keep pace with this growth. The Division responded to numerous inquiries by neighborhood organizations in both new and existing neighborhoods requesting street or alley lighting. Lighting provides neighborhoods with a greater feeling of security. Street lighting not only contributes to safer driving conditions on our city's roadways, it is often seen as a contributor to pedestrian safety and as a crime deterrent.

The city has addressed demands for more street lighting by adopting a comprehensive program consisting of the "Illuminate Columbus" bond program, a neighborhood assessment program, and in 1990, passing legislation requiring developers to install lighting. "Illuminate Columbus" bond money is used for lights with overhead wiring in older neighborhoods, concentrating in the central city and moving outward concentrically. Existing neighborhoods wanting decorative lighting with underground wiring have the assessment program available to them.

There are many older areas with antiquated arc circuit "series" lighting with underground wiring which needs to be replaced. It is a safety and maintenance problem for the city.

The Division of Electricity is responsive to inquiries from neighborhoods which want street lighting and those which do not. The Division often meets with neighborhood organizations to answer questions about its programs and takes their concerns into account when planning future programs.

Despite efforts to get ahead of the demand for street and alley lighting, funding levels continue to lag behind the demand. Even with the current bond, assessment, and new development programs, it will be many years before some neighborhoods will get lighting.

As the city's street lighting system expands at a more rapid pace, there is a need to expand the power delivery system. Capital expenditures will be needed to add to the power delivery system so more revenue can be raised to help support the Division of Electricity's street lighting and customer service responsibilities.

The Columbus Comprehensive Plan recognizes the importance of adequate, appropriate street lighting in all areas of the city and the need to maintain a viable distribution system to support this goal. The Plan, therefore, recommends that:

- **the city of Columbus continue to expand the "Illuminate Columbus" program through additional bond funding to increase the number of existing neighborhoods receiving safe, modern street lighting.**
- **the city of Columbus increase funding available for street lighting projects where the residents agree to share the cost through an assessment.**
- **a funding mechanism be made available to assist neighborhoods wanting decorative street lighting with underground wiring or those with antiquated systems which need upgrading.**
- **the Division of Electricity, with the assistance of the Planning Division, expand efforts to communicate with neighborhoods about street lighting programs.**
- **the city of Columbus require street lighting be installed, using Division of Electricity funds, or wherever possible, highway safety funds, in conjunction with all arterial street widening projects.**
- **all street lighting fixtures used within neighborhoods be selected from city-approved lists.**
- **the city of Columbus increase funding for improvements to the Division's power delivery system so that it can continue to provide reliable service for the street lighting system and its retail customers.**

COMMUNITY FACILITIES RECOMMENDATIONS

PARKS

The presence of adequate parks is as integral a part of a successful community as streets, water, sewers, and safety services. They provide economic benefits by increasing the value and marketability of nearby property. Parks also add to a community's desirability as a business location or tourist destination. The quality and quantity of parks available in a community has been shown to have a positive correlation with the physical and mental health of the community's residents. Parks help shape a city's image. In Columbus, downtown riverfront parks provide an important cultural and social stage for the entire region. On a neighborhood level, Franklin, Goodale, Schiller, and Westgate are among the well established parks that provide a strong, positive image for the surrounding communities.

Columbus is fortunate to have an extensive park system providing a wide array of opportunities. The system encompasses more than 400 properties and about 12,500 acres of parkland and water. Standards have been developed to ensure that this system meets current and projected needs. These standards represent a combination of local and national observations on park needs in urban areas.

The Columbus Recreation and Parks Commission has adopted the National Recreation and Parks Association's standard of 5.5 acres of parkland per 1,000 people. This standard applies to well distributed,

accessible, neighborhood and community parks. Given this standard and a 1990 population of 632,910, Columbus should have a minimum of 3,482 acres of neighborhood and community parkland. The need will grow to almost 4,000 acres by 2010. Columbus has over 3,900 acres of such parkland. The approximately 3,420 remaining acres maintained by the Recreation and Parks Department is in the form of golf courses, undeveloped land, watercourse property, street islands, special parks, and regional parks. While providing important recreation opportunities, this land should not be included in the 5.5 acre per 1000 standard calculations.

Distribution of parks is as important as overall acreage. While our overall park acreage meets national standards, certain locations within the city do not. Some areas have an abundance of parks, while other areas, particularly newer neighborhoods, have a significant shortage. Use of overall parkland standards must be balanced with availability and need within individual areas of the city. Additional park location criteria, such as service area population and distance, can be used to ensure all residents are adequately served. These criteria are different for each type of park and may differ from area to area. In a dense location, citywide park standards may be inadequate, while in low density neighborhoods they may be excessive.

PARKLAND ACQUISITION

Current funding is inadequate to meet the growing parkland demand. Large parkland deficiencies exist in the post-1950 city. Those areas with the biggest parkland need also have very high real estate costs. The Far North alone has a parkland shortfall of 172 acres. Land prices there average \$75,000 per acre. During a recent two-year period, the city spent about \$300,000 in citywide parkland acquisition. Even with the promise of more funding in coming years, there is little hope of meeting current or projected parkland needs.

In the city's struggle to provide facilities and services, parkland acquisition and development consistently receives low priority. Acquisition money generally comes from bond packages. When funding becomes available, projects of a regional nature, such as greenways, are overlooked in favor of neighborhood parks and recreation facilities. Current rezoning and subdivision processes allow the city to negotiate for donated parkland, but it is not mandatory. The city has been successful in leveraging federal dollars for parkland with local matching funds, but this funding source is extremely limited. Improved funding from a variety of sources is necessary for the continued vitality of the Columbus park system.

Improved funding for parkland acquisition will necessarily include both enhanced use of current sources and the development of new sources. Methods that work in some areas of the city may not work in others.

It is the recommendation of the Columbus Comprehensive Plan that Columbus pursue improved funding for parkland acquisition through a variety of methods including, but not limited to:

PARKLAND DEDICATION

Many cities have adopted parkland dedication ordinances to provide parks and open space. Parkland dedication is required as part of the subdivision process. The dedication requirement is typically determined based on a formula incorporating overall project size, number of units, and subsequent density. The municipality and the developer determine what portion of the site to reserve as parkland. If no suitable site exists or another park exists nearby, the municipality may require payment in lieu of dedication. The money is then spent on the acquisition and/or development of parks or open space. This allows the municipality to avoid acquiring inappropriate sites.

A successful parkland dedication ordinance must observe a direct link between dedication or payment requirements and the benefits received. In small communities this is not a problem. The benefits derived from parks and open space apply to everyone. However, this is not necessarily true for larger cities. A payment required of a subdivision developer should not be used to build a neighborhood park far away. This can be avoided by using the city's planning areas. Dedication or payment requirements are used to meet the parks and open space needs of residents within the zone from which they are derived. The Recreation and Parks Department uses this method to assess parkland needs.

A parkland dedication ordinance must be carefully structured. It should provide for dedication of park areas within larger new developments in areas where park needs (including those from the new development) are not being met. The ordinance should provide mechanisms for flexibility, including the potential for a payment in lieu of land dedication and the recognition that not all developments should be required to make a dedication or payment.

This method works well in newly developing areas, but cannot be used to totally make up significant parkland deficiencies in areas that are already developed. This need must be addressed independently. It generally requires substantial development activity to leverage enough land or fee donations to provide significant park acreage.

BOND PACKAGE ALLOCATIONS

The 1988 bond package included parkland acquisition funds; however previous bond packages have not. Future bond packages should include a certain percentage set aside for parkland acquisition. This would enable the city to pursue parkland acquisition in areas where a dedication ordinance will have little impact. Bond revenues are a particularly useful tool for developing projects of a citywide nature, such as greenways and a regional riverfront park.

DONATION

Columbus has relied increasingly on donations from developers for parkland. This is usually accomplished through negotiations between neighborhood groups and developers. This approach should not be confused with parkland dedication, which is based on the subdivision process. The tax deductible nature of parkland donation has been another source of parkland for Columbus. The city should continue to encourage these methods of parkland acquisition.

SHARED SITES

Columbus has begun to work more closely with the Columbus City School District to develop shared facilities and acquire excess land. This approach is particularly useful because of the neighborhood distribution pattern of schools. Columbus should also approach suburban school districts for this purpose.

OTHER

The city has been successful in leveraging parkland acquisition money with matching federal grants. Although this source is not always dependable, Columbus should continue to use it whenever possible. The city should continue to be creative in using all available opportunities to acquire parkland.

NEIGHBORHOOD PARKS

Columbus has over 100 neighborhood parks. Examples are English, Glen Echo, Scioto Trail, and Westmoor. They are small-to-medium in size, typically between 5 and 10 acres. Neighborhood parks are meant to provide a place to relax with a book, participate in a neighborhood ball game, take children to play, walk a dog, etc. They typically have limited facilities, including playground equipment, benches, picnic tables, basketball courts, and ball fields. Neighborhood parks are often located in conjunction with schools. In more dense neighborhoods, these parks provide important open space. Neighborhood parks are often placed at sites with natural features, such as ravines and rivers.

The Recreation and Parks Department considers the primary service area of a neighborhood park to be 1/2 mile. The appropriate service area of any park depends in part on the density of the surrounding area. The heaviest concentration of neighborhood parks is in older areas of the city. Conversely, the biggest need for neighborhood parks is in those areas of Columbus that have developed more recently, particularly within the past twenty years.

It is the recommendation of the Columbus Comprehensive Plan that neighborhood parks:

- **be provided within 1/2 mile of all residents.**
- **be located on a minimum of 5 acres, where possible.**
- **be incorporated into scenic greenways where possible.**
- **be connected to the surrounding neighborhood, activity centers, and other parks by sidewalks and bike paths.**

- **be reserved for casual sporting activities and organized children’s leagues, rather than adult league intramural sports.**
- **provide opportunities for passive as well as active recreation.**
- **be located on local streets or neighborhood collectors, between arterials.**
- **be developed in conjunction with school playgrounds, where possible.**

COMMUNITY PARKS

These parks are larger than neighborhood parks, averaging about 30 acres. They include such parks as Goodale, Schiller, Franklin, Westgate, and Whetstone. They are focal points for the surrounding community and contain a wide range of facilities, such as lighted ball courts, walking and running paths, fitness courses, picnic shelters, restrooms, parking lots, and multiple playing fields for adult league play. Many community parks contain swimming pools and recreation centers.

The optimum service area of a community park is a two-mile radius. This standard is achieved in many of the central city communities. However, as with neighborhood parks, there is a shortage of community parks in the outlying parts of the city.

There is a particular need for larger community parks, such as Whetstone.

It is the recommendation of the Columbus Comprehensive Plan that community parks:

- **be provided within 2 miles of all residents.**
- **be located on a minimum of 20 acres, where possible.**
- **be incorporated into scenic greenways where possible.**
- **be connected to the surrounding community, activity centers, and other parks by sidewalks and bike paths.**
- **be served by public transportation, where possible.**
- **have direct vehicle access from arterials rather than local streets and neighborhood collectors.**
- **be the location for high traffic generating recreational uses, such as swimming pools, recreation centers, athletic centers, and adult league playing fields.**
- **provide opportunities for both passive and active recreation.**
- **provide protection for on-site natural areas.**

REGIONAL PARKS

Columbus has a number of parks that can be classified neither as neighborhood nor community parks. They include downtown parks, athletic parks, reservoir parks, campgrounds, and bike paths. The impact of these parks is citywide.

Larger parks such as Mock or Big Run are recreational resources for entire portions of the city. The Park of Roses draws visitors from across the state. Sports parks such as Lou Berliner draw participants from throughout central Ohio. Downtown parks play an important role in the cultural life of Columbus and the region. Griggs, Hoover, and O’Shaughnessy Reservoirs provide opportunities for water sports. Many of these parks provide wildlife habitat.

It is the recommendation of the Columbus Comprehensive Plan that:

- **Columbus continue to provide parks that have a special emphasis and regional appeal.**
- **regional parks be easily accessible by automobiles, public transportation, pedestrians, and bicyclists.**
- **other jurisdictions be involved in the planning, funding, and operation of such parks, where appropriate.**
- **regional parks be incorporated into scenic greenways where possible.**

VEST-POCKET PARKS

The Recreation and Parks Department maintains small parks throughout the city, often referred to as vest-pocket or mini-parks. They may be the size of a residential lot or even smaller. Some are used as attractive

entry markers for particular neighborhoods. Others have benches and some playground equipment for use by neighborhood residents.

The acquisition and development of vest-pocket parks is not a high priority with the city. The need for more basic neighborhood and community parks supersedes the need for mini-parks. These parks present logistical maintenance difficulties and are typically located in areas where general park provision is adequate. Despite problems associated with vest-pocket parks, they can and do make an important contribution to local neighborhoods. They turn what, in many cases, is a neglected lot or easement into appealing open space that provides community identity. In some instances, these parks can add value to the surrounding neighborhood by prompting increased private investment nearby.

It is the recommendation of the Columbus Comprehensive Plan that:

- **the city continue to acquire and develop vest-pocket parks where appropriate.**
- **the acquisition and development of neighborhood and community parks take precedence over vest-pocket parks.**
- **vest-pocket parks which serve as gateways to neighborhoods be encouraged.**
- **the maintenance and care of vest-pocket parks by neighborhood and civic groups be encouraged.**

REGIONAL RIVERFRONT PARK

The Recreation and Parks Department has identified the potential for a grand regional riverfront park. The park would begin in the Downtown at the confluence of the Olentangy and Scioto Rivers and extend southward to State Route 104 and from I-71 on the west to within a few blocks of High Street on the east. It would encompass Lou Berliner Park and several downtown riverfront parks. Much of the land is currently under government ownership.

The park would contain a variety of uses. The northern portions of the park would retain their urban nature. The downtown riverfront has become an important cultural center for Columbus and would remain a staging area for regional events. Lou Berliner Park, making up the southwest portion of the park, would continue to be used as a regional sports park. The southeastern portion is being quarried and would have a more passive recreation theme. The quarries would be turned into lakes like the quarry lake at Antrim Park on the city's north side, providing aquatic habitat and recreation.

The park would provide an opportunity to protect the Scioto River from contamination and urban encroachment. It would also serve as a regional centerpiece, much like Central Park in New York City. The park's presence could attract more residential development in the downtown core. Columbus is fortunate to have the opportunity to create this park in the downtown area.

It is the recommendation of the Columbus Comprehensive Plan that:

- **Columbus pursue the development of a regional riverfront park.**
- **Columbus begin to acquire land for development of the park.**
- **the regional riverfront park serve as a centerpiece for the city recreation and parks system.**
- **the regional riverfront park be fully integrated into a citywide scenic greenways system.**
- **the regional riverfront park contain a wide variety of recreational opportunities.**
- **development surrounding and within the regional riverfront park be of a compatible nature.**
- **the city of Columbus put in place zoning appropriate to take advantage of the regional riverfront park's potential as an inducement for adjacent residential development.**
- **areas of the regional riverfront park nearest the river be maintained as natural open space.**
- **the regional riverfront park provide expanded boating opportunities.**

RECREATION FACILITIES

Columbus maintains 27 community recreation centers, eight senior recreation centers, eleven swimming pools, five athletic complexes, seven golf courses, and three cultural arts facilities. These facilities provide social, recreational, and educational opportunities for the entire community. They contribute to the mental and physical development of children and the continued health of adults. While many recreation facilities

are available privately, public facility provision is an absolute necessity. Many people could not otherwise afford to participate in programs such as swimming, golfing, or art instruction.

Distribution is a critical aspect of recreation facility provision. The majority of recreation facilities are in the central city. There is a need for more recreation facilities throughout the city, particularly in the newly developed areas.

It is important to accommodate the accessibility needs of a recreation facility's user groups. This means allowing for pedestrians, bicyclists, and public transportation as well as automobiles.

While new recreation facilities are needed, it is also important to consider the impact of additional recreation facilities on existing facilities. Many existing facilities already suffer from deferred maintenance and inadequate staffing. Adding too many facilities to the competition for operations and maintenance funding may result in an unacceptable level of service for all recreation facilities.

COMMUNITY RECREATION CENTERS

Columbus operates 27 community recreation centers, including two facilities opened within the past few years. Recreation centers offer such supervised activities as volleyball, art classes, fencing, weightlifting, basketball, aerobics, reading programs, theater, and martial arts. These centers are particularly important in low-income neighborhoods where there are few recreational opportunities. The majority of activities offered are free or available for a nominal fee. While recreation centers cater to children, they offer activities for adults as well. The centers are often used as meeting space for community groups and clubs.

Recreation centers have a two-mile service radius. This standard is met overall, but not in particular parts of the city. The biggest concentration of recreation centers is in the central city where many are within a mile of each other. Many of these centers are located in conjunction with public housing complexes. Recreation centers are needed in the far north, far northeast, southeast, southwest, and western portions of the city.

It is the recommendation of the Columbus Comprehensive Plan that community recreation centers:

- **be provided within two miles of all residents.**
- **be served by public transportation, where possible.**
- **be developed within community parks.**
- **be connected to the surrounding community, activity centers, and parks by sidewalks and bike paths.**
- **be considered as appropriate uses for vacant school buildings.**
- **be built only if sufficient funds are available to ensure that the operation and maintenance of existing centers will not be negatively impacted.**

SENIOR RECREATION CENTERS

Columbus operates eight senior recreation centers serving residents over 60 years of age. Only one of these facilities is owned by the city; the remainder are owned by the Columbus Metropolitan Housing Authority (CMHA) and the state of Ohio. Golf outings, day and overnight travel excursions, volleyball, dancing, discussion groups, exercise equipment, and arts instruction are a few of the opportunities senior recreation centers offer. Many centers also provide low-cost meals.

These eight senior recreation centers are not sufficient to meet the needs of Columbus seniors. The percentage of the population 60 or older is expected to grow by 37% over the next twenty years. There is a need for new centers in the northern, northwestern, and southern portions of the city. Additionally, many of the existing centers are too small to accommodate the number and variety of activities desired.

There is also a need for a senior fitness center, including a pool, gymnasium, and exercise facilities. Senior citizens are increasingly physically active and are reluctant to share facilities with children and younger adults.

Use of multi-generational recreation centers is one approach to coordinating the recreation needs of all age groups with special programs and space and time restrictions. One portion of a center may be restricted to senior citizens' use only, while another may be restricted to use by children. Some facilities, such as gymnasiums or swimming pools can be used by all groups on a time sharing basis. Multi-generational centers can be adapted to the changing demographics of a community as space is allocated according to the age groups with the most need at any given time.

It is the recommendation of the Columbus Comprehensive Plan that:

- **Columbus explore developing a system of multi-generational recreation centers.**
- **more facilities be developed to accommodate senior recreation, particularly in the northwestern, northern, and southern parts of the city.**
- **existing senior recreation centers be enlarged where necessary.**
- **senior recreation centers be located within community parks, where possible.**
- **senior recreation centers be served by public transportation.**
- **a senior fitness facility be built at a central location in the city.**

SWIMMING POOLS

Columbus maintains eleven swimming facilities, one of which is an indoor swim center. These pools are all located in the central city. Many of the outdoor pools are adjacent to public housing complexes. City pools provide an important recreation opportunity in many of the city's lower income neighborhoods, where few private pools exist.

Outdoor swimming pools are among the more expensive types of recreation facilities to operate. Costs associated with annual maintenance, start-up, staffing, and close-down are particularly high in light of a 10-week season. Indoor pools are a much more efficient use of capital and operating dollars. Indoor facilities are open year round and can be used by schools, private groups, and the general public.

Most of the post-1950 city is unserved by city swimming pools. However, these areas have an abundance of privately operated pools. The presence of privately operated public pools is an important consideration for the establishment of new pools. With limited resources, the city has sought to provide pools where the fewest alternatives exist. Many operators of private pools feel that the city's low admission fee gives them an unfair competitive advantage.

While there is a need for additional outdoor city swimming pools, there is greater need for an additional indoor swimming facility. The current indoor facility is used by residents citywide and is constantly booked. A new facility would be easily used to capacity.

It is the recommendation of the Columbus Comprehensive Plan that:

- **priority be given to the establishment of an additional indoor swimming facility rather than outdoor pools.**
- **additional indoor swimming facilities be centrally located and easily accessible by automobiles, public transportation, pedestrians, and bicyclists.**
- **outdoor swimming pools be located in community parks.**
- **outdoor swimming pools be given lower capital improvement prioritization than other types of recreation facilities.**

ATHLETIC COMPLEXES

Columbus maintains five athletic complexes. Each complex provides four indoor courts which can be used for basketball or volleyball. Athletic complexes are also used as indoor running and walking tracks. The existing complexes are used by nearly 10,000 adult sports league participants. Several additional complexes could easily be filled. While it is generally desirable to have an even distribution of athletic complexes, they do not have the same neighborhood orientation that recreation centers have. Many of the teams that use them are made up of members from across the city. Athletic complexes are most needed in the northwest, far north, northeast, and far east.

It is the recommendation of the Columbus Comprehensive Plan that:

- **additional athletic complexes be built in outlying portions of the city.**
- **athletic complexes be located on major arterials with good freeway access.**
- **athletic complexes be served by public transportation.**
- **athletic complexes be accessible by pedestrians and bicyclists.**

GOLF COURSES

Columbus operates five 18-hole golf courses and two 9-hole courses. The courses are located on the city's northeast, east, far east, southwest, and west sides. The city courses offer a low cost alternative to private courses. The low cost is the key ingredient to the success of this recreation service. It allows residents, who could not afford it otherwise, the opportunity to learn and play golf.

The Golf Courses Division was recently created as an enterprise division. Previously any revenue from course fees was returned to the city's general fund. Now revenue is retained for improvements and expansion of city courses.

When locating new golfing facilities, the availability of land is almost more important than the distribution. Golfers will often travel twenty miles or more to play. Ideally, the city would provide a course in each area of the city, however this has not proven practical. The city has acquired courses from private operators. This may provide a means for establishing city courses throughout the city.

It is the recommendation of the Columbus Comprehensive Plan that:

Columbus seek to provide additional golf courses, particularly in the northern portions of the city. golf courses and facilities continue to be improved to provide a low-cost quality recreation opportunity.

URBAN FORESTATION

Trees are a valuable environmental and aesthetic resource in any community. Mature trees add to the appeal of neighborhoods and give streets an inviting appearance. Trees also play an important environmental role by exchanging carbon dioxide for oxygen. They can significantly lower heating and cooling costs by providing shade and blocking wind. Trees planted along transportation arteries can shield nearby neighborhoods from noise and provide visual relief from monotonous highways. Trees also help to mitigate the harmful effects of automobile exhaust. Trees located next to rivers or on steep slopes help to filter harmful urban runoff and prevent erosion.

Despite their positive impact, city trees are being lost at a much higher rate than they are being replaced. Nationally, cities plant an average of one tree for every four lost. Street tree programs are generally poorly funded and are often casualties of municipal budget cuts.

There is a great need for communities to plant more trees, both to replace lost trees, and to provide coverage in areas where there is none. While planting is the first step in urban forestation, maintenance is equally important. Prolonging the life of a 30-year-old street tree can be more important to the environmental and aesthetic quality of a neighborhood than planting a dozen saplings. Street trees are susceptible to a variety of threats including utility lines, vehicle scrapes, and restricted growing space. Without the benefit of routine maintenance, the life span of a street tree is short.

Columbus has nearly 1700 miles of streets and approximately 137,000 street trees which is about half of what is appropriate. Every year about two percent of the street tree stock is lost. Each year new subdivisions are built without street trees, adding to the deficit. Columbus also loses from 500 to 1000 park trees each year. The average life of urban trees is 30 to 50 years. If the trend is not reversed, many of the city's older neighborhoods will experience a significant loss of trees by the year 2010.

Due to funding limitations, Columbus does not have an automatic street tree replacement and maintenance program. Street trees are generally planted upon request only. Columbus residents can pay \$25 to have a street tree placed within the city right-of-way in front of their home. The city plants about 2000 trees a year under this program, 80% of which go to new subdivisions. Existing trees that die or are taken out are not

replaced unless requests are made. The result is the gradual deforestation of many neighborhoods. Street trees are occasionally planted through special city programs. The city also occasionally provides trees or technical assistance to civic groups who do special plantings.

Very little tree planting occurs in city parks and open space. Some neighborhood and community parks have been adopted by civic groups who use donated funds and volunteer labor to plant and maintain park trees. The work of these groups has vastly improved the condition and variety of the tree stock in some parks. However, the tree stock in the majority of city parks acreage goes without such sponsorship.

While tree planting in Columbus is limited, tree maintenance is virtually non-existent. The majority of staff time is spent responding to requests for attention to specific trees damaged by storms or accidents. There is insufficient staff to provide routine maintenance to street trees or park trees.

Many cities place neighborhoods on a five- to ten-year cycle of tree plantings and maintenance, with emergency care provided throughout the cycle. This type of program allows urban foresters to prolong the life of street trees and tailor their services for the needs of individual neighborhoods.

It is the recommendation of the Columbus Comprehensive Plan that a street right-of-way assessment be used to fund urban forestry.

Currently, urban forestry funding comes from the general fund and from the \$25 fee for planting new street trees. The \$25 charge covers only the cost of the tree, while labor, equipment and other materials are supported by the general fund. Improved funding is needed to improve the street and park tree programs of the city.

Ohio law allows cities to levy right-of-way assessments to fund street tree programs. A typical assessment is 10 to 20 cents per foot of frontage, or about \$5.00 to \$10.00 for an average residential lot. Another form of assessment is made in conjunction with property values. The more valuable a piece of property, the higher the assessment.

It is the recommendation of the Columbus Comprehensive Plan that a street tree master plan be developed.

Such a plan would inventory existing conditions and identify appropriate tree varieties for particular settings. The plan would also identify appropriate planting and maintenance procedures. Methods by which capital improvements can be made more compatible with street trees would also be specified. An example is underground trough watering systems for street trees in commercial locations. A street tree master plan would provide a balanced, integrated approach to planting and maintenance of street trees in Columbus.

Recommendations to be made as part of a street tree master plan include:

- subdivision regulation amendments including requirements and guidelines for integration of street trees in residential and commercial developments.

The city's current subdivision ordinance suggests that developers confer with the urban forester to select street trees for new subdivisions. This rarely happens. Most new subdivisions have no street trees. Each year the city's urban forestry staff plants street trees in such subdivisions, at the request of individual property owners. This is an inefficient and expensive process.

Columbus should require that developers plant appropriate street trees in new subdivisions according to specific guidelines. Sidewalks should be placed a sufficient distance from the street to allow for street tree growth. This results in less sidewalk damage from tree roots and more area for the trees, which must compete with underground utilities for space. Tree guidelines would include appropriate types, proper placement, and minimum standards for tree size and health. Incentives would be included to encourage retention of existing trees during the construction of new subdivisions.

- **penalty assessments against those who damage street trees or trees located on city property.**

Each year street and park trees in Columbus are intentionally removed or vandalized. People have cut down trees on city property to provide visual access to a sign or waterway. When trees are removed or vandalized, they should be replaced on site by a tree of like size or several smaller trees. Cities use a variety of formulas for replacing lost trees.

- **tree planting along major arterials and expressways.**

Columbus has no program for planting trees along major city arterials and expressways. Large barrier walls are sometimes built to shield neighborhoods from the noise of adjacent expressways. Trees and other types of mature vegetation can be as effective as these barriers. Trees help to mitigate the negative effects of automobile exhaust. They also provide visual relief from the monotony of concrete and asphalt. With minimal initial cost and required maintenance, major thoroughfares can be pleasant natural corridors. In locations where noise barriers have been built, their visual harshness can be lessened with plantings of trees and shrubs. The city's forestry section would have primary responsibility for this program.

It is the recommendation of the Columbus Comprehensive Plan that neighborhood groups be involved in selecting appropriate varieties and locations of street trees in their communities.

By involving neighborhood groups in the selection of street tree types and locations, the city can help neighborhoods develop a sense of pride and environmental awareness. Some cities require neighborhoods to be involved in the street tree process in order to receive trees. While community participation should not take place without professional guidance, it helps ensure commitment and services that meet the needs of each community.

It is the recommendation of the Columbus Comprehensive Plan that routine tree planting and maintenance occur in all city parks and open space.

In order to retain the natural quality of city parks, tree planting and maintenance should be routine. Open space on other city property, such as fire stations and utility facilities should also be planted with trees. Special priority should be given to riverbanks.

It is the recommendation of the Columbus Comprehensive Plan that significant woodlots be inventoried and protected.

Most of the significant woodlots in Columbus are found along waterways. The scenic greenways section of the Plan urges the preservation of these woodlots. It is also important to protect woodlots that exist outside of the river corridors. An inventory of existing woodlots should be developed, ranking the woodlots according to their environmental and aesthetic significance. The city should seek to protect the most critical woodlots by purchase, acquiring development rights or restrictive covenants.

FIRE FACILITIES

FIRE STATIONS

The Columbus Fire Division maintains 30 fire stations. An additional station serving the Far North is under construction. The oldest station was built in 1896 and two stations have been built recently. The highest concentration of fire stations is in the central city, where population densities and aging housing stock contribute to a high demand for service. Engines housed in suburban stations may respond to less than 500 calls per year, while central city engines have as many as 2000 responses. The same imbalance holds true for other types of fire-related equipment.

Despite their importance to fire and emergency services, many central city fire stations are deteriorating. Five stations are rated as being in poor or very poor condition. Another five are rated fair. Some of the oldest fire stations were designed for horse drawn equipment and are inadequate for modern apparatus. Parking for personal vehicles is a continuing problem. The replacement, renovation, expansion, and maintenance of central city fire stations is a top priority of the Fire Division.

Although there is a need for additional suburban fire coverage, the need is more a function of equipment location than station location. The vast majority of suburban Columbus residents live within two miles of a fire station. However, many suburban stations do not have emergency medical service (EMS) units. These stations are designed to accommodate additional pieces of equipment as needed. Suburban stations are generally much newer than central city stations and are in good or excellent condition. New stations will eventually be necessary in the southern, western, and northeastern portions of the planning area. Additional stations would also be needed as expansion development areas are opened.

It is the recommendation of the Columbus Comprehensive Plan that:

- **Columbus provide fire stations within two miles of all residents.**
- **replacement, renovation, expansion, and maintenance of central city fire stations receive priority over the construction of new stations.**
- **replacement or renovation of those stations in poor or very poor condition be a particularly high priority.**
- **parking be improved at central city stations.**
- **a new station be constructed to serve the Rickenbacker area fringe village.**
- **new stations be located on major arterials.**

OTHER FIRE FACILITIES

In addition to 30 fire stations, the Fire Division maintains an administrative building, maintenance facility, medical training center, and training academy. These facilities are no longer adequate for the needs of the division. Consideration is being given to the construction of a combined fire and police training facility. The administrative building is too small for current and projected space needs. Additionally the maintenance facility, built in 1941, is in very poor condition and should be replaced.

It is the recommendation of the Columbus Comprehensive Plan that:

- a combined fire and police training facility be established.
- the Fire Division maintenance building be replaced.
- the Fire Division administrative building be expanded.

COOPERATIVE AGREEMENTS

Cooperative agreements are an important aspect of emergency service in Columbus. Through these agreements with suburban and township fire departments, Columbus is able to ensure adequate emergency service throughout the city in a cost-effective manner.

Automatic response and mutual aid are the two basic types of cooperative agreements between local fire departments. Automatic response agreements stipulate that when an emergency occurs in either jurisdiction, the closest available units automatically respond.

Mutual aid agreements stipulate that either party will provide emergency assistance to the other upon request. The department receiving assistance must be on the scene before help from the other department may be requested. Columbus has automatic response or mutual aid agreements with all Franklin County departments but one.

Columbus receives a great deal of assistance from local fire departments, particularly in the form of emergency medical service. Columbus does not have enough EMS units or personnel to provide sufficient coverage throughout the city. This shortage is overcome by the use of automatic response agreements. Other jurisdictions provide EMS coverage in outlying areas where Columbus coverage is thin.

The automatic response system is advantageous to suburban and township fire departments in two primary ways. First, the non-Columbus fire departments are able to maintain an emergency readiness that would be impossible without the agreements. Without frequent opportunities to practice their skills, fire fighters can lose their edge in emergency situations.

Second, in the event of an emergency the non-Columbus fire departments have the Columbus fleet at their disposal. They could not otherwise afford this level of protection. If a community with one engine unit has an emergency, that community can rely on Columbus to provide extra coverage, both at the site and elsewhere in the community until the emergency is over. Unique pieces of fire fighting apparatus may be too expensive for each fire department to maintain, but automatic response provides everyone access to different types of equipment.

While Columbus would be likely to assist other departments in an emergency situation regardless of the presence of an automatic response agreement, valuable time is saved if one exists. If the cooperative agreement is mutual aid rather than automatic response, there is typically a significant delay in the delivery of assistance. If no agreement exists, the Columbus fire chief and safety officials must be contacted before assistance can be provided, resulting in even longer delays.

Mutual aid agreements represent a lower level of cooperation than automatic response. Local jurisdictions not willing to commit equipment and personnel to automatic response, but wanting the added security of a cooperative relationship with Columbus, choose mutual aid.

Columbus requires other departments to meet minimum staffing and equipment standards before automatic response agreements are entered. It is of little use to Columbus if a non-Columbus unit arrives at an emergency with insufficient staff. As a result, some suburban and township departments are unable to enter into automatic response and choose mutual aid.

Many of the townships with which Columbus has cooperative agreements are experiencing significant financial pressure as their tax bases shrink and the costs of providing basic services rise. It is likely that over the next twenty years townships will be forced to close stations. The question of who will provide emergency coverage in the absence of township service is yet to be answered. The city does not generally enter into service contracts with unincorporated areas and normally requires annexation before service is rendered.

Automatic response and mutual aid agreements have been a cost-effective way to provide non-duplicative emergency coverage throughout Franklin County. It remains to be seen how these agreements will fare in an era of ever-tightening local government budgets. In the event they are abandoned, costs are likely to rise for fire coverage in all jurisdictions.

Many Columbus fire officials have stated that a countywide fire agency would be the most efficient way to provide emergency coverage. It would appear that the cooperative agreements currently in place would provide a foundation for such an undertaking. The Central Ohio Fire Chiefs Association is currently studying the costs and benefits of such a system. Benefits of a countywide system would include uniform insurance rates throughout the county, greater ability to absorb rising personnel costs, and lower administrative costs. In the absence of such an agency, it will be increasingly important for county fire departments to cooperate on such issues as equipment purchase and communication systems.

It is the recommendation of the Columbus Comprehensive Plan that:

- **Columbus continue to participate in cooperative emergency service agreements with local jurisdictions.**
- **Columbus provide more emergency medical services coverage in suburban locations in case cooperative agreements fail.**
- **Columbus not provide contractual emergency services to townships.**
- **the acquisition and use of vacant township fire stations be considered.**

EMERGENCY RESPONSE TIME

Response time for fire and EMS units is a function of equipment location and availability. Units typically travel an average of 30 miles per hour. This figure takes into consideration delays due to intersections and other obstacles. Every station has at least one engine, so response time for fire engines is generally good throughout the city.

The distribution of EMS units is not as extensive as that of engines. There are two types of EMS units. Squads, which provide basic life support, are located at 15 of the city's stations. Medic units, which provide advanced life support, are located at five stations. It should also be noted that all Columbus fire fighters receive emergency medical training. Fire engines are often dispatched to medical emergencies to assist until an EMS unit arrives. This is known as first response.

Most EMS units are located in the central city. Only one of the six fire stations outside the outerbelt has an EMS unit. EMS response times of more than 10 minutes are not uncommon in suburban locations. While this distribution seems unbalanced, it is based on demand for service. Those EMS units located in the central city have a much higher demand rate.

Fire Division plans call for the placement of several more EMS units in outlying stations over the next five years. This will significantly improve EMS response time throughout the city.

There is a need for an additional ladder unit in both the northwest and northeast. Fire Division plans call for the addition of two new ladder units in these areas within the next five years.

While the addition of emergency apparatus, particularly EMS equipment, is needed, the cost of purchasing and staffing these units should not be underestimated. The cost of each additional EMS unit is a minimum of \$75,000. The annual staff cost is nearly \$350,000 for a squad and \$500,000 for a medic. Acquisition cost for new engines is approximately \$200,000, while ladders cost approximately \$500,000. Both engines and ladders require about \$900,000 a year to staff. Demand for added units must be carefully balanced against these costs.

It is the recommendation of the Columbus Comprehensive Plan that:

- **fire response time be within the range of five to seven minutes in all parts of the city.**
- **first EMS response time be within the range of two to three minutes in all parts of the city.**
- **basic life support EMS response time be within three to five minutes in all parts of the city.**
- **advanced life support EMS response time be within five to seven minutes in all parts of the city.**
- **additional ladder units be added in the northern portion of the city.**

POLICE FACILITIES

The Police Division is organized into 18 precincts, each divided into several cruiser districts or patrol areas. The precincts are housed in a total of 12 substations. These substations serve as reporting sites during shift changes and are available for lunch breaks. They have parking space for personal vehicles, lockers, and restrooms. Substations are not staffed and are not accessible to the public. Six of the twelve substations house two precincts. Two substations share building space with fire stations.

The existing substations are inadequate with respect to distribution, condition, building size, parking availability, and overall function. The downtown substation has not had permanent quarters for over twenty years. The Bolton Field substation is housed in a janitor's closet. The double precinct substations are too small to house two precincts. Parking is a problem at virtually all of the substations.

ZONE COMMAND SYSTEM

In order to provide more community-oriented policing, the Police Division has restructured its patrol command from a citywide shift system to a twenty-four hour zone system. Previously, the primary responsibility for uniformed police protection was with three shift or company commanders. They were responsible for all patrols throughout the city during their shift. There was little opportunity for concentration on a particular problem area or neighborhood, especially if the problem overlapped shifts.

Under the new system, the city has been divided into four zones or quadrants each with a zone commander. Eventually, a fifth zone, consisting of the central city will be added. Each zone commander is responsible for patrols in the zone 24 hours a day. This allows them to tailor coverage to meet the needs of their zone.

Currently substations are not regularly staffed. Residents who wish to obtain an accident report or place a complaint must go to the downtown headquarters. Each of the five zones will eventually have headquarters

staffed 24 hours a day. Staff will be available for basic reference and assistance. Communication linkages to the division headquarters will allow access to central records.

Although no designs or overall space requirements exist for zone headquarters, the facilities will need to be much larger than existing substations. They will need to accommodate locker and parking space for several precincts as well as meeting rooms for staff and community block watch groups. They will contain offices for the zone commander, detectives, and community relations staff.

Although zone headquarters will provide a variety of important community services, staff levels will be kept at a minimum. The division headquarters will continue to function as the administrative center of the division. Centrally located zone headquarters will substantially improve the accessibility of the Police Division and allow for a more efficient use of personnel.

Substations will continue to play an important role in the new system. Each zone will cover approximately 50 square miles. Substations will function as zone outposts, providing space for officers to change shifts, store vehicles, and confer.

It is the recommendation of the Columbus Comprehensive Plan that:

- **the city establish four centrally located zone headquarters.**
- **the central zone headquarters be housed in the Police Division headquarters.**
- **consideration be given to the use of vacant school buildings as zone headquarters.**
- **zone headquarters be located on arterials.**
- **zone headquarters be accessible by pedestrians, bicyclists, and public transportation.**
- **construction of new substations and/or the renovation of existing substations be compatible with the zone command system.**

OTHER FACILITIES

In addition to zone headquarters, the Police Division maintains numerous other facilities including the Special Weapons and Tactics Platoon (SWAT) headquarters, training academy, indoor firing range, marine park facilities, impounding lot, property room, and the central headquarters.

The Police Division headquarters should easily provide sufficient administrative space for the next twenty years. This facility could also accommodate the central city zone headquarters. The vehicle impounding lot is located on part of what will become the regional riverfront park. A more suitable location, removed from residential land uses, should be found. The property room has recently been moved to Fairwood Avenue. The condition of the SWAT headquarters is good. A storage facility is needed at the Hoover Marine Park.

The primary Police Division capital need, besides zone headquarters, is a new training facility. The existing facility is inadequate for current needs and should be replaced. The Fire Division also needs a new training facility. Consideration has been given to the use of a vacant high school complex as a joint police and fire training facility.

It is the recommendation of the Columbus Comprehensive Plan that:

- **joint use of facilities by the Fire and Police Divisions be pursued whenever possible.**
- **consideration be given to the use of existing facilities for the training facility.**
- **the police impounding lot be moved to a more appropriate location, removed from residential development.**
- **marine park police facilities be expanded as necessary.**

RESPONSE TIME

Each of the city's 18 precincts has several cruiser districts, patrolled by one or two officers. During peak demand hours, additional cruiser districts are added to precincts. In addition to coverage by several cruiser districts, each precinct is typically patrolled by a police transport vehicle and the precinct sergeant. Calls for service are generally handled by the patrol unit assigned to the cruiser district in which the call occurs.

Response time is a function of where a patrol unit is within the cruiser district when a call for service occurs. The size of precincts and cruiser districts are determined by the demands for service in a particular area. In the most dense areas of the city, cruiser districts are quite small — .25 square miles or less. Cruiser districts in the city's less dense outlying areas are, by contrast, often larger than entire precincts in the central city. Despite the size differences, demand for service is much higher in central city cruiser districts than in outlying areas.

In outlying areas, police response time is most hindered by the distance a patrol unit must travel to arrive at the scene. In central city precincts, response time is often impaired by competing demands for service. The Police Division must prioritize emergency responses. Runs are categorized by relative importance. Categories A and B receive highest priority. They involve life threatening situations such as robbery in progress, homicide, suicide attempt, officer in trouble, shooting, and sex crime. Current response time averages about 8 minutes for category A and B runs.

Categories C-G involve such things as suspicious persons, stolen automobiles, hit skip accidents, fights, property destruction, and accidents with injuries. Categories H-Z receive the lowest priority and involve such non-threatening situations as speeding, loud music, dog complaints, house watch, and obstructions in the street. The average response time for both category C-G and H-Z runs is about 25 minutes.

Most cruisers are staffed by one officer. Many demands for service require a response by two or more officers. When this occurs, the necessary coordination often delays response. In areas of the city where such calls are common, cruisers are staffed by two officers; however personnel limitations prevent this citywide. If a patrol unit is called from its cruiser district to assist in a response elsewhere, coverage must be provided by neighboring patrols.

An additional cause of response delays in some areas of the city is the confusion created by the Columbus corporate boundaries. Columbus surrounds numerous pieces of unincorporated township land where Columbus police officers do not have jurisdiction. Calls for service from residents in these areas often result in jurisdictional questions. The call often must be referred to the Franklin County Sheriff or township authorities, causing delays.

It is the recommendation of the Columbus Comprehensive Plan that:

- **police response time for category A and B runs be improved to an average of 3 minutes in all areas of the city.**
- **police response time for category C-G runs be improved to an average of 10 minutes in all areas of the city.**
- **police response time for category H-Z runs remain within an average of between 20 and 30 minutes in all areas of the city.**

CHAPTER 5: NEIGHBORHOODS

The character and desirability of Columbus' neighborhoods are influenced by the day-to-day decisions of the city and its boards and commissions. These decisions involve the delivery of city services, scheduling of capital improvements, and regulation of private development.

Decisions that affect the character of an area should be made with an understanding of the existing neighborhood situation. Most important, attention should be given to distinguishing physical characteristics of the neighborhood and evidence of change in the desirability of the area as a community.

With more than 160 distinct neighborhoods in Columbus, it is unlikely that the various boards, commissions, and city personnel will have a complete understanding of each individual neighborhood, its conditions and needs. To give guidance to these decisions and actions, policies are outlined below that give consideration to a classification of neighborhoods based on physical characteristics and the nature of change. The aim is to provide a convenient reference guide for city policies.

The city's neighborhoods are categorized in two ways. One categorization classifies neighborhoods according to the degree of change in single family housing value as compared to the county average. The other categorization focuses on the physical condition, design, and appearance of neighborhoods.

PROTOTYPE POLICIES

Columbus neighborhoods can all be classified by the following neighborhood prototypes — Renaissance, The Way We Were, The American Dream, Middle America, Backyard Living, Up and Coming, In City Estates, and Manufactured Housing. Observations and recommendations are offered for the residential areas and activity centers of the various prototypes.

The Columbus Comprehensive Plan recommends the following strategies for all neighborhood prototypes:

- **Enhance and maintain a positive neighborhood identity and image.**
- **Undertake appropriate strategies to arrest housing deterioration including vigorous code enforcement and, as needed, rehabilitation programs.**
- **Discourage demolition of buildings that have significant rehabilitation potential (including demolition as a means of nuisance abatement).**
- **Require development standards for redevelopment and new development.**
- **Discourage rezoning activity that detracts from the desirability of neighborhoods.**
- **Maintain safe levels of traffic flow conducive to housing.**
- **Undertake steps to ensure economic and social integration throughout the city to avoid concentrations of disadvantaged residents.**
- **Respect the importance of the natural environment in all public works, including street signs and lighting.**
- **Discourage through traffic on residential streets.**
- **Undertake steps to avoid concentrations of economically and socially disadvantaged residents in particular neighborhoods.**

RENAISSANCE (MID-1800s TO EARLY 1900s)

Renaissance neighborhoods are among Columbus' oldest communities. They developed from the mid-1800s to the early 1900s spurred by the emergence of streetcar lines. Developed on a grid street system, Renaissance neighborhoods are characterized by single-family homes oriented to the street, with rear alley garages and carriage houses. Churches, stores, and restaurants are often integrated into residential areas. These activity centers are neighborhood-oriented and convenient for pedestrian access.

Another type of activity center that occurs in Renaissance neighborhoods is the mixed use corridor. Development is high density, generally more than two stories, with an intact streetscape. The market focus is both neighborhood and community. Streets are narrow, generally fewer than four lanes, with minimal setbacks, on-street parking, parking in the rear and few curb cuts. The Short North and Parsons Avenue between Broad and Town Streets are good examples of this type of activity center.

The character of Renaissance neighborhoods stems from the mature vegetation, historic structures and infrastructure components (such as brick streets), mix of land uses, and passive recreation parks. Most Renaissance neighborhoods have experienced, and continue to experience, some degree of private reinvestment. Renaissance neighborhoods are located close to the downtown and include German Village and portions of the near south; Victorian Village, Italian Village and portions of the Short North; and the Olde Towne East and Franklin Park areas on the near east.

The Columbus Comprehensive Plan recommends that the city of Columbus support the revitalization and preservation of Renaissance neighborhoods through the following policies:

- **Support a gradual process of reinvestment to restore the neighborhoods to their former grandeur without displacement of lower income residents.**
- **Encourage the identification and preservation of buildings and areas of historic and architectural significance.**
- **Support the redevelopment of vacant lots and non-contributing buildings with structures of compatible design or passive open space.**
- **Maintain historic infrastructure features that contribute to the neighborhood's identity, such as brick streets, ornamental lighting fixtures, and slate sidewalks.**
- **Preserve mature vegetation.**
- **Undertake streetscape improvements which are in keeping with the historic context of the neighborhood, including street lighting, street trees, street furniture, trash containers, and bus stops to enhance private investment and neighborhood identity and liveability.**
- **Encourage more efficient use of rear yards for off-street parking.**
- **Reduce the scale of large trash collection bins.**
- **Enhance the historic and architectural character of the area through the use of design guidelines and architectural review.**
- **Achieve a balance between residential liveability and other uses.**
- **Improve pedestrian access to activity centers with pathways and improved ability to cross streets and intersections.**
- **Define upper floor use potential for multi-story structures as well as subsequent requirements for traffic and parking.**
- **Discourage parking for activity centers in residential areas.**
- **Encourage the replacement of establishments which do not serve the needs of the local community or which create a public nuisance.**
- **Encourage adaptive reuse of vacant structures with needs of local residents in mind.**
- **Encourage bus service.**
- **Define business mix options for local and extended market areas.**

THE WAY WE WERE (LATE 1800s - EARLY 1900s)

Once known as "streetcar suburbs," The Way We Were neighborhoods were developed on a grid street pattern. The residential component of The Way We Were neighborhoods is comprised primarily of moderate to large single-family homes with some duplexes and apartments on the edge of the community. Houses generally have an on-street orientation with small front yards sloping up to wide front porches. Some neighborhoods have rear alleys as sole access to detached garages, while other neighborhoods have driveways through side yards to garages.

Churches, schools, stores, and restaurants are often integrated into residential areas. These activity centers are neighborhood-oriented and convenient for pedestrian access. Commercial/light industrial uses often occur on arterials. These corridors are generally four to six lanes wide, with minimal setbacks, on-street and remote parking, and few curb cuts.

The Way We Were neighborhoods sometimes experience parking congestion as they were not designed to handle large numbers of automobiles. Mature trees often create a “canopy” effect over the sidewalk and street and contribute to a strong sense of place. The Way We Were neighborhoods are found predominantly in the Clintonville, South Linden, and Hilltop areas with more isolated pockets on the east and south sides.

The Columbus Comprehensive Plan recommends that the city of Columbus enhance the stability and attractiveness of The Way We Were neighborhoods through the following policies:

- **Undertake a program of tree replacement to fill the gaps in the street canopy.**
- **Consider the reuse of parcels on the edge of the neighborhood for activity center parking requirements.**
- **Discourage through traffic in alleys.**
- **Encourage more efficient use of rear yards for off-street parking.**
- **Discourage use of front yard fencing.**
- **Maintain streetscape and encourage front yard vegetation.**
- **Improve pedestrian, bicycle, and vehicular linkages to other neighborhoods and the community.**
- **Promote a stronger link between residential areas and activity centers.**
- **Discourage parking for activity centers in residential areas.**
- **Encourage the replacement of establishments which do not serve the needs of the local community or which create a public nuisance.**
- **Encourage adaptive reuse of vacant structures with needs of local residents in mind.**
- **Encourage bus service.**
- **Establish rear access and alley design standards to integrate the image of residential areas and the character of business establishments.**
- **Devise a standard group of streetscape improvements and standards to reinforce identity (including bus stops, crosswalks, sidewalks, parking, street graphics, street trees, trash containers, and street furniture).**

THE AMERICAN DREAM (MID-1940s - LATE 1950s)

The American Dream neighborhoods were developed during the building boom that followed World War II. Land uses in these neighborhoods are separated. Most of the single-family housing is small to moderate in size. Apartments and townhouses are often found on the edge of the community. There is a greater similarity in housing than is found in Renaissance and The Way We Were neighborhoods.

American Dream neighborhoods provided the seeds for the suburban development pattern, as these neighborhoods were the first to be auto-oriented. Although streets remained in the grid pattern, often with alleys, houses were situated in the center of lots and the wide front porches disappeared. With the beginning of the American Dream era, backyards were used more frequently as the on-street orientation of social activity began to dwindle. Consistent setbacks and minimal landscaping are common in these neighborhoods. Driveways through side yards to detached, rear garages are also common.

Activity centers within the American Dream neighborhoods are generally characterized by community-oriented commercial land uses, often in the form of early shopping centers, such as Graceland, Central Point, and Town and Country. Highway-oriented commercial strips such as East Main Street and Cleveland Avenue are also common in American Dream neighborhoods. These strips are characterized by low density development of mixed age and use with little or no landscaping. Since initial development many of these corridors have undergone several cycles of transition, with a general erosion of vitality being the overall result. This decline was brought about by the construction of the interstate highway system.

American Dream neighborhoods are found in many locations, including portions of the Hilltop; south of Sullivant Avenue; the Bellows area in Franklinton; the Beechwood area of northern Clintonville; most of North Linden; and portions of the northeast, far east, and far south sides.

The Columbus Comprehensive Plan recommends that the city of Columbus foster stabilization of aging American Dream neighborhoods through the following policies:

- **Encourage a coordinated street tree planting effort to diminish the perception of “sameness” caused by the similarity of housing styles.**
- **Encourage exterior alterations that add attractive features to basic housing styles through the preparation and distribution of guidebooks to homeowners.**
- **Strengthen neighborhood sense of place through the addition of sidewalks, street lights, and other basic neighborhood necessities.**
- **Develop a sense of community through linkages with community components such as parkland, commercial and office uses, and services.**
- **Improve pedestrian access to, from, and within activity centers.**
- **Encourage redevelopment of some retail establishments as housing or community use establishments.**
- **Add landscaping to activity centers to soften the harshness of the auto-oriented character of the environment.**
- **Provide design guidelines and other support services for start-up businesses.**
- **Establish corridor landscaping and street design guidelines to create a new image and sense of place, supportive of the character of the surrounding area.**
- **Perform analysis of large scale uses with particular attention to their impact on surrounding neighborhoods.**

MIDDLE AMERICA (1950s - MID-1970s)

With the emergence of Middle America neighborhoods in the 1960s, development patterns changed dramatically. The grid street pattern of earlier neighborhoods was replaced with a curvilinear system of wider streets; building lots became larger; greater variation was achieved in housing styles with backyard-oriented ranch, split-level, and two-story homes; and the natural environment became more dominant with park-like landscaping. Multi-family housing often serves as a buffer between single-family areas and activity centers.

Activity centers in Middle America neighborhoods are largely low density commercial and tend to be very auto-oriented. They include early open shopping centers, such as Northern Lights, and more modern shopping centers, such as Northland, Westland, and Eastland. Wide streets, large setbacks, surrounding parking, multiple curb cuts, and internal circulation systems are typically present. Schools and parks are typically integrated into residential areas.

Middle America neighborhoods are located almost exclusively in Northland, North Linden, and Eastmoor areas.

The Columbus Comprehensive Plan recommends that the city of Columbus foster the continued attractiveness of Middle America neighborhoods through the following policies:

- **Maintain and enhance a neighborhood sense of place through provision of appropriately designed sidewalks, street lights and other missing elements.**
- **Promote the use of uniform design standards in the redevelopment of commercial sites to create a more consistent neighborhood image.**
- **Monitor the condition of housing through periodic code inspections.**
- **Seek to link and join Middle America residential areas and surrounding activity centers through pedestrian and bicycle pathways.**
- **Facilitate efficient movement of traffic.**
- **Reevaluate access to and within districts including options to the single frontage street access pattern.**
- **Identify new parking and transit concepts.**
- **Encourage reforestation of the streetscape.**
- **Improve pedestrians’ ability to cross streets at intersections.**
- **Encourage redevelopment of some retail establishments as housing or community use establishments.**
- **Add landscaping to soften the harshness of the activity center environment.**

BACKYARD LIVING (EARLY 1960s - MID-1970s)

Backyard Living neighborhoods are the second generation of the suburban pattern. They feature curvilinear street patterns, similar sets of ranch and split-level house plans, colored siding, and an orientation to backyard activities. Garage, landscaping and house designs obscure front doors and windows, continuing the trend toward residents' privacy. Sense of place or identity is moderate to weak, despite some physical consistency of setbacks, lot sizes and house designs. Backyard Living subdivisions are often centered around a neighborhood elementary school. While these neighborhoods are predominantly single-family residential, multi-family housing often serves as a buffer between single-family areas and activity centers.

Activity centers in Backyard Living neighborhoods are largely low density commercial and tend to be very automobile-oriented. They include shopping centers, such as Northland, Westland, and Eastland. Wide streets, large setbacks, surrounding parking, multiple curb cuts, and internal circulation systems are typically present.

Backyard Living neighborhoods tend to be found in scattered locations on the west and south sides, in the Knolls in the northwest, and in a corridor south of Livingston Avenue extending through Eastmoor and Berwick to the far east.

The Columbus Comprehensive Plan recommends that the city of Columbus support the viability of Backyard Living neighborhoods through the following policies:

- **Improve pedestrian, bicycle, and vehicular linkages from Backyard Living neighborhoods and activity centers.**
- **Encourage a coordinated street tree planting effort to enhance neighborhood identity.**
- **Facilitate efficient movement of traffic.**
- **Reevaluate access to and within districts including options to the single frontage street access pattern.**
- **Identify new parking and transit concepts.**
- **Encourage reforestation of the streetscape.**
- **Improve pedestrians' ability to cross streets at intersections.**
- **Add landscaping to soften the harshness of the auto-oriented character of the activity center environment.**

UP AND COMING (1970s TO PRESENT)

Up and Coming neighborhoods represent Columbus' newest communities. They are heavily auto-dependent and are generally segregated by land use. The residential component consists of single-family subdivisions containing moderate to larger homes with backyard orientation on curvilinear and court streets. Consistent curb cuts for attached garages and curb mailboxes establish uniformity along the street. In some instances, mature vegetation and trees were left in place at the time of development. Moderate to upscale townhouses and apartments appear on the periphery of the single-family areas.

Most non-residential uses in Up and Coming neighborhoods are focused on or near major arterials. Such activity centers are characterized by single story buildings, having low-density suburban regional and community-oriented commercial land uses with some community facilities. Very wide streets, large setbacks, surrounding parking, multiple curb cuts, and internal circulation systems are typical.

Up and Coming neighborhoods are located predominantly in the northwest; however, some examples are found in the west and northeast with more expected in the next few years.

The Columbus Comprehensive Plan recommends that the city of Columbus enhance the strength and liveability of Up and Coming neighborhoods through the following policies:

- **Make activity centers bicycle and pedestrian accessible.**
- **Encourage landscaping along the freeways to lessen noise.**
- **Where necessary encourage a coordinated street tree planting effort to enhance neighborhood identity.**

- **Ensure that Up and Coming neighborhoods accommodate a variety of income levels and housing types.**
- **Facilitate efficient movement of traffic.**
- **Identify new parking and transit concepts.**

IN CITY ESTATES (PREDOMINANTLY LATE 1800s - EARLY 1900s)

In City Estates neighborhoods are characterized by the commanding presence of environmental features including mature trees, natural vegetation, and, in some instances, ravines and watercourses. Their attraction and desirability as single-family neighborhoods is drawn almost exclusively from their natural setting, although some boast large distinctive homes. Neighborhood streets are neither grid nor curvilinear, but follow more natural routes dictated by the terrain. Streets are generally narrow without curbs and sidewalks.

In City Estate neighborhoods are not associated with any one type of activity center. Rather, they are typically designed to mitigate the impact of adjacent non-residential uses. In City Estates neighborhoods include Old Beechwold, Iuka Ravine, Overbrook Ravine, Walhalla Ravine, and Glen Echo Ravine.

The Columbus Comprehensive Plan recommends that the city of Columbus protect the desirability of In City Estates neighborhoods through the following policies:

- **Link natural features to adjacent residential areas with special landscape and streetscape features.**
- **Introduce appropriate buffering to separate non-residential uses from these neighborhoods.**
- **Undertake measures to protect ravines from erosion and development.**
- **Discourage sidewalks except in fringe areas away from the natural features, ravines and watercourses.**
- **Enhance historic and architectural character of the area through the use of design guidelines and appearance review.**

MANUFACTURED HOUSING (1950s - PRESENT)

Manufactured Housing neighborhoods are characterized by single-family manufactured homes set on concrete pads. These homes are single story, with aluminum and vinyl siding, flat or shallow pitched roofs and driveways alongside the structures. Narrow streets are, at times, gravel and of a grid or curvilinear nature. Manufactured homes are normally placed with the narrow side facing the street and the entrance facing the driveway.

Normally located near commercial and industrial areas, Manufactured Housing neighborhoods are found in the south side and northeast.

The Columbus Comprehensive Plan recommends that the city of Columbus ensure the liveability of Manufactured Housing neighborhoods through the following policies:

- **Encourage appropriate buffering between adjacent land uses.**
- **Ensure the adequate provision of playgrounds and open space in higher density areas.**
- **Encourage the use of lawn sheds as storage facilities.**

REVITALIZATION POLICIES

Most of the neighborhood prototypes include neighborhoods in all three categories of neighborhood change—growth, stable, and revitalization.

Growth neighborhoods are those neighborhoods whose inflation-adjusted home prices rose at a higher rate than the county average, typically 20% or more since 1984. The average includes neighborhoods whose prices are lower than the county's but rising faster. It also includes neighborhoods whose prices are higher than the county's and rising at a faster rate. Growth refers to financial growth rather than growth in number of units.

Stable neighborhoods performed about as well as the county average. The average home price may be higher or lower than the county average, but the inflation-adjusted trends approximate those of the county as a whole.

In revitalization neighborhoods, home prices either rose in nominal dollars but did not keep pace with county averages or declined in average sale values both in nominal dollars and when adjusted for inflation. There is a decreasing demand for existing housing in these neighborhoods. The areas are in transition or have high potential for moving from one market level to a lower market level.

Within the category of revitalization neighborhoods, three degrees of need are present—initial, transitional, and advanced. Areas in the initial stages of need are those that are beginning to revitalize and require few city resources to stabilize them.

The Columbus Comprehensive Plan recommends that in initial revitalization areas:

- **the city stimulate and encourage the private sector to reinvest in housing and undertake programs designed to improve the demand for housing.**
- **systematic code enforcement and issuance of citations be undertaken by the city.**
- **actions be taken to encourage housing suitable for and appealing to a mix of income groups.**
- **encourage neighborhood conservation by encouraged by preference for the renovation and rehabilitation of existing dwelling units, particularly single family units, over the infill construction of new buildings.**
- **consideration be given to the location of employment opportunities and retail and service establishments in the neighborhoods.**
- **guidance be provided on home improvement, rehabilitation, and renovation.**
- **public education programs be created to assure that property owners know the zoning and the status of variances on their property.**
- **infrastructure be maintained and enhanced.**

Transitional neighborhoods are those which require city resources for moderate improvements.

The Columbus Comprehensive Plan recommends that in transitional neighborhoods:

- **the city make a greater effort to stabilize transitional neighborhoods through quality of life improvements rather than large-scale development and redevelopment efforts, which lead to speculation, disruption, and cause displacement.**
- **actions be taken to encourage housing suitable for and appealing to a mix of income groups.**
- **systematic code enforcement and issuance of citations be undertaken by the city.**
- **maintenance and upkeep of vacant property be required.**
- **consideration be given to location of employment opportunities in the neighborhoods.**
- **existing infrastructure be maintained.**
- **neighborhood conservation be encouraged by preference for the renovation and rehabilitation of existing dwelling units, particularly single family units, over the infill construction of inappropriate new buildings.**

Neighborhoods in advanced stages of need require intensive and substantial efforts to adequately address the problems in these areas. Lack of or crumbling infrastructure, an abundance of vacant land, and abandoned and boarded houses characterize these neighborhoods. In some cases, the land may be better used for purposes other than housing.

The Columbus Comprehensive Plan recommends that in neighborhoods in the advanced stages of need:

- **programs of land banking and land assembly/redevelopment be undertaken.**
- **consideration be given to location of employment opportunities in the neighborhoods.**
- **economic development opportunities be maximized.**
- **relocation assistance be provided to assist businesses to locate in more appropriate market areas.**
- **urban reforestation be undertaken.**

- redevelopment zones be defined.
- opportunities to improve traffic flow, accessibility, and parking be defined.
- streetscape improvements be devised to achieve street appeal for redevelopment.
- transit access and stops be made more attractive.
- maintenance and upkeep of vacant property be required.

HISTORIC RESOURCE PRESERVATION POLICIES

Areas of the city that have significant architectural, aesthetic, or historic value warrant special attention. It is important to preserve these areas as a link to the past for future generations. Several neighborhoods are listed on the local and national registers of historic places. In addition, several individual structures are located in residential neighborhoods or activity centers of significant historic value. Plan recommendations for these areas are organized in four categories: general historic policies, neighborhood preservation policies, historic district policies, and historic structure policies.

The Columbus Comprehensive Plan recommends the following strategies for historic resources:

GENERAL HISTORIC RESOURCES

- Assure that preservation efforts benefit a mixture of lifestyles and income levels.
- Recognize that existing historic structures represent a significant underutilized resource.
- Maintain a focus on the existing residents in areas undergoing historic rehabilitation.
- Encourage preservation and rehabilitation of buildings over demolition by establishing procedures for handling nuisance abatement cases.
- Identify new sources of funds for public loan/grant programs for rehabilitation of historic structures.
- Maintain an ongoing process of inventory and nomination of historic and archaeological resources for inclusion in the Columbus and National Registers.
- Encourage public involvement in architectural design and review policies.
- Identify and maintain historic infrastructure features that contribute to neighborhood identity, such as brick streets, street patterns, street lights, and slate sidewalks.
- Encourage preservation of historic building stock through the provision of incentives for restoration/rehabilitation and penalties for demolition by neglect.
- Pursue conservation of historic structures through the vigorous enforcement of building codes.
- Apply the Ohio Basic Building Code in such a manner as to encourage and promote the restoration of historic buildings.

NEIGHBORHOOD PRESERVATION POLICIES

- Identify and preserve existing environmental character and distinguishing features of all neighborhoods.
- Seek to regain a sense of historic identity and continuity in all areas that lack a sense of place.
- Improve coordination and communication between the historic resource office and other areas of city government.

HISTORIC DISTRICT POLICIES

- Designate historic districts where existing resources are documented and designation is supported by the local community, property owners, and local merchants.
- Establish district review commissions and architectural review standards.
- Provide design handbooks and seminars to encourage sensitive rehabilitation.
- Permit only revitalization and infill efforts that are responsive to the historic context of the district.
- Identify all non-contributing structures within districts and prepare adaptive reuse and/or redevelopment strategies which will allow them to be as compatible as possible.
- Maintain the historic character of the existing buildings while achieving new uses.

HISTORIC STRUCTURE POLICIES

- **Facilitate nomination of individual residences, commercial and industrial buildings to the Columbus Register of Historic Places.**
- **Provide rehabilitation handbooks and seminars to encourage sensitive rehabilitation.**
- **Encourage the development of preservation management processes and technical services to assist with restoration, renovation, and adaptive use projects.**
- **Assist investors to qualify for tax investment credits for certified rehabilitation for income-producing property.**
- **Solicit the input and assistance of local preservation groups and commissions in the nomination of historic buildings.**

CHAPTER 6: DOWNTOWN

ROLE OF THE DOWNTOWN

It is a goal of the Columbus Comprehensive Plan to maintain and strengthen the role of downtown as the city's primary commercial, cultural, and entertainment center, and as a major retail and residential center.

Downtown is the physical, social, and economic core of Columbus. Downtown planning policies have a definite impact and ripple effect on most aspects of citywide planning. It is the purpose of this chapter to identify and embrace downtown planning policies that directly affect citywide land use patterns, economics, transportation, and the environment.

The Downtown Columbus Strategic Plan, completed by Downtown Columbus, Inc. (DCI) in 1988, outlines a vision for downtown as the region's premier mixed-use center: location of the most prestigious office and commercial addresses; venue of the most exciting theaters, entertainment, and civic events; site of comfortable and convenient urban housing choices; headquarters for city, county, state, and regional government, as well as for specialized human service facilities; showcase for the city's skyline architecture, parks, and urban streetscapes; center for discovery in colleges, museums, and libraries; and destination for the best upscale shopping in the metropolitan area, arguably in the entire state.

In this vision, downtown should continue to maintain its position as the region's preeminent high-rise office location. Downtown should likewise continue to serve as the government center for the city, county, and state, as well as for the federal region of which Columbus is a part. All city, county, state, and federal government administrative offices should be located downtown.

Downtown should be the priority location for development of regional arts and entertainment facilities, as well as the showplace for major cultural and civic festivals. Downtown should also be the preferred site for unique civic facilities with a citywide, regional, or statewide attraction.

Policy-making, planning, and implementation of projects for downtown will inevitably have citywide implications. Downtown investments, however, should not be viewed as competitive with other areas of the city. Ultimately, the purpose for building and maintaining a strong and vital downtown is to strengthen the social and commercial fabric of the community as a whole, for which downtown is the center.

Policies which relate to citywide development have been derived from the Downtown Columbus Strategic Plan as well as from downtown sub-area planning studies. The following policies represent policies with citywide implications.

The Columbus Comprehensive Plan embraces the following policies:

ARTS AND ENTERTAINMENT

- Downtown should be the priority location for development of regional arts and entertainment facilities.
- Encourage the continued use of downtown as the regional showplace for major cultural and civic festivals.

TRANSPORTATION AND PARKING

- Achieve an efficient mix of affordable public and private transportation options linking the downtown to the rest of the city and allowing for a shift towards mass transit as densities increase. Provision should also be made for a multi-modal station downtown.
- Downtown should maintain and develop streets, plazas, and public spaces that give priority to pedestrian traffic.

- Develop a distinctive, cost-effective, attractive, traffic-compatible transportation system linking major activity centers in the downtown area to each other and to peripheral parking sites.
- Establish additional bicycle routes between downtown and adjacent neighborhoods, and continue to expand the riverfront corridor bikeway system, linking it to other bikeway corridors throughout the city.
- Policies to make more efficient use of the existing highway network should be adopted. These may include, but are not limited to, encouragement of transit use, car pools, and vanpools; adoption of flextime and alternative work schedules by downtown employers; and provision of HOV (high occupancy vehicle) lanes on highway corridors into the downtown.
- Develop a light rail system which will eventually link the downtown to major population centers outside the downtown.
- As the downtown core becomes more dense, parking supply in the downtown periphery will increase. Public policy should encourage development of structured parking and discourage the spread of unimproved surface parking. Peripheral parking sites should be linked to the commercial/retail core by a people-mover system.

RIVER CORRIDOR DEVELOPMENT

- The Scioto River corridor should be the focal point for development of new cultural/entertainment attractions on a regional scale.
- Development of the Scioto Peninsula should encourage public use of and access to the river corridor and should link to adjacent neighborhoods.
- Privately held land in the Scioto Peninsula, as well as along the river corridor from the confluence of the Olentangy and Scioto Rivers to Frank Road, should be acquired by the city as part of a long-term parkland development strategy.

CIVIC CENTER DEVELOPMENT

- Downtown should be the preferred location for the development of unique regional, statewide, or national attractions, including cultural parks, a civic arena, and a major outdoor amphitheater.
- Downtown should serve as the government center for the city, county, and state, as well as for the federal region of which Columbus is a part. All city, county, state, and federal government administrative offices should be located downtown. Non-administrative centers, such as recreation centers, fire stations, warehouses, and service centers, should be located where they most efficiently serve the citizens of Columbus.
- Downtown should continue to serve a regional need for the centralized location of specialized human service facilities. Development of these facilities should be integrated into overall land use and capital improvements planning for the area.

HOUSING

- Public incentives, including, but not limited to, tax abatement, building and zoning code revisions, interest-rate write-downs, land assembly, and (if necessary) public/ private development, ownership, and management, should be used as tools to create a mixture of different housing opportunities within the downtown and its adjacent neighborhoods.

RETAIL

- Citywide development policies should recognize the value of public/private investments which have made downtown Columbus the premier retail destination throughout the region. Public investment or incentives which would detract from that commitment to the preeminence of downtown retail should be avoided.

- Retail/commercial corridors within the downtown, including but not limited to East Gay Street, East Main Street, and High Street, should be classified as eligible for assistance from the Neighborhood Commercial Revitalization Program.

OFFICE/COMMERCIAL

- Land use planning within downtown, as well as throughout the city as a whole, should recognize and maintain downtown’s status as the city’s preeminent high-rise commercial office district.
- Creation of special assessment districts should be encouraged not only in downtown, but in other commercial districts of the city, to empower businesses and residents to enhance services, maintenance, and security within their neighborhoods.

URBAN DESIGN AND LAND USE

- Encourage design excellence in all urban projects and activities through adoption of downtown development guidelines and creation of a review process.
- Historic preservation of worthy commercial, residential, and institutional structures requires public policies which encourage preservation, to be implemented through local tax abatement or credits as well as through more stringent review procedures for threatened historic properties.
- Public incentives should encourage development of existing downtown structures for an innovative mix of uses, especially in the case of worthy historical structures.
- Downtown should continue to develop as the city’s preeminent mixed-use center, making use of its high-density, high-activity character to maintain that status. Inappropriate proposals for development of high-density centers in low-density areas remote from downtown should be discouraged.
- The downtown’s bridge and “gateway” connections to the rest of the city, especially to its surrounding neighborhoods, should receive priority attention in capital improvements planning.
- Land use and development policies should encourage the development of downtown as an educational/cultural district. The growth of institutions of higher education has made downtown the second largest educational center in the region. This trend will require public policies to encourage expansion, while at the same time assuring compatibility of development with adjacent business and residential areas.
- Expansion of surface parking throughout the downtown has resulted in demolition of many older buildings and a blighted aspect to high-density, high-traffic commercial areas in the downtown core. New legislation and enforcement of existing legislation should encourage development of structured parking and discourage the spread of unimproved surface parking.

PARKS AND RECREATION

- Incorporate the highest design standards as part of a deliberate coherent master plan to enhance the beauty, recreational opportunities, accessibility, and security of downtown parks.
- Expand and enhance downtown parks and green space.

CONVENTIONS AND TOURISM

- Enhance airport services and operations, including an increase in direct air flights.
- Future light rail development should link downtown with the airport.

CHAPTER 7: DEVELOPMENT DISTRICTS

EXPANSION DEVELOPMENT DISTRICTS

The Columbus Comprehensive Plan designates Expansion Development Districts as a means of better balancing the timing of private development and public expenditure in areas of potential annexation where public facilities and services are not available. The Plan's recommendations spell out proposed development policy for the city regarding such areas. Nothing in the plan is intended to discourage annexation of land not identified in expansion areas. The extension of any necessary services to such areas should be approved in a manner consistent with the general policies associated with the expansion districts identified. Nothing in the Plan is intended to require or encourage the city's refusal to accept new territory through the annexation process, whether such territory is within or outside an expansion district, or if within an expansion district, whether sanitary sewer service has been programmed for that district (or part thereof).

Three expansion development districts are identified. They are Northeast Expansion District, South-Southeast Expansion District, and Northwest Expansion District. Each can be subdivided further into logical expansion areas. None of the districts is currently served by city facilities or services and all would require significant capital investment in order to develop.

It is the recommendation of the Columbus Comprehensive Plan that:

- **specific area plans be conducted for all Expansion Development Districts.**
- **land use in the Northeast Expansion District be largely residential with supporting commercial areas in the northern portion and more intense commercial and employment uses in the southern portion.**
- **the western half of the South-Southeast Expansion District hold a mixed-use fringe village developed to effectively organize expected employment opportunities in the Rickenbacker area including residential and commercial uses and with specific attention to open space near the South Wellfield area.**
- **the eastern portion of the South-Southeast Expansion District develop only in very low intensity uses. (Extensive flood plains, poor drainage, and presence of groundwater resources render the area unsuitable for many development types.)**
- **the Northwest Expansion District include a commercial corridor along an extended Tuttle Road leading to commercial and employment uses in the Route 33 area with some residential uses present.**
- **Sanitary sewer service will be programmed for Expansion Development Districts (or sub-districts) at such time as a plan for an appropriate level of capital improvements and service provision is in place. The service plan will include a full description of capital improvements and services needed to appropriately serve the area or any part or parts thereof, a timetable for implementing them, a budget, and identification of a dependable source of financing. The capital improvements and services can be financed by the city, private interests, or a combination. Programming of sanitary sewer service to an expansion development district will represent an acknowledgement by the city of Columbus that a satisfactory level of facilities and services will be available. Such acknowledgement will require the passage of a specific Plan recommendation ordinance by City Council, taking into account the recommendations of the Development Department.**
- **Flexible and expeditious procedures for "opening" expansion districts will be developed.**

FRINGE VILLAGE DEVELOPMENT DISTRICTS

Fringe villages represent mixed use at its best and offer the opportunity to provide a sense of community in a newly developing area. Fringe villages can be thought of as self-contained places offering most of what small towns can offer — places to live, work, play, shop, and attend school in an environment conducive to

walking and biking as well as driving. Fringe villages also can serve productively as transit anchors. Additionally fringe villages can be an effective means to organize and concentrate suburban development to maximize the impact of public investment. Such districts are worthy of consideration in any high-density fringe urban development and could be achieved by the application of a Fringe Village Planning Overlay.

Two emerging employment centers outside the downtown offer the opportunity for creation of fringe villages at the northern and southern edges of the region. A need for higher density residential and convenience retail opportunities in close proximity to employment locations underscores the important role that fringe villages can play.

The development underway at the Polaris Centers of Commerce provides an opportunity for a fringe village at the northern edge of the region. Employment is locating in the area and shopping opportunities will soon exist. Property is available nearby to create the remainder of a fringe village including residential development. The village will provide an excellent opportunity for a northern transit terminus.

With the city's historic interest in economic development opportunities at Rickenbacker and an announcement of base closure, opportunities exist to create a fringe village at the southern edge of the city as well. It is particularly appropriate to provide for high quality development on the south side and to create environmentally safe land uses abutting the Wellfield Protection District at the South Wellfield. This village also provides the opportunity for a southern transit terminus.

It is the recommendation of the Columbus Comprehensive Plan that the following policies and guidelines be followed in planning and developing fringe villages. Special attention should be given to the creation of fringe villages in the vicinity of Polaris Centers of Commerce and Rickenbacker Air National Guard Base.

- **Area plans should fully define the fringe villages and establish a planning and development process based on agreed policies and guidelines.**
- **Create a compact, new, livable residential environment that encourages pedestrian movement as an alternative to the traditional dependency on automobiles.**
- **Maximize public investment in infrastructure services.**
- **The physical size of the fringe villages should be limited by their designed pedestrian convenience.**
- **The density of the villages can be relatively high for single-family development to create a compact and comfortable village setting. Townhouse and apartment development can range from ten to twelve dwelling units per acre, and single-family dwelling units can be developed at five units per acre, depending on the amount of public open space within easy access to the development.**
- **Land uses in these villages should include mixed housing, recreational facilities, schools, retail centers, industries, and employment-based commercial development.**
- **Street design controls should be carefully considered to encourage easy access between the villages and the surrounding suburban areas.**
- **Provision of infrastructure can be used as a bargaining tool to encourage private developers to work within the general concept plan for the fringe village.**
- **Developers should be required to follow specific regulatory controls designed to govern planning and development within the fringe village including zoning, use, density, architectural design, street layout, public places, parks, squares, and streetscape.**
- **Existing wetlands, woodlands, natural habitat, and drainageways should be protected and contribute to a system of open space.**
- **A street tree planting ordinance should be enforced.**
- **Public-private partnerships should be encouraged to acquire land and accelerate infrastructure investment.**
- **Intergovernmental cooperation should be encouraged in the planning and development of the fringe villages.**
- **Good access within the fringe villages and to surrounding urban areas should be provided.**
- **Public transit should be extended to serve the fringe villages.**

- **Develop design standards and guidelines that will enable the creation of superior living space and economically viable development of the fringe villages.**

INDUSTRIAL/OFFICE DEVELOPMENT DISTRICTS

Potential sites for office, light industrial, distribution, and manufacturing uses have been generally identified. The sites are large enough to support these types of uses, and, such uses, if developed properly, will be compatible with surrounding land use patterns. These uses will be potential revenue generators for the city. The uses also are consistent with plans for the areas in which the sites are located.

Identification of attractive office sites encourages service sector growth in our community. In addition to the downtown area, several prime potential office sites, such as the Polaris development, the Tuttle Crossing area, and The Ohio State University, have been identified. These sites are easily accessible from freeways and can provide amenities such as open space and parking.

The Columbus Comprehensive Plan recommends the following strategies for potential office sites:

- **Improve the visual appearance of the surrounding sites.**
- **Require compatibility with adjacent uses so that the office park environment is protected and the use does not conflict with existing or planned surrounding uses.**
- **Provide infrastructure improvements.**
- **Make these areas easily accessible from freeways.**
- **Provide sufficient parking.**
- **Encourage open space in the office parks.**
- **Provide safe and convenient pedestrian areas with attractive amenities such as paving, lighting, seating, and landscaping.**
- **Offer additional amenities to businesses that would employ a substantial number of employees.**
- **Review existing zoning and undertake, as appropriate, rezoning of sites to protect against less tax productive land development.**

Several potential industrial areas have also been identified. These sites are either in redevelopment areas or in undeveloped areas. The redevelopment areas include the Joyce Avenue Corridor, the Groveport/Corr Road Corridor, the Marion Road Corridor, and the Rickenbacker area. Most of these areas are currently used for light industrial uses. These areas need to be maintained and/or redeveloped to compete with potential industrial sites in the fringe areas. Public incentives such as city financing programs and tax incentives are warranted to attract industries to locate in these areas. Surrounding residential areas need to be incorporated into the planning of these potential industrial areas to protect the neighborhoods' quality of life. These developments should be compatible with adjacent land uses. Provisions should be made to manage the additional traffic generated by these developments so that the existing neighborhoods are not negatively affected. These redevelopment areas will also provide employment opportunities for residents in the surrounding neighborhoods.

The Columbus Comprehensive Plan recommends the following strategies for potential industrial areas in redevelopment areas:

- **Provide infrastructure improvements and financial incentives.**
- **Provide amenity improvements to industrial areas.**
- **Protect the quality of life of surrounding neighborhoods by involving them in the planning of these areas.**
- **Require compatibility with adjacent uses.**
- **Protect existing neighborhoods from significant noise, odor, traffic, and other negative impacts by providing appropriate barriers.**
- **Encourage industries that will provide employment opportunities to residents of surrounding neighborhoods.**
- **Enhance the visual quality of the surrounding physical environment.**
- **Pursue programs of land banking and land assembly.**

Undeveloped areas identified for potential industrial development are primarily located in the fringes of the city. These areas have easy access to freeways, railroads, and/or air transportation. Financing and provision of infrastructure can be used to attract industrial development to these areas.

The Columbus Comprehensive Plan recommends the following strategies for potential industrial sites in undeveloped sites:

- **Provide infrastructure improvements.**
- **Require appropriate buffering to be compatible with adjacent uses.**
- **Provide financial incentives if necessary.**
- **Provide additional incentives to industries that will provide a substantial employment base for the city.**

CHAPTER 8: ENVIRONMENTAL DISTRICTS

ENVIRONMENTAL CONSERVATION DISTRICTS

An area at the extreme western edge of the planning area, generally west of Clover Groft Ditch, south of Hayden Run Road, and north of Broad Street, has been identified as an Environmental Conservation District. The two primary development limitations in the district are hydric soils and the district's proximity to the Big Darby watershed.

Hydric soils have characteristics influenced by exposure to water over extended periods. These soils have severe surface and subsurface drainage problems, resulting in significant development limitations. Hydric soils cover about 16% of Franklin County, but nearly half of the western Environmental Conservation District.

Big Darby Creek, located on the western edge of Franklin County, provides habitat to more than 35 rare and endangered species. It is a designated state scenic river and is under consideration for national scenic river status. Big Darby Creek recently received international attention when it was designated by the Nature Conservancy as one of the dozen last great places in the western hemisphere.

The Nature Conservancy is conducting a Big Darby project to develop a cooperative inter-jurisdictional plan for protecting the watershed. The effort has been rewarded with unprecedented involvement of dozens of agencies and hundreds of individuals. In cooperation with the Nature Conservancy, Metro Parks is establishing a park along the Big Darby north of I-70, west of Amity Road, and south of Scioto-Darby Creek Road.

While great strides have been made to protect the Big Darby, risks to the watershed still exist. Gradual land use changes from agriculture to residential and light manufacturing have caused a slight downward trend in the biological diversity of the stream. It is of the utmost importance that the Big Darby Watershed be protected from further degradation.

It is the recommendation of the Columbus Comprehensive Plan that the city of Columbus:

- **protect the district from inappropriate uses.**
- **discourage development in the district.**
- **not extend the Big Run subtrunk or any other centralized sewer facilities to serve any portion of the district.**
- **not extend water distribution facilities into the district.**
- **support the efforts of Brown and Prairie Townships to preserve open space and discourage high density development within the district.**
- **support the creation of a Metro Park along Big Darby Creek in Brown Township.**
- **cooperate with current and future efforts to preserve the environmental quality of the Big Darby watershed.**

NOISE OVERLAY DISTRICTS

Exposure to high noise levels can have a variety of health implications. Proper noise abatement measures in and around noise-generating sources such as airports, industries, and freeways can reduce this impact. Noise sensitive land uses, such as residential areas, hospitals, nursing homes, and schools should be directed away from noise sources.

An effective way of managing the built environment within noise sensitive areas is by the use of a noise overlay district. This type of district places additional requirements onto existing zoning within a given geographic area. The noise overlay district establishes land use and development requirements within certain noise sensitive areas based upon the level of noise exposure, land use patterns, roadway patterns,

and topography. Within each specific noise sensitive area, land use activities are managed to ensure that noise sensitive land uses are properly placed to protect the public health. Land uses that are extremely sensitive to certain noise levels are not permitted within a given area.

The Columbus Comprehensive Plan recommends the following strategies for lessening the impact from noise generated from airports. These recommendations apply to uses within the current 65 Ldn noise contour, which is the area designated by the Federal Aviation Administration where noise sensitive uses should be prohibited.

- **Prohibit the development of noise sensitive uses on undeveloped land.**
- **Require soundproofing for any new noise-sensitive uses.**
- **Require soundproofing for major remodeling projects that may have buildings that contain noise-sensitive uses.**
- **Amend subdivision regulations to require the dedication of noise and aviation easements and notice on recorded plats of potentially high noise levels.**
- **Mandate sellers of property and their authorized agents to notify potential buyers that homes may be impacted by aircraft noise.**
- **Encourage Development Commission and City Council to consider airport noise and land use compatibility needs when reviewing development proposals, special use and variance applications, and rezoning requests.**
- **Encourage developers to dedicate noise and aviation easements to the airport for developments close to the airport, even if the development is outside the regulatory boundary.**
- **Acquire easements over vacant properties close to the airport that are impacted by aircraft noise.**
- **Acquire noise and aviation easements from existing homes impacted by noise.**
- **Encourage residential areas eligible for soundproofing assistance to combine this assistance with any rehabilitation assistance for which they are eligible.**

The Columbus Comprehensive Plan recommends the following strategies for lessening the impact of noise generated from industries and freeways. These recommendations apply to noise sensitive uses exposed to noise levels that exceed 67 Leq.

- **Encourage appropriate buffering that reduces the noise and visual impact of industries and freeways located close to noise sensitive uses.**
- **Require soundproofing for new noise sensitive uses adjacent to industries and freeways.**
- **Require soundproofing for the remodeling of any major projects that may have any noise-sensitive uses and are adjacent to freeways and industries.**
- **Require sellers of property and their authorized agents to notify potential buyers that their homes may be impacted by noise.**
- **Prohibit the development of noise sensitive uses adjacent to industries and freeways.**
- **Consider noise and land use compatibility needs when reviewing development proposals, special use and variance applications, and rezoning requests.**

SCENIC GREENWAYS DISTRICTS

The character of a city is defined by the manner in which it relates to its natural environment. Cities are known for ocean harbors, mountains, lakes, beaches, and valleys. Columbus is not blessed with spectacular natural features; however, there is an abundance of rivers. Five major waterways and several tributaries flow through the Columbus Comprehensive Plan planning area. Major waterways include the Scioto River, Olentangy River, Alum Creek, Big Walnut Creek, and Blacklick Creek. Big Run, Hellbranch Run, Hamilton Ditch, Clover Graft Ditch, and Rocky Fork Creek are among the significant tributaries. These waterways have a great impact on the environmental, recreational, cultural, aesthetic, and economic quality of Columbus.

Columbus, like many other cities, has not taken full advantage of its river corridors. Public access to most rivers is limited. Illegal dumping and development have resulted in degradation of water quality. Soil

erosion and poor sediment controls have further harmed the waterways. Rather than being protected and enhanced as important natural pathways through the community, rivers often serve more as neglected alleys.

CURRENT STATUS OF RIVER CORRIDORS

The majority of property adjacent to rivers is privately owned. The 1974 “Watercourse Plan for Columbus and Franklin County” recommended that all waterways in Franklin County be protected as natural corridors. The Columbus Recreation and Parks Department has sought to do this by acquiring property and easements through purchase, donation, and negotiation. City land ownership and easement possession is highest along the Scioto River north of its confluence with the Olentangy River, Olentangy River, and, to a lesser extent, Alum and Big Walnut Creeks. Progress in acquiring land has been slow, due to a lack of funding.

Although boating is permitted on all Columbus rivers, land passage is not. Currently, large portions of most Columbus rivers are inaccessible to the public, due to the high incidence of private property ownership. Many neighborhoods located next to river corridors are effectively shut off from the waterways.

Columbus’ rivers vary widely with respect to their natural state. The Scioto River between Griggs Dam and its confluence with the Olentangy River is very natural. The Olentangy River north of Tuttle Park and several sections of Big Walnut Creek are also quite natural. Conversely, the Olentangy River south of Tuttle Park, Scioto River south of downtown, and parts of Alum Creek are quite developed.

The Ohio Environmental Protection Agency (OEPA) regularly tests Columbus rivers for pollution levels. Results from recent testing were provided to the Columbus Waterways Task Force, a committee seeking to develop management plans for all Columbus Waterways. The rivers were rated as having exceptional, good, fair, or poor water quality. Fair or poor water quality does not meet OEPA target standards.

The Scioto River was rated excellent and good north of downtown, but fair and poor south of downtown. The Olentangy River was determined to have exceptional and good water quality north of Henderson Road, but only fair water quality further south. Alum Creek was judged to have fair water quality, while Big Walnut Creek received a good rating. Blacklick Creek was generally rated good. However its water quality is beginning to experience degradation due to nearby development. Typical causes for poor water quality include the overflow of combined sewers, urban runoff, sediment accumulation, and sewage plant discharge.

ROLE OF GREENWAYS

Greenways fulfill a variety of functions. Some may emphasize active recreation, while others may provide for more passive recreation. Different rivers present unique opportunities with respect to their natural features and location in the city. Greenways function as:

NATURAL BARRIERS

Perhaps the most important role of greenways is to protect the river by acting as a buffer between the river and the built environment. Natural buffers help to shield the river from harmful sediment accumulation. They also filter chemicals from nearby lawns, parking lots and fields.

PUBLIC ACCESS

Another important role of greenways is to provide direct public access to river corridors from adjacent neighborhoods. Tributary greenways provide further linkages to major waterways from more distant neighborhoods.

NATURAL HABITAT

Greenways provide habitat for plants and wildlife. This is particularly important in an urban setting, where few natural areas exist.

TRANSPORTATION CORRIDORS

Bike paths are probably the most well known component of greenways. Bike paths provide an important transportation alternative. They connect neighborhoods, parks, employment centers, schools, and shopping opportunities. The natural setting of greenways is ideal for recreational riding. Bike paths are used extensively for walking and running. They also provide a buffer between the river and the built environment and vehicle access for greenways maintenance.

SCENIC CORRIDORS

Rivers form green bands of landscape through even the most developed portions of the city. Greenways increase the property value of adjacent property and provide excellent views.

RECREATION OPPORTUNITIES

In addition to bike paths, greenways offer a wide variety of recreational opportunities. Greenways connect parks of all sizes and types. Neighborhood parks are connected to community parks with recreation centers and other community facilities. Fishing, hiking, and nature education are other recreational aspects of greenways. Many greenways are used as canoe trails.

GREENWAYS RECOMMENDATION

It is the recommendation of the Columbus Comprehensive Plan that Columbus develop its river corridors as a system of greenways, containing a mix of cultural, natural, recreational, and transportation opportunities.

Greenways would help to achieve several of the Columbus Comprehensive Plan Goals:

- **Reserve and protect the natural areas of Columbus for appropriate recreational uses.**
- **Increase and maintain recreational sites and facilities.**
- **Maintain and improve the environmental quality of Columbus.**
- **Protect, expand, and enhance the natural features of Columbus.**
- **Promote the greening of Columbus.**
- **Provide Columbus with a balanced, coordinated transportation system which enables individuals and goods to move safely, efficiently and affordably.**

LAND ACQUISITION AND PRESERVATION

Greenways corridors should extend about 120 feet from either bank, but this is not always possible. A minimum of twice the river's width should be obtained on either side of the river. Tributary greenways could be much narrower, 50 feet or less on either bank.

- **It is the recommendation of the Columbus Comprehensive Plan that in order to successfully implement a greenways system, Columbus use a variety of land acquisition and preservation techniques, including, but not limited to:**

FEE SIMPLE PURCHASE

Fee simple purchase is usually the most effective form of land acquisition and control as well as the most expensive. This method should be used only when other acquisition techniques are unavailable. It is particularly appropriate in the most sensitive areas or when an additional use, such as a park or school, is desired for the property. Much of the land that would be used for greenways is located in floodplain and has limited development potential.

MANDATORY DEDICATION

The city should require mandatory dedication of riverfront property for all new subdivisions adjacent to waterways. This benefits the city and the subdivision residents who will have access to the greenways system. This dedication would also provide land upon which a neighborhood park could be built.

EASEMENT PURCHASE OR DONATION

Easements are a popular tool for greenways development. They can be purchased, donated, or negotiated in the process of rezoning or subdivision review. They allow the property owner to obtain income and receive

estate and property tax benefits, while providing the holder with a low cost form of land acquisition. Columbus currently has easements on several waterways, which generally allow for public access and the development of such things as bike paths. Liability, maintenance, and enforcement can be problems in the use of easements. The city does not currently have enough staff to monitor easement holdings.

DONATION

Columbus has received a significant amount of land in the past through donation. Land donations often provide tax benefits to the property owner. The establishment of a greenways program may serve as an inducement for such donations. A possible source of donated land is wetlands mitigation. Developers filling wetlands sites of more than one acre are required to mitigate the loss by creating wetlands elsewhere. Through coordination with the U.S. Army Corps of Engineers, it may be possible to direct some of the mitigation sites to greenways.

RESTRICTIVE COVENANT

In instances where the preservation of land in a natural state is desirable, but public access is not needed, restrictive covenants may be appropriate. Restrictive covenants are limitations placed on a property title or lease. Such limitations could require that the property remain undeveloped. The burden of maintenance remains with the property owner. Restrictive covenants have been used in many communities to preserve farmland.

GREENWAYS PRIORITIZATION

- **It is the recommendation of the Columbus Comprehensive Plan that those rivers or sections of rivers currently in the most natural state receive the highest priority for greenways resources.**

The development of greenways will be a slow and deliberate process. It is therefore important to establish priorities regarding which greenways should be developed first. Those waterways or sections of waterways that are experiencing the highest degree of development pressure should receive the highest priority. Property acquisition and greenways development should proceed on all rivers; however, city greenways resources should first be concentrated on preserving the natural quality of the most threatened waterways.

GREENWAYS ZONING OVERLAY

- **It is the recommendation of the Columbus Comprehensive Plan that a greenways zoning overlay be established including the following elements:**

AESTHETIC CONSIDERATIONS

To maintain the scenic quality of greenways, restrictions should be placed on billboards, on-site signage, and lighting.

LANDSCAPING RESTRICTIONS

Mature vegetation provides an important buffer between rivers and the built environment. Mature vegetation should be maintained on public and private property. While forest undergrowth is not always ideal, it plays an important role in filtering stormwater run-off. Chemical treatment and manicured lawns should be prohibited within the greenways.

DEVELOPMENT RESTRICTIONS

In order to preserve the natural condition of river corridors, any development allowed to occur within the greenways zone must be of a compatible nature. It should be of generally low density, incorporate extensive open space, and not infringe on the public's physical or visual access. Soil erosion and sediment control regulations should be adopted to ensure that construction near greenways does not result in the degradation of water quality.

CITY POLICIES

- **It is the recommendation of the Columbus Comprehensive Plan that the following city policies be implemented:**

LAND ACQUISITION

When the city of Columbus needs land for a facility, first consideration should be given to purchasing land adjacent to a river corridor, provided the desired facility is compatible with greenways. This would allow part of the property to be used for the original purpose, while the remainder could be used as greenways open space. Certain municipal facilities, such as impounding lots, trash shredding stations, and vehicle maintenance facilities should not be located near greenways.

LOWHEAD DAMS

Lowhead dams can cause dangerous water conditions and prevent fish from moving along river corridors. They also interrupt canoe passage. Whenever possible, lowhead dams should be removed. Where it is not possible to remove dams, their negative impacts can be lessened by the use of man-made boulders. Boulders can lessen the turbulent water flow associated with lowhead dams.

STORMWATER RELEASE

Storm sewers that carry urban runoff should not flow directly into rivers or tributaries. They should first be released into a channel filled with riprap or an artificial wetland. These techniques slow water flow and allow for a reduction in the level of harmful chemicals in the runoff.

RIVERBANK VEGETATION

Wherever city property abuts a river, mature woody vegetation should be maintained as a buffer.

RESERVOIRS

- **It is the recommendation of the Columbus Comprehensive Plan that the reservoirs of Columbus be fully incorporated into the citywide greenway system.**

Columbus has several on-stream reservoirs including Griggs, O'Shaughnessy, and Hoover. In addition to being primary water sources for the city, these reservoirs are regional recreation resources. They are an integral part of the river system in Columbus and should be extended any applicable protection provided to waterways. Special emphasis should be placed on the protection of water quality through natural buffers and stormwater runoff controls.

REGIONAL COORDINATION

- **It is the recommendation of the Columbus Comprehensive Plan that the development of greenways in Columbus be accomplished in coordination with neighboring jurisdictions, Metro Parks, and Franklin County.**

Because rivers do not observe jurisdictional boundaries, it is essential that the establishment of greenways be coordinated with other local governments and agencies. Issues to resolve include maintenance, signage, operational procedure, permitted uses, funding, and administration. If several municipalities have different regulations for use and maintenance of the greenways, a successfully integrated system cannot be achieved. Similarly, if a bikeway of one municipality does not connect to the bikeway of the next municipality the system's usefulness is diminished. Many of the greenways would go through or near Metro Parks, whose role in the system must be clearly identified.

A greenways commission, made up of members appointed by all involved parties, could help provide coordination by establishing uniform standards and goals. They could provide guidance regarding funding sources and administrative procedures.

WELLFIELD PROTECTION DISTRICTS

Over one fourth of the nation's fresh water comes from Groundwater sources. While reliance on groundwater is greatest in rural areas, many municipalities also rely on this resource. In Ohio, 29% of the population is served by public water supplies that rely on groundwater. As the use of groundwater continues to rise throughout the nation, it will be increasingly important to understand and protect this resource.

Aquifers are saturated rock and soil formations, not unlike underground sponges. They are often part of regional systems much like rivers. Consolidated aquifers typically consist of saturated bedrock such as limestone or sandstone. Unconsolidated aquifers are saturated deposits of sand, silt, and gravel. Aquifers that are covered by impervious formations, such as clay or shale, are called confined, while those covered by unsaturated porous materials are referred to as unconfined. Aquifers are filled or recharged when rainfall percolates through the soil until it reaches the saturated zone. Aquifers can also be recharged by gradual percolation from surface water bodies, such as rivers, ponds, or lakes.

GROUNDWATER USE IN COLUMBUS

Columbus has four main sources of water. Hoover, O'Shaughnessy, and Griggs Reservoirs are surface water sources, while the South Wellfield is a groundwater source. Water is also occasionally drawn from Alum Creek Reservoir. The wellfield draws from an unconsolidated, unconfined aquifer formed by alluvial deposits in the ancient buried Teays River valley.

The South Wellfield produces over 19 million gallons of water per day, or about 15 percent of the system-wide total production of 131 million gallons per day. "Water Beyond 2000," a comprehensive water treatment and supply feasibility study conducted by the Columbus Division of Water, projected a system-wide demand of 175 million gallons per day by the year 2010. The current safe yield of all Columbus water sources is 137 million gallons per day. To meet this increased demand, existing sources must be expanded and/or new sources developed, including new wellfields.

COMMON THREATS

Potential threats to wellfields include those that affect both the quality and quantity of groundwater resources. A leaking underground fuel tank can contaminate an aquifer and degrade the water quality. Covering large surface areas of a wellfield with impervious land cover will also harm the wellfield by hindering its recharge ability.

Impairment of groundwater quality can be extremely expensive or even impossible to remediate. Wellfield contamination also poses severe health problems for the service area population. Common groundwater contaminants include nitrates, petroleum products, paint, pharmaceutical products, bacteria, lead, mercury, and various salts. There are thousands of substances currently regulated by groundwater protection legislation. While the list of potential organic and inorganic contaminants can be overwhelming, the various sources of contamination are more easily enumerated. Potential contamination sources include agricultural threats such as animal waste, pesticides, and herbicides. Other sources include waste disposal practices, hazardous materials storage and handling techniques, oil and gas production and transmission, and mining and drilling practices.

Threats to the recharge capability of wellfields are as serious as those that affect water quality. The long term viability of any groundwater source depends on its ongoing recharge. Any activity that will hinder the ability of surface water to percolate into the aquifer can cause a drop in water level and thus pose a threat to the aquifer.

EXISTING LAND USE

Land use in the South Wellfield is predominantly agricultural, although sand and gravel quarries also cover a large area. Other land uses within the wellfield include a housing subdivision, scattered residential sites, a horse-racing track, two gasoline service stations, and several small retail businesses. Two sewer mains and a jet fuel pipeline run through the wellfield area.

IMPACTS OF EXISTING LAND USE

Contamination threats of existing land use include septic tanks, animal waste, fertilizers, herbicides, insecticides, underground fuel tanks, and road salt. Excavating and quarrying can affect recharge potential and risk exposing the aquifer. After quarries are fully excavated, they are typically filled with water. The bottoms of these quarry lakes can become covered with silt and fine clay particles that form an impervious surface. The result is that the land is no longer available as a recharge area. Vehicles represent potential contamination sources, both with respect to their own fuel tanks and any hazardous cargo they might carry.

Interstate 270, which runs just north of the South Wellfield protection area, is a designated hazardous cargo route. The fuel pipeline and sewer mains also pose contamination threats.

WELLFIELD PROTECTION ORDINANCE

Columbus City Council has passed legislation that provides for the protection of Columbus' wellfields from substances that could harm the quality of the water. Known as the Wellfield Protection Program (Chapter 1115, Columbus City Codes, 1959), this legislation is designed to reduce and/or eliminate the potential for contaminating the alluvial aquifer, thereby ensuring that Columbus has a safe supply of drinking water.

As Columbus begins implementation of this program, the Ohio Environmental Protection Agency, as required by the 1986 Amendments to the Safe Drinking Water Act, is formulating its own Wellhead Protection Program to serve as a guide for communities that use a groundwater source for their drinking water.

The outermost boundary of the wellfield is defined by the 5-year time-of-travel line for contaminants moving through the aquifer towards the producing wells. All lands within this boundary, regardless of use, must comply with the provisions of Chapter 1115. This law regulates the use of approximately 2500 substances, such as petroleum products, agricultural chemicals, and hazardous wastes. All users of these regulated substances must submit an Environmental Audit, detailing their storage and handling practices. Upon approval, users will receive an annually renewable permit to use those substances within the wellfield.

Chapter 1115 also includes provisions for the quarrying of industrial materials to ensure that such practices have no harmful effects on groundwater quality or quantity. To determine what effect quarrying or other land uses have on the aquifer, a system of monitoring wells has been installed.

The Columbus Division of Water employs a Wellfield Coordinator who is responsible for implementing and administering the Wellfield Protection Program. The coordinator is also involved in the review of development plans proposed for the wellfield area, and is responsible for ensuring that new and existing land uses will have minimal effect on the groundwater.

WELLFIELD PROTECTION RECOMMENDATIONS

The Columbus Comprehensive Plan has identified the importance of protecting the city's groundwater resources. While the wellfield protection ordinance is a significant tool in the protection of the city's groundwater resources, land use controls and other planning tools can provide further protection for existing and future wellfields.

- **It is the recommendation of the Comprehensive Plan that the following strategies be used, where possible, to complement the wellfield protection ordinance in protecting existing and future city wellfields.**

ZONING CONTROLS

It is important that zoning in existing and future city wellfields reflect their importance as a water source. While all land uses can constitute some threat to aquifers, some land uses such as manufacturing pose more of a threat than others. Much of the South Wellfield is unincorporated. As unincorporated land is annexed and new wellfields are established, preference should be given to zoning categories which allow only low to moderate risk land uses.

As provided in the wellfield protection ordinance (Chapter 1115, Section 12(A)(9)), the Public Utilities Department should be involved in establishing land use restrictions for city wellfields. Zoning and other land use restrictions should be done in conjunction with wellfield geologic assessments. Those portions of wellfields most sensitive to groundwater contamination should have the most restrictive zoning. Land uses that do not conform to new zoning should be discontinued after a sufficient amortization time has passed.

RETENTION OF PUBLICLY OWNED LAND

Columbus should retain all city-owned land in the wellfield. The city should also acquire land owned by other governments or not-for-profit agencies before it is placed on the open market.

LIMIT INFRASTRUCTURE AND SERVICE IMPROVEMENTS

Development requires the support of infrastructure. By limiting infrastructure and service improvements in wellfield protection areas, the city can limit the intensity of development that occurs there.

CAPITAL IMPROVEMENTS PROGRAM COORDINATION

Any capital improvements that occur within wellfield protection areas should be screened by appropriate departments and divisions to ensure compatibility with the wellfield.

UNINCORPORATED LAND

Columbus should pursue annexation of unincorporated portions of the South Wellfield and any future wellfields in order to have more direct land use control. In lieu of annexation, Columbus and Franklin County should develop a cooperative agreement regarding land use controls in the wellfield protection area. Suburban communities and other counties impacting city wellfields should also be involved in multi-jurisdictional agreements.

SCIOTO RIVER GREENWAY

The Comprehensive Plan recommends that the rivers of Columbus be developed as a series of interconnected greenways. Given the nature of wellfields, this goal is particularly appropriate for the Scioto River. Most of the greenway would be located within the extensive Scioto River floodplain. The greenway would act as a buffer, screening the river from soil erosion as well as providing a habitat for plant and animal life. The greenway could also include bike and canoe trails. Interest has been expressed in developing a regional riverfront park south of downtown. The city should consider extending the park system along the Scioto into the aquifer protection area. Parks and greenways should remain a high priority for land use in any wellfield protection areas identified in the future.

RAVINE PROTECTION DISTRICTS

Columbus offers little in the way of dramatic topography. Even slight variations in land form provide interesting visual diversions. Ravines are among the most important local topographical features. Ravines, in various states of natural condition, exist throughout the city, typically running east-west from major waterways. Some neighborhoods, such as Clintonville and the University area, have an abundance of ravines which provide unique housing sites, recreational opportunities, open space, and habitat for plants and animals. Equally important is the role ravines play in the natural drainage system. Stormwater from surrounding neighborhoods drains into ravines and flows to nearby waterways.

While ravines play many important roles in the urban landscape, they are often neglected and misused. Land use and development controls seldom include sufficient consideration of natural features as a development factor. The result, in many cases, has been a significant degradation of the natural environment. Ravines are no exception to this trend. The stability of many of the city's ravines is being threatened by increased development.

Development, adjacent to and in some cases within the ravines, has caused problems pertaining to stormwater runoff and erosion. These problems have led to the destruction of many ravine ecosystems. As development occurs, the amount of impervious cover, in the form of buildings, streets, and parking lots, increases dramatically. This results in substantial increases in the speed and amount of stormwater runoff, which can overload ravine stream bed capacity and hasten erosion. Many ravines are treated like drainage ditches, stripped of mature vegetation.

Ravines are further threatened by improper construction and landscaping practices that lead to hillside erosion. In the most extreme cases, ravines have been obliterated by infill and grading. This continues to occur in ravines throughout the city. Ravine-front lot splits have resulted in numerous homes being built

within ravines. The process of construction and the existence of a permanent structure within the ravine has a disrupting effect; earth is moved, erosion occurs, and mature vegetation is destroyed. Ravine homes often have driveways and culverts that cross streams. These are often poorly maintained and obstruct stream flow because of trapped debris. The proliferation of homes being built in ravines may eventually negate the aesthetic, environmental, and hydrological benefits ravines provide.

Woodland plants, which provide natural habitat, temperature moderation, and oxygen, also play a crucial role in erosion control. The dense undergrowth of roots, mature vegetation, and fallen leaves and branches filters and reduces the speed of stormwater runoff. Much of the water is retained by the vegetation. Forestation also helps to prevent landslides by stabilizing the ravine walls with root systems.

The removal of mature woodland vegetation from ravines is a significant cause of increased erosion and sediment volumes in streams and major waterways. Housing built within ravines has a particularly negative impact. Mature vegetation is removed and replaced with buildings, driveways, and lawns. This causes an increase in stormwater runoff and a reduced capacity to accommodate it. Homes built on the edge of ravines with lawns extending into the ravine can have the same effect.

- **It is the recommendation of the Columbus Comprehensive Plan that a protective zoning overlay be developed for ravines.**

One way that environmentally sensitive areas can be protected is through a zoning overlay. Overlays are designed with specific guidelines to protect a particular resource or type of resource. It is not a rezoning, but adds a layer of requirements to ensure that any development that occurs is of a compatible and environmentally sensitive nature. A zoning overlay or district to protect ravines should address those things that pose the most significant threats to ravine stability. The overlay should include all land inside the steeply sloped walls of the ravines and any parcels contiguous with the top of any ravine hillside. At a minimum, the ravine protection overlay should include the following general elements with specific standards and requirements as appropriate:

RAVINE IDENTIFICATION

A survey should be conducted to identify all ravines within the city upon which the overlay should be applied.

IMPERVIOUS SURFACE LIMITATIONS

The use of impervious surfaces should be minimized.

LANDSCAPING RESTRICTIONS

The maintenance of mature woodland vegetation in ravines should be encouraged, while landscaped lawns should be minimized.

GRADING, SHAPING, AND INFILL CONTROLS

A Ravine Protection District should include requirements that development be oriented in such a way as to minimize necessary grading and site preparation. Infill should be prohibited.

Terracing and excessive padding should be minimized. The land form should change as little as possible.

CONSTRUCTION PROCESS GUIDELINES

It is important that development projects be completed quickly and with as little disruption of the ravine as possible. Removal of existing native vegetation should be minimized and proper techniques used to prevent soil erosion and landslides.

DRIVEWAY AND CULVERT LIMITATIONS

Driveways and culverts crossing the ravine stream beds should be prohibited.

SLOPE RESTRICTIONS

In order to prevent erosion and landslides, development should be prohibited on steeper portions of ravine walls.

RUNOFF STANDARDS

All runoff from impervious surfaces should be channeled into tiles, storm sewers, swales or stream beds, rather than being released onto ravine walls. Increases in overall runoff should be minimized.

ENVIRONMENTAL IMPACT REPORTS

The Ravine Protection District should delineate circumstances under which the city may require a property owner or developer to submit engineering, hydrologic, and geologic reports.

CAPITAL IMPROVEMENT COORDINATION AND REVIEW

It is important that the city coordinate capital improvements so that they have the least negative impact on ravines. The city should observe the same restrictions that are placed on private landowners.

- It is the recommendation of the Columbus Comprehensive Plan that ravines be fully integrated into the city's greenway system.

The Columbus Comprehensive Plan recommends that the city develop a system of greenways incorporating the area's major waterways and tributaries. Because the major waterways of Columbus run north and south, ravines provide important east-west connections between and among larger greenways. Some ravines, such as Walhalla and Overbrook, already function well as greenways. They have public access and some parkland. Other ravines are totally under private control.

The city should pursue ownership or control of the most significant portions of the city's ravines. This can be accomplished by purchase or acquisition of easements or property rights. Parkland within the ravines should be maintained in a predominantly natural state. Bikeways and walking paths should be constructed through the ravines and public access points should be provided where possible.

CHAPTER 9: RECOMMENDATIONS OUTSIDE THE SCOPE OF THE PLAN

There are a number of activities, situations, and conditions, that, while outside the scope of the Columbus Comprehensive Plan, deserve recognition by other organizations and in other arenas.

STORMWATER MANAGEMENT

The Columbus Comprehensive Plan makes recommendations concerning stormwater management within the city of Columbus. However, stormwater management transcends jurisdictional boundaries. To help encourage appropriate multi-jurisdictional approaches to the issue of stormwater management, the following additional recommendations are made.

- **The Columbus Comprehensive Plan recommends that:**
- **the Columbus Stormwater Management Advisory Committee continue to study and address the issue of stormwater treatment and compliance with emerging federal and state environmental mandates.**
- **government officials and interested organizations and individuals throughout central Ohio encourage state legislation promoting establishment of innovative regional solutions to stormwater management problems through creation of stormwater districts, utilities, or other cooperative arrangements.**
- **the Development Committee for Greater Columbus and the Mid-Ohio Regional Planning Commission encourage continued dialogue to promote cooperation on issues related to stormwater planning and management.**

INTERCITY PASSENGER RAIL TRANSPORTATION

The prospect of fast, efficient passenger rail transportation connecting the three largest metropolitan areas in Ohio, with connections to points beyond, continues to spur the imaginations of travelers, transportation planners, and entrepreneurs throughout the state. To many, the idea of a comfortable, reliable alternative to long-distance automobile transportation is appealing. The primary obstacle is funding.

The Ohio Railway Organization, an international consortium whose intent is to build a high-speed rail system between Cleveland, Columbus, and Cincinnati, has outlined preliminary plans for construction of a system comprising 260 miles of track and nine stations. The \$3.1 billion capital costs, to be garnered from public and private sources, would be spread over a five-year construction period. Annual operating and maintenance costs are estimated at \$61 million while annual operating revenues are estimated to be \$88 million if the system were in operation today. The plans include a downtown Columbus station and one on Columbus' north side.

Other less ambitious proposals for "3C" passenger rail linkages include expanded Amtrak service or conventional rail service by another carrier at costs estimated at between \$15 and \$25 million. Conventional rail could generate a pattern of passenger rail patronage prior to more substantial investment for a high-speed system. A likely Columbus station site is near the new convention center.

Columbus Comprehensive Plan goals encourage the city's preparation for participation in regional and national transportation linkages and fostering balance and coordination in the transportation system. While the city of Columbus has limited ability to further a specific proposal, it is able to promote the general concept of "3C" rail and minimize actions which preclude its development within the Columbus 2010 Planning Area.

The Columbus Comprehensive Plan recommends that the city of Columbus:

- **discourage development that threatens to preclude the use of passenger rail corridors for “3C” rail linkages or other valid public purposes.**
- **reserve sufficient land adjacent to potential corridors for future joint public-private development as railway stations and multi-modal transportation terminals.**
- **assist in the coordination of regional highway infrastructure and public transportation services to complement passenger rail and other beneficial intercity transportation options.**
- **monitor and support state and federal initiatives which advance the prospects of successful intercity passenger rail operations, including responsible funding proposals.**

WATER SUPPLY

Phase One of the Comprehensive Water Treatment and Supply Study (Water Beyond 2000) identified twenty water supply alternatives including six groundwater options, ten surface water options, and four conjunctive use options which allow for a combination of surface water and groundwater resources. In Phase Two, seven potential water system alternatives were identified for further study. The Northwest Carbonate Aquifer was excluded due to poor water quality. Others were excluded from further analysis not because they are poor sources but because they would not likely provide the quantities of raw water required by the Columbus system at the present time. The water supply alternative recommended in Phase Three include expansion of the existing South Well Field and upground reservoirs along the Scioto River northwest of Columbus. A number of water supply alternatives initially identified and subsequently eliminated by the Water Beyond 2000 study team are located outside the Columbus 2010 Planning Area. They are, nonetheless, important to Columbus and all of central Ohio because they may at some time be needed to support development in the region.

The Columbus Comprehensive Plan recommends that all central Ohio jurisdictions protect potential water sources of acceptable quality from encroachment and contamination through:

- **protecting groundwater aquifers by regulating land uses and the use of potentially damaging materials.**
- **limiting or prohibiting activities that may reduce the recharge capabilities of groundwater aquifers.**
- **limiting or prohibiting permanent development within stream valleys which may later be inundated to create onstream reservoirs.**
- **preserving appropriately sized and located level areas for potential future development of upground reservoirs.**

OUTER-OUTERBELT

In recent years, as urbanization in central Ohio has spread beyond I-270 and portions of that roadway have become congested, interest in a new circumferential highway has surfaced. Due to the magnitude and complexity of the project and a variety of constraints on the physical development of the city of Columbus, it is unlikely that such a roadway would pass through incorporated Columbus during the 20-year time frame of the Columbus Comprehensive Plan. The Columbus Comprehensive Plan has not, therefore, directly considered the concept.

However, the prospect of a new superhighway circling central Ohio has serious implications for Columbus residents and business interests. Just as I-270 drew development away from central areas resulting in lower densities along the urban fringe, another ring highway would promote a continuation of that trend. While Columbus was able to secure a sizable portion of growth spawned by I-270, that would not be likely in the case of an outer-outerbelt.

Columbus Comprehensive Plan goals prompt serious questions about the benefits and costs to Columbus residents and taxpayers of a new circumferential limited-access freeway. Included are goals encouraging a

balanced, coordinated transportation system, a strong downtown, and revitalization of Columbus neighborhoods.

The Columbus Comprehensive Plan recommends that the city of Columbus strongly oppose construction of an outer-outerbelt.

The Columbus Comprehensive Plan recommends that the Mid-Ohio Regional Planning Commission, the Ohio Department of Transportation, and public officials in Franklin and surrounding counties:

- **carefully consider the variety of potential impacts associated with the proposed project on Columbus and other centrally located jurisdictions in the region.**
- **analyze and weigh the capital and operational costs of an outer-outerbelt in light of changing federal and state funding programs and priorities as well as alternative uses for these public dollars, including public transit and rehabilitation of existing roadways.**
- **evaluate the long-term environmental impacts of the proposed project.**

AFFORDABLE HOUSING

The issues of housing affordability and proximity of affordable housing to employment locations are inextricably linked. The Columbus region offers a wide variety of housing types and affordability levels and a wide variety of employment opportunities at various pay scales. There is, however, a significant gap in the linkages between the two, particularly regarding housing affordable to low- and middle-income people and employment locations. The Columbus Comprehensive Plan encourages mixed-income neighborhoods and the further development of employment locations in central city locations. Many fringe and suburban sites, however, contain employment locations. Therefore, the issue of affordable housing and its connection to employment locations is a regional one.

It is the recommendation of the Columbus Comprehensive Plan that:

- **the Mid-Ohio Regional Planning Commission undertake a fair share housing plan to assure that affordable housing is provided throughout Franklin County. Such a study, building on the Comprehensive Housing Affordability Strategy for the City of Columbus and Franklin County would target opportunities for all jurisdictions in central Ohio to participate in the provision of affordable housing.**

SCHOOLS

The relationship between Columbus Public Schools and the city of Columbus is a significant one, strengthened by a mutual awareness of the interdependence of many decisions. It has been suggested, for example, that policies of the Columbus Public Schools have caused the drop in single-family home construction experienced in areas of the city of Columbus within the Columbus Public Schools district. It has also been suggested that the city's interest in offering tax abatement as an economic development lure is not beneficial, overall, to the school system. The Columbus Comprehensive Plan recognizes the importance of this relationship and the importance of the Columbus Public Schools to the city's health and vitality.

It is the recommendation of the Columbus Comprehensive Plan that:

- **communication between the city of Columbus and the Columbus Public Schools be improved through creation of a standing committee composed of members of the Columbus Board of Education, Columbus Public Schools staff members, representatives of Columbus City Council and the Mayor's office, and staff members of the Development Department for the purpose of communication on issues of mutual interest.**
- **joint use of property and facilities by the city of Columbus and Columbus Public Schools be encouraged.**

REGIONALIZATION

Due to the broad nature of comprehensive planning, the issue of regionalization of government and/or its facilities has been raised repeatedly in the process of developing the Columbus Comprehensive Plan. Some local government facilities and services are now operated by regional organizations or are regional in function. Among these are the Central Ohio Transit Authority, Mid-Ohio Regional Planning Commission, Metropolitan Parks District of Columbus and Franklin County, Columbus Metropolitan Library, Franklin County Regional Solid Waste Management Authority, the regional operation of the centralized sewer and water systems, and the move toward regional stormwater management.

Because of the recurring debate about the appropriateness and benefits of regional government and, more specifically, regional government in the central Ohio area, it is appropriate to assess its value and likelihood.

The Columbus Comprehensive Plan recommends that:

- **Mid-Ohio Regional Planning Commission and the Development Committee for Greater Columbus undertake a study to determine the degree of local interest in regional government or regional services districts, the potential advantages and disadvantages of regional government and regional services districts in central Ohio, and the steps necessary to create regional government or regional service districts in central Ohio.**

OHIO TO ERIE TRAIL

In 1990, the Ohio Bicycle Advisory Council conducted a feasibility study for a cross-state multipurpose recreation and transportation trail. Since that time, support for the trail has grown to include dozens of recreation organizations and government agencies. As proposed, the 320-mile off-road trail will cross Ohio from Cincinnati to Cleveland, going through Columbus. Most of the trail will be located on abandoned railroad right-of-way. Its uses will include bicycling, horseback riding, hiking, snowmobiling, and skiing. In urban areas, the trail will provide needed open space. Such trails elsewhere provide significant economic benefit from tourism. Funding for construction and maintenance of the trail is to come from a variety of sources including local, state, and federal government agencies and special user groups and agencies. The identification of Columbus as a link in the Ohio to Erie Trail provides an important opportunity for the community. The trail could be integrated into the city's greenway system, providing local residents with access to a statewide recreation and transportation system. The Ohio to Erie Trail would help to fulfill Columbus Comprehensive Plan goals dealing with transportation, recreation, aesthetics, natural resources, and environmental quality.

The Columbus Comprehensive Plan recommends that the city of Columbus:

- **support the development of the Ohio to Erie Trail.**
- **seek to ensure that the trail goes through Columbus.**
- **assist in determining, acquiring, and protecting from encroachment the trail's alignment through the area.**
- **integrate the trail fully into the city's greenway system.**
- **seek to maximize the trail's local utility for recreation and transportation, while not hindering its regional role.**

CHAPTER 10: RELATIONSHIP TO AREA PLANS

The Columbus Planning Division has developed, and continues to develop, a series of area plans that are specific to neighborhoods throughout the city. There are many similarities between area plans and the Columbus Comprehensive Plan. The intent of both is to develop guidelines which provide a framework for decisionmaking in order to safeguard and enhance the quality of life in the designated planning area.

Like the Columbus Comprehensive Plan, area plans address issues such as land use, housing, transportation/circulation patterns, and community facilities and services. Development of most of the area plans has followed a traditional two-year planning effort, similar to that of the Comprehensive Plan, with significant research, analysis, and input from the community. Once adopted by City Council, a plan becomes an official guide for development, redevelopment, and preservation decisions. The plans are, in essence, working reference documents that provide planning guidelines.

The difference between area plans and the Comprehensive Plan lies in the size of the planning area and degree of specificity in the guidelines and recommendations. As the name suggests, the Comprehensive Plan is larger in scope, encompassing a significantly greater land area, and addressing a wider range of issues. The Columbus Comprehensive Plan provides the framework within which the more specific area plans fit.

An important relationship exists between the Columbus Comprehensive Plan and the adopted area plans. They must be consistent with each other in terms of recommendations and terminology, as both are official reference guides for development-oriented issues. Area plans for additional areas of the city will be developed within the citywide framework provided by the Comprehensive Plan.

As of December 6, 1993, area plans adopted since the 1986 return of the Planning Division to the Development Department are:

- **Community Directions (University District): 1987**
- **Planning Overlay: 1987**
- **University District Planning Study: 1991**
- **Amended Planning Overlay: 1992**
- **North Market Plan: 1989**
- **Grant/Washington Discovery District Plan: 1989**
- **Design Guidelines**
- **Northland Plan: 1989**
- **Northland Standards: 1992**
- **I-670 Corridor Development Plan: 1989**
- **Area of Special Control: 1990**
- **Brice-Tussing Area Plan: 1990**
- **PenWest: 1990**
- **Area of Special Control**
- **Franklinton Plan: 1991**
- **West Columbus Interim Development Concept: 1991**
- **Northwest Plan: 1991**
- **Downtown South Plan: 1992**
- **Brewery District Plan: 1993**

GLOSSARY

active recreation: recreational opportunities involving vigorous physical exertion, such as playgrounds, sports fields and courts, golfing, swimming, and hiking.

activity centers: areas where people work, play, shop, and/or congregate.

The American Dream: post World War II neighborhoods characterized by a distinct separation of land uses and grid streets. Single-family homes tend to be very similar and small to moderate in size. Multi-family residential and early auto-oriented commercial centers and strips are present at neighborhood edges.

adaptive reuse: reuse of structures to serve needs of the local community.

affordable housing: housing affordable to persons of low and moderate income.

arterial street: a roadway with some access control used for express, moderate to high speed (usually 35-50 miles per hour) travel within an urbanized area.

automatic response: agreements between local fire departments which stipulate that when an emergency occurs in either jurisdiction, the closest available units automatically respond.

Backyard Living: second generation suburban neighborhoods characterized by similar sets of ranch and split level homes. Low density auto-oriented commercial land uses, including enclosed regional malls, and multi-family residential are also present.

bikeway: any road, path, or way which is in some manner specifically designated as being open to bicycle travel, regardless of whether it is designated for the exclusive use of bicycles or is to be shared with other transportation modes.

collector street: a roadway that carries traffic to arterial streets from residential and commercial areas. Speeds are low to moderate (usually 25-35 miles per hour).

community park: about 30 acres in size, focal point for the surrounding community with a wide range of facilities. Optimum service area is a two-mile radius.

corridor: a generalized alignment along which a street is located. Corridors are either existing or proposed. Existing corridors are those corridors along existing streets. Proposed corridors are those corridors connecting two existing streets.

curb cut: a break in a street curb at a location other than an intersecting roadway to allow ingress and egress to and from abutting property.

drainage basin: the area adjacent to a stream from which surface water flows by gravity to that stream.

easement: permanent or limited right of use obtained by a public agency or public utility from a landowner.

fair share housing: the planned allocation of subsidized housing units to every community within a metropolitan area.

fee simple: direct ownership of real property.

fenestration: the arrangement and proportion of windows in solid wall areas.

floodplain: an area susceptible to flooding by the overflow of a water body.

freeway: a roadway with full control of access, all crossroads grade-separated, and interchanges at major crossroads. Freeways accommodate heavy traffic at high speeds (usually 55-65 miles per hour).

fringe village: self-contained sites offering opportunities for people to live, work, play, shop and attend school in an environment conducive to walking and biking as well as driving.

gravity-fed sewer system: a sewer system designed to collect sanitary sewerage by gravity and deliver it to treatment facilities without use of pumping stations and force mains.

greenway: a natural corridor, typically consisting of a waterway and adjacent land. Provides opportunities for recreation, natural habitat, and scenic vistas.

grubbing: the clearing of land by removing roots and stumps.

high density residential: densities of 6 dwelling units or more per acre (including apartments).

hydric soils: soils with characteristics influenced by exposure to water over extended periods. Typically exhibit significant drainage problems.

In City Estates: characterized by single-family homes oriented to natural features, such as ravines, waterways, and forests.

infrastructure: the permanent installations which provide the services required by urban society including, but not limited to, transportation facilities, water and sewer services, and electricity and street lights.

interceptor sewer: a sewer pipe, usually large, which carries wastewater to a treatment facility.

interconnector sewer: the large (13 feet in diameter) sanitary sewer connecting the Jackson Pike and Southerly Wastewater Treatment Plants.

land assembly: acquisition of several separate properties, usually contiguous, into a single development tract.

land banking: acquiring land for future use, usually by a public body or agency.

leapfrogging: process in which development “jumps over” vacant land at the immediate urban fringe or within developed areas in favor of land farther out.

Ldn (day-night equivalent sound level): energy-averaged equivalent sound level (Leq) for 24 hours, adjusted to include a 10 dB penalty for noise exposures during night-time hours (10 p.m. to 7 a.m.).

Leq (equivalent sound level): an energy summation of the aggregate noise environment as measured in A-weighted sound level. Stated simply: the equivalent steady state sound level which would contain the same acoustic energy as the time-varying sound level during the same period.

level-of-service: in roadway system analysis, a measure of a street intersection’s capacity or its ability to carry traffic in terms of the average stopped delay per vehicle for the different movements within an intersection.

local street: a roadway that provides direct access to residential, commercial, industrial or other abutting land uses. They also provide for local traffic movements. Speeds are low (usually 25 miles per hour).

lowhead dam: dam located along a waterway and designed to create shallow pools for dilution of incoming waste or stormwater.

mainline section: that portion of a street lying between intersecting streets.

mandatory dedication: required transfer of land by deed or easement to a government agency for public use.

manufactured homes: single-family pre-fabricated homes set on concrete pads. Single-story, with aluminum and vinyl siding, flat or shallow pitched roofs, and driveways alongside structures.

manufactured housing: characterized by single-family manufactured homes set on concrete pads, often located amongst commercial and industrial land uses.

master metered suburban water service agreement: an agreement between the city of Columbus and a suburban municipality whereby Columbus supplies potable water in bulk to the suburb. The suburb is responsible for water line construction, system maintenance, and customer billing.

median divider: a raised concrete or grass barrier separating opposing flows of traffic; or a painted separation at street grade of no less than four feet in width separating opposing flows in traffic; or a series of painted left turn lanes occurring at all intersections in addition to the through lanes; or a continuously painted opposing left turn lane.

Middle America: first generation suburban neighborhoods characterized by similar ranch and split level homes. Low density auto-oriented commercial land uses, including early shopping centers, are separated from single-family homes by multi-family residential land uses.

mixed use: development including various types of uses, such as residential, retail, office, etc.

multi-modal: pertaining to multiple modes of transportation.

multi-modal station: a terminal designed to serve as a transfer point between different modes of transportation.

mutual aid: cooperative agreements between local fire departments which stipulate that either party will provide emergency assistance to the other upon request. Department receiving assistance must be on the scene before help from the other department may be requested.

neighborhood: a geographic area defined by boundaries within which residents conveniently share the common services and facilities in the vicinity of their dwellings.

neighborhood park: five- to ten-acre park with limited facilities. Often located in conjunction with neighborhood schools. Primary service area is 1/2 mile.

non-contributing structure: a structure not compatible with the majority of surrounding structures and which does not contribute to the predominant nature of the area.

overlay district: regulatory technique which places additional requirements onto existing zoning within a given geographic area.

passive recreation: recreational opportunities oriented toward relaxing, physically undemanding activities, such as picnicking, fishing, and walking.

police cruiser district: the patrol area assigned to one police cruiser or unit. May be patrolled by one or two officers in the same cruiser.

police precinct: a geographic and administrative grouping of several cruiser districts. Commanded by a sergeant and housed in a substation.

recharge area: area which serves as a primary water source for wellfield replenishment. Surface water from rainfall and water bodies percolates through the soil into the aquifer.

regional park: any park with a special and/or citywide appeal. This includes parks as diverse as the Park of Roses and Lou Berliner Sports Park.

regional traffic management: initiation of regional traffic surveillance and control, and development of a regional transportation demand management program.

Renaissance: Columbus' oldest communities, characterized by moderate to large single-family homes, with rear alleys and carriage houses. Churches, schools, stores, and restaurants are integrated into residential areas and located along high density, pedestrian-oriented streets.

restrictive covenant: limitation placed on a property title or lease.

riprap: stones or rocks of varying dimensions placed to form a foundation or wall, usually along the banks of a stream to prevent erosion.

scramble crosswalk: a crosswalk that allows pedestrians to cross in any direction while all vehicle traffic is stopped.

serviceability: ability of an area to be served by infrastructure and community facilities.

service road: a roadway of minimum twenty foot width, generally paralleling the street the function of which is to intercept the vehicles from adjacent property and channel these vehicles to controlled points of egress to the arterial street.

setback: required distance for location of a structure from the perimeter of a property.

special assessment: a tax on property in a specific district that will benefit specifically from improvements to be paid for by the tax, such as sewer or water facilities and streets.

stormwater runoff: water deposited on land by rain or other precipitation.

street canopy: a canopy over the street created by trees on both sides of the street

street scheme: appearance and nature of streets in a neighborhood created by elements such as unique architecture and landscaping.

street-type hierarchy: a means of classifying various types of roadways in terms of function, design, and speed. See freeway, arterial street, collector street, and local street.

streetscape: appearance of a street created by the amenities provided.

tax abatement: concession by a taxing authority under which, for a specified period of time, a property is exempt from local taxes or pays a reduced rate of taxes for that period of time.

traffic management association: a public/private partnership of local government with public transportation providers and major employers in areas of major employment concentration to develop and implement a trip reduction and modal shift program.

traffic management team: an ad hoc association of local public transportation agencies and major employers in a corridor to address a major congestion problem through low-cost roadway and transit infrastructure improvements and the initiation of trip reduction program measures.

traffic operational improvement: a low capital cost project designed to improve capacity and safety on the arterial street system.

trunk main (trunk sewer): one of a set of large pipes which form the branches of the sewer system. It collects wastewater from smaller pipes in a large portion of the community and then discharges it into an interceptor.

tuberculation: the buildup, over time, of mineral deposits and products of corrosion which reduces the carrying capacity of water distribution lines.

Up and Coming: characterized by Columbus' newest neighborhoods, typically single-family subdivisions, with moderate to larger homes and low density auto-dependent commercial land uses.

volume-to-capacity ratio: in roadway system analysis, a measure of a roadway's capacity or its ability to carry traffic in terms of the volume of vehicles on an intersection approach or designated group of lanes serving a particular traffic movement divided by the calculated capacity of the intersection approach or designated group of lanes.

water table: point in the depth of the soil below which it is saturated with water.

The Way We Were: characterized by older moderate to large single-family homes and some duplexes with wide front porches on narrow grid streets. Neighborhood oriented commercial and institutional uses are integrated into the residential areas and located along pedestrian - accessible corridors.

woodlot: tract of land covered by dense growth of trees and undergrowth.

APPENDIX: COLUMBUS THOROUGHFARE PLAN

FREEWAYS

ROADWAY	FROM	TO	CLASS
Airport Connector	I-670	Stelzer Road	F
Columbus-Lancaster Road (US 33)	College Avenue (south of Haddon Rd)	east Planning Area boundary	F
Columbus-Marysville Road	northwest Planning Area boundary	Frantz Road	F
I-270 (Outerbelt)	N/A	N/A	F
I-670	I-70 west of downtown	I-270	F
I-70	west Planning Area boundary	east Planning Area boundary	F
I-71	south Planning Area boundary	north Planning Area boundary	F
I-71 Connector	Fourth Street and Third Street	I-670 at I-71	F
SR 104 (Frank-Refugee Freeway)	I-71	Columbus-Lancaster Road	F
SR 161 (New Albany Freeway)	Westerville Road	east of Babbitt Road	F
SR 315	I-70	between I-270 and Hard Road	F
US 33 Freeway	I-670	Dublin Road	F
US 62	I-270 at I-670	west of Stygler Road	F

NORTH/SOUTH ARTERIALS

ROADWAY	FROM	TO	CLASS
Alton & Darby Creek Road	Broad Street at Alton Road (relocated)	Cosgray Road (extended)	4-2
Alton & Darby Creek Road	Cosgray Road (extended)	Scioto & Darby Creek Road	C
Alton Road	west Planning Area boundary	Broad Street at Alton & Darby Creek Road	C
Alum Creek Drive	London-Groveport Road	Main Street	4-2D
Avery Road	Cemetery Road	Post Road (relocated)	4-2D
Avery Road	Post Road (relocated)	Muirfield Drive	4-2
Babbitt Road	Clark State Road	Morse Road	4-2
Babbitt Road	Morse Road	Dublin-Granville Road	C
Baltimore-Reynoldsburg Road	east Planning Area boundary	Graham Road	4-2
Baltimore-Reynoldsburg Road	Graham Road	Main Street	C
Bixby Road-Rohr Road Connector	Rohr Road	Bixby Road at Groveport Road	C
Brentnell Avenue	Fifth Avenue	Mock Road	C
Brice Road	Winchester Pike	Gender Road	4-2
Brice Road	Gender Road	Main Street	4-2D
Brown Road	Frank Road	Harrisburg Pike	4-2
Busch Boulevard	Dublin-Granville Road	Schrock Road	4-2D
Canal Road	Commerce Street	London-Groveport Road	C
Cassady Avenue	Broad Street	Sunbury Road at Agler Road	4-2
Central Avenue	Mound Street	McKinley Avenue	4-2
Champion Avenue	Marion Road	Frebis Avenue	C
Champion Avenue	Frebis Avenue	Broad Street at Governor Place	2-1
Champion Avenue	Long Street at Governor Place	Mount Vernon Avenue	2-1
Champion Avenue	Mount Vernon Avenue	Joyce Avenue at Leonard Avenue	4-2
Cherry Bottom Road	Johnstown Road	Dublin-Granville Road	4-2
Civic Center Drive	Rich Street at Second Street	Marconi Boulevard (north of Broad Street)	3-1
Cleveland Avenue	Naughten Street at Grant-Cleveland Connector	Westerville Road	4-2D

Cleveland Avenue	Westerville Road	Dublin-Granville Road	4-2
Cleveland Avenue	Dublin-Granville Road	West Main Street (Westerville)	6-2
Cleveland Avenue	West Main Street (Westerville)	Maxtown Road	4-2D
Coffman Road	Tuttle Crossing Boulevard	Post Road	4-2
Coffman Road	Post Road	Brand Road	C
College Avenue	Columbus-Lancaster Road (south of Haddon Road)	Livingston Avenue	4-2
Cooper Road	Westerville Road	Schrock Road	C
Cosgray Road	Alton & Darby Creek Road	Dublin-Plain City Road	4-2
Courtright Road	Winchester Pike at Watkins Road	Refugee Road	C
Courtright Road	Refugee Road	Livingston Avenue	4-2
Davis Avenue	Thomas Avenue	Town Street	2-1
Demorest Road	Grove City Road	Alkire Road (at I-270)	4-2
Demorest Road	Alkire Road (east of Southwestern Road)	Sullivant Avenue	4-2
Dixon Road	Havens Corners Road	Clark State Road at Babbitt Road	C
Dublin Road	Trabue Road	Frantz Road	4-2
Dublin Road	Frantz Road	Glick Road	C
Ebright Road	Groveport Road at Lithopolis Road	Winchester Pike at Shannon Road	C
Elliott Road	Scioto & Darby Creek Road	Hayden Run Road	C
Fairwood Avenue	Refugee Road	Main Street	C
Federated Boulevard	Dublin-Granville Road	Sawmill Road	4-2D
Flint Road	High Street	Lazelle Road	C
Fourth Street	Livingston Avenue	Hudson Street	3-1
Frantz Road	Dublin Road	Post Road	4-2
Front Street	Greenlawn Avenue	Livingston Avenue	4-2
Front Street	Livingston Avenue	Front Street-Marconi Boulevard Connector	3-1
Front Street	Front Street-Marconi Boulevard Connector	Park Street	4-2
Galloway Road	west Planning Area boundary	Hall Road	C
Galloway Road	Hall Road	Broad Street at Hilliard-Rome Road (relocated)	4-2
Gantz Road	Stringtown Road	Home Road at Marlane Drive	4-2
Gantz Road	Home Road at Marlane Drive	Frank Road	C
Gender Road	Lithopolis Road	Groveport Road	4-2
Gender Road	Groveport Road	Brice Road	4-2D
Georgesville Road	west Planning Area boundary	Norton Road	4-2
Georgesville Road	Norton Road	I-270	4-2DS
Georgesville Road	I-270	Broad Street	4-2D
Glenwood Avenue	Mound Street	Broad Street	C
Godown Road	Kenny Road at Francisco Road	Bethel Road	4-2
Godown Road	Bethel Road	Dublin-Granville Road	C
Governor Place	Broad Street at Champion Avenue	Long Street at Champion Avenue	2-1
Graham Road	Baltimore-Reynoldsburg Road	Main Street at Waggoner Road	4-2
Grandview Avenue	McKinley Avenue	King Avenue	4-2
Grant Avenue-Cleveland Avenue Connector	Spring Street at Grant Avenue	Cleveland Avenue at Naughten Street	4-2
Grant Avenue	Livingston Avenue	Spring Street at Grant Avenue-Cleveland Avenue Connector	4-2
Grant Avenue	Eleventh Avenue	Chittenden Avenue	2-1
Hague Avenue	Clime Road at River Bend Road	Trabue Road	4-2
Hamilton Avenue	Broad Street at Parsons Avenue	Spring Street at M.L.K., Jr. Boulevard	C

Hamilton Road	Groveport Road	London-Groveport Road at Bixby Road	C
Hamilton Road	London-Groveport Road at Bixby Road	Refugee Road	4-2D
Hamilton Road	Refugee Road	Livingston Avenue	6-2DS
Hamilton Road	Livingston Avenue	Central College Road at Harlem Road	4-2D
Hamilton Road (Old)	North of Thompson Road	Dublin-Granville Road	4-2
Hardy Parkway	Gantz Road	Frank Road at Brown Road	C
Harlem Road	Central College Road at Hamilton Road	Smothers Road	4-2
Harmon Avenue	Frank Road	Mound Street at Souder Avenue	C
Harrisburg Pike	south Planning Area boundary (at I-71)	Mound Street at Central Avenue	4-2D
Hartford Avenue	Town Street	Broad Street	C
High Street	south Planning Area boundary	I-270 south of Obetz Road	6-2D
High Street	I-270 south of Obetz Road	Main Street	4-2D
High Street	Main Street	Spring Street	4-2
High Street	Spring Street	I-270 at Wilson Bridge Road	4-2D
High Street	I-270 at Wilson Bridge Road	Powell Road	6-2D
Hilliard-Rome Road/Main Street (Hilliard)	Broad Street at Galloway Road	Cemetery Road	4-2D
Hoover Road	London-Groveport Road	Stringtown Road	4-2D
Hoover Road	Stringtown Road	Home Road	4-2
Huntley Road	Dublin-Granville Road	Worthington-Galena Road at Wilson Bridge Road	4-2
Indianola Avenue	Hudson Street	Morse Road	4-2
Indianola Avenue	Morse Road	Lincoln Avenue	C
Industrial Parkway	Dublin-Plain City Road	northwest Planning Area boundary	4-2
Jackson Pike	south Planning Area boundary	I-71 at Frank Road	4-2
James Road	Winchester Pike	Stelzer Road	4-2D
Joyce Avenue	Champion Avenue at Leonard Avenue	Hudson Street	C
Karl Road	Oakland Park Avenue	Dublin-Granville Road	4-2
Karl Road	Dublin-Granville Road	Schrock Road	C
Kelton Avenue	Livingston Avenue	Main Street	2-1
Kenny Road	Fifth Avenue	Kinnear Road	C
Kenny Road	Kinnear Road	Francisco Road at Godown Road	4-2
Kitzmiller Road	Morse Road	Johnstown Road	C
Leap Road	Scioto & Darby Creek Road	Hayden Run Road	C
Leap Road-Walcutt Road Connector	Scioto & Darby Creek Road at Walcutt Road	Leap Road near Lacon Road	C
Lee Road	Ulry Road	Walnut Street	C
Linworth Road	Olentangy River Road north of Bethel Road	Snouffer Road	C
Linworth Road	Snouffer Road	Wilson Bridge Road	4-2
Linworth Road	Wilson Bridge Road	Hard Road	C
Lithopolis Road	southeast Planning Area boundary	Groveport Road at Ebright Road (relocated)	4-2
Lockbourne Road	Commerce Street	London-Groveport Road	C
Lockbourne Road	London-Groveport Road	Livingston Avenue at Miller Avenue	4-2
Maize Road	North Broadway	Oakland Park Avenue	4-2
Maize Road	Oakland Park Avenue	Morse Road	C
Mann Road	Havens Corners Road at Taylor Station Road	Clark State Road	C
Marconi Boulevard	Civic Center Drive north of Broad Street	Front Street via Marconi Connector	3-1
Martin Luther King, Jr. Boulevard	Hamilton Avenue	Mount Vernon Avenue	C

McGuffey Road	Hudson Street	Oakland Park Avenue at Karl Road	C
McNaughten Road	Livingston Avenue	Broad Street	4-2
Miller Avenue	Livingston Avenue	Main Street	2-1
Morrison Avenue	Westbourne Avenue	Hamilton Road	C
Muirfield Drive	Avery Road	Glick Road	4-2
Neil Avenue	Broad Street at Starling Street	King Avenue	4-2
Nelson Road	Main Street	Airport Drive	C
New Albany-Condit Road	Johnstown Road	north Planning Area boundary	4-2
New Scioto Valley Road	Lisle Avenue	Groveport Road	C
Noe-Bixby Road	Winchester Road	Refugee Road (north of Warminster Drive)	4-2
Noe-Bixby Road	Refugee Road (north of Warminster Drive)	Woodcrest Road (south of I-70)	C
Noe-Bixby Road	Livingston Avenue at Woodcrest Road	Main Street	C
Northwest Boulevard	Goodale Boulevard	King Avenue	4-2D
Northwest Boulevard	King Avenue	Fishinger Road at Tremont Road	4-2
Norton Road	west Planning Area boundary	Hall Road	4-2D
Norton Road	Hall Road	Broad Street	4-2
Ohio Avenue	Frebis Avenue	Mount Vernon Avenue	2-1
Old State Road	Lazelle Road	Polaris Parkway	4-2
Olentangy River Road	Goodale Street	Kinnear Road	4-2
Olentangy River Road	Kinnear Road	Henderson Road	4-2D
Olentangy River Road	Henderson Road	Linworth Road	4-2
Olentangy River Road	Linworth Road	Wilson Bridge Road	C
Olentangy River Road	between I-270 and Hard Road	north Planning Area boundary	4-2
Park Street	Front Street	Goodale Street	4-2
Parsons Avenue	London-Groveport Road	Broad Street	4-2
Phillipi Road	Broad Street	Fisher Road	4-2
Pontius Road	south Planning Area boundary	London-Groveport Road	C
Rager Road	Groveport Road	Bixby Road	C
Reed Road	Fishinger Road	Bethel Road	4-2
Reynoldsburg-New Albany Road/Lancaster Avenue	Main Street	Johnstown Road	4-2
Rich Street-Main Street Connector	Main Street at I-71 exit ramp	Rich Street	3-1
Riverside Drive	Trabue Road at Dublin Road	Glick Road	4-2D
Sancus Boulevard	Worthington-Galena Road	Powell Road	4-2
Sawmill Road	Henderson Road	Dublin-Granville Road	4-2D
Sawmill Road	Dublin-Granville Road	I-270	6-2D
Sawmill Road	I-270	Planning Area boundary	4-2D
Second Street	Mound Street	Rich Street at Civic Center Drive	3-1
Sinclair Road	Morse Road	Lincoln Avenue	4-2
Sinclair Road	Lincoln Avenue	Dublin-Granville Road at Huntley Road	C
Smoky Row Road	Snouffer Road	north Planning Area boundary	4-2
Souder Avenue	Mound Street	Thomas Avenue	C
Souder Avenue	Thomas Avenue	Town Street	2-1
ROADWAY	FROM	TO	CLASS
Souder Avenue	Broad Street	US 33 at Spring-Sandusky Interchange	4-2
Spindler Road	Renner Road	Roberts Road	C
Spring Road	Dempsey Road	Maxtown Road	4-2
Spring Road	Maxtown Road	north Planning Area boundary	C
St. Clair Avenue	Leonard Avenue	Fifth Avenue	C

Stelzer Road	James Road	Morse Road	4-2D
Stelzer Road	Morse Road	Sunbury Road	C
Stelzer Road-Morse Road Connector	Stelzer Road	Morse Road	4-2
Stygler Road	Johnstown Road	Morse Road	4-2
Summit Street	Third Street	Hudson Street	3-1
Sunbury Road	Fifth Avenue	Agler Road	C
Sunbury Road	Agler Road	north Planning Area boundary	4-2
Taylor Avenue	Broad Street	Leonard Avenue (relocated)	C
Taylor Road	Slate Ridge Boulevard (extended)	Havens Corners Road at Dixon Road	4-2
Taylor Station Road	Broad Street	Havens Corners Road at Mann Road (relocated)	4-2
Third Street	Livingston Avenue	Summit Street	3-1
Tremont Road	Lane Avenue	Kenny Road	C
Twin Rivers Drive/Twin Rivers Drive Connector	Dublin Road	Goodale Street	C
Ulry Road	Dublin-Granville Road	Lee Road	C
Waggoner Road	Main Street	Clark State Road	4-2
Walcutt Road	Trabue Road	Scioto & Darby Creek Road at Leap Road-Walcutt Road Connector	4-2
Washington Street	Groveport Road	Waterloo Street	4-2
Westerville Road	Cleveland Avenue	north Planning Area boundary	4-2D
Wilson Road	Sullivant Avenue	Trabue Road	4-2D
Wilson Road	Trabue Road	Roberts Road	4-2
Winchester Pike	Gender Road	James Road	4-2
Woodcrest Road	Noe-Bixby Road (south of I-70)	Livingston Avenue at Noe-Bixby Road	C
Worthington Road	Lazelle Road	Polaris Parkway	4-2
Worthington-Galena Road	High Street	Wilson Bridge Road at Huntley Road	C
Worthington-Galena Road	Wilson Bridge Road at Huntley Road	Sancus Boulevard	4-2
Worthington-Galena Road	Sancus Boulevard	Worthington Woods Boulevard	C
Worthington-Galena Road	Worthington Woods Boulevard	Lazelle Road	4-2
Yearling Road	Livingston Avenue	Fifth Avenue	C

EAST/WEST ARTERIALS

ROADWAY	FROM	TO	CLASS
Ackerman Road	Kenny Road	Olentangy River Road at Dodridge Street	4-2
Agler Road	Westerville Road	Sunbury Road at Cassady Avenue	4-2
Agler Road	Sunbury Road	Cassady Avenue	C
Agler Road	Cassady Avenue	Stygler Road	4-2
Airport Drive	Sunbury Road	Cassady Avenue	C
Alkire Road	Norton Road	Harrisburg Pike	4-2
Bent Tree Boulevard	Federated Boulevard	Snouffer Road	4-2
Bethel Road	Hayden Road	SR 315	4-2D
Big Run South Road	Grove City Road	Alkire Road	4-2
Bixby Road	Groveport Road	Winchester Pike	C
Brand Road	Union County line at Mitchell Road	Dublin Road	C
Briggs Road	Demorest Road	Harrisburg Pike	C
Broad Street	west Planning Area boundary	Norton Road	4-2D
Broad Street	Norton Road	Nelson Road	6-2
Broad Street	Nelson Road	Hamilton Road	4-2D

Broad Street	Hamilton Road	Reynoldsburg-New Albany Road	6-2D
Broad Street	Reynoldsburg-New Albany Road	east Planning Area boundary	4-2D
Bryden Road	Parsons Avenue at Town Street	Nelson Road	C
Campus View/Worthington Woods Boulevards	High Street	(West) Main Street (Westerville)	4-2
Case Road, West	Riverside Drive	Godown Road	C
Cemetery Road	Scioto & Darby Creek Road	Fishinger Boulevard	4-2D
Cemetery Road	Fishinger Boulevard	Dublin Road	C
Central College Road	Sunbury Road at Schrock Road	Johnstown Road	4-2
Chatterton Road	Noe-Bixby Road at Refugee Road	Brice Road at Refugee Road	4-2D
Chittenden Avenue	High Street	Grant Avenue	2-1
Clark State Road	Hamilton Road	Babbitt Road	4-2
Clime Road	Georgesville Road	Harrisburg Pike at Frank Road	4-2D
Coffman/Dublin/Riverside Connector	Coffman Road	Riverside Drive at Hard Road (extended)	4-2
Cole Street	Eighteenth Street	Fairwood Avenue	2-1
Columbus Street	Broadway (Harrisburg Pike)	Stringtown Road	4-2
Columbus-Marysville Road	Frantz Road	Riverside Drive	4-2D
Commerce Street	Rowe Road	Canal Road	C
Cooke Road	Henderson Road	Karl Road	C
Cooke Road	Karl Road	Cleveland Avenue	C
Davidson Road	Elliott Road	Dublin Road	C
Dempsey Road	Westerville Road	Sunbury Road	C
Dodridge Street	Olentangy River Road at Ackerman Road	High Street	4-2
Dublin Road	Riverside Drive (at Trabue Road)	SR 315 at Long Street and Spring Street	4-2
Dublin-Granville Road	Riverside Drive	Sinclair Road	4-2D
Dublin-Granville Road	Sinclair Road	Cleveland Avenue	6-2DS
Dublin-Granville Road	Cleveland Avenue	Westerville Road	4-2DS
Dublin-Granville Road	Cherry Bottom Road	Hamilton Road	4-2
Dublin-Granville Road	Hamilton Road	east Planning Area boundary	C
Dublin-Plain City Road	west Planning Area boundary	Columbus-Marysville Road	4-2D
Dublin-Plain City Road	Columbus-Marysville Road	Post Road	4-2
Eakin Road	Demorest Road	Harrisburg Pike	C
Eleventh Avenue	High Street	Grant Avenue	2-1
Eleventh Avenue	Grant Avenue	Cleveland Avenue	4-2
Feder Road	Alton & Darby Creek Road	Hilliard-Rome Road at Fisher Road	4-2
Ferris Road	Karl Road	Westerville Road	C
Fifth Avenue	McKinley Avenue	Dublin Road	4-2
Fifth Avenue	Dublin Road	Hamilton Road	4-2D
Fisher Road	Hilliard-Rome Road at Feder Road	McKinley Avenue	4-2
Fishinger Boulevard	Cemetery Road	Smiley Road	4-2D
Fishinger Road	Smiley Road	Riverside Drive	4-2D
Fishinger Road	Riverside Drive	Kenny Road	4-2
Frank Road	Harrisburg Pike at Clime Road	I-71 at Frank-Refugee Freeway (SR 104)	4-2D
Frebis Avenue	Parsons Avenue	Alum Creek Drive	C
Gibbs, Jack Boulevard	Cleveland Avenue	I-71 at Leonard Avenue	C
Glick Road	Muirfield Drive at Concord Road	Dublin Road	4-2
Glick Road	Dublin Road	Riverside Drive	C
Goodale Boulevard	Grandview Avenue	Goodale Street (at Columbus corporate limit)	4-2
Goodale Street	Goodale Boulevard (at Grandview Heights corporate limit)	Fourth Street	4-2

Granville Street	Johnstown Road	Hamilton Road at Havens Corners Road	4-2
Greenlawn Avenue	Harmon Avenue	High Street	4-2
Grove City Road	west Planning Area boundary	Broadway (Harrisburg Pike)	4-2
Groveport Road	Parsons Avenue	Washington Street (in Canal Winchester)	4-2
Groves Road	Courtright Road	Hamilton Road	C
Hall Road	Galloway Road	Georgesville Road at Clime Road	4-2
Hanawalt Road/Smothers Road/Bevelheimer Road Hard Road	Worthington Road	Johnstown Road	4-2D
Havens Corners	Riverside Drive	Olentangy River Road	4-2
Hayden Road	Road Hamilton Road	east Planning Area boundary	4-2
Hayden Run Road	Riverside Drive	Bethel Road	4-2D
Hayden Run Road	west Planning Area boundary	Dublin Road	4-2
Hayden Run Road	Dublin Road	Riverside Drive	4-2D
Hayes Road	Pontius Road	Lithopolis Road	C
Henderson Road	Riverside Drive	Sawmill Road	C
Henderson Road	Sawmill Road	SR 315	4-2D
Henderson Road	SR 315	Cooke Road	4-2
Holt Avenue	Brentnell Avenue	Sunbury Road	C
Home Road	Broadway (Harrisburg Pike)	Gantz Road	C
Hudson Street	High Street	Cleveland Avenue	4-2
Hudson Street	Cleveland Avenue	Parkwood Avenue at Mock Road	C
Innis Road	Cleveland Avenue	Sunbury Road at McCutcheon Road	4-2
International Gateway	Stelzer Road	Port Columbus Airport	4-2D
Johnstown Road	Cassady Avenue	Stygler Road	C
Johnstown Road	Stygler Road	northeast Planning Area boundary	4-2D
King Avenue	Grandview Avenue	High Street	4-2
Kinnear Road	Kenny Road	Olentangy River Road	4-2
Lane Avenue	Riverside Drive	High Street	4-2
Lane Avenue	High Street	Summit Street	C
Lazelle Road	High Street	Worthington-Galena Road	4-2
Leonard Avenue	I-71 at Jack Gibbs Boulevard	Fifth Avenue	4-2
Leonard Avenue	Fifth Avenue	Sunbury Road	C
Lincoln Avenue	High Street	Sinclair Road	C
Lisle Avenue	Obetz Road (at Obetz corp. limit)	New Scioto Valley Road	C
Livingston Avenue	Front Street	Third Street	2-1
Livingston Avenue	Third Street	Baltimore-Reynoldsburg Road	4-2D
London-Groveport Road	west Planning Area boundary	High Street	4-2
London-Groveport Road	High Street	Hamilton Road at Bixby Road	4-2D
Long Road	Refugee Road	east Planning Area boundary	C
Long Street	Dublin Road at SR 315	Hamilton Avenue	3-1
Long Street	Hamilton Avenue	Taylor Avenue	4-2
Long Street	Taylor Avenue	Nelson Road	C
Main Street	Washington Boulevard at Rich Street	Rich Street-Main Street Connector	3-1
Main Street	Rich Street-Main Street Connector	east Planning Area boundary	4-2
Main Street, West (in Westerville)	Columbus corp. limit at I-71	Westerville Road	4-2
Marion Road	Parsons Avenue	Lockbourne Road	C
Maxtown Road	Worthington Road	Westerville Road	4-2D
Maxtown Road	Westerville Road	Sunbury Road	4-2
McCoy Road	Riverside Drive	Kenny Road	C

McCutcheon Road	Sunbury Road at Innis Road	Johnstown Road	4-2
McKinley Avenue	Trabue Road at Dublin Road	Souder Avenue	4-2
Mitchell Road	west Planning Area boundary	Franklin County line at Brand Road	C
Mock Road	Parkwood Avenue at Hudson Street	Sunbury Road	C
Mooberry Street	Parsons Avenue	Fairwood Avenue	2-1
Morse Road	High Street	I-71	4-2D
Morse Road	I-71	Cleveland Avenue	6-2DS
Morse Road	Cleveland Avenue	I-270	6-2D
Morse Road	I-270	Hamilton Road	4-2D
Morse Road	Hamilton Road	east Planning Area boundary	4-2
Mound Street	Hague Avenue	Souder Avenue at Harmon Avenue	4-2
Mount Vernon Avenue	Fourth Street	Spring Street at Washington Avenue	2-1
Mount Vernon Avenue	Martin Luther King, Jr. Boulevard	Taylor Avenue	C
Nationwide Boulevard	SR 315 at Goodale Street	Front Street	4-2D
Nationwide Boulevard	Front Street	Fourth Street	6-2D
Naughten Street	Fourth Street at Nationwide Boulevard	Cleveland Avenue	2-1
North Broadway	Kenny Road	Maize Road	4-2D
Oakland Park Avenue	Maize Road	Cleveland Avenue	4-2
Obetz Road	High Street	Parsons Avenue	C
Obetz Road	Parsons Avenue	Lockbourne Road	C
Obetz Road	Lockbourne Road	Lisle Avenue (at Obetz corp. limit)	C
Park Road	Flint Road	Worthington Woods Boulevard	C
Park Road	Worthington Woods Boulevard	Westerville corp. limit at I-71	4-2
Polaris Parkway	Old State Road at Powell-Polaris Connector	Worthington Road	6-2D
Post Road	Dublin-Plain City Road	Frantz Road at Columbus-Marysville Road	4-2
Powell Road	High Street	Powell Road-Polaris Parkway Connector	6-2D
Powell Road	Powell Road-Polaris Parkway Connector	Worthington Road	C
Powell Road-Polaris Parkway Connector	Powell Road	Old State Road at Polaris Parkway	6-2D
Rathmell Road	High Street	Alum Creek Drive	4-2
Refugee Road	Lockbourne Road	Alum Creek Drive	C
Refugee Road	Winchester Pike	Noe-Bixby Road at Chatterton Road	4-2D
ROADWAY	FROM	TO	CLASS
Refugee Road	Noe-Bixby Road	Brice Road	C
Refugee Road	Brice Road at Chatterton Road	Gender Road	4-2D
Refugee Road	Gender Road	east Planning Area boundary	4-2
Renner Road	Alton & Darby Creek Road	Trabue Road at Walcutt Road	4-2
Rich Street	SR 315	Washington Boulevard at Main Street	3-1
Rich Street	Civic Center Drive at Second Street	Rich Street-Main Street Connector	3-1
Rickenbacker Access Road	Alum Creek Drive at London-Groveport Road	London-Groveport Rd.	4-2
Rings Road	west Planning Area boundary	Cosgray Road at Tuttle Road (extended)	4-2
Rings Road	Avery Road	Dublin Road	C
Roberts Road	Walker Road	Alton & Darby Creek Road	C
Roberts Road	Alton & Darby Creek Road	Dublin Road	4-2
Rohr Road	Lockbourne Road	Groveport Road	C
Rowe Road	High Street	Commerce Street	C

Schrock Road	Worthington-Galena Road	Huntley Road	C
Schrock Road	Huntley Road	Busch Boulevard	4-2
Schrock Road	Busch Boulevard	Sunbury Road at Central College Road	4-2D
Scioto & Darby Creek Road	Elliott Road	Alton & Darby Creek Road	C
Scioto & Darby Creek Road	Alton & Darby Creek Road	Dublin Road	4-2
Second Avenue	High Street	St. Clair Avenue	C
Seventeenth Avenue	Summit Street	Brentnell Avenue	C
Shannon Road	Winchester Pike	Gender Road	C
Slate Ridge Blvd. (Livingston extended)	Baltimore-Reynoldsburg Road	Taylor Road	4-2
Snouffer Road	Bent Tree Boulevard	Linworth Road	4-2
Snouffer Road	Linworth Road	Olentangy River Road	C
Spring Street	Dublin Road at SR 315	M.L.K., Jr. Boulevard at Hamilton Avenue	3-1
Starr Avenue	Dennison Avenue at Third Avenue	High Street	C
Stimmel Road	Brown Road	Harmon Avenue	C
Stringtown Road	Columbus Street	Jackson Pike	4-2
Sullivant Avenue	Galloway Road	Norton Road	C
Sullivant Avenue	Norton Road	Davis Avenue	4-2
Summit View Road	Riverside Drive	Smoky Row Road	C
Sunbury Road/I-270 Connector	Sunbury Road	I-270 south of Morse Road	4-2
Taylor Road	Morrison Avenue	Baltimore-Reynoldsburg Road	4-2
Third Avenue	Northwest Boulevard	Dennison Avenue at Starr Avenue	C
Thomas Avenue	Souder Avenue	Davis Avenue	2-1
Thurman Avenue	High Street	Lockbourne Road	C
Town Street	Central Avenue	SR 315	C
Town Street	SR 315	High Street	3-1
Trabue Road	Renner Road at Walcutt Road	Riverside Drive	4-2
Tussing Road	Brice Road	Baltimore-Reynoldsburg Road	4-2
Tuttle Crossing Boulevard	Avery Road	Frantz Road	4-2D
Tuttle Road	Cosgray Road at Rings Road	Avery Road	4-2
Valleyview Drive	Wilson Road	Hague Avenue	C
Walnut Street	Lee Road	Harlem Road	C
Waterloo Street	Washington Street	east Planning Area boundary	4-2
Watkins Road	Lockbourne Road	Winchester Pike at Courtright Road	C
Weber Road	High Street	Cleveland Avenue	C
Westbourne Avenue	Morrison Avenue	Taylor Station Road	C
Whittier Street	High Street	Fairwood Avenue	C
Williams Road	High Street	Hamilton Road	4-2
Wilson Bridge Road	Linworth Road	Worthington-Galena Road	4-2

TYPE “F” ARTERIAL

A Type “F” Arterial is any arterial street as defined in Chapter 2101, Columbus City Codes as a “Freeway” or “Expressway.” Such arterials shall have right-of-way and pavement widths as determined to be necessary to accommodate traffic needs.

TYPE “6-2DS” ARTERIAL

A Type “6-2DS” Arterial is an arterial street having a minimum right-of-way width of 220 feet wherever possible. Such arterial streets shall wherever possible, be designed to accommodate an 88 foot pavement consisting of six moving lanes with median divider on mainline sections and parallel service roads.

TYPE “6-2D” ARTERIAL

A Type “6-2D” Arterial is an arterial street having a minimum right-of-way width of 160 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate an 88 foot pavement consisting of six moving lanes with median divider on mainline sections.

TYPE “6-2” ARTERIAL

A Type “6-2” Arterial is an arterial street having a minimum right-of-way width of 120 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 72 foot pavement consisting of six moving lanes on mainline sections.

TYPE “4-2DS” ARTERIAL

A Type “4-2DS” Arterial is an arterial street having a minimum right-of-way width of 196 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 72 foot pavement consisting of four moving lanes with median divider on mainline sections and parallel service roads.

TYPE “4-2D” ARTERIAL

A Type “4-2D” Arterial is an arterial street having a minimum right-of-way width of 120 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 72 foot pavement consisting of four moving lanes with median divider on mainline sections.

TYPE “4-2” ARTERIAL

A Type “4-2” Arterial is an arterial street having a minimum right-of-way width of 100 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 56 foot pavement consisting of four moving lanes on mainline sections.

TYPE “3-1” ARTERIAL

A Type “3-1” Arterial is an arterial street having a minimum right-of-way width of 80 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 52 foot pavement consisting of three moving lanes and two parking or additional moving lanes in one direction.

TYPE “2-1” ARTERIAL

A Type “2-1” Arterial is an arterial street having a minimum right-of-way width of 60 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 36 foot pavement consisting of two moving lanes and two parking or additional moving lanes in one direction.

TYPE “C” ARTERIAL

A Type “C” Arterial is an arterial street having a minimum right-of-way width of 60 feet wherever possible. Such arterial streets shall, wherever possible, be designed to accommodate a 36 foot pavement consisting of two moving lanes and two parking or additional moving lanes in two directions.

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