Chapter Three: LAND USE

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LAND USE OVERVIEW

Taking a look back

Since 1995, Dublin’s residents and policy-makers have desired a plan that would control future traffic congestion to the greatest extent feasible, while maintaining appropriate land uses and continued fiscal health. It was recognized that although development patterns outside the city boundary may not always match Dublin’s expectations, surrounding growth will, nevertheless, have a significant impact on the city. The Community Plan process has sought to mitigate these potential impacts. Efforts have included working cooperatively with surrounding jurisdictions to ensure quality development and fiscal health for the area as a whole.

As part of the 1997 Community Plan, a significant effort was made to model and analyze growth scenarios for the Dublin planning area. Following an intense multi-year process that considered trends based on adopted plans within the area and multiple development alternatives, a low-intensity scenario was endorsed. Given resulting traffic impacts, a request was made by the Steering Committee, Planning and Zoning Commission and City Council to lower development intensities further while maintaining projected fiscal health.

The 1997 Community Plan and the adopted Future Land Use Map reflected this “lower than low” scenario with minor modifications that emphasized office development along the I-270 and U.S. 33 corridors and residential development at 1.0 to 2.0 dwelling units per acre in growth areas outside of the commercial corridors. The 1997 Plan and subsequent amendments served Dublin well through the first half of the 2000s and continued Dublin’s development as a high quality, successful city.

The 2007 update of the Community Plan was undertaken to account for changing demographic and development trends within the city and the Central Ohio region. Dublin’s residents and policy-makers recognized that in some areas of the city, higher development densities, with a continued focus on high-quality design, could provide additional benefits to the City by concentrating infrastructure and service investments in targeted areas. This targeted growth strategy responds to a growing demand for compact walkable places with additional housing and shopping options, while increasing commercial development opportunities to maintain the City’s fiscal health. The 2007 Future Land Use Map included a series of walkable, mixed use centers and mixed residential neighborhoods, and emphasized high-intensity office and research and development uses along the U.S. 33 corridor.
Existing Conditions

The City of Dublin maintains an inventory of existing land uses within the 34-square-mile land use and fiscal modeling area (planning area) as shown in the Existing Land Use map. The planning area corresponds to water and sewer contract boundaries established with the City of Columbus. The City uses a parcel-based geographic information system (GIS) containing Standard Industrial Codes (SIC) from Franklin, Delaware and Union County databases. The collection of land use information includes a variety of sources: county and MORPC database information; Dublin planning and building databases; and other geodata, including digital aerial photography. Additional follow-up windshield surveys and photo interpretation are also used to verify the existing uses. Based upon the inventory, land uses for both the municipal boundary and the total planning area are identified. Existing land uses for areas outside the planning area, but within the transportation modeling area, are compiled from MORPC data and verified for accuracy.

The results of the land use inventory indicate that the city is dominated by single-family residential uses. In fact, single-family residences, offices and parks comprise over half (52 percent) of the city. In the broader context of the planning area, significant amounts of agricultural land (22 percent) have yet to be developed and offer future development potential, particularly in the Southwest Area, the West Innovation District and along the U.S. 33 Corridor.

LAND USE MODELING

Building the Plan

The existing land use inventory is used as a basis to identify potential development areas consisting of vacant or underutilized land within the planning area. Based upon public input and discussion with City Council and the Planning and Zoning Commission, several land use scenarios were developed as part of the 2007 Plan update to evaluate land use impacts from multiple perspectives to the horizon year 2030. This analysis focused on key locations throughout the city and in potential annexation areas, which consist of lands within Dublin’s exclusive sewer and water service area or within the service area negotiated between Dublin and the City of Columbus. Special planning areas were identified based on the likelihood of future development pressures or the potential for significant redevelopment opportunity. The results and estimation of impacts from the three development scenarios were used by residents and policy makers to formulate informed decisions about Dublin’s future. Policy implications were discussed for future traffic analysis, fiscal implications, water and sewer impacts and overall levels of service.

The Dublin planning area extends beyond the existing City of Dublin corporation limits. For areas outside the planning area and within the transportation modeling area (study area), land uses from MORPC’s model have been used to calibrate the Dublin transportation model. Land use assumptions included within the MORPC model are verified for accuracy when compared to current or pending development projects within the area and adopted plans for surrounding jurisdictions. The MORPC data is generally consistent with expected development, particularly in areas of growth and change to the north and west of Dublin.

Land Use Scenarios

As part of the 2007 Community Plan update, three scenarios were created with varying intensities of land use. These land use alternatives were the basis for an in-depth analysis of potential development impacts. The land use assumptions contained in the alternatives were analyzed for effects on the transportation network, utilities, and fiscal plan. The scenarios are outlined below.
The Trend Scenario

Analysis for the 2007 update included an iterative modeling process, using the adopted land use policies as expressed in the 1997 Community Plan as a baseline for comparison. The “Trend Scenario” was derived from (1) existing development within the city, (2) the potential for additional development of properties given established zoning, and (3) future land use designations as denoted on the adopted Future Land Use Map (as revised on January 7, 2005). The Trend Scenario represented the expected build-out of the city and its planning area based upon no change to current policies. The scenario, as a result, expressed land use impacts if Dublin were to continue on its current course of development. Major components of the Trend Scenario include the following:

- Focus on retail and office development within the Sawmill Road/SR 161 area south of I-270 and east of the Scioto River;
- Additional office development along the future Emerald Parkway extension between Sawmill Road and Riverside Drive;
- Industrial and office development along the Shier Rings Road corridor;
- Additional office and retail development as Tuttle Road is extended to the west;
- Substantial office and industrial development along U.S. 33;
- Additional industrial development and future residential development along and to the west of Industrial Parkway; and
- Significant residential development within the southwest and northwest growth corridors of the city.

The Mid-Range Scenario

While the Trend Scenario expressed a clear focus on office development and single-family neighborhoods, additional needs such as greater housing options, convenient neighborhood services and more walkable environments were identified and expressed in the adopted Land Use Principles.

Scenario Two, or the “Mid-Range Scenario,” was developed as part of the public planning process and represents a policy shift that acknowledges the success and popularity of existing Dublin development, yet strives to provide greater variety and opportunity in the future. In particular, the Mid-Range Scenario incorporated the concepts of mixed use development and targeted neighborhood center development to provide more localized and convenient services for residents and employees. Using area plan concepts, the scenario included mixed use redevelopment strategies in the Sawmill Road area, the expected revitalization of Historic Dublin and future development of the West Innovation District as a major employment generator for the region. Given these planning objectives, the scenario designates the State Route 161 Corridor as the central development core of the city. Targeting of densities and major employment nodes was encouraged to facilitate long-term transit options as the region develops. The following are major differences between the Trend and Mid-Range Scenarios:

- Instead of general suburban office and retail development, the Mid-Range Scenario encouraged the integration of mixed use office and retail with high density housing to revitalize existing or redeveloped community-level commercial strip centers that have struggled with the creation of new retail opportunities in the area.
- Residential designations within the Southwest Area were modified to vary from single-family residential uses as identified in the Trend Scenario. The Amlin area was identified as a village node where mixed use development would
be concentrated. Surrounding areas were balanced by residential conservation patterns to the west and a broader range of housing options to the east along the Tuttle Road extension, consistent with adopted land use principles.

- As part of planning efforts for the West Innovation District, growth along U.S. 33 and Post Road would facilitate greater office and research components with additional support services for employees.

- Areas to the northwest focused on low density residential conservation patterns to maximize open space around the Glacier Ridge Metro Park. The scenario targeted neighborhood centers where appropriate, and varied from the large-lot, low density development identified in the Trend Scenario.

- Non-residential areas west of U.S. 33 focused on future industrial growth along Industrial Parkway associated with research activities in the West Innovation District. Residential development patterns to the west were also modified to provide housing options and daily services for area employees within the framework of a coordinated open space system.

The Maximum Build-Out Scenario

The third land use scenario tested, the “Maximum Build-Out,” continued the integration of conservation design, mixed use neighborhood centers, a broader range of housing, targeted redevelopment of ailing retail areas and future technology-related growth in the West Innovation District. The Maximum Build-Out Scenario is generally similar to the Mid-Range Scenario; however, long-term success and growth of the U.S. 33 Corridor north of State Route 161 was assumed with substantial employment growth along the Industrial Parkway corridor. Additional office, research and light industrial uses were included in areas west of U.S. 33 identified as residential in the other scenarios.

Modeling the Scenarios

A build-out analysis was conducted to determine the total capacity for growth under each scenario, given currently undeveloped land and selected future land uses. The capacity was calculated by multiplying the land area by specific densities and then translating the number of households and non-residential square footage into population and employment projections.

Findings indicated that the Trend Scenario resulted in a build-out population for the planning area of 74,480 persons; a 110 percent increase over the 2004 population. The tested scenario would have capacity to support residential growth beyond 2030 and resulted in a housing stock comprised of 70 percent single-family homes. Other scenarios created a broader range of housing types, but lower population estimates due to expected decreases in household size. The Mid-Range and Maximum Build-out Scenarios encourage mixed uses and greater diversity of housing types. These alternatives were tested with more open space and adequate areas of land assigned to non-residential land uses to promote substantial employment. Based on these initial capacity results, the Development Capacity Analysis was used for transportation and fiscal modeling.

The build-out year for all scenarios was beyond the 2030 horizon year established for transportation modeling. Because the Dublin travel demand model (the method used to determine regional traffic impacts) functions within a regional system, it was necessary to be consistent with regional transportation network assumptions using the planning horizon year of 2030, as used by the Ohio Department of Transportation (ODOT) and MORPC. Maintaining consistency with these entities allows for the Dublin travel demand model to incorporate land use and travel data from outside of the
Dublin planning area. Growth forecasts were completed that included population and employment growth in the Dublin land use planning area to meet the interim planning horizon of 2030 and meet the consistency needs of the travel demand model.

It was determined in the analysis that if all the people and businesses that wanted to move to Dublin could do so by 2030, there would be demand for housing for 66,000 residents and 124,500 new jobs. The projections included existing and new population and employment for the planning area. To accommodate this, the three scenarios were adjusted to reflect the amount of development and growth that could occur by 2030. By using the potential demand as a control, each scenario was “built” to best meet the projected demand.

Each scenario included a different mix of housing types and non-residential building areas, and each land use type generated different results based on industry standards and observed trends in Dublin. Based on the demand, new homes were modeled by type (i.e. single-family, single-family attached, and multi-family) and new non-residential square footage by type (i.e. commercial/retail, office, and industrial). The results, as calibrated to the horizon year of 2030, were included in the travel demand model. Following a preliminary review of transportation results derived from the land use scenarios and capacity demand analysis, findings were provided to policy-makers. Based upon the traffic impacts of the land use options, the Mid-Range Scenario was selected to complete comprehensive modeling efforts.

Refining the Scenarios

Land use scenarios represent a snapshot in time; they are developed based on the best information available and a reasonable set of assumptions about future conditions. As conditions change, new trends are observed, and more information is gathered, assumptions about the future must also be revised. The Mid-Range Scenario and associated modeling continues to provide a strong framework for Dublin’s Land Use Plan. However, periodic adjustments and refinements are also necessary to maintain the Plan’s currency and effectiveness as a policy guide for decision-making. Since the adoption of the 2007 Community Plan, changing trends in demographics, housing demand, commercial development patterns and real estate financing occurring at national, regional and local levels have caused the City to undertake two major planning initiatives.

The Bridge Street District planning effort began in 2009 as an analysis of how and where Dublin could accommodate the growing interest in walkable, urban neighborhoods among young adult and retirement age populations. It culminated in the adoption of the Bridge Street Corridor Vision Report by City Council in 2010, followed by the adoption of new form-based zoning regulations in 2012, from which ongoing implementation efforts will be undertaken.

The West Innovation District Plan was undertaken to further the many years of planning for a signature research and development campus to the west and south of U.S. 33/SR 161. City Council adopted the Economic Advancement Zone Plan along with updated zoning regulations for this area in 2011. These plans are consistent with the Land Use Principles and other planning goals developed as part of the 2007 Community Plan, and have been incorporated into the Land Use Plan with revisions to the Future Land Use Map and Special Area Plans.

Refer to the Bridge Street District Area Plan and West Innovation District Area Plan for more information about these planning initiatives.
THE LAND USE PLAN

The Community Plan is the key policy guide for decision-making about Dublin’s built and natural environments. The Community Plan text and associated maps contain detailed recommendations for future development including the appropriate location and density or intensity of residential and commercial uses; the general location and character of roads; the general location of parks, open space and public buildings; and the general sites for and extent of public water and sanitary sewer utilities. It also contains recommendations to guide development strategies for the unincorporated areas to the northwest and southwest of Dublin.

Recommendations throughout this Plan are based upon a review of existing conditions and evaluation of future development scenarios for their impacts on infrastructure, roads and the City’s fiscal health. Dublin’s ability to maintain high quality of services and quality of life depends on a careful review of development proposals for conformance with the Community Plan.

The Land Use Plan and the Transportation Plan together form the foundation of the Community Plan. The Land Use Principles, Future Land Use Map and Land Use Classifications are important components of the Land Use Plan, while the Thoroughfare Plan is the primary policy tool within the Transportation Plan. Both the Future Land Use Map and the Thoroughfare Plan serve to guide decision-making regarding the appropriateness of development proposals and the infrastructure improvements necessary to support future development.

Land Use Principles

Based upon extensive public input, discussion with City Council and the Planning and Zoning Commission, and evaluation of community expectations and future needs, ten land use principles were developed to serve as the basis for evaluation of future development proposals. City Council adopted Resolution 64-06 on August 21, 2006 to set common design objectives and direction for land use policy in Dublin:

1. Provide high quality design for all uses, recognizing density has important economic implications, but is essentially an outcome (not a determinant) of creating a quality place.

2. Create places to live that have a stronger pedestrian environment, connections to convenient services, and are conducive to multi-generational living.

3. Create places with integrated uses that are distinctive, sustainable and contribute to increasing the City’s overall vitality.

4. Provide some retail services in closer proximity to residential areas as an important amenity to residents. The design considerations are very important.

5. Create a wider range of housing choice in the community, as well as in new neighborhoods.

6. Preserve the rural character of certain areas of the community, including the appearance of roads, as well as the landscape.
7. Develop streets that create an attractive public realm and make exceptional places for people.

8. Create better connected places, in part, to improve the function of the street network and also to better serve neighborhoods.

9. Create streets that contribute to the character of the community and move a more reasonable level of traffic.

10. —Provide opportunities to walk and bike throughout the community.

Key Planning Issues

As with the 2007 Community Plan, Dublin’s housing and commercial needs have been identified as critical issues throughout the course of the planning process, informed by changes in the housing and commercial markets identified in Dublin and throughout the region over the previous five years. A discussion of the key planning issues specific to these topics is provided below.

Residential Development

The availability of housing is one of the most fundamental quality of life elements for Dublin’s residents. Current housing options available in Dublin consist primarily of single-family homes. While this meets the needs of families with children, the need for other housing types is expected to grow as the demographics of Dublin change over time.

- **Housing needs for an aging population**
  Expectations that the population will be aging in Dublin, the region and the state may have serious implications on future housing availability within the city. Today, individuals are living longer and are looking for a wider range of housing choices within the same community. Accordingly, they are more active and independent than past generations in this age group. Traditionally, focus for development has centered on housing for families with children. Empty nesters and the baby boom generation will need more housing choices allowing them to remain in Dublin as their housing needs change with their lifestyles.

- **Housing needs for young professionals**
  Likewise, young professionals and first time homebuyers may not find sufficient housing choices. From a neighborhood and community-wide perspective, present and future residents should have options for housing mobility and to meet their desire to maintain social connections throughout the various stages of life. The Bridge Street District Vision was established in part to respond directly to the housing demands of the young professional and empty nester demographic segments (who have surprisingly similar needs), as well as everyone in between looking for a compact, walkable neighborhood.

- **Preserving and strengthening Dublin’s existing suburban neighborhoods**
  A community’s housing stock serves as the foundation that defines its neighborhoods, frames its streets, and contributes to the overall character of the community. Dublin is known for its high quality, family-centered
neighborhoods well-connected to the community’s schools, parks, and other amenities. As these neighborhoods age, land use decisions should focus on preserving these qualities while improving availability and connections to nearby services, recreational facilities and adjacent neighborhoods.

- **Convenient access to services, workplaces, and recreation**
  A range of housing types located near employment contributes to the economic viability of the Central Ohio region and can offer both social and economic benefits. Proximity to employment encourages alternative forms of transportation helping to reduce traffic congestion and other demands on infrastructure while promoting pedestrian accessibility.

**Commercial Development**

Dublin’s commercial development is concentrated primarily in several key areas, generally ringing Interstate 270/Emerald Parkway and along the U.S. 33/SR 161 corridor, including the Bridge Street District at the city’s core and the West Innovation District along the city’s west boundary. Dublin is home to over 3,000 businesses (and counting), owed in part to the city’s high quality of life, wide range of high value office and retail environments, strong demographics, and proactive approach to economic development.

Responding to ever-changing market demands to address challenges and take advantage of opportunities as they arise will be a principal planning issue related to commercial development in Dublin. In 2012, the city’s Department of Economic Development engaged the Battelle Technology Partnership Practice to create a *Cluster-Based Economic Development Strategy and Action Plan* for the City of Dublin. The Battelle study identified six current and emerging industry ‘clusters’ within Dublin:

- Internet Commerce & Computer Services (IT)
- Business Support Services
- Corporate Headquarters/Managing Offices
- Medical Biosciences & Healthcare
- Residential Healthcare Services
- Tourism, Entertainment, & Arts

These industry clusters represent key opportunities for targeting economic development efforts and have emerged as priorities for business expansion and attraction efforts by the city. By understanding Dublin’s strengths and weaknesses in the commercial marketplace, the city is able to focus its planning and development initiatives to ensure a diversified financial base and to remain competitive with other jurisdictions in job retention and business creation. The cluster-based analysis has helped to inform recent updates to commercial zoning regulations and to the overall Land Use Plan. A series of distinct business neighborhoods were also identified as part of the City’s economic development strategy to provide a unique district identity in each area suited for a variety of different types and sizes of firms and to reinforce existing and targeted business clusters. Additional information about Dublin’s commercial development needs is described below.

- **Office/Industrial/Research & Development**
  Over the past 40 years, Dublin has developed a reputation as a destination community for commerce within Central Ohio, with over 8.5 million square feet of professional office and medical development and approximately 1.5 million square feet of industrial facilities. As technology and business practices evolve at a quickening pace, it is important for
Dublin has updated aging zoning and development regulations to encourage economic development by responding to changing trends in office, research, and manufacturing markets.

The Technology Flex zoning district was created in 2011 to update Dublin’s 1970s-era industrial development standards while providing additional land use options to respond to the increased demand for flexible office, research and development, warehousing, and laboratory space. Similarly, the West Innovation District area plan and the associated Innovation District zoning regulations were adopted in 2011 to provide a clear vision for how this area of the city can accommodate a wide variety of modern flex/research and development, and clean manufacturing uses. At the same time, demand for large-format, single-user office buildings is now shifting in favor smaller, highly adaptable office spaces near convenient services. The Bridge Street District plan was developed in part to meet the needs of this growing business trend. Dublin continues to offer prime development opportunities for traditional Class “A” office space with highway visibility and convenient automobile access as well.

• **Retail**
  There is an abundant supply of regional and community-level retail development in and around Dublin; however, many of these are nearly exclusively auto-oriented. Retail services are an important community amenity and the distribution of these uses should meet the needs of residents and employees alike. This is both an individual convenience consideration and community-wide traffic issue. Existing commercial support areas should be encouraged to redevelop over time to incorporate a mixture of uses, particularly residential development, and encourage pedestrian access. Development of new regional and community-level retail should be limited except for the specific areas identified in the Special Area Plans, such as the Bridge Street District. Ideally, retail service areas should be integrated into a neighborhood employment center in a highly walkable setting.

• **Institutional Uses**
  Related in part to its aging population, Dublin has experienced an increased demand for institutional uses including memory care facilities, skilled nursing, specialty hospitals, and general medical office space. The General Office land use classification now includes Institutional uses that accommodate these medical facilities and private educational services that may be located along side general office development, or as a transitional use between higher intensity employment areas and nearby residential neighborhoods.

**Mixed Use Development**

Vibrant, walkable mixed use development can build on community character and quality of life when carefully sited and designed. Mixed use development allows a variety of uses that are conveniently accessible and well-connected to residents and employees, making Dublin an even more attractive place to live and work. Since different types and intensities of mixed use development are appropriate in different parts of the city, three types of mixed use land use classifications are recommended in specific locations as described below.

• **Urban Core**
The ability to offer choices in housing, jobs, shopping, recreation, transportation is central to Dublin’s changing demographics and lifestyles and will complement and reinforce Dublin’s existing community fabric. The Urban Core area, which coincides with the Bridge Street District, accommodates a strong mixture of uses in an active, highly walkable environment. This classification allows for the widest mixture of uses and highest development densities within the city and is suited to serve a regional market and include a variety of large scale and specialized stores and services.

- **Village Centers**
  Community-level centers, or village centers, serve markets that extend beyond a single neighborhood to serve a set of local neighborhoods. These may include small groceries and other retail establishments, and non-retail services such as banks and medical offices. These village centers can vary in size and include civic uses such as libraries or parks and public plazas. Providing a mix of uses, particularly residential, is a key element to these centers. Two village centers are identified in the Land Use Plan: Historic Dublin, targeted for preservation and compatible infill development as the core of Dublin’s founding, and the rural crossroads neighborhood of Amlin, which has the potential to serve as a mixed use hub for future residential development in the Southwest Area. Village center development scale and design character should be sensitive to the area in which they are located.

- **Suburban Neighborhood Centers**
  Locally serving retail, or suburban neighborhood centers, can vary in form. They may serve employment centers, residential neighborhoods, or both, where a concentration of businesses or a particular need creates a distinct market for particular types of retail goods and services. When serving residential neighborhoods, the scale of commercial development is critical. This type of retail service may include food establishments, copy services, banks, small retail stores, office supplies, personal services, day care, and small grocery stores. The service needs of nearby employment centers, coupled with a growing work force, must be met in ways that do not increase mid-day or late-afternoon (peak-hour) traffic. Neighborhood centers should be located in close proximity to residential areas, providing residents with convenient pedestrian access to essential retail stores. The success of mixed use development in a suburban setting relies on its design sensitivity to adjacent neighborhoods. In particular, residential-serving retail should be designed to avoid negative impacts on surrounding neighborhoods. Ideally these service areas should be integrated into neighborhoods in a manner that is sensitive to the City’s emphasis on design quality, residential character and the following key elements:

  - Small commercial uses that include a variety of neighborhood services for daily needs (e.g. corner grocery, coffee shop, dry cleaner, etc.).
  - Location within a quarter-mile walking distance from residential neighborhoods, but also serving a three-mile automobile radius.
  - Vibrant, pedestrian-friendly design.
  - Integrate a variety of housing types and other land uses vertically and horizontally, where practical.
  - Ground floors designed as a center of activity with wide sidewalks and public plazas.
  - Integrate safe pedestrian and vehicular movement.
  - Flexible structures to accommodate changes in use.
• Minimize the impact of external traffic to the neighborhood.

• Architectural character at a pedestrian scale that blends with adjacent residential areas with a high level of aesthetic quality.

The Future Land Use Map

Refer to S:\2012 Community Plan Amendment\CP Chapters\3 - Land Use\Future Land Use Classifications - Redline Draft_PSL.docx

OBJECTIVES AND STRATEGIES

REFER TO S:\2012 COMMUNITY PLAN AMENDMENT\CP CHAPTERS\3 - LAND USE\CHAPTER THREE OBJECTIVES - REDLINE DRAFT.DOCX