

AUGUST 19, 2015

PUBLIC REVIEW DRAFT

DRAFT

CITY OF POWELL COMPREHENSIVE PLAN





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EXECUTIVE SUMMARY

Responding to Changes, Planning for the Future

In 2014, the Powell Comprehensive Plan was approaching the twenty-year mark since its adoption in 1995. While many of the plan's policies and recommendations remained relevant, much had changed in the intervening years. The City of Powell undertook the Comprehensive Plan Update to respond to the changes that have occurred while creating a strategic vision for the next twenty years. One of the first tasks of the plan update was an update to the Comprehensive Plan **Vision Statement** (opposite page) to better reflect the Powell of today and its aspirations for the future. The major goals of the 1995 plan were also refined and revised into a series of ten **Guiding Principles**, vetted through the public review process. Together the Vision and Principles provide an overarching framework for the plan's recommendations.

Purpose of the Plan

The Comprehensive Plan is the key policy guide for land use, development, and infrastructure decisions in the City of Powell. This plan serves as a guide for the City of Powell Staff, the Planning and Zoning Commission, City Council and other government entities as they assess the character, location, and extent of public investments and private development proposals in the City of Powell. The plan's policies and recommendations will be implemented over time through public and private decisions, such as capital improvements carried out by the City, and zoning or development proposals initiated by property owners and conducted through the public review process.

Structure of the Plan

The Plan is comprised of five major components:

Introduction

The Introduction provides an assessment of current conditions and relevant trends affecting Powell. It also describes the process used to develop the plan.

Land Use Plan

The Land Use Plan documents Powell's current land use patterns, and provides recommendations for future land use and development decisions within the community. The Land Use Plan is a guiding framework to be used when making public and private decisions about development, redevelopment, and related infrastructure investments. The plan consists of a Future Land Use

Map, and a series of related development guidelines and policy recommendations. The plan provides descriptions of each land use category depicted on the Future Land Use Map, with specific policies related to transportation, infrastructure, open space, and development standards.

Transportation Plan

The Transportation Plan provides recommendations for transportation policy and related infrastructure investments within the community. As with the Land Use Plan, the Transportation Plan guides decision-making regarding the appropriateness of development proposals and infrastructure improvements necessary to support future development. The Thoroughfare Plan is the primary reference tool within the Transportation Plan, identifying recommended roadway improvements, right-of-way needs and other roadway elements. This section also includes a detailed analysis of traffic conditions in Downtown Powell, and provides recommended solutions to improve downtown traffic congestion.

Fiscal Analysis

The Fiscal Analysis provides an assessment of the long-term sustainability of the City's finances, both of the current level of development and of each of the scenarios considered during the development of the plan.

Implementation

The Comprehensive Plan is a long range vision for the community. The plan is also intended to serve as a guide for how the community can turn vision into reality through specific actions. The Implementation section provides a detailed implementation matrix that outlines recommended policies and actions, and responsible parties. Among these implementation items, three **Key Priorities** are identified based on their significance in addressing the major issues facing the community:

- 1. Initiate a strategic urban design plan for Downtown Powell** to address complex transportation and development needs in a coordinated manner.
- 2. Create a sustainable revenue structure** by thoroughly examining and adjusting tax policies to support long-term community needs.
- 3. Establish a multi-jurisdictional working group** to address shared issues and advance coordinated planning initiatives amongst the City, surrounding townships and the County.

VISION STATEMENT

The City of Powell is **one of Central Ohio's premier communities**, sought after for its high quality of life, unique community character, and vibrant business environment. Situated in a significant growth corridor in southern Delaware County, Powell has planned for continued growth and development in a responsible and strategic manner. It has retained the **charm of a small town** with rural roots while **responding to changing trends** and development pressures in a way that is uniquely Powell.

Guiding Principles



The historic, small town charm of Downtown Powell should be preserved and enhanced. Downtown Powell should be a vibrant, accessible center of the community with a diverse mixture of uses and activities.



Traffic improvements should strive to relieve congestion at the Four Corners, but not at the expense of pedestrian mobility and safety. Improvements should enhance, rather than detract from, the character of Downtown.



Diverse housing options are important to the community. The City embraces its family-friendly character and also recognizes the need for housing to serve a diverse population in all stages of life. Alternatives to large lot single family subdivisions are acceptable, but design aesthetics, character, and high quality development standards are critical to ensuring new options are appropriate for Powell.



New residential development should include, where appropriate, accessible and useable public parks and open spaces in a variety of scales and types.



Rural character should be preserved and reinstated (through new development) along the community's edges. This may be through preservation of farmsteads and active farming operations within the surrounding townships, or through sensitive roadway designs, landscape treatments and development practices that retain a rural feel for those living in and traveling through the community.



The City should strive to plan cooperatively with Liberty Township and other nearby communities to establish a shared vision and development policies.



Pedestrian and bicycle connections should be enhanced and expanded throughout the community, including connections to the surrounding townships, parks, and other destinations.



Development patterns should seek to minimize traffic impacts by mixing uses or locating compatible uses within walking distance, and by providing interconnected street systems and paths.



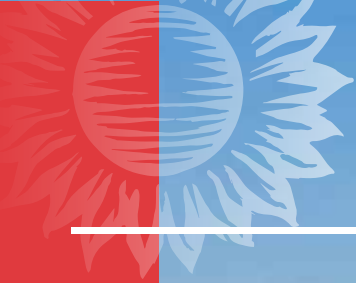
New commercial development should contribute to both the service needs of the community as well as the economic and fiscal well-being of the City.



Opportunities to expand transportation options (public transportation, car/ride sharing, bikes, paths, etc.) into and through Powell should be supported, both to increase transportation options for residents and employees, and to alleviate traffic congestion.



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INTRODUCTION





INTRODUCTION

Introduction

The City of Powell is known as one of Central Ohio's premier family friendly residential communities. The City pays special attention to recreation and community services and has a lower income tax rate than other area cities. As a bedroom community, Powell is just a 20 minute drive to Downtown Columbus; however, rush-hour traffic creates a significant strain through the downtown core. As Powell and surrounding communities continue to grow, traffic moving through and around the City has heavily impacted the community. Traffic issues, increased development pressures, low revenue and a growing population have created a strain on Powell, driving the need for a clear vision to fit the larger goals of its residents.

What is a Comprehensive Plan?

The Comprehensive Plan is the key policy guide for land use, development, and infrastructure decisions in the City of Powell. This plan serves as a guide for the City of Powell staff, the Planning and Zoning Commission, City Council and other government entities as they assess the character, location, and extent of public investments and private development proposals in the City of Powell. The Plan's policies and recommendations will be implemented over time through public and private decisions, such as capital improvements carried out by the City, and zoning or development proposals initiated by property owners and conducted through the public review process.

Why Update the Plan?

In 2014, the Powell Comprehensive Plan was approaching the twenty-year mark since its adoption in 1995. While many of the plan's policies and recommendations remained relevant, much had changed in the intervening years. For instance, Powell has grown significantly since 1995, introducing new residents and increasing the need for public services and infrastructure. The original vision of Powell as a "rural greenbelt town" is no longer an adequate description of Powell's size and development conditions. Continued growth in Liberty Township, and continued development pressures immediately north of Powell require the City to establish its own vision and priorities for areas that could become part of Powell in the future, and which will undoubtedly affect, and be affected by the City.

In recent years, both local and regional demographic changes, such as an aging population, changing family structures, and desire for more walkable communities and maintenance free living, are beginning to increase demands for different types of development not previously anticipated. In some cases, critical planning elements, such as a community-wide thoroughfare plan map, had not been included in the previous plan.

On February 3, 2014 Powell City Council participated in a strategic planning session facilitated by the Novak Consulting Group and focusing on issues affecting the future of the City in the coming year. The initiation of this Comprehensive Plan Update was one of the outcomes of the retreat. At the retreat, Council placed "Review & Update Plan" as a "very important" priority, in large part because most of the other goals identified in the session were contingent on an update of the plan to ensure they are adequately addressed and prioritized. Other "very important" items were to increase cooperative intergovernmental relations and sustainable capital funding.

Purpose and Process

This plan was developed through a collaborative effort between Powell City staff, a Steering Committee comprised of Powell residents and business owners, and a multidisciplinary team of consultants including MKSK (land use, urban design, and community engagement), Trans Associates (transportation engineering), and Regionomics, LLC (fiscal analysis).

This plan responds to the changes that have occurred since the last plan was adopted and creates a strategic vision for the next twenty years. The three main components of the plan are the Land Use Plan (Section 2), Transportation Plan (Section 3), and Fiscal Analysis (Section 3). Together, these elements establish a framework that will guide Powell in responding to the issues and opportunities it is currently facing, as well as those that may arise in the future. An implementation strategy (Section 4) puts the planning recommendations into action.

Figure 1 illustrates the plan update process. The process began with a "Baseline Analysis" - an assessment of existing plans, policies, and physical conditions. The results of this analysis are described in the remainder of this section. With planning issues assessed and prioritized, the planning team developed alternative "Preliminary Scenarios" for growth and development for consideration by the community. Feedback and guidance from the Comprehensive Plan Steering Committee and the general public helped to guide the development of a "Preferred Scenario" and plan, including a series of policy recommendations. A draft plan was reviewed by the Steering Committee and then forwarded with recommendations for review by the Planning and Zoning Commission. The Planning Commission then forwarded the Plan on to City Council for final review and adoption. [NOTE: This text will be revised as needed to accurately reflect the adoption process, relevant dates and ordinance number, once the process has been completed]

Figure 1.1: The Planning Process



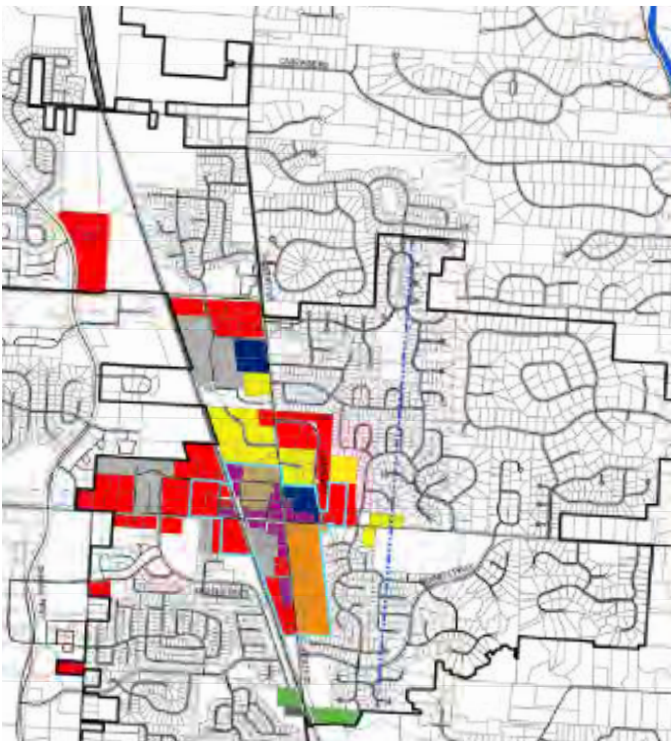
INTRODUCTION

Past Planning Efforts

A variety of plans and studies are currently in place to guide growth and development decisions both within Powell and in surrounding communities. This of course includes Powell's 1995 Comprehensive Plan, which is revised and updated by this document. Other plans have been consulted to provide an understanding of current policies that may affect Powell, or which may be affected by Powell's plan. In some cases, the recommendations of this plan may conflict with those of other policy documents. In these cases, the City of Powell should proactively engage surrounding communities to ensure cooperative and coordinated planning efforts.

1995 Powell Comprehensive Plan

Originally conceived as an update to the Village of Powell's 1988 Comprehensive Plan, the 1995 plan recommended a significant rethinking of the community's land use and transportation priorities, primarily with the goal of minimizing long term traffic impacts and fiscal strains. The plan recommended low density, high-quality residential development; limiting government services and associated costs; and minimizing employment-generating land uses that require costly transportation system upgrades.



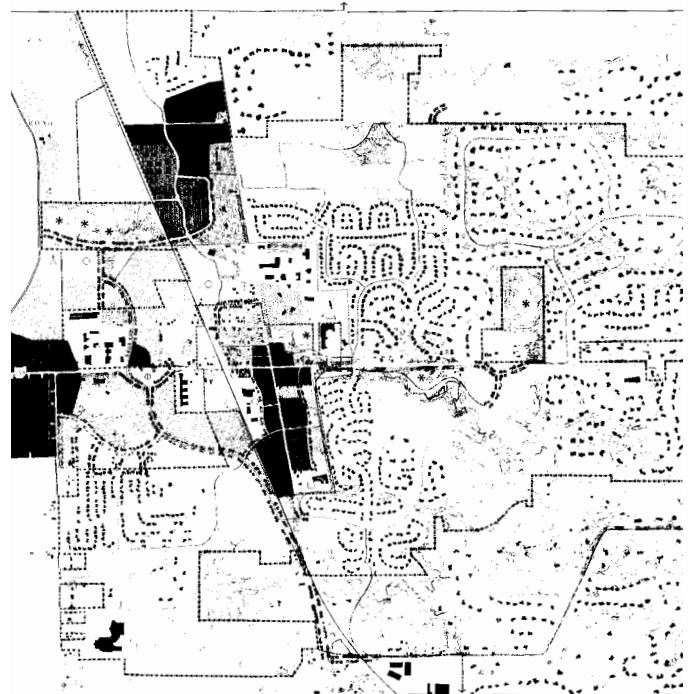
Source: Downtown Powell Revitalization Plan, 2004

The plan also emphasized the importance of reinforcing and improving the pedestrian-oriented character of downtown Powell. It endorsed introducing a variety of housing types in the town center including "village lot" condominiums and multi-family options as a means to support local businesses.

Cumulatively, the 1995 plan established a vision for "a small, rural, greenbelt town, located off the beaten path." Twenty years later, many of the planning and transportation issues facing Powell remain relevant, and warrant a reconsideration of goals and strategies in light of current conditions and trends.

Downtown Powell Revitalization Plan (2004)

The Downtown Powell Revitalization Plan furthered the 1995 Comprehensive Plan's recommendations for the town center with a detailed market analysis and physical plan for each quadrant of the downtown. The plan calls for rehabilitation and adaptive reuse of historic structures, as well as targeted infill and redevelopment with a mixture of uses. Like the Comprehensive Plan, the Revitalization Plan envisions the introduction of both detached and attached housing types and potentially "live-work" housing as a means to support downtown business.



Source: 1995 Comprehensive Plan, City of Powell, December 1995

The plan recommends streetscape enhancements, and street extensions to create an interconnected grid at a pedestrian-oriented village scale, with buildings fronting streets and shared parking behind. The potential for a left turn lane at Olentangy Street and Liberty Street is considered, with further analysis recommended to fully understand the impacts such a project would have on the character of downtown Powell.

Liberty Township Comprehensive Plan (2006)

The Liberty Township Comprehensive Plan foresees continued development of farmland in the unincorporated portions of the township to the north of Home Road. The plan anticipates that sewer service requirements will likely increase pressures to develop at minimum one-acre lot sizes in the Farm Residential zoning district, which covers most of the township, rather than two to five acre lot sizes that have occurred in the past. The plan recommends maintaining a one unit per acre maximum net density for residential development north of Home Road, but also considers the possibility of Conservation Subdivisions that would cluster residential development and preserve large amounts of open space while maintaining low densities over the larger area. Generally, the plan does not recommend commercial development north of Home Road, but does consider the possibility of transitional mixed uses along the Township's northern boundary of Bunty Station Road near the City of Delaware.

To the south of Home Road, the Township plan recognizes the possibility of continued annexation of land into Powell. In these areas, the plan recommends alternative development patterns be considered to minimize sprawl, including mixed-use, pedestrian-oriented Traditional Neighborhood Design (TND).

Concord Township Comprehensive Plan (2004)

Like the Liberty Township plan, the Concord Township Comprehensive Plan also recommends low residential densities throughout its Farm Residential zoning district, but also considers the possibility of Conservation Subdivision developments to preserve rural character and open space while clustering housing. The plan also recommends Traditional Neighborhood Design Development as an alternative to sprawl in targeted areas.

City of Delaware Comprehensive Plan (2003-2008)

The City of Delaware's currently adopted Comprehensive Plan establishes a generalized future growth boundary just north of Bunty Station Road. Of note for Powell though, Delaware has planned for a significant amount of light industrial development north of Bunty Station and along US 42. The planned extension of Sawmill Parkway from Hyatts Road to US 42 (scheduled for construction in 2015-2016) will reinforce the development potential of this area.



Downtown Powell

INTRODUCTION

Growth and Development

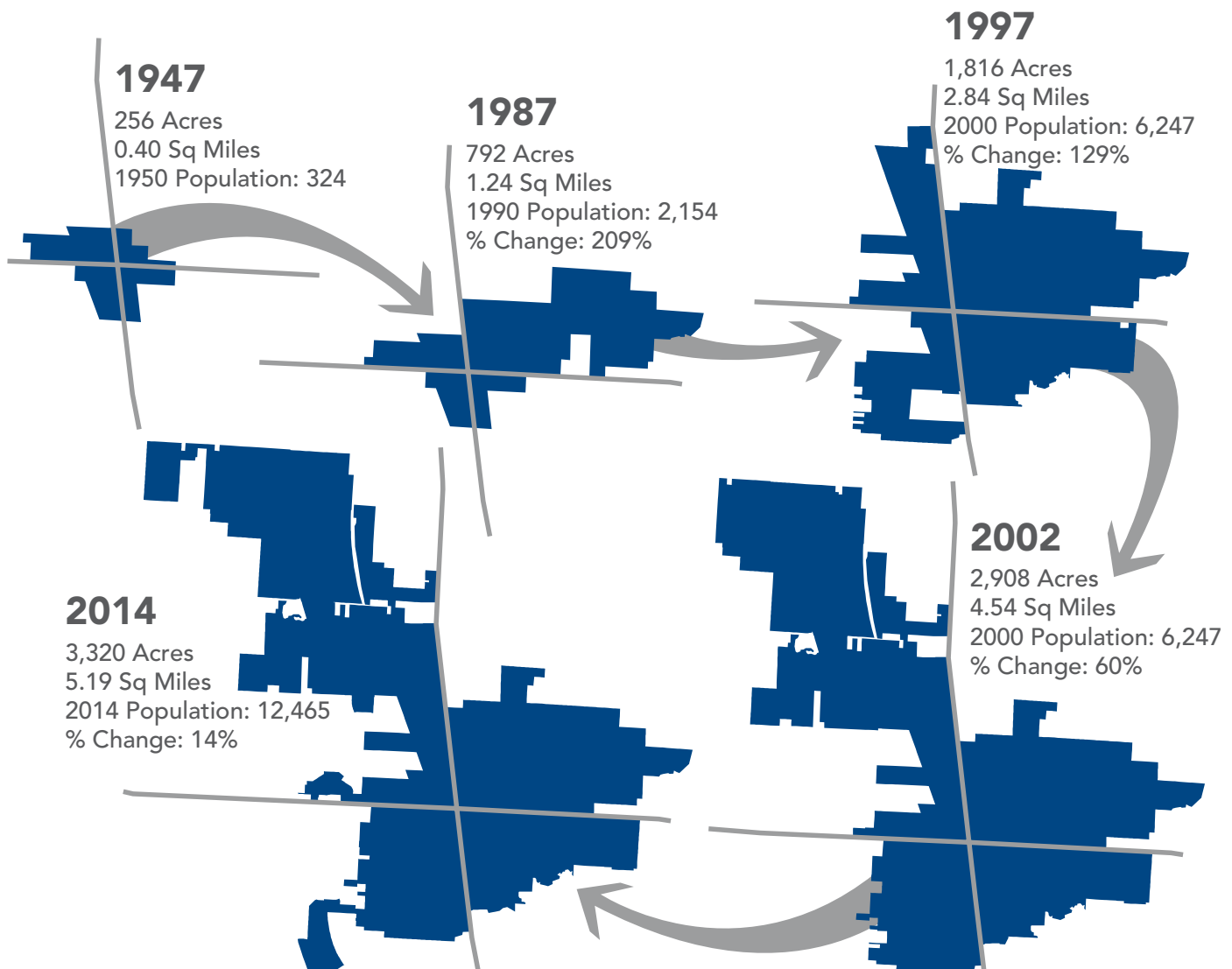
Powell was originally settled in 1801 as a frontier crossroads community called Middlebury. It was incorporated as a village in 1947, nearly a century after taking the name of Powell. The village began to expand in the 1980's with the trend of suburban residential subdivisions beyond the I-270 outerbelt. By 1990 the population was over 2,000 and 10 years later, when Powell was incorporated as a city, its population had tripled through continued expansion and subdivision.

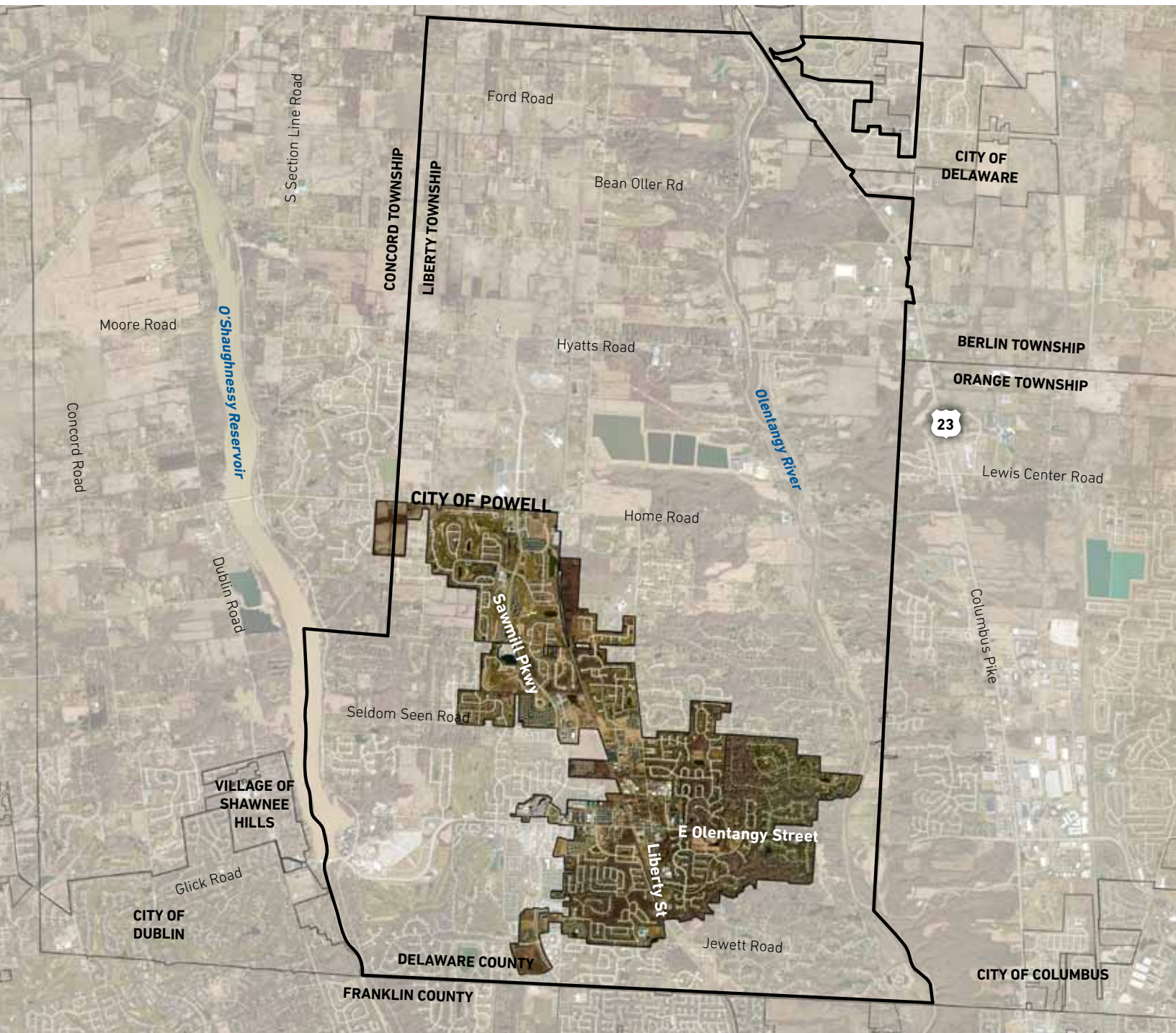
Between the years 2000 and 2010, Powell's population nearly doubled again, largely due to the 2002 annexation of approximately 1,000 acres along the Sawmill Parkway

extension north of Seldom Seen Road for the development of the Golf Village community. At about the same time, Powell and Liberty Township entered into a Cooperative Economic Development Agreement (CEDA), which guides annexation from the township to the City, and limits Powell's expansion north of Home Road until the year 2017. In recent years, Powell has experienced more modest annexations, primarily of commercial land along the Sawmill Corridor near the southwest quadrant of the city. The City has also expanded into Concord Township with new residential development along Home Road.




Refer to the Land Use Plan section for more information about Powell's current land use and development patterns and recommendations for future growth.

Figure 1.2: Powell Historical Growth





Map 1.1: Powell In Context

-  Powell City Boundary
-  Liberty Township Boundary
-  Township Boundary

↑ NORTH

0 2,000' 4,000'

INTRODUCTION

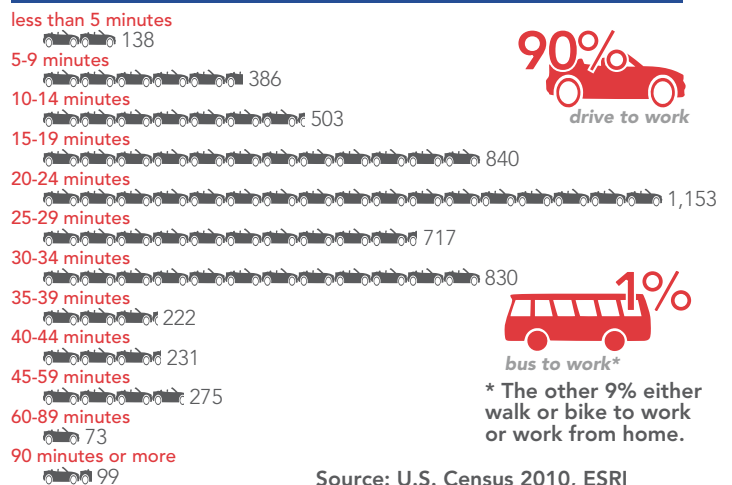
Transportation

As with the region as a whole, east-west transportation through and around Powell is problematic, largely due to limited bridge crossings of the Olentangy and Scioto Rivers. Disconnected suburban street systems have exacerbated this issue, as does the CSX railroad which bisects the city with multiple at-grade crossings. Traffic congestion in Downtown Powell, specifically at the Four Corners intersection of Olentangy and Liberty Streets is a top concern of the community. The extension of Sawmill Parkway north of Powell Road has improved north-south mobility since the 1995 Plan, serving new development in Powell and Liberty Township. However, the extension of Sawmill Parkway north to US 42 will establish a significant regional connection that will open more land for development while also supporting increased through traffic within Powell. Likewise, the planned widening and extension of Home Road will improve east-west mobility, while also supporting new development. Other currently planned regional and local transportation improvements are illustrated below.

Public Transportation

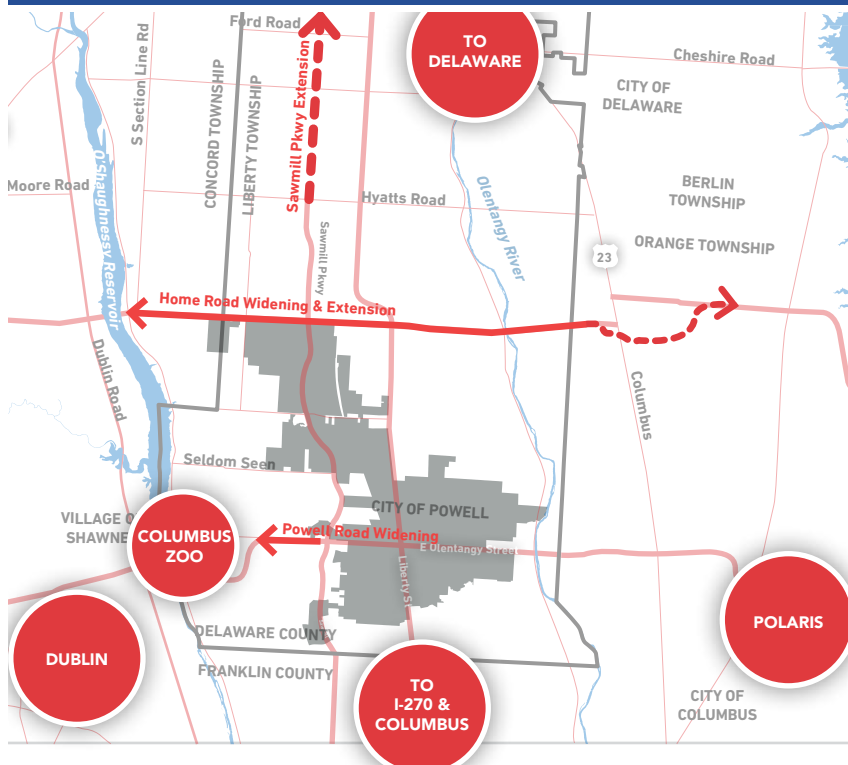
Currently COTA does not provide service to the City of Powell. The closest stops are at the Columbus Zoo and to the south at the intersection of Smoky View Boulevard and Smoky Row Road (South Liberty Road). While no plans currently exist to introduce commuter rail service to Central Ohio, the railroad does offer a long term opportunity to turn a transportation issue into an asset.

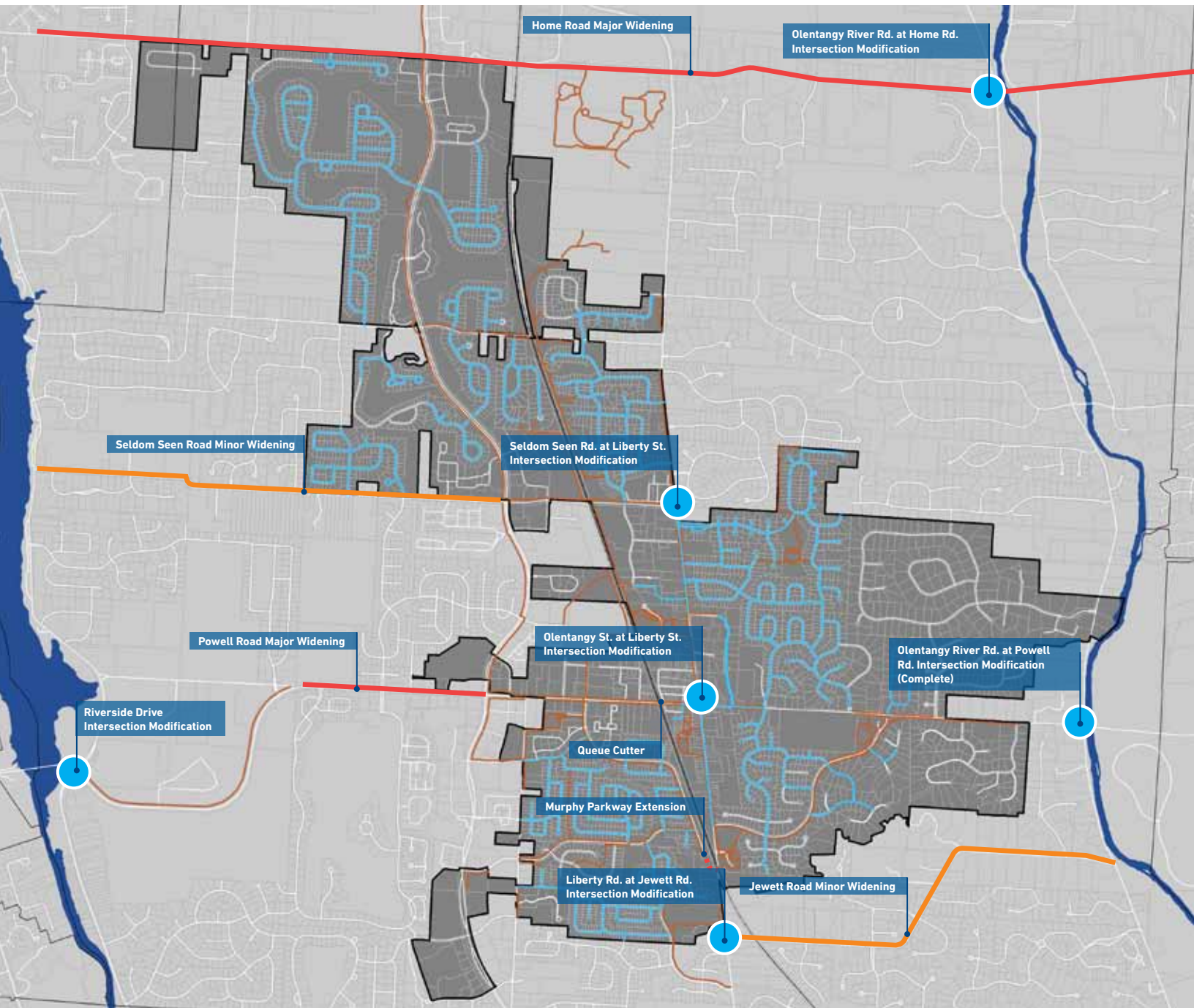
Figure 1.4: Powell's Commuting Patterns (2008 - 2012)



Source: U.S. Census 2010, ESRI

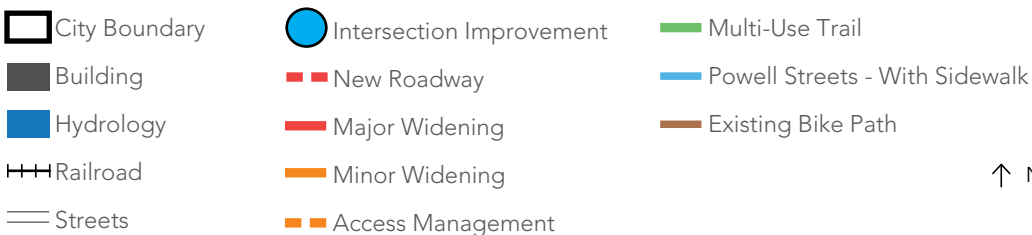
Figure 1.3: Surrounding Area





Map 1.2: Transportation Projects

(As planned by the City of Powell, Delaware County, and designated in the MORPC 2012-2035 Metropolitan Transportation Plan)



↑ NORTH

0 1,000' 2,000'

INTRODUCTION

Population & Housing

Population Growth

Powell maintained a relatively constant number of residents from 1950 through 1980, and then experienced a significant jump in population with growth in the 1980's. By 2010, the population had increased to over 11,000 new residents. Projections developed by the Mid-Ohio Regional Planning Commission indicate that Powell is expected to add nearly 5,000 additional residents over the next 20 years, but this number does not include potential growth through new annexation. By contrast, surrounding Liberty Township is projected to grow by over 25,000 new residents by the year 2035, increasing from just over 15,000 residents to over 41,000. Through annexation, a portion of this growth may occur within the City of Powell.

Household Composition

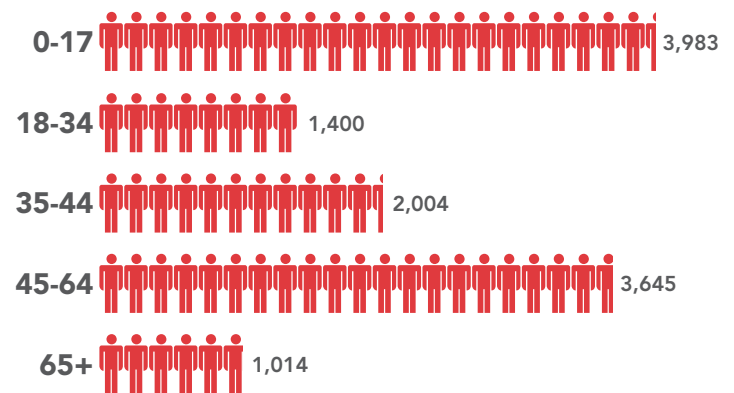
Powell is a family-oriented community with 85% of its households being families with children. Average household size for most single-family neighborhoods is 3 persons per household. The remaining 15% of households are comprised of couples or individuals. Average household sizes for attached housing types

(condos or apartments) within Powell generally range between 1.3 and 1.9 persons per household. A result of the condos being designed for retirees.

Demographics

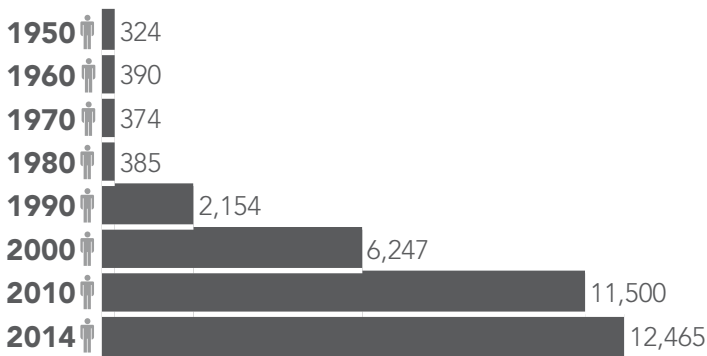
School aged children and middle-aged adults (their parents) make up the majority of the population of Powell. However, projections by the Olentangy Local School District indicate that the rate of growth in school aged children is expected to slow over the coming years. As with many local communities, the population in the 55-year and older age groups is expected to grow in

Figure 1.6: Population by Age (2013)



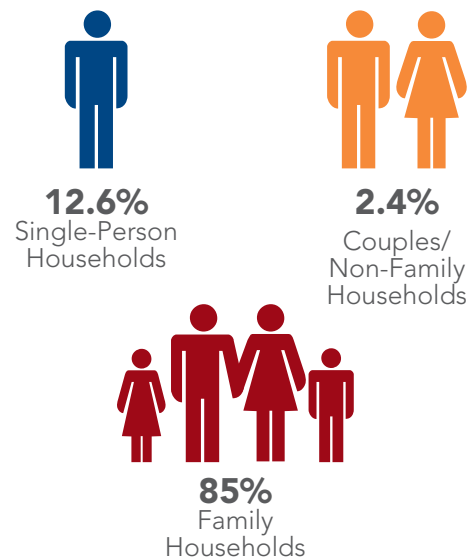
Source: U.S. Census 2010, ESRI

Figure 1.5: Historical Population Data



Source: U.S. Census 2010, ESRI

Figure 1.7: Powell Households by Type (2010) %



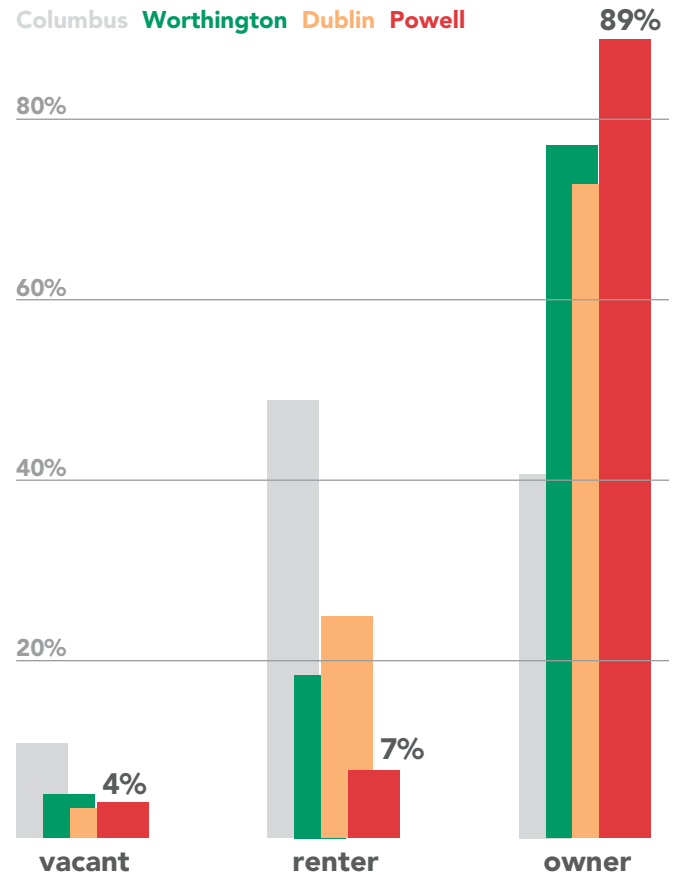
Source: U.S. Census 2010, ESRI

Powell for the foreseeable future (U.S. Census Bureau; ESRI forecasts). Powell's population is also steadily diversifying, with Asian-Americans and Asian immigrants represent over 7% of the population in 2015, and expected to increase to nearly 10% by the end of the decade.

Housing Stock

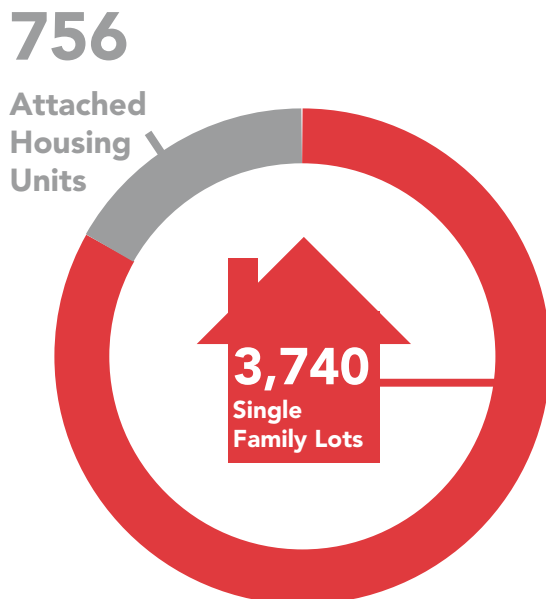
In the Columbus metro area Powell has the highest median home value at nearly \$400,000 - 2.5 times the median home value in the City of Columbus. The majority of Powell's housing stock is relatively new, built between 1990 and 2010. By comparison, the nearby City of Worthington's housing stock is substantially older, having been built primarily between 1950 and 1980. Nearly 90% of homes in Powell are owner-occupied, significantly higher than other nearby primarily single-family communities. Approximately 7% of housing units in Powell are renter-occupied; a small number of these are apartment units, while the rest are single family homes. As of 2014, approximately 83% of the City's housing stock (existing and approved for construction) is comprised of detached single-family homes. The remainder of attached housing units are primarily condominiums, typically ranging from 2 to 5 units per structure.

Figure 1.9: Occupancy of Housing Units 2014



Source: U.S. Census 2014, ESRI

Figure 1.8: Powell Housing Types (Existing and Approved)



Source: City of Powell, 2014

Figure 1.10: Median Home Values 2014



Source: U.S. Census 2014, ESRI

INTRODUCTION

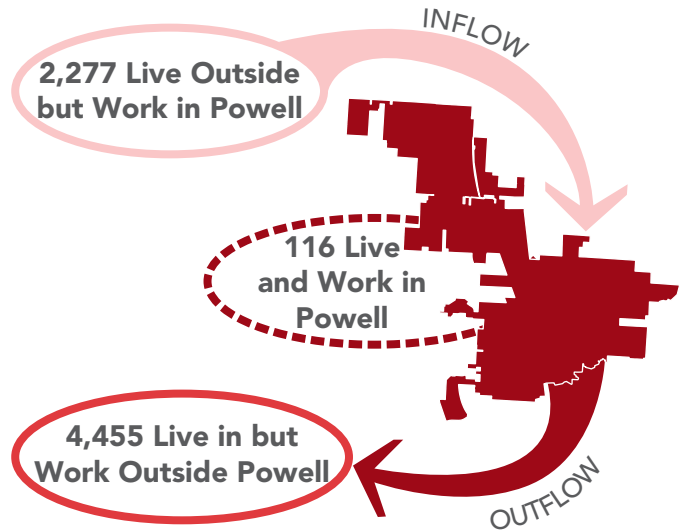
Economy & Employment

Powell is home to a highly educated and well-paid workforce. However, most Powell residents commute outside of the city for work. Only about 5% of those who work in Powell also live within the community. Most jobs within the city are held by employees who commute into Powell on a daily basis.

Nearly 70% of Powell's residents hold a bachelor degree or higher, and over half are employed in either a management or business position. The rest of Powell's white collar occupations are divided nearly equally between healthcare, technology, and education.

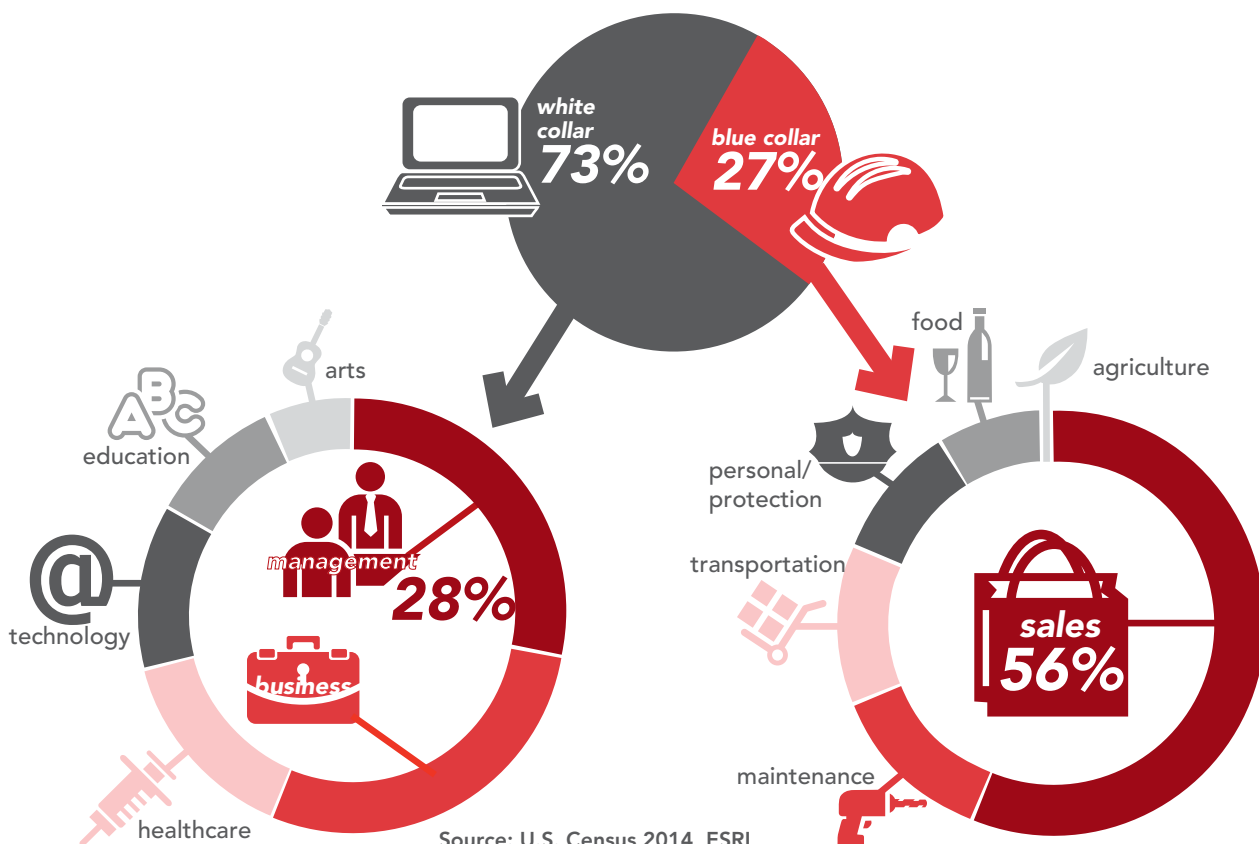
The majority of Powell residents make more than \$100,000 annually, with over 38% making more than \$200,000. This is consistent with local demographics; a highly educated population in the prime of their careers. The median household income is \$149,601 and is expected to increase to over \$160,000 by the year 2020.

Figure 1.12: Inflow/Outflow Jobs 2011



Source: U.S. Census 2014, ESRI

Figure 1.11: Occupation of Powell Residents 2014



Source: U.S. Census 2014, ESRI

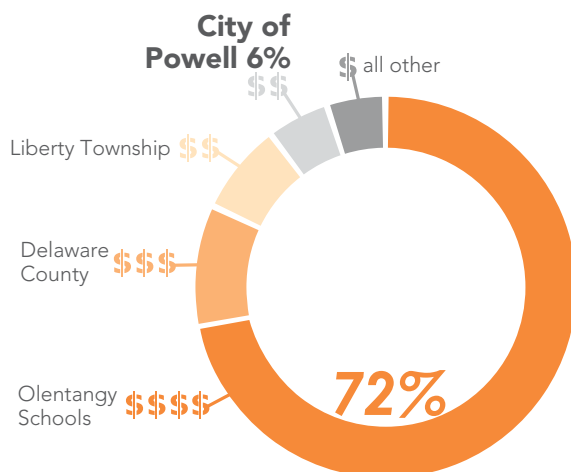
The City is primarily residential but does include limited employment opportunities. The service sector dominates current businesses within Powell. These types of businesses include auto repair, salons, dry cleaners, dentist offices, doctors offices and schools.

Income and Property Taxes

Powell's municipal income tax rate is 0.75%, the lowest in Central Ohio and one of the lowest in the state. The full 0.75% rate applies to those who earn wage and business income within the city. Those who live in the city but work in another municipality (city or village) that imposes an income tax are subject to Powell tax at a rate of 0.5% in addition to the rate applied by the municipality where the resident is employed. Within Central Ohio, the municipal income tax rate is typically in the range of 1% to 2% (the City of Columbus rate is 2.5%). This means that a Powell resident who works in Columbus has an effective income tax rate of 3%: 0.5% paid to Powell and 2.5% to Columbus.

The majority of property taxes paid by Powell residents and business goes to the Olentangy Local School District. Approximately 5% goes to the City of Powell for city services and infrastructure, with the remainder going to Delaware County and Liberty Township.

Figure 1.13: Powell Property Tax



Source: City of Powell, 2013 Annual Report

Figure 1.14: Businesses by Type in Powell 2014

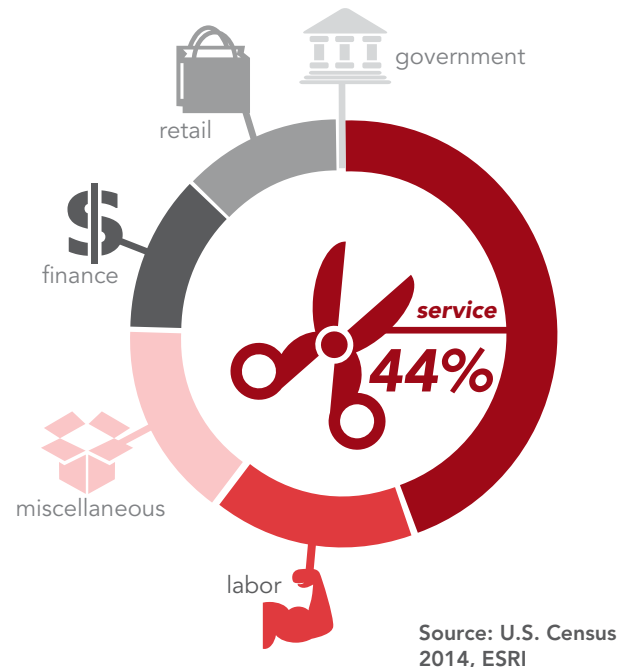
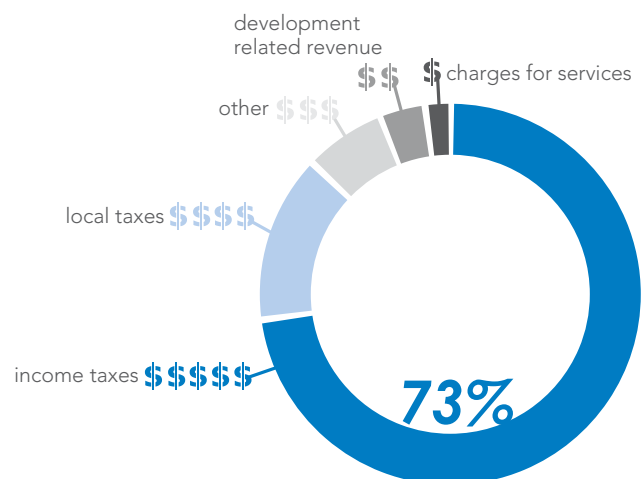


Figure 1.15: Powell Revenue Sources



Source: City of Powell, 2013 Annual Report

Community Facilities

Schools

The local education system is an important quality of life consideration for Powell's residents, and is consistently cited as one of the main reasons why people move to the Powell area. The majority of children in Powell attend Olentangy Local Schools, although it is not necessary to live within the Powell city limits to attend. In fact, only one public school is located within Powell's municipal boundaries, while six are located immediately outside of the city. The district is highly ranked with a 98% graduation rate and the state's Performance Index of 91%. The school district is comprised of 95 square miles located in Delaware County with a small, southern portion in Franklin County. The district serves all of the City of Powell but also all or part of a number of area municipalities. The total student population for the district as of October 2014 was 18,769 with roughly 19% of the students being Powell residents. Village Academy is the only private school within the City boundaries. It offers education for Pre-Kindergarten thru 12th grade.

Parks, Open Space and Trail Connections

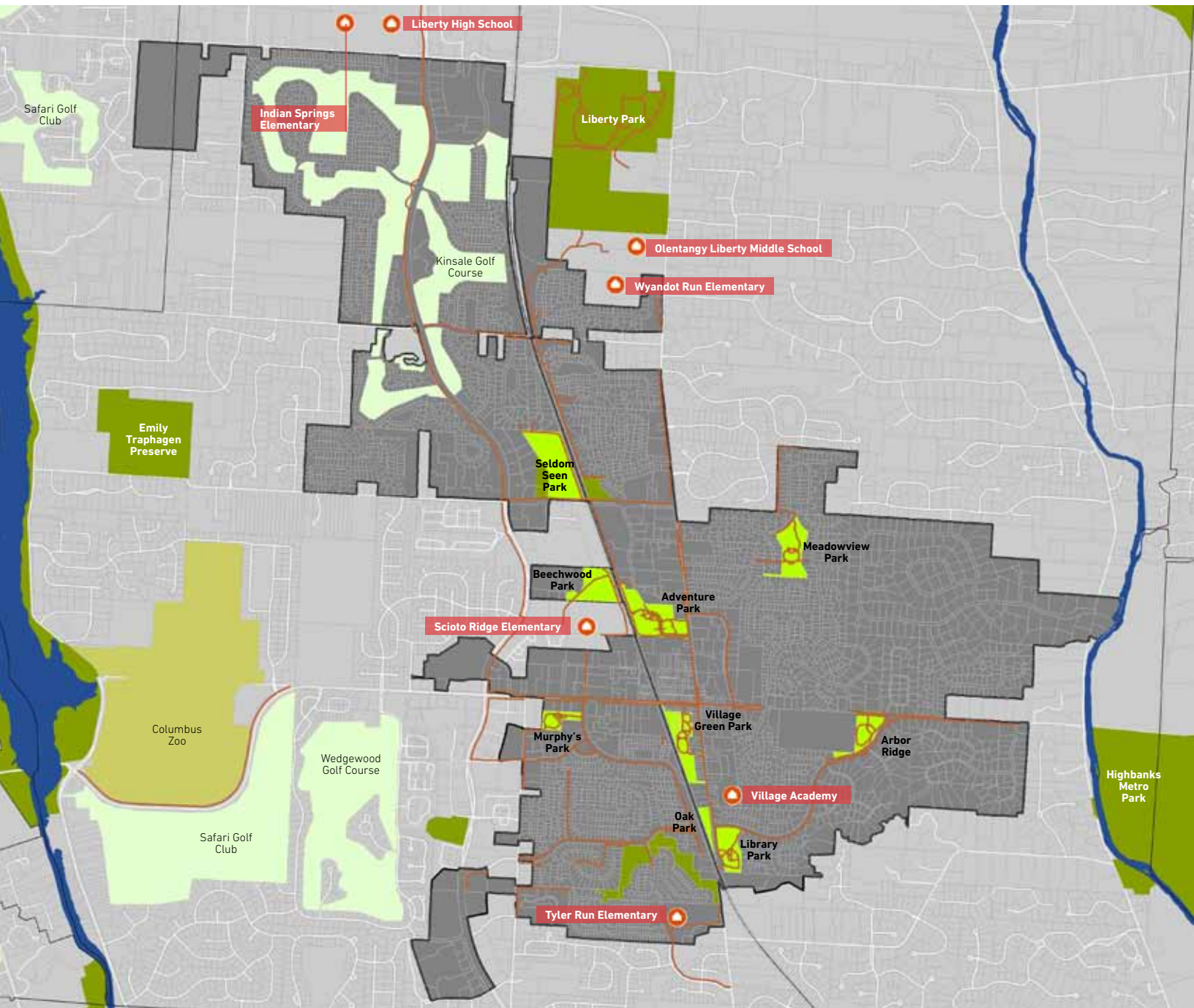
There are over 100 acres of public parkland within the City of Powell. The City recently adopted a master plan for the Park at Seldom Seen, a 23-acre addition to the City's park system that will provide both active and passive recreational opportunities in the geographic center of the community. Other major community parks include Adventure Park, Village Green Park, Arbor Ridge Park, and Library Park. Liberty Park, within the Liberty Township civic corridor along Liberty Road, provides additional parkland that also serves Powell residents. High Banks Metro Park is located along the east bank of the Olentangy River, less than a half-mile from Powell; however, there are currently no safe pedestrian or bicycle connections to this major recreational destination.

There are currently 13 miles of multi-use paths throughout Powell. However, there are a number of gaps within the path system that limit citywide pedestrian and bicycle connectivity. The map on the opposite page illustrates where the City has identified needed path connections, to be completed over time as capital funding is available.

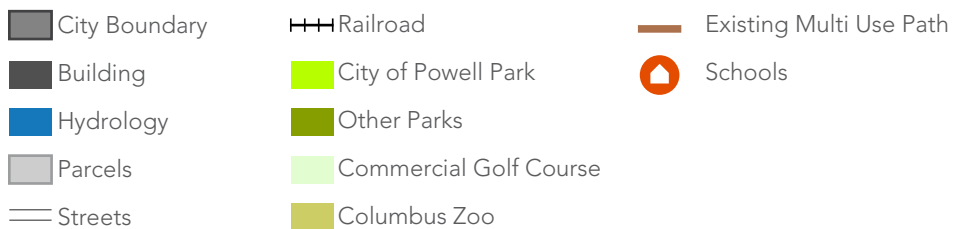


The Park at Seldom Seen will be the newest addition to Powell's public park system.

Source: POD Design



Map 1.3: Parks & Open Space
Existing Pedestrian And Bicycle Infrastructure



↑ NORTH

0 1,000' 2,000'

INTRODUCTION

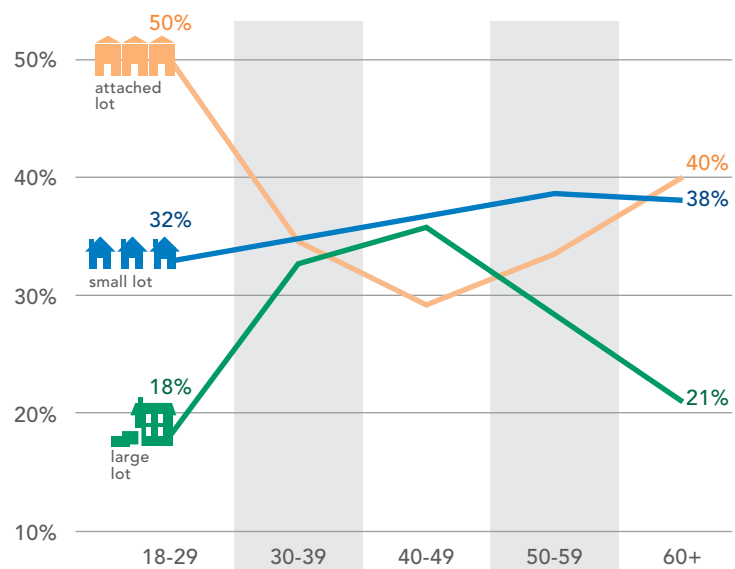
Regional Trends

The Comprehensive Plan update was undertaken during a time of significant change for the Powell community and the region as a whole. As Powell began the planning process, the Mid-Ohio Regional Planning Agency (MORPC) was also engaging leading national planning consultants to analyze demographic and development trends for Central Ohio. This includes a report by demographer Arthur C. Nelson — *Columbus, Ohio Metropolitan Area Trends, Preferences, and Opportunities: 2010 to 2030 and to 2040*, and the *Insight2050* initiative, a joint collaboration between MORPC, Columbus 2020, and the Urban Land Institute, led by Calthorpe Associates. These studies document significant demographic changes that will affect development patterns throughout the region, and identify the growing opportunities for more compact, walkable, mixed use development that will best respond to the needs of a changing population.

Despite projections for static or declining population numbers for most communities in the State of Ohio, Central Ohio is projected to experience continued growth and economic development over the next 30 years. However, mirroring national trends in changing demographics and housing preferences, the region is projected to experience a significant increase in demand for attached and small lot housing options. This is an issue affecting many of the suburban communities in the metropolitan Columbus area, which are dominated by large lot single family development and are now exploring how best to accommodate other housing types in a manner that fits with the overall character of the community.

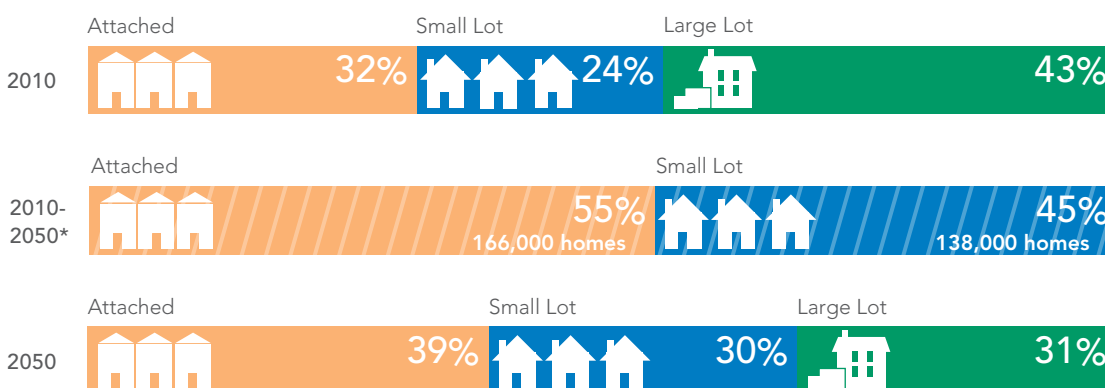
Regionally, the 65 and older demographic is projected to experience the largest percentage increase in population over the next 25 years. While Powell is currently dominated by families with children, the community can be expected to experience an increase in the senior population as the Baby Boom generation reaches retirement and begins to downsize. While there are currently some senior-oriented housing developments in Powell, the community can expect continued interest in alternatives to large lot single family homes, particularly in areas with walkable access to community amenities.

Figure 1.17: Housing Type Preference by Age



Source: National Association of Realtors (2011)

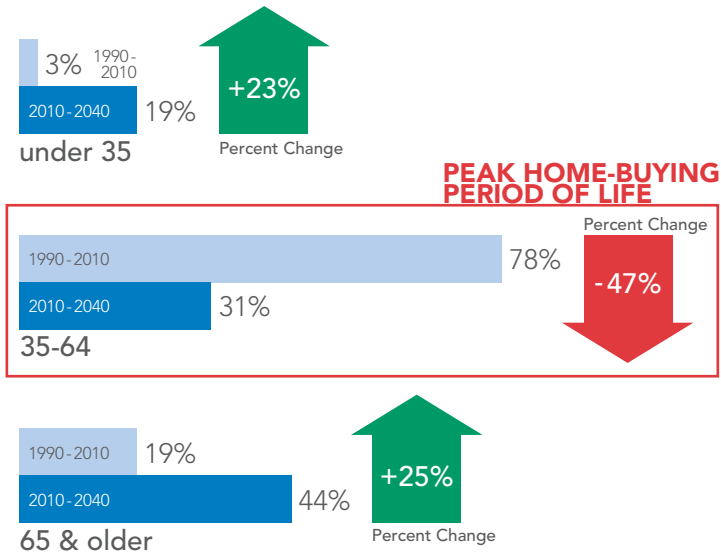
Figure 1.16: Projected Demand for Housing by Type, Columbus MSA (2010-2050)



*Refers to households from 2010-2050, excluding households that existed prior to 2010.

Source: Arthur C. Nelson, *Columbus, Ohio, Metropolitan Area Trends, Preferences, and Opportunities: 2010-2030 and to 2040* (NRDC)

Figure 1.18: Columbus MSA Population Growth Projections by Age Group



Source: Arthur C. Nelson, Columbus, Ohio Metropolitan Area Trends, Preferences, and Opportunities: 2010-2030 and to 2040 (NRDC)

Figure 1.20: Current & Future Households Growth by Type, Columbus MSA

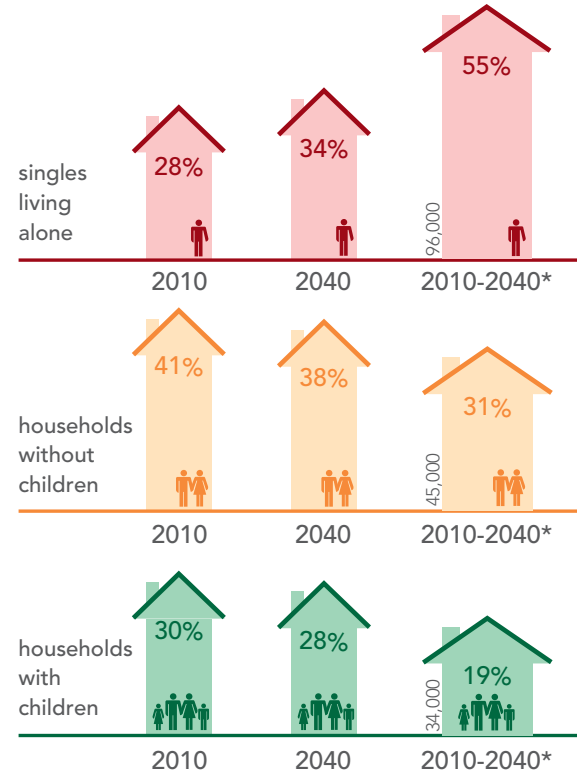
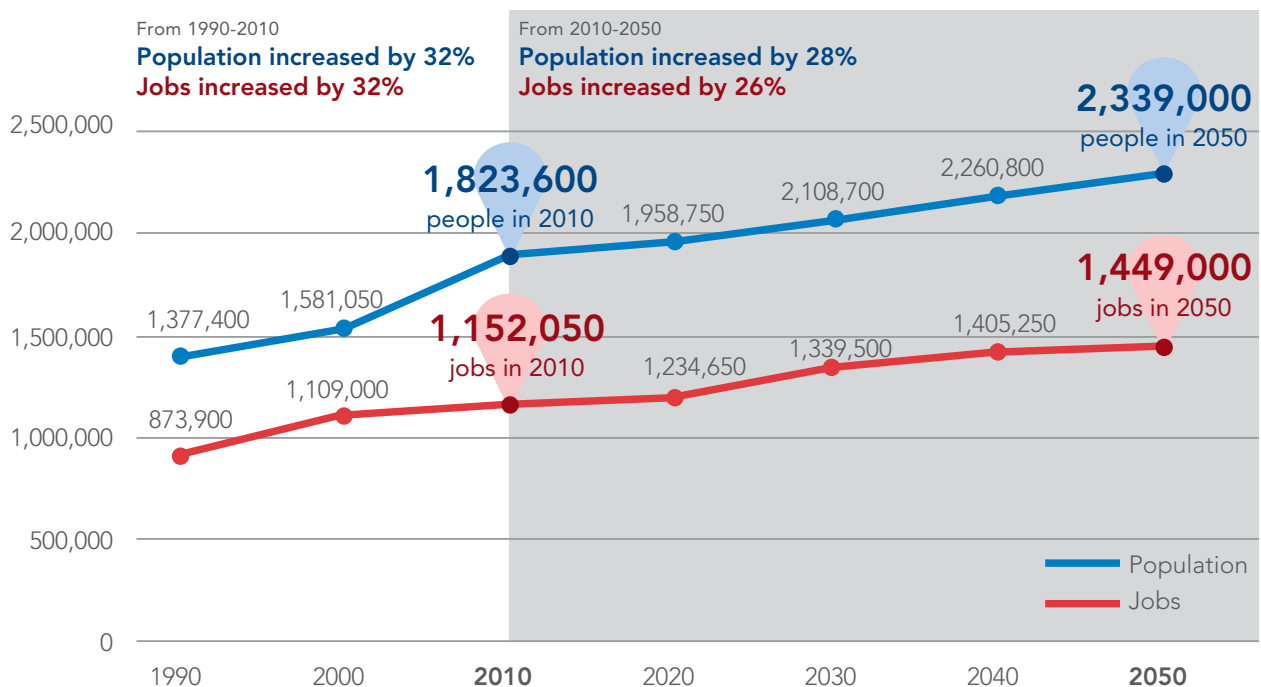


Figure 1.19: Important Columbus MSA Population Changes



INTRODUCTION

Community Perspectives

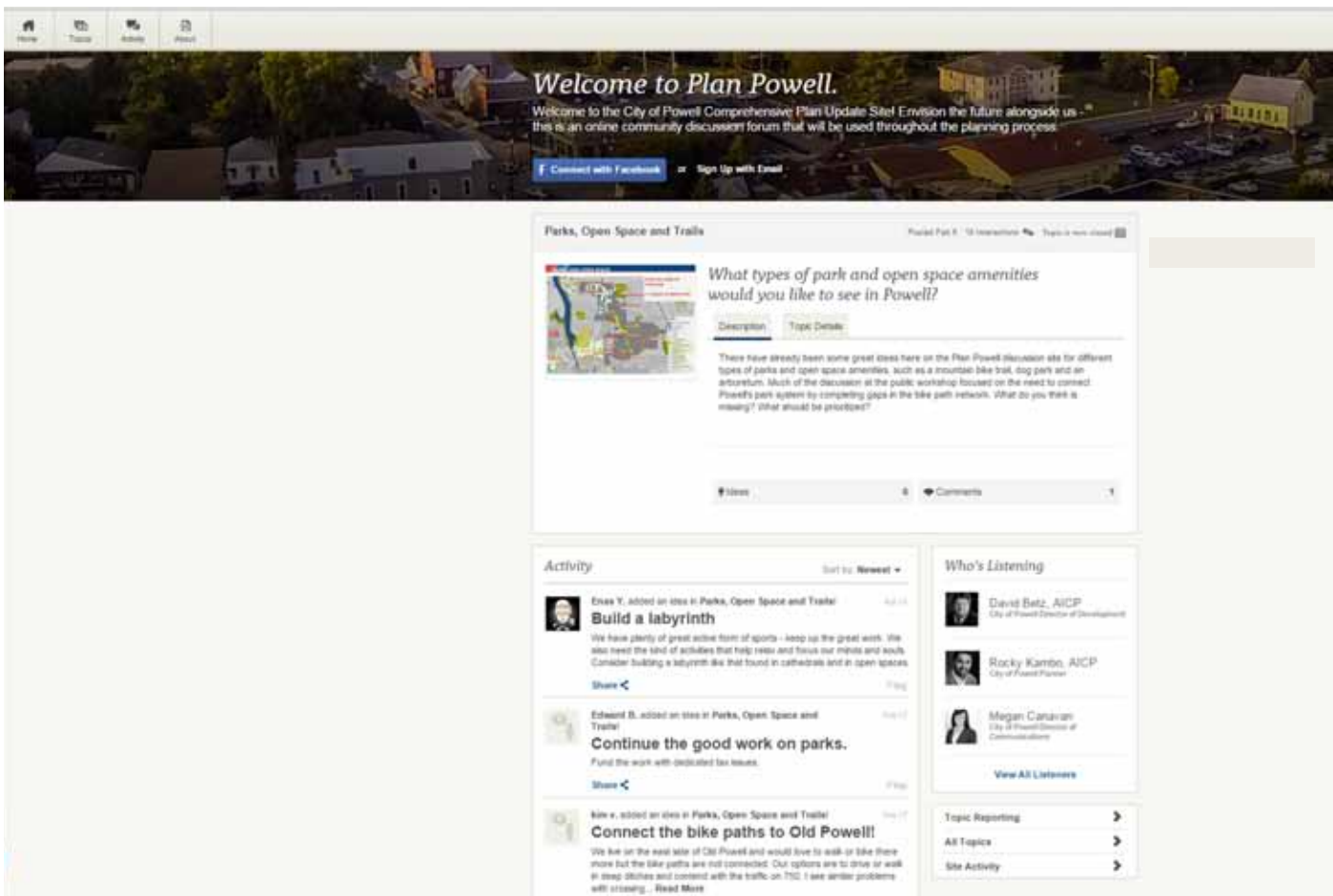
Community Attitudes Survey

In the Spring of 2014, Powell engaged the public opinion research firm Saperstein Associates to conduct telephone interviews with over 400 registered Powell voters. A majority of residents consider the City of Powell an outstanding community. They praised the city-managed amenities, city services, and Powell's public officials. They also cited the city's small-town atmosphere as one of the most attractive aspects of the community. The survey identified two major issues that the community needs to address: 1) traffic congestion, particularly in Downtown Powell, and 2) residential development involving higher densities of housing than Powell has seen in the past.

Plan Powell! Online Engagement Site

In order to generate public outreach and discussion, the planning team and the City of Powell developed an interactive outreach website called *Plan Powell* using a web-based discussion platform designed specifically for public collaboration.

The Plan Powell site generated over **200** user-generated "ideas" from over **100** participants. The site had over 13,000 page views with over 4,000 unique visitors throughout the entire process of updating the plan. All of the ideas and comments are located in the Appendix of this document. In some cases, there was considerable consensus regarding community perspectives, such as the need to improve the bikeway connections throughout the City. For other issues, especially the most topical issues of traffic congestion and housing development, a wide variety of opinions were expressed, demonstrating a clear need for the plan to provide recommendations on these items.



Plan Powell MindMixer website

Stakeholder Interviews

At the beginning of the planning process, the planning team conducted targeted interviews with individuals and small groups representing a variety of interests in and around Powell. Such interviews help to supplement the information gained from online discussion and community-wide public meetings by providing planners with direct insights from those who live in and conduct business in the community. Groups included residents and business owners (both within downtown and outside of downtown), local developers (both those who have successfully developed in the city and township, and who may have interest in future development in city), and representatives from local government agencies, including the Olentangy Local School District, Delaware County, and Liberty Township. The following summarizes key points of discussion:

General Business Owners (outside of downtown)

- There is a strong market for local business space
- The market is currently focused service-oriented office/retail that primarily serves Powell/Liberty Township residents
- Need for flexible spaces (overhead doors, loading docks, etc.)
- Powell is missing Class A office space that could serve as an anchor for commercial areas

Downtown Business Owners/Residents

- Fixing the Four Corners is a top priority
- General support for downtown housing options, but must be high quality
- “Character of place” is part of downtown’s success
- There are several infill/redevelopment opportunities in or near downtown. These should be developed to fit within downtown’s character and to extend its character further along Olentangy and Liberty Streets.
- Need diverse businesses



County, Township, School Representatives

- Planning for more large lot single-family development, but recognize need for diversity
- Multiple sewer extensions under study
- Elementary school enrollment is decreasing
- Opportunities exist for new trail connections between City and Township
- Maximizing existing infrastructure

Development Community

- Residential developers are responding to shift in demand for smaller lots and attached units
- Prospective customers (new residents) want access to up-scale amenities, dining, bike path connections, open space, etc.
- A consistent source of capital improvements funding to support new development is needed.
- Diverse housing options needed

INTRODUCTION



Public Workshops

The plan update included three public workshops held at the Village Green Municipal Building at key points of the planning process. These provided an opportunity for the planning team to share findings and educate the public about key issues, and to listen to residents' concerns and ideas to help guide the development of the plan.

Public Workshop - February 5, 2015

The planning team hosted an introductory public workshop that was well attended with approximately 75 people. A general presentation kicked off the evening to inform the audience about existing conditions and trends. The participants then were invited to split up to discuss various topics in 15 minute intervals. Discussion topics and ideas included:

Land Use & Development

- Annex remainder of Powell Road
- Don't grow too fast
- Be more aggressive with annexation / plan for undeveloped land
- Sawmill Road, Home Road and railroad tracks are prime ground
- Consider merging with Liberty Township

Traffic / Transportation

- Four Corners intersection is *the* transportation issue
- Create a more effective downtown bypass
- Some advocate widening Olentangy and Liberty to add left turn lanes
- Others want to eliminate all left turns (at all times)

- Improve signage to divert traffic
- Use Seldom Seen Road as a bypass to downtown
- Create an overpass/underpass at railroad crossing(s)

Parks / Open Space / Trails

- Connect bike paths (fill gaps), both within Powell and in the Township
- Create a bike connection from downtown Powell to Highbanks
- Require developers to dedicate more open space
- Preserve the Bennett Farm

Fiscal Health

- Need to provide incentives to lure jobs
- Focus employment uses on Home Road/Sawmill Parkway
- Interest in fiscal impact of zoo and schools
- Encourage small and medium-sized businesses
- Diversify employment in Downtown

General Discussion

- Much discussion about appropriate housing types and locations
- Recognition of need for senior housing/downsizing options/aging in place
- Little expectation for housing demand among younger groups
- Some support for residential in downtown, but not (generally) rental/apartments, and not next to the railroad tracks



Public Workshop - April 15, 2015

The second public workshop allowed participants to review conceptual scenarios for Powell's growth and development and discuss preferences regarding land uses and development character. The planning team also presented preliminary findings of the transportation and fiscal analyses and implications for Powell's future. Discussion topics amongst workshop participants included:

- The potential to redevelop downtown single family north of Olentangy Street
- The pros and cons of on-street parking in Downtown
- The potential for a new center of development north of Home Road
- Aging community demographics
- A desire for specialty shops in Downtown
- Long-term potential for merger with the Township
- The declining need for more single family housing
- Annex existing Sawmill corridor to the Zoo
- Northward expansion and related traffic impacts
- Encourage Mixed-Use & Senior Housing
- Concern with Downtown development traffic as well as the need for business patrons in walking distance
- Creating path connections to Downtown
- Preserving the quality of the school system



Public Workshop - June 17, 2015

The final public workshop was attended with approximately 55 people. The planning team presented the results of the scenarios analysis and related transportation and fiscal impacts. This workshop was an opportunity for residents to review and comment on the recommended future land use plan and thoroughfare plan. Discussions helped to craft the final plan and recommendations in this document. Key outcomes included:

- General consensus for annexation of commercial development to improve tax revenues, including portions of the Sawmill Parkway corridor
- General consensus for the development of a new mixed use center and employment-generating uses to the north of Home Road
- A continued variety of opinions regarding the types of housing appropriate for Downtown Powell
- General support for the creation of additional street connections in Downtown Powell, but concern with how quickly this can be accomplished



Young Residents Workshop - May 6, 2015

The City wanted all residents to have the opportunity to voice what they loved about Powell and this, of course, had to include the younger residents who are such a pivotal part of Powell. The City hosted a workshop specially designed to engage the younger population to better understand their likes and dislikes. Some of their answers are listed below.

What do you like about Powell?

- Greater's, Rita's, Local Roots, Trinity All-Starts, etc.
- People work together
- It's nice and safe, small and cozy
- The Powell Festival
- The Splash Pad
- Becoming more modern, new styles
- Easy to run
- Everyone is close and kind of knows each other
- Close to the zoo, friends and I can walk to shops

What would you change about Powell?

- A place to hang out with your friends
- More trees, bigger parks
- More businesses downtown, More shopping for younger residents
- Nothing, I love everything!
- Make the splash pad bigger!
- More shopping
- Need an indoor track

Conclusion

The comprehensive plan update was undertaken at a critical period in Powell's development history. The community has experienced significant growth over the past twenty years, and is also being impacted by growth in surrounding communities. There is also the potential for continued suburban growth, particularly to the north of the city with the extension of Sawmill Parkway, that will surely have an impact on Powell. This growth, coupled with limited east-west regional transportation connections and reliance on the single-occupant automobile, has created a significant traffic congestion issue in the community, most notably in Downtown Powell at the Four Corners intersection.

At the same time, changing demographic and development trends suggest the Powell should consider the need for alternative forms of development, including more diverse housing options and more walkable neighborhood design. The community is already facing market pressures for new housing types, particularly in Downtown Powell, with a variety of opinions among residents about what types of development are appropriate in the village center.

These development and transportation pressures are occurring within the backdrop of a limited municipal revenue stream that already makes it difficult to fund major transportation improvements, and may create future challenges in maintaining the high levels of municipal services that Powell residents have come to enjoy.

The planning process that resulted in this document was initiated to address these important issues facing Powell, and to provide a vision and strategies to guide the community as it makes decisions about growth, development, infrastructure, and fiscal policies over the coming years. The remainder of this Plan outlines specific issues and planning recommendations for land use (Section 2), transportation (Section 3) and fiscal sustainability (Section 4). An implementation strategy (Section 5) with key policy recommendations and action items provides a road map for the community to put the plan into action.



LAND USE PLAN



LAND USE PLAN

Introduction

This section of the plan documents Powell's current land use patterns, and provides recommendations for future land use and development decisions within the community. The Land Use Plan is a guiding framework to be used when making public and private decisions about development, redevelopment, and related infrastructure investments. The plan consists of a Future Land Use Map, and a series of related development guidelines and policy recommendations. Pages 28-45 provide descriptions of each land use category depicted on the Future Land Use Map, with specific policies related to transportation, infrastructure, open space, and development standards.



Current Land Use Patterns

Powell is primarily a residential community, with over half of the City's land area comprised of residential uses, mostly single family subdivisions. Nearly 5 percent of Powell is comprised of attached housing types, with most of these being suburban-style condominium developments. Both detached and attached housing types are of high quality throughout the community.

Residential densities are generally low with wide lots, and street layouts within the subdivisions are often circuitous and poorly connected. This combination of design factors result in relatively long walking distances for most residents, even when neighborhood services are located in close proximity "as the crow flies."

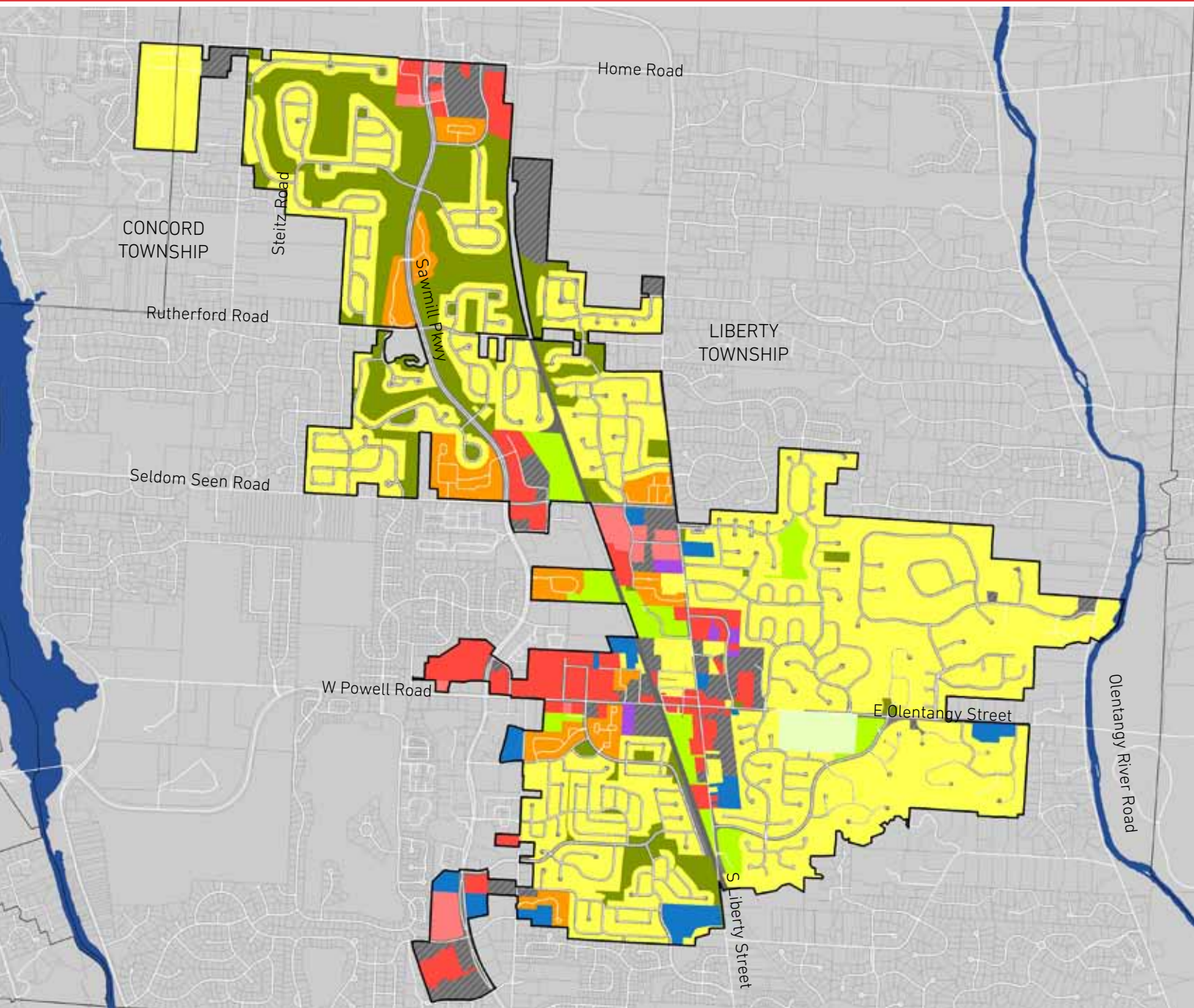
Approximately 10 percent of the City's land area is dedicated to existing employment uses, most of which are retail. Employment uses are located in and near downtown, along Grace Drive, the Wolfe Commerce Park at Liberty and Seldom Seen Roads, along Powell Road/SR 750, along Sawmill Parkway at various locations,

and at Home Road and Sawmill Parkway. Excluding Downtown Powell, the City's neighborhood service retail centers are built in a low-density, auto-oriented style. These developments are not conducive to foot or bicycle access.

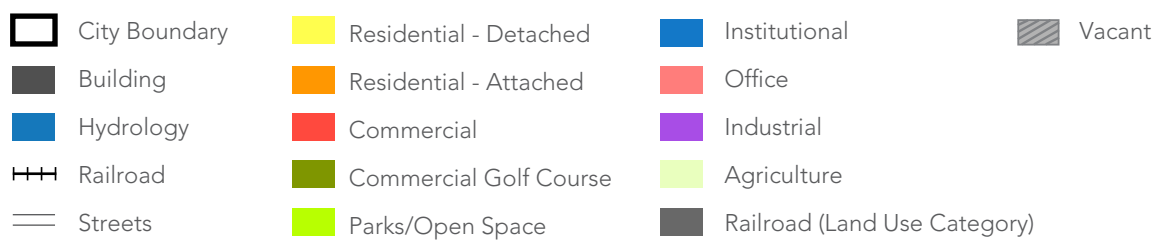
Just over 5 percent of Powell's current land area is vacant and available for development. However, there are opportunities for infill redevelopment in and near Downtown Powell and in other targeted locations. Additional vacant land immediately adjacent to Powell but not within the city limits is also available for development, and could develop with or without annexation into the city. The potential for infill, redevelopment and geographic expansion were explored in the scenarios analysis described on pages 26 and 27.

City of Powell Existing Land Use 2015

Land Use Color	Land Use Category	Acreage	%
	Residential - Detached	1662.57	49.92%
	Residential - Attached	164.73	4.96%
	Commercial/ Retail	204.16	6.13%
	Commercial Golf Course	233.74	7.02%
	Parks/Open Space	168.70	5.07%
	Institutional	55.53	1.67%
	Office	48.95	1.47%
	Industrial	12.21	0.37%
	Agriculture	32.22	0.97%
	Railroad (Land Use Category)	25.31	0.76%
	Vacant	189.26	5.52%
	Right of Way	425.55	12.78%
Total		3330.09	100%



Map 2.1: Existing Land Use



↑ NORTH

0 1,000' 2,000'

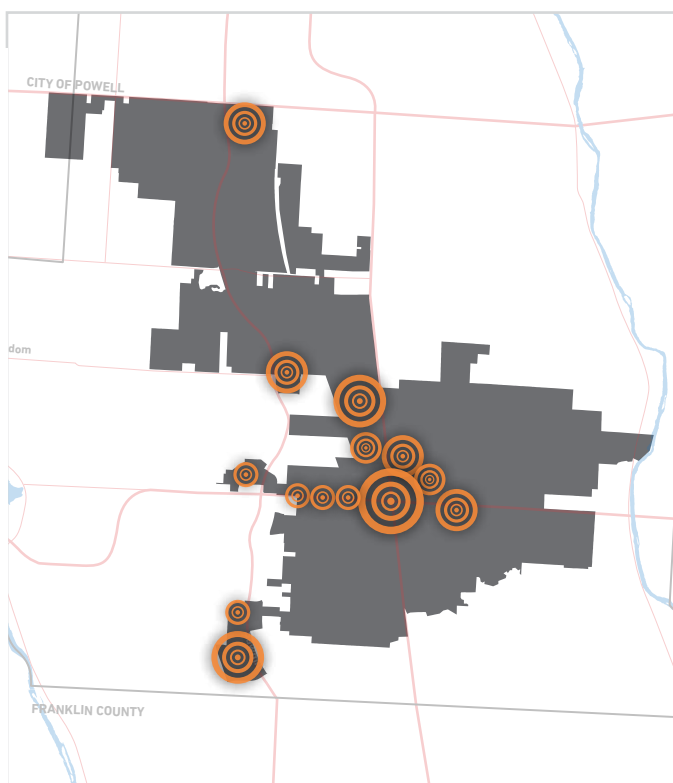
Development Scenarios

To thoroughly consider options for Powell's future, three conceptual scenarios for growth and development were analyzed. These ranged from an assumption that Powell no longer continues to annex land, to both modest and potentially more expansive growth schemes. Each of these scenarios was examined in terms of development capacity using assumptions about future land use, development densities and infrastructure impacts. Refer to the Appendix for more details about these assumptions.

Scenario 1:

Infill & Redevelopment Focus

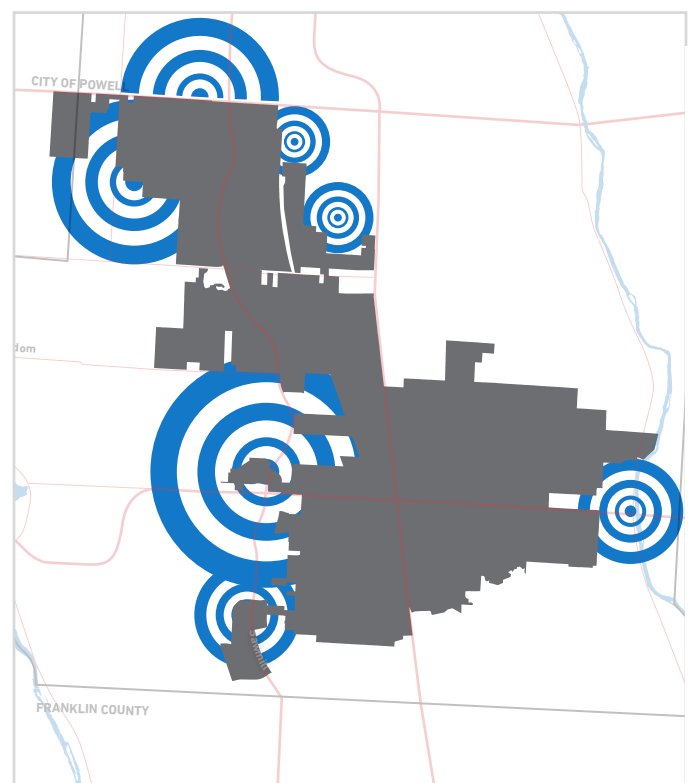
In this scenario, Powell stops annexing land, and encourages targeted infill and redevelopment within current city boundaries. Possible redevelopment areas include sites near Downtown and ageing commercial centers. The remaining vacant land in the city builds out. Liberty Township continues developing according to current plans (primarily low-density single-family).

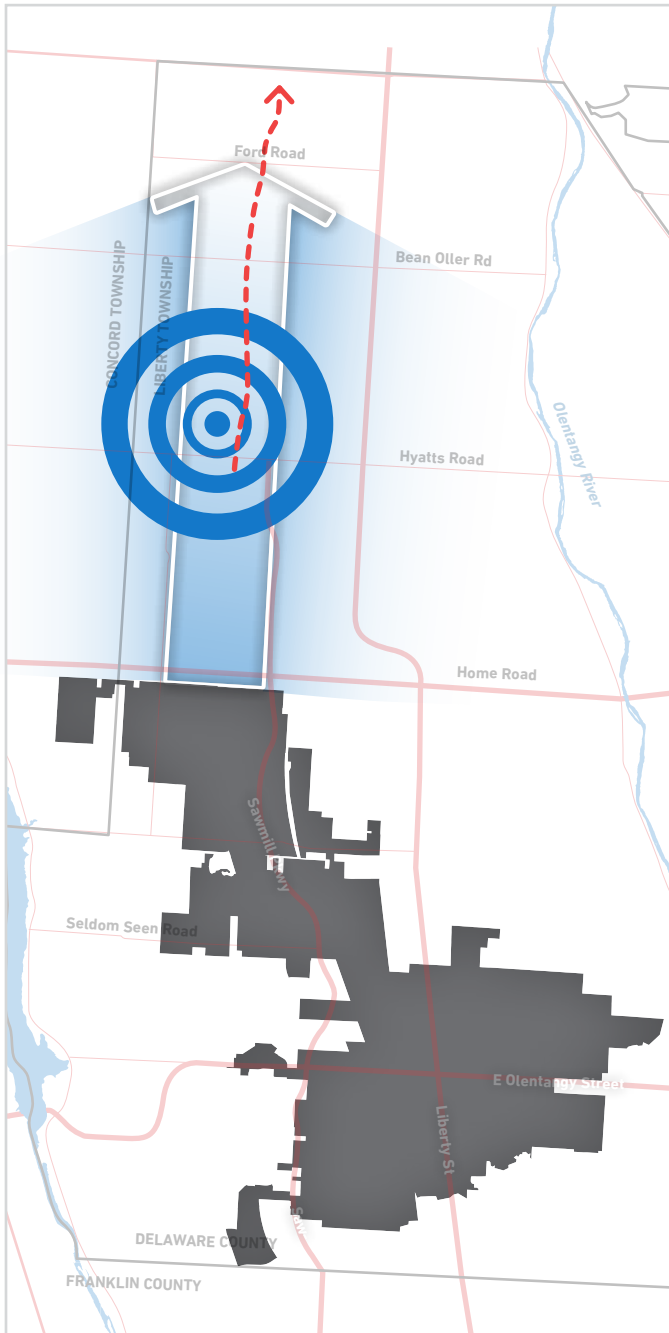


Scenario 2:

Strategic Annexation Policy

In Scenario 2, Powell pursues targeted annexations, and geographically 'fills out' to create a consolidated service area. This expansion can also go beyond Home Road to incorporate school facilities and commercial areas there. Powell also focuses on annexation along the existing Sawmill Corridor south of Powell Road with the intent to redevelop and add density the corridor.





Scenario 3:

Northward Growth Corridor

In this scenario, Powell takes an active role in growth policy north of Home Road. Management may be done through direct annexation efforts and (or) through cooperative planning with surrounding jurisdictions. Under this scenario, Powell enacts development policies that focus growth along and near the Sawmill corridor, while limiting low-density sprawl outside of the corridor.

Accomplishing this would require one or more master development plans and associated land massing. Additionally, completing this plan would require multi-jurisdictional planning efforts between Powell, Liberty Township, Concord Township, Delaware County and, potentially, the City of Delaware.

Development of the Land Use Plan: A combined approach

These three scenarios were tested from a transportation and fiscal impact perspective (refer to the Thoroughfare Plan and Fiscal Analysis sections), and also presented to the public at the April 15th public workshop. Workshop and online participants were asked to discuss and prioritize the scenarios, while the technical analyses helped to identify potential costs and benefits for consideration. Both public sentiment and the technical analyses suggested a hybrid approach to the scenarios will present the greatest benefit to Powell's long term fiscal health, as well as its ability to control its own destiny by influencing development patterns and community character in areas that are likely to experience future growth.



LAND USE PLAN

Future Land Use

The intent of the Future Land Use Map is to illustrate a broad pattern of land use and development types across the City of Powell and potential growth areas. It is not intended to designate very specific land uses for individual parcels of land. Many of the land use categories are intentionally broad with respect to the types of residential and commercial uses that may be appropriate for that area. The land use patterns illustrated by the Land Use Plan serve to guide the City of Powell as it implements the plan, through actions such as zoning amendments, development approvals, annexation agreements, and capital improvements. The Plan is also a resource for property owners and developers to understand how their properties fit within the larger context of development patterns envisioned for Powell and its surrounds over the next 20 years.

It is important that the Land Use Plan provide a certain degree of flexibility, so that new and unexpected opportunities can be considered as they arise. The Plan should be updated on a regular basis, so that interim decisions are documented and policy recommendations can be re-evaluated for appropriateness and relevancy. As time goes on, there will likely be development proposals in certain areas that do not strictly conform to the recommendations of the Plan. Such proposals should be considered on their own merit, with the Plan serving as a guide in the decision-making process. However, proposals that clearly deviate from the key goals and intent of the Plan should be closely scrutinized and vetted through the public review process to ensure they are appropriate for the community.

In most cases, the boundaries of individual land use categories depicted on the Future Land Use Map are intended to be general, showing the relative relationship between different land uses. Typically, development patterns will transition in terms of the mixture of uses, scale and intensity, and the degree of urban, suburban and rural character. The plan (page 29) depicts a general pattern of land uses both within the current City of Powell corporate limits, as well as in portions of Liberty and Concord Townships in close vicinity to the municipal boundary. It is important to recognize that this plan is not an annexation plan - the areas depicted with a future land use type are not intended to suggest that the City of Powell will seek or support annexation of specific parcels of land. Rather, the Future Land Use Map is intended to






depict preferred land uses and development patterns, regardless of the jurisdiction within which development may occur. As discussed in the Fiscal Analysis section, annexation of specific properties into the City of Powell will require case by case analysis.

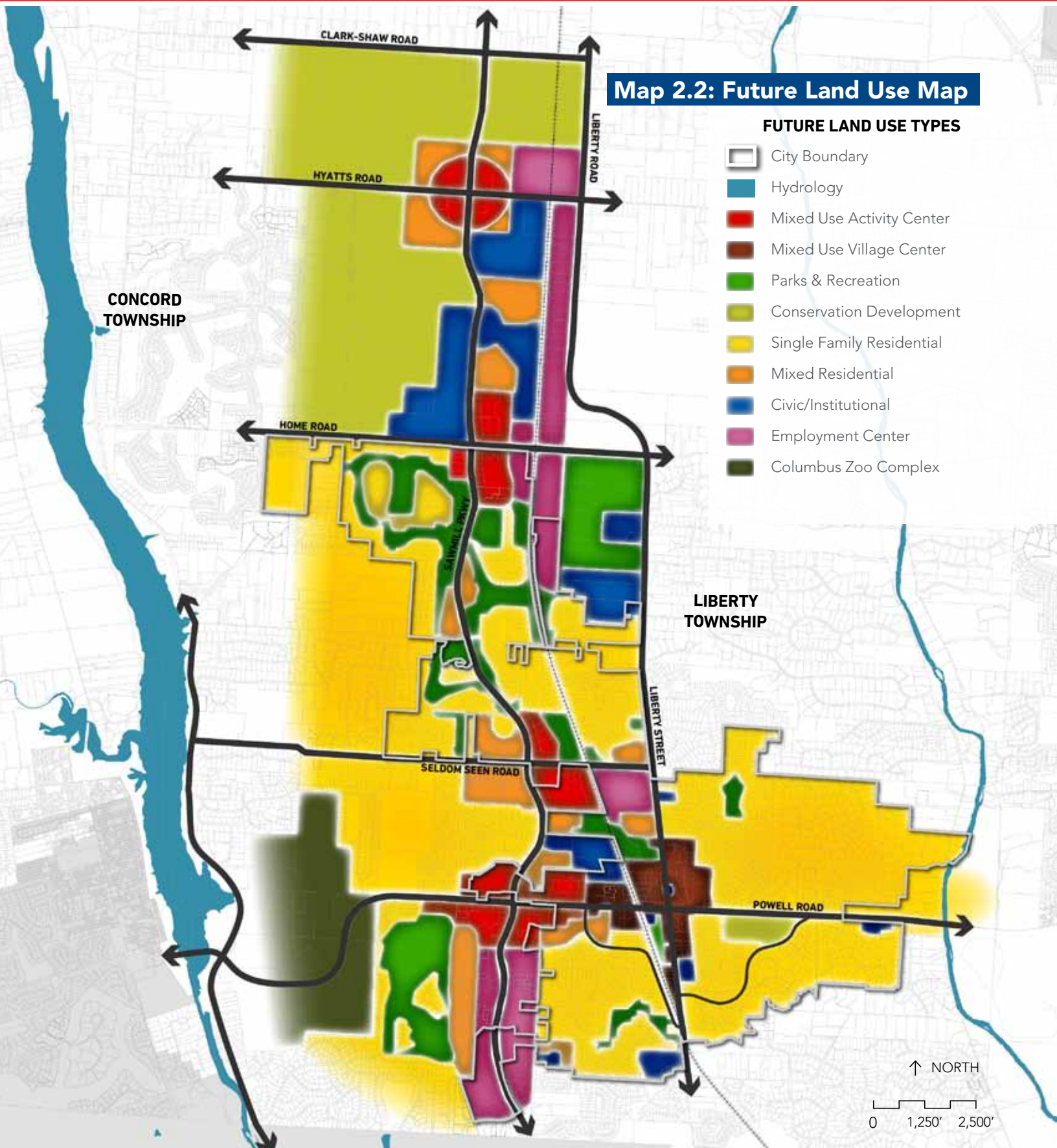
Each of the future land use types depicted on the Future Land Use Map is described in further detail on the following pages. This includes a description of the purpose and intent of each land use typology, a discussion of where in Powell or surrounding lands that the use is appropriate for consideration, and a series of recommended development guidelines. Representative examples from both Powell and other communities are also provided to help illustrate the potential scale and character of the development type. These generally reflect the results of a "visual preference survey" conducted at the April 15th, 2015 public workshop, in which participants were asked to vote on various images to help identify which were most appropriate for Powell and where within the planning area the development type should be considered. This exercise, combined with the scenario prioritization exercise, helped to guide the development of the future land use plan. It should be noted that maximum development densities are not explicitly stated for individual land use types, although typical densities were used as assumptions for transportation and fiscal modeling purposes (refer to the Appendix). Quantitative measures such as maximum density are often over-emphasized during the development approvals process, sometimes at the expense of the much more important considerations of design detail and quality. This plan emphasizes quality and character over density.

In broad terms, the Future Land Use Plan encourages a shift toward more compact, walkable and mixed use development patterns. Mixed Use Centers are recommended at major nodes along Sawmill Parkway, and Downtown Powell is given special consideration as a unique type of Mixed Use district. In addition to employment generated within mixed use centers, specific zones of employment-generating uses are designated along portions of Sawmill Parkway, Liberty Road and Home Road. Conservation Development patterns are recommended as an alternative to the typical single family subdivision in growth areas to the north of Home Road. Mixed Residential development types are recommended in various locations as a means to increase housing options throughout the community, particularly in close proximity to Mixed Use Centers.

Map 2.2: Future Land Use Map

FUTURE LAND USE TYPES

-  City Boundary
-  Hydrology
-  Mixed Use Activity Center
-  Mixed Use Village Center
-  Parks & Recreation
-  Conservation Development
-  Single Family Residential
-  Mixed Residential
-  Civic/Institutional
-  Employment Center
-  Columbus Zoo Complex



LAND USE PLAN

Mixed Use Village Center

Intent

Downtown Powell is the historic heart of the City, and is widely recognized as the community's center of identity. Its quaint village scale and Midwest vernacular architecture represent a small-town feel that many Powell residents identify with and desire to protect. The Mixed Use Village Center land use type responds to the unique character of Downtown Powell, and generally applies to the area corresponding to the Downtown Powell business district as identified on the Future Land Use Map.

The traditional village character of Powell's historic heart should be preserved, while also accommodating sensitive infill and redevelopment in certain locations. A variety of uses and activities are encouraged to support a vibrant, walkable village center. Building heights and massing should be closely coordinated with the scale of existing buildings to create a cohesive character that blends new and old structures. This applies to both commercial and residential buildings.

Within this area a more refined breakdown of land uses is considered, as depicted on the diagram to the right. Generally, commercial and mixed use building types will be most successful when located along arterial roadways, such as Olentangy Street and Liberty Street, and collector streets such as Grace Drive. Village scale residential buildings should be located on local streets that connect to the arterial network. Refer to page 70 of the Transportation Plan for more information on proposed street conditions in Downtown.

Development Guidelines

- Commercial and mixed use buildings should be located adjacent to the public sidewalk with prominent main entrances and storefront windows. Outdoor patio spaces are encouraged.
- New development should be designed to create an interconnected public street network that will provide alternative routes to downtown businesses and eliminate the need for left turns at the Four Corners intersection.
- Shared and interconnected parking areas should be provided behind commercial buildings. Parking lots

should be physically linked together or accessible from public alleys.

- All streets should have tree-lined sidewalks, decorative street lamps and other pedestrian-oriented streetscape amenities.
- Local streets should have on-street parking to help control traffic speeds.
- New residential development should include small neighborhood pocket parks. Opportunities to create a more prominent public street presence for the Village Green and/or a recognizable town square should be explored.
- High quality materials and architectural detailing is critical to ensure new development contributes to the village character.

Map 2.3: Mixed Use Village Center Detail



- Mixed Use and Commercial Buildings
- Parks & Recreation
- Village Residential
- Civic/Institutional

Village Residential

Downtown Powell has begun to experience infill and redevelopment pressures over the past decade, exemplified by the successful commercial developments at 50 South Liberty Street and at the northeast corner of Liberty and Olentangy Streets. Both of these have been designed with sensitivity to the architectural character of the historic village center. Even more recently, interest in new development has increased, with a number of proposals to develop new types of residential products in and near Downtown. These include potential apartment buildings, 2-4 unit condominiums and single family detached condominiums. All of these housing options respond to the growing demand for alternatives to the conventional low-density single family home, and the desire of more people to live in and near walkable mixed use neighborhoods with a unique “sense of place.” These types of housing options are also recommended in the 2004 Downtown Powell Revitalization Plan and the 1995 Comprehensive Plan.

However, with each of these proposals, there has been much debate within the community about what types and densities of housing are appropriate for Downtown. Most of the concern has revolved around the potential impact of additional automobile traffic on the already heavily congested downtown roadways, particularly at the problematic Four Corners intersection. This concern culminated in a voter referendum in 2014 and approval of an amendment to the City Charter prohibiting the approval of “high density” housing in the downtown business district. The amendment defines high density as any dwelling containing more than one family. During the course of this comprehensive planning process, the amendment was challenged in court, and a resolution had not been determined at the time this plan was written [NOTE: This statement will be modified as appropriate if a court decision is rendered prior to plan adoption]. For this reason, it is appropriate for the community to be prepared for potential changes to the City Charter.

This Comprehensive Plan acknowledges the limitations to downtown residential development as specified by the Charter Amendment. However, it also recognizes the integral role that housing plays in a mixed use district by supporting local retail, restaurants and neighborhood services. Well-designed residential neighborhoods with high-quality architecture, accessible public open spaces and walkable streets can have a positive contribution to

community character and residents’ quality of life – with the right design, density is merely an outcome, rather than a determinant of quality development. If sensitively designed to fit with the scale and unique character of existing downtown development, a variety of housing options could be appropriate and beneficial in advancing the economic vibrancy, character, and livability of Downtown Powell.

Despite the potential benefits, it is critical that community concerns regarding unwanted impacts of new residential development be addressed. It should be noted that while all land uses produce traffic, one of the benefits of compact, walkable mixed use development is that some automobile trips can be replaced by other modes, such as walking and bicycling. Also, as discussed in the Transportation Plan (section 3), one of the key recommendations to improving traffic flow in Downtown is the creation of an interconnected street system that will concentrate left turns at controlled intersections and provide alternate routes for those traveling to downtown destinations. In some cases, new local streets are most likely to be constructed as part of new private development projects, and many of these are likely to have a residential component. In this way, new residential development in Downtown can actually help to improve traffic conditions.

Within Downtown, new residential development should be compatible with the height, scale and design aesthetic of existing downtown buildings. Specific housing types and densities for new development proposals will be required to meet the requirements of the downtown housing Charter Amendment for as long as it is in effect. However, if the Charter was to be further revised in the future, it will be necessary to establish clear expectations for other types of housing that could be considered for Downtown Powell. In all cases, high-quality architecture, construction detailing, and site design standards are of utmost importance to preserving and enhancing the character of Downtown. Even without the Charter Amendment, the need for sensitive and compatible design to coordinate with the historic character of Downtown would mean that certain types and scales of residential architecture will not be appropriate for the village core, despite being appropriate in other parts of the community.

Village Center - Mixed Use/Commercial Examples



Baxter Village, Fort Mill, SC

- Parking Behind Building
- Urban Style Building
- Transparent, Active First Floor Storefronts



New Town, VA

- Flat Roofs
- Active Second Floor Space
- On-Street Parking
- Outdoor Dining



Powell, OH

- 2 Stories Maximum in Height with Towers or Architectural Feature
- Built Close to the Sidewalk
- Mixed Brick and Siding Facade with Color Variations

Village Center - Village Residential Examples



Ashton Grove, New Albany, OH

← Off-Street Parking in Rear or Side

← Tree Lined Streets



Danielson Grove, Kirkland, WA

Traditional Character

Small Lots (may be fee simple or condominium)

← Connecting Sidewalks



Harrison West, Columbus, OH

2 Stories in Height

← Built Close to the Sidewalk

← Mixed Brick and Siding Facades with Color Variations

Mixed Use Activity Center

Intent

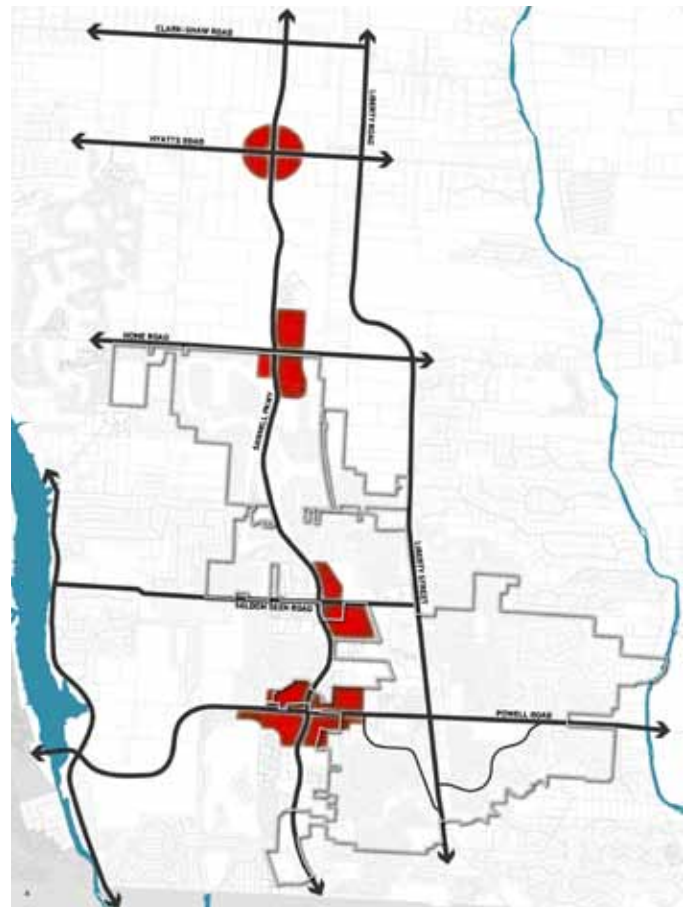
This land use type responds to growing demand for walkable places that offer a wide variety of business services, amenities and housing options. Mixed use centers have a more urban development form, but can have a variety of scales. These development types allow for a more efficient development pattern that does not require automobile travel for all daily needs which helps to alleviate traffic.

Development Guidelines

- Uses may be integrated vertically within buildings, such as residential or office over ground-floor retail, or horizontally among single-use buildings that are closely coordinated.
- Mixed Use Activity Centers should incorporate commercial and mixed residential development including townhomes and multi-unit buildings. (See *Mixed Residential Neighborhood* for more description.)
- Developments should be designed to create a system of interconnected streets and blocks.
- Streets should be designed to prioritize pedestrian and bicycle travel.
- On-street parking should be permitted to contribute to required parking maximums.
- Off-street parking should be located to the rear or side of buildings.
- Commercial buildings should be located adjacent to the public sidewalk with publicly accessible main entrances and transparent storefronts.
- Buildings heights may range from one to three stories
- Mixed use buildings should have a durable and lasting character, able to be repurposed over time.
- Mixed Use Activity Centers should include a variety of public spaces such as open squares, greens, and plazas.

Where is this appropriate?

Mixed Use Activity Centers are recommended as nodes of activity at the major arterial intersections along Sawmill Parkway. These include the existing and currently developing suburban retail strip centers at Powell Road, Seldom Seen Road and Home Road. New development or future redevelopment in these locations should take a more walkable form with mixed uses. An entirely new Mixed Use Center is recommended at the intersection of Sawmill Parkway and Hyatts Road. Most of the development that occurs north of Home Road should be concentrated in this new center as an alternative to continued sprawl development patterns.



Mixed-Use Center Examples



Norton Commons, Lexington, KY

Urban Style Building

Pedestrian Area

Transparent Storefronts



Crocker Park, West Lake, OH

2-3 Story Commercial Buildings

Streetscaped Plazas



Birkdale Village, Huntersville, SC

2-3 Stories in Height with Architectural Elements

Mixture of Building Materials with Color Variations

On-Street Parking

Employment Center

Intent

Employment generating land uses are critical to Powell's fiscal health, contributing to the City's revenue base. The community currently has a limited amount of employment centers; existing business parks and corridors should be encouraged to infill with additional facilities if possible. Incorporating new employment centers will be an important part of Powell's growth strategy. A variety of office, tech/flex space and clean manufacturing/assembly facilities should be encouraged in key locations. It should be noted that Mixed Use Centers also provide employment opportunities, including a mixture of office and retail uses. Likewise, the boundaries between adjacent Mixed Use Centers and Employment Centers may be fuzzy. Employment-generating institutional uses with a residential component, such as nursing homes and assisted living facilities, are appropriate in some locations as well.

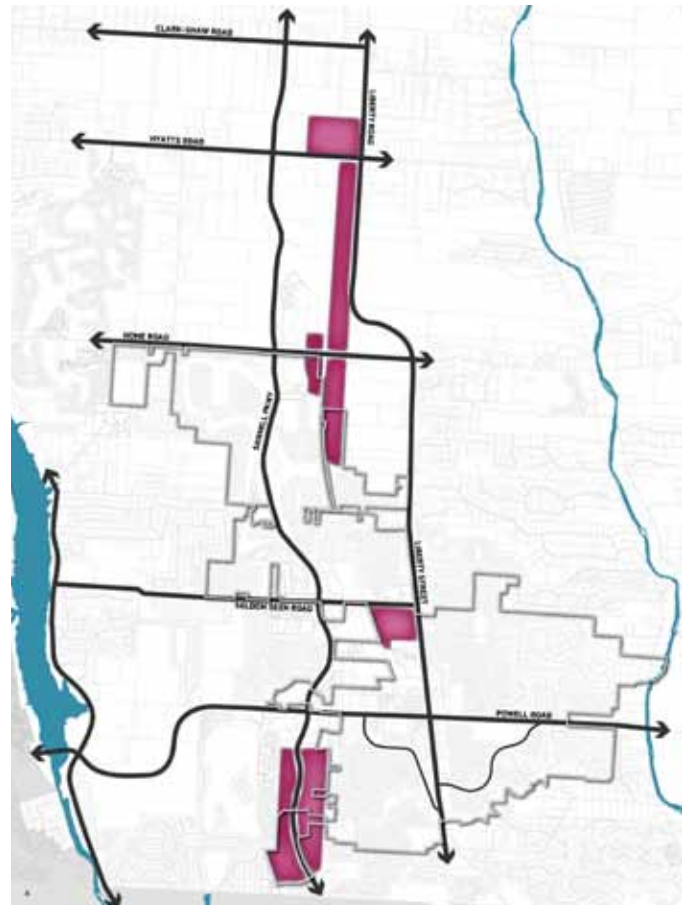
Development Guidelines

- Arterial roadway access is critical to the success of employment areas. Industrial uses will require accommodations for heavy truck traffic.
- Streets within employment areas should include sidewalks and/or multi-use paths and encourage connections to neighborhoods and other commercial centers.
- In campus and business park settings, shared parking arrangements should be encouraged, although most businesses will require some amount of dedicated parking.
- Large industrial facilities, warehouses, and flex/R&D space will often have relatively low parking needs.
- Buildings should be oriented toward the front of the lot, but will typically be set back 30 to 50 feet. Parking should be located to the side or rear.
- Loading docks and bays should be oriented away from public streets or screened with landscaping.
- Industrial, flex and warehouse buildings should balance economic construction with basic aesthetics.
- Office components and main visitor entrances should be located on the front facade.

- Railroad spurs to light manufacturing and warehouse may be necessary.

Where is this appropriate?

The existing Wolfe Commerce Park includes undeveloped land available for additional business development within the current Powell corporate limits. The commercial corridor along Sawmill Parkway south of Powell Road offers another opportunity to incorporate employment-generating uses. Future development opportunities for light industrial uses exist along the railroad corridor near Home Road, Hyatts Road and adjacent to Liberty Road.



Employment Center Examples



Prominent Main Entrance

Connect with Sidewalks

Shared Parking

Office Building, John's Creek, GA



High Quality Building Materials

Parking Behind the Building

Office Building, New Albany, OH



Flex Industrial/Research & Development Space

Loading Docks Oriented Away from Front Door

Industrial Flex Space, Poland

Mixed Residential

Intent

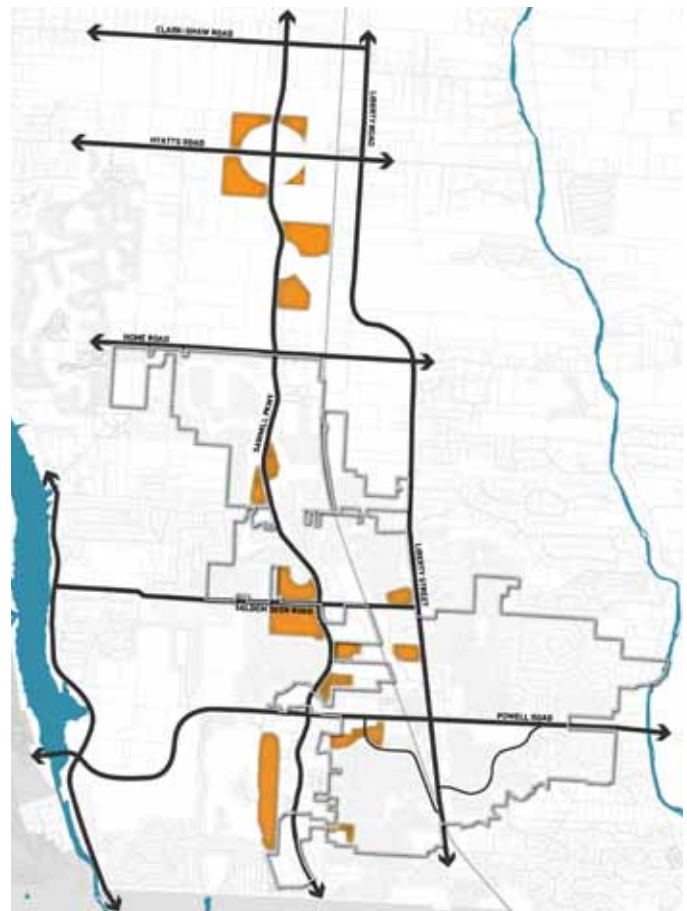
This land use type responds to changing demographic and market trends and offers alternative housing types that will cater to the growing empty nester/senior population as well as younger individuals and couples seeking a lower maintenance lifestyle. Mixed Residential neighborhoods accommodate a wide array of both attached and detached housing types including multi-level flats, small lot homes and townhomes. Ideally, all of these housing types are integrated into a cohesive neighborhood.

Development Guidelines

- Neighborhoods are designed with multiple interconnected streets with an emphasis on the pedestrian.
- Cul-de-sacs and dead-ends are not appropriate.
- Streets should have sidewalks on both sides, with tree lawns of sufficient width to support large shade trees.
- Arterial streets leading to or through these neighborhoods should be lined with multi-use paths.
- On-street parking should be permitted.
- Front setbacks should range from 10 to 20 feet, with porches, lawns or landscape gardens between the sidewalk and building face.
- Buildings should frame the street, with modest side setbacks, creating a relatively continuous building edge.
- Garages and parking areas should be located to the rear of buildings, accessed from a rear lane or alley. If garages are front-loaded, they should be setback from the building face.
- Neighborhoods should be designed with architectural diversity in terms of building scale, form, and style.
- High quality materials, such as brick, stone, wood, and cementitious fiber should be encouraged
- Neighborhoods should include a variety of publicly accessible parks and open spaces

Where is this appropriate?

Existing condominium communities offer the only current alternative to the single family subdivision, but often lack architectural diversity, which could be improved over time. Additionally, Mixed Residential neighborhoods should be considered as an integral component of the Mixed Use Center land use type, providing a residential base to support neighborhood businesses in a walkable distance. (See *Mixed-Use Center* for more description.)



Mixed Residential Examples



Atlanta, GA

← Mixture of Building Styles

← Strong Relationship between the Front Door and Public Sidewalk



Danielson Grove, Kirkland, WA

← Diverse Housing - Small Lots

← Shared Community Open Space



Harrison West, Columbus, OH

← 2-3 Stories in Height Maximum with Architectural Elements

← Mixture of Quality Materials with Color Variations

Conservation Development

Intent

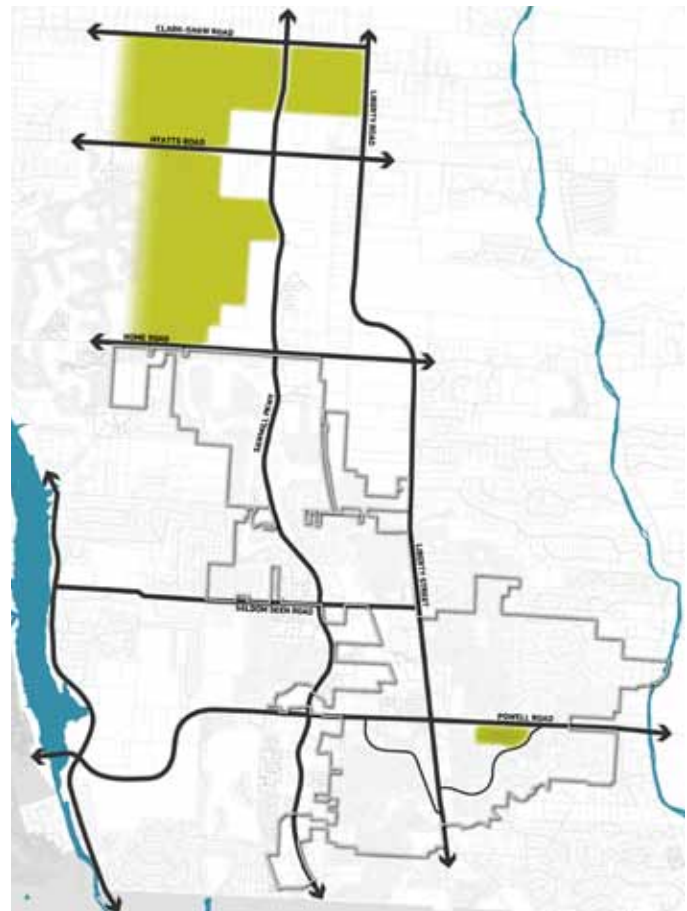
This land use type offers an alternative to residential sprawl. Conservation Development balances development pressures with goals of preserving open space and responding to market demands for alternative types of neighborhoods. Conservation Development is designed to work with the natural landscape, clustering homes together into neighborhoods and preserving large amounts of open space. At least half of the overall development should be preserved to create an interconnected greenway system.

Development Guidelines

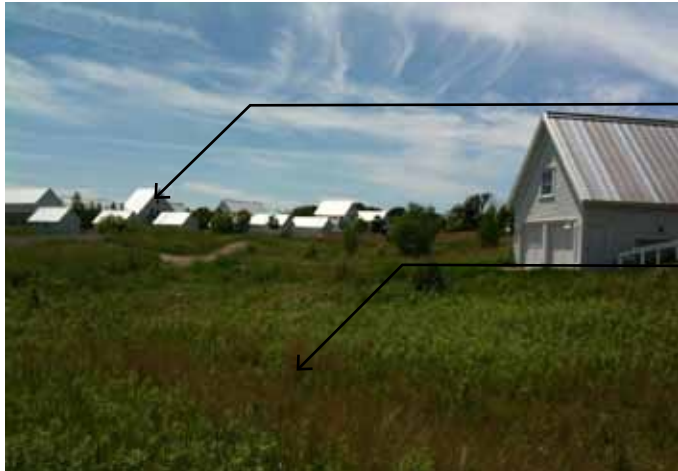
- Conservation developments are master planned and designed to preserve significant amounts of open space.
- These communities are likely to be entirely residential, but may incorporate mixed use and, where supported by the market, commercial development at major intersections.
- Local streets should be designed to encourage interconnectivity to and through the neighborhood.
- Cul-de-sacs should be discouraged unless necessary due to topographic or environmental constraints.
- Multi-use paths should be provided throughout conservation communities.
- Sites should incorporate large scenic landscape setbacks from existing rural roadways.
- Residential buildings should be clustered together and oriented in a manner that encourages community interaction among residents.
- At least 50% of the overall site area should be preserved.
- Open spaces within Conservation Developments should emphasize interconnected greenway systems and preservation of environmentally sensitive lands.
- Residential buildings may take a variety of forms, but traditional midwestern vernacular is encouraged.

Where is this appropriate?

Existing farmland north of Home Road will face the same residential development pressures that have resulted in suburban subdivisions throughout Liberty and Concord Townships. Conservation Development patterns should be the standard for all new residential-only development in these areas. On a smaller scale, individual sites with streams, woodlots or other natural features, such as the Bennett Farm on Powell Road, should be developed with conservation design principles if they cannot be preserved entirely as open space/recreation.



Conservation Development Examples



Clustered Residential

Preserved Open Space

Jackson Meadow, Marine on St. Croix, MN



Traditional Midwest Character

Public Multi-Use Paths

Greenspace

Jackson Meadow, Marine on St. Croix, MN



Clustered Residential

Minimum 50% Open Space, Naturalized

Jackson Meadow, Marine on St. Croix, MN

Single Family Residential

Intent

This land use type includes existing low density single family subdivisions that have developed throughout Powell over the past forty years. This land use type is not intended for extensive application beyond existing or currently planned developments, or where new suburban residential development would most appropriately coordinate with adjacent developments. The Mixed Residential land use type (pages 38-39) offers alternative housing types to accommodate changing market preferences. This will help diversify Powell's housing stock while also preserving value in existing single family neighborhoods discouraging over saturation of an individual housing type. Also, the Conservation Development land use category (pages 40-41) offers an alternative to the conventional suburban residential subdivision that balances the desire for non-urban living while also preserving rural character.

Development Guidelines

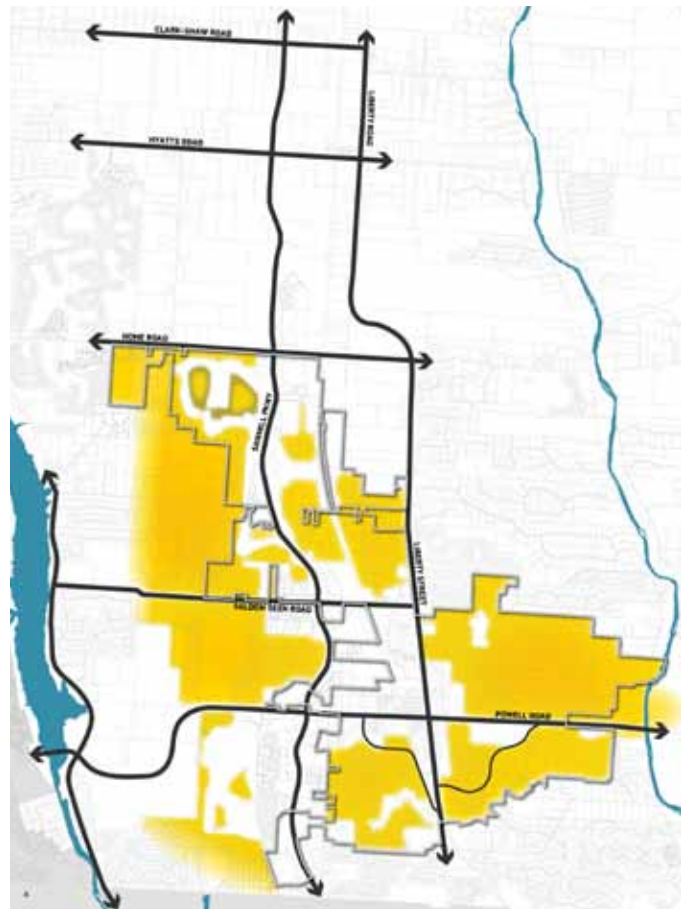
- New Single Family Residential streets should be designed to encourage interconnectivity to and through the neighborhood and to surrounding subdivisions.
- Cul-de-sacs and dead-end streets should be discouraged unless necessary due to topographic or environmental constraints.
- Suburban residential subdivisions are auto-oriented by design. To the extent possible, this approach to residential development should be de-emphasized.
- Sidewalks and/or shared use paths should be provided on all streets, with connections to larger pedestrian and bicycle systems. Sidewalk retrofits in existing subdivisions should be considered after thorough consultation with and support from existing residents.
- Reverse frontage lots should be avoided. Homes should not back onto arterial or collector streets, unless those roadways are designed with substantial green space setbacks.
- Homes should be designed with "four-sided" architecture. Garages doors should not dominate

the front facade; ideally garages should be set back from the front facade and/or side-loaded.

- High quality materials, such as brick, stone, wood, and cementitious fiber should be encouraged. Special attention should be paid to material specifications and installation.

Where is this appropriate?

New suburban single family subdivisions are most appropriate for smaller infill development sites surrounded by existing single family developments.



Single Family Residential Examples



Front Porch

Connect with Sidewalks

Stapleton, CO



Garages and Off-Street Parking to the Side or Rear

Sidewalks and/or Shared Use Paths

Powell, OH



High Quality Building Materials and Architectural Details

Ashburn, VA

LAND USE PLAN

Civic and Institutional

Intent

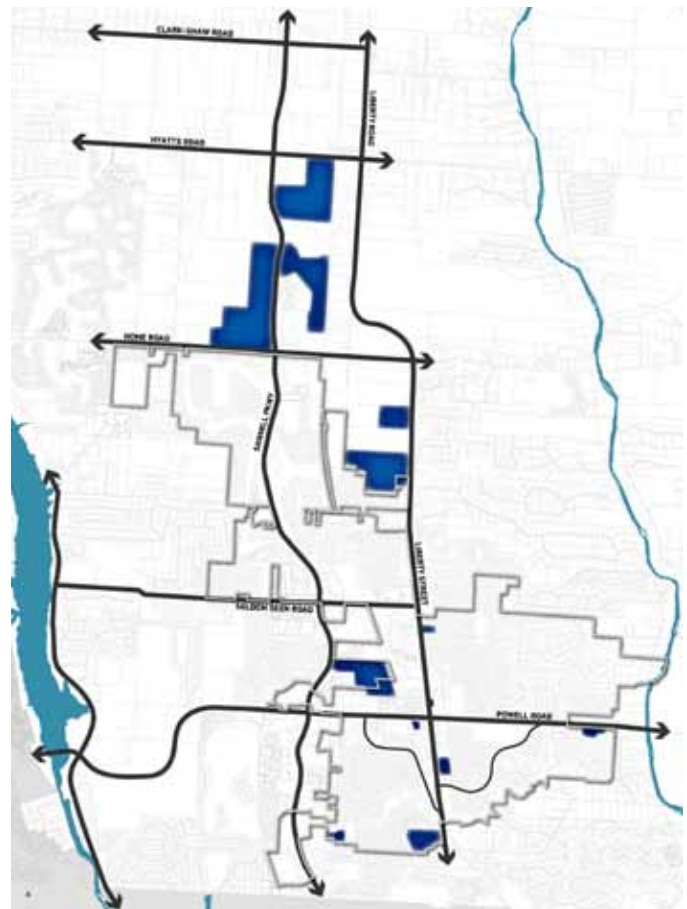
Civic and Institutional uses include government, educational and religious facilities and other types of public and private facilities intended for public assembly and gathering. These types of civic uses fill an important role in community life and identity.

Development Guidelines

- Civic uses should have a strong architectural presence along public streets to reinforce their connection to the public realm.
- The scale, form, and character of civic and institutional buildings should respond to the surrounding development context. However, civic buildings should be recognizable as serving a special function in the community. This may be achieved through monumental architectural elements, such as towers, cupolas, spires or grand entrances.
- Main entrances should be connected to the sidewalk, but buildings typically will have landscape setback between the street and building face.
- Civic facilities often serve as destinations for meetings and events that require automobile travel. However, streets providing access to institutions should balance auto access with other modes.
- Neighborhood-oriented institutions, particularly schools, should be accessible by foot and bicycle.
- Shared parking with other nearby uses should be encouraged to minimize large expanses of pavement. This is particularly important for religious institutions, which often require large amounts of parking, but which is only used once or twice a week.

Where is this appropriate?

Existing schools, religious facilities and government buildings are shown on the Future Land Use Plan. Most of the Olentangy Local Schools facilities are located immediately adjacent to Powell, but outside of the corporate limits. These could be incorporated into the City in the future. As with parks/open space, the land use plan is not intended to illustrate all individual locations for future institutional facilities. Various types of civic uses may be incorporated into any of the other land use types, if designed and operated to fit within the surrounding development context.



Civic and Institutional Examples



Strong Architectural Presence

Connect with Sidewalks

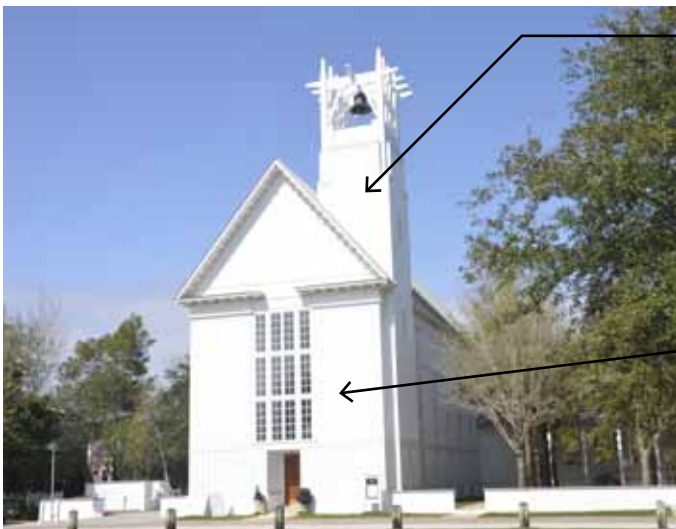
Village Green Municipal Building, Powell, OH



Front Entrances Highly Visible

Accessible by Foot and Bike

Columbus Public Library New Albany, OH



Strong Architectural Presence

High Quality Building Materials for Reuse

Seaside Chapel, Seaside, FL

Parks & Recreation

Intent

Great communities have great open spaces and public gathering places with pathways connecting them. This land use type represents the many public parks and open spaces already existing in Powell, as well as a wide variety of new open space types that should be created with future development. Parks and Recreation may include everything from small streetside plazas and pocket parks, to large public squares, neighborhood and community-scale parks, and natural greenways. Private recreational facilities such as golf courses are also included in this category.

Development Guidelines

- All residential neighborhoods should include publicly accessible parks and open spaces. New development should be required to dedicate useable public space with paths and amenities - this should not be unusable, "leftover" space.
- Neighborhood parks should be accessible by sidewalk, and located within a 5-minute walk for nearby residents. Ideally, all residents of the community should be able to walk or bike a short distance to a public park.
- Most parks and open spaces should have some amount of public street frontage. This provides physical and visual access and contributes to community character.
- Large mixed use developments should be designed with high quality public gathering spaces as a focal point. Parks in higher density and more urban development areas will typically have a more formalized design.
- Larger community-scale parks and greenways should include naturalized landscapes.
- Public greenway corridors should be preserved wherever possible, aligned with streams and tree lines, and with enough space to construct multi-use trails.
- Where greenway connections are not practical, the public street network should be enhanced with bicycle facilities to interconnect all major parks into a comprehensive system.

Where is this appropriate?

Park and recreation uses should be located throughout the community, varying by type, size, and function depending on their specific location and the context of surrounding land uses.



Parks & Recreation Examples



High Quality Public Gathering Space

Usable Space with a Variety of Programming

Publicly Accessible

Village Green Park, Powell, OH



Adjacent to Residential

Active Recreational Space

Norton Commons Park, Louisville, KY



Close to Residents

Multi-Use Trails

Provides Access to Natural Features

Bike Paths, Powell, OH

Policy Recommendations

The Future Land Use Plan provides an overall vision for development patterns and character across Powell and nearby potential growth areas over the next twenty years, consistent with the Vision Statement and Guiding Principles outlined at the beginning of this document. In order to achieve this vision, the following series of policy recommendations provides a framework for implementing the land use plan.

1. Use the Future Land Use Map as a guide in making development decisions

This plan should be consulted for all zoning and development decisions within the City to determine if development proposals are consistent with the community's vision. However, it should also be recognized that the plan is a flexible and living document; development opportunities that are not anticipated by this plan, but which are nevertheless consistent with its spirit and intent, and which clearly advance the well-being of the community, should be considered on their merits.

2. Update zoning and development regulations to advance the goals of this plan

Following adoption of the plan, the City should undertake a comprehensive review of its zoning, subdivision and development requirements to identify potential barriers to implementation and opportunities to encourage and incentivize preferred development policies. Where necessary, regulations should be revised for consistency with the land use policies outlined in the plan.

3. Balance land use, community character, infrastructure, transportation and fiscal sustainability goals

Most developments bring a mixture of benefits and external impacts to the communities in which they are located. In particular, the potential traffic impacts of development are of utmost concern to the citizens of Powell. Each development proposal should be considered for its potential impact on the transportation system, and should be required to contribute to transportation system improvements to accommodate those impacts, either through infrastructure upgrades or fees in lieu of construction. At the same time, it should be recognized

that different land uses and development types may bring various benefits to the community, such as revenue generation, jobs-housing balance, neighborhood services, or housing diversity. The traffic impacts and other types of potential effects of an individual development may be outweighed by these or other considerations. For this reason, development impacts, whether traffic-related or otherwise, should be considered on a holistic basis.

4. Coordinate with surrounding communities and jurisdictions

The City of Powell and Liberty Township currently maintain a Cooperative Economic Development Agreement (CEDA), which among other provisions, places limitations on Powell's geographic expansion north of Home Road until the year 2017. With this provision nearing its end, the City should engage the Township to establish clear expectations for future development and potential annexation with an updated agreement that is mutually beneficial to both jurisdictions. The City should also pursue joint planning initiatives with the Township and other surrounding jurisdictions to establish a shared vision and commitment to land use and development policies that will be implemented regardless of whether additional land is annexed into Powell. Specifically, a shared vision should be established for a Mixed Use Center at Hyatts Road and Sawmill Road and for conservation development patterns across much of the area north of Home Road. This effort would identify the precise locations of preferred development and preservation areas, new roadways and access points from Sawmill Parkway, and site designs that address the constraints of the multiple high tension electric transmission lines that traverse this area.

5. Encourage mixed use development in appropriate locations, as designated in the plan

This plan emphasizes the benefits of more compact, walkable, mixed use development patterns, and designates specific target areas for implementation of mixed use centers. However, even in targeted areas, it is neither practical nor appropriate to require every individual development proposal to include a mixture of uses. Market forces may bring certain uses before others. For instance, a requisite amount of residential development is typically needed before the market can support neighborhood retail uses. Where mixed use development is recommended by this plan, locations

should be targeted for a balance of well-integrated commercial and residential development that will occur in phases over time. In particular, large residential development sites with arterial roadway frontage should preserve that frontage for commercial uses that will both generate revenue for the City, while also providing jobs and services within walking distance of nearby homes. Phased developments and adjacent sites should be designed in a manner that will create a seamless, well-integrated development pattern at build-out. This will require the creation and enforcement of subdivision and development requirements that prevent the creation of isolated and disconnected developments.

6. Promote sensitive infill development and redevelopment

One of the most efficient means of development, from both a fiscal and environmental perspective, is through the development of parcels that are already adequately served by public infrastructure. In many cases, this will mean redevelopment of aging and obsolete structures that have outlived their useful life, or development of small sites that were left undeveloped in the first wave of construction. Redevelopment offers a significant opportunity to replace development that may have little community character, such as aging, auto-centric shopping centers, with more attractive architecture and pedestrian-friendly site designs. However, infill and redevelopment also poses challenges due to the typically close proximity of other development, particularly when that development is an established residential neighborhood. The scale, intensity, character and design of these new developments must take into consideration their compatibility with and potential impacts on pre-existing development. At the same time, the establishment of a nearby pre-existing development pattern should not be used as a sole means of prohibiting a new form of development if it advances the larger goals of the community. This is a delicate balance that must often be struck on a case by case basis, although detailed focus plans (see policy 13) can help to anticipate and resolve these issues in a proactive manner.

7. Create an interconnected open space system throughout the entire community

Powell is home to numerous, high-quality public parks, but lacks an interconnected greenway system that connects these parks together in a seamless manner. The City should prioritize multi-use path improvements to link parks and open spaces into a holistic system. Opportunities for safe bicycle and pedestrian connections to parks within Liberty Township and to Highbanks Metro Park should also be prioritized. Where appropriate, new developments should be designed to include public open space that connects to the larger greenway network. New development should be required to preserve significant natural features as part of a publicly accessible open space system. Open space should be integral to development design, rather than an afterthought of the development process.

8. Update the Downtown Powell Revitalization Plan

The Downtown Revitalization Plan is now over ten years old. Some of the recommendations of the plan have been implemented, while others may require reconsideration due to changed market conditions, new developments, ongoing community discussion, and the recommendations of this plan. The revitalization plan should be updated to acknowledge present conditions and community concerns, and to provide a clear expectation for private development and public improvements in Downtown Powell.

9. Ensure development quality meets Powell's standards for aesthetic and community character

New development should contribute to the aesthetic character of Powell with high quality materials and well-planned site design. Minimum standards should be developed to ensure both residential and commercial development creates a positive image for Powell and will be durable and sustainable.

10. Explore options for the creation of a community recreation center

Public input generated as part of the planning process suggested a community desire for a public recreation center. The City should undertake a feasibility study to determine the potential size, location, programming and financing of a community recreation center. If determined to be feasible, options for co-location of other public facilities and/or potential public-private partnerships should be explored.

11. Preserve rural character by requiring conservation development patterns in growth areas north of Home Road.

New residential development within Liberty Township should preserve large amounts of open space, consistent with the Conservation Development land use type described in this plan. Typical suburban development patterns that have consumed land over the past forty years should be avoided in favor of development that is concentrated in smaller areas with at least fifty percent or more of gross site acreage dedicated to publicly accessible open space. This may result in higher net densities in smaller portions of a site, but lower gross densities across larger areas. The resulting open space should be linked together in a comprehensive system, consistent with the recommendations of Policy 7.

12. Ensure adequate development and use of utility infrastructure to support land use and development goals.

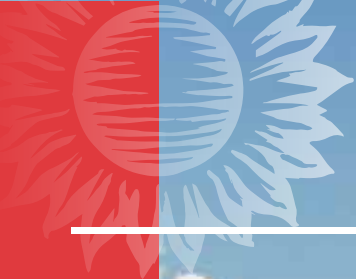
Adequate provision of utilities, particularly sanitary sewer service, is a critical limiting factor for new development, in terms of both location and intensity. The City should work with developers and with the Delaware County Regional Sewer District to ensure that sewer infrastructure improvements will accommodate expected and desired growth patterns. In some cases, overlapping sewer service areas may offer an opportunity to maximize capacity in adjacent service areas.

13. Undertake more detailed plans and studies for specific focus areas and development corridors.

This plan provides a general framework for development decisions and expectations throughout the City. As with Downtown Powell, there are a variety of other development areas and roadway corridors that would benefit from more detailed analyses, policy recommendations, and physical planning to address unique issues and establish clear expectations for future development and public improvements. The City should identify priority areas for which more detail is desired and undertake focus area plans or corridor studies to advance the plan. Market studies should be included as a part of these focus plans to ensure that anticipated development types are supported by market conditions. Ideally, such plans should be adopted by reference as future amendments to the Comprehensive Plan.

14. Develop an annexation strategy to guide decisions about Powell's physical expansion.

Powell has experienced significant growth over the past twenty years, largely through annexation. Today, the City has an irregular boundary that creates awkward service areas and sometimes confusion for residents who may not understand if they actually live within the municipality or the township. Service area gaps and "township islands" should be considered for long term annexation, generally at the request of those property owners. In recent years, the City has used development agreements and incentives to encourage commercial annexation, such as in Sawmill Parkway corridor. This approach should be continued as an economic development strategy.



TRANSPORTATION PLAN





TRANSPORTATION PLAN

Introduction

This section of the plan provides recommendations for transportation policy and related infrastructure investments within the community. As with the Land Use Plan, the Transportation Plan guides decision-making regarding the appropriateness of development proposals and infrastructure improvements necessary to support future development.

The Thoroughfare Plan is the primary reference tool that addresses roadway system needs, while the Land Use Plan is the primary planning instrument that suggests how the area may be developed or redeveloped in the future. Both of these primary planning elements provide the foundation to guide decision-making regarding the appropriateness of development proposals and infrastructure improvements necessary to support future development.

Regional Roadway System

The supporting regional roadway system is illustrated in Map 3.1. SR 750 is a major east-west arterial running directly through Powell, crossing the Scioto River to the west and the Olentangy River to the east. The next major east-west connectors are found at Home Road to the north and Interstate 270 to the south. In the north-south direction, Liberty Road is a minor arterial running through the center of Powell (referred to as Liberty Street within Downtown Powell). Sawmill Parkway to the west and SR 315 to the east are major arterials with access to I-270.

Thoroughfare Plan Structure

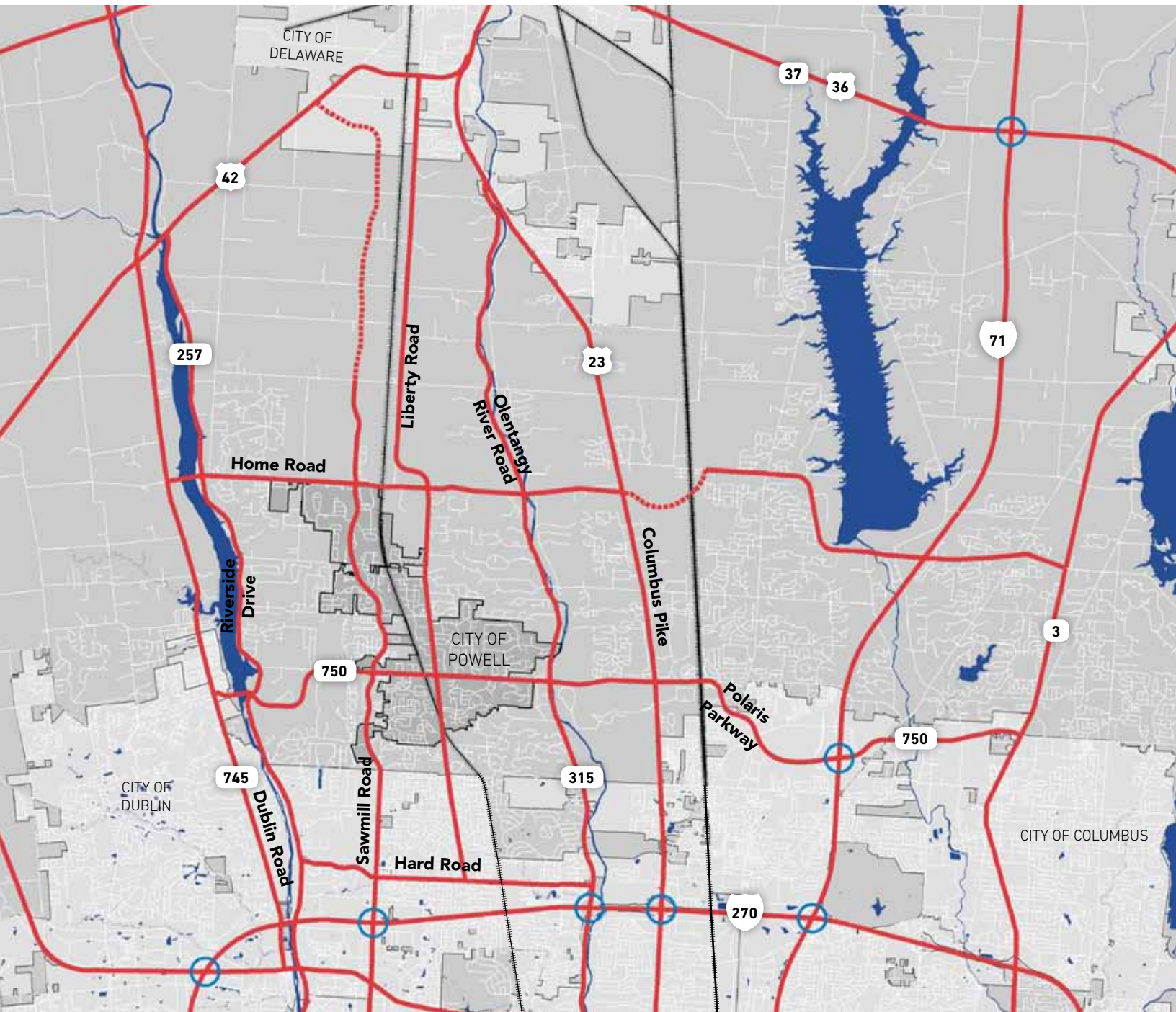
The basic structure of a thoroughfare plan is a functional classification system of roadways that designates the role of each major route within the local and regional transportation network. These functional classifications are combined with recommendations for future new roads and improvements/modifications to the existing system to meet projected transportation needs.

A thoroughfare plan identifies a hierarchy of streets and highways to serve long-term needs of the community. The plan consists of a map of existing and planned highways, streets, interchanges, and grade separations. Existing roads are classified by usage (i.e. arterial, collector, and local) and carrying capacity. Once the current conditions are fully understood, projected development is assessed

according to the land use component of the community's comprehensive plan. Roadway system enhancements are planned accordingly to properly accommodate projected travel demands. When the land use and transportation components of the comprehensive plan are developed concurrently, transportation system constraints can be acknowledged and thus influence land use plan decisions.

The transportation plan should respect the area's needs and establish a solution to provide safe and efficient travel of vehicles into, out of, and within the community for the next 20 to 25 years.

It is important to note that road locations and layouts are not completely established in a thoroughfare plan. Proposed upgrades, new roads, and additional services are recommendations for local officials and transportation departments to follow as development occurs. As the need for roadway upgrades and additions arise, additional site-specific planning will be necessary.



Map 3.1: Regional Roadway System

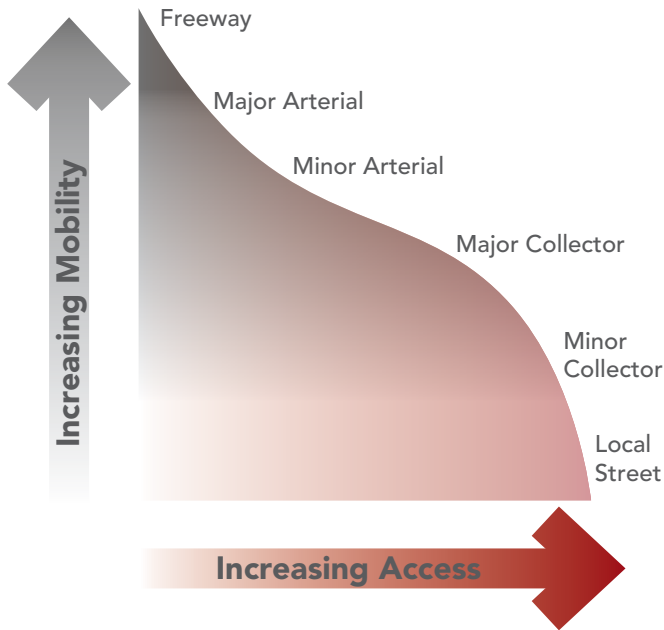
- City Boundary
- Major Roadway
- Interchange

↑ NORTH

0 800' 1,600'

TRANSPORTATION PLAN

Figure 3.1: Relationship of Traffic Mobility and Land Access by Functional Classification



Functional Classification System

The functional classification of a road typically guides decisions including potential lane requirements, appropriate design standards, cross-section elements, right-of-way requirements, and access management components. Functional classifications are defined in the context of the overall roadway network to provide a balanced system that meets both travel and access needs. Failure to provide a well-planned network of streets in a variety of functional classifications can result in congested streets, cut-through traffic on neighborhood streets, high crash rates, and other operational problems.

Four typical classifications are used in thoroughfare plans: freeways, arterials, collectors, and local streets. With the exception of fully-controlled access freeway facilities, all roadways serve some combination of through travel and access to property. The general relationship between land access and traffic mobility for each functional classification is illustrated in Figure 3.1. Roadways that are primarily intended for traffic service (typically for longer trips) are referred to as arterials. Collector roadways make a link between arterials and local streets. Local streets are those intended primarily for access to abutting land parcels. In many ways, the functional classification system for a network of roadways is analogous to a tree – with

the arterials serving as the trunk, the collectors serving as the branches, the local streets serving as the twigs that tie directly with the leaves (representing individual land parcels).

All roadways within the Powell study area were mapped and identified. The future study area road network includes the planned extensions of Home Road from US 23 to Lewis Center Road and Sawmill Parkway from Hyatts Road to US 42. Based upon the following descriptions, each roadway was assigned a functional classification.

- **Major Arterial** (e.g. Sawmill Parkway): Roadways that serve the major activity centers, the highest traffic volume corridors, and the longest trips. Service to abutting land should be subordinate to travel service. This system carries the major portion of trips entering and leaving an urban area – as well as the majority of through movements desiring to bypass the area. Major arterials range from interstates/freeways to principal streets and highways.
- **Minor Arterial** (e.g. Liberty Road): Streets and highways interconnecting with and augmenting the major arterial system – and providing service to trips of moderate length at a somewhat lower level of travel mobility. This system places more emphasis on land access and distributes travel to geographic areas smaller than those identified with the higher system.
- **Major/Minor Collector** (e.g. Murphy and Bennett Parkways): Streets running through development sub-areas and neighborhoods, collecting traffic from local streets, and channeling it into the arterial systems. A minor amount of through traffic may be carried on collector streets, but the system primarily provides land access service and carries local traffic movements within residential, commercial, and industrial areas. Major collectors typically favor mobility, whereas minor collectors offer more access. While the distinctions between the two are subtle, major collectors may have longer routes, higher speed limits, higher average annual traffic volumes, more travel lanes, and lower driveway densities than minor collectors.
- **Local Street** (e.g. Hall Street): Streets not classified in a higher system, primarily providing direct access to abutting land and access to the higher systems. They offer the lowest level of mobility, and service to

through traffic should be deliberately discouraged.

The framework of the Powell Thoroughfare Plan (refer to pages 60-61) is composed of major arterials, minor arterials, major collectors and minor collectors. The Thoroughfare Plan-Downtown Powell Detail (refer to pages 70-71) also includes local streets.

Traffic Volume Projections

In transportation planning, models are commonly used to imitate the travel patterns of people. Commonly called *travel demand models*, these tools are based upon the practical relationships between socioeconomic characteristics, land uses, and travel patterns. By approximating future travel patterns, models make it possible to assess the implications of growth, to compare alternative transportation solutions, and to provide a testing ground for changes in transportation and land use policies.

The roadway network, as described in the preceding section, is critical for travel modeling within the designated area. The other critical component is the traffic analysis zone structure. A Traffic Analysis Zone (TAZ) is the unit of geography most commonly used in conventional transportation planning models. The size of a zone varies, ranging from very large (in the external and fringe areas of the modeled area) to small (in major activity areas). Land use and socioeconomic data are entered into the model at the TAZ level.

Traditional travel demand modeling uses a four-step process. The steps are:

1. Trip Generation: Estimating the number of trips produced by and attracted to the land uses within each TAZ in the planning area.
2. Trip Distribution: Determining the origin of each trip destination within the planning area, and vice versa.
3. Mode Split: Splitting the trips by available transportation modes between each origin and destination.
4. Traffic Assignment: Selecting paths from origins to destinations and loading trips onto the corresponding selected paths on the transportation network; vehicle-trips are loaded onto the transportation network using route choice principles.

A travel demand model was tested by the Mid-Ohio Regional Planning Agency (MORPC) for the Powell

planning area to produce traffic volume projections on a typical weekday. Land use data was developed by TAZ for two scenarios: current conditions and projected conditions in 2035. Model validation was accomplished by comparing the trip assignments related to current (occupied) land uses with counted traffic volumes on existing roadway links and at existing intersections. Modeling was then performed to define roadway system needs for the planning horizon based upon anticipated land use development levels in 2035. The 2035 condition was based on detailed projections for commercial and residential growth using assumptions for land use types, development densities, and potential locations for development based on the final proposed Land Use Plan (refer to page 29). A summary of development assumptions is located in the Appendix. These projections were coordinated with the inputs for the Fiscal Analysis (Section 4).

Roadway Characteristics

Each roadway within the Powell Regional Thoroughfare Plan was identified by functional classification (as previously discussed) – as well as by number of lanes, design designation, access control (where applicable), and right-of-way.

Travel Lanes on Roadway Segments

The following is a description of the number of lanes on roadway links of the Powell Regional Thoroughfare Plan:

- 2 L – Basic two-lane roadway with one travel lane in each direction.
- 2/3 L – Two-lane roadway (one through lane in each direction) with either a center left turn lane or separate left turn lanes at driveways and intersections.
- 4/5 L – Four-lane roadway (two through lanes in each direction) with either a center left turn lane or separate left turn lanes at driveways and intersections.
- 4/5 D – Four-lane roadway (two through lanes in each direction) with a barrier center median and with separate left turn lanes at driveways and intersections.

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Design Descriptions

The purpose of defining a physical design characteristic for a street or roadway is to provide a set of standards for pavement widths and right-of-way requirements, in order to properly accommodate the number of needed travel lanes and desired streetside conditions beyond the travel way. These conditions can include open ditch versus curb and gutter drainage, median, on-street parking, sidewalks and bikeways, and tree lawns. The applicable right-of-way width must then accommodate the travel way and the desired adjacent conditions. Table 3.1 lists typical pavement and right-of-way widths for roadways contained in the Thoroughfare Plan.

Table 3.1 reflects typical minimum dimensions for each type of roadway. The City may adjust these dimensions, as needed, to best fit unique situations and conditions.

The right-of-way widths given in the table are based on typical cross-section needs beyond the actual travel way. For "rural" design, about 18 feet is designated for drainage and other features on each side beyond the actual travel way. For "urban" design, about 15 feet is

designated on each side for amenities beyond the curb face. In general, this can include 7-foot tree lawns, 5-foot sidewalks, and 8-foot multi-use paths. The rights-of-way have been rounded to the nearest 10 feet.

Access Management

Access management is the process of identifying the appropriate level of access that adjacent land uses should have to roadways, primarily based on their functional classification. Through access management, the City can provide access to land development in ways that preserve the capacity, safety, and flow of traffic on the roadway network. Access management can provide benefits, such as maintaining efficient movement of people and goods, reducing accidents, preserving public investment in the transportation infrastructure, reducing the need for more new roadways (or the need to widen existing roadways), protecting the value of private investment in the adjacent properties, and enhancing the environmental and economic vitality of the city.

Table 3.1: Typical Pavements and Right-of-Way Widths (Associated with Major Arterials, Minor Arterials, and Collectors)

Travel Lanes	Description	Rural (a)		Urban (b)			
				Without Parking		With Parking (c)	
		Pavement Width (d)	R-O-W Width	Pavement Width (e)	R-O-W Width	Pavement Width (e)	R-O-W Width
2 L	One lane each direction	22 ft. to 24 ft.	60 ft.	22 ft. to 24 ft.	50 ft.	38 ft.	70 ft.
2/3 L	One lane each direction with left turn lanes	Base 24 ft.; 36 ft. @ intersections	70 ft.	38 ft.	70 ft.	52 ft.	80 ft.
4/5 L	Two lanes each direction with left turn lanes	60 ft.	100 ft.	64 ft.	90 ft.	78 ft.	110 ft.
4/5 D	Two lanes each direction with median and left turn lanes	68 ft.	100 ft.	71 ft.	100 ft.	85 ft.	115 ft.

- a. Open ditch drainage.
- b. Curb and gutter design.
- c. Parallel to curb.
- d. Outside edge of pavement to outside edge of pavement.
- e. Outside curb face to outside curb face.

The traveling public benefits from faster and safer travel. Businesses and property owners benefit through the avoidance of the congestion and resultant reduced accessibility that may otherwise result from uncontrolled and poorly planned access. Taxpayers benefit through more efficient use of existing roadways.

Access management is intended to reduce the conflict points between traffic traveling through an area and the traffic turning into or exiting from land developments. As such, it limits the number of conflict points at driveway locations, provides adequate separation between conflict areas, reduces the interference of turning traffic with through traffic, provides adequate circulation and storage for traffic on adjacent properties, and provides sufficient spacing between traffic signals. Access management techniques include consolidation of driveways, proper driveway design, provision of turn lanes, installation of medians, and use of frontage or backage roads (i.e. alleys or rear lanes).

When new roadways are constructed, or when tracts of land are developed (or redeveloped) along existing roadways, access management should be applied compatibly with the functional classification of the roadway as designated in the Thoroughfare Plan. (For roadways under the jurisdiction of the Delaware County Engineer, traffic impact studies associated with planned or proposed developments must comply with the standards and specifications contained in the ODOT State Highway Access Management Manual for state highways and in coordination with Access Management Standards set forth in the Delaware County Thoroughfare Plan).

Resultant Thoroughfare Plan

The final Thoroughfare Plan was developed based upon a final Land Use Plan and the resultant average annual daily traffic volumes obtained from travel demand modeling. Future lane needs were first determined roughly according to the guidelines presented in Table 3.2.

Map 3.2 shows the resulting future lane needs throughout the Powell study area. Nonetheless, these results are solely based on the projected traffic volumes, and the final Thoroughfare Plan must take into account the practicality and efficiency of potential roadway improvements. For example, travel demand model results suggest that SR 315 should be widened to five lanes south of Carriage Road. This improvement is unlikely to occur due to environmental constraints and thus is not shown in the

Table 3.2: Planning Level ADT Thresholds by Facility Type

Type of Facility	Average Daily Traffic (ADT) Volume
2-lane road w/out left turn lanes	Less than 5,000
2-lane road with left turn lanes	5,000 to 20,000
4-lane road with left turn lanes	20,000 to 35,000
6-lane road with left turn lanes	35,000 to 45,000

thoroughfare plan. Model results also indicate that a five-lane section is technically needed on SR 750 east of Liberty Street. While the Thoroughfare Plan does identify widening on SR 750 to the west of Sawmill Parkway and to the east of SR 315, it is suggested that this roadway be no more than two lanes wide with left turn lanes through the City of Powell in order to discourage through traffic from using this route.

The resultant Thoroughfare Plan (pages 60-61) combines the technical lane needs with practical expectations for future roadway improvements. The Thoroughfare Plan Roadway Elements Table (pages 62-64) provides a summary of the Thoroughfare Plan by roadway link. This table also defines the physical characteristics of a link in terms of basic design, functional classification, and desired minimum right-of-way width. It should be noted that additional right-of-way may be needed on certain links to accommodate certain roadside amenities or special design considerations. The Delaware County Engineer's Office provided the present right-of-way width on each road where such information was available.

Some of the identified improvements have already been planned by the Delaware County Engineer. The extension of Sawmill Parkway to US 42 is being designed and built as a major arterial. Additionally, the widening of SR 750 to the west of Sawmill Parkway, as well as the widening of Home Road throughout the study area, are improvements that were identified in the Delaware County Thoroughfare Plan. Beyond these, the Powell Thoroughfare Plan suggests widening to five lanes on US 42 west of South Section Line Road as well as on SR 257 north to Home Road. Seven lanes are called for on Sawmill Parkway south of Hyatts Road and on US 23 throughout the study area. While these capacity enhancements would best accommodate projected travel demands, the State and County do not have any current plans to undertake such modifications.



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The Thoroughfare Plan also calls for a railroad overpass on Seldom Seen Road. It would be desirable to also consider a railroad overpass on SR 750, as this railroad crossing is a major contributor to congestion in Downtown Powell. However, it is simply not physically practical to construct an overpass (or underpass) on SR 750. Using the existing overpass at Home Road as an example, grade separation would likely need to begin 800' or more from the center of the railroad tracks. A railroad overpass on SR 750 would therefore need to begin almost immediately west of the intersection of Olentangy and Liberty Streets, thereby denying direct access to SR 750 for all of the downtown businesses located west of Liberty Street. Similar conditions would result west of the railroad tracks. While an overpass is not suggested, a queue cutter is being installed to improve the safety of vehicles crossing at this location.

Although the Thoroughfare Plan suggests the widening of several major roadways surrounding existing Powell, it is important to note the lack of improvements suggested within Powell itself. No major widening has been suggested on SR 750 between Sawmill Parkway and SR 315, and this plan does not call for the construction of any new roads to funnel traffic away from SR 750 beyond what has already been planned. While a new east-west roadway would be desirable, a careful examination of the study area shows that development patterns have precluded any opportunity to create such a new roadway capable of carrying regional traffic.

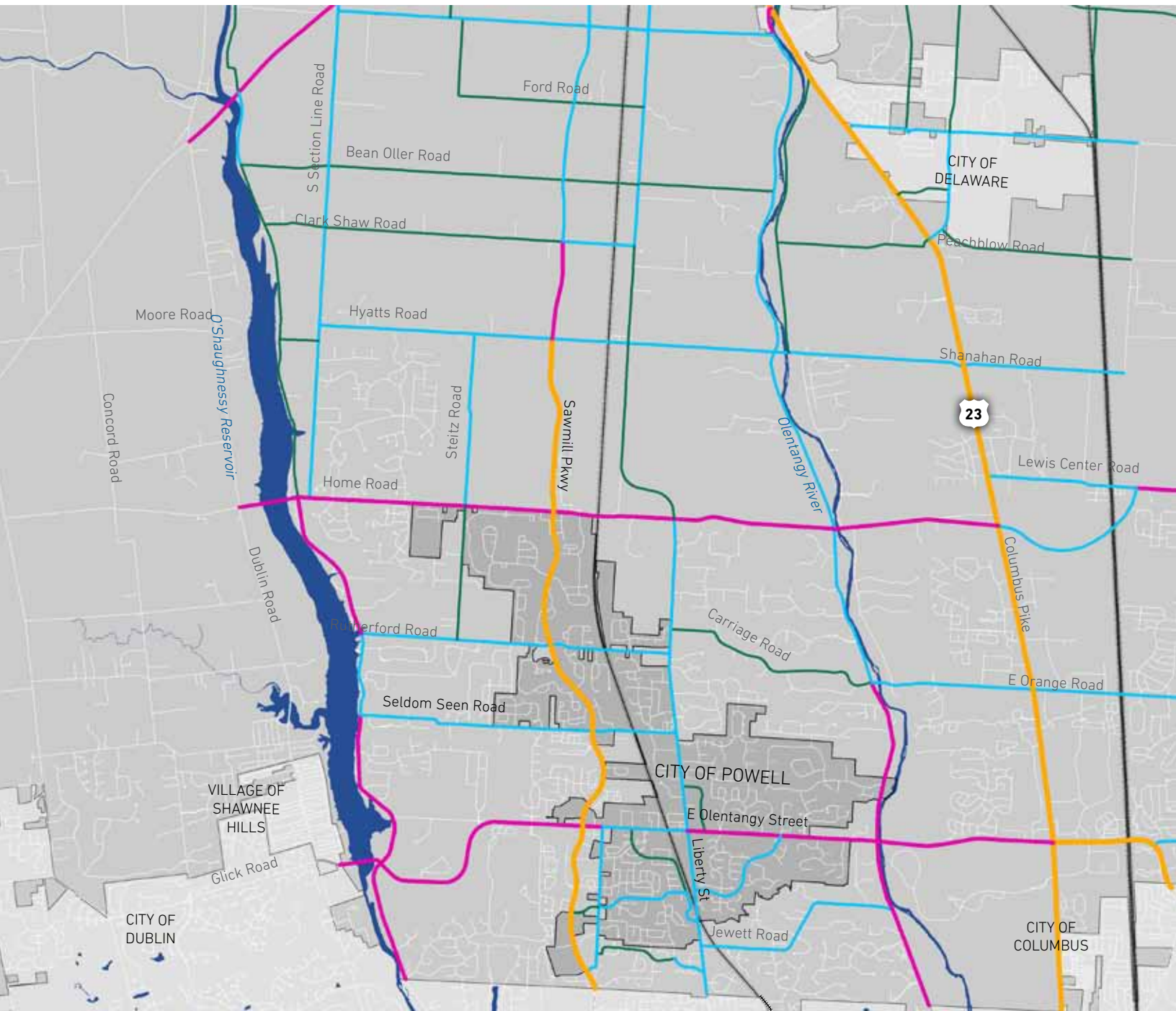
Congestion in Downtown Powell (especially on SR 750) has been identified as one of the biggest concerns for residents. The situation will likely continue to deteriorate given that the population of Central Ohio is expected to increase by 500,000 people by the year 2050. Areas of severe congestion, which are now concentrated more closely to Downtown Columbus, will begin to spread further north if more people move to surrounding suburbs such as Powell, and continue to expand low-density, automobile-dependent development patterns. Regardless, widening SR 750 or adding new east-west links to the system are not the best solutions to congestion issues.

In the short-term, adding capacity to SR 750 or constructing new roads may ease congestion and shorten commute times. In the long-term, the increased system capacity would only encourage people to drive more, so much so that nearly all of the additional capacity would be

consumed. This phenomenon, called “induced traffic”, has been well documented and is the reason that larger roads or new roads would do very little to reduce traffic congestion in Powell.

By restricting the capacity of SR 750 within Powell, “through” traffic is more likely to divert to other avenues. As an alternative to major roadway widening, congestion in and around Downtown Powell can be alleviated by supporting expanded use of mass transit and/or by practicing “smart development”. This includes creating mixed-use centers, which promote walking and biking instead of driving, or providing employment nodes so that fewer residents are forced to commute to Downtown Columbus or other suburbs. The Land Use Plan ([refer to Section 2](#)) has been developed to achieve these objectives. Additionally, drivers traveling to and from the Columbus Zoo could be redirected to other routes by replacing existing signage, which currently instructs drivers to use SR 750. Drivers traveling to and from the north could instead be directed to Home Road, while drivers traveling to and from the south could follow the path of I-270 to Sawmill Road.

To improve access to local businesses and facilitate traffic flow, a more comprehensive network of local streets is being proposed in Downtown Powell. The primary objectives of the proposed secondary collector system are to provide access to land uses and parking areas – and to provide linkages that transfer short-distance in-town trips away from the arterial roadway system. In addition, if left turn movements are restricted at the intersection of Olentangy Street and Liberty Street, the proposed secondary collector system accommodates access to land uses within each downtown zone. This system of access and circulation routes should also integrate pedestrian and bicycle facilities in conjunction with the proposed linkages for these modes.

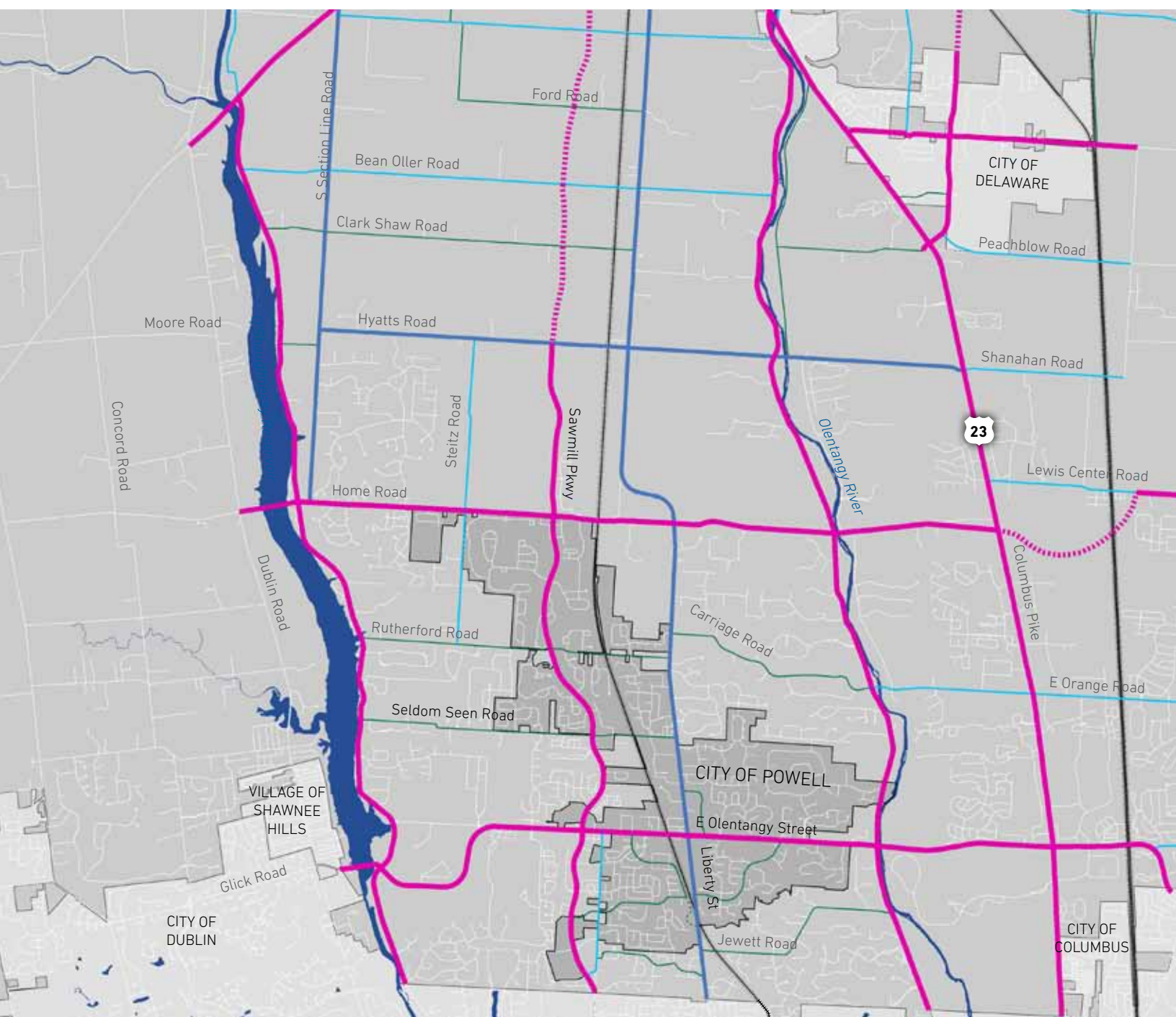


Map 3.2: Regional Roadway System Future Lane Needs

- 6/7 Lane Road
- 4/5 Lane Road
- 2/3 Lane Road
- 2 Lane Road


↑ NORTH

0 1,000' 2,000'



**MAP 3.3: THOROUGHFARE PLAN —
FUNCTIONAL CLASSIFICATION OF ROADWAYS**

-  Major Arterial

 Major Arterial (New)

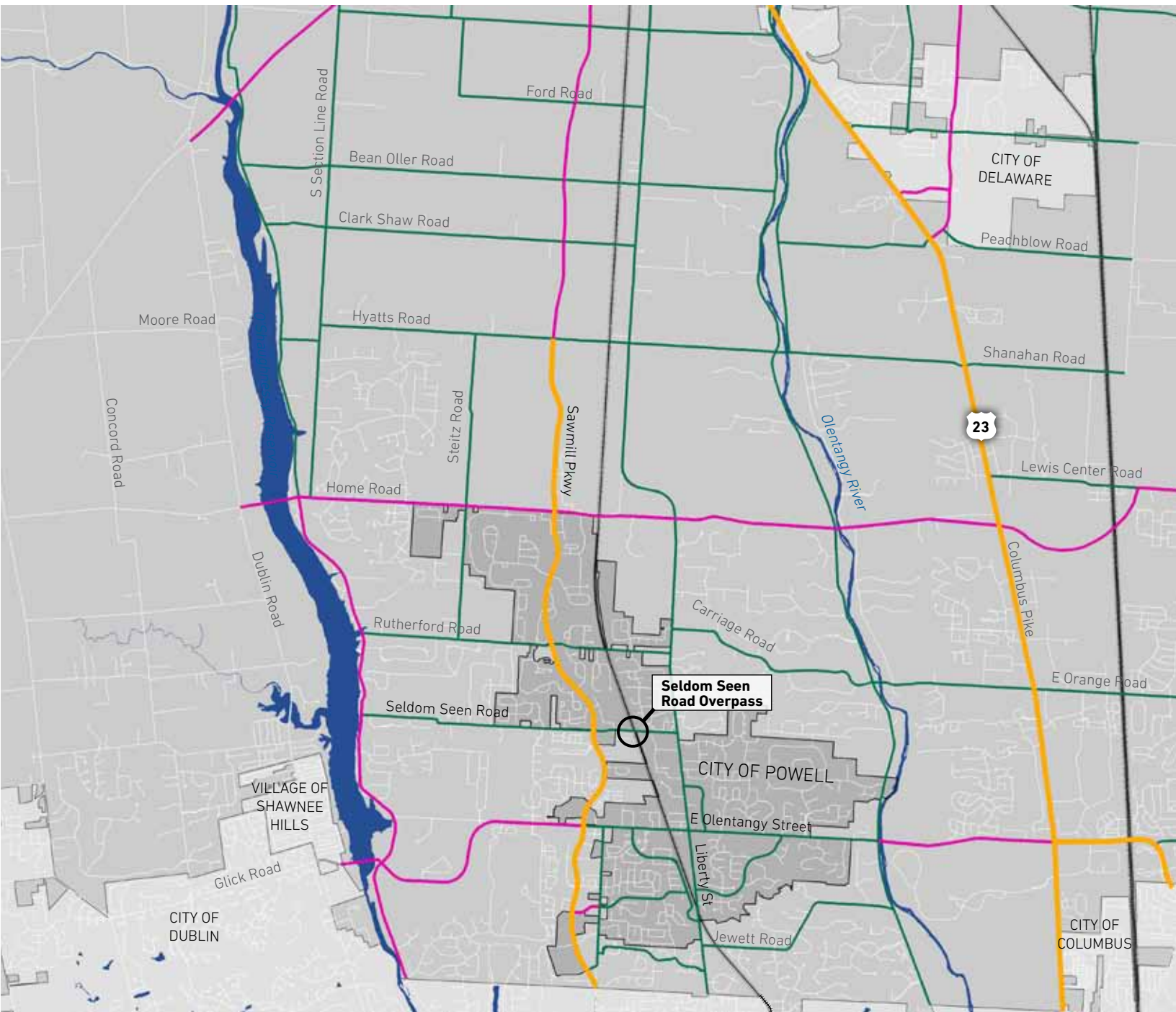
 Minor Arterial

 Minor Arterial (New)
-  Major Collector

 Major Collector (New)

 Minor Collector

 Minor Collector (New)



**MAP 3.4: THOROUGHFARE PLAN —
NUMBER OF LANES**

- 6/7 Lanes
- 4/5 Lanes
- 2/3 Lanes

↑ NORTH

0 1,000' 2,000'

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Table 3.3: Thoroughfare Plan Roadway Elements

Roadway	Limits	Current Jurisdiction	Present Condition			Thoroughfare Plan			
			Number of Lanes	Pavement Width (ft)	R-O-W (ft)	Functional Classification	Number of Vehicular Lanes		Minimum R-O-W (ft)
							Technically Needed	Per Plan	
Bean Oller Road	SR 257 to Township Limits	Concord Township	2	21	60	Major Collector	2	2/3	80
Bean Oller Road	Township Limits to SR 315	Liberty Township	2	21	60	Major Collector	2	2/3	80
Clark Shaw Road	SR 257 to Township Limits	Concord Township	2	20	60	Minor Collector	2	2/3	60-70
Clark Shaw Road	Township Limits to Sawmill Parkway	Liberty Township	2	20	60	Minor Collector	2	2/3	60-70
Clark Shaw Road	Sawmill Parkway to Liberty Road	Liberty Township	2	20	60	Minor Collector	2/3	2/3	60-70
Hyatts Road	S. Section Line Road to SR 315	Delaware County	2/3	22	40/60	Minor Arterial	2/3	2/3	80
Home Road	SR 257 to SR 315	Delaware County	2/3	24-36	60 (min)	Major Arterial	4/5	4/5	100
Carriage Road	Liberty Road to SR 315	Liberty Township	2	20	60	Minor Collector	2	2/3	60-70
Rutherford Road	SR 257 to Township Limits	Concord Township	2	18	40	Minor Collector	2/3	2/3	60-70
Rutherford Road	Township Limits to Sawmill Parkway	Liberty Township	2/3	18	40	Minor Collector	2/3	2/3	60-70
Rutherford Road	Sawmill Parkway to west of Flagg View Drive	City of Powell	2/3	18	40	Minor Collector	2/3	2/3	60-70
Rutherford Road	West of Flagg View Drive to Liberty Road	Liberty Township	2/3	18	40	Minor Collector	2/3	2/3	60-70
Seldom Seen Road	SR 257 to Sawmill Parkway	Liberty Township	2/3	22	40	Minor Collector	2/3	2/3	60-70
Seldom Seen Road	Sawmill Parkway to east of Railroad	Liberty Township	2/3	22	40	Minor Collector	2/3	2/3	60-70
Seldom Seen Road	East of Railroad to Liberty Road	City of Powell	2/3	22	40	Minor Collector	2/3	2/3	60-70
Murphy Parkway	SR 750 to Presidential Parkway	City of Powell	2/3	24-36	60 (min)	Minor Collector	2	2/3	75-80
Murphy Parkway	Presidential Parkway to Liberty Street	City of Powell	2/3	24-36	60 (min)	Minor Collector	2/3	2/3	75-80
S. Section Line Road	US 42 to Home Road	Delaware County	2	24	60	Minor Arterial	2/3	2/3	120

Table 3.3: Thoroughfare Plan Roadway Elements (continued)

Roadway	Limits	Current Jurisdiction	Present Condition			Thoroughfare Plan			
			Number of Lanes	Pavement Width (ft)	R-O-W (ft)	Functional Classification	Number of Vehicular Lanes		Minimum R-O-W (ft)
							Technically Needed	Per Plan	
SR 750	SR 257 to east Gibson Drive	State	5	24	60	Major Arterial	4/5	4/5	100
SR 750	East of Gibson Drive to Sawmill Parkway	State	3	24	60	Major Arterial	4/5	4/5	100
SR 750	Sawmill Parkway to east of Sawmill Road	State	3	24	60	Major Arterial	4/5	2/3	80
SR 750	East of Sawmill Road to Liberty Street	City of Powell	2/3	24	60	Major Arterial	2/3	2/3	60 min. *Varies
SR 750	Liberty Street to East of Thornbury Lane	City of Powell	2/3	24	60	Major Arterial	4/5	2/3	80
SR 750	East of Thornbury Lane to SR 315	State	2/3	24	60	Major Arterial	4/5	2/3	80
Bennett Parkway	Liberty Street to SR 750	City of Powell	2/3	24-36	75-80	Minor Collector	2/3	2/3	75-80
Presidential Parkway	Sawmill Parkway to Sawmill Road	Liberty Township	4	48	80	Minor Collector	2	4/5	80
Presidential Parkway	Sawmill Road to Murphy Parkway	City of Powell	2	24	50-80	Minor Collector	2/3	2/3	80
Jewett Road	Liberty Street to SR 315	Liberty Township	2	20	50	Minor Collector	2/3	2/3	60-70
SR 257	US 42 to Bean Oller Road	State	2	24	60	Major Arterial	2/3	2/3	70
SR 257	Bean Oller Road to Home Road	State	2	24	60	Major Arterial	2	2/3	70
SR 257	Home Road to Rutherford Road	State	2/3	24	60	Major Arterial	4/5	4/5	100
SR 257	Rutherford Road to Seldom Seen Road	State	2/3	24	60	Major Arterial	2/3	4/5	100
SR 257	Seldom Seen Road to north of Jerry Borin Trace	State	2/3	24	60	Major Arterial	4/5	4/5	100
SR 257	North of Jerry Borin Trace to County Limits	State	4/5	24	60	Major Arterial	4/5	4/5	100

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Table 3.3: Thoroughfare Plan Roadway Elements (continued)

Roadway	Limits	Current Jurisdiction	Present Condition			Thoroughfare Plan			
			Number of Lanes	Pavement Width (ft)	R-O-W (ft)	Functional Classification	Number of Vehicular Lanes		Desired R-O-W (ft)
							Technically Needed	Per Plan	
Steitz Road	Hyatts Road to Home Road	Delaware County	2	18	No Record	Major Collector	2/3	2/3	60-70
Steitz Road	Home Road to Rutherford Road	Liberty Township	2	18	No Record	Major Collector	2	2/3	60-70
Sawmill Parkway	US 42 to Clark Shaw Road	Delaware County	-	48	120 (min)	Major Arterial	2/3	4/5D	120
Sawmill Parkway	Clark Shaw Road to Hyatts	Delaware County	-	48	120 (min)	Major Arterial	4/5	4/5D	120
Sawmill Parkway	Hyatts Road to Home Road	Delaware County	4/5D	48	120 (min)	Major Arterial	6/7	6/7D	120
Sawmill Parkway	Home Road to Seldom Seen Road	City of Powell	4/5D	48	120 (min)	Major Arterial	6/7	6/7D	120
Sawmill Parkway	Seldom Seen Road to County Line	Delaware County	4/5D	48	120 (min)	Major Arterial	6/7	6/7D	120
Sawmill Road	SR 750 to Presidential Parkway	Liberty Township	2	21	40 (min)	Major Collector	2/3	2/3	70
Sawmill Road	Presidential Parkway to south of Bradford Court	Liberty Township	2	21	40 (min)	Major Collector	2/3	2/3	70
Liberty Road	Bunty Station Road to Clark Shaw Road	Delaware County	2/3	22	No Record/ 60	Minor Arterial	2/3	2/3	80
Liberty Road	Clark Shaw Road to Home Road	Delaware County	2/3	22	No Record/ 60	Minor Arterial	2	2/3	80
Liberty Road	Home Road to Ashmore Drive	Delaware County	2/3	22	No Record/ 60	Minor Arterial	2/3	2/3	80
Liberty Road	South of Railroad to County Limits	Delaware County	2/3	22	No Record/ 60	Minor Arterial	2/3	2/3	80
Liberty Street	Ashmore Drive to south of Railroad	City of Powell	2	22	No Record/ 60	Minor Arterial	2/3	2/3	50-70 *Varies
SR 315	US 23 to Bunty Station Road	State	2/3	24	60	Major Arterial	4/5	2/3	60-70
SR 315	Bunty Station Road to Carriage Road	State	2/3	24	60	Major Arterial	2/3	2/3	60-70
SR 315	Carriage Road to County Limits	State	2/3	24	60	Major Arterial	4/5	2/3	60-70

Downtown Powell

The “Four Corners” intersection (i.e., the intersection of Liberty Street with Olentangy Street in Downtown Powell) has been identified by residents as the primary source of congestion in Downtown Powell. As a subset of the thoroughfare planning process, a detailed study was undertaken to highlight key factors that contribute to congestion throughout Downtown Powell, and subsequently determine possible short-term and long-term mitigation strategies.

Contributing Factors

As shown in the Regional Roadway System Map (refer to page 53), Olentangy Street, or State Route 750, is the first major east-west arterial located north of I-270, and is one of the few roads to cross both the Olentangy River to the east and the Scioto River to the west. As a result, east-west through volumes traveling in Downtown Powell are higher than desired. Furthermore, there are several factors that significantly hinder the progression of through traffic, and result in congestion both in the east-west and north-south directions on Olentangy and Liberty Streets.

Both Olentangy Street and Liberty Street are only two lanes wide through Downtown Powell, with no center turn lanes. Left turn blocking is thus a major issue not only at the Four Corners signal, but also at driveways and other intersecting streets. With the two-lane cross sections of Olentangy and Liberty Streets, there is not enough space for through vehicles to proceed past those waiting to turn left. Left turn blocking is a recognized issue, and the City has attempted to improve conditions by prohibiting left turn movements at the traffic signal from 4:00 – 7:00 PM on the eastbound and westbound approaches. Nonetheless, there are other contributing factors at play.

At the location of the at-grade railroad crossing on Olentangy Street to the west of Liberty Street, the tracks are slightly elevated compared to the surface of the road, resulting in a large bump that forces drivers to significantly reduce their speed as they cross the tracks. Train crossings at this location are also relatively frequent (about 15 per day), and can completely stop traffic on SR 750 for 5-10 minutes at a time. Also, the more urban and walkable development character of Downtown Powell, particularly at the Four Corners, creates a condition that encourages drivers to slow down, perhaps more than they are used to at other intersections in the City. All of these

factors result in the overall sluggish operation of traffic in the downtown area, effectively reducing the throughput operations of the traffic signal and causing delays.



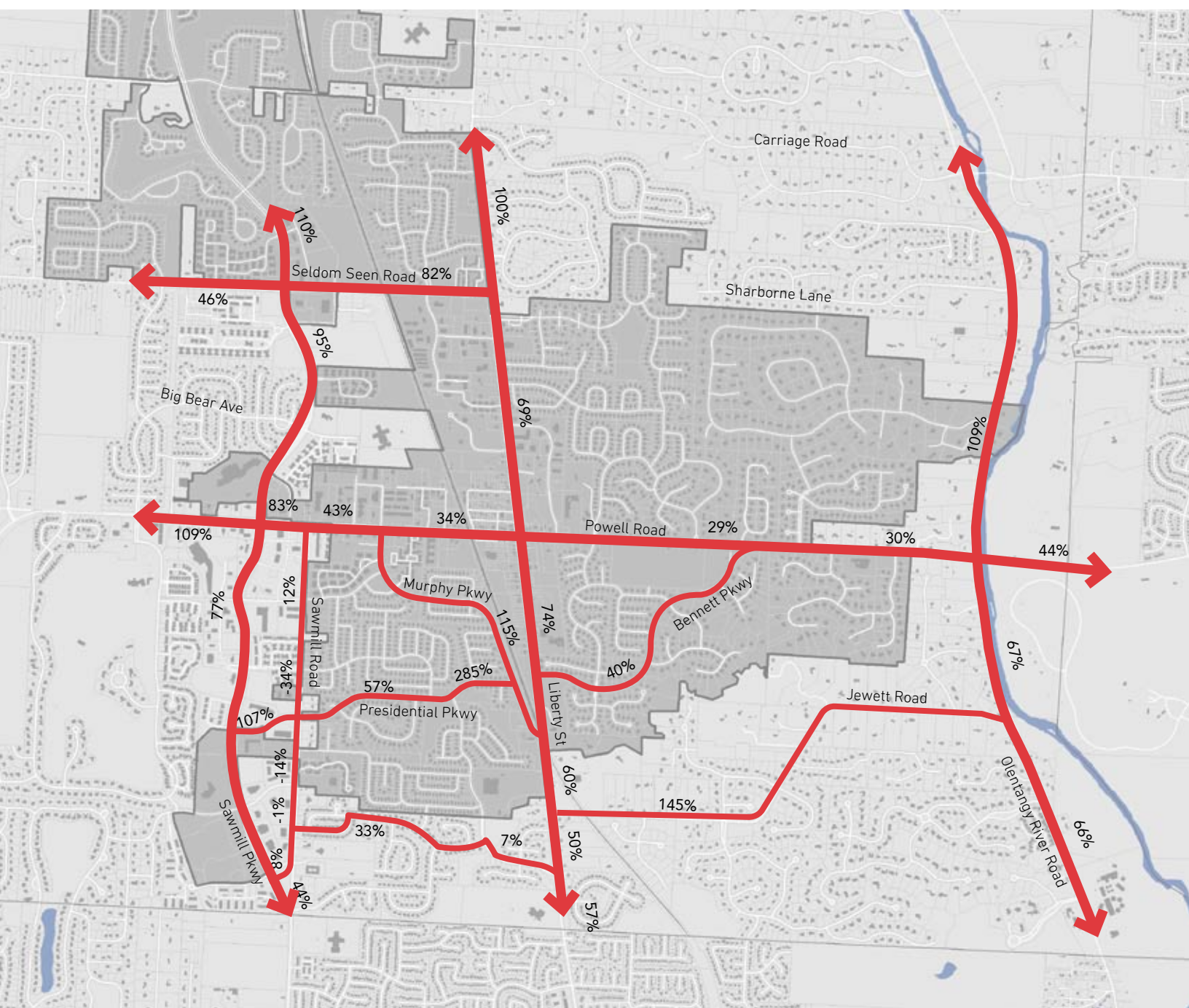
Downtown Powell - Liberty Street Looking South

Future Traffic Demands

The Mid-Ohio Regional Planning Commission (MORPC) was consulted for the purpose of establishing potential future traffic demands in Powell and the surrounding areas. MORPC’s regional travel demand model accounts for probable future land use changes as well as planned road network modifications, and the model uses this information to distribute future traffic demands throughout the region.

As a first step, recently collected traffic count data in and around Powell was provided to MORPC for the purpose of verifying current (2015) travel demand model results. Then, travel demand model results were provided for future (2035) conditions taking into account the land use adjustments proposed as part of this plan as well as planned road network additions, including the Murphy Parkway extension to Liberty Road.

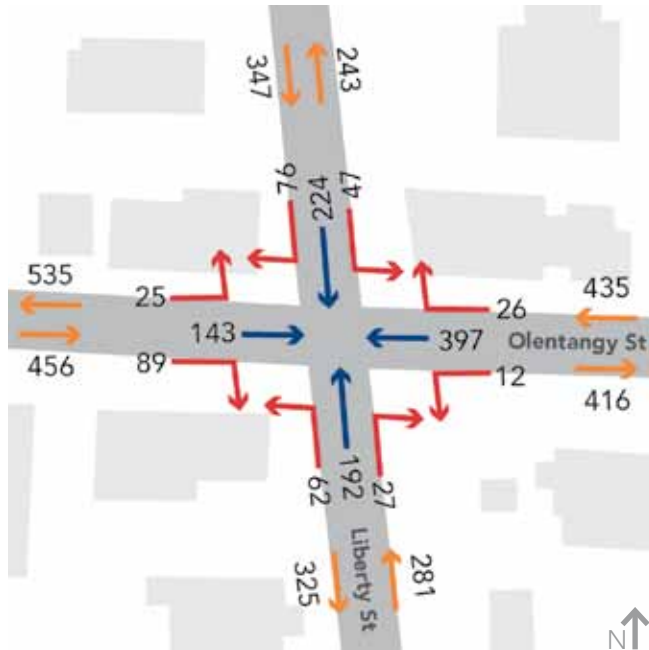
Comparing current and future travel demand model results, growth rates were established on road links throughout downtown Powell. It is expected that between 2015 and 2035, the volume of daily traffic traveling through downtown Powell on Olentangy Street will increase by roughly 30%. On Liberty Street, the volume through Downtown Powell may increase by almost 75% on a daily basis.



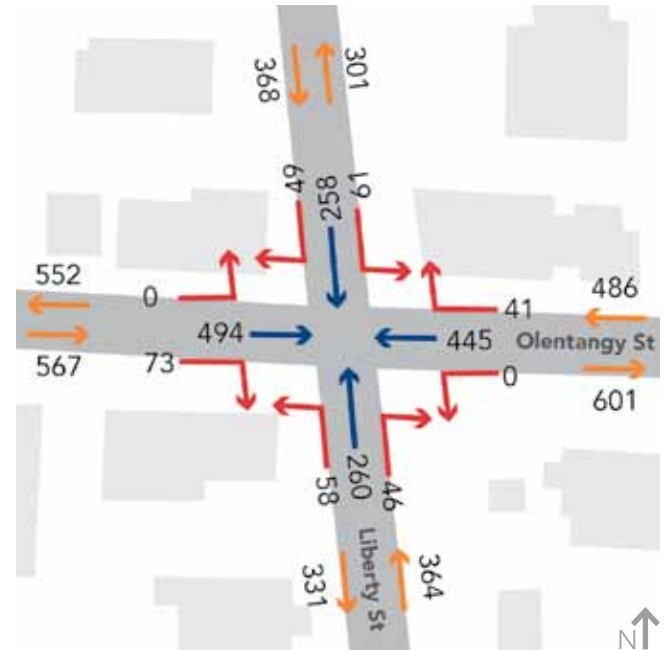
Map 3.5: Potential Traffic Growth 2015 to 2035

Figure 3.2: Four Corners Intersection Volumes, Existing Left Turn Restrictions

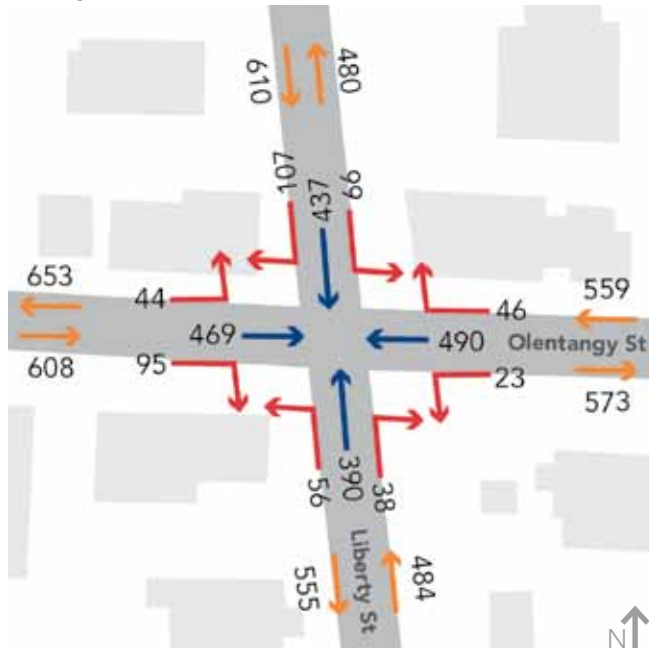
2015, AM PEAK HOUR



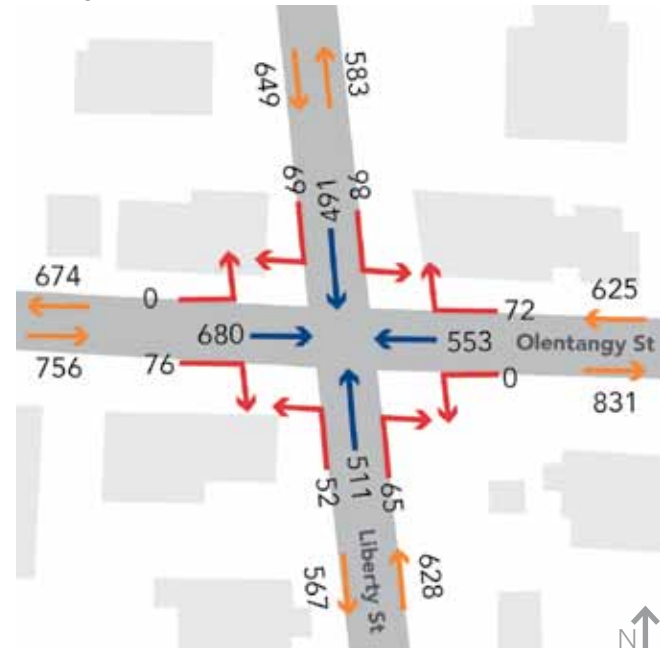
2015, PM PEAK HOUR



2035, AM PEAK HOUR



2035, PM PEAK HOUR



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The regional travel demand model provided two-way, 24-hour traffic volumes on each link in the network. However, AM and PM peak hour turning movement volumes were needed in order to perform capacity analyses and simulation. Turning movement volumes were estimated by adjusting current traffic count data for the Murphy Parkway extension and applying the link growth rates, [see Map 3.5](#), over a 20 year horizon. Current and future turning movement volumes at the Four Corners intersection are illustrated in Figure 3.2. These volumes represent currently implemented restrictions at the intersection; there are no left turn restrictions in the AM, but eastbound and westbound left turns are currently prohibited from 4:00 – 7:00 PM, weekdays. At all times, right turns on red are prohibited on both Liberty and Olentangy Streets.

Alternative Conditions

Given that left turn blocking and slow turn speeds have been identified as major contributors to congestion in Downtown Powell, future conditions were tested under the scenario that (1) left turns are completely prohibited at the signal during the AM and PM peak commuter hours, and (2) both left and right turns are completely prohibited at the signal during weekday peak hours. Turning volumes were reassigned to the road network based on trip origins and destinations, as well as the availability of alternate routes. For trips with origins/destinations outside of Downtown Powell, Murphy Parkway would serve as a

bypass in the southwest quadrant while Bennett Parkway serves the southeast. Grace Drive would be a bypass for trips in both the northeast and northwest quadrants.

Conditions at the intersection were analyzed for each of these alternatives to identify their effectiveness in reducing congestion. One of the measures used in comparing alternatives was the Intersection Capacity Utilization (ICU) Ratio. This value is reported as a percentage and provides an indication of how much congestion may be expected at the intersection, as summarized in Table 3.4.

Four Corners ICU results for existing turn restrictions and alternative conditions (with 2035 projected traffic volumes) are found in Figure 3.3. Completely prohibiting left turns at the signal provides the largest improvement, decreasing ICU by over 30% in the morning and almost 25% in the afternoon/evening. Prohibiting right turns as well further improves the ICU, though the impact is not as substantial.

As another measure of effectiveness, the intersection level of service was considered. The level of service value is based on the procedure defined in the Highway Capacity Manual (HCM) and the associated Highway Capacity Software (HCS) (developed by the Transportation Research Board). This is a qualitative assessment of factors such as speed, volume, geometry, delays, and ease of maneuvering. Capacity analyses specify the quality of operations as a letter with respect to the average amount of delay experienced by drivers at the intersection, and the resulting level of service criteria are shown in Table 3.5.

Table 3.4: Intersection Capacity Utilization (ICU) Criteria

ICU Ranges	Intersection Operation
< 55%	Intersection has no congestion
>55% but <64%	Intersection has very little congestion
>64% but <73%	Intersection has no major congestion
>73% but <82%	Intersection normally has no congestion
>82% but <91%	Intersection is on the verge of congested conditions
>91% but <100%	Intersection is over capacity and likely experiences congestion periods of 15 to 60 consecutive minutes
>100% but <109%	Intersection is 9% over capacity and experiences congestion periods of 60 to 120 consecutive minutes
>109%	The intersection is 9% or greater over capacity and could experience congestion periods of over 120 minutes per day

The average delay per vehicle for each of the alternative conditions at the Four Corners intersection is shown in Figure 3.4. For future traffic conditions, the intersection will operate at a failing level of service in the AM and PM with existing turn restrictions. Again, prohibiting left turn movements on all approaches provides a significant reduction in intersection delay. The intersection would operate at a level of service of D in the AM (which is typical for peak hour operation), but would still operate at F in the PM. Prohibiting both left and right turns on all approaches allows the intersection to operate at a level of service of C in the AM and D in the PM.

As a final measure, the traffic conditions in Downtown Powell were simulated for existing turn restrictions and the condition that all turns are prohibited at the intersection. If existing turn restrictions are maintained, queues on the eastbound approach could extend nearly to Murphy Parkway during both the AM and PM peak hours. Restricting all turns at the signal has the potential

to reduce this eastbound queue by 57% in the AM and 44% in the PM, with average queues reaching just beyond the railroad crossing.

Table 3.5: Level of Service Criteria for Signalized Intersections

Level of Service	Average Delay (sec/veh)
A	< 10.0
B	> 10.0 and ≤ 20.0
C	> 20.0 and ≤ 35.0
D	> 35.0 and ≤ 55.0
E	> 55.0 and < 80.0
F	> 80.0

Figure 3.3: Four Corners Intersection Capacity Utilization, Alternative Conditions, 2035 Volumes

Existing Restrictions

No Left Turns from SR 750 & Liberty

No Turns from SR 750 & Liberty

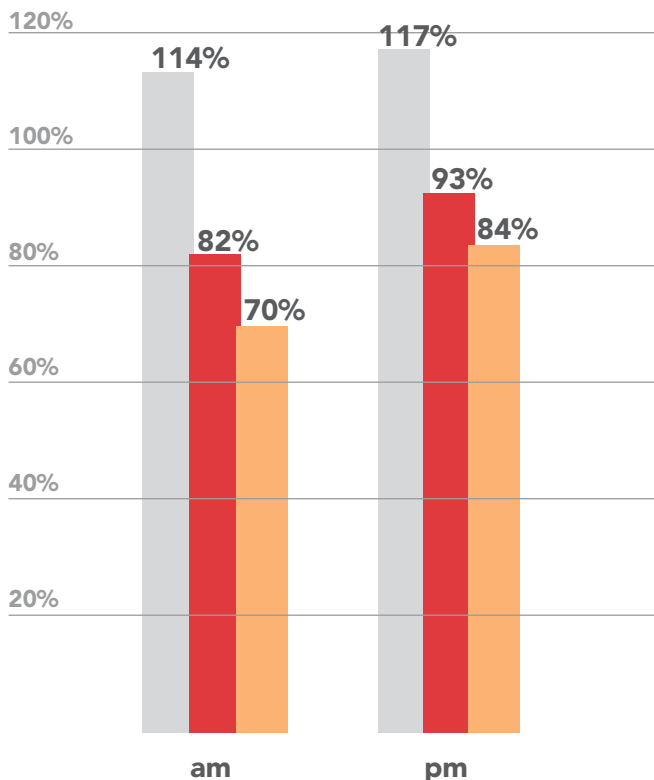
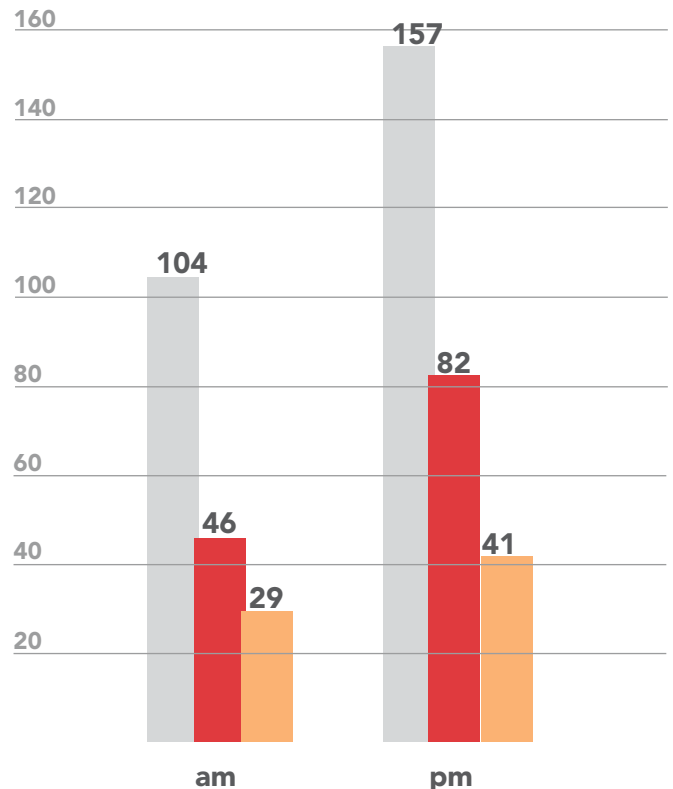


Figure 3.4: Four Corners Intersection Delay, (Seconds per Vehicle) HCM 2010, 2035 Volumes

Existing Restrictions

No Left Turns from SR 750 & Liberty

No Turns from SR 750 & Liberty



TRANSPORTATION PLAN

On the westbound approach, the AM peak hour could see queues extending well beyond Bartholomew Boulevard and nearly to Bennett Parkway without any turn restrictions in place. PM peak hour queues on the westbound approach could extend to just past Bartholomew Boulevard under existing turn restrictions (no left turns). Restricting all turns at the Four Corners intersection reduces the average queue to just east of Grace Drive during both peak hours.

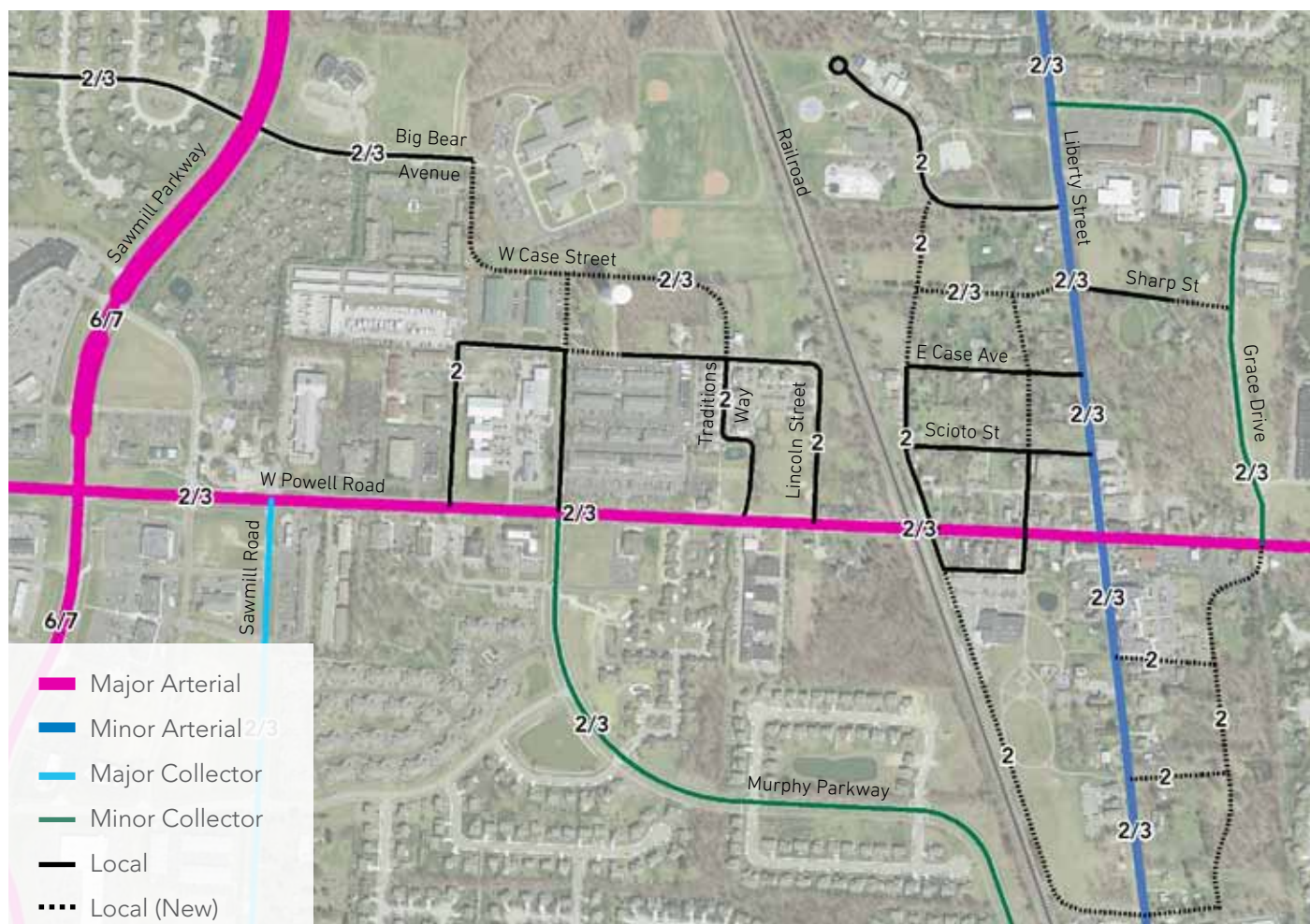
Downtown Powell Road Network

While it has been shown that restricting turns on all approaches of the Four Corners intersection could greatly reduce congestion in Downtown Powell during the peak hours, it is important to note how this might affect access to local businesses. Turn restrictions on all approaches would make it much more difficult for customers to get

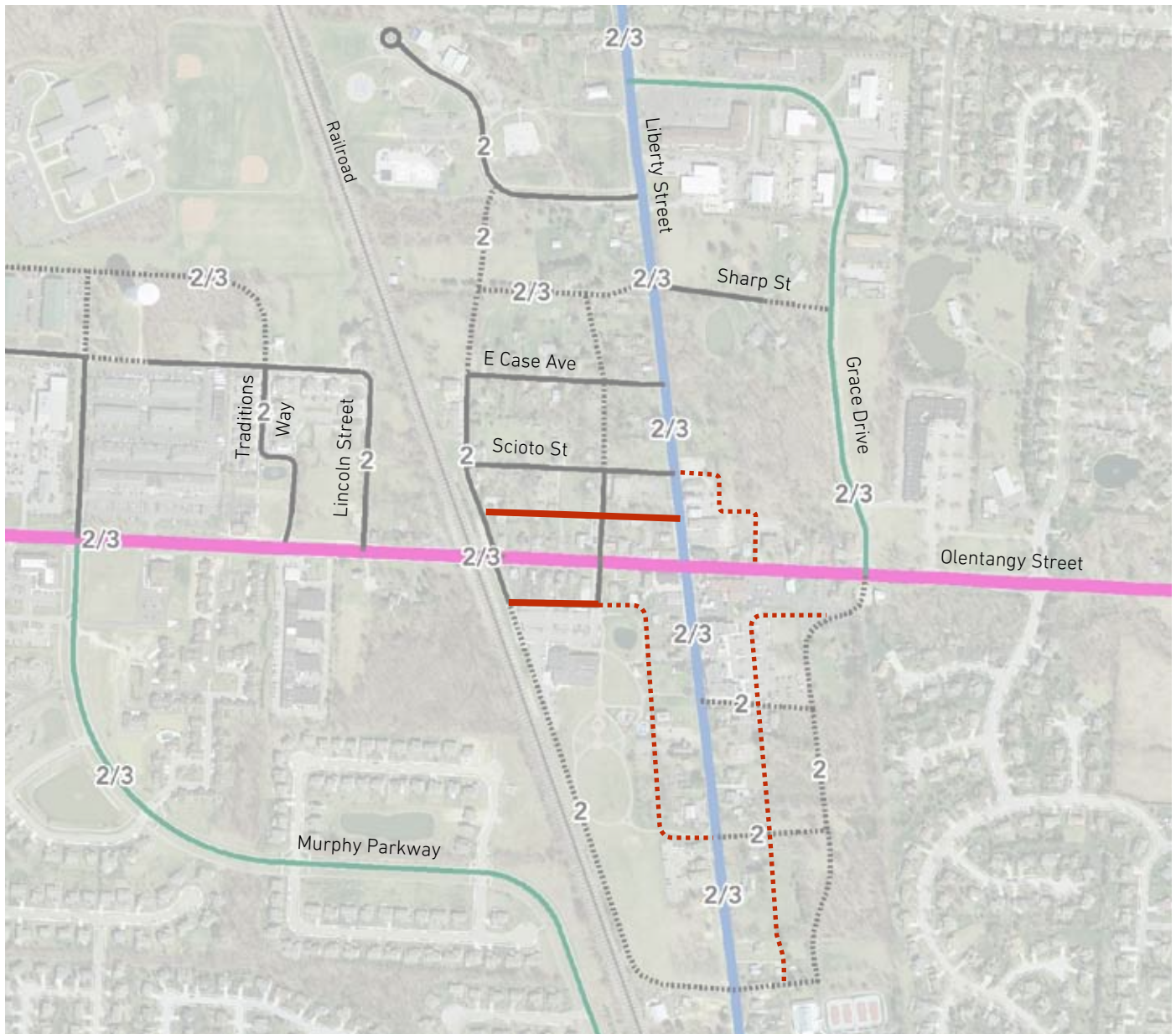
to and from businesses and other establishments and facilities in the downtown area, and may deter people from visiting these locations. It is thus imperative that a comprehensive street network be provided in the downtown area to provide access to parking and alternate routes for customers, visitors, and employees.

A concept street network has been created in order to address this issue and create a more robust downtown area. This concept includes additional public streets for better circulation around Downtown and is depicted in Map 3.6. A more complete picture of the concept street network in the immediate vicinity of Downtown Powell is pictured in Map 3.7. In addition to new public streets, this diagram shows a general concept for creating smaller access drives or alleys that may be provided for interconnected parking areas. Opportunities to create shared parking arrangements and/or new public parking areas should also be explored.

Map 3.6: Thoroughfare Plan — Downtown Powell Detail



Map 3.7: Thoroughfare Plan — Downtown Powell Alley System



- | | |
|---|---|
| — Major Arterial | — Alley (Existing) |
| — Minor Arterial | - - - Alley (New) |
| — Major Collector | |
| — Minor Collector | |
| — Local | |
| - - - Local (New) | |

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Widening Concepts

Even as a more extensive road network is developed in Downtown Powell, left turn blocking will continue to be an issue if improvements are not made to the Olentangy Street or Liberty Street corridors. Consideration could be given to widening both arterials to three lanes in order to provide center turn lanes into driveways and other intersecting streets. However, it is not recommended that left turn lanes be added at the Four Corners signalized intersection. One option would be to add landscaped

medians near the intersection to maintain a consistent three lane section (refer to Appendix). Olentangy Street would be widened to the south, removing the existing on-street parking on this side only.

However, in order to preserve sidewalk space and minimize pedestrian crossing distance at the Four Corners intersection, another design scenario may also be considered. This scenario involves widening Olentangy Street west of Liberty Street to provide left turn lanes at Hall (and a continuous three-lane section moving westward), but maintaining a two-lane section through the signalized intersection. No widening would be done to the east on Olentangy Street or on Liberty Street. This alternative condition is illustrated below.

Olentangy Street Existing Conditions



Olentangy Street Concept: Turn Lanes, Tapering to a Two-Lane Section at the Four Corners



Conclusion

Several factors contributing to congestion in downtown Powell have been identified. With projected traffic growth, conditions will continue to deteriorate if action is not taken. Some turn restrictions are currently implemented at the Four Corners signal in the PM peak hour. However, this is not enough to handle traffic demands over a 20 year horizon. Analysis of alternate conditions shows that consideration should be given to restricting at least left turn movements, and possibly all turns, from all approaches at the intersection.

With this recommendation, it is imperative that the Downtown Powell road network also be expanded to provide alternate routes and access to local businesses. Additionally, consideration could be given to widening Olentangy Street and possibly Liberty Street to three lanes. This would prevent left turn blocking of through movements at driveways and other intersecting streets in Downtown Powell. However, left turn lanes should not be provided at the Four Corners intersection itself. For this reason, alternative urban design concepts should be implemented. While a landscaped median could be provided near the intersection to maintain a consistent curb line with a three-lane section to the east and west, this would involve further impacts on the pedestrian

realm. Alternatively, the suggested three-lane section of Liberty and Olentangy Streets could be tapered back to the existing two-lane sections near the Four Corners intersection to maintain the pedestrian-oriented village character of the City's most prominent intersection.

Given the importance of Downtown Powell as the center of community identity and as a destination along a major regional traffic route, the complex interplay between transportation improvements and urban design considerations must be weighed together. As the City seeks to relieve traffic congestion at the Four Corners, the impacts on community character, pedestrian safety and mobility, and the success of downtown commerce should be carefully considered. As such, the City should undertake a more detailed and comprehensive design plan to determine the most appropriate configuration of travel lanes and the adjacent streetscape, as well as preferred access points for new streets and alleys.



Downtown Powell - The impacts on the pedestrian realm from potential widening of Olentangy and Liberty Streets should be carefully considered.

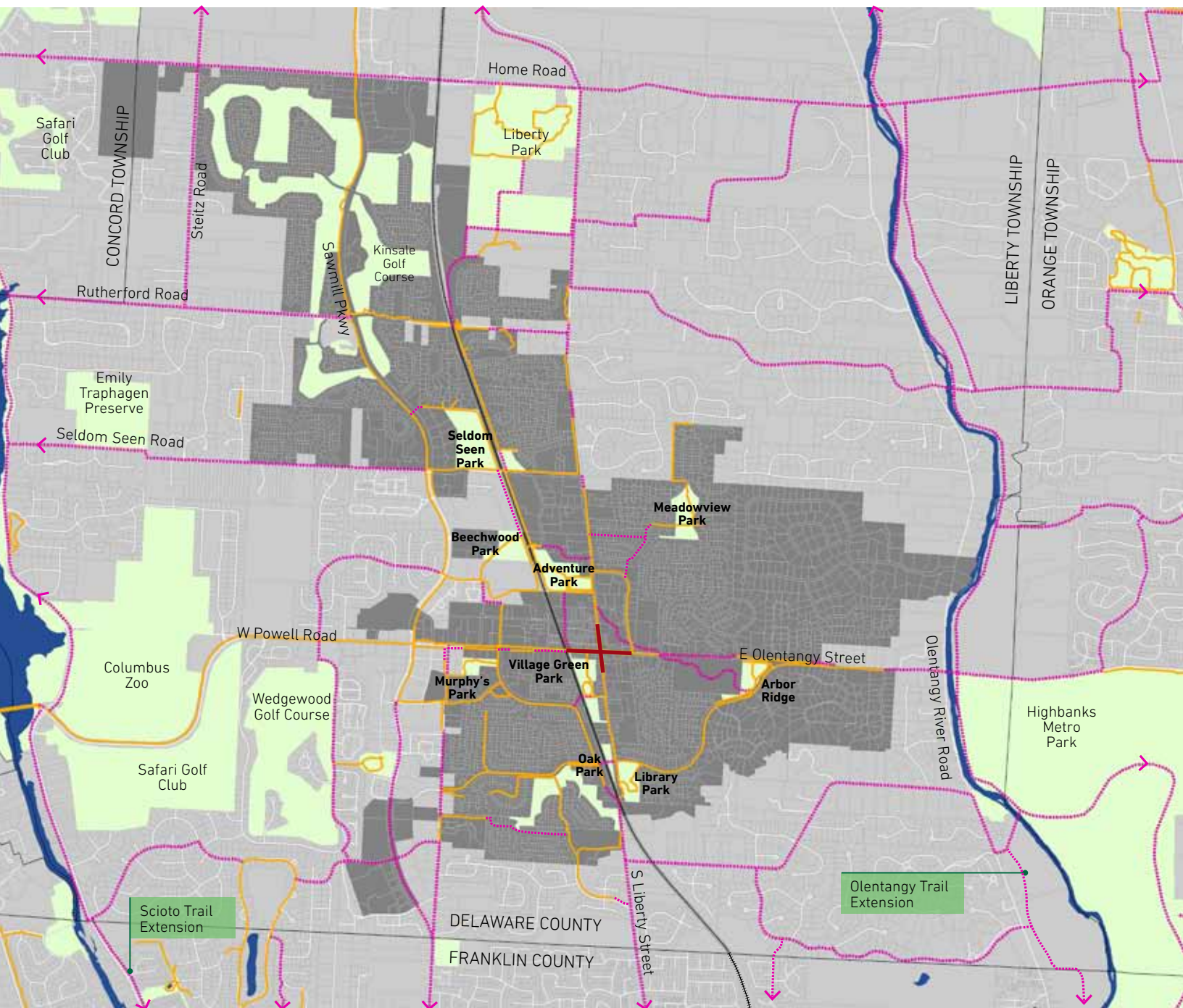
Bikeway Plan

Bicycle travel, both for recreational purposes and for access to destinations such as shops, schools, and places of employment, is a critical part of a well-balanced, multi-modal transportation system. For suburban communities such as Powell, with lower-density development that results in longer travel distances, biking offers a more practical option than walking for many residents who would like to travel by means other than an automobile, or who cannot drive at all. This is especially important for children, who may not live in walking distance of their school, but could bike to school if safe and convenient routes are provided. People of all ages may wish to bike to a public park or to downtown Powell, but many find it difficult due to significant gaps in the existing bike path system. The Mid-Ohio Regional Planning Commission's Metro Bike Map identifies most of Powell's major roadways as having poor to moderate levels of service for bicycle travel, largely due to the gaps in the roadside path system. Throughout the course of the Comprehensive Plan update, public comments emphasized a desire for improvements to Powell's bikeway network by connecting gaps and creating safe connections to major destinations, such as downtown Powell and Highbanks Metro Park.

Bicycle Infrastructure

Today, Powell's bikeway system is comprised entirely of off-street paths that run alongside major roadways or through parks and open spaces. These paths are more accurately considered "multi-use paths" as they are not reserved exclusively for bicycle travel, but also may be used for walking, jogging, or other non-motorized transportation. While there may be opportunities for on-street bike lanes on some roadways, these facilities would primarily serve riders who are more confident riding with traffic. For this reason, expansion and connection of the off-street path system should be considered the highest priority to best serve the entire community. In some cases, critical connections within the system may require on-road facilities if there is no space for a roadside path. However, this may not require significant infrastructure investments if bicycle routes are strategically located along low traffic residential streets that are signed and marked as designated bicycle routes (i.e. a "signed/shared roadway" or "bicycle boulevard").





Map 3.8: Bikeway Plan

- | | |
|------------------------|--------------------------------------|
| Railroad | Existing Multi-Use Path ¹ |
| City of Powell Park | Proposed Bicycle Route ² |
| Other Parks | Downtown Sidewalks |
| Commercial Golf Course | |
| Columbus Zoo | |

- Existing Paths indicate precise locations.
- Proposed routes do not necessarily indicate a preferred side of road or precise alignment. Routes may be comprised of on-street or off-street facilities

↑ NORTH

TRANSPORTATION PLAN

The Highbanks Connection

The Columbus and Franklin County Metro Parks system has undertaken a study to identify a future extension of the Olentangy Greenway Trail to Highbanks Metro Park. Three alternate routes are being considered, including a trail extension from its endpoint at the Olentangy Valley shopping center northward between the Olentangy River and Olentangy River Road (SR 315). A trail bridge would be constructed across the river to provide access to the park. This would provide an opportunity for Powell residents to access Highbanks via a route that would avoid the busy SR 750/SR 315 intersection. A route could be created by extending a multi-use path connection south on Liberty Road to Jewett Road, and along Jewett Road to Churchill Drive. From there, Churchill Drive, Loch Lomond Drive and Manning Parkway (through a future connection between Loch Lomond and Manning) could serve as a signed/shared roadway route to Olentangy River Road. Improvements would be necessary at the intersection of Manning Parkway and SR 315 to provide a safe crossing point for cyclists. Other potential routes include Jewett Road directly to Olentangy River Road, and Olentangy Street across the SR 750 bridge over the Olentangy River. All of these options should be explored in more detail and pursued as opportunities arise.

Downtown/Four Corners Connection

Downtown Powell currently has a mixture of sidewalks and multi-use paths. There are a number of gaps in the system, both within Downtown and along the primary roadways that lead to Downtown. Gaps along SR 750 and Liberty Road should be prioritized, with an immediate goal of providing a continuous, connected multi-use path on at least one side of each road, and with safe crossing points where the path shifts sides. Ideally, continuous paths should be provided on both sides of these roadways. As these roads enter Downtown Powell, paths should transition to a more urban sidewalk with streetscape amenities. Due to right-of-way constraints at the Four Corners, it is not feasible to provide an on-street bike lane or a dedicated bicycle path separate from the sidewalk through Downtown. For this reason, roadway improvements should preserve as much sidewalk width as possible to allow safe use by both pedestrians and cyclists, but it will be necessary for cyclists to slow down considerably, or to dismount and walk along Olentangy and Liberty. However, additional street connections and nearby multi-use paths will provide alternative routes for cyclists that lead through Downtown while avoiding the Four Corners.



Policy Recommendations

The Thoroughfare Plan serves as a guide for roadway infrastructure improvements necessary to accommodate anticipated growth and future traffic conditions over the next twenty years. The Thoroughfare Plan will be implemented over time, through a combination of proactive capital improvements and development-initiated construction. As with the Land Use Plan, the Thoroughfare Plan is intended to advance the Vision Statement and Guiding Principles outlined at the beginning of this document. The following series of policy recommendations provides a framework for implementing the Thoroughfare Plan and advancing related transportation and mobility goals.

1. Use the Thoroughfare Plan as a guide in the development approvals process

Like the Land Use Plan, the Thoroughfare Plan should be consulted for all zoning and development decisions within the City to determine if development proposals are consistent with roadway improvement and right-of-way needs identified in the plan. For developments that include frontage on an existing arterial or collector roadway identified in the plan, development plans should be designed to accommodate the recommended public right-of-way width. Generally, rights-of-way should be dedicated to the City as part of the development process. Roadway infrastructure improvements, such as widening and pedestrian/bicycle path construction, should be constructed by the developer as part of the development process, or alternatively, a fee in lieu of construction should be paid to the City where piecemeal construction of improvements is not appropriate. In some cases, it may be appropriate for multiple developments to pay a fair share contribution to a major roadway project.

2. Proactively address long-term transportation improvement needs

The City should begin to prioritize components of the Thoroughfare Plan for implementation. While some improvements may happen incrementally in conjunction with private development projects, others will require public commitments and action. The City should target land needed for new or expanded public rights-of-way and acquire property as needed to preserve space for future improvements.



Powell currently undertakes capital improvements planning as part of the annual budget process, including a five-year budget horizon, general phasing and identified funding sources. These are the essential elements of a Capital Improvements Program (CIP), and the City should continue to prioritize and fund infrastructure projects over a multi-year period. The City should also consider expanding the CIP into a stand-alone document that would provide greater detail for individual projects and priorities, and serve as a publicly accessible road map to infrastructure implementation. The CIP should continue to be assessed and updated on an annual basis in conjunction with the annual budget process.

3. Balance traffic capacity needs with community character impacts

Traffic congestion is widely recognized as one of the primary issues of concern among Powell residents. The most acute traffic problem is experienced within downtown Powell at the Four Corners intersection, but other congested intersections and roadways are also of concern. Providing adequate roadway width, travel lanes, and turn lanes is an important aspect of improving residents' quality of life and supporting local business activity. However, roadway design must also take into consideration the character of the surrounding area, and should not be solely focused on moving automobiles. Roadways are part of the public realm, and should contribute to a positive visual image of the community. The City should establish roadway character guidelines for priority corridors that establish design expectations

TRANSPORTATION PLAN



Transportation improvements should consider the character and context of surrounding development.

for the public realm, to be coordinated with the context of surrounding development. As recommended in the Land Use Plan, targeted corridor studies should be considered that will establish a coordinated vision for both public and private improvements in priority areas.

4. Coordinate roadway improvements and maintenance with surrounding communities and jurisdictions

Powell's irregular municipal boundaries result in a number of roadways that periodically enter into and exit the City's jurisdiction, or which are bisected by the boundary of the City and Liberty Township. Powell already has shared maintenance agreements with the township to address these circumstances and should continue such relationships to ensure consistent infrastructure conditions and provision of services such as snow removal. Some roadways also fall under State or County jurisdiction, which may provide additional funding sources for improvements, but also may create limitations on roadway design. The City should coordinate closely with ODOT and the Delaware County Engineer to ensure that improvements in and near Powell are appropriately prioritized and designed to meet the community's needs.

These needs may go beyond those of accommodating adequate traffic capacity, and also include aesthetic design elements, community gateway treatments and pedestrian/bicycle improvements. For instance, Sawmill Parkway, as Powell's major north-south arterial, establishes a visual image for the City that could be improved with enhanced roadside and median landscape treatments, which would require close coordination with the Delaware County Engineer.

5. Implement access management programs to reduce congestion and improve safety

A significant factor in roadway congestion is the location and frequency of vehicular curb cuts on arterial roadways and collector streets. Numerous, uncoordinated access points on busy thoroughfares can impact traffic movement, particularly where there are no turn lanes to provide space for drivers to wait for turns without stopping the flow of traffic. Numerous driveway curb cuts also interrupt sidewalks and bike paths and create potential conflict points for cars, pedestrians and bicyclists. This situation is best exemplified along Olentangy Street in Downtown Powell. As described earlier in this chapter, the City should implement an access management plan for Downtown Powell that will create consolidated, controlled access



Sawmill Parkway caters primarily to the automobile today, but has the potential to serve as regional transit route in the future.

points to properties along Olentangy and Liberty Streets. Outside of Downtown, access management solutions should take into consideration the unique circumstances of different roadways and development conditions to appropriately balance traffic movement with access to adjacent properties.

6. Maximize roadway connectivity

New developments should be designed to extend public street systems. An interconnected roadway system provides more direct travel routes and increased travel options that help to disperse traffic and minimize congestion on arterial roadways. Isolated and gated developments should be discouraged. At the same time, care should be taken during the design process to ensure that roadway connections will appropriately serve area residents and businesses, and not induce outside “cut-through” traffic. In the case of private residential roadways and commercial drives, connections between adjacent developments and cross-access easements should be required during the development process. For new residential development, cul-de-sacs should be discouraged in favor of loop streets and other layouts that increase route choices.

7. Promote multi-modal transportation options throughout the community

While Powell is a very automobile-oriented place, residents also enjoy walking and bicycling. Much of the public input generated during the comprehensive planning process identified a need to improve pedestrian and bicycle infrastructure. Powell currently has a disconnected system of sidewalks and bike paths. The City has already identified significant gaps in the system that should be completed, and should establish a long term implementation plan as part of the Capital Improvements Program.

Streets should be designed to function for all users, including pedestrians, cyclists, motorists, and in some cases, transit riders. Powell should adopt “complete streets” and “context-sensitive” design standards for new and improved roadways to ensure all users are accommodated in ways that are appropriate to the location and development context of various roadways. In addition, compact, walkable development patterns, as described in the Land Use Plan, should be emphasized to increase the ability of residents to travel by means other than the automobile.

Powell should strive to increase the efficiency of the transportation system by providing, supporting, and promoting programs and strategies that are aimed at reducing the number of car trips and miles driven (for work and non-work purposes). The City should promote and implement programs that encourage alternatives to driving alone by connecting people to transit. This requires policies and projects that address access to and from park-and-ride facilities, major transit hubs, and transit corridors. Transportation demand should also be managed by encouraging employer-based programs, or development-based programs, that offer incentives to ride transit. In addition, public education and marketing programs should be implemented to promote transit and other alternatives to driving.

Further, the City should work with MORPC, COTA, DATA, and surrounding jurisdictions to identify transit-emphasis corridors that connect designated compact and mixed-use centers with appropriate urban design and infrastructure standards to accommodate and enhance the operation of transit services. In particular, the Sawmill Parkway corridor has the potential to be a major regional transit route in the future, and could be prioritized for a Bus Rapid Transit (BRT) line.



Delaware County Data Bus Service
Image: Columbus Dispatch

Finally, Powell should support future opportunities to introduce commuter rail service to the existing CSX rail corridor. While there are no immediate plans for such service, the existence of a major rail line running through the center of the City, while currently a barrier to traffic, could be part of a long-term solution to Powell's traffic congestion issues.

All modes of travel and types of facilities, from sidewalks and bikeways, to roadways, transit lines and transit stops and stations, should be linked together into a cohesive system that allows Powell residents to choose a convenient and preferred mode of travel and to switch between modes safely and efficiently.

8. Create a holistic design plan for the Four Corners intersection and associated downtown roadway improvements

As described in this section of the plan, a detailed analysis of existing and potential future conditions at the Four Corners suggests that the most appropriate solution to downtown traffic congestion involves eliminating all left turning movements at Olentangy and Liberty Streets, and introducing left turn lanes elsewhere on these streets to disperse local traffic prior to reaching the intersection. A variety of design options have been explored, including widening Olentangy and Liberty Streets to three-lanes, introducing a median near the Four Corners, and alternating the roadway width from a three-lane to a two-lane section to preserve sidewalk width near the intersection. All of these options have costs and benefits in terms of traffic movement, parking impacts, pedestrian

comfort and downtown character. The City should undertake a more detailed and comprehensive design plan to determine the most appropriate configuration of travel lanes and the adjacent streetscape. Design considerations should include an analysis of on-street parking impacts, roadside landscape treatments and street furnishings, stormwater drainage, sidewalk connectivity and consistency, pedestrian crossings, the potential for bicycle accommodations, and burial of overhead utilities, among other factors. This study should produce a comprehensive design plan for Olentangy and Liberty Streets and a clear strategy for implementation.

9. Implement a signage program to direct drivers to alternate routes around Downtown Powell

The City should work with County, State, and Township officials to develop a signage program that encourages drivers to travel on alternate routes instead of through Downtown Powell. This program should be implemented on both a regional scale and a local scale in order to optimize its efficiency in relieving congestion through Downtown Powell. On a regional basis, traffic traveling to and from the Columbus Zoo currently encumbers Downtown Powell, especially during the summer season. In lieu of existing signage which directs drivers to SR 750, new signage should be installed to make better use of Home Road, Sawmill Parkway, and Riverside Drive. This signage should begin directing drivers to a more appropriate route as far away as I-71 (to Home Road) and I-270 (to Sawmill Parkway) in order to capture these longer-distance, regional trips.

Signage should also be installed on a local scale to direct those drivers with destinations outside of Downtown Powell (not just Powell residents) to the available bypass routes along Bennett Parkway, Grace Drive, and Murphy Parkway (upon completion of its extension). Successful implementation of this program has the potential to significantly reduce congestion issues at the Four Corners intersection and throughout Downtown Powell.



FISCAL ANALYSIS



Introduction

An assessment of the long-term sustainability of Powell's finances, both of the current level of development and of each of the development scenarios proposed earlier, is an important part of the plan. The ultimate goal is to ensure that the City will be able to continue to deliver the excellent level of public services that residents have come to expect as the City matures and development continues.

The key finding of this analysis is that household and business-generated general revenues under the current funding structure are not sufficient to support the community either currently or over the long-term; in other words, the City is facing a structural imbalance. It is important to note that this does not mean that the City is in any imminent fiscal danger. It simply means that projected household- and business-generated revenues are insufficient to support municipal services benefiting those households and businesses. Under the assumptions to be discussed, this deficit will grow over time, increasing to \$1.8 million by 2023.

Based on available data and projections, most of the development scenarios tested as part of this analysis provide a positive net fiscal benefit, which will reduce this imbalance. In general, the developments that are more beneficial to long-term financial stability are those with a significant commercial (primarily office) component. Residential development generally consumes more in services than it generates in taxes, but commercial office development generally generates more taxes than it consumes in services. This is primarily due to state statutes leading to Ohio municipalities' reliance on income tax as their primary funding source.

A critical assumption underlying the analysis of development alternatives is that sufficient market demand exists to fill most of the proposed commercial development. If this is not the case, the space will remain vacant and generate no income taxes. Indeed, it is more likely that the property itself will never be developed without market appeal, or that it will face development pressures from uses or development types not supported by this plan. Not only does this mean that the City would receive only a minimal amount of property taxes



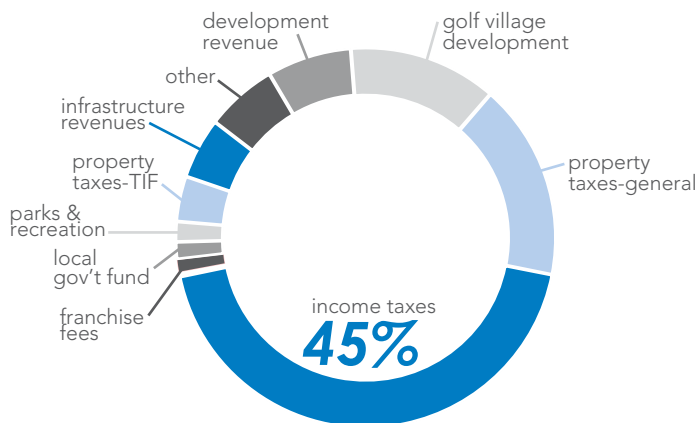
Commercial Development
Image: City of Powell

from the vacant land, it also means that the goals of the Comprehensive Plan will be thwarted. Answering this question requires a careful study of market conditions and demand for the particular type of development being considered. Such a study is beyond the scope of this plan but is an essential step as the plan is implemented.

Revenue Structure

Powell's general fund revenues in 2014 totaled nearly \$13.1 million, up from \$8.6 million in 2009. However, \$1.8 million of the 2014 total consisted of advances and transfers from one fund to another, leaving \$11.2 million in revenues coming into the City's treasury from outside entities. Figure 4.1 shows the source of these funds.

Figure 4.1: 2014 Distribution of Revenues, City of Powell



Source: City of Powell Finance Department

Income Taxes

Municipal income taxes are Powell's largest source of general fund revenue, yielding \$4.9 million in 2014 – 43.6% of total revenue. Tax revenues have increased 22.4% since 2009. Powell's municipal income tax rate is 0.75%, the lowest in Central Ohio and one of the lowest in the state. (Of the 609 cities and villages in Ohio that levied a income tax in 2013, only eight had a lower rate and nine had the same 0.75% rate.) The full 0.75% rate applies to those who earn wage and business income within the city. Those who live in the city but work in another municipality (city or village) that imposes an income tax are subject to Powell tax at a rate of 0.5% in addition to the rate applied by the municipality where the resident is employed. Within Central Ohio, the municipal income tax rate is typically in the range of 1% to 2.5%. This means that a Powell resident who works in Columbus (whose rate is 2.5%) pays 0.5% to Powell and 2.5% to Columbus – an effective income tax rate of 3%. While this is higher than the rate charged by any Central Ohio municipality, some residents of the region face a higher rate. Marysville has a tax rate of 1.5% and grants no credit for tax paid elsewhere, so a Marysville resident working in Columbus would pay 2.5% to Columbus and the full 1.5% to Marysville – an effective tax rate of 4%. Still, most Central Ohio municipalities have an income tax rate of 2% or 2.5%, but provide a full or nearly full credit to their residents for taxes paid in another municipality where they work. The result is an effective total tax rate of 2% or 2.5% for these residents.

Townships are prohibited by state law from charging income tax, so residents working outside of municipalities pay no tax where they work. Thus, Powell residents who work in an unincorporated township also pay the full 0.75% to Powell. Table 4.1 gives the number of Powell



residents earning taxable income and the rate paid to Powell on that income based on where they work. Nearly 57% of the city's 3,269 taxpayers pay taxes to Powell at the full 0.75% rate. Assuming all employed people living in Powell earn on average the same amount regardless of where they work, the average tax rate paid to the City by a working Powell resident is 0.6416%. This rate is used later in this analysis to predict the income taxes generated for Powell by proposed residential areas in the development alternatives.

Not all income is subject to taxation. Major exemptions in state law include military pay and allowances; income of tax-exempt religious, charitable, and educational institutions; interest and dividends; pensions; disability benefits; and capital gains and losses. Note that the exemption on interest, dividends, capital gains, and pensions likely exempts most retirement income.

Table 4.1: Income Tax Rates of Powell Residents

Work location	Number of Taxpayers	Powell tax rate
Work in Powell	1,074	0.75%
Work in another tax-charging municipality	1,418	0.50%
Work in a non-tax-charging jurisdiction	777	0.75%

Source: City of Powell Finance Department

1. Ohio Department of Taxation. Ohio's Taxes: A Brief Summary of State and Local Taxes in Ohio. 2013.

Property Taxes

Property taxes are Powell's second-largest source of revenue, netting more than \$2.3 million in 2014, more than one-fifth of total revenues. Taxes are based on the market value of land and improvements (buildings and other permanent installations). In Ohio, however, taxes are charged on only 35% of the market value; this share is called the taxable value.

Different types of property are taxed at different rates. Residential and agricultural property in Powell (type 1 property) is charged a total rate of 7.4688% on taxable value, or 2.6141% on market value³. Commercial, industrial, and other types of property (type 2 property) pay a rate of 7.5518% (2.6431% on market value). Type 2 tax rates are customarily higher than type 1, but the difference is usually much greater than it is here. Powell, however, receives only a small fraction of the total property tax payment: 0.38% on the taxable value of both type 1 and type 2 property. Table 4.2 shows the distribution of taxes on property in the city by recipient of the tax. Olentangy Local Schools receive more than 70% of the total property tax payment; Powell receives only 5%.

Property taxes in designated areas called Tax Increment Financing (TIF) districts are distributed not to the customary recipients (including the Powell general fund)

but instead defray the cost of new infrastructure that will benefit the district. TIF districts are established for a set period of time to pay for the improvements using the increased increment of property tax revenue from the new development, then expire upon completion of debt service. Afterward, the increased tax revenues from the development go to the original recipients. Powell has two TIF districts: a Downtown TIF effective January 1, 2006, and a Sawmill Parkway Commercial Corridor TIF effective January 1, 2012. These two TIF districts accounted for 18.7% of total property tax revenues in 2014.

Other Sources of Revenue

Several other sources of revenue require brief discussion. Franchise fees are paid for the use of public rights-of-way by utility and cable companies. These fees are administered by the State of Ohio, which sets their level. Franchise fee revenue totaled \$124,211 in 2014. The value of these revenues has hovered around \$29 per household at least since 2009, implying that the only increase in these revenues is a result of population growth.

The Local Government Fund (LGF) was created by the State of Ohio in the Depression year of 1934 to share proceeds from the new state sales tax with local jurisdictions. This remained a fairly stable source of funding over the decades. In recent years, however, it has

Table 4.2: Property Tax Rates on Type 1 and Type 2 Property by Recipient

Recipient	Type 1 property		Type 2 property	
	Taxable value	Market value	Taxable value	Market value
Olentangy Local School District	5.2571%	1.8400%	5.2874%	1.8506%
Delaware Area Career Center	0.2331%	0.0816%	0.2411%	0.0844%
Delaware County Health Dept.	0.0602%	0.0211%	0.0663%	0.0232%
Preservation Park District	0.0577%	0.0202%	0.0597%	0.0209%
Delaware County District Library	0.0961%	0.0336%	0.0993%	0.0347%
City of Powell	0.3800%	0.1330%	0.3800%	0.1330%
Liberty Township	0.6697%	0.2344%	0.6850%	0.2398%
Delaware County Agencies	0.5764%	0.2017%	0.5888%	0.2061%
Delaware-Morrow Mental Health	0.0954%	0.0334%	0.0995%	0.0348%
Delaware County 9-1-1 District	0.0432%	0.0151%	0.0446%	0.0156%
Total	7.4688%	2.6141%	7.5518%	2.6431%

Source: Delaware County Auditor

2. Property tax rates are expressed not in percentages but in "mills"; a mill is one-tenth of one percent. Thus, 7.4688% would be expressed as 74.688 mills. Even these values carried out to the third or fourth decimal point are rounded off.

been reduced significantly in order to balance the state budget, which was severely affected by the recession. Powell's LGF receipts totaled \$165,200 in 2014 – down 57% from 2011. It is unclear if the state will ever return to earlier funding levels of the LGF; in fact, funding could decline further.

A second negative impact on the municipal budget has been the elimination of the estate tax as part of Ohio's recent tax reform. These taxes were paid on estates valued at \$338,333 or higher, at a rate of 6% on the value between \$338,333 and \$500,000, and 7% on the value greater than \$500,000. The tax was eliminated on the estates of individuals dying on or after January 1, 2013. Given the small number of very large estates and the efforts of wealthy individuals to structure their estates so as to avoid taxation, this was not a stable source of revenue. Receipts were as little as \$35,600 in 2006 and as much as \$811,100 two years later. The average collection between 2009 and 2012 was \$227,000; in future years it will be zero — thus, roughly 2% of the City's annual budget was eliminated with the estate tax repeal.

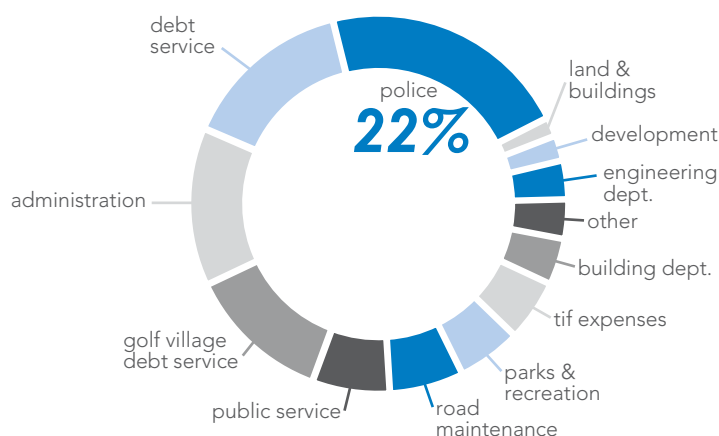
Three revenue streams act to defray the cost of various municipal services, and are treated as such in the analysis. The cost of the Police Department is supported by fines assessed on parking and other violations, as well as charges assessed for services such as police reports, fingerprinting, assembly and parade permits, security alarm permits, and peddler registration. The income from these sources is small, however: \$42,400 in 2014, down 15% from 2009. The cost of infrastructure operations and maintenance is supported by charges to property owners for sidewalk repairs and taxes on gasoline and auto registrations. These contributed \$638,500 in 2014. Finally, the Development and Building Departments are supported by permit, inspection, and contractor registration fees. Receipts from these sources totaled \$689,700 in 2014, almost completely offsetting the cost of these two departments.

Golf Village development receipts consist of payments collected to defray the debt service on bonds issued originally in 2002 to acquire and develop infrastructure serving Golf Village on the northern edge of the city. These receipts – and the associated debt service payments – totaled \$1.42 million in 2014.

Expenditure Structure

Reported 2014 expenditures (excluding agency expenditures) totaled \$13.269 million compared to \$8.5 million in 2009. Netting out the \$1.8 million in advances and transfers that appear in both the revenue and expenditure accounts leaves expenditures of \$11.151 million. Expenditures exceeded revenues in 2014 by \$439,000. Figure 4.2 shows the distribution of these expenditures. The following paragraphs discuss the major categories of expenditure.

Figure 4.2: 2014 Distribution of Expenditures



Source: City of Powell Finance Department

The Powell Police Department accounts for nearly \$2.5 million of the total 2014 expenditures, more than 21% of the total budget. Public safety is an essential public service, highly valued by the residents of a community, and typically the largest category of local government expenditures. In particular, police service is an important differentiator between the city and surrounding townships. Liberty Township's expenditures for fire services, which also protect Powell, were more than \$5.7 million in 2014, almost 57% of the total Township budget. Nearly 91% of the total expenditure for the Fire Department is for wages and benefits. As noted earlier, fines and charges for public safety-related services offset some of these costs, but only 1.6% of the total. Total police expenditures have increased 20.5% since 2009.

FISCAL ANALYSIS

Administration expenditures as defined here include more than those for the Administration Department. They also include other administrative functions: the City Clerk and Council, Finance Administration, the Legal Department, and Information Technology. As so defined, expenditures on these functions totaled \$1.6 million in 2014, up 41% from 2009.

Road maintenance and public service together comprise 13% of the City's expenditures, with outlays of \$1.5 million in 2014. The revenues from sidewalk repairs, gasoline taxes, and auto registration fees offset 42.6% of these costs.

The ongoing development of Powell gives rise to – and is supported by – expenditures for the City's Building and Development Departments. Together, these two departments incurred expenditures of nearly \$708,000 in 2014, 6.1% of the City's total. These expenditures steadily declined from 2010; a sizeable increase in 2014 restored them to a level 7.8% greater than that in 2009. As noted above, the \$699,000 in development-related revenue almost completely offsets these costs. However, the expenses of these two departments are covered by revenue only when activity is strong. In the much weaker market of 2009, expenditures exceeded revenues by more than \$280,000.

Principal and interest payments on the City's debt are also an obligation of the general fund. These payments amounted to \$1.7 million in 2014, but were impacted by a nonrecurring principal repayment of \$695,000.

Excluding this impact from both debt service costs and total expenditures implies that ongoing debt services costs are just under \$1 million, 9.2% of total expenditures. As noted above, bonds also support the development of Golf Village, but the debt service associated with these bonds is fully supported by outside entities, so they are excluded from the analysis along with the associated revenue.

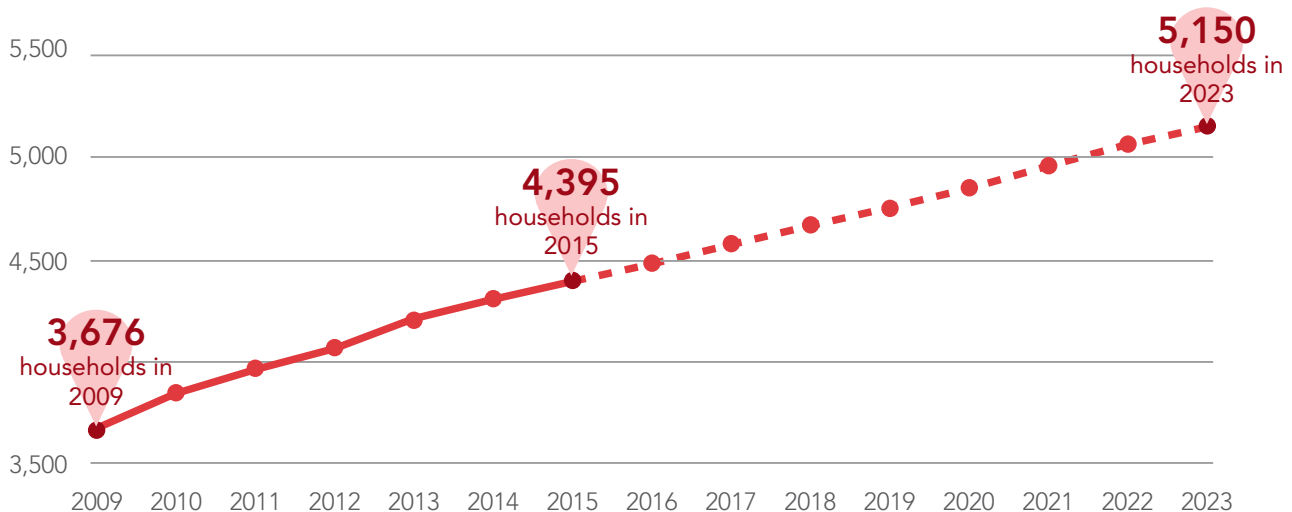
Assessment of the City's Fiscal Sustainability

As a first step in evaluating the future development alternatives examined in this plan, it is important to determine whether the City's revenues are sufficient to sustain the needs of residents given the current scale of development and ongoing population growth. This evaluation (and the evaluation of the fiscal impact of development alternatives) involves revenue and expenditure projections through 2023.

Growth in income and outlays is a function of both inflationary impacts and growth in households. Household growth is a better benchmark than population growth because a household represents a unit of consumption and because growth in dwelling units is the driver of many of these financial effects. Thus, the assessment requires both an annual estimate of the number of households from 2009 (the first year of data provided by the Powell Finance Department) and projections to 2023.

Both historical estimates and projections of the number of households are required on an annual basis. The Census Bureau provides annual estimates of population for all

Figure 4.3: Estimated and Projected Number of Households, 2009-2023





Liberty Township/Powell Fire Department

cities and villages including Powell, while a household count is available for the 2000 and 2010 Censuses. The strategy to derive historical annual household estimates is to calculate the average number of people per household in 2000 and 2010, use the results to derive a trend and an annual estimate of people per household, and divide this into the annual population estimate to get an annual household estimate.

In 2000 (before the most recent annexation), there were 3.16 people per household on average, while in 2010 there were 3.03. If it assumed that the number per household declines smoothly between 2000 and 2010, there were 3.04 people per household in 2009. When this is divided into that year's population estimate of 11,185, the result is 3,676 households. According to the American Community Survey the average number of people per household was 2.97 over the period 2009-2013. This is consistent with the notion that the decreasing number of people per household continued after 2010, so the 2000-2009 trend is simply projected to 2014.

The assessment does not need a population count for years after 2014, only a household count. While the development alternatives in some cases will disrupt the trend, the assumption underlying this baseline assessment is "more of the same"—no significant annexations or development, similar growth through occupancy of existing housing and construction on empty lots, and new residents similar demographically to existing residents. So the household projections are derived simply by projecting forward the annualized household growth rate (approximately 2%). The resulting historical and projected household estimates are graphed in Figure 4.3. The estimates imply that the 4,400 households in 2015 will grow to 5,150 by 2023.

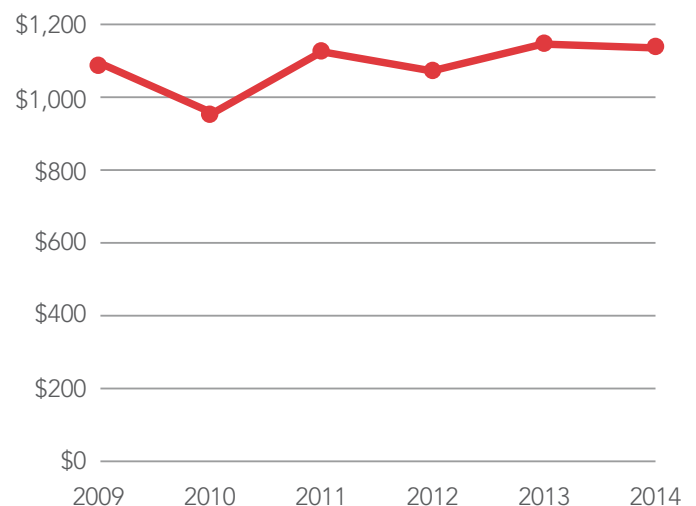
The next step in the assessment is to calculate the historical

amount per household of key revenue and expenditure items, consider how the per-household amounts are likely to change in the future, and derive the projected total values by multiplying the per-household value in each year by the number of households projected in that year. (Development and Building Department expenses are omitted under the assumption that fees and charges will continue to offset the cost of these departments.) The following paragraphs discuss these projections for the major budget items.

Income Tax Revenue

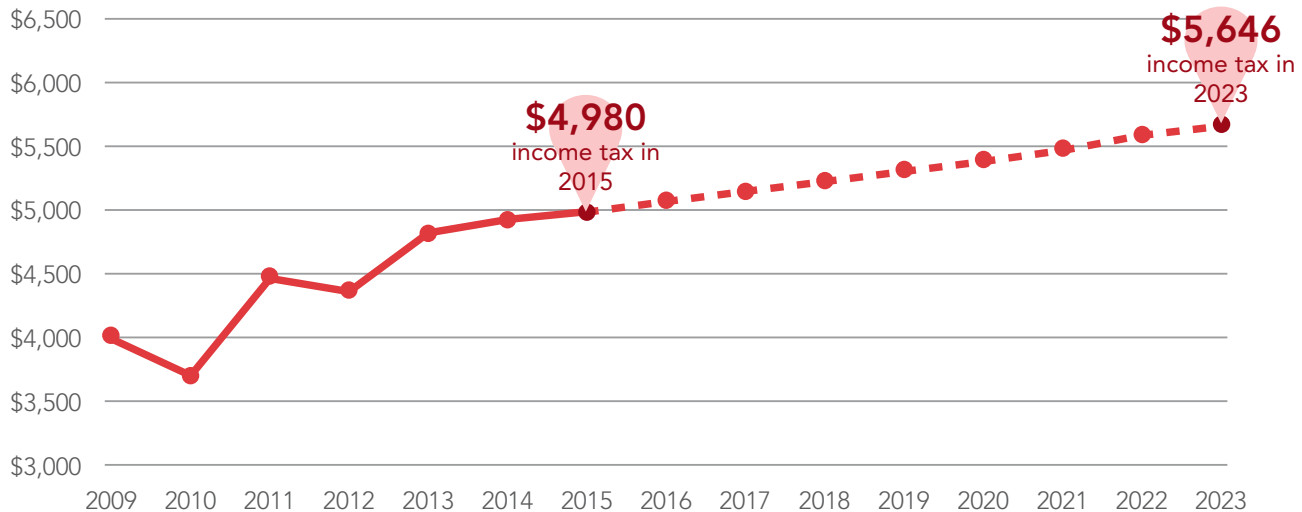
Figure 4.4 graphs income tax revenues per household from 2009 through 2014. Taxes per household have barely changed since 2011. These totals are not adjusted for inflation so the only increase in income taxes over these years has been due to the city's population increase. On an inflation-adjusted basis, per-household income taxes have declined. This is consistent with a larger trend in wage and salary income, which has stagnated for years. Wage increases in coming years are not certain, even as workforce growth slows with the retirement of Baby Boomers. The growth of wages depends both on this impact and on the offsetting impact of technology, which continues to allow functions that were accomplished by workers to be accomplished instead by machines. Further, there is a high likelihood that a recession will occur sometime before 2023, which will slow any growth that occurs.

Figure 4.4: Income Tax per Household, 2009-2014



Source: City of Powell Finance Department

Figure 4.5: Total Income Tax Revenues, 2009-2023



Source: City of Powell Finance Department

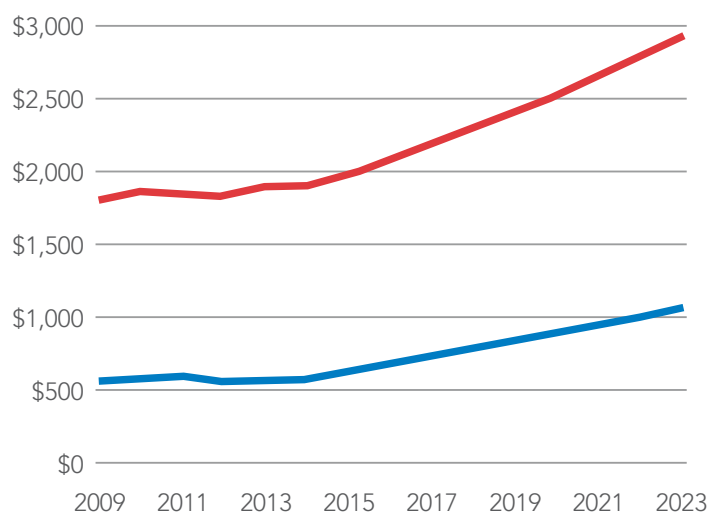
Therefore, it is assumed that wages and salaries – and thus income tax revenues – per worker will remain constant. Approximately \$3.8 million of the income tax receipts come from residents; the other \$1.1 million come from non-residents. Taxes generated by residents will stay constant per household, but increase in total as the number of households increases. With no increase in wages and no new development, wages paid to non-residents will stay constant in total. But these wages will decrease per household as the number of households increases. The net impact is a slight decline in income taxes per household in coming years – from \$1,138 per household in 2014 to \$1,096 per household in 2023. Total income tax revenue, however, will increase given the increasing population. Historical and projected income tax revenues are shown in Figure 4.5. Total income taxes increase 15% to \$5.6 million by 2023. This represents an annualized increase of 1.6%, less than the Congressional Budget Office’s 2.3% long-term projection of inflation.

Property Tax Revenue

Property tax collections totaled \$1.8 million in 2014. As discussed earlier, a substantial share of property tax revenues are generated within the TIF districts. Other revenues are committed to specific funds, such as for the payment of debt service on the City’s bonds. It can be argued that by supporting the cost of financing

infrastructure that would presumably have to be constructed in any case, property taxes earned for these designated purposes help to offset the financial burden faced by citizens. For that reason, the revenues designated to satisfy bond payments are treated as an offset to debt service costs. TIF-designated revenues are excluded, as are TIF-related costs. These revenues per household are also assumed to increase 5% per year. Figure 4.6 shows general fund and other property taxes.

Figure 4.6: Property Tax Revenues, 2009-2023



Source: City of Powell Finance Department

Property tax growth has been unsteady over the past six years. This is because of the way taxable property values are determined. A general reappraisal of all properties is conducted every six years, with an update to those values after three years. Increases in the intervening years are driven only by new construction, so property tax growth is essentially a stair-step function. The most recent reappraisal in Delaware County was in 2011 and the update occurred in 2014. The projection assumes a steady 5% annual increase per household in coming years. Actual collections will be impacted by the 2017 reappraisal and 2020 update, so will not follow the smooth increase assumed here. The net effect over the coming years is the same, however.

Other Revenues

Local Government Fund revenues are included in the analysis of fiscal sustainability. For two reasons, though, they are excluded from the evaluation of development alternatives. First, they are not a function of population growth; second, they are uncertain and may decline further. (These revenues amounted to \$73.67 per household in 2009 but only \$38.35 per household in 2014.) For purposes of the sustainability analysis, they are assumed to remain at their 2014 level of \$165,242. Other revenues discussed above are included, but as offsets to the expenses to which they relate.

Expenditures

The net expenditures are projected in the same way as revenues: the total expenditure is converted to a per-household value, the per-household value is projected forward, and each year's per-household value is multiplied by the projected number of households to derive the annual total expenditure. TIF-related expenditures are excluded for the same reason as TIF-related revenues: they do not directly benefit the households and businesses outside of the TIF districts. This does not significantly alter the conclusion, however, because the long-run revenues and expenditures of the TIF should be equal.

Expenditures per household are assumed to increase at a 2.3% annual rate, the long-run inflation rate for the United States projected by the Congressional Budget Office. This implies that on an inflation-adjusted basis, the only increase in these expenses will be due to population increase. Multiplying the value per household for each year by that year's projected number of households yields a value trend that reflects both inflation and population growth. The expenditures per household that followed a relatively smooth trend from 2009 through 2014 could simply be projected forward, but many expenditures are highly variable over time. This is especially true of the capital outlays (which were analyzed separately). In these cases, the per-household values over the six prior years were averaged and the result used as the base 2015 per-household expenditure. The Golf Village debt is excluded because it is supported by contributions. No attempt is made to predict the issuance of new debt or repayments beyond the ongoing amortization of some of the bonds. Applying the inflationary increase to the baseline debt service total incorporates the possibility that some new indebtedness may be needed in the coming years.

In some cases, the derived expenditure totals for 2015 differ substantially from their levels in the 2015 City budget. This approach, however, eliminates possible non-recurring circumstances that may be factored into the budget totals but would not be relevant for the budget position in coming years – as was the case with the 2014 bond principal repayment.

Table 4.3: Expenditure Projections

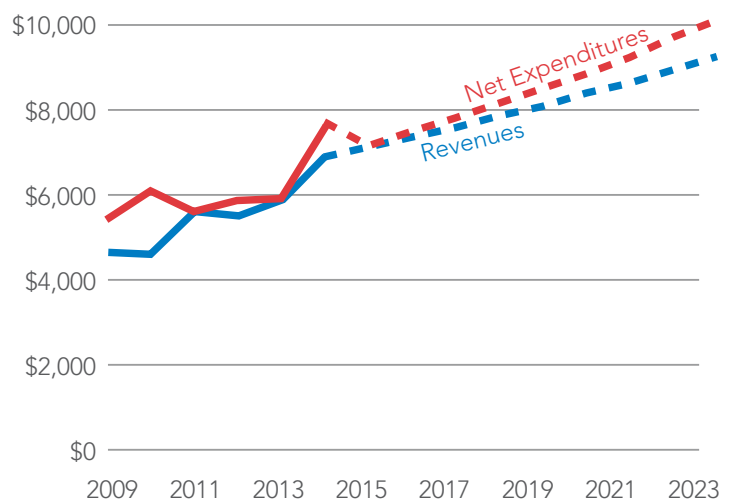
Expenditure	2015*		2023	
	Total (\$000)	Per household	Total (\$000)	Per household
Police (net)	\$2,466	\$561	\$3,466	\$673
Administration**	\$1,693	\$385	\$2,379	\$462
Land and buildings	\$200	\$45	\$281	\$55
Roads and public service (net)	\$859	\$195	\$1,207	\$234
Development and building (net)	\$0	\$0	\$0	\$0
Engineering	\$325	\$74	\$457	\$89
Parks and recreation (net)	\$457	\$104	\$642	\$125
Debt service***	\$220	\$50	\$309	\$60
Total	\$6,218	\$1,415	\$8,740	\$1,697

*These are baseline amounts for the projections, and do not necessarily correspond to amounts in the 2015 budget. **Includes the Administration Department, the City Clerk and Council, Finance Administration, the Legal Department, and information technology. ***Excludes Golf Village-related debt.

The results of the expenditure analysis are shown in Table 4.3. Note that because the same 2.3% inflationary increase was applied to each of the component expenditure items, the 2015 baseline expenditures could have been summed and the sum projected forward. This approach, though, highlights the place of each expenditure in the City's overall financial position.

The results of the sustainability analysis are graphed in Figure 4.7. As shown, revenues increase at a slower rate than expenses, creating a gap that widens steadily to \$1.8 million by 2023, implying a structural imbalance in the City's finances. In other words, long-term revenue growth is insufficient to sustain public services at their current level. This is a problem faced not only by Powell but by communities throughout Ohio. The ultimate source of the problem is the structure and lack of diversity of local government finance imposed by state law. Ohio municipalities' primary source of revenue is the tax on wages, salaries, and business income. The recent stagnation of wages and salaries and the increasing relative importance of investment and retirement income – which is not subject to taxation – has created funding shortfalls in communities throughout the state. This problem is complicated even further by the sharp cutbacks in Ohio's Local Government Fund support and the repeal of the estate tax and personal property tax. Powell leadership has done a commendable job of managing the effects on the city's well-being of these outside impacts, but only so much can be done.

Figure 4.7: Total Revenues and Net Expenses, 2009-2023, Excluding TIF Impacts



Source: City of Powell Finance Department

This analysis is based on the assumptions described above; future revenues and expenditures are likely to be different from those projected, perhaps significantly so. As discussed earlier, the future growth of wages and salaries depends on the pace of technological change, workforce growth, and economic growth in Central Ohio and elsewhere. If economic growth exceeds the ability of technology to adapt to the availability and skills of workers,

demand for workforce will increase, pushing up wages in central Ohio's increasingly tightening labor market; consequently, income tax revenue growth will increase. However, if the Central Ohio economy continues to be significantly stronger than in other Ohio and Midwestern regions, net in-migration to Central Ohio by workers looking for better job opportunities will continue. This will mitigate the emerging shortage of workers. Income tax growth may accelerate as well as a result of retirees downsizing and selling their homes to younger, wage-earning and income tax-paying households.

However, a recession may very well occur prior to 2023. The impact of the 2007-2009 recession on the Delaware County economy was remarkably mild considering the recession's length and depth⁴. While a recession matching the severity of the 2007-2009 downturn is not likely, each recession impacts the economy in unique and unpredictable ways. If the next recession is centered in sectors that are a focus of Powell, Delaware County, and central Ohio, that recession's impact on Powell may be much greater than that of the 2007-2009 recession. Any recession, mild or severe, is likely to impact growth of income and property taxes, and the ability of revenues to offset their related expenditures to at least some extent.

The fiscal sustainability assessment also assumes that capital expenditures will increase proportionally to inflation and household growth – an assumption that may be overly optimistic. Powell's infrastructure – roads and buildings – will continue to age and require increasing maintenance and repair outlays. This fact and the possibility that an unforeseeable major need may arise may require significantly larger expenditures than projected in this analysis.

These caveats imply that the future financial position of Powell may be better or worse than that suggested by these projections. Substantial new development will also impact finances in possibly significant ways, as discussed below. But these projections should serve as a call to action to plan for the possibility that a funding gap may open in the relatively near future. The only two possible responses to this funding gap are to increase revenues or to reduce services and other expenditures. The longer any gap is allowed to continue, the more painful closing it will be.



Liberty Square
Image: City of Powell

Fiscal Impacts of Development Scenarios

The remainder of this section presents an analysis of the fiscal impact of the future development alternatives presented in this plan. This is an extension of the approach used in the fiscal sustainability analysis, and includes estimated impacts of the major household-dependent revenue and expenditure categories:

- Income taxes revenues;
- Property tax revenues;
- Franchise fee revenues;
- Administrative, building, and IT expenditures;
- Debt service expenditures net of offsetting property tax revenues;
- Police Department expenditures net of associated revenues;
- Parks and Recreation Department expenditures net of associated revenues;
- Engineering expenditures;
- Street maintenance and public service costs net of associated revenues from taxes, fees, and charges; and
- Total capital costs of all departments.

Costs related to the Development and Building Departments are assumed to be fully offset by associated fees and charges. Revenues and expenses are calculated as of 2020, assuming that development will not occur immediately. A variety of assumptions are required to generate revenue and expense projections. The assumptions are detailed in the Appendix

4. See Bill LaFayette, Delaware County Strategic Economic Development Plan , September 2014, pp. 1-15 – 1-17 and 1-22.

Evaluation of Development Scenarios

Four future development possibilities are considered in this fiscal analysis, each based on the three conceptual growth and development scenarios described in the Land Use Plan (refer to pages 26-27). Scenario 1 involves infill development (and redevelopment) in existing areas of the city. Scenario 2 includes two separate strategies: Scenario 2a involves targeted annexations of primarily commercial developments, while Scenario 2b considers the annexation of selected existing residential areas within Liberty Township. Each of these is assessed separately. Scenario 3 involves annexation and development of land north of Home Road.

For each scenario, detailed projections were developed for commercial and residential growth using assumptions for land use types, development densities, potential locations for development and annexation, and other development characteristics to determine an estimate for the number of new dwelling units and amount of commercial square footage that could be developed (A summary of development assumptions is located in the Appendix). These projections were coordinated with the inputs for the transportation analysis, and together the results of these analyses were used to develop the recommended Land Use Plan and Thoroughfare Plan.

Scenario 1: Infill & Redevelopment

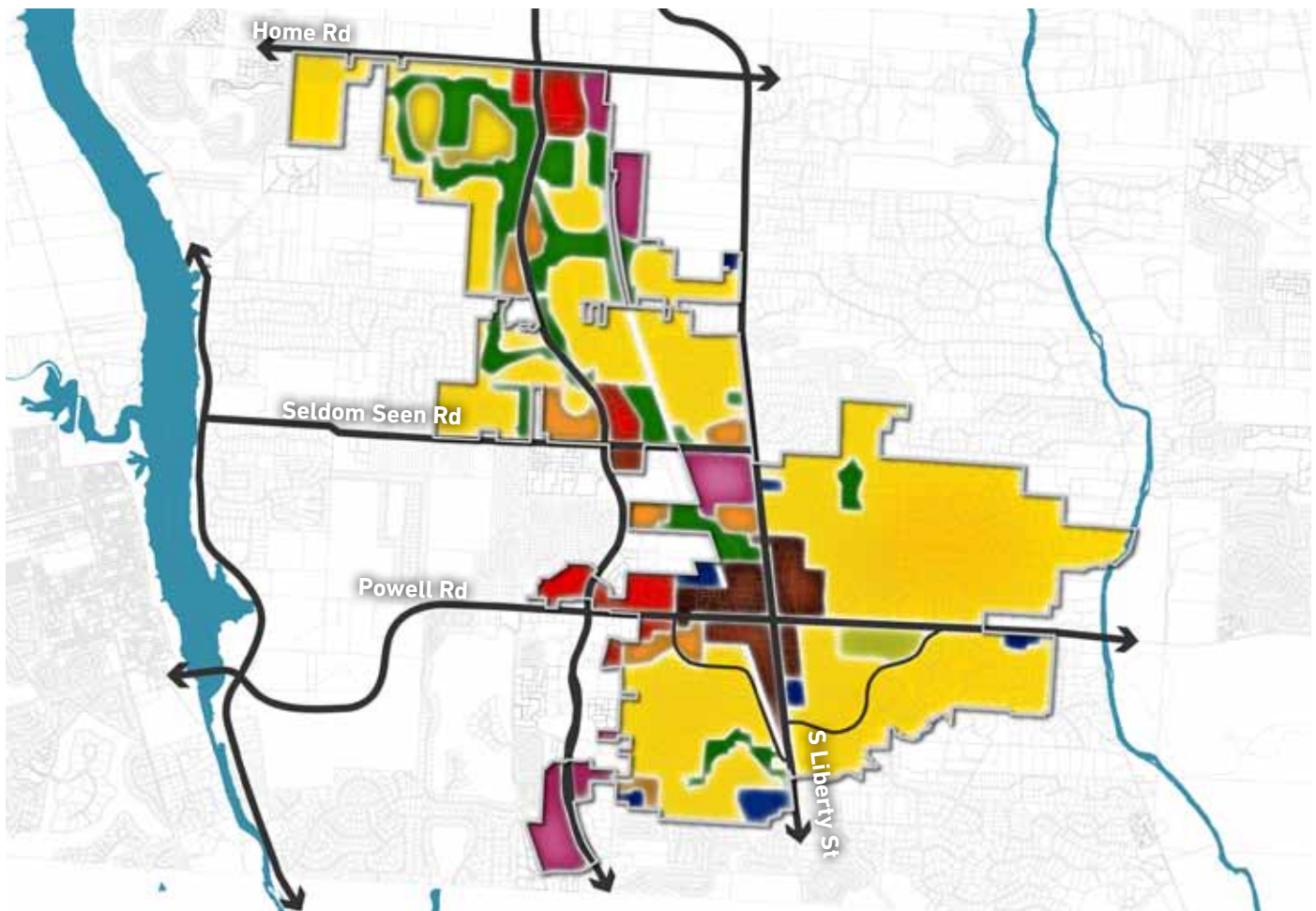
The revenues, expenses, and net impact on Powell finances of Scenario 1 are shown in Table 4.4. A recurring message in these analyses is that residential developments generally have a negative impact on city finances when considered on their own, while the impact of commercial developments is generally positive. In this case, the \$245,000 annual net cost of the residential developments is more than offset by the \$536,300 annual net benefit of the commercial development, leaving an overall annual net positive benefit of \$291,300. However, it is important to keep in mind that the residential developments provide the customer base that creates viability for retail developments and a nearby workforce that can be tapped for the other types of developments, increasing the possibility that portions of the workforce will walk or bike to work, and reducing the impact on the road system. It is also important to note that market forces and locational considerations have a significant influence on the feasibility of commercial development in certain locations. While a number of infill sites could potentially be developed with a variety of uses, either commercial or residential (or a mix of the two), some sites will not be marketable for revenue-generating commercial development.

Further, the cost of serving these developments might be somewhat less than if a comparable development were to be built on annexed territory. This development involves building properties among existing developments, which can be served by the police and other services without extending routes. These benefits are not likely to be especially significant, however.

Table 4.4: Scenario 1

	Revenues	Net expenses	Net impact
Residential			
Downtown (NE Quadrant)	235,214	307,983	-72,770
Downtown (SE Quadrant)	116,404	131,758	-15,354
Downtown (NW Quadrant)	62,548	90,887	-28,339
Downtown (SW Quadrant)	42,865	49,819	-6,954
Railroad To Murphy	58,499	68,067	-9,568
Railroad To Village Pointe	107,663	122,839	-15,176
Golf Village South	229,560	319,579	-90,019
Bennett Farm	59,756	66,608	-6,852
Total Residential	912,508	1,157,540	-245,031
Commercial			
Retail	187,561	51,370	136,191
Office	406,657	44,051	362,605
Industrial	41,788	5,592	36,196
Institutional	1,857	547	1,310
Total Commercial	637,863	101,560	536,302
Total Scenario 1	1,550,371	1,259,100	291,271

Scenario 1



* Please note that all scenario maps follow the legend below.

-  City Boundary
-  River
-  Mixed Use Activity Center
-  Mixed Use Village Center
-  Parks & Recreation
-  Conservation Development
-  Single Family Residential
-  Mixed Residential
-  Civic/Institutional
-  Employment Center
-  Columbus Zoo Complex

Scenario 2a: Strategic Annexation

This alternative involves annexing a number of existing developments – with the potential of additional growth – and five schools. The school properties are exempt from property taxes, but do generate income taxes on wages and salaries. Employment of these five schools totals 221; wage and salary income totals approximately \$14.2 million annually

The scenario also assumes more than 300 units of proposed senior housing. As Table 4.5 reveals, senior housing is particularly expensive from a fiscal standpoint. These households demand municipal services but provide very

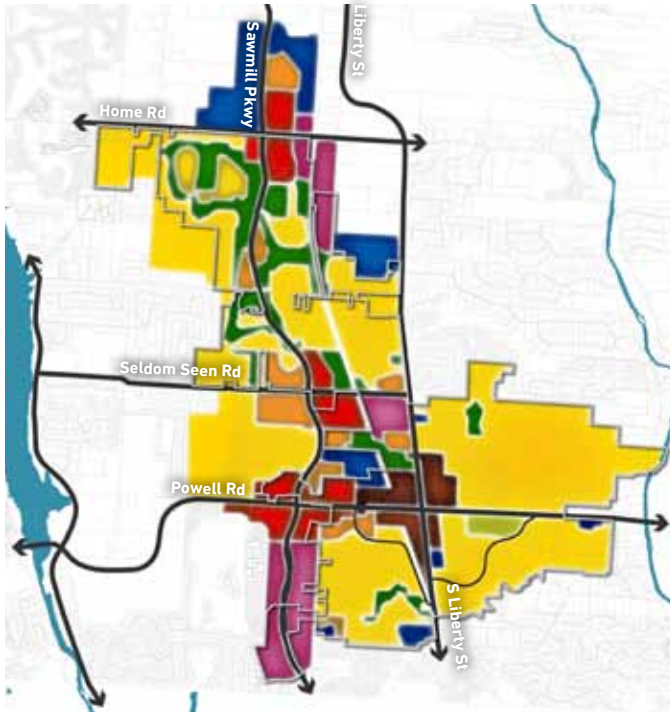
little in revenue because of the exemption of retirement income from what can be taxed by municipalities. Only one-quarter of Powell residents 65 years and older are in the labor force, according to the American Community Survey, and a higher-than-average share of those in the labor force may be working part-time. The estimation accounts for the former, but data are not available to permit accounting for the latter.

However, there are strategic reasons for developing senior housing. These households will generate demand for medical services, which could be developed close by and would generate high levels of income and property taxes. Other providers of senior-oriented goods and services might also be attracted. A second stage of this analysis should quantify this demand, determine the net benefit of developing the medical offices and other services required, and examine the offset of the presumably positive benefit of those developments against the negative fiscal benefit of the senior housing. There are also important considerations for community cohesion and quality of life. As Powell residents retire, many may wish to downsize from their single family house, but to age in place within the community they have come to call home. This process also makes detached homes more available for new tax producing households (perhaps young families who already live in Powell). As the community matures, accommodating multiple generations of residents to live within Powell throughout all cycles of life presents a less tangible benefit that should be considered alongside more direct fiscal impacts.

Table 4.5: Scenario 2a

	Revenues	Net expenses	Net impact
South of Seldom Seen, east of Sawmill			
Senior housing	158,337	411,115	-252,778
Retail	13,323	3,863	9,461
Office	26,567	2,704	23,863
Scioto Ridge Elementary	18,212	2,414	15,798
Existing development - retail	202,538	58,646	143,891
Existing development - office	340,729	34,698	306,031
Total area	759,706	513,440	246,266
Golf Village North Commercial			
Multi-unit housing	305,064	418,572	-113,507
South of Seldom Seen, west of Sawmill			
Retail	26,670	7,725	18,945
Office	53,723	5,472	48,251
Total area	80,393	13,197	67,196
East of Railroad, south of Home Road			
Industrial	43,490	9,849	33,640
Office	48,662	4,957	43,705
Olentangy Liberty Middle School	29,516	3,927	25,589
Wyandot Run Elementary School	15,679	2,079	13,599
Total area	137,346	20,813	116,534
North of Home Road			
Retail	22,258	6,438	15,820
Office	44,890	4,571	40,319
Hyatts Middle School	26,061	3,463	22,597
Liberty Tree Elementary School	17,385	2,318	15,068
Existing development - office	11,379	1,159	10,220
Total area	121,973	17,948	104,025
Total development	1,404,482	983,970	420,513

Scenario 2



Scenario 2b: Annexation of Existing Residential Developments

This alternative involves annexing as many as 14 existing residential developments. Most of these developments are fully built, but the Heathers at Golf Village North and Shamrock Golf Club were not yet developed at the time of this analysis and Kinsale Village was only partly developed with 15 units. All three of these uncompleted developments must be evaluated assuming that they are fully built out. The Heathers is assumed to be developed with 129 units in multi-unit structures with an average value of \$182,700 per unit (comparable to Seldom Seen Acres). Kinsale Village is evaluated with a total of 120 units comparable to existing units in this development. Shamrock Golf Club is assumed to be developed with a mix of 122 single-unit and 55 multi-unit structures. The single-unit properties are assumed to have an average value of \$300,000, while the multi-unit dwellings are assumed at \$235,000 – comparable to the Orchards at Big Bear Farms.

Contrary to the findings above, one of these developments does provide a positive net benefit, and in several other cases, the negative fiscal benefit is so small that the development can be assumed to break even. It is not possible to determine in advance whether a specific development will generate more in revenues than its service cost. The net benefit of any development is a complex function of property value (and hence resident income), development layout (related to the amount of needed service and infrastructure), density, and degree of development. In this analysis, the number of units in the development does not appear to have an impact on its own.

Once again, these possible annexations must be evaluated both financially and strategically. Can they be easily and economically serviced from the city's existing territory? Does the annexation give Powell access to commercial developments – current or potential – that can generate a positive net benefit? Similar to the senior housing case above, if annexing a negative net benefit residential development allows the annexation of a strong commercial development, the true net fiscal benefit would incorporate the impact of both the residential and the commercial developments.

Table 4.6: Scenario 2b

	Revenues	Net expenses	Net impact
Big Bear Farms	382,143	561,105	-178,963
Seldom Seen Acres	87,873	177,576	-89,703
The Heathers at Golf Village North	97,007	170,529	-73,522
Shamrock Golf Club (Verona)**	192,802	264,696	-71,894
The Village at Wedgewood	36,267	95,835	-59,567
Greensview Apartments	69,944	126,840	-56,896
Bear Pointe Apartments	59,342	105,700	-46,358
The Village of Clermont	59,008	91,607	-32,599
The Orchards at Big Bear Farms	62,278	74,695	-12,417
Rutherford at Liberty	11,088	21,981	-10,893
Kinsale Village	149,373	159,254	-9,882
Rutherford at Railroad Tracks	4,375	9,537	-5,162
Hunters Bend	21,176	24,467	-3,291
Rutherford at Sawmill Pkwy	6,407	7,219	-812
Powell Road/SR 315 (NW)	33,121	21,140	11,981
Plus total arterials	---	118,102	-118,102
Total Scenario 2b	1,272,205	2,030,282	-758,077

Scenario 3: Annexation North of Home Road

This alternative assumes annexation of large areas north of Home Road, including two existing schools, and approximately 675 acres of conservation residential development, a mixed use center development, and office/industrial development. The mixed-use center, like similar developments discussed earlier, would

provide retail establishments that would support the new residential developments, while office uses would also support the community and could attract local residents for employment. The schools employ 149, with an approximate annual payroll of \$9.6 million.

The tax impact of the conservation developments depends on the ownership and degree of development of

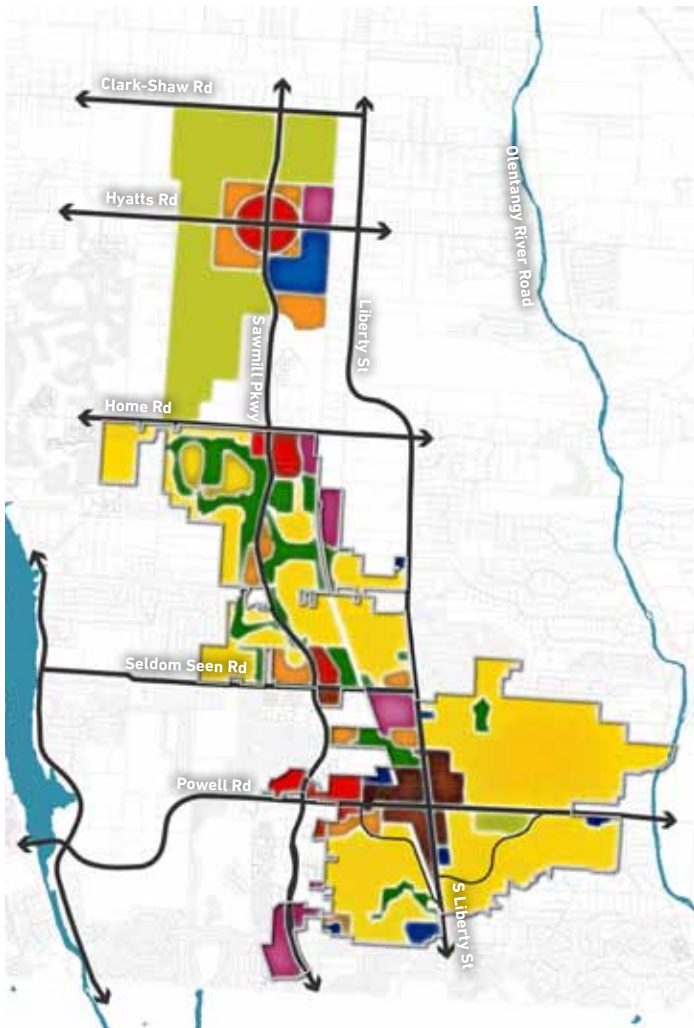
the preserved land. Three possibilities are considered: (1) The land is publicly-owned and passive; (2) The land is owned by an association of the property owners in the development; and (3) The land is privately-owned and farmed. If the land is publicly-owned and passive, it will generate no property tax but also incur minimal park maintenance costs. Maintenance costs obviously increase significantly if the City actively maintains the conservation areas as public parks. Alternatively, if the land is privately owned by the development's property owners, it could give these households exclusive access to the land, providing an amenity for the development only; however, the land could also be owned and maintained by a homeowners association but with public access granted through an easement, providing an amenity to the larger community. The degree of development of the land would in either be irrelevant because the development and upkeep would be borne by the association.

A third alternative is for the land to be privately owned and farmed. This generates property tax as well, but potentially at a significantly discounted rate. Commercial farmland is covered by Ohio's Commercial Agricultural Use Value (CAUV) program. This program allows properties that are actively farmed to be valued for property tax purposes according to their value as farmland rather than the customary "highest and best use" standard. CAUV usually results in a much lower value per acre. In order to qualify for CAUV status, the land must either be at least 10 acres or

Table 4.7: Scenario 3

	Revenues	Net expenses	Net impact
Hyatts to Clark Shaw, Sawmill to Steitz Extended			
Mixed-use center residential	205,036	226,642	-21,606
Conservation residential 1	464,831	449,369	15,462
Conservation area 1	0	0	0
Retail	53,794	15,579	38,215
Office	118,368	12,167	106,201
Total area	842,030	703,757	138,273
Home Road to Hyatts / Sawmill to Steitz			
Mixed use center residential	250,794	274,559	-23,765
Conservation residential 2	637,591	605,311	32,280
Conservation area 2	0	0	0
Retail	65,582	18,991	46,592
Office	138,945	14,227	118,652
Industrial	15,379	8,320	7,059
Indian Springs Elementary	20,129	2,646	17,483
Olentangy Liberty High School	52,163	6,920	45,243
Total area	1,180,583	930,974	249,609
Hyatts to Clark Shaw / Sawmill to Railroad			
Conservation residential 3	239,111	229,918	9,193
Conservation area 3	0	0	0
Industrial	239,797	30,442	209,355
Retail	14,461	4,184	10,276
Office	276,606	31,825	244,780
Total area	769,975	296,370	473,605
Hyatts to Clark Shaw / Sawmill to Railroad			
Industrial	13,700	7,676	6,024
Railroad to Liberty			
Industrial	141,582	37,917	103,665
Total arterials	---	98,557	-98,557
Total Scenario 3 – conservation land publicly owned	2,934,171	2,067,576	866,595

Scenario 3



generate an average yearly gross agricultural income of at least \$2,500. All conservation areas contemplated by this scenario are at least 10 acres so all would qualify for CAUV status. The evaluation of Scenario 3 considers the possibility that the land is publicly-owned and passive, privately-owned by the homeowners, or farmed and subject to CAUV.

Upon analysis, the small difference in the fiscal impact of these three ownership and development alternatives for the conservation land means that the City can evaluate these alternatives from a strategic rather than a financial standpoint. This is discussed in more detail in the recommendations that follow.

Conclusion

Table 4.8 summarizes the impacts of all four basic development options, as well as the impact of omitting Scenario 2b, the annexation of existing residential development. The net benefit of nearly \$1.6 million under this option is fairly close to the \$1.8 million fiscal gap projected in 2023 .

Table 4.8: Conclusions

	Revenues	Net expenses	Net impact
Scenario 1	1,550,371	1,259,100	291,271
Scenario 2a	1,404,482	983,970	420,513
Scenario 2b	1,272,205	2,030,282	-758,077
Scenario 3 – conservation land publicly owned	2,934,171	2,067,576	866,595
All four options	7,161,229	6,340,928	820,302
Omitting Scenario 2b	5,889,024	4,310,646	1,578,378

Policy Recommendations

1. Closely monitor trends in revenues and expenses, particularly income taxes, and implement policies to address the fiscal gap.

The fiscal sustainability assessment was founded on a set of fairly conservative assumptions. The most important of these was that household incomes would remain stagnant for the forecast period. If incomes increase even somewhat faster than projected, the impact on the City's overall fiscal position will be significantly better than predicted. It was also assumed that expenditures would increase in proportion to the increase in households. Even though no economies of scale were evident in the historical data, these may arise as population increases further.

However, Powell officials have made clear that capital expenditures to date have been inadequate to sustain municipal operations. These historical expenditures were also the basis of the projections, which implies that future expenditures are understated. Consequently, revenues will need to be increased (by taxes, development, or both) and/or operating expenditures will need to be reduced even if the structural imbalance worsens to a lesser degree than projected. City officials will need to educate residents regarding the darkening fiscal outlook and make a compelling case that these additional capital expenditures are necessary. Failing to address them will degrade the quality of services that residents have come to expect. It therefore appears that raising the income tax rate will likely be necessary. Because of Powell's low rate relative to the region, raising the rate, but possibly maintaining the credit for Powell residents who work in other taxed jurisdictions might be one solution to investigate.

This argument applies even more strongly to the new capital improvements recommended elsewhere in this plan. No capital expenditures for new roadways were included in any of the assessments under the assumption that they would be paid for by the developers, as has generally been the case in the past. TIF districts are also possible, but the City must recognize that setting aside property tax revenues to fund improvements in the TIF district violates the assumption that these revenues will augment the general fund. Accordingly, creating a new

TIF district reduces the calculated net benefit of the affected development. Without a robust and reliable revenue source, it will be necessary to go to the voters to obtain the necessary revenue for specific capital projects, such as a community recreation center as recommended elsewhere in this plan. A potential benefit is that the vote gives a clear signal of whether residents want the project badly enough to pay for it.

2. Establish a dedicated fund for capital improvements, and communicate both funded and unfunded capital needs broadly.

The City currently has no dedicated fund for capital improvements to help meet both planned and unplanned needs. Thus, if an urgent need were to arise, the City would have to tap its borrowing capacity – possibly when credit markets are unfavorable. The City of Columbus, for example, has for years formally set aside a specified percentage of its income tax revenue in a capital improvements fund.

The City's annual budget document currently spells out various capital needs and their rationale in detail, with a detailed schedule tying the departmental capital budget amounts to specific needs. An effective means of communicating the scope of these needs would be to specify in detail those capital needs that should be met but cannot be because funds are not available to do so, with a detailed discussion of the impact on municipal services.

3. Undertake a market study to assess the capacity for proposed commercial developments.

This plan proposes significant commercial development. A critical preliminary step in implementing the plan is a careful assessment of the market need for the developments – a question that is beyond the scope of this plan. The study of the market should also identify the specific types of office, retail, and industrial uses that will gain the greatest acceptance, or for which a market could be created, in part to address the fiscal structure issues already discussed. This is particularly vital in the case of retail, which is more likely to address the needs of the immediate community rather than those of a broader area. As discussed earlier, failure to undertake this step will increase the risk that the development will not occur, endangering the implementation of the plan and weakening the City's financial position. On the other hand, providing developments that fill gaps in existing market offerings or provide viable employment opportunities will enhance the quality of life for residents and ultimately increase property values and tax revenues. These are the commercial developments that will best address the emerging structural imbalance.

4. Prioritize the annexation of commercial and mixed use development over residential-only development.

A key message of the development alternatives analysis is that while some existing residential developments carry their weight fiscally, most do not. While annexing these developments will increase the City's income and property tax base, doing so will in most cases increase expenses to a greater degree. It is true that township residents do already consume some municipal services and impose some cost now by driving on Powell's streets and visiting Powell's parks. However, they do not impact to any great extent the costs of police protection, administration, and engineering, which comprise nearly three-quarters of the total cost of Scenario 2b. Still, there could be compelling community-building reasons for annexation outside of the fiscal considerations. Thus, this recommendation should be tempered by considering any strategic benefit of residential annexation; this is discussed in the next recommendation.

5. Consider the impact of development holistically and strategically.

It is important to recognize the interdependence of residential and commercial developments. The broad nature of the fiscal analysis scenarios does not permit this. An example given earlier is the possibility that the development of senior housing will attract medical offices to meet the needs of these residents. This would be part of that scenario's commercial development. The likely positive fiscal impact of the medical offices and other services will help to offset the negative impact of the senior housing. Again, a market study is necessary to quantify this need and assess the degree to which the commercial development pays for the residential development.

Another example is an existing residential area that may have a negative net benefit on its own but allows annexation of an adjacent commercial area with a significantly positive net benefit. The relevant consideration is the combined benefit of the two areas.

Along similar lines, the mixed use center land use type recommended in the Land Use Plan by its very nature incorporates both residential and commercial uses. Each of the fiscal scenarios includes some elements of mixed use center development, most notably, the creation of a new center to the north of Home Road in Scenario 3. This is also an important aspect of infill development in Downton Powell. In these cases, it is necessary to consider the residential and commercial components of a development as a whole, and also to consider the additional property value generation that tends to accompany well-designed mixed use developments.

Finally, annexing areas to the north of Home Road may be desirable for reasons in addition to the fiscal benefit. This area will certainly develop sooner or later, with the distinct possibility that it would develop under inefficient "sprawl" development patterns if current trends were to continue. Annexation will give Powell the ability to control and shape the nature of that development rather than leaving it to outside forces. If this is done correctly, it will increase property values in the city as a whole (or prevent them from declining in the face of undesirable development). The positive impact on the city's finances can validly be considered an addition to the impact of the development itself.

6. Evaluate the status of conservation areas as a strategic issue.

The finding that ownership of the conservation areas does not have a significant impact on the overall fiscal position of the development means that Powell can approach this question from a strategic, rather than a financial, standpoint. On one hand, if the conservation areas were to be owned by a Homeowners Association, it may alleviate a maintenance responsibility for the City. However, with a passive open space program and naturalized landscape design, maintenance costs can be minimized while giving Powell full control over the land. A strategic approach to setting aside conservation areas will allow for the creation of an interconnected open space system that serves as an amenity to the broader community, in addition to the residents of individual developments. The lack of a substantial financial impact gives Powell the luxury of making decisions about ownership and maintenance responsibilities based on community development goals and planning priorities rather than fiscal limitations. Individual conservation developments will need to be analyzed in more detail as part of the development approvals process to ensure design and long-term maintenance are planned appropriately. Regardless, Powell should establish a standard policy with clear expectations for how conservation areas will be owned, maintained, and used by the public. Opportunities to partner with land conservation entities such as the Metro Parks System or a private land trust should also be explored.

7. Understand the scale impacts of proceeding with the development scenarios.

These development alternatives, if fully implemented, will significantly change the scale of the city and the scope of its government. As shown above, the cost of implementing the scenarios other than the existing residential annexation (Scenario 2b) will increase expenses by \$4.3 million annually – nearly 40 percent of total expenditures in 2014. The analysis scales expenses based on their current level per household. In reality, there are scale impacts – both economies and diseconomies – that must be considered. The long-run cost of many administrative functions will likely be lower per household with many more households and businesses, but municipal structures and systems may have to change significantly to accommodate the larger population and staff.

This plan calls for a scale of commercial development far greater than Powell has ever experienced. This implies the need for an economic development specialist. This individual would be responsible for: (1) managing new commercial developments large and small; (2) assisting commercial property owners in attracting new tenants; (3) meeting with existing businesses to ensure that their needs are being met and that no barriers exist to their growth; and (4) acting as a liaison between prospective commercial projects and City departments to ensure that those departments are responding quickly and effectively to the needs of the developer, owner, or tenant.

The larger geographical area may require a different deployment of police and maintenance functions to maintain response time and quality, and facilities may need to be developed to accommodate the new staff. The specifics of these considerations are beyond the scope of this plan, but they should be fully analyzed as part of the implementation strategy.



IMPLEMENTATION



Achieving the Vision

The Comprehensive Plan Update is a long range vision for the community. The plan is also intended to serve as a guide for how the community can turn vision into reality. This section provides a detailed implementation matrix that outlines recommended policies, specific actions, and responsible parties. A graphic key links each policy recommendation to the corresponding Guiding Principle(s) outlined at the beginning of this document (refer to the Vision Statement on page v).

The implementation strategy begins with adoption of the Plan as the official policy document to guide public and private decision-making. To be effective the Plan should be consulted on a regular basis for all development and infrastructure decisions made by the City. The Plan should be used on a regular basis to gauge public and private decisions concerning development, redevelopment, capital improvements, economic incentives, and other matters affecting the community. The Plan is a living and flexible document, and as such, should be monitored and updated on a regular basis.

Implementation Matrix

The following list of projects and tasks is a road map for implementation of the plan.

This section provides a detailed listing of all the projects and tasks within the plan which work toward implementation. The goal is to break down the various features into achievable tasks with incremental and measurable outcomes.

Some of these actions are already being undertaken by the City, and should be continued and improved upon where necessary. Others may require the creation of entirely new initiatives and procedures.

Leadership

Project leadership identifies the key entity which will be responsible for implementing the individual plan element. These are often City departments, but may also be another government agency, non-profit organization, private entity, or a partnership of such groups.

Key Priorities

Among the variety of policies and actions listed in the implementation matrix, some items should be considered as high priorities for implementation, based on their significance in addressing the major issues identified in the plan. Three key priorities are identified:

1. Initiate a strategic urban design plan for Downtown Powell.

Throughout the planning process, the transportation and development issues facing Downtown Powell have risen to the top of the community's concerns. Decisions to quickly resolve one issue, such as improving traffic flow through the Four Corners, could have unintended consequences if not considered as part of a larger, comprehensive initiative. Before major infrastructure decisions are made, a holistic engineering and urban design plan should be undertaken as described in this plan. At the same time, the Downtown Revitalization Plan (now over 10 years old) should be updated to guide land use and development decisions within the context of current development pressures and potential transportation improvements.

2. Create a sustainable revenue structure.

The Fiscal Analysis section identifies a "structural imbalance" in the City's current funding structure, with a projected deficit that will grow over time unless there are significant changes to the municipal revenue structure. While strategic implementation of the land use plan will help to lessen the fiscal gap, it will not resolve the issue alone. The City must undertake a thorough review of its revenue streams, particularly its income tax structure, and determine appropriate adjustments that will resolve this issue. This will require extensive public education to ensure that the community understands the benefits and supports proposed changes to taxation policy.

3. Establish a multi-jurisdictional working group.

Many of the implementation items regarding land use and infrastructure decisions will require close coordination with other jurisdictions and government agencies. Powell should engage these stakeholders, including key officials from Liberty Township, Concord Township, and Delaware County, among others, to establish a joint planning working group with regular meetings to address shared issues and advance coordinated planning initiatives.

Guiding Principles



The historic, small town charm of downtown Powell should be preserved and enhanced. Downtown Powell should be a vibrant, accessible center of the community with a diverse mixture of uses and activities.



Traffic improvements should strive to relieve congestion at the Four Corners, but not at the expense of pedestrian mobility and safety. Improvements should enhance, rather than detract from, the character of downtown.



Diverse housing options are important to the community. The City embraces its family-friendly character and also recognizes the need for housing to serve a diverse population in all stages of life. Alternatives to large lot single family subdivisions are acceptable, but design aesthetics, character, and high quality development standards are critical to ensuring new options are appropriate for Powell.



New residential development should include, where appropriate, accessible and useable public parks and open spaces in a variety of scales and types.



Rural character should be preserved and reinstated (through new development) along the community's edges. This may be through preservation of farmsteads and active farming operations within the surrounding townships, or through sensitive roadway designs, landscape treatments and development practices that retain a rural feel for those living in and traveling through the community.



The City should strive to plan cooperatively with Liberty Township and other nearby communities to establish a shared vision and development policies.



Pedestrian and bicycle connections should be enhanced and expanded throughout the community, including connections to the surrounding townships, parks, and other destinations.



Development patterns should seek to minimize traffic impacts by mixing uses or locating compatible uses within walking distance, and by providing interconnected street systems and paths.

















New commercial development should contribute to both the service needs of the community as well as the economic and fiscal well-being of the City.



















Opportunities to expand transportation options (public transportation, car/ride sharing, bikes, paths, etc.) into and through Powell should be supported, both to increase transportation options for residents and employees, and to alleviate traffic congestion.




IMPLEMENTATION

GUIDING PRINCIPLES	LAND USE PLAN IMPLEMENTATION		LEADERSHIP
	Policy	Actions	Responsible Party
	Use the Future Land Use Map as a guide in making development decisions	Develop a standard procedure for including the Comprehensive Plan as part of the official development review and approvals process	Development Dept.
	Update zoning and development regulations to advance the goals of this plan	1. Conduct a "Code Diagnostic" by reviewing all zoning, subdivision and development requirements for consistency with the Plan	Development Dept. Engineering Dept. Building Dept.
		2. Revise regulations where necessary	Development Dept. Engineering Dept. Building Dept.
	Balance land use, community character, infrastructure, transportation and fiscal sustainability goals	1. Review policy and procedures	Development Dept. Engineering Dept. Finance Dept.
		1. Require new development to make fair share contributions to transportation and infrastructure improvements	Development Dept. Engineering Dept. Finance Dept.
	Ensure adequate development and use of utility infrastructure to support land use and development goals	Establish a joint policy between the City, Liberty Township, Concord Township and the Delaware County Sewer District to preserve sewer capacity for desired uses and development patterns	City Manager Development Dept.
	Undertake more detailed plans and studies for specific focus areas and development corridors.	Create a map of potential focus areas and corridors and establish a priority list and timeframe for planning initiatives	Development Dept.
	Develop an annexation strategy to guide decisions about Powell's physical expansion	Establish criteria for actively pursuing targeted annexations and/or accepting voluntary annexation requests	City Manager Finance Dept. Development Dept.
	Encourage mixed use development in appropriate locations, as designated in the plan	Create focus area and corridor plans for targeted mixed use areas	Development Dept.
		Adopt subdivision and development requirements that prevent the creation of isolated and disconnected developments	Development Dept. Engineering Dept.
	Coordinate with surrounding communities and jurisdictions	Establish a working group with Liberty Township, Delaware County and the City of Delaware to develop joint planning initiatives	City Manager/City Council
		Engage Liberty Township to update the Cooperative Economic Development Agreement	City Manager Development Dept.











GUIDING PRINCIPLES	LAND USE PLAN IMPLEMENTATION		LEADERSHIP
	Policy	Actions	Responsible Party
	Promote sensitive infill development and redevelopment	1. Create focus area plans for targeted infill and redevelopment areas to establish clear expectations for land use, development intensity, character and design	City Manager Development Dept. Finance Dept.
		2. Develop neighborhood outreach programs to engage residents who may be affected by infill and redevelopment	Public Information Office Development Dept.
		3. Provide development incentives to encourage infill and redevelopment of priority sites	Development Dept.
	Create an interconnected open space system throughout the entire community	Prioritize multi-use path connections as part of the annual CIP process	Engineering Dept.
		Establish a working group with Liberty Township, the Delaware County Engineer, ODOT, and Columbus Metro Parks to develop a safe bicycle connection between Powell and Highbanks Metro Park	Engineering Dept. Parks & Recreation
		Create minimum open space dedication, design, and connectivity standards for new development	Development Dept. Parks & Recreation
	Update the Downtown Powell Revitalization Plan	Initiate a planning process to create a comprehensive update to the current plan	Development Dept.
	Ensure development quality meets Powell's standards for aesthetic and community character	Develop minimum quality standards (architectural and site design) for residential and commercial development	Development Dept.
	Explore options for the creation of a community recreation center	1. Initiate a community recreation center feasibility study	Parks & Recreation Finance Dept.
		2. Identify a preferred location	Parks & Recreation Finance Dept.
		3. Identify co-location and/or partnership opportunities	Parks & Recreation Finance Dept.
	Preserve rural character by requiring conservation development patterns in growth areas north of Home Road	Initiate a joint planning initiative with Liberty Township	City Manager Development Dept.
		Create development standards and regulations for conservation development	Development Dept.
		Create a focus area plan for the North of Home Road area	Development Dept.

IMPLEMENTATION

GUIDING PRINCIPLES	TRANSPORTATION PLAN IMPLEMENTATION		LEADERSHIP
	Policy	Actions	Responsible Party
   	Use the Thoroughfare Plan as a guide in the development approvals process	Require right-of-way dedication for new developments	Engineering Dept.
		Require infrastructure improvements and/or fee-in-lieu payments according to the anticipated impacts of development	Engineering Dept. Finance Dept.
   	Proactively address long-term transportation improvement needs	Assess right-of-way needs for near-term and long-term transportation projects and develop acquisition strategies	Engineering Dept. Finance Dept.
		Continue to develop the annual CIP with additional detail. Use the CIP as a tool to prioritize all recommended transportation projects to ensure continual progress toward implementation	Engineering Dept. Finance Dept.
  	Balance traffic capacity needs with community character impacts	Establish roadway character guidelines for priority transportation corridors	Development Dept. Engineering Dept.
		Undertake corridor development studies that consider both public realm improvements and private development potential	Development Dept. Engineering Dept.
 	Coordinate roadway improvements and maintenance with surrounding communities and jurisdictions	Continue shared maintenance agreements with Liberty Township	City Manager Engineering Dept. Finance Dept.
		Identify partnership opportunities for the construction of regional and cross-jurisdictional infrastructure improvements and engage other funding entities proactively	City Manager Engineering Dept. Finance Dept.
		Engage the Delaware County Engineer and Liberty Township to establish a landscape and gateway beautification program for Sawmill Parkway	
 	Implement access management programs to reduce congestion and improve safety	Create an access management plan for Downtown Powell	Engineering Dept. Development Dept.
		Establish access management standards for other roadways and development areas throughout Powell	Engineering Dept. Development Dept.
	Maximize roadway connectivity	Establish minimum connectivity standards for all new development	Development Dept. Engineering Dept.

GUIDING PRINCIPLES	TRANSPORTATION PLAN IMPLEMENTATION		LEADERSHIP
	Policy	Actions	Responsible Party
	Promote multi-modal transportation options throughout the community	Prioritize multi-use path connections as part of the annual CIP process	Engineering Dept. Parks & Recreation
		Adopt complete streets and context-sensitive design standards for various roadway types throughout Powell	Engineering Dept. Development Dept.
		Encourage compact, walkable development patterns and pedestrian-friendly site design	Development Dept.
		Engage Liberty Township, the Delaware County Engineer, ODOT, and the Columbus-Franklin County Metro Parks to identify bicycle routes, roadway crossings, and river crossing points that will connect Powell residents to Highbanks Metro Park	
		Engage COTA and DATA to explore opportunities to expand public transit service to Powell	
	Create a holistic design plan for the four corners intersection and associated downtown roadway improvements	Initiate a comprehensive engineering and urban design process for Olentangy and Liberty Streets	Development Dept. Engineering Dept.
	Implement a signage program to direct drivers to alternate routes around Downtown Powell	Establish a working group with County, State, and Township officials to identify appropriate routes and sign locations	

IMPLEMENTATION

GUIDING PRINCIPLES	FISCAL IMPLEMENTATION		LEADERSHIP
	Strategy	Actions	Responsible Party
	Closely monitor trends in revenues and expenses, particularly income taxes, and implement policies to address the fiscal gap	1. Strategically implement the Future Land Use Plan to advance fiscal goals with revenue-generating uses	Development Dept. City Manager Finance Dept.
		2. Analyze and advance tax revenue strategies and consider potential adjustments to income tax structure	Development Dept. City Manager Finance Dept.
		3. Implement a public education campaign to address concerns and gain support for potential tax rate adjustments	Development Dept. City Manager Finance Dept.
	Establish a dedicated fund for capital improvements, and communicate both funded and unfunded capital needs broadly	Identify capital needs spelled out in the City's annual budget document that should be met but cannot be because funds are not available to do so	Development Dept. City Manager Finance Dept.
		Initiate a public discussion of unmet capital needs and their impact on municipal services	
	Undertake a market study to assess the capacity for proposed commercial developments	Initiate a community-wide market study and market strategy initiative that analyzes specific commercial sectors, residential types and geographic areas of the City	Development Dept. City Manager Finance Dept.
	Prioritize the annexation of commercial and mixed use development over residential-only development	Establish criteria to guide the annexation of residential developments that may have a strategic or community benefit	Development Dept. City Manager Finance Dept.
 	Consider the impact of development holistically and strategically	Conduct a market study to assess the degree to which new commercial development pays for new residential development	Development Dept. City Manager Finance Dept.
		Establish a strategic annexation policy for that will incorporate lands in a fiscally sustainable manner	
  	Evaluate the status of conservation areas as a strategic issue	Establish a standard policy with clear expectations for how conservation areas will be owned, maintained, and used by the public	Development Dept. City Manager Finance Dept.
		Explore opportunities to partner with land conservation entities such as the Metro Parks System or a private land trust	
	Understand the scale impacts of proceeding with the development scenarios	Analyze the specifics of accommodating a larger geographic area as part of the implementation strategy	Development Dept. City Manager Finance Dept.
		Create a City Staff position for an Economic Development Specialist	