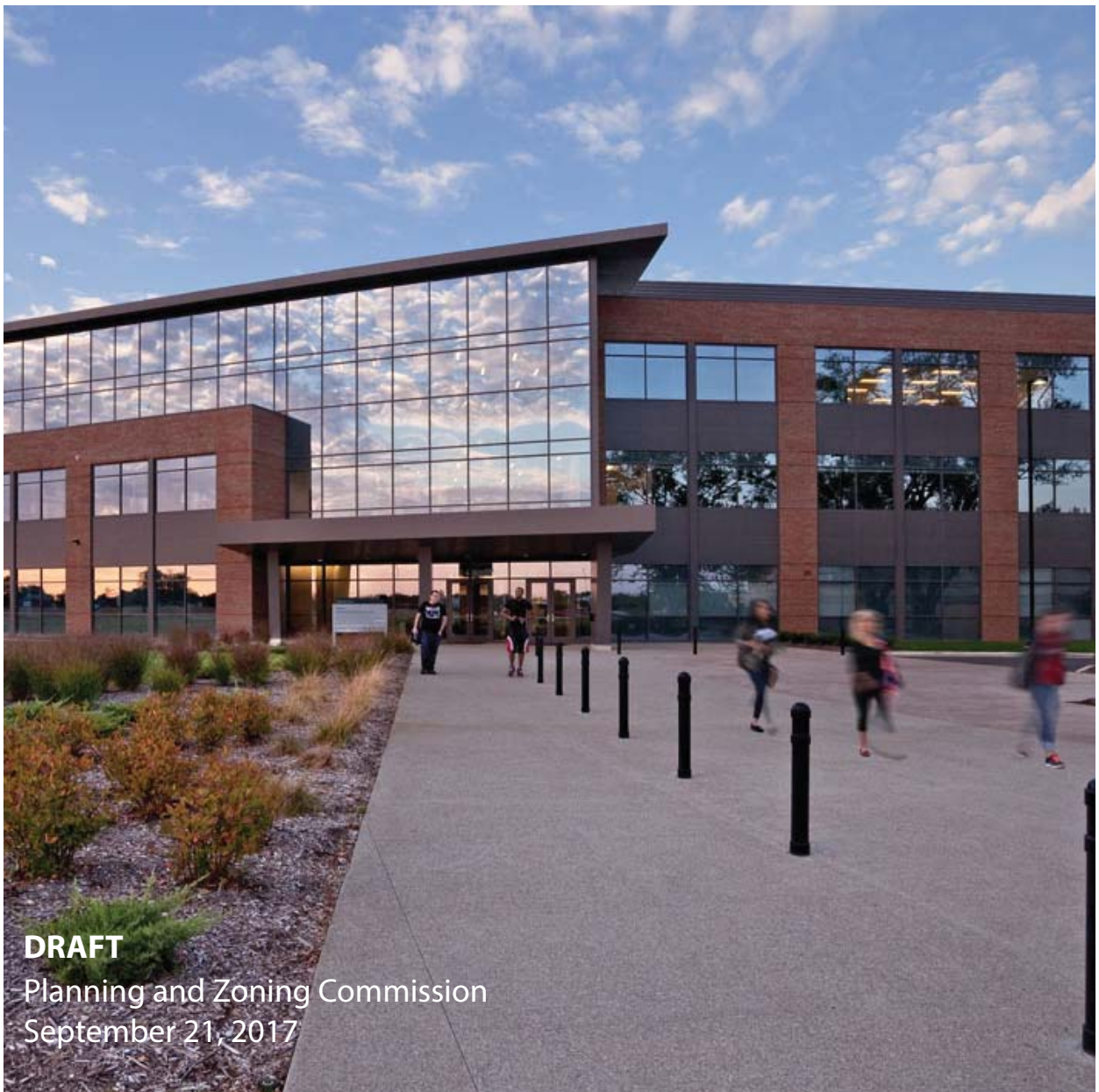


WEST INNOVATION DISTRICT

Community Plan: Special Area Plan Update



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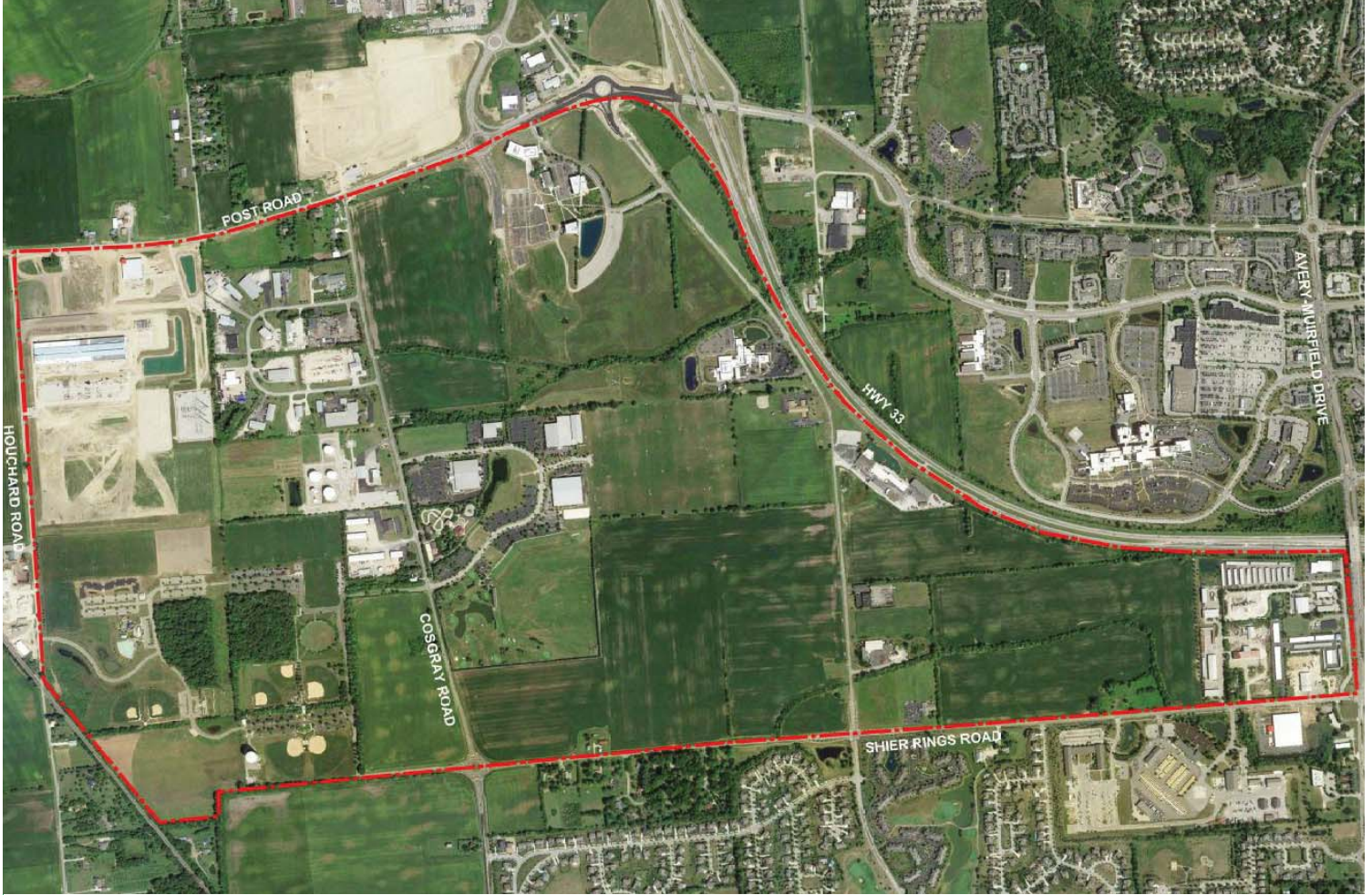


TABLE OF CONTENTS

1. PROJECT OVERVIEW
2. REGIONAL CONTEXT
3. PROCESS AND PUBLIC ENGAGEMENT
4. EXISTING CONDITIONS
5. FUTURE LAND USE RECOMMENDATIONS
6. DEVELOPMENT AND DESIGN POLICIES
7. TRANSPORTATION AND UTILITIES
8. IMPLEMENTATION
9. GLOSSARY

PROJECT OVERVIEW

The West Innovation District Area Plan is specific to the future growth potential of the far western corridor of the City of Dublin. The original goal of the plan was to establish a world-class innovation and research district. In 2016, the City decided to revisit the concept given changes in the research industry and building upon the commitment of Ohio University to develop a cutting edge academic and research campus in Dublin. The planners that assisted Dublin with designing the original concept, O'Brien Atkins, worked with staff and Council to update the concept and prepare this updated plan.

At 1,100 mostly undeveloped, acres, the West Innovation District (WID) provides multiple opportunities for walkable, mixed use, research and innovation development sites that can meet a host of business needs while building a 24/7 environment to attract and support the work force of the future. Located on the City's western edge, yet fully accessible by U.S. 33 (33 Smart Corridor), the WID can grow to accommodate 3.9 million square feet of development yielding \$711 million dollars in revenue and employing 10,500 employees.

The City has made numerous investments in the district, including the following.

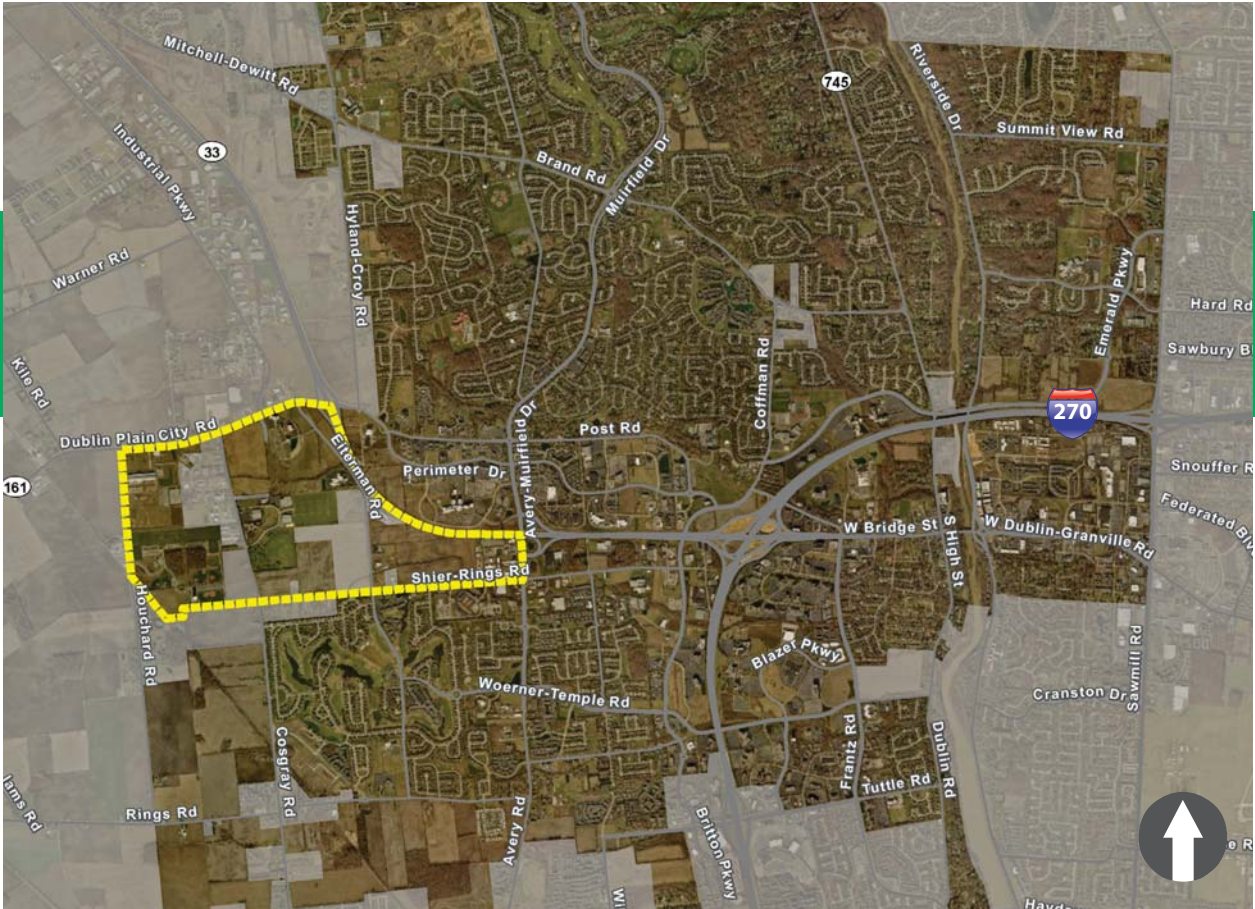
CITY INVESTMENTS

- ▶ Acquiring 175 key acres at the U.S. 33/SR 161 Interchange and along Post Road to control development and provide direct availability of sites;
- ▶ Obtaining Job Ready Site status for municipal properties to enhance marketability;
- ▶ Committing funds to facilitate interchange improvements at U.S. 33 and Post Road/SR 161;
- ▶ Donating 45 acres of land to facilitate the creation of the Ohio University Heritage College of Osteopathic Medicine as the first phase of an anchor campus;
- ▶ Providing key water and sewer extensions to encourage annexation;
- ▶ Donating land for the development of future electric facilities;
- ▶ Constructing a new public street to provide access to future development;
- ▶ Completing a new two-million gallon water tank to expand capacity and facilitating the removal of the Post Road tank for redevelopment; and
- ▶ Investing in park amenities at Darree Fields, such as the Miracle Field, soccer facilities and other recreation amenities.

GOALS OF DEVELOPMENT

Since its inception, the WID has been intended as a home for innovation companies within Central Ohio. The area will serve as an economic engine for Dublin, and with the creation of the OU campus, it is sure to occur at a more rapid pace than originally envisioned. The broader goal is to create a self-sustaining cycle of innovation that works together with the educational institutions and companies in the district to constantly provide talent and opportunities for collaboration within the region. When these two goals are achieved, a third goal of positive economic impact will naturally follow. This will allow Dublin to attract innovative companies, create a dynamic district that is "alive" 24/7, provide opportunities for companies to collaborate, support emerging entrepreneurs and provide varied options for different industries.

REGIONAL CONTEXT



 West Innovation District

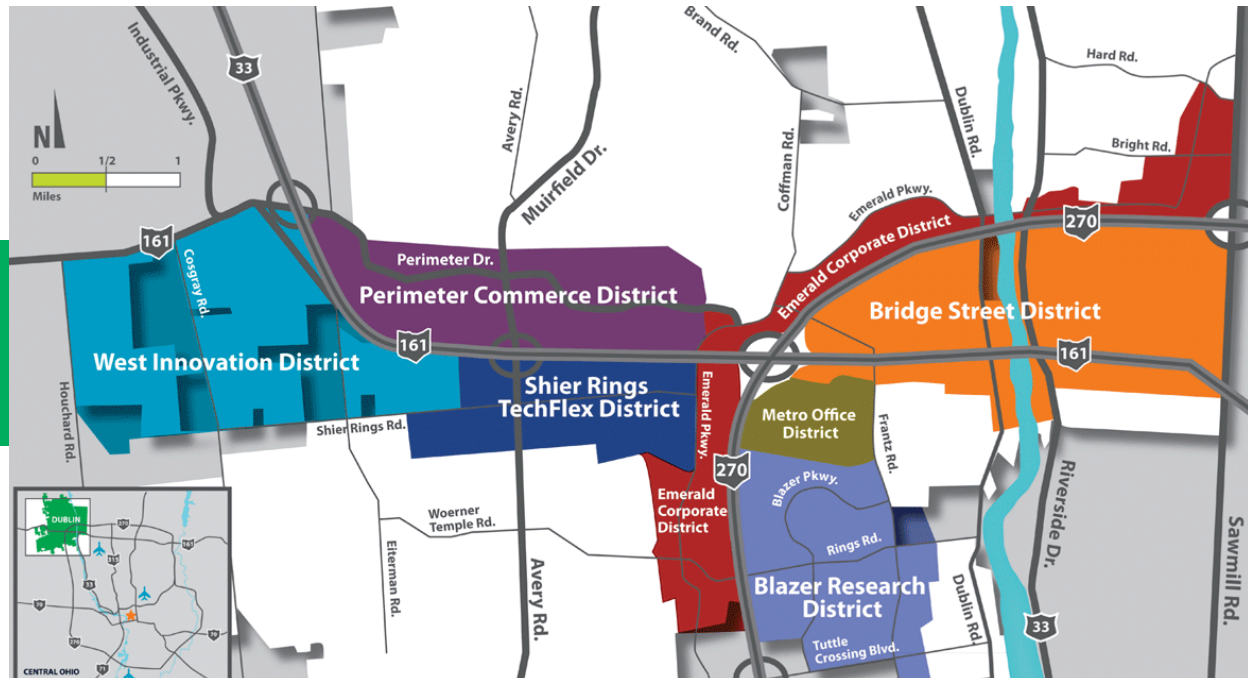
BACKGROUND

The West Innovation District is designated as one of the Special Area Plans within the Dublin Community Plan, which establish a vision for the built environment and growth, and create an important guide for the City's economic development strategy. In fact, this place-based approach to economic development is what is fundamental to the WID strategy - creating a place that attracts and supports workers

as well as employers. At a larger scale, this part of Central Ohio is a hotbed of innovation due to nearby corporate and educational establishments. All of this, along with the accelerated growth in this region, makes the district primed for development. This is strengthened by the advantages of the area, including economically flourishing areas, a healthy and thriving metropolitan region, strong neighborhoods, a highly

recognized public school system and thriving retail centers.

The WID vision is also important for Dublin to stay competitive relative to regional and national trends. From generational behaviours to economic climate, the workplace is changing and there are many factors contributing to the shift. For the district to thrive it must respond to these trends. Some say the biggest impact



Dublin's business districts

to the workplace was the Great Recession that started in 2008. This affected all industries and caused many companies to change their approach to business; the most evident being a focus on agility and efficiencies. Surviving with lower revenues meant that businesses were looking for ways to cut costs without losing their quality of services or products. One approach has been a reduction in real estate expenses, leading to companies encouraging some workers to work from home, which is far more feasible with increased bandwidth capabilities on the rise. And with reductions in employment levels, there has been an increase in the use of independent contractors and small businesses. This sparked the need for co-working spaces and maker spaces that could accommodate these smaller scale ventures while giving them the resources of bigger companies.

Other influences are shaping the needs of the emerging workforce, which include:

Collaboration

The outcome of these influences was a workforce that was very independent but also valued collaboration as the key to success. Urban areas have flourished in the last 15 years, partly because they function as centralized areas of collaboration.

Convenience

Another attribute of the emerging workforce is its emphasis on convenience. With a generation that has grown up with the internet and other technologies, Millennials have always been able to find "a better way," such as a better work-life balance. Technology is part of the key, but convenience is another part. Again, this is where urban areas have thrived because they can offer a live, work and play environment.

Live-Work-Play Balance

One of the most important elements to the emerging workforce is communities that provide a balance of live-work-play to attract this generation and compete with the urban areas that provide these offerings. This includes providing compact and walkable environments, the ability to attract a labor force, provide advancements in technology, provide public and private partnerships, provide interdisciplinary research models, encourage entrepreneurship in areas focusing on innovation and development, encourage businesses that are faster, cheaper, and more efficient, encourage companies to adapt quicker in order to compete and include technological advancements in the automotive industry.

*Working in Dublin*

Along with national trends, the district is influenced by local trends that provide opportunities for partnerships that contribute to its potential development, which includes the educational institutions and companies that reside within or nearby the district. Add in the surrounding neighborhoods, the recreational entities, Dublin Methodist Hospital and nearby retail and services, and real estate becomes primed for development.

A series of best planning practices must be implemented to ensure success to take advantage of these opportunities. This starts with energizing the district with development that is active all day by integrating amenities and residential options. Convenience is key to the modern worker and one of the reasons the suburban park has eroded. Innovation and research companies are a better foundation for innovation if they have support from educational institutions. Good transportation

systems are also key as the modern worker is looking for something more than just automobiles for their mobility options.

On the development side, providing a variety of sites for companies is key. Options are needed for different scale companies, including companies that want to be more collaborative and others that want to be more secluded. Hubs and nodes are needed that offer an urban-like experience that concentrates amenities. These best practices include integrating amenities, providing convenient residential options, encouraging a variety of recreational options to create vitality, providing hubs of centralized activity, allowing for multiple transportation options, providing perimeters for quality architecture and landscape without being overly prescriptive, and creating important relationship with local educational institutions.

PROCESS AND PUBLIC

ENGAGEMENT



Public meeting

The West Innovation District Area Plan update was a collaborative process between City staff, Ohio University and O'Brien Atkins. This was a multi-phase process that began in April, 2016 and concluded in Fall 2017.

PHASE I

The first phase spanned from April to August, 2016 and included joint workshops among these stakeholders. An internal, day-long workshop focused on local and regional development trends, including ways in which the market and Dublin has changed since the last plan update in 2008. An important partner in these meetings included representatives from Ohio University to ensure close coordination between the University and City.

A two-day tour of the Research Triangle Park in Raleigh, North Carolina, and the North Carolina State University Centennial Campus focused on best practices of other communities that have embraced research and development office parks with a focus on advancements in technology, as well as creating a collaborative workforce of entrepreneurs. Participants included representatives of City staff, City Council, Ohio University, Dublin City Schools and the consultant team. Highlights included successes from the City of Raleigh, visits to several incubator companies, public and private collaborative spaces, an innovative and place-making library and two STEM schools.

PHASE II

The second phase of the plan spanned from September to October, 2016, and included a public open house hosted by the City of Dublin and Ohio University. The open house gathered input from residents, business community, community officials and other stakeholders. Work stations focused on the OU Dublin Branch Master Plan, areas for residential development, recreational and path connectivity and the character of the Shier Rings Road corridor. Later, a web survey was available for three weeks to gain further insights into the details of the West Innovation Plan, from road networks to land uses. Key feedback from 214 respondents included the following.

*Ohio University in Dublin*

Survey results from 214 respondents, which include:

- ▶ Provide a high school on the OU campus;
- ▶ Require advanced manufacturing uses to meet progressive, innovative and high standards;
- ▶ Emphasize bike path access, including protected lanes, to ensure connectivity with neighboring developments and provide bike access across U.S.;
- ▶ Promote local-owned small retail businesses in place of big box retail;
- ▶ Ensure access for existing development.
- ▶ Reduce through-traffic on Shier Rings Road; and
- ▶ Provide vehicular access across U.S. to connect hospital/shopping to the West Innovation District.

PHASE III

The third phase of the plan spanned from October, 2016 to March, 2017. This phase allowed for final comments from O'Brien Atkins, which were presented to City Council at a work session on October 17, 2016. City Council acknowledged the findings of plan and requested that the consultant continue to work towards a draft plan. In conjunction with the City's review process, the Ohio University Board of Trustees adopted the Dublin Framework Plan in March 2017. The final phases included posting the draft plan of the West Innovation District plan on the web to gather public comments, an open house and the adoption process involving the Dublin Planning and Zoning Commission and City Council.

EXISTING CONDITIONS



Aerial map of West Innovation District (outlined in red)

The western edge of Dublin is an area poised for significant change. With approximately 1,100 acres of land between Avery Road, Houchard Road, Shier Rings Road and State Route 161/Post Road, the West Innovation District is a key component of the City's business neighborhoods targeted for office research, laboratory and clean manufacturing uses. With a focus on "speed to build," the WID planning area is a focus for quality projects requiring swift administrative approval. Just as Dublin has grown and changed significantly over the last few decades, technology and the way business is conducted has also evolved. The WID is intended to meet the needs of today's development environment, as well as anticipating the need to attract and retain the workforce of the future.

LAND USES

The planning area is dominated by agricultural uses, but contains a range of industrial businesses, office and research land uses, as well as the emerging campus of Ohio University (OU). The planning area has very level terrain and contains open areas that have high visibility. The physical character of the WID provides the opportunity for greater corporate visibility with options for design considerations. The most significant residential development near the West Innovation District is the Ballantrae Subdivision that contains a range of housing from condominium units to single-family housing. In terms of prominent business operations, the area is home to Nestle Quality Assurance and other research

and development companies. Prominent architecture and innovative design can be found on the existing OhioHealth Dublin Methodist Hospital located directly east of the district, as well as the newly constructed Heritage College of Osteopathic Medicine on the OU campus. These uses define the complexity of the area and provide new opportunities for vitality and growth within this corridor.

TRANSPORTATION

Primary access to the district is provided by US 33 at the Avery/Muirfield Drive and SR 161/Post Road interchanges. US 33 links the planning area to I-270, providing businesses with easy access to the Central Ohio region. Avery Muirfield Drive, Cosgray Road,

*Ohio University campus in Dublin*

Houchard Road, and Eiterman Road provide north-south access in the district, including linkage to Hilliard. US 161 is the northern edge of the district and provides easy access to Union County. Important roadway improvements have been planned, including reconstruction of the US 33/SR 161/Post Road interchange, as well as the recently completed I-270 and SR 33 interchange. Other roadway characteristics include a network of township roads that have not yet been improved. The character of these roads provide a unique opportunity to consider a new network for improved access and development potential. Providing a system that will provide the greatest access and mobility possible can benefit future companies and employees

in the WID. The presence of the CSX railroad along the western edge, in addition to interstate access, also provides opportunities to transport goods and supplies.

NATURAL FEATURES

The planning area contains a limited number of natural features that provide character to an otherwise flat and open landscape. This includes portions of the South Fork Indian Run and the Cosgray Creek, which also serve an important function for drainage while providing greenway connections. Other natural features include smaller streams, fencerows and woodlots that should be used as elements to add character.



Greenways

UTILITIES

Along with other necessary infrastructure, public water and sewer services are necessary to support development. Water and sewer infrastructure for the West Innovation District was modeled as part of the 2007 Community Plan update and was reevaluated in an update process in 2013. Land uses were forecasted to determine demand at build-out.

Sewer

The northern and southern halves of the district are located within the South Fork of the Indian Run and Cosgray sewer sheds, respectively. Modeling results indicated that the South Fork would require 4,000 feet of improvements to accommodate expected capacity. The Cosgray sewer shed was also determined to meet future demands. The City completed a sewer extension project that provides service west along the South Fork of the Indian Run to properties in the northwest corner of the planning area. The extension beyond Cosgray Road

will provide the opportunity for industrial areas that are currently unincorporated to annex and more easily acquire public services. The City has proactively invested in the Post Water District that includes all of the WID. Installation of final segments to establish a loop system that improved service within the southwest area of the city.

Water

Completion of a two-million gallon water tank at Darree Fields ensures that future development has sufficient capacity to meet any future needs.

Along with sewer and water infrastructure, electric and other utilities are important to have in order to be “site ready” for future development. Electric, gas, phone, high-speed broadband and other utilities can be easily provided throughout the district.

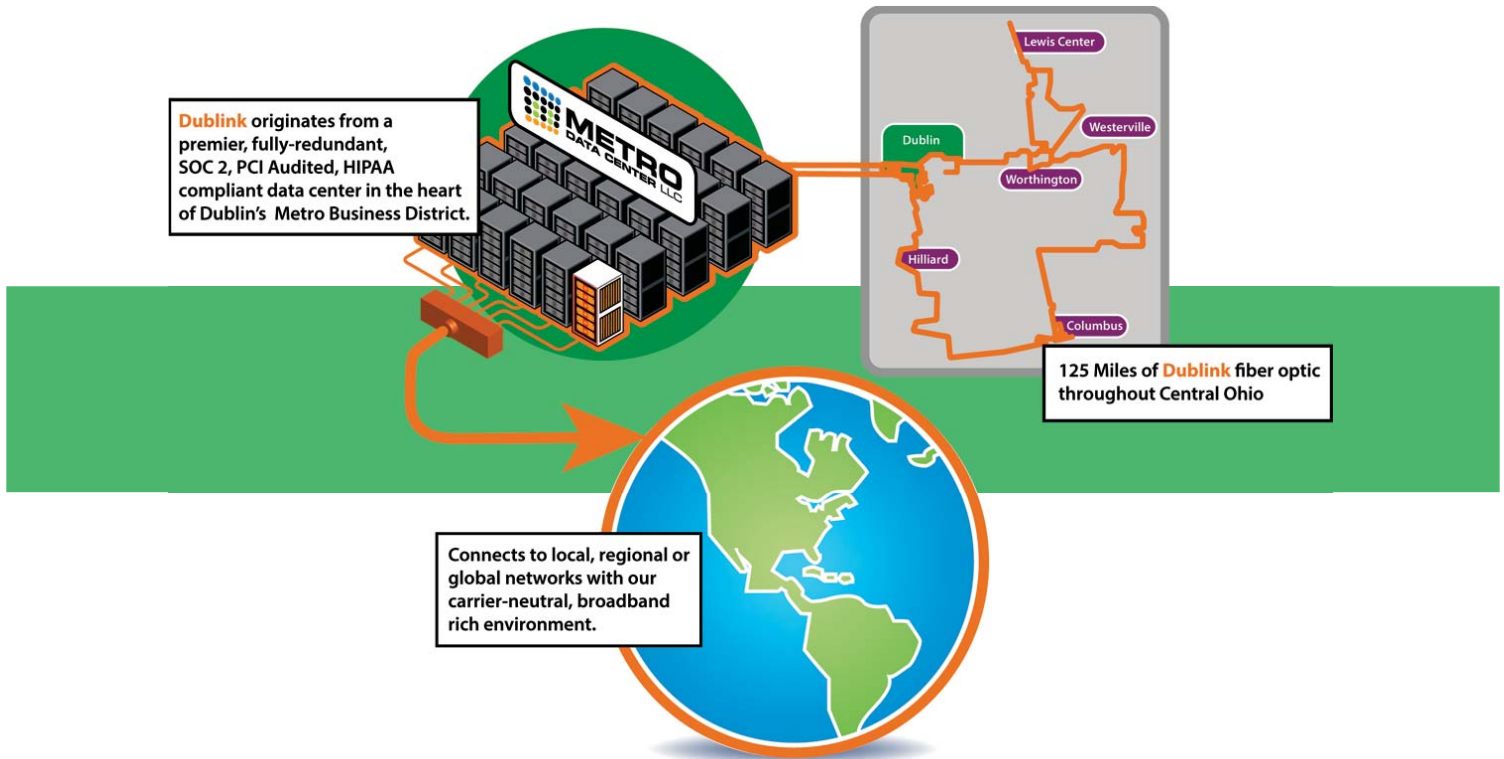
Electricity

The area is located within the service area for American Electric

Power. With substations along Shier Rings Road and Hayden Run Road, additional capacity can be provided. In order to further enhance the area’s capabilities, the City donated land for an additional substation south of SR 161 in the west portion of the planning area. It provides power from high tension transmission lines running north to south through the district between Cosgray Road and Houchard Road. This allows for redundant power provision. AEP has stated that this provides capacity to extend lines for large scale users from Shier Rings Road, as well as the future Houchard substation. Union Rural Electric provides power just to the north which may provide the opportunity for dual power sources.

Natural Gas

The planning area also benefits from significant natural gas infrastructure. Major lines are located along SR 161 with service extending down Eiterman Road and Cosgray Road. Industrial

*DubLink broadband*

areas on Fishel Drive and Dublin Park Drive also have service, and future extensions planned along key roads that could provide the capability to easily facilitate development.

Telephone and Cable

Similar to the provision of natural gas, other utilities such as phone and cable are readily available. Easements are provided along roadways as the City completes new infrastructure.

BROADBAND

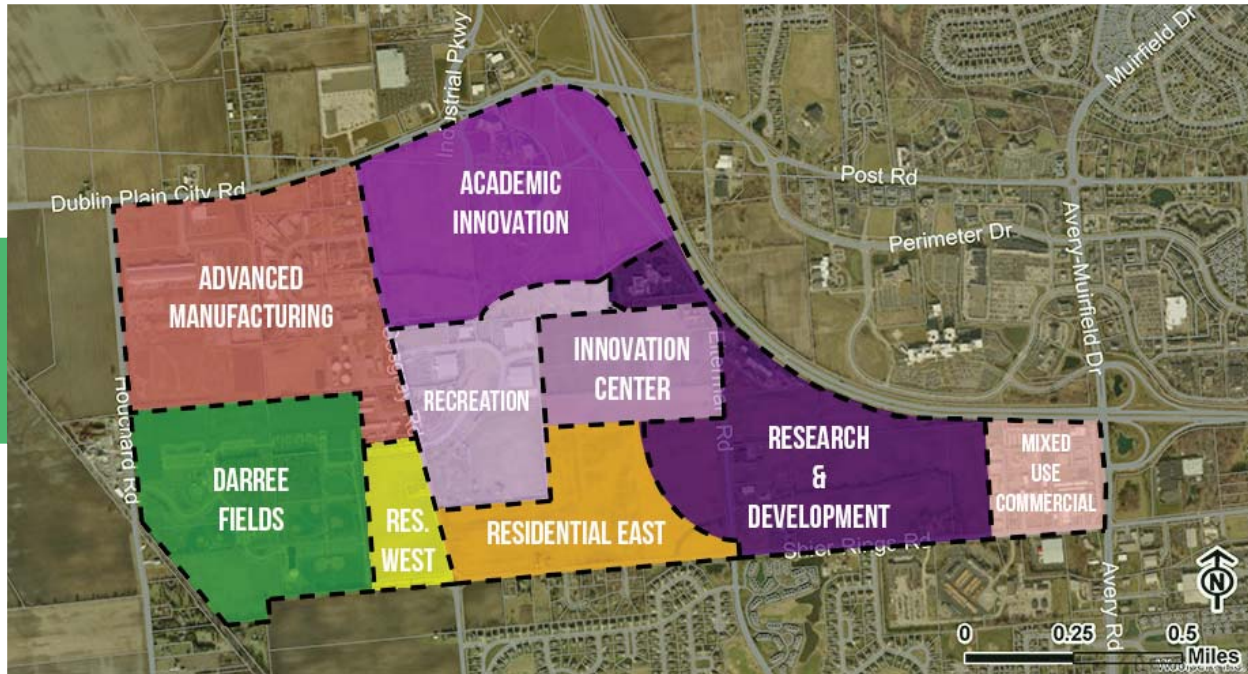
The City has focused significant capital improvements on building the largest broadband and WiFi system in Central Ohio. DubLink is Dublin's broadband infrastructure system located throughout key business districts, accommodating optical fiber services that provide instant access to the global marketplace. In addition, the City has linked with the Ohio Academic Research Network (OARnet) to create the Central Ohio Research Network (CORN). The broadband system links businesses with educational institutions to encourage research and economic development opportunities. OARnet provides access to governments, colleges, universities and other institutions such as the Ohio Supercomputer Center through more than 1,850 miles of high speed broadband. The City also has competitive broadband services available by nearly a dozen service providers.

PARKS AND GREENSPACE

Future growth cannot be fully enjoyed without important amenities to attract businesses and their employees, as well as to support the recreational needs of residents. Dublin has over 1,400 acres of dedicated parkland and open space. Key park and greenspace destinations that serve the WID include Glacier Ridge Metro Park, the M.L. "Red" Trabue Nature Preserve and Darree Fields. These important public spaces are supported by an Open Space Plan that was adopted by City Council.

FUTURE LAND USE

RECOMMENDATIONS



Proposed future sub-district land use map

The West Innovation District is designated as a **Mixed Use Regional Center** on the City's Future Land Use Plan. This designation reflects the functional role this district plays from a land use perspective. While an important district of the City, it serves a dual role as a regional economic node. The following describes the characteristics of the Mixed Use Regional Center for the WID:

- ▶ A mixed use environment of integrated academic, research, office and advanced manufacturing uses that are supported by residential, retail, personal services, entertainment and open spaces as amenities.
- ▶ Densities that support a walkable built environment, principally serviced by structured parking, with a supporting multi-

modal transportation system connected to the City and the region.

- ▶ Development sites that respond to a variety of corporate needs, from walkable urban centers to lower density, traditional suburban office sites, that together represent a cohesive urban district with suburban character.
- ▶ The scale of this vision is necessary to ensure that the goal of a 24/7 live-work-play environment can be supported. This requires a higher density of employers, as well as the supporting residential and services necessary to attract and retain a young and highly educated workforce.

The West Innovation District is divided into eight sub-districts as a means of reinforcing the development vision for the district. Each sub-district has unique economic, physical and design characteristics that fulfill the vision for WID. Many of the sub-districts support mixed-use development in the effort to provide the synergy necessary to support a work-live-play environment. All of the sub-districts will permit residential land uses to create that mixed-use environment. Densities have been provided for the non-residential land uses but will allow residential land uses to develop without prescriptive densities. This will allow residential development to occur as incidental uses to the permitted uses and provide an essential component to a mixed-use environment.



Proposed Innovation Center

SUB-DISTRICT | Innovation Center

The Innovation Center is the nucleus that defines the West Innovation District by blending a variety of uses in a central location. It unites the district throughout the day and evening fostering the growth of startup companies and established businesses alike. The Hub creates a “town center” physical environment that supports a range of office, retail, services, cultural, recreational and education that supports the entire

USES

Primary

- Office
- Research
- Education

Secondary

- Parking (surface and structured)
- Upper floor residential
- Maker spaces
- Incubators
- Laboratories
- Ground floor retail, restaurant, bar, personal services and related amenities (freestanding and large format retail are not appropriate)

DEVELOPMENT STANDARDS

	Min.	Max.
Density		
SF/acre	None	40,000
Height		
Stories	1	3



Proposed Academic Innovation Campus

SUB-DISTRICT | Academic Innovation

The Academic Innovation is the key catalyst for innovation in the West Innovation District. It serves as the home of the Ohio University-Dublin. The framework plan is organized by an urban, walkable 24/7 “main street” environment for academia, research and living. The energy of the area will permeate all the other districts and promote the development of entrepreneurial enterprises and public and private partnerships.

The area is where the private sector and academia come together to collaborate on ideas through research, development and advanced manufacturing uses. Here ideas and near “proof of concepts” will emerge from the lab to advance the “scale up” phase in the private sector.

USES

Primary

- University and academic uses (office, classroom, laboratories)
- Campus amenities (wellness, recreational and cultural)
- Office
- Research
- Parks, plazas and natural open space facilities
- Light Manufacturing

Secondary

- Parking facilities (surface and structured)
- Retail, restaurant, bar, personal services and related amenities
- Residential uses
- Hotel and conference center
- Entertainment venues
- Facilities that support a multi-modal transportation system
- Training
- Laboratories
- Makerspace

*Ohio University Master Plan*

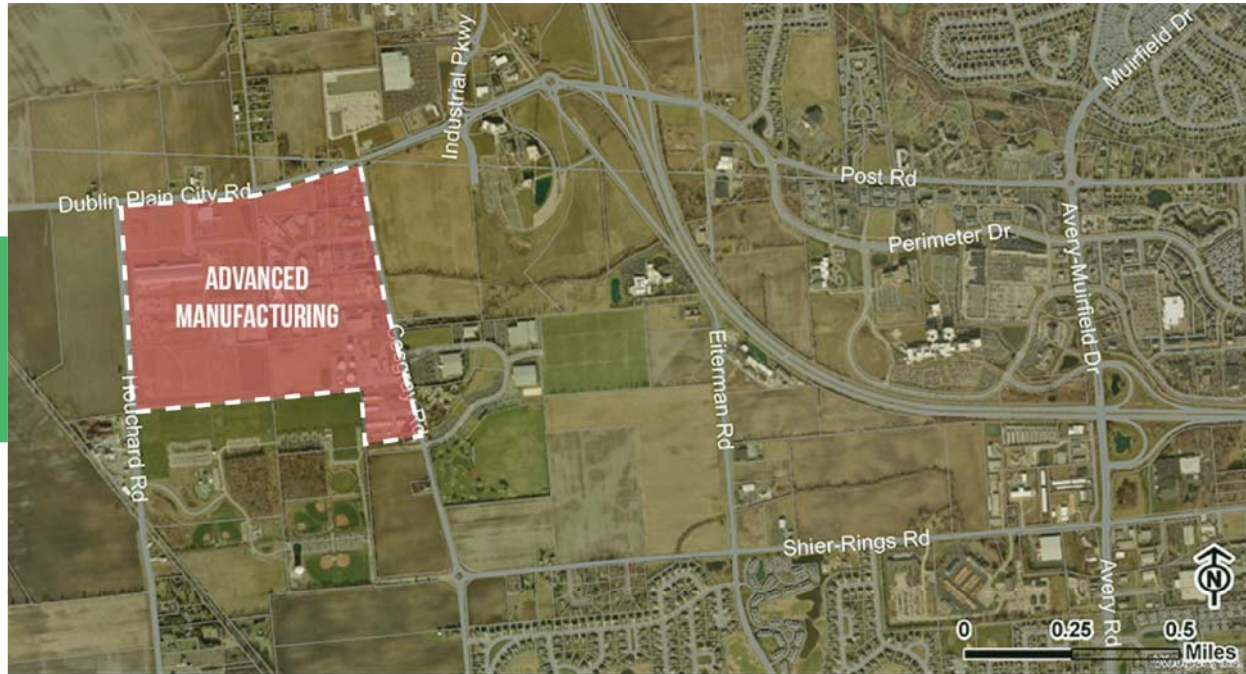
OHIO UNIVERSITY DUBLIN FRAMEWORK PLAN

The West Innovation District Area Plan provides a broad vision for land use recommendations and design standards for Academic Innovation sub-district within the planning area while the Ohio University's Dublin Framework Plan provides detailed guidance regarding the ways in which the area will evolve over time. The plan includes specific design considerations that are consistent with the university's vision for Dublin. The university's plan has been adopted by the City of Dublin and the OU Board of Trustees, and is included here by reference.

The land uses recommended in Academic Innovation District are typically associated with the education campus however, land uses that are compatible with the university will also be supported based on the recommendations of the Dublin Framework Plan.

The Dublin Framework Plan will also be the guiding document for development standards and design considerations within this district and will inform the Development and Design Guidelines that are to be adopted in conjunction with the amendment of the West Innovation District zoning classifications and standards.

More information regarding Dublin Framework Plan is available at www.ohio.edu/planning-space/up/e20.cfm



Proposed Advanced Manufacturing District

SUB-DISTRICT | Advanced Manufacturing

The Advanced Manufacturing District is an area dedicated to the support and production of sustainable technologies for the future. Major employers are expected to locate to this sub-district, including prototype development, light and advanced manufacturing, data centers, mission critical operations and "clean tech" manufacturing. Both large and small scale footprint buildings are appropriate.

USES

Primary

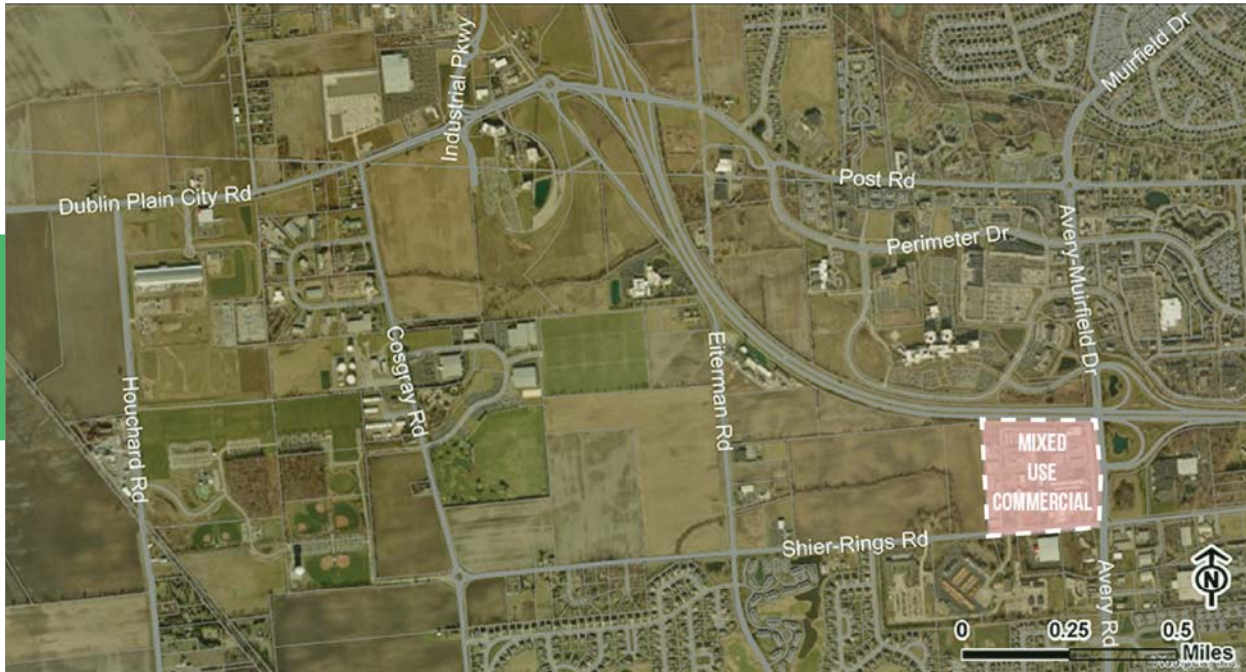
- Office
- Research
- Light manufacturing
- Data centers

Secondary

- Parking (surface)
- Laboratories

DEVELOPMENT STANDARDS

	Min.	Max.
Density		
SF/acre	None	20,000
Height		
Stories	1	2



Proposed Mixed-Use Commercial District

SUB-DISTRICT | Mixed-Use Commercial

The Mixed-Use Commercial District provides services and amenities needed by the West Innovation District, as well as nearby neighborhoods and the greater Dublin community. It builds upon an existing commercial development pattern, but seeks to encourage redevelopment and infill as land is annexed into Dublin for centralized water and sewer services.

USES**Primary**

- Retail and personal services (limited to 5,000 square feet)
- Childcare
- Fitness clubs
- Lodging

Secondary

- Parking (surface)

DEVELOPMENT STANDARDS

	Min.	Max.
Density		
SF/acre	None	10,000
Height		
Stories	1	1



Proposed Residential District

SUB-DISTRICT | Low-Density Residential District: West

The Low-Density Residential District: West is an area immediately east of a public park (Darree Fields) and identified as residential land use, most typically depicted in a suburban single-family character. The uses are restricted to single-family residential uses at a low density. This provides a “buffer” district between a public amenity, Darree Fields, and a higher density residential district to the east. This district, similar to the Medium Density Residential District will encourage and promote sustainable practices that will be encouraged throughout the Mixed Use Regional Center.

USES

Primary

- Single-family, two-family and multi-family residential uses

Secondary

- Open space, recreational and cultural amenities
- Community gardens
- Alternate energy facilities (roof and ground mounted)

DEVELOPMENT STANDARDS

	Min.	Max.
Density		
Units/acre	None	3
Height		
Stories	1	2



Proposed Residential District

SUB-DISTRICT | Medium-Density Residential District: East

The Medium-Density Residential District:East is a modern, sustainable neighborhood offering a mix of housing targeting single-professionals, young families and empty nesters alike, with the goal of providing accessible housing to residents employed in the West Innovation District. It is located within walking and biking distance of all sub-districts.

USES**Primary**

- Single-family, two-family and multi-family residential uses

Secondary

- Open space, recreational and cultural amenities
- Community gardens
- Alternate energy facilities (roof and ground mounted)

DEVELOPMENT STANDARDS

	Min.	Max.
Density		
Units/acre	5	7
Height		
Stories	1	2



Proposed Research & Development District

SUB-DISTRICT | Research & Development

The Research and Development District is an area reserved for mature innovation companies that desire the autonomy of their own site and require ample space for expansion. This sub-district offers a limited number of larger sites with ample parking, as well as visibility along U.S. 33.

USES

Primary

- Office
- Research
- Medical

Secondary

- Parking (surface)
- Laboratories

DEVELOPMENT STANDARDS

	Min.	Max.
Density		
SF/acre	None	30,000
Height		
Stories	1	3

*Proposed Recreation District*

SUB-DISTRICT | **Recreation**

The Recreation District is where people inside and outside of the West Innovation District can enjoy recreational activities that are both active and passive with greenways, open spaces and structured facilities. This sub-district is primarily comprised of privately owned parkland (Sports Ohio) which provides a unique land use that is a regional attraction. It should be noted that Sports Ohio benefits from industrial zoning commitments in the EAZ zoning district.

USES

Primary

- Parks and recreational facilities
- Passive open space
- Cultural facilities

Secondary

- Parking (surface)

Future Projections of Fiscal Opportunities

Along with future land use recommendations, the consulting team completed a fiscal analysis based upon the build out forecast that accompanies the land use plan. The forecast sought to estimate the number of jobs that could be generated (and the related wages) based upon the build out forecast.

The analysis determined that the land use plan could accommodate about 3.9 million square feet of development, which represents a private investment value of \$711 million (this excludes public infrastructure investment). Based on industry multipliers, this square footage would yield about 10,500 jobs with an annual payroll of about \$712 million, not including the Ohio University campus. Based on the City's current income tax rate of 2.0%, this would generate about \$14 million annually in municipal revenues.

CAPACITY & INVESTMENT | PROJECTED BUILD-OUT

	<i>Capacity</i>	<i>Investment</i>
Academic Innovation	not included	not included
Residential	not included	not included
Academic Innovation District	911,200 SF	\$164,016,000
Innovation Center	1,382,900 SF	\$193,606,000
Advanced Manufacturing District	328,200 SF	\$45,948,000
Research and Development District	1,195,000 SF	\$268,875,000
Mixed-Use Commercial District	123,000 SF	\$13,530,000
<i>Total</i>	3,940,300 SF	\$711,975,000*
*Includes \$26M for parking decks		

JOBS & WAGES | PROJECTED BUILD-OUT

	<i>Jobs</i>	<i>Wages</i>
Academic Innovation	not included	not included
Residential	n/a	n/a
Academic Innovation District	1,800	\$135,000,000
Innovation Center	3,670	\$256,900,000
Advanced Manufacturing District	650	\$35,750,000
Research and Development District	3,500	\$280,000,000
Mixed-Use Commercial District	180	\$4,500,000
<i>Total</i>	10,500	\$712,150,000
With these financial incentives to the City, this area can be a primary contributor to the vitality and fiscal health of our community.		

DEVELOPMENT AND DESIGN

POLICIES



Image by O'Brien/Atkins

PRINCIPLES

- ▶ Dedication to a high quality, long lasting built environment.
- ▶ A walkable, mixed-use built environment that supports a 24/7 live-work-play district is the foundational basis of the West Innovation District.
- ▶ Economic development is the principal focus of the district, while residential and commercial uses serve as amenities to support employers and employees.
- ▶ Architectural design and materials should reflect the economic intent of the district to attract and retain cutting edge businesses in the field of research, development and advanced manufacturing.
- ▶ Sustainable development and construction practices should be a hallmark of all new development and site design approaches and operations.
- ▶ Sites should be designed to emphasize a quality built environment, which is informal and emphasizes low maintenance, native plant materials.

MATERIALITY

The materials used in the district will define the district as a modern and creative space. Quality materials are to be used in an authentic way that highlights the individual strengths of each material. Materials that emulate a different material are discouraged (i.e. EIFS is a material that tries to simulate stone or concrete or a wall that is painted to look like stone). There are materials beyond these listed (i.e. composites, plastics, etc.) that are encouraged which should be evaluated in terms of their integration into the design of a building to support flexibility and creativity. Below are some of the common materials to be deployed.

Glass



Lightweight, transparent, and cool - glass connects the outside and inside. It blends with the surroundings during the day and provides an interesting backdrop at night. It works in a range of scales and due to its versatility and function it is encouraged to be a predominate material. Designers are encouraged to maximize glass in the design of their elevations.

Metal



Lightweight, strong, flexible and permanent - metal represents technological advancement as a building material that has the most variety of any other materials and thus is encouraged to be used in creative ways that represent the district as a leader in innovation.

Stone



(Previous column) Heavy, permanent, textural and warm - stone provides a solid material that can be used in a multitude of ways to highlight certain areas of the building and provide texture that other materials lack. The use of stone is encouraged but should be limited to foundations and at the ground level of an elevation.

Clay



Solid, warm, resilient and smooth - hardened clay in its two products (Brick and Terracotta) is a versatile product that has been used in construction for over 5,000 years. The scale of brick makes it a great material to be experienced in low-to- medium height buildings and is encouraged to be used in those applications. Terracotta works well in all scales due to its varied sizes and comparative lightweight nature.

Wood



Warm, textured, pliable, and sustainable - wood is reminiscent of the natural environment in contrast to the built environment. An approachable material that gives comfort and brightness to any facade. The use of wood is encouraged. Used in contrast with

the more weighty/colder materials of brick, stone, metal or concrete can create a pleasant balance.

Concrete



Fluid, heavy, hard, cool - concrete is a material that can be sculpted to create dynamic shapes and spaces. A designer has to be careful with its use however because it can easily create an austere and intimidating facade if used in the wrong way. Limited use of concrete is encouraged to avoid creating brutalist facades. It is often used best in contrast with a lighter material.

MATERIAL COLOR

A natural color palette is encouraged and is easily achieved when materials are used in an authentic manner. The use of bright colors can also be used but their application should be limited and derive from the need to highlight a particular function of a building. If a bright color is used, it should be only one color and should be limited as an accent.

ARCHITECTURAL STYLE

Modern architecture can be described as the buildings that represent the current time period. This most commonly is illustrated with current building technologies and artistic styles that have spawned from those technologies. Buildings in the district are encouraged to be modern in character. This is not to be confused with "modernist" that was an architectural style of the mid-20th century. Buildings that use older architectural styles in to recreate an historic character

should not be in this District. The WID is about the future and those styles are not forward looking.

Modern architecture starts with the technology of this time. Technology has allowed buildings to become better environments for their occupants. Glazing technologies have allowed buildings to let more natural light in and views out and building facades dominated with these types of systems are encouraged. Technologies and design strategies that include sustainable design features are part of being modern and encouraged. This includes anything from solar devices, green roofs, and photovoltaics and beyond. Creativity is part of the modern style. Due to advances in design tools and fabrication methods buildings can have more organic and unique designs and this is encouraged in the district.

ARCHITECTURAL COMPOSITION

Architectural design should not be overly restrictive in the district relative to the composition of the architectural character of buildings that would limit creativity. However, designers are encouraged to respond to the following basic guidelines to ensure that the styles accurately reflect the City's goals.

Massing

The massing of buildings should be dynamic. Flat and box-like massing is discouraged as such buildings do not create a community that appears welcoming.

Scale

Buildings should try to address the scale of a person. When walking next to a building it should not feel overwhelming. When architectural and landscape elements are used properly, the scale of the exterior feels welcoming despite the actual size of the building.

Variation

Architectural variety is encouraged. Architects are should try to find elements that tie into the surrounding architecture but not imitate any other buildings that are in the district.

Transparency

Buildings are encouraged to provide as much transparency as their programs will allow. In particular, transparency should be maximized in ground floor spaces occupied by retail, restaurant, personal services and related uses. Offices, research and related uses should maximize transparency on upper floors as the interior programming allows.

SITE LANDSCAPING

Landscape design in the district should take cues from the surrounding area and blend public space design with the private landscape. Design character in the district should convey the more naturalized feel of the area's two stream corridors to contrast with the contemporary nature of the built environment. The goal of landscape design is to establish a contradiction or interplay between the natural environment and built environment.

Plantings should extend from the public rights-of-way to private space with an emphasis on low-mow or links grasses to create a seamless and natural appearance. Designs should utilize mass naturalized plantings to establish a framework for defining formal spaces in key locations around buildings which will limit maintenance needs. The use of native plant species and planting in informal clusters is encouraged to enhance the informal feel of the landscaping opposed to linear, evenly spaced planting.

SITE DESIGN CONSIDERATIONS

The district should represent the cutting edge in design and best practices for site development. Sites should employ sustainable design practices, public art and have a clear arrival sequence and provide the minimum amount of parking required by the user.

Internal Design

Industrial flex space and research manufacturing facilities should place office components in locations that can be prominently designed and visible from the public realm.

Building Placement

Buildings should be placed to maximize prominent views and exposure to the community, especially along major roadways. Primary entrances should be oriented toward and/or visible from the public street to enhance identity and wayfinding.

Service Locations and Parking

Strategically place the service functions of buildings where they do not disrupt the primary views and detract from the public spaces consistent with City requirements. Service areas should be shared and screened by architectural components. Employee and service parking should be located to the side and rear of buildings. Furthermore, limited visitor parking may be placed in front of buildings but should be screened by areas of links grass or low-mow grasses and additional plantings to reduce visual impact and maintenance focus on building architecture.



Bicycle accommodations

PARKING ACCOMMODATIONS

The district should represent the cutting edge in design and best practices for site development. Sites should employ sustainable design practices, public art and have a clear arrival sequence and provide the minimum amount of parking required by the user.

Security

Feeling safe is an important aspect of good parking lot design. Parking areas should be well lit and have call stations where possible.

Sustainable

Parking areas are appropriate for deploying sustainable practices such as solar shade structures, pervious paving, rain gardens and drought tolerant landscaping. The City's engineering staff can provide guidance on appropriate and successful measures.

Bicycle Parking

Providing long and short term bicycle parking in appropriate locations are necessary to encourage bicycling within the district. Bicycle parking should be located at all destinations and should be appropriately sited. Short-term bicycling parking should be visible from the main entrances of buildings and easily accessible to the general public.

Surface Parking Landscaping

Parking areas should be screened from view from the public right-of-way consistent with City standards. A combination of mounding and landscaping can accomplish this effectively and add to the area's aesthetics. Break down large expanses of pavement with mini tree groves or tree islands, consistent with code.

Structured Parking Screening

Structured parking should screen the structure as much as possible. This can be done with facade treatments that match the surrounding architecture or wrapping the structure with other programmed spaces, such as residential or office.

HYDROLOGY AND STORMWATER MANAGEMENT

Stormwater Management

The City of Dublin Stormwater Management and Stream Protection Code regulates stormwater from areas of new development and redevelopment for the purpose of protecting public health, safety and welfare. It also defines appropriate stormwater management objectives for the quantity and quality of stormwater runoff. In this district, stormwater management

*Open space and gathering space*

objectives for the quantity and quality of stormwater runoff. In this district, stormwater management should strive to meet City Standards in a more sustainable method. Development should take advantage of the numerous treatment options available as identified in the City's Stormwater Design Manual to meet this objective. Runoff from parking lots and the built environment should be directed into rain gardens and storm water basins where impurities can settle and the water treated before being released into the natural water courses and streams. In addition, storm water runoff can be harvested and used for irrigation and even mechanical cooling systems.

Water in Nature

Natural streams and water courses in the district are a highly valued

resource. They support wildlife and add to the beauty of the surroundings. They also serve to convey stormwater flow and surface runoff downstream. There is existing FEMA designated floodplain located within portions of the district that will need to be considered when developing sites. The City of Dublin Stream Corridor Protection Zones also exists in this area to protect the riparian areas and streams from impacts of development.

OPEN SPACE AND SOCIAL GATHERING SPACE

Open Space Value

The aesthetic value of quality development often is directly related to the amount of open space present in the plan. The district has been planned to work with the existing landform and integrate its natural resources such as streams and wetlands.

Striking a Balance

The overall density is carefully balanced with the quantity of open space. As designed, the plan is strongly focused on open space. Keys to regulating the open space amount are: widths of building setbacks, storm water requirements, building heights and parking methods.

Social

Social gathering spaces are critical to the success of the district. The plan provides for mixed uses of housing, restaurants, music events, community events and farmers markets to be integrated into the work components of the district.



Opportunities for Recreation

GREENWAYS

An active lifestyle and recreation is a key component in the lives of today's young workers and families. Greenways play a vital role meeting these needs. Disengaged from roadways and vehicles, these greenway connections are highly valued for escaping the hustle and bustle of the district.

Connectivity

Greenways provide access across the district and connectivity to the broader community.

Informal Design

Greenway paths should be informal in their design and allow for long graceful curves. The paths should provide for clear line-of-sight and have occasional conveniences such as information kiosk and blue light security call stations.

Stream Crossings

Footbridges should be provided at stream crossings and minimize disturbance to the water course.

ROADWAY CHARACTER

An active lifestyle and recreation is a key component in the lives of today's young workers and families. Greenways play a vital role meeting these needs. Disengaged from roadways and vehicles, these greenway connections are highly valued for escaping the hustle and bustle of the district.

Views

Landscaping along roadways should never interfere with the function and safety of the roadway corridor. Design guidelines should be used to determine view and site distances along roadways.

Lighting

Lighting should be placed in sequence with the trees and illuminate both the roadway and pathways.

Paths and Bikes

Shared-use pathways and sidewalks should be placed along

all roadways at an appropriate width to facilitate walking and biking, consistent with City standards. Bike lanes should be placed along roadways and stripped, as deemed appropriate by the City Engineer.

Landscaping

Landscaping along roadway edges should be lined with shade trees and provide a rhythm and identifiable character for the road. Median plantings should remain low and block opposing headlights where appropriate. Use flowering trees to enhance roundabouts and intersecting roadways.



Image by O'Brien/Atkins



PUBLIC ART AND STREETSCAPE

Public Art

Public art should be used as visual focal points that enhances awareness and serves as landmarks for the area. Opportunities to coordinate with the Dublin Arts Council should be explored and art should be appropriately themed to the character of the district.

Private Art

Corporate (private) art should be encouraged to create a sense of place on private property. Buildings visible from US 33 should be contemplated as opportunities for art through architectural expression. Architectural elements, sculptures and lighting should enhance the visual context.

Streetscape

Objects within the public right-of-way can reinforce a desired character. Elements ranging from

benches, shelters, kiosks, trash cans, bus stop shelters, lighting and other components should enhance design and provide consistency. Streetscape elements should be programmed and implemented as part of park and roadway improvements. Private businesses should also be encouraged to use streetscape elements to further extend design character into private spaces, consistent with the ideals of technology, advancements and contemporary character of the district.

TRANSPORTATION AND UTILITIES

Transportation and ease of access are key components for making communities desirable for future land growth. The West Innovation District is located just west of I-270 and the interchange with US 33 that has several arterials that facilitate access to key logistics points, nearby communities and residential areas. The establishment of a well-managed transportation network and enhanced access to I-270 makes the district a prime location along a developing corridor that has quick access to all areas of the region. Transportation planning for the district provides a distinct opportunity for new business, whether as a commuting employee or for freight movement. General policies include:

- ▶ Partner with private development to construct new roadways and improve intersections;
- ▶ Continue to partner with the Ohio Department of Transportation to improve the interchange at US 33/SR 161/Post Road;
- ▶ Plan internal road improvements to most efficiently provide access to sites and maximize business access to interchange; and
- ▶ Create a road network that provides multiple travel options while separating through traffic from surrounding residential areas.

Specific improvements include the US 33/SR 161 interchange improvements. The City has

proactively worked to facilitate transportation upgrades in the area to ensure quality access to the district. Through the cooperation of the Ohio Department of Transportation, the City is completing environmental assessments for the project and will begin detailed design work in the later portion of 2017 or early portion of 2018. This project also involves collaboration with other regional partners including Union County and other local jurisdictions.

Another important improvement project in the area is the I-270 and US 33 Interchange project. This project is currently underway and expected to be completed in late 2017.

To accommodate future development, the City adopted a Transportation Plan for the WID, which addresses character and alignment of internal roads. Significant macro-level transportation modeling was based on assumed land use densities of the Community Plan. The plan for future transportation improvements has been established to provide a clear internal system of public streets that will result in predictability and enhance development potential for the entire area. The network includes a number of significant elements and alignments that vary from assumptions originally made as part of the City's Thoroughfare Plan.

The general objectives are:

- ▶ Create a parallel route for US 33 to enhance access for commuters and to better

separate through-traffic from area neighborhoods;

- ▶ Implement a new entrance to Darree Fields to downplay residential portions of Shier Rings Road between Eiterman and Cosgray Roads;
- ▶ Establish a more defined entry point into residential areas along Cosgray Road south of the West Innovation District; and
- ▶ Create an east-west connection paralleling SR 161 that will provide additional options to access the interchange and link with transit along the railroad.

Other considerations include classifying street networks by character and types and creating a road hierarchy with three levels of design and function. Major arterials are expected to be built similar to Emerald Parkway with two travel lanes and a bike lane or shared lane in each direction with a landscaped median. A design speed of 35 to 40 mph is expected to encourage efficiency of movement. Smaller collector streets that funnel traffic similar to Eiterman Road. The design includes one travel lane and a bike lane in each direction with a landscape median. Travel is expected to be slower based on the character of the street and placement of surrounding buildings. Internal to pockets of development will be local streets that provide on-street parking and cycling speeds of 25 mph.



Thoroughfare Plan for West Innovation District

Arterials

- ▶ Design speeds of 35 to 40 mph
- ▶ Two lanes of travel each way
- ▶ Median separation with center left turns
- ▶ Integrated bike lanes for commuters
- ▶ Curvilinear multi-use paths/sidewalks for recreational use
- ▶ Thematic landscaping

Collectors

- ▶ Design speeds of 30 to 35 mph
- ▶ One lane of travel each way
- ▶ Median separation with center left turns
- ▶ Integrated bike lanes for commuters
- ▶ Linear shared-use paths/sidewalks for recreational use
- ▶ Thematic landscaping

Local Streets

- ▶ Design speed of 25 mph
- ▶ One lane of travel each way
- ▶ Signed bike route for shared use
- ▶ On-street parking to enhance pedestrian environment
- ▶ Sidewalks or paths to access businesses

PLAN

IMPLEMENTATION

The West Innovation District is a refined area plan that specifies an action plan to carry out a refined vision for the district. The district must not only include the specific planning elements presented in the plan but also consider how the district can build upon success and gain a competitive market edge regionally and nationally. The following action items should be prioritized, directed and carried out to achieve the general vision of the district.

ACTION STEPS

- ▶ Update land use and development regulations in the Zoning Code to require general compliance with the West Innovation District Area Plan.
- ▶ Adopt development and design guidelines to guide site layout, architecture, building mass, form and overall development of the district.
- ▶ Continue to administer the expedited review process.
- ▶ Adopt new standards for automatic “kick up” of applications to the Planning and Zoning Commission.
- ▶ Continue to work with key stakeholders, including Ohio University, to incorporate the multiple and supportive visions of the West Innovation District.
- ▶ Explore sign regulations that are more contemporary and appropriate for the architectural objectives of the district. Sign locations, size and design considerations should be integrated into building design.
- ▶ Implement landscaping objectives that maximize the benefit of natural screening and the growth and overall health of natural plant materials.
- ▶ Continue to coordinate with surrounding jurisdictions to ensure regional cooperation.
- ▶ Continually monitor the West Innovation District Plan and associated zoning regulations and design principles, as necessary to account for changes in development conditions and new planning considerations thus preserving the Plan’s accuracy and effectiveness as a guide for economic development.

**TRANSPORTATION AND
TRANSIT OPTIONS**

- ▶ Continue regional efforts to expedite U.S./SR161/Post Road interchange upgrades to maximize long-term accessibility for the planning area.
- ▶ Integrate the dedication of rights-of-way to complete major improvements as part of the development process.
- ▶ Use the West Innovation District as a guide to upgrade regional transit options for the City of Dublin and work cooperatively with the Central Ohio Transit Authority.
- ▶ Ensure that road improvements will easily accommodate and integrate transit options over time.
- ▶ Implement the applicable Mobility Study recommendations to ensure connectivity with the West Innovation District.

**UTILITIES AND TECHNOLOGY
ADVANCEMENTS**

- ▶ Program key water and sewer extensions along with road improvements to enable municipal-owned sites to be more easily subdivided for development.
- ▶ Continue promoting the City's successes with broadband as an attraction and retention tool for economic development.
- ▶ Pursue future partnerships with local high schools, technical schools and colleges to promote tech-based learning within the district.

**OPEN SPACE, BIKEWAYS AND
LANDSCAPE DESIGN**

- ▶ Ensure vital greenway connections as dedicated or provided as easements as part of the administrative review of development proposals.
- ▶ Program important segments of shared-use paths for completion in conjunction with development or as part of road construction.
- ▶ Ensure landscape plans for individual sites meet the general intent of the plan to create a low-maintenance environment that is informal in character,
- ▶ Encourage private development to extend the character of the right-of-way into a site as a design cue to create a more seamless transition between public and private space.

**PUBLIC AMENITIES AND
SUSTAINABILITY**

- ▶ Work with the Dublin Arts Council to identify sites for public art.
- ▶ Encourage corporate art on private property as an important visual amenity.
- ▶ Program key entry features along with related streetscape elements along SR 161 as a branding opportunity for the district.
- ▶ Encourage or incentivize alternative site design methods that are consistent with the general character of the district.

- ▶ Encourage alternative architectural design that integrates sustainable design elements.
- ▶ Consider economic development and zoning incentives to facilitate implementation of sustainable design components.
- ▶ Study the shared use of public space to see how park facilities and greenways can be used to create amenities and/or public-private partnerships for renewable energies such as geothermal, solar and wind power.

**ASSISTING THE DEVELOPMENT
COMMUNITY AND PROMOTING
THE VISION OF THE PLAN**

- ▶ Promote partnerships with educational institutions and business organizations.
- ▶ Promote the expedited review process to the Central Ohio community.
- ▶ Discuss updates to the city's Capital Improvement Plan and establish a project shortlist that will be proposed and funded in both the next year and throughout the remainder of the five year program to continue forward movement.

GLOSSARY

ACADEMIC/ADVANCED MANUFACTURING BLEND

Academic/advanced manufacturing blend describes spaces where a community college or other academic institute could establish specialty labs and customized training programs to support advanced manufacturing companies in research, development, prototyping, and process improvement. Any manufacturing in these spaces would be small scale pilot operations requiring offices, labs and some manufacturing space.

ADVANCED INDUSTRIES

Advanced industries can occur with any business sector where technology and process improvements are incorporated to significantly improve products and services. According to the latest Brookings Institute Study, the largest advanced industries in the Greater Columbus Metro region are:

- ▶ Computer systems design and related services
- ▶ Motor vehicle parts manufacturing
- ▶ Architectural, engineering and related services
- ▶ Scientific research and development services
- ▶ Management, scientific and technical consulting services

Most of these operations can be accommodated within office buildings. However any advanced

manufacturing business, including motor vehicle parts, may require a combination of office and high-bay production flex space.

CLEAN TECH MANUFACTURING AND SERVICES

Clean tech manufacturing and services companies seek to reduce negative environmental impacts through significant energy improvements, the sustainable use of resources, or environmental protection activities. This sector includes firms involved in recycling, renewable energy (biofuels, hydro, solar, wind), information technologies, electric and hybrid vehicles, sustainable chemistry, smart devices and software to save water and electricity, lighting systems, and grey water recovery and re-use. Most of these operations require office and flex lab spaces.

DATA CENTERS/MISSION CRITICAL OPERATIONS

Data center/mission critical operations house networked computer and storage systems at a large scale. These facilities typically consume large amounts of electricity and need redundant power systems as back-up for operations. Most of these facilities require customized spaces with cooling and reliable, high quality power.

INCUBATORS

Incubator facilities provide entrepreneurial companies with low cost, flexible office, lab and manufacturing spaces offering a variety of shared services. The time frame for occupying the space

can vary but it is usually done on a limited basis where companies are encouraged graduate to larger more permanent space once they have proven they are viable. These spaces typically include offices, shared resources including copiers, breakrooms, bathrooms and conference rooms, access to data and telecommunications services, training, and connections to potential partners.

MAKER SPACES/PROTOTYPE DEVELOPMENT

Maker spaces are usually subsidized by an academic institution or non-profit organization and allow access to tools and resources for creating innovative products. The original maker space was an individual's garage or workshop. The modern day maker space is run by a company or organization that provides a low cost warehouse like space with access to tools, raw materials, and training for members to prototype their ideas. Maker spaces often include:

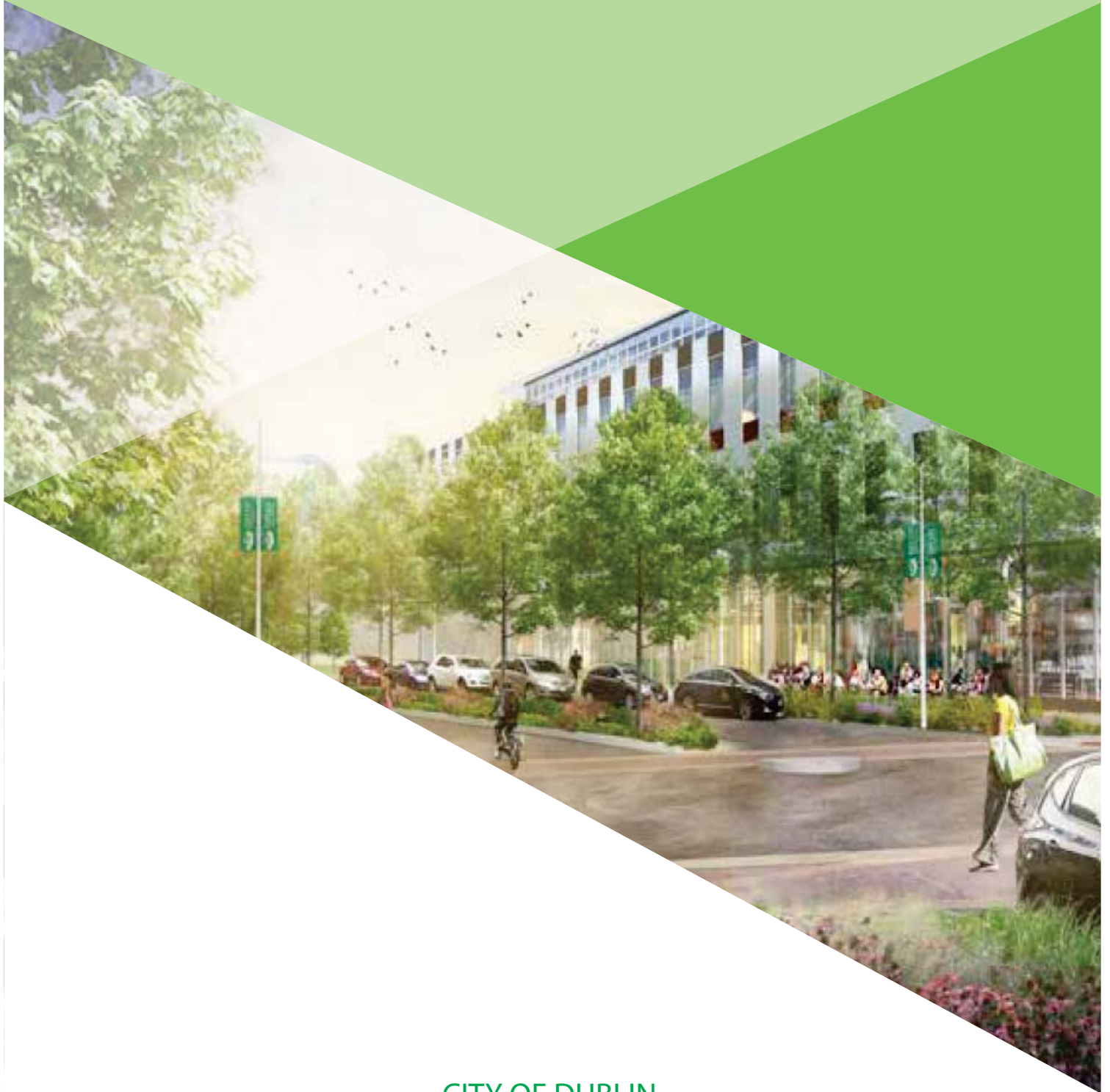
- ▶ A design lab with open tables and stools and 3-D printers
- ▶ A machine shop with welding equipment, soldering benches and plasma cutters
- ▶ A wood-working shop with table saws, drill presses, and sanders
- ▶ A computer cluster
- ▶ Project storage areas
- ▶ Team meeting rooms

- ▶ Offices for the shop supervisor and lab manager
- ▶ A breakroom
- ▶ A gathering space
- ▶ Display spaces to exhibit products

If connected with a university, these spaces are generally multi-disciplinary including but not limited to departments, professors and students from computer science, business and engineering.



The Dublin Entrepreneurial Center (DEC) is an example of a local incubator



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