

# RECORD OF RESOLUTIONS

Dayton Legal Blank, Inc., Form No. 30045

Resolution No. 05-15

Passed \_\_\_\_\_, 20\_\_\_\_

## **A RESOLUTION AUTHORIZING THE CITY MANAGER TO ENTER INTO A JOINT USE AGREEMENT BETWEEN THE CITY OF DUBLIN AND THE OHIO BOARD OF REGENTS.**

**WHEREAS**, the Ohio General Assembly appropriated Three Hundred Thousand Dollars (\$300,000) ("Funds") to the Ohio Board of Regents to be used by Dublin for construction of certain capital infrastructure to wit: fiber optic system improvements; and

**WHEREAS**, Ohio Administrative Code §3333-1-03(E) requires a public institution to submit to the Chancellor of the Ohio Board of Regents a joint use agreement that contains the requirements in (E)(1)-(11) for review and approval; and

**WHEREAS**, Dublin has demonstrated that the value of the use of the facility or equipment is reasonably related to the amount of appropriation; and

**WHEREAS**, this Agreement is being entered into between the Ohio Board of Regents and the City of Dublin and it is intended that Dublin and the Ohio Academic Resources Network ("OARnet") both benefit from the terms hereof; and

**WHEREAS**, Dublin has an existing optical fiber system (hereinafter referred to as "Dublink") throughout Dublin and Central Ohio; and

**WHEREAS**, Dublin has proposed to build a new optical fiber route within Dublin to connect municipal facilities, public institutions and Dublin City Schools, ultimately expanding Dublink; and

**WHEREAS**, public institutions and Dublin City Schools will be enabled by these Funds to locate certain servers and cause the placement of electronics to assure interconnectivity with OARnet.

**NOW, THEREFORE, BE IT RESOLVED** by the Council, of the City of Dublin, State of Ohio, \_\_\_\_\_ of the elected members concurring that:

Section 1. The City Manager is hereby authorized to execute a Joint Use Agreement between the City of Dublin and the Ohio Board of Regents, in substantially the form set forth in Exhibit A.

Section 2. This Resolution shall take effect upon passage in accordance with Section 4.04(a) of the Revised Charter.

Passed this \_\_\_\_\_ day of \_\_\_\_\_, 2015

\_\_\_\_\_  
Mayor - Presiding Officer

ATTEST:

\_\_\_\_\_  
Clerk of Council



City of Dublin

Office of the City Manager

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# Memo

**To:** Members of Dublin City Council  
**From:** Marsha Grigsby, City Manager /mac  
**Date:** December 31, 2014  
**Initiated By:** Dana L. McDaniel, Director of Development  
**Re:** Resolution 05-15 – Joint Use Agreement with Ohio Board of Regents

## Background

As Council may recall, the Ohio General Assembly appropriated \$300,000 to the Board of Regents to be used towards the City of Dublin's efforts to make a 100 gigabit capable fiber optic backbone available for research and education. Attachment A contains the project application summary submitted to the General Assembly that resulted in the award of the \$300,000. The intent of this project as presented to the State of Ohio General Assembly is to:

*Provide a fiber optic backbone that can operate at 100 gigabits of broadband speed and capacity in order to create, retain, expand and attract high-tech and broadband driven industry, businesses and jobs, while expanding the capabilities of primary and secondary education.*

The City of Dublin, through its own efforts as part of its ongoing Five-Year Capital Improvement Program, will fund the portions of the 100 gigabit fiber optic backbone to be used by the private sector. The funds to be provided by the General Assembly, via the Board of Regents, will be focused on building out infrastructure to support those parts of the 100 gigabit system to support municipal needs, connect schools and other public institutions that can benefit from the system. Deployment of this backbone in support of public institutions and specifically Dublin City Schools will significantly enhance the overall City-owned fiber optic system by reaching into areas where the system is not currently deployed. It will likely be necessary for the City to enter into a subsequent agreement(s) with the Dublin City Schools and/or other public institutions that desire to leverage the 100 gigabit fiber optic backbone capability funded by the State of Ohio.

In order to receive this funding, Ohio Administrative Code Section 3333-1-03(E ) requires a public institution to submit to the Chancellor of the Ohio Board of Regents a joint use agreement that contains the requirements in (E )(1)-(11) for review and approval. Staff has demonstrated that the value of the use of the proposed asset will meet the requirements of the Administrative Code. In effect, the ongoing lease rate that Dublin currently applies for the use of its optical fiber system combined with its experience with cost avoidance meets this requirement. A draft joint use agreement is attached (Attachment B).

## Recommendation

Staff recommends Council approve Resolution No. 05-15. Please contact Dana McDaniel with any questions.

**Project Name:** 100 Gigabit - Dublin Ignite Fiber Optic Project

**Project Mission Statement:** *Provide a fiber optic backbone that can operate at 100 gigabits of broadband speed and capacity in order to create, retain, expand and attract high-tech and broadband driven industry, businesses and jobs, while expanding the capabilities of primary and secondary education.*

**Project Description:** As an extension of the effort put forth by Governor Kasich and the State Legislature's deployment of a 100 gigabit backbone in support of educational institutions, the City of Dublin intends to scale its existing fiber optic architecture to 100 gigabit capability. This capability will be made available to start-up, small and medium size businesses within a defined geographic area of Dublin (See Attachment 1) and to Dublin City Schools. Increasing the capability of the existing Dublin-owned system will enable businesses and Dublin City Schools to interconnect to academic/research networks; National Science Foundation computing capability; Ohio Supercomputer; Internet2 national and international research network; data center services/cloud computing; thin client services; data analytics; and City owned Wi-Fi. Dublin City Schools will be able to interconnect to college level institutes to demonstrate the value of remote and virtual learning environments and model this to other local schools. Businesses will be able to access a "virtual playground" to promote the retention, expansion and attraction of IT companies and research and development interests/companies that desire to access high level computing capacity. New applications (virtualization, analytics, software, simulation, etc.), new businesses and new jobs can be developed.

The City will add fiber optics architecture to the existing system, 100 gigabit routing equipment, and fiber optic laterals into certain multi-tenant buildings in a fixed geographic area and to an interconnection point with Dublin City Schools. The project will be fully engineered and deployed by December 31, 2014. Evaluation will be ongoing through December 31, 2015.

**Funding Requested:** The City of Dublin respectfully requests \$334,480 towards the implementation of this project. See Attachment 2 for project cost components.

**Regional and State-wide Impact:** Several cities and academic institutions within the region and in the State of Ohio possess fiber optic/broadband infrastructure. The City of Dublin will expand its successful beta test in a controlled second generation deployment to achieve the 100 gigabit capability building on lessons learned (See Beta Test/Award Winning Research in Background, below). Further lessons learned will be shared with others in order that additional 100 gigabit capability can be developed within the region and the State of Ohio. These lessons will be garnered by a team of academics from The Ohio State University, Ohio Academic Resource Network (OARNet) and University of Missouri in partnership with Raytheon BBN and Metro Data Center using grant funding **already received** from the National Science Foundation in the amount of \$265,000.

**Economic Impact:** The 100 Gigabit capability provided by this project will be a first of its kind in the Midwest region of the United States. The presence of the 100 gigabit backbone is anticipated to attract 500 new jobs in three years after the deployment is complete in the computer, health sciences, banking and financing services industries. Average wages of such jobs are anticipated to

be in the \$40,000-\$50,000 per year range. The competitiveness of office buildings along the 100 gigabit fiber route will be significantly increased to create, retain, expand and attract new businesses. The 100 gigabit – Dublin Ignite project will deepen the understanding of deployment, use and impact of this capability for municipalities, public schools, the private sector and other organizations who possess broadband infrastructure or who are considering the deployment of similar broadband infrastructure. Such efforts will strengthen the overall broadband capability within the State of Ohio increasing the State's overall competitiveness and job growth.

**Background:**

- Moore's Law, an axiom of computer microprocessor development, holds that computer processing power doubles about every 18 months, especially relative to cost or size. This has held mostly true for decades and is anticipated to continue for decades to come. Therefore, demand for ever-greater levels of internet speed and capacity will continue to increase. Cities around the globe are recognizing that they must compete in a rapidly changing technological environment that runs predominantly on infrastructure that provides broadband and drives the digital economy. Broadband is now recognized as a key infrastructure and job and wealth multiplier. High paying technology jobs are typically associated with jobs rooted or enabled by information technology and the digital economy. Information technology capabilities are only as good as the broadband backbones they can access and to services that enhance their capabilities to leverage broadband. Hence, cities such as Chattanooga, Tennessee, Riverside, California and now Google cities, which include Kansas City, Missouri, Austin, Texas and Provo, Utah, are seeking to differentiate themselves competitively with ultra-speed broadband networks, operating at about 1 gigabit.
- Dublin: The City of Dublin possesses a 120 mile fiber optic system throughout its commercial district and throughout Central Ohio. The City uses its fiber optic system to interconnect public facilities, lease dark fiber to the telecommunications industry and to provide interconnectivity for major companies in Dublin. The City also partners with the Ohio Academic Resource Network (OARNet) and the Ohio Supercomputer Center to provide the Central Ohio Research Network (CORN). CORN consists of a portion of the City's fiber optic network and is "lit" and operated by OARNet. CORN provides connectivity between Dublin companies, public institutions, Ohio's Supercomputer and Ohio's universities, colleges and research institutes. The City of Dublin has invested \$5 million in the deployment of Dublin and its 24 square miles of Wi-Fi system. Both deployments are public/private partnerships. The City of Dublin and Dublin have been recognized twice as a Top7 community among several hundred communities, internationally, by the international think tank – The Intelligent Community Forum (<http://www.intelligentcommunity.org>). Dublin is also a US Ignite City (<http://us-ignite.org>).
- Beta Test/Award Winning Research: The City of Dublin, in partnership with OARNet, the Ohio Supercomputer, The Ohio State University and the University of Missouri, has conducted beta testing on Dublin's fiber optics to deploy unique services such as thin client services, cloud computing and access to a local data center. The beta test cost nearly \$250,000 and was successful in determining the value of these services to small and

medium size businesses. Additionally, this team, in partnership with TotalSim, a local Dublin company, received a US Ignite award for this research demonstrating how a company's software applications can be developed by leveraging the fiber optic system's capabilities. This research and this award garnered the attention of the National Science Foundation (NSF). As a result, Dublin gained connectivity to the National Science Foundation's Global Environment for Network Innovation (NSF GENI; <http://www.geni.net>) virtual laboratory via OARNet.

**Project Partners:**

- City of Dublin: The City will make available its existing interconnections and access to certain broadband infrastructure to enable portions of the project. However, additional fiber will be needed to help make the fiber optic architecture 100 gigabit capable.
- Ohio Academic Resource Network and Ohio Supercomputer Center (The Ohio State University): The Central Ohio Research Network will be interconnected to the 100 gigabit backbone to provide R&D capacity to the private sector.
- The University of Missouri: Dr. Prasad Calyam, formerly of The Ohio State University, managed a \$200,000 grant from Mozilla and \$50,000 from the City of Dublin to conduct a beta test (See Background, above). Dr. Calyam **has received** another grant from the NSF (\$265,000) which will enable academic research on the deployment of the 100 gigabit capability. This will enable the project to be evaluated and outcomes/capabilities to be measured.
- Metro Data Center, Inc. (<http://metrodatacenter.com>): A privately owned data center in Dublin and within the geographic area of the proposed deployment, Metro Data Center provides more than 6,000 square feet of "High Tier" infrastructure, supporting a fully redundant N+1 environment. The data center is Carrier Neutral and is a fiber rich environment providing multiple connectivity avenues. The data center is co-located with Dublin Entrepreneurial Center; housing over 100 start-up companies. Metro Data Center is also the "point of presence" between Dublin, OARNet and critical private sector telecommunication service providers. Access to the NSF's "Geni virtual laboratory" is also provided here.
- US Ignite – The City of Dublin is a US Ignite Community. US Ignite fosters the creation of next-generation Internet applications that provide transformative public benefit by "igniting" the development and deployment of new apps with profound impact on how Americans work, live, learn and play.

**Exhibit B****JOINT USE AGREEMENT****Between the City of Dublin and the Ohio Board of Regents**

This Joint Use Agreement (“Agreement”) is entered into by and between the City of Dublin, Ohio, an Ohio municipal corporation (hereinafter referred to as the “City”) having an office at 5800 Shier Rings Road, Dublin, Ohio 43016 and the Ohio Board of Regents, an instrumentality of the State of Ohio created and existing under Chapter 3333 of the Ohio Revised Code (hereinafter referred to as “Board”), having an office at 25 South Front Street, Columbus, Ohio 43215, and which are sometimes referred to individually as “Party” and collectively as “Parties.”

WHEREAS, House Bill \_\_\_ passed by the Ohio General Assembly appropriates Three Hundred Thousand Dollars (\$300,000) (“Funds”) to the Board to be used by the City for construction of certain capital infrastructure to wit: fiber optic system improvements; and

WHEREAS, Ohio Administrative Code §3333-1-03(E) requires a public institution to submit to the Chancellor of the Ohio Board of Regents a joint use agreement that contains the requirements in (E)(1)-(11) for review and approval; and

WHEREAS, the City has demonstrated that the value of the use of the facility or equipment is reasonably related to the amount of appropriation through the worksheet included in this Agreement as Attachment A; and

WHEREAS, this Agreement is being entered into between the Board and the City is intended that the Ohio Academic Resources Network (“OARNet”) benefit from the terms hereof; and

WHEREAS, the Board has concluded that the value of the City’s facilities as provided to OARNet in this Agreement is reasonably related to the amount of the Funds; and

WHEREAS, the City has an existing optical fiber system (hereinafter referred to as the “Existing Fiber System”) throughout the City and Central Ohio; and

WHEREAS, the City proposes to build a new optical fiber route within Dublin to enhance municipal operations and connect the Dublin City Schools (“New Fiber System”); and

WHEREAS, THE City of Dublin will connect certain municipal facilities, enhancing safety, communications, interconnection and the WiFi/wireless backbone; and

WHEREAS, Dublin City Schools will be enabled by these Funds to locate certain servers and cause the placement of electronics to assure interconnectivity with OARNet; and

WHEREAS, the City desires to interconnect the existing and New Fiber System for the purpose of furthering research and education; and

WHEREAS, the City will also grant OARNet an IRU in and to four (4) fibers in a portion of the the New Fiber System; and

WHEREAS, OARNet connects K-12 schools, research universities, medium and smaller universities and colleges, government agencies and others in order to foster new collaborations between and among these entities, while at the same time promoting critical educational, scientific and industrial capacities and research thereby advancing a technology based economy; and

WHEREAS, the Parties may in the future agree to enter into additional separate agreement(s) for additional and/or separate optical fiber uses which will incorporate the covenants and agreements of this Agreement and which will also set forth the terms and provisions unique to each additional or different specific project.

NOW, THEREFORE, in consideration of the mutual benefits hereunder, it is hereby agreed to between the parties as follows:

1. **Facility or equipment owned, to be built or purchased by nonprofit or public body.** The facility to be built, is a fiber optic network described in Attachment C and referred to herein as New Fiber System.
2. **Use of the facility or equipment by public institution.** The New Fiber System will be connected with the Existing Fiber System and OARNet will be granted an IRU to use two pair of fiber in the New Fiber System. The New Fiber System will be connected to the New Fiber System and the Existing Fiber System.
3. **Term.** This Agreement shall begin upon execution and terminate twenty (20) years after the execution date.
4. **Reimbursement of funds.** In the event that this Agreement is terminated because City's failure to execute the IRU, City shall remit to the State of Ohio the Funds. In the event that this Agreement is terminated prior to the expiration of the term in Paragraph 3, the IRU shall remain the property of OARNet pursuant to its terms.
5. **Use of Funds.** The Funds provided under this Agreement shall be used only to build and provide electronics for the New Fiber System.
6. **Competitive bidding.** The City will follow all State and local laws regarding bidding procedures and purchasing.

7. **Amendments.** Any amendments to this Agreement shall be in writing, signed and approved by City and signed and approved by the Board.
8. **Records of University Use.** Upon request by the Board, City shall supply the Board with a copy of the executed IRU.
9. **Distribution of Funds; Administrative Costs.** Upon execution of this Agreement the Board shall release the Funds to City for the uses specified herein.
10. **Force Majeure.** Neither Party shall be liable to the other for any failure of performance under this Agreement due to causes beyond its control (except for the fulfillment of payment obligations as set forth herein), including, but not limited to: acts of God, fire, flood, earthquake or other catastrophes; adverse weather conditions; material or facility shortages or unavailability not resulting from such Party's failure to timely place orders therefore; lack of transportation; national emergencies; insurrections; riots; wars; or strikes, lockouts, work stoppages or other labor difficulties (collectively, "Force Majeure Events").
11. **Assignment.** This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors or assigns; provided, however, that no assignment hereof or sublease, assignment or licensing (hereinafter collectively referred to as a "Transfer") of any rights or obligations hereunder shall be valid for any purpose without the prior written consent of each Party hereto.
12. **Relationship not a Partnership or an Agency.** The relationship between Board and the City shall not be that of partners or agents for one another and nothing contained in this Agreement shall be deemed to constitute a partnership, joint venture or agency Agreement between the Parties hereto.
13. **Self-Insurance.** Both City and OARNet are self-insured, and damage to the system shall be repaired pursuant to the terms of the IRU.
14. **No Third-Party Beneficiaries.** This Agreement is for the sole benefit of the Parties hereto and their respective permitted successors and assigns, and except for the requirements herein, shall not be construed as granting rights to any person or entity other than the Parties or imposing on either Party obligations to any person or entity other than a Party.
15. **Effect of Section Headings.** Section headings appearing in this Agreement are inserted for convenience only and shall not be construed as interpretations of text.
16. **Notices.** Any written notice under this Agreement shall be deemed properly given if sent by registered or certified mail, postage prepaid, or by nationally recognized overnight delivery service or by facsimile to the address specified below, unless otherwise provided for in this Agreement:

If to Board to:  
Chancellor  
Ohio Board of Regents  
25 South Front Street  
Columbus, OH 43215

If to City to:  
City Manager  
5800 Shier Rings Road  
Dublin, Ohio 43061

With a Copy to:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

With a Copy to:

Law Director  
Frost Brown Todd

Either Party may, by written notice to the other Party, change the name or address of the person to receive notices pursuant to this Agreement.

17. **Severability.** In the event any term, covenant or condition of this Agreement, or the application of such term, covenant or condition, shall be held invalid as to any person or circumstance by any court having jurisdiction, all other terms, covenants and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect unless a court holds that the invalid term, covenant or condition is not separable from all other terms, covenants and conditions of this Agreement.
18. **Compliance with Law.** Each Party hereto agrees that it will perform its respective rights and obligations hereunder in accordance with all applicable laws, rules and regulations.
19. **Governing Law and Venue.** This Agreement shall be interpreted in accordance with the Charter and Codified Ordinances of the City, as amended, the laws of the State of Ohio, and all applicable federal laws, rules and regulations as if this Agreement were executed and performed wholly within the State of Ohio. No conflict of law provisions shall be invoked so as to use the laws of any other jurisdiction. The exclusive venue for all cases or disputes related to or arising out of this Agreement shall be the state and federal courts in Franklin County, Ohio.
20. **Entire Agreement.** This Agreement, including any Attachments attached hereto, all constitute the entire agreement between the Parties with respect to the subject matter. This Agreement cannot be modified except in writing signed by both Parties.

**Project:** \_\_\_\_\_

**Date:** \_\_\_\_\_

IN WITNESS WHEREOF, the parties have executed this Joint Use Agreement as of the date set forth below.

The City of Dublin  
an Ohio municipal corporation

The Ohio Board of Regents  
an instrumentality of the State of Ohio

By: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to Form:

\_\_\_\_\_  
Law Director

