



Urbana- Champaign Big Broadband



Urbana City Council Project Review & Update

Michael K. Smeltzer
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What was the original plan?

7 fiber rings spanning the community

- Fiber connectivity & Internet service for 143 very broadly defined “Anchor Institutions”
- Schools, Public Safety, Government, Medical, Senior Living & Activity, Youth Centers, Social Service Agencies, Public Computing Centers

Fiber-to-the-Premise (FTTP)

- To the curbs of 4,650 homes & 200 businesses
- In 11 “underserved” Census Block Groups
 - Areas were determined by a statistically valid door-to-door survey and are primarily low-income
 - Areas had less than 41% broadband adoption
- 2,700 projected FTTP customers



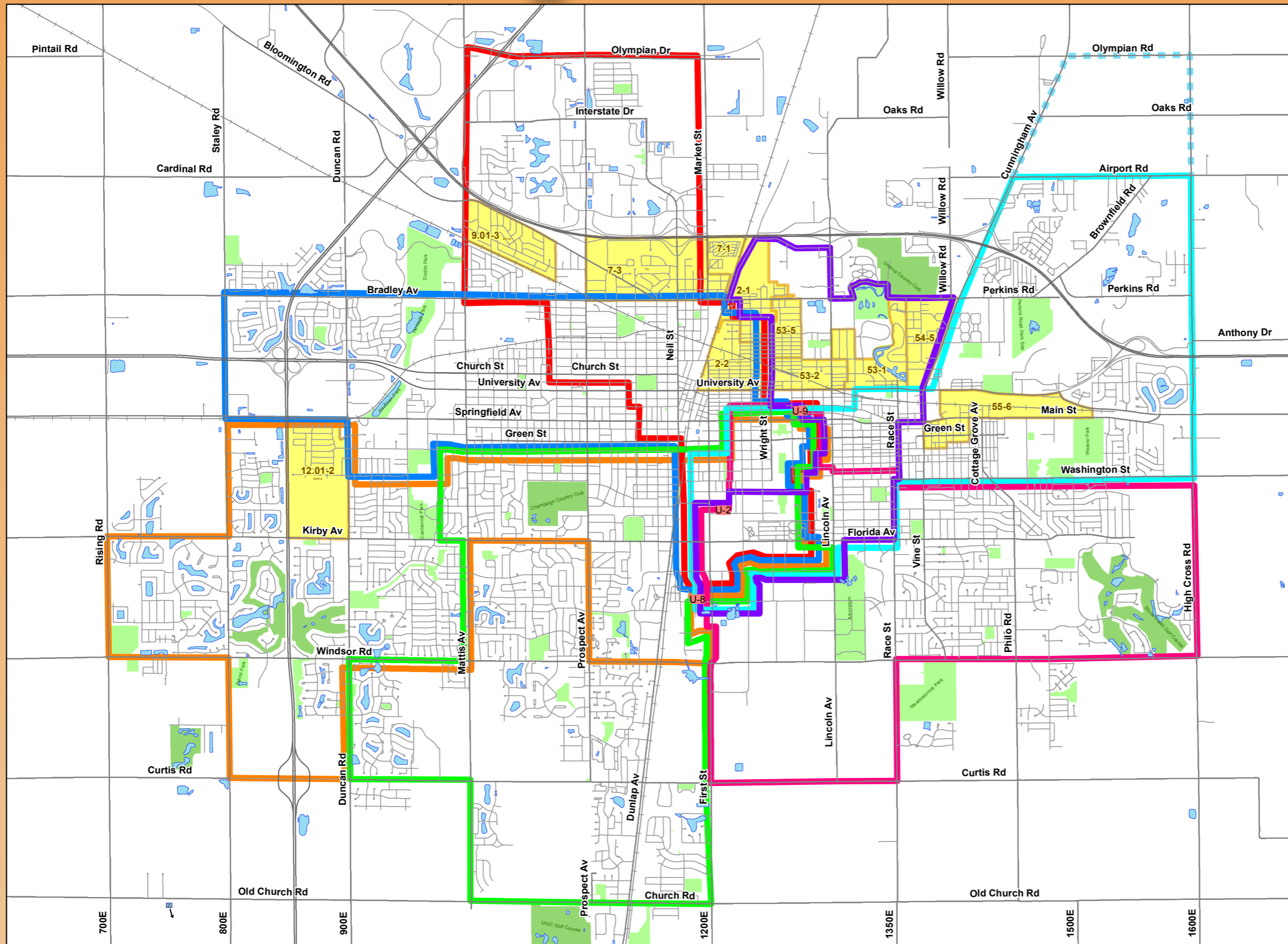
“Middle Mile” Infrastructure

7 Fiber Rings

- Cover all of the metropolitan area
- Connect 143 “Anchor Institutions”
 - All Private & Public Schools & Libraries
 - All Public Safety, and Medical facilities
 - All Senior Living and Activity Centers
 - Social Service and Youth Service Agencies
 - Public Computing Centers
 - All Urbana & Champaign city facilities
- Select Sanitary District & Mass Transit District locations
- Provide backbone for the FTTP pilot project
- Provide future backbone for FTTP everywhere



Fiber Rings & FTTP Areas

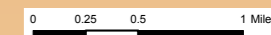


Map 1
Ring Layout

10/18/10

Legend

- U-8 University Node
- Ring 1
- Ring 2
- Ring 3
- Ring 4
- Ring 5
- Ring 6
- Ring 6 (alternate course)
- Ring 7
- 2-1 Last Mile FTTH Funded Service Area (labeled as Census Block Group)





“Last Mile” FTTP Pilot Project

11 “Underserved” Census Block Groups

- 6 in Champaign, 5 in Urbana

Base UC2B retail service offering:

- 5 Mbps symmetrical connection to the Internet
- 100 Mbps & 1 Gbps connections to local institutions
- \$19.99 a month - with grant-funded fiber installation
- Higher Internet bandwidth tiers available

Open network - all service providers welcome

- Only IP-based services - no traditional TV or phone
- Layer two transport services for ISPs

One of few FTTP projects funded by NTIA



An Open Access Network

UC2B will be an Open Network

- Shared community-owned infrastructure
- Multiple service providers
 - Providers compete on price and quality of service
 - All lawful service providers are welcome
 - AT&T and Comcast are welcome

All data is treated the same

- No preference to any source or type of data

Network Neutrality is a grant requirement



Sources of UC2B Funds

- Federal Government - NTIA - \$22.5 million
- State of Illinois - \$3.5 million
- University of Illinois - \$510,971
- City of Champaign - \$498,070
- City of Urbana - \$345,675
- Champaign Unit 4 Schools - \$622,557
- Urbana District 116 Schools - \$298,075
- C-U Mass Transit District - \$339,103
- U-C Sanitary District - \$120,000
- Lincoln Trail Libraries - \$30,000
- Champaign Telephone Company - \$587,698



Project Update

Environmental Assessment is Complete

- Finding of No Significant Impact (FONSI) issued

Engineering firm selection in progress

- Will review the backbone design
- Will design the backbone rings and fiber to the curb
- Aiming for Nov 18th U of I Board of Trustees approval

Construction will be bid in 3 packages

- Urbana (& contiguous Champaign County)
- Champaign (Savoy & contiguous Champaign County)
- University area
 - Lincoln Ave. to RR tracks, University to Windsor



Project Update - 2

Interviewing for first FT grant employee

- Will manage outreach, private easements & GIS

Close to advertising for second position

- Will concentrate on outreach and easements team

DCEO \$3.5 M grant paperwork pending

- Looking to finalize before November 2nd

FTTP Technology RFP almost ready

- Need to select before engineer can start FTTP design

Policy Board & Tech Committee meeting

- Have approved RFP materials

Urbana city staff involved



Looming Issues

Organizational structure for operations

- Attorneys engaged and discussing options

IRU agreements with all entities

- Must have organizational entity first

Finalize Backbone Design

- Review is 1st order of business for Engineering firm

FTTP Technology Choice

- Needed for Engineering firm to design FTTP

Finalize Statements of Work and sub-awards

- With both cities



Looming Issues - 2

“Rural” easements

- One-time offer of UC2B services in exchange for private easements where needed for rings
- May need to move outer perimeter of backbone rings to city-owned streets in some or all areas
- Urbana Public Works is researching extend of issue

Marketing campaign

- Brandon is leading marketing sub-committee effort
- Not too soon or too late
- Segmented approach has been suggested



Construction Timetable

Dec 2010 - March 2011 - Engineering

- Three Bid Packages

March - April 2011 - Bid & Award Construction

- Urbana, Champaign & University

May - November 2011

- Build 7 Rings
- Build fiber to many curbs
- Connect Anchor Institutions, Homes & Businesses

March - November 2012

- Complete construction to curbs
- Complete remaining fiber drops



Construction Timetable - 2

January - July 2012

- Create FTTP plan for the rest of the community

August - September 2012

- Get approvals and financing for next phase

October - November 2012

- Hire engineer for next phase

February - March 2013

- Hire contractors for next phase

April 2013 - November 2017

- Build FTTP to entire community



Questions

smeltzer@illinois.edu
(217) 244-3835
www.UC2B.net