1. UC2B is the short name for Urbana-Champaign Big Broadband, which is a collaboration between the cities of Urbana and Champaign, the University of Illinois and several other public and private partners. Together they received some $22.5 million in Federal stimulus funding from the Department of Commerce and another $3.5 million in funding from the State of Illinois Department of Commerce and Economic Opportunity to build the UC2B fiber-optic network in the Urbana-Champaign community. Local organizations pledged another $3.4 million to the $29.4 million project.

2. There are a total of nine local organizations that pledged money to help build the UC2B fiber-optic network. 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 Champaign-Urbana Mass Transit District - $339,103 Champaign Telephone Company - $587,698 Urbana-Champaign Sanitary District - $20,000 Lincoln Trail Libraries System - $30,000 Total of all Local Matching Funds: $3,352,149

3. There are two parts of the UC2B project. The first part will build seven underground fiber-optic rings that span the entire community. The rings will connect some 200 Community Anchor Institutions to each other, to the Internet and to local residents and businesses. The rings also form the backbone for the second part, which is a Fiber-to-the-Premise (FTTP) network in 11 Census Block Groups that qualified for the federal Broadband Technology Opportunities Program (BTOP) grant - based on a door-to-door survey that was conducted in 2009.

4. To qualify for grant funding for the Fiber-to-the-Premise construction, we had to show that less than 41% of the households in a Census Block Group subscribed to a broadband service. The Federal government defined the minimum speeds that qualified as “broadband”. The 11 local Census Block Groups that had less than a 41% broadband subscription rate in the door-to-door survey are the areas that qualified for the grant.

5. All households, businesses and the Community Anchor Institutions that subscribe to UC2B fiber-to-the-Premise (FTTP) service will have a small fiber-optic cable installed into their building. That fiber cable will come from a small hand-hole at the edge of their property in the public right-of-way in front of their building. Typically the hand-holes will be small - 12 inches by 17 inches - and look like this:

6. Fiber-optic cable is by far the safest technology to bring into your home or business. The fiber strands themselves only transmit light, not electricity. Should lightning hit the UC2B fiber cable that comes into your home, the energy might melt the cable, but no electrical charge will be carried into your home. The fiber cable entering your home or business contains no metal that could conduct electricity. Your computer, Blu-ray player, game console or TV will be safe from lightning that strikes your UC2B fiber cable. Fiber-optic cables also do not transmit any electromagnetic radiation as they provide service.
7. Once the fiber-optic cable enters your home, it is connected to an Optical Network Terminal (ONT), which converts the pulses of light on the fiber strand to low voltage electrical signals that can be transmitted over standard Ethernet cables to your computer, Blu-ray player, game console, TV or any other Internet-enabled device. Signals from the fiber strand can also be transmitted within your home or business by your very own secure Wi-Fi wireless network. That will allow you to use a UC2B connection with a Wi-Fi capable smart-phone, an iPad, netbook, laptop computer or any Wi-Fi enabled device.

8. UC2B’s primary service will be an Internet / Intranet data service. Over that connection you will be able to browse the Internet, download movies and music, stream movies and music - (including HD movies with great quality), use a Voice-over-IP (VoIP) phone service, have video chats and conferences, and do a host of other things. While many of those activities will be over the Internet, there will also be many things that you or your family can do over the UC2B Intranet. Your children will have practically unlimited bandwidth from your home to any local school or library. If your employer is a UC2B subscriber, you can have practically unlimited bandwidth from your home to your place of work. If your place of worship is a UC2B subscriber (and many are slated to be), you may be able to watch services or participate in study groups from your home. If you have a medical condition that requires regular monitoring, you may be able to have that done remotely over UC2B, saving you the time and cost of an office visit across town. With a home automation system, you would be able to control your lights, appliances and your thermostat while away from home, saving on utility costs.

9. UC2B service rates will be affordable, but even the families with the least expensive service - $19.99 a month - will have practically unlimited bandwidth to the local schools, libraries and Community Anchor Institutions. The UC2B Policy Board has not yet finalized the pricing for the full range of services, but we know that even the least expensive UC2B service will allow families to stream HD movies or TV shows and browse the Internet at the same time. Video chats and conferences will be detailed and clear. Sending family photos or movies to your relatives across town or across the country will be faster than you have ever experienced from home.

10. You will be able to sign up for UC2B service where you will be using it - in your home or business. Canvassers for UC2B will call on every household and business in the 11 grant-eligible Census Block Groups. They will explain the service options, the costs and answer all questions. The good news is that for the first 2,500 households or businesses in those 11 Census Block Groups that subscribe, (there are a total of roughly 4,850 households and businesses in those areas) the installation of UC2B service will be totally paid for by the grant. UC2B subscribers will need to pay for the monthly charges, but the installation for the first 2,500 UC2B subscribers will be totally free.

11. The canvass in the very first FTTP service areas will be late this fall. Services in those first areas will begin in February or March of 2012 - depending on the weather and the availability of fiber-optic cable. The canvass for the rest of the UC2B FTTP service areas will be next spring with services being activated later in the summer and fall of 2012.

12. For More Information
Please visit: www.UC2B.net - or send e-mail to: info@UC2B.net - or call: (217) 366-8222 (UC2B)

UC2B Policy Board meetings are open to the public and are held on the 1st and 3rd Wednesdays of the month in the Champaign City Council chambers from Noon to 1:30.