

Asheville “Wi-Fi City”

Wally Bowen

Mountain Area Information Network

Asheville, North Carolina

March 25, 2008

State and National Endorsements

e-NC Authority

*“Wi-Fi City” on program for Southeast Information and
Communication Technology Conference in Raleigh*

April 16, 2008

New America Foundation

Institute for Next Generation Internet

San Francisco State University

Asheville “Wi-Fi City”

1. Our request:

- * An official endorsement of the “Wi-Fi City” vision by the Asheville City Council.
- * No city money
- * No city obligation to use the network

2. Why do we need an official endorsement?

- * To add credibility with national foundations and corporate funders.
- * To leverage non-local funding for community and economic development
- * To create “buzz” among high-tech firms seeking big-city amenities for their employees.

“Wi-Fi City” Benefits

1. Security, Mobility, Reliability:

- * Home-health delivery
- * On-location film production
- * Construction sites
- * Tailgate markets
- * The “Virtual Office”
- * “Rolling Wi-Fi” on city buses
- * Small-business friendly
- * Green Economy support

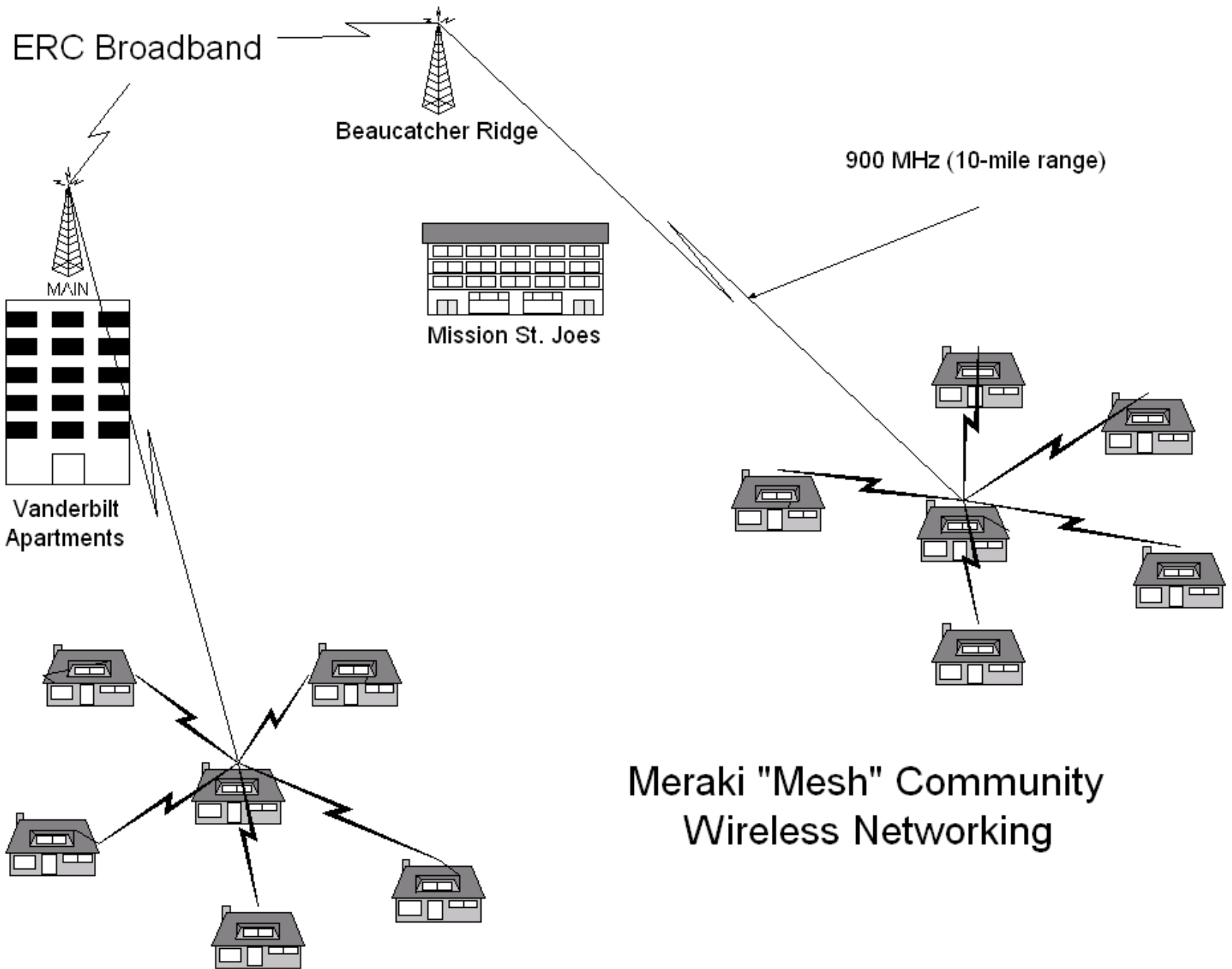
2. Digital Divide, Education, Job Training

- * Affordable and keeps dollars local
- * Focus on underserved neighborhoods
- * At-risk youth (\$100 laptop)
- * After-school programs
- * Community Center access
- * Media production & youth mentoring

3. Municipal Applications:

- * Public Safety/Disaster Recovery, 75%
- * Building Inspection, 52%
- * Public Access, 50%
- * Public Works, 45%
- * AMR/Utilities Mgt. 43%
- * Education, 39%
- * Asset Tracking, 34%
- * SCADA, 35%
- * Parking/Traffic, 23%

(Source: MuniWireless.com, 2007)



ERC Broadband

Beaucatcher Ridge

900 MHz (10-mile range)

Mission St. Joes

Vanderbilt
Apartments

Meraki "Mesh" Community
Wireless Networking



Currently Operating Meraki "Mesh" Neighborhoods

Ivy St./UNCA

Max St./S. Charlotte

Lenior St./Kenilworth

Haywood Rd./Westwood

Haywood Rd./Sandhill Rd.

Biltmore Ave./Charlotte St.

Joyner Ave./Riverview

Montford

Mount Clare

[overview](#) | [usage data](#) | [device list](#) | [map view](#) | [analyze](#) | [account activity](#)

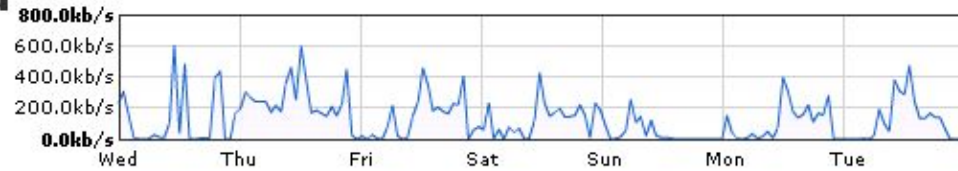
M@IN_on_Haywood_Rd

Network usage over the last week

Block

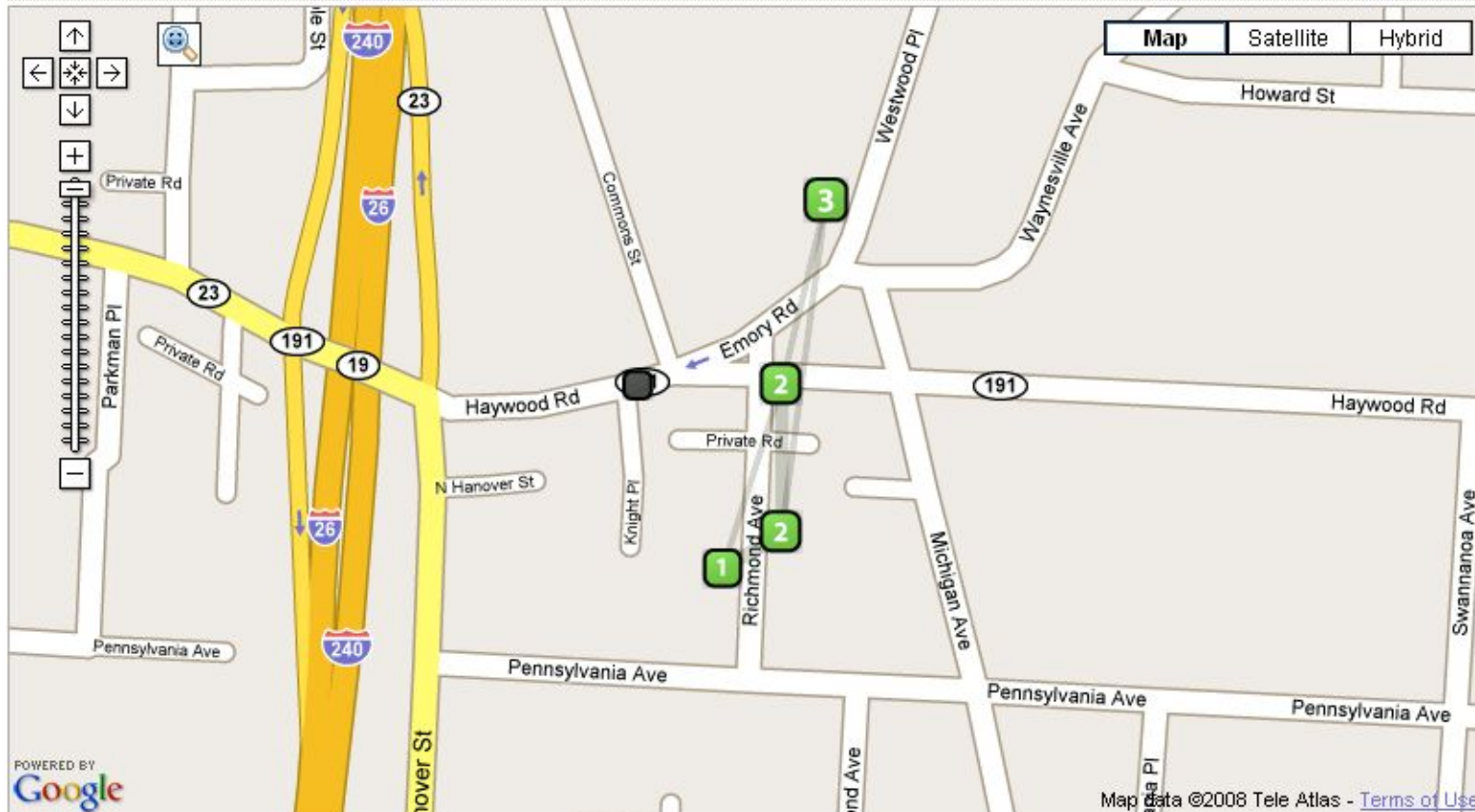
8 users downloaded 1.2 GB in the last day.

Total of 371 users transferred
74.017959 gigabytes



Map of Users per Meraki Device

Point at a node to see its route to the Internet; move nodes in [map view](#)



[overview](#) | [usage data](#) | [device list](#) | [map view](#) | [analyze](#) | [account activity](#)

M@IN_on_Lenoir_St

6 users downloaded 806 MB in the last day.

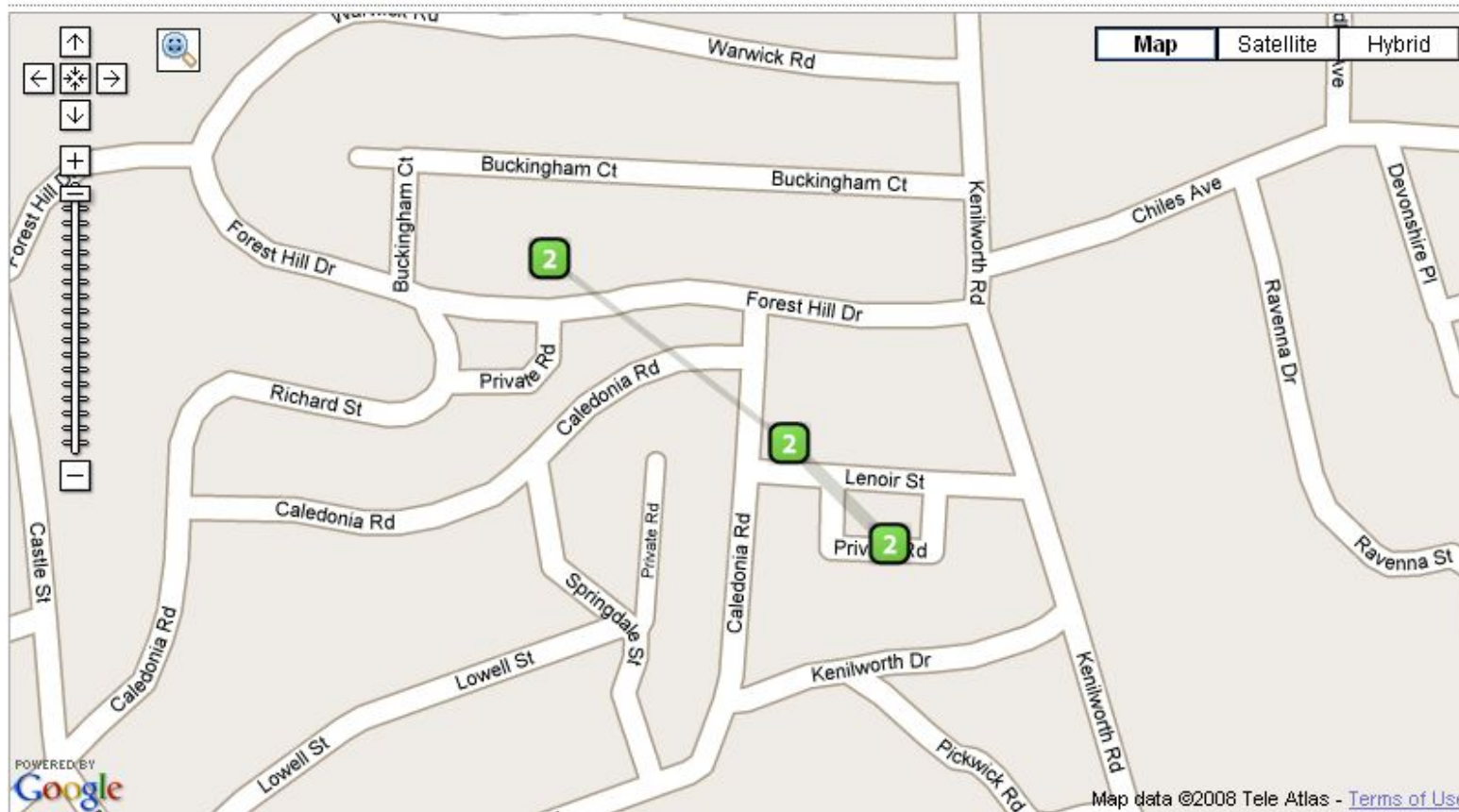
Total of 100 users transferred 106.085932 gigabytes

Network usage over the last week



Map of Users per Meraki Device

Point at a node to see its route to the Internet; move nodes in [map view](#)



Monitor

Configure

Support

Select a Network: M@IN_on_Mount_Clare

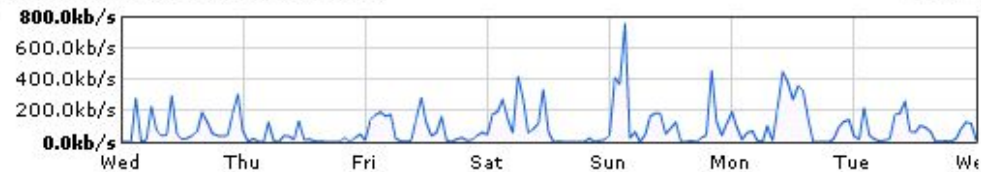
[overview](#) | [usage data](#) | [device list](#) | [map view](#) | [analyze](#) | [account activity](#)

M@IN_on_Mount_Clare

22 users downloaded 762.7 MB in the last day.

Total of 175 users transferred 34.602140 gigabytes

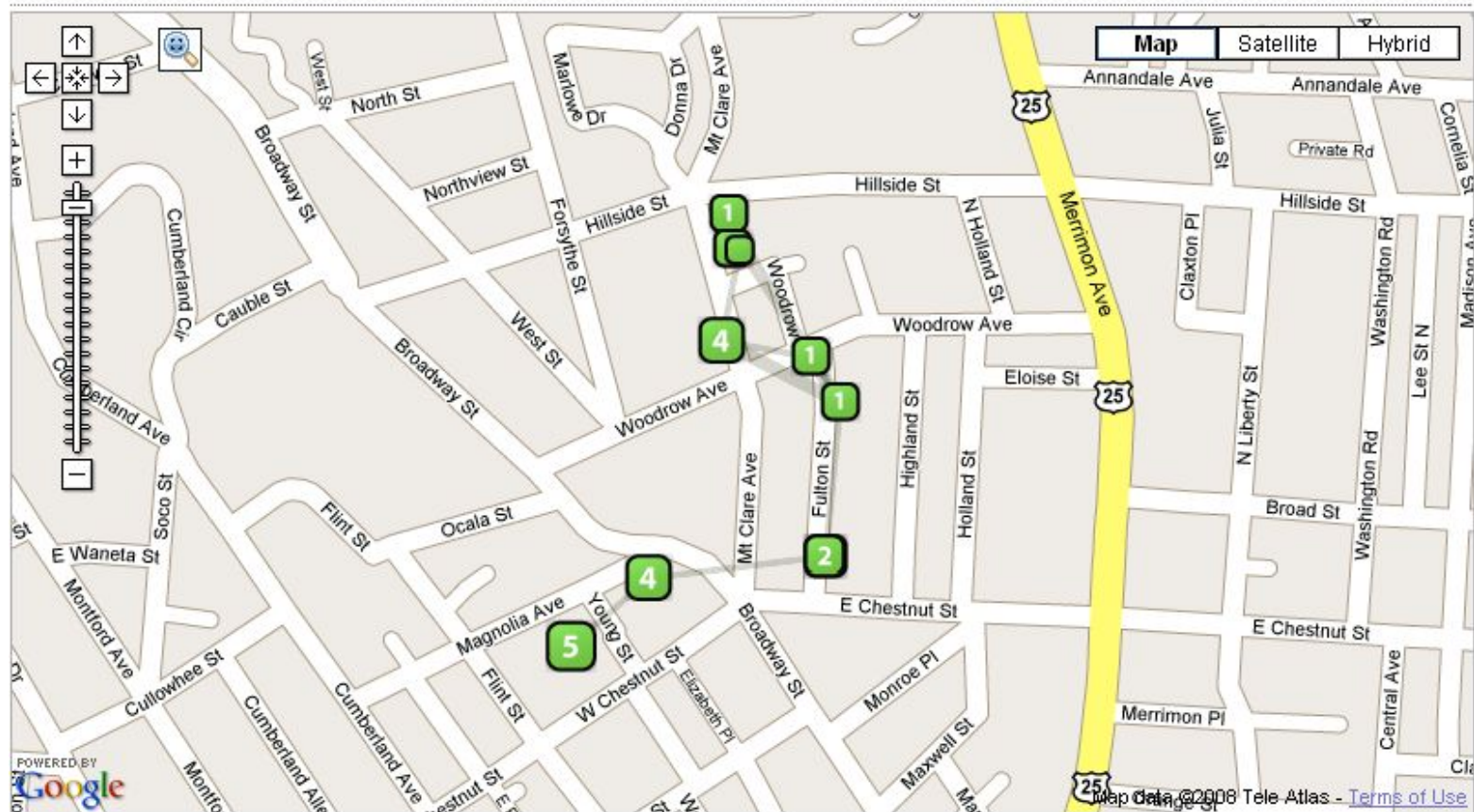
Network usage over the last week



Block

Map of Users per Meraki Device

Point at a node to see its route to the Internet; move nodes in [map view](#)



Free the Net SF

Total of 65281 users transferred
16.495050049 terabytes

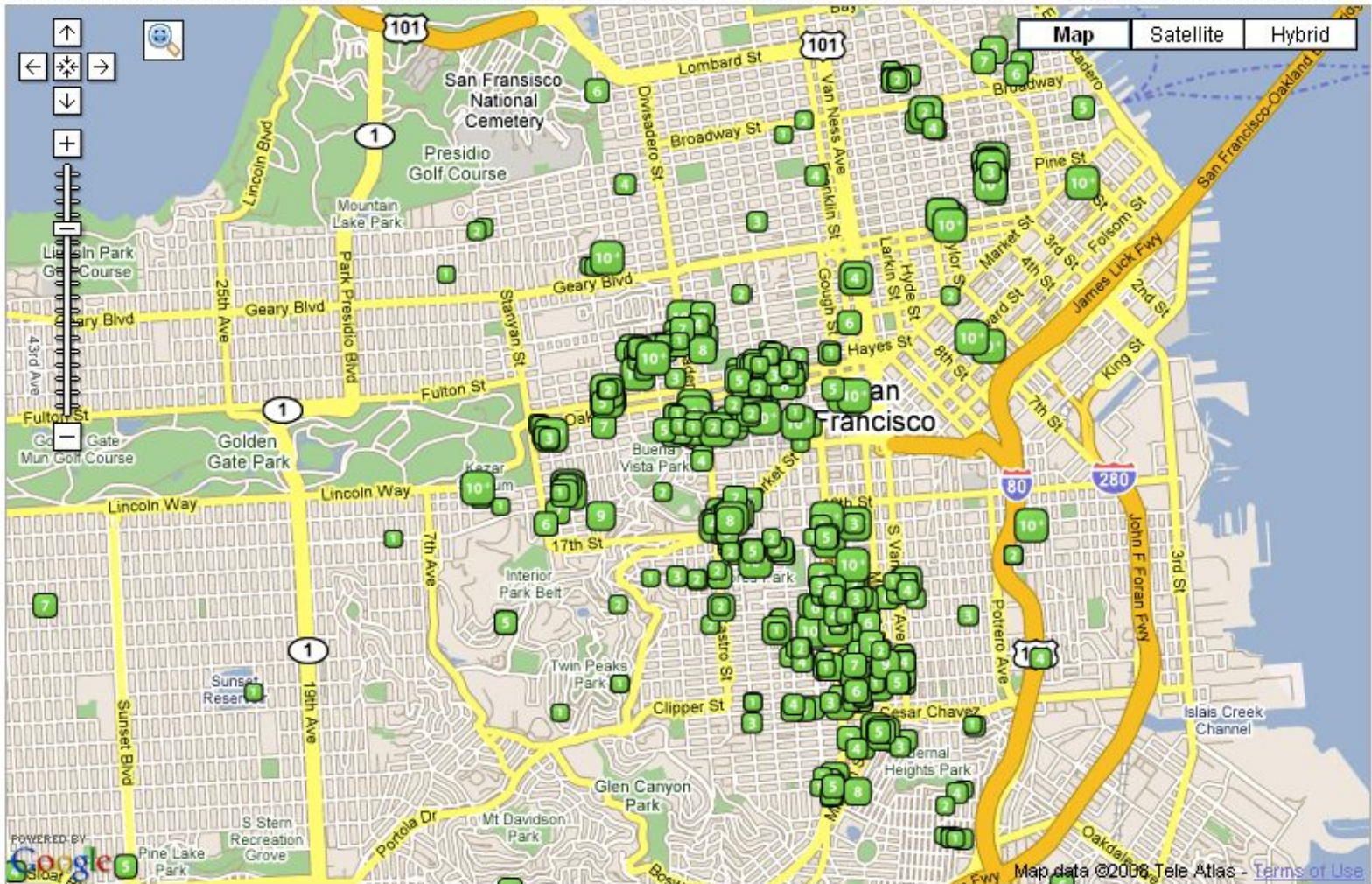
Help out at <http://sf.meraki.com>

Total users connected

Block



Map of Users per Meraki Device



Solar-Powered Wireless Node



Legislative Priorities

U.S.: Wireless Innovation Act of 2008

N.C.: E-NC Internet Connectivity/
PEG Channels (SB-1068)

www.main.nc.us

Asheville City Council
Planning and Economic Development Committee

4:00 p.m., March 12, 2008
Economic Development Office Conference Room

D R A F T Minutes

Present: Councilwoman Robin Cape, Chair; Councilman Bill Russell, Vice Mayor Jan Davis; Staff Members: Sam Powers, Julia Cogburn, Blake Esselstyn, Shannon Tuch, Bob Oast, Gary Jackson, and Nikki Gunter

Guests: Gregory Walker Wilson, David Brown, Jim Fox, Ray Denny, Wally Bowen, Carol Groben, Dave Alexander, Mike Tolley, Jane Hansel, Ron Hillabrand, Carol Groben, Linda Kinney, and Geoffrey Bullock

The Planning and Economic Development Committee met on March 12, 2008 at 29 Haywood Street at 4:00pm. Chair Robin Cape called the meeting to order.

1. Approval of Minutes

The minutes from the previous meeting, held February 13, were approved as written.

2. Presentations

Request from Mountain Biz-Works

Gregory Walker-Wilson made a request to the City of Asheville for \$100,000 to support a new space for Mountain BizWorks. The attached sheet outlines in detail his request to the city and why he believes this would be a good return on the investment and beneficial for small business in the community. Councilman Russell made a motion to include Mountain Bizworks for Council's consideration in the budget process. The motion was approved unanimously by a 3-0 vote.

HUB and EDC Funding Requests

David Brown asked the City to help with several projects, including but not limited to a space for RENCI in downtown Asheville, endorsement of City Council as a "Green" City and promoting Asheville as a National Center for Alternative and Complementary Medicine would help promote jobs in the area. Additionally, funding for EDC and HUB projects was requested. The other funding requests can be found on the attached power point handout. Vice Mayor Davis made a motion to recommend the \$50,000 in the current budget be encumbered for the 2008-2009 contribution to the EDC. The motion was approved unanimously.

Jim Fox then presented on the RENCI engagement site in downtown Asheville. He proposed the Civic Center site as a possible idea. Discussion among Council and staff about the feasibility of this idea was talked about. Councilman Davis and Councilman Russell both agreed this would not be a good location. No motions were made. Staff agreed to continue reviewing possible downtown locations.

Mountain Area Information Network

Wally Bowen presented on his non-profit ISP. His handout explains that he is seeking City Council's endorsement of his use of the term "municipal wireless". Discussion about the term municipal among council and staff ensued. Councilwoman Cape made a motion to move this to council for further discussion. The motion was approved unanimously.

3. Updates

Woodfin Annexation

Bob Oast gave an update on the Woodfin Annexation (see attached map). He emphasized that creating proper spheres of influence to eliminate future conflict and continuing the dialogue of cooperation through preliminary topographical planning most practical. Discussion ensued among Council and staff. Although there were some concerns that the divide on the road as drawn is not ideal, it was agreed this was preferable to a property divide.

4. New Business

Swannanoa Incorporation

Carol Groben, representing Swannanoa residents, opened the discussion and spoke about the feasibility study done in 2006, and the community was overwhelming in favor of the incorporation. The committee is currently in the process of applying in the General Assembly. Mike Tolley and Geoffrey Bullock spoke about the benefits to the community and the boundaries currently drawn. Dave Alexander concluded that they currently have 23% of the population in favor of this petition. Other townships and counties have given resolutions in favor, and the committee would like Asheville City Council's support in this matter.

Blake Esselstyn presented on behalf of the City Planning Department concerning staff analysis of the Swannanoa Incorporation. As outlined by the attached maps, it seems that some parcels of land are divided (bottom of Map D), there are still a large number of areas that are mostly undeveloped (he noted development was at 51%), there is a marked difference between the sewers above I-40 and below I-40. The Swannanoa Committee noted that much of the undeveloped areas are sold and ready for development.

City Manager Gary Jackson inquired about the spheres of influence and future negotiations about boundary agreements. The group replied as far as they can tell, this will be where the boundary ends, but they are amenable to discussion

after the application process is complete. Discussion regarding the date that this would be heard at council ensued. No motions were made. Mr. Jackson said he would be in touch regarding an agenda date.

5. Old Business

None

6. Public Comment

None

The meeting was adjourned at 7:00pm.