

# WiFi – wireless internet access

- Provides wireless access to the internet for both mobile and stationary users
- Affordable alternative when broadband services are not available or is too expensive
- Areas with WiFi availability are viewed as technology friendly

# WiFi Access for Downtown Scottsdale – Wildfire Broadband

- **Downtown network**

- Chaparral to Osborn, 68<sup>th</sup> Street to Miller
  - 16-20 antennas mounted on traffic signal poles
- Access speed of 512Kbps
  - Higher access speeds available

- **ASU Scottsdale Technology Center**

- McDowell to Belleview, Scottsdale to Hayden
- Operational before construction of 1<sup>st</sup> building completed

# WiFi Business Models

- **Subscription** (Cupertino, CA; Santa Clara, CA)
  - Reduced fees in some zones (Philadelphia)
- **Free access**
  - Advertising fees cover costs (Sunnyvale, CA)
- **Hybrid of free access and subscription**
  - Free access with advertising or no advertising for monthly subscription
- **Wholesale to ISPs/WISPs only**

# Municipal/City-wide WiFi Deployment Models

- Municipal funding
- Municipal driven without municipal funding
- Market driven opportunities

# Scottsdale's Market Driven WiFi Opportunity

- Allows non-exclusive use of ROW
- Annual fee for use of each streetlight pole and traffic signal pole in the ROW
  - Fee is based on coverage area
- Service provider determines coverage areas
  - Market demand will drive coverage areas
- Bond or line-of-credit for antenna removal
  - Lesson from Metricom

# Antenna Installation Example



## **BelAir200 WiFi antenna:**

- **Diameter = 12 inches**
- **Height = 18 inches**