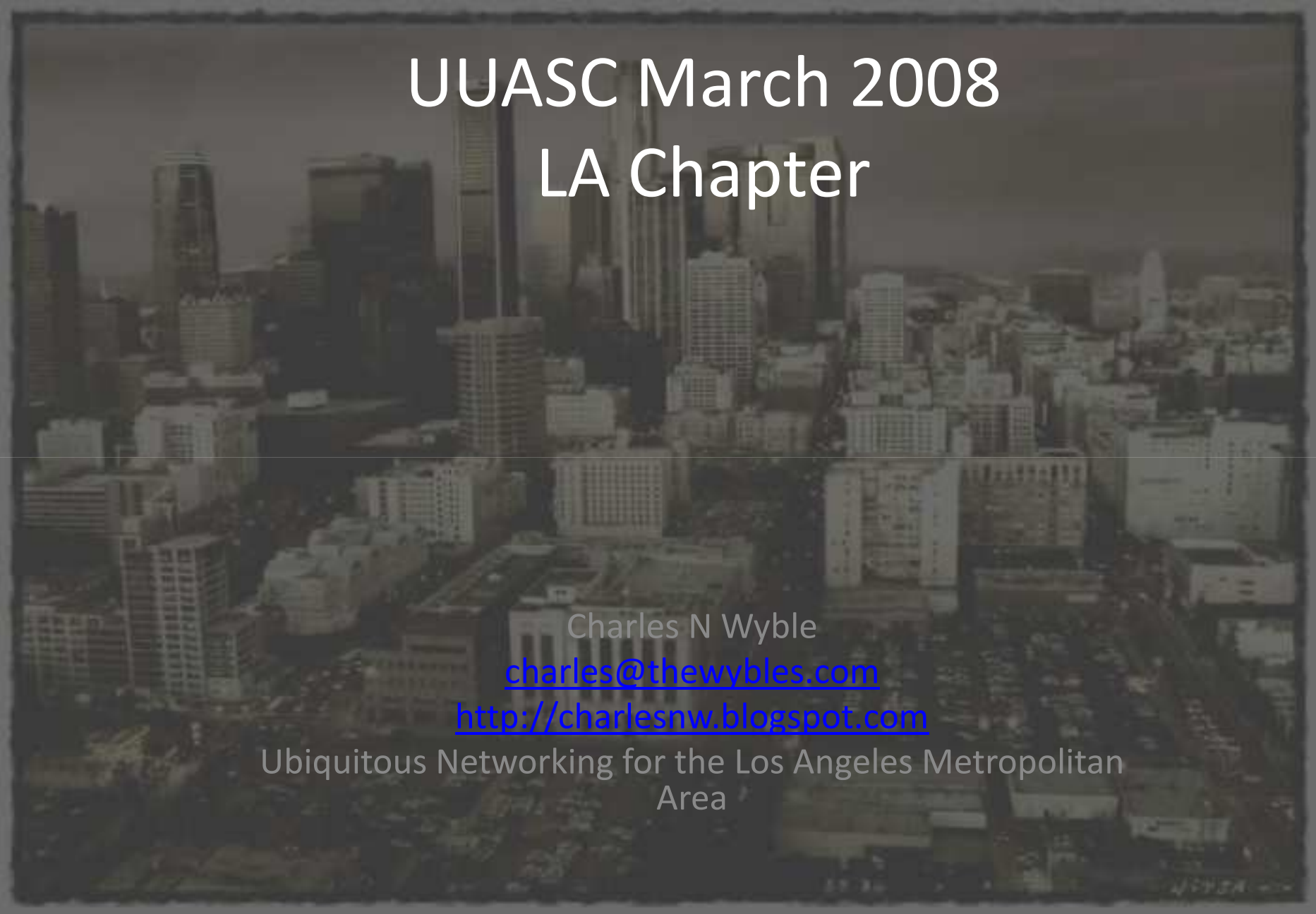


An aerial photograph of a city skyline, likely San Francisco, with the word "Applause" overlaid in large white text. The image is dark and has a grainy, artistic quality. The word "Applause" is centered horizontally and vertically, with a bounding box of approximately [161, 360, 831, 585]. The background shows various skyscrapers and buildings, with the word "Applause" being the most prominent feature.

# Applause



# UUASC March 2008 LA Chapter

Charles N Wyble

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<http://charlesnw.blogspot.com>

Ubiquitous Networking for the Los Angeles Metropolitan  
Area

# Some History

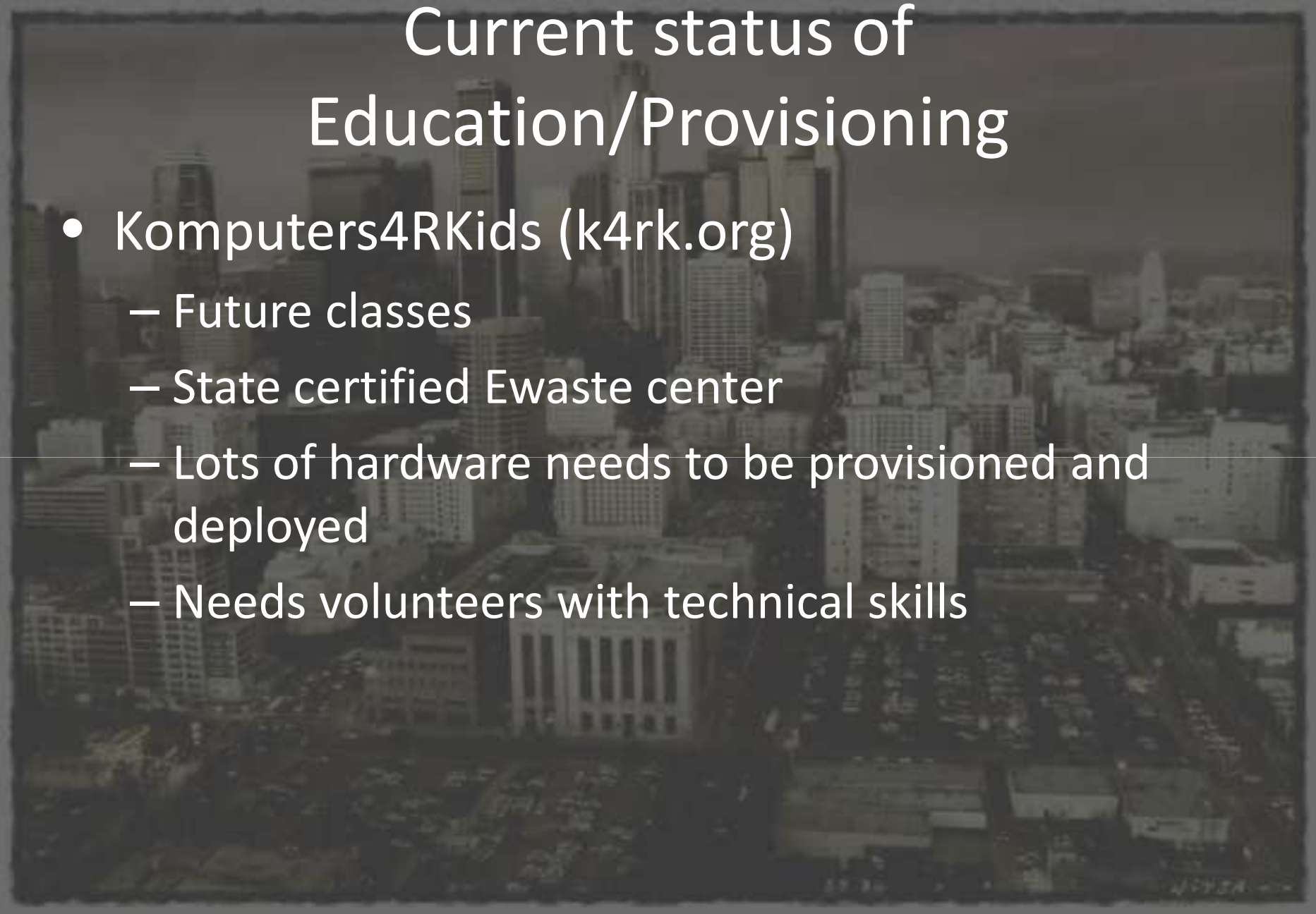
- Linux Network Management (October 2007 UUASC-LA)
  - Technical
    - Touched on Wifi
    - Lots of network services
    - Interested in building massively scalable systems through automated means.
  - Business
    - VmWare appliances (ocean sunrise)
    - Sell services/support

# Some more history

- Linux in Education (December 2007 UUASC-OC)
  - Technical
    - Touched on LTSP/auto deployment
    - Clustered/network file systems
  - Business
    - Low cost Linux classes at the schools
    - Higher cost on site classes

# A tiny bit more

- Website testing tools (February 2008 UUASC-OC)
  - Technical
    - Covered load testing, functional testing
    - Touched briefly on Security
    - Some people asked about non web site testing tools.
    - See my blog post on the subject at <http://charlesnw.blogspot.com/2008/03/non-website-testing-tools.html>
  - Business
    - Some ideas for an automated testing product.
    - Will be revealed at a later time



# Current status of Education/Provisioning

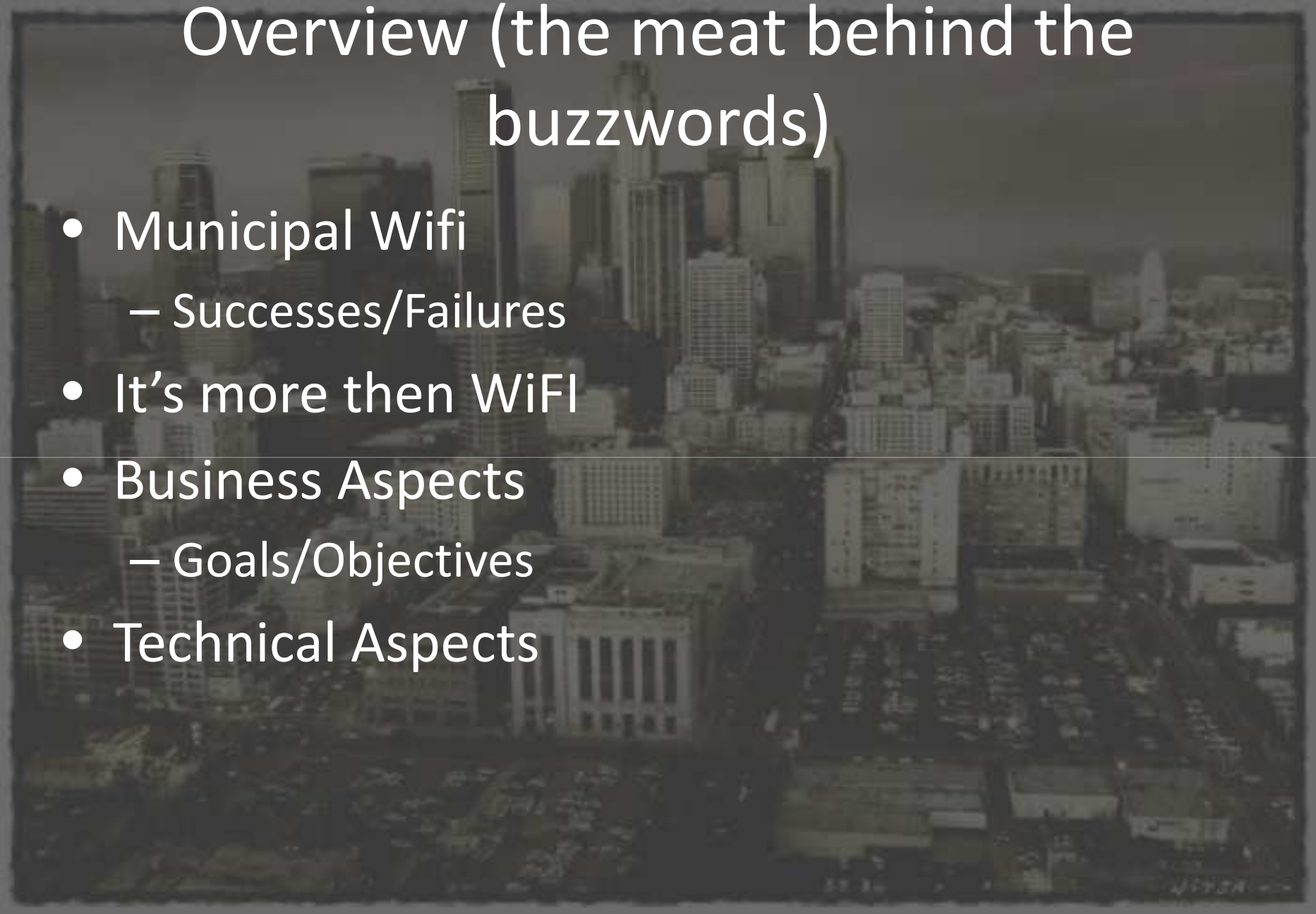
- Komputers4RKids ([k4rk.org](http://k4rk.org))
  - Future classes
  - State certified Ewaste center
  - Lots of hardware needs to be provisioned and deployed
  - Needs volunteers with technical skills

# Common Themes (I actually did have a point) 😊

- Co-op model (or MLM scheme you decide)
- Systems management
  - Standalone product
  - Commodity on the trailing edge
  - Incubate people who are innovating
- Education
- Silicon Valley South

# Plan to throw one (or 5) away

- SOCALWUG list mentions LA wifi meeting
- Lots of good connections
- Formation of Red Badger project
- Light bulb moment
- Perfect place/environment/opportunity to build a massively scalable system with open source software



# Overview (the meat behind the buzzwords)

- Municipal Wifi
  - Successes/Failures
- It's more than WiFi
- Business Aspects
  - Goals/Objectives
- Technical Aspects

# Where we are (Municipal WiFi)

- Successes/Failures
  - Where? How? Why?
    - <http://www.muniwireless.com/>
  - The East
  - The Heartland
  - The West

An aerial photograph of a city skyline, likely San Francisco, with numerous skyscrapers and buildings. The image is darkened to serve as a background for the text.

# Where we need to be (Ubiquitous Access)

- It's more than WiFi
  - [WiMAX](#)
  - [EDGE](#)
  - [EVDO/HSDPA](#)
- It's more than Wireless (fiber, ethernet)
- It's all IP(v6) all the time
- It's all about services services services and more services

# Business Aspects

- What do we want to accomplish/provide?
- How do we survive? (hint its not the light pole approach)
- Do we just provide bandwidth?
- How about Value Added Services?
  - VoIP service
  - IPTV
  - General ISP services (e-mail can be used as network identifier)

# What we provide

- Core network services
- Wireless Appliance
- Core Nodes
- Revenue Sharing

# What we want the community to provide

- VoIP
- IPTV
- E-mail
- Web
- <your app here>

# Tech Bits

- Directory Services
  - FreeIPA
- RADIUS
- Network Access Control
- QOS/Traffic shaping
- Network Health/Monitoring
  - SNORT/ClamAV
  - Spam filtering

# More Tech Bits



- Provisioning
  - Servers
  - Routers
- Massively scalable VoIP
  - SIP Express
  - Asterisk/Freeswitch

# Keeping the bad guys away

- Terms of service
  - How do we enforce them?
  - What should they be?





# Future

- Near Future
  - April – SGVLUG
  - May – BarCamp San Diego
- Mid term Future
  - USENIX/LISA
  - UUASC?

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# Applause