Scope of Work

- Configuration
- Extra Conduit
- Identify Honolulu Standard Light Poles
- Recommendations
Today’s Situation

- Demand Skyrocketing for Broadband Services
- Year End 2006 = 50 Million **Households** US with Broadband
  - HDTV, Internet, Dial Tone, Meters, Other
- Uses
  - Health, Education, Business, Digital Homes, Public Safety, Arts, Sciences, Utilities
Smart Community Defined

“Where local government, business, education, healthcare and the public understand the potential of information technology and form alliances to work together to use and transform the community.”

Intelligent Communities Forum
What Does a SC Look Like

- Coalition of Business, Education, Government and Citizens
- Active Involvement Essential
- Ubiquitous Communications Access
Foundation

4 Tier Architecture

- Application Services Tier
- Hardware Tier
- Computing Infrastructure
- Network Infrastructure
Service Topologies

- Dial Up
  - Incumbent Phone Company
- DSL
  - Incumbent Phone Company
- CATV
  - Incumbent Cable TV Provider
- Wireless
  - Various Providers – Licensed and Unlicensed
    - WiFi, WiMax, GSM, CDMA, etc.
How Did We Get Here?

- Household Requirements
  - Dial Tone
  - Internet
  - Security
  - Monitoring
  - Video

- Public Safety Requirements
  - Traffic Management
  - ACAMS
  - Lighting
  - First Responders
Original Assumptions No Longer Valid

- Incumbent Telco is Only Dial Tone Provider
- Incumbent Cable Company is the only Video Provider
- Wireless is Just for Mobile Telephones
- Public Safety Systems Come Later
Available Options

- Dynamic Conduit Master Plan
- Light Pole Master Plan
- Plan for Wireless
- Plan for Public Safety
- Easement/License/Lease Agreements Transfer to City
- Developer/Community Hybrids
- Ignore – Let the Community Deal with IT
Sample Conduit Configuration

Legend
1 = Telco
2 = County
3 = Cable
4 = Signaling
5 = Private
Wireless Example
Sample Cabinets/Vaults

- What Do You Want in Your Community
  - One Set for Every Provider
Potential Towers
Wireless Antenna
Stealth Tree Antenna
Recommendation

- Install Additional Conduit
  - Work with City on Dedication/Easement Plan
- Master Plan Communications Equipment
- Enter Into an Agreements with a Wireless Internet Carriers for Co-Location Sites
- Work with City on Public Safety Communications Needs
- Identify Specific Mobile/Wireless Tower Sites
- Standard Lease/License/Easement Options with C&C
  - Centralized Application Process
  - Fee Schedules
  - Who pays for what
- Obtain Agreements with Providers/City
- Light Pole Master Plan – PUC/HECO/City
- Planning/Permitting/Zoning/SUP/
- Land Conveyance Issues
Incredible Opportunity to Create the Development of the Future/Present

Commend You for Your Vision