Santa Clara County Cities Association
Board Meeting 11/2/06
Joint Policy Collaborative

Wireless Telecommunications

Presentation:
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<u>CITY PLANNING PERSPECTIVE</u>

1. **Most communities are split between:**
    a. Those that want good coverage
    b. Those that live near proposed sites
2. **Common concerns?**
    a. Health impacts
    b. Visual and aesthetic impacts
    c. "I have 4 bars, why do they need another site?"
3. **Low hanging fruit is gone**
4. **Difficult sites remain**
    a. Those closest to residential neighborhoods
5. **What are typical concerns for a City?**
    a. Sites out of scale with adjacent area
    b. Not well screened or disguised
    c. Antennas getting larger and more of them vs. smaller and fewer
    d. Perceived inflexible design options by carrier
6. **How do carriers design sites?**
    a. RF Engineers are architects of network
    b. They decide where new sites need to be located, and at what height, based on computer modeling
    c. RF Engineers want the perfect network
    d. As a result, RF Engineers often demand antenna heights and locations which are difficult to attain.
7. **Design results:**
    a. Carrier wants a specific design
    b. Community desires for sites to be unobtrusive
    c. Decision-makers caught in the middle
8. **How to meet all goals?**
    a. Sound policies and guidelines
    b. Clear dissemination of information
    c. Follow through with requirements
9. **Problems can be:**
    a. Poor definition of what is acceptable to city
    b. Poor follow-through on design
    c. Most difficult areas to permit are where service is needed

    d. Confusion of issues by citizens
        i. Health concerns

10. **Design ideas**
    a. Well placed antennas on existing structures
        i. Sports field lights
        ii. PG&E towers
        iii. Buildings
            1. Façade mounted
            2. Roof mounted
        iv. Parking lot lights
        v. Microcells on power poles
        vi. Co-location on monopoles
        vii. City towers
    b. New structures
        i. Tree poles
        ii. New monopoles
        iii. Flag poles
11. **Design issues**
    a. Design shown on photosimulations and drawings aren't always what is built
    b. Slim-line poles don't easily allow co-location
    c. Placement of coax cables
    d. Back-up generators
    e. Tree pole final design

SOLUTIONS

1. **Goals of carriers and communities need to intersect**
2. **Carriers need to listen to their own planners**
    a. Where and how sites ate located and designed based on city criteria and feedback
3. **Jurisdictions need to create clear guidelines and follow them**
4. **Community needs to be involved**
    a. Clear dissemination of information
    b. Outreach meetings
        a. Who runs them?
        b. What is the expectation?
5. **Consistency**
    a. Create policies and procedures that allow carriers to find sites
    b. Make most difficult approval in the sensitive areas
    c. Create a high bar of expectations
        i. If met, approval should be granted
    d. Apply policies consistently
6. **The wireless industry can do amazing things**
    a. Design
    b. Location

    c. Placement
7. **Why does it take so long for decisions?**
    a. Project is a unique proposal which doesn't fit with normal review
    b. Planners in industry accept the RF Engineer design
    c. Planners in government inexperienced in field
    d. Carriers are not a part of the community, and the personnel change often
        i. No consistency
        ii. Difficult follow-through
8. **Demand follow through on design**
    a. Flag pole has a flag
    b. Tree looks like a tree
    c. Appropriate design elements included
    d. Coax placement

CONDITIONS OF APPROVAL

1. **Industry not good at landscaping**
    a. Carriers do not have landscaping service as part of team
    b. Contracted out
2. **RF Emission readings completed**:
    a. Before site is built
    b. After site is built
    c. Ensures FCC guidelines are met
    d. Gives neighbors relief
3. **Before and after noise readings, if necessary**
4. **If requiring a 5 year review**
    a. What is expectation of it?
    b. Don't expect carriers to follow the 5 year review timing
5. **Add conditions relating to construction period**
    a. Tensions may still be high
    b. Contractors on ground may be unaware of issues
    c. Ensure all conditions are met
6. **Make sure building inspectors check key elements**
    a. Height
    b. Equipment location
    c. Fencing/screening
    d. Landscaping
    e. GPS antennas
    f. Generator location