

**POLICING VERTICAL COMMUNITIES:  
COMING TO A SUBURB NEAR YOU**

**by**

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The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

The views and conclusions expressed in the Command College Futures Project and journal article are those of the author, and are not necessarily those of the CA Commission on Peace Officer Standards and Training (POST).

## **POLICING VERTICAL COMMUNITIES: COMING TO A SUBURB NEAR YOU**

A Dave Berg comic strip from the 1970's depicted a situation in which a husband and wife were discussing population growth as they were out for a drive in their car. As their conversation drew to a close, one asked the other where would all the people fit, as if a solution seemed unfathomable. The irony of their conversation was delivered by the strip's closing frame, which depicted the pair driving through a vast, undeveloped region. The notion may exist to the average Californian that the Golden State has vast expanses of developable land. This can be reinforced as one drives through such places in California as the Mojave Desert region on State Route 58 or Interstate 15; Interstate 10 east of the Inland Empire towards the Arizona border; or even Interstate 8 east of San Diego. A drive on U.S. Highway 101 through Ventura County suggests that even in areas adjacent to metropolitan areas, ample open and available land still exists.

This perception is misleading. California's booming population is on a collision course with the amount of developable land. This will fundamentally affect the ways future communities are designed, and will include the introduction and proliferation of high-density, high-rise "vertical" communities in small and medium-sized towns and cities. This transformation will affect the strategies needed to deliver effective policing services during the next decade. Small and medium-sized police departments must first recognize that "verticalization" is likely to be on the event horizon for their cities and towns. As this realization becomes clearer, these departments should explore a number of long-term strategy considerations that may better prepare them for the impacts that high-rise communities can have upon them when they are established. Implementation of successful strategies can afford opportunities to affected agencies to address crime and

life quality matters on the *front end*, discouraging crime while promoting life quality and community policing. In order for this to happen in the future, thought should be invested in the matter now.

### Limited Land + More People ⇒ Verticalization

The 2000 U.S. Census recorded 155,959 square miles of dry land in California, which at first seems to support the notion of abundant space. Significant portions of this land are held by a wide variety of interests including various branches of the federal government.<sup>i</sup> The Bureau of Land Management reports it currently regulates fifteen million acres of public land in California (about fifteen percent of the state's surface), two and one-half million acres of privately owned land and a trust of nearly six hundred thousand acres of Native American tribal lands.<sup>ii</sup> The United States Department of

Agriculture's *2003 National Resource Inventory Report* stated that of California's 101.5 million surface acres, 46.6 million acres were reserved federal land, 17.75 million acres were rangeland, 13.9 million acres were forested, 9.5 million acres were cropland and 5.9 million acres were already developed. By 1996 only about eight million acres of available urban raw land existed in California.<sup>iii</sup> Though this may sound like a lot of remaining territory, it actually means that about



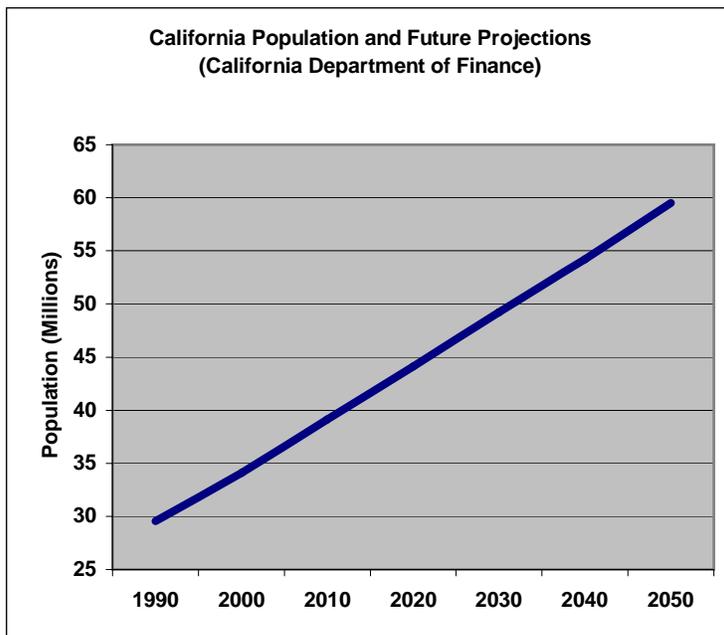
**California is facing a rapidly diminishing amount of developable land.**

ninety-two percent of the state's surface area has already been spoken for, and only a fraction remains available to accommodate future growth and development.

In May of 2007, the California Department of Finance estimated the state's population at 37.7 million people – roughly one out of every eight persons in the United States.<sup>iv</sup> CADOF also projected that the state's population will climb to thirty-nine million people by the year 2010, and surpass forty-four million by the year 2020.<sup>v</sup> Projections note that California will have 59.5 million people by the year 2050.<sup>vi</sup> It is easy to see that California's growing population threatens to deplete the state's developable land, since people must go somewhere.

Where are they going? Earlier this year, the University of California at Santa Barbara's Economic Forecast Project indicated that people are moving to areas outside of established metropolitan centers.<sup>vii</sup> Suburban communities are well on their way to developing their own urban centers in the near future. California's population growth is

evident in a number of counties and cities that were previously considered as being rural, suburban and agricultural or were otherwise not associated with metropolitan living. The California Department of Finance's 2007 list of *Ten Fastest Growing California Cities Based on Percentage*



**Population projections reinforce the notion that the growing population will greatly influence the design of California's future communities.**

*Change*<sup>viii</sup> shows that almost all of those that made this list currently are not considered

to be high-density urban centers.<sup>ix</sup> CADOF's 2006-2007 *Ten Fastest Growing California Cities Based on Numeric Population Change*<sup>x</sup> also lists a number of the same cities, as well as cities that share common geographic areas, such as the Inland Empire and Southern California's high desert region. This list also indicates that small and medium-sized cities in California are experiencing accelerated population growth.<sup>xi</sup> This suburban growth trend presents a new spin on the characteristics of future communities. In February 2008, futurist Joel Kotkin related during a U.C. Santa Barbara Economic Forecast forum that with the influx of more people, suburbs will undergo significant transformations. He is not the only one espousing this trend, which will be discussed later.

The rankings from <http://www.citymayors.com>'s "Fastest-growing U.S. cities between 2000 and 2006" go a step further by illustrating that a number of California cities that made the above referenced CADOF lists are experiencing sustained growth.<sup>xii</sup> A number of medium-sized, sub-metropolitan cities (defined as incorporated cities having one hundred thousand or more persons) rank on this list, with thirty-one California cities in the top 100 cities in terms of *numerical* population growth.<sup>xiii</sup> An increasing number of Southern California communities are now contiguous to each other, greatly limiting outward expansion. In many cities, infill development may be the only alternative to no growth at all.

It is clear that a suburban boom is in progress. The population increase of the United States' western region projects a 135% development in suburban areas in this region between 1990 and 2050.<sup>xiv</sup> The shift to suburbia began decades ago with the development of multi-lane interstates linking metropolitan centers to outlying suburban

areas and small towns.<sup>xv</sup> Increased dependence upon automobiles and the development of increasingly fuel-efficient engines and vehicular amenities has made the workforce better equipped to live outside of metropolitan centers. The popularity of compressed and flexible work schedules has also mitigated inconveniences caused by commuting. Suburban areas are also generally perceived as being more desirable and safer than cities. This is demonstrated by considerable growth in cities such as Thousand Oaks and Simi Valley CA, which have repeatedly held the titles of being among the nation's safest cities.<sup>xvi</sup> People will continue to move to these smaller cities, adding fuel to the frenzy of suburban sprawl, which progressively burdens these cities as space becomes limited. This will force fundamental changes in municipal design.

#### Concepts Lending to Verticalization

*Smart growth, mixed-use development, and open space conservation* concepts are gaining momentum in the wake of California's situation and will contribute to civic transformation.<sup>xvii</sup> *Smart growth* has become a broadly used term, as land management initiatives and planning strategies grow inversely proportional to the amount of remaining developable land. *Smart growth* advocates compact, transit-oriented, walkable, bicycle-friendly land use, including mixed-use development with a range of housing choices. It may be viewed as an urban planning and transportation theory that concentrates growth in the center of a city to avoid urban sprawl.<sup>xviii</sup> *Mixed-use* refers to the practice of allowing more than one type of use in a building or set of buildings. In zoning terms, this may mean a combination of residential, commercial, industrial, office, institutional, or other land uses.<sup>xix</sup>

*Conservation of open space and agricultural resource* movements are also becoming formidable factors in the development of future.<sup>xx</sup> In some areas, initiatives designed to curb urban sprawl or preserve agricultural resources restrict outward expansion and development. Ventura County, for example, has its *Save Open Space and Agricultural Resources* initiative, a countywide commitment to establish and enforce city urban restriction boundaries.<sup>xxi</sup> The initiative requires that urban development outside of municipal boundaries be subject to voter approval. As a result, thousands of acres of farmland and open space are now practically off-limits to development.

All three land use concepts advocate high-density development, including high-rise buildings, since these structures maximize the use of land. The term “high-rise building” can have a wide variety of definitions, but a generally accepted definition used by most building engineers, inspectors, and architects is: a building that is seventy-five feet or greater in height, equating to about seven stories.<sup>xxii</sup>

A long list of impacts caused by the collision of more people and less space can be drawn up, but one evolving dynamic is apparent: this situation will force Californians to fundamentally change how its communities are designed. Joel Kotkin noted that communities will evolve into self-sustaining, pedestrian-friendly enclaves, in which people will live and shop near work.<sup>xxiii</sup> In sync with Kotkin’s prediction, the National Institute of Crime Prevention’s President, Art Hushen, stated in 2007 that a new lifestyle shift dubbed “vertical new urbanism” may soon find itself to be en vogue in America.<sup>xxiv</sup> Hushen added that well-planned high-rise communities, complete with pedestrian-friendly mixed-use environments could help restore a national concept of community that has declined over the years.<sup>xxv</sup> In the coming decade, communities will find themselves

expanding in a vertical fashion, introducing high-rise business and residential space in separate and mixed-use settings.

This means that a number of cities and towns in California will face the transitional “flash point” of introducing vertical structures within their boundaries. Some California cities on the edge of this transition include larger cities such as Sacramento and San Jose, and medium-

sized cities such as Oxnard and Irvine. Port Hueneme, a seaside community of twenty-four thousand, recently rebuffed a developer’s attempt to establish a forty-six story mixed-use tower. Despite



Hueneme’s rejection of the project, it is significant in that small towns are included in attempts to “go vertical.”

**A conceptual illustration of the upcoming *Village* development in Oxnard, California. Oxnard is among a number of medium-sized cities that will soon experience an introduction to mixed-use vertical communities. (Image provided courtesy of *The DalyOwensGroup*)**

### “Vertical” Challenges to Law Enforcement

As California continues to grow, law enforcement agencies in fledgling “vertical” cities will feel significant effects of change, particularly in those small and medium-sized cities that transform from horizontal low-structure communities into vertical ones. The perceived link between high-density, high-rise populations and crime will concern law

enforcement agencies tasked with policing them. Past experience, such as those in the embattled high-rise public housing projects in eastern U.S. cities during the 1960's through the 1990's, serve as a lesson learned when developing strategic plans to effectively police these future communities.<sup>xxvi</sup> Law enforcement agencies must anticipate the challenges presented by burgeoning high-rises, and develop policing strategies to meet them.

Newly formed high-rise towns and cities may face a host of problems concerning how the police, accustomed to serving “horizontal” environments, will perform their duties. Challenges will run a gamut ranging from fundamental methods of how the structures are policed to training and equipment requirements, operational tactics, emergency response and evacuation procedures, and impacts of increased response times. The successful incorporation of a variety of technologies into policing strategies will also play a role. Successful, proactive strategies will occur at the *front end* of these challenges, beginning with police involvement in planning processes. Every effort must be made to establish a safe environment from the moment the high-rises are occupied.

### Strategies for Consideration

An eight-person panel convened in Oxnard, California in mid-2007 to examine future impacts of vertical community proliferation in small and medium-sized cities. Members were comprised of professionals from fields of property management, private security, firefighting, high-rise development, crime prevention, law enforcement / community policing, and land use / open space conservation. Panelists discussed potential vertical community policing and problem-solving strategies (referred to as V-

*COPPS*) for the future. The panel identified land use and community design trends consistent with those noted by Kotkin and Hushen. The panel also cited additional relevant emerging trends including:

- Increased stakeholder involvement in the community planning process
- Increased resident concern for security
- Increased emphasis upon privatization of public safety components
- Increased reliance on technology

The group concluded that cities facing vertical transformation should develop public safety strategies that are reflected in developer agreements and municipal planning processes. The decisions made and actions taken from this point will largely dictate the vertical community profile that will in turn provide an indicator of what public safety demands such urban centers may present. Panelists recommended that law enforcement agencies should also be vigilant of emerging technologies and their application to public safety, since its successful use in high-rises can be an effective tool to both prevent and solve crime. Additionally, the panel discussed the notion that municipal governments and police departments should develop partnership-oriented strategies, in which police departments consider collaboration with high-rise communities and private industry interests such as those from security and technology fields.

The points made by the panel serve to suggest strategies that may assist law enforcement to provide effective, community oriented policing services in future high-rise environments. Amongst the most critical strategies will be involvement in the planning and development process, deploying the appropriate training and equipment, and deploying technology as it emerges to aid in the work of policing vertical communities.

## Planning and Development: Investments in High-Rise Public Safety

Throughout California, police agencies engage in varying degrees of effort in the municipal planning process.<sup>xxvii</sup> Police executives should, if they are not already, allocate resources to participate in future city planning and development efforts. Public safety officials should also immerse themselves in dialogue with local community development agencies well before the crafting of developer agreements. An astute police chief will interact and team up with other municipal department heads and present the case for the need of additional police resources when new development projects approach an event horizon. A police department that becomes familiar with and involved with municipal planning will better position itself to consider and voice public safety issues when high-rises come to town.

Outside of municipal processes, formal education such as that offered by UCLA's School of Public Affairs' Department of Urban Planning (among many other programs at many other colleges) should be encouraged for police managers. For example, urban planning studies may add additional managerial perspective to the role that police have in public safety, particularly in law enforcement - a profession that typically places emphasis on education in criminal justice, law, and to some degree business (especially for management positions). Having added perspectives on a police department's command staff would be a good thing, since it would lend to additional ways of viewing both issues and solutions. A police department that is well-versed in such disciplines may be better suited to effectively represent police interests in planning matters, including the processes centering upon high-rise developments that are coming to town.

## Training and Equipment: Tools for High-Rise Responses

Police departments anticipating the emergence of high-rise communities should develop training programs tailored to respond to these environments. Training should cover a wide spectrum of topics, including:

- Familiarization of building infrastructure including elevator / attack elevator operation, fire door operation, and associated safety equipment / infrastructure
- Access control systems
- Surveillance camera operations
- Evacuation procedures, including occasional live drills
- Tactical responses to high-rise buildings
- Terrorist opportunity mitigation
- Roof operations, especially in those jurisdictions that operate air units
- High-rise crime prevention through environmental design
- Community policing in vertical environments
- Disaster preparedness
- Physical fitness

Training should not be limited to tactical operations, but also to a further understanding of infrastructure, hardware, and equipment found in such buildings. Such training can help prevent the loss of life, as past examples have provided future lessons. In the 1988 Los Angeles First Interstate Bank Building fire, the sole fatality was a building engineer who did not use proper elevator procedures.<sup>xxviii</sup> In a 1993 incident inside San Francisco's forty-eight story *101 California Street Tower* is also instructive. In this tragedy a deranged gunman shot fourteen people in a law firm, fatally wounding eight before committing suicide. Responding officers faced a number of challenges, particularly with stairwell operations, fire doors, and communications. A San Francisco Police Officer who responded to this incident recently related that a number of lessons arose from the event, but emphasized that law enforcement agencies need to train their personnel specifically for responding to high-rise critical incidents.<sup>xxix</sup> In addition to

emergency responses, appropriate training would also enhance service during more routine calls. Officers aware of resources the building offers (surveillance, access points, etc.) will be more effective in any aspect of their core service to protect the public.

Academic coursework and familiarization of municipal processes, particularly for those involved in police supervision and management may also lend towards developing lasting high-rise policing strategies. A greater understanding of community design beyond law enforcement-driven CPTED concepts can help shed more light upon strategies for policing future high rises. City staff and planning commissioners should be offered opportunities to attend law enforcement oriented courses, such as Sacramento Police Department's newly-developed *High Rise Crime Prevention Through Environmental Design*, which made its debut in June of 2007. Such courses would be beneficial to such staff by educating them of the myriad of issues facing law enforcement in the face of inevitable vertical community proliferation; their added understanding and buy-in to high-rise public safety concerns can only lend toward designing better vertical communities.

### Technology's Role in Vertical Policing

Technology will play a significant role in high-rise communities, since numerous emerging and developing technologies have a foreseeable public safety role in this medium. Law enforcement agencies in soon to be affected cities should to pay particular attention to technology related, but certainly not limited to:

- Radio Frequency Identification
- Communications technology (radios, repeaters)
- Surveillance and closed circuit monitoring
- Wireless and mesh networks (wireless feeds and communications systems)

- Perimeter security systems (sensors, alarms)
- Access control systems (smart locks, smart cards, biometrics)
- Automated parking systems
- Facial, object, and behavioral recognition (license plate readers, and gait analysis technology)
- Weapons and explosives detection systems
- Anti-terrorism and blast mitigation systems
- Personalized VTOL aircraft (such as the Moller Skycar<sup>®</sup>, which is in early developmental stages<sup>xxx</sup>)

Technology is not the magic bullet that will prevent and solve all crime, but if properly figured into high-rise communities it can be a tool for preventing crime and increasing the feeling of security in future communities. For example, the use of high-rise automated parking systems may also become more widespread in the future. In addition to space conservation, automated vehicle parking systems are also viewed as an effective deterrent to crimes such as vehicle burglary and vehicle theft.<sup>xxxi</sup> Also for consideration are technologies related to radio communications within high-rises, which has often been problematic – as the *101 California Street Tower* incident showed.

Law enforcement agency communications managers should be vigilant of improved radio frequency repeater products or technologies that can address high-rise radio reception “dead spots” and should be prepared to explore other types of emerging technology, such as wireless mesh network communications. This developing technology allows concurrent video, voice, and even data transmission, making it ideal for municipal, public safety, and industrial networks. Mesh networks for surveillance cameras and access control systems may soon be fundamental for both crime prevention and response augmentation in high-rise environments; a conceptual example includes integrated surveillance systems that can conceivably feed audio-visual footage from a high-rise environment directly to patrol units or handheld personal data assistants.

Whether applied strictly to communications within high-rises, or applied for law enforcement use throughout a jurisdiction, technologies such as this should be evaluated for their application feasibility.

The bottom line is that it is important for law enforcement strategists to realize that given that high-rise communities will be a new entity in a number of cities and towns, these jurisdictions should exploit the opportunity of their pre-arrival to include crime-fighting / prevention technology solutions early in the game.

### Reflect, then Look Ahead!

Regardless of whether a city is currently considered to be sub-metropolitan, suburban or even rural, many will develop vertical urban centers during the next decade. Though this is not a future event for those larger, urban environments where high-rises have long been a part of the landscape – it certainly is for those smaller towns and cities that have yet to experience the transition. High-rise proliferation can change sleepy one-horse and two-stoplight towns into highly populated urban centers in which the small town feeling can all but erode if left unchecked. Without proper foresight into the impacts they will have upon the delivery of not only basic police responses, but also to community policing strategies, the effectiveness of policing these post-vertical communities can be jeopardized. Police departments should recognize the value of their participation in community design, the utility of technology, and the need for high-rise oriented training and equipment. If agencies do not, or choose not to recognize the impacts that high-rise proliferation will have upon their towns, they risk becoming reactive, occupying forces surrounded by multi-storied crime problems. However if we

realize the benefit of both past learned lessons and the future challenges, we can better equip law enforcement agencies with improved opportunities police them.

## End Notes

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<sup>i</sup> United States Department of the Interior, Bureau of Land Management:

<http://www.blm.gov/ca/st/en/info/iac/mapindex.3.html>

<sup>ii</sup> United States Department of the Interior, Bureau of Land Management:

<http://www.blm.gov/ca/st/en.html>

<sup>iii</sup> Landis, John. "Raising the Roof: California Housing Development Projections and Constraints, 1997-2020." (University of California at Berkeley, Institute of Urban and Regional Development, 2000), Page 4.

<http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1028&context=iurd>

<sup>iv</sup> California Department of Finance: "State Adds Almost 470,000 in 2006; 2007 Population Nears 37.7 Million." May 1, 2007. pg.1.

<http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E1/documents/e-1press.pdf>

<sup>v</sup> California Department of Finance: Table 1: County Growth Projections by Decade.

[http://www.dof.ca.gov/html/DEMOGRAP/ReportsPapers/Projections/P1/documents/P-1\\_Tables.xls](http://www.dof.ca.gov/html/DEMOGRAP/ReportsPapers/Projections/P1/documents/P-1_Tables.xls)

<sup>vi</sup> Ibid.

<sup>vii</sup> Bruce, Allison. "New kind of community on horizon." Ventura County Star: February 22, 2008. <http://www.venturacountystar.com/news/2008/feb/22/new-kind-of-community-on-horizon/>

<sup>viii</sup> California Department of Finance: "State Adds Almost 470,000 in 2006; 2007 Population Nears 37.7 Million." May 1, 2007. pg.3.

<http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E1/documents/e-1press.pdf>

<sup>ix</sup> Beaumont topped the list (with 21.2 percent growth between 2006 and 2007) followed by: Imperial, Lake Elsinore, Porterville, Lathrop, Lincoln, Fontana, San Jacinto, Orange Cove and Adelanto (placing tenth with 9.2 percent growth).

<sup>x</sup> California Department of Finance: "State Adds Almost 470,000 in 2006; 2007 Population Nears 37.7 Million." May 1, 2007. pg.3.

<http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E1/documents/e-1press.pdf>

<sup>xi</sup> The top ten include Fontana, Santa Clarita, Irvine, Victorville, Visalia, Lake Elsinore, Porterville, Chico, Hesperia and Lancaster.

<sup>xii</sup> "The Fastest Growing American Cities": <http://www.citymayors.com/statistics/us-cities-growth-2007.html>

<sup>xiii</sup> [http://www.citymayors.com/gratis/uscities\\_growth.html](http://www.citymayors.com/gratis/uscities_growth.html)

<sup>xiv</sup> Lori M. Hunter, Manuel De J. Gonzalez G, Matt Stevenson, Kimberly S. Karish, Richard Toth, Thomas C. Edwards, Robert J. Lilieholm and Mary Cablk. "Population and Land Use Change in the California Mojave: Natural Habitat Implications of Alternative Futures." *Population Research and Policy Review* #22, (2003), *Kluwer Academic Publishers. Printed in the Netherlands. Pg. 377.*

<http://ella.gis.usu.edu/bioregionalplanning/media/PRPRMojave.pdf>

<sup>xv</sup> Hushen, Art. Lecture: "Why High Rises: Why Communities Choose to Build Vertical and Not Horizontal" (High Rise Policing Strategies and Crime Prevention Though Environmental Design seminar. Sacramento, California). June 21, 2007.

<sup>xvi</sup> Morgan Quitno Awards website, listing America's safest and most dangerous cities:

<http://www.morganquitno.com/citprev07.htm>. Click on individual annual press releases for additional information.

<sup>xvii</sup> Ventura County Civic Alliance. June 7, 2007 Compass Vision Workshop, sponsored by the Ventura County Civic Alliance. This sentiment was also expressed by the research panel that convened in Oxnard, California on June 28, 2007. Also: Hushen, Art. Lecture: "Why High Rises: Why Communities Choose to

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- Build Vertical and Not Horizontal” (High Rise Policing Strategies and Crime Prevention Though Environmental Design seminar. Sacramento, California). June 21, 2007.
- <sup>xviii</sup> [http://en.wikipedia.org/wiki/Smart\\_growth](http://en.wikipedia.org/wiki/Smart_growth)
- <sup>xix</sup> [http://en.wikipedia.org/wiki/Mixed-use\\_development](http://en.wikipedia.org/wiki/Mixed-use_development)
- <sup>xx</sup> Ventura County Civic Alliance. June 7, 2007 Compass Vision Workshop, sponsored by the Ventura County Civic Alliance.
- <sup>xxi</sup> <http://www.soarusa.org/>
- <sup>xxii</sup> Craighead, Geoff. High Rise Security and Fire Life Safety, 2<sup>nd</sup> ed., (Woburn, Massachusetts: Elsevier Science, 2003), pg. 1.
- <sup>xxiii</sup> Bruce, Allison. “New kind of community on horizon.” Ventura County Star: February 22, 2008. <http://www.venturacountystar.com/news/2008/feb/22/new-kind-of-community-on-horizon/>
- <sup>xxiv</sup> Hushen, Art. Lecture: “Why High Rises: Why Communities Choose to Build Vertical and Not Horizontal” (High Rise Policing Strategies and Crime Prevention Though Environmental Design seminar. Sacramento, California). June 21, 2007.
- <sup>xxv</sup> Ibid.
- <sup>xxvi</sup> For example, Chicago’s Rockwell, Horner, and Ickes public housing developments, which were plagued with crime and life quality problems, as described in Susan J. Popkin’s The Hidden War: Crime and the Tragedy of Public Housing in Chicago. Rutgers University Press; Piscataway, New Jersey, 2000: pg. 174.
- <sup>xxvii</sup> This statement is based on the author’s observations of an informal survey through the California Police Chiefs Association, in which agencies were asked about the extent that their participation in the planning process. Answers ranged from little to no participation to significant.
- <sup>xxviii</sup> U.S. Department of Homeland Security, U.S. Fire Administration National Fire Data Center, Fire Investigations Program: “Interstate Bank Building Fire, Los Angeles, California.” May 1988, pg. 10. <http://www.usfa.dhs.gov/downloads/pdf/publications/tr-022.pdf>
- <sup>xxix</sup> Dowke, Jay. Lecture: “A Case Study: 101 California Street, San Francisco” (High Rise Policing Strategies and Crime Prevention Though Environmental Design seminar. Sacramento, California). June 19, 2007.
- <sup>xxx</sup> <http://www.moller.com/>
- <sup>xxxi</sup> Examples of automated vehicle parking systems can be seen on the following websites: Urban Parking Concepts <http://www.urbanparkingconcepts.com/automated-parking-system.cfm> ; Popular Mechanics [http://www.popularmechanics.com/blogs/technology\\_news/4213198.html](http://www.popularmechanics.com/blogs/technology_news/4213198.html) ; and Robotic Parking <http://www.roboticparking.com/corporate.html> .