

THESES AND PROFESSIONAL PROJECTS ABSTRACTS

MASTER OF CITY AND REGIONAL PLANNING, CAL POLY SAN LUIS OBISPO

Although in the last couple of years the CRP Department has been implementing the new MCRP curriculum which now offers a final comprehensive planning studio as an option for students who prefer not to do a thesis or an independent project, the flow of quality individual research work continues. The following master's theses and projects were defended in 2007, and both the CRP department and Cal Poly's Kennedy Library hold copies for consultation.

Planning for Safety in the City of Desert Hot Springs

Jeffrey Ryan Anderson

In the fall season of 2006, the City of Desert Hot Springs contracted the CRP Department for the update of the General Plan. This professional project builds on the General Plan update process for the Noise and Safety Element, with a focus on safety standards and specific safety issues present in Desert Hot Springs. The purpose was to identify and inform the city, decision makers, and the community of the natural and man-made safety hazards in the city. The report includes analysis of five major safety areas: geotechnical, flooding and hydrology, hazardous and toxic materials, fire and police protection, and emergency preparedness. This report concludes with a recommendations section.

Maglev In Southern California: Opportunities and Constraints Associated with a "Seamless" Airport Decentralization System and Regional Commuter Rail System

Robert Betts

This study assesses the development of a seamless air and rail system to decentralize commercial passenger aviation activity in a regional scale network. "Seamless" is an environment in which the passenger does not feel like he/she leaves the system in order to transfer transportation modes. Based on the decentralization model, this study assesses the use of high-speed magnetic levitation (maglev) rail to connect nine different commercial aviation facilities spread out over 38,000 square miles in Southern California. The study provides a broad assessment of opportunities and constraints to enable planners and engineers to gain initial insight into how such a system would function. The findings recommend that a successful system would include planning at a regional scale led by a governing body composed of multiple stakeholders from multiple jurisdictions, and proactive planning and design.

The Bayside Sanctuary

Craig Thomas Chinn

This thesis explores the likelihood of developing an integrated art, cultural, and entertainment district in Oakland, CA. Oakland was originally chosen for its central location, political context, and economic vitality. Site analysis, design planning theory, and case studies helped to identify an 80-acre site near Jack London Square along the oceanfront, and it is entirely owned by Oakland's Port Authority. A design program, conceptual plan, and conceptual imagery were developed to provide basic guidance for the project titled "The Bayside Sanctuary," a mixed-use development with a heavy accent on the interface with the water. There was strong enough evidence to indicate that the development of this project could flourish as an integrated arts, cultural, and entertainment district.

State of Conservation Report for the Land Conservancy of San Luis Obispo County: A Land Conservation GIS-Based Decision Support Model

Catherine Lambert

This professional project is a “state of conservation” analysis of San Luis Obispo County completed for the Land Conservancy of San Luis Obispo County. The project’s unit of analysis is the landscape unit, created by the Land Conservancy, and the county is divided into one hundred discrete units. The project considers three inputs: targeted natural resources, developmental pressure, and current conservation efforts in the county. The Natural Resource and Developmental Pressure inputs consist of variables selected by the committee members based on their professional experience and knowledge. Once the variables were determined, points were distributed within each variable and a weight was assigned to each. ESRI ArcGIS was used to create weighted overlay models based on the inputs. The results identify major trends for conservation in the county, and a series of maps were created with the results. The information can be used by the Land Conservancy to facilitate strategic decision-making and the selection of conservation priorities.

Assessing the Effects of the “Big Three” Corporate Ownership on Colorado Ski Resort Community Development

Josh LeBombard

This study analyzed rates of overall growth, density, gentrification, and affordability in and on the periphery of seven Colorado ski resort communities (Aspen, Breckenridge, Crested Butte, Steamboat Springs, Telluride, Vail, and Winter Park) to determine whether their physical and socio-economic development patterns are affected by ownership of all the ski resorts by only three corporations. The study provides a structure in which to analyze ski resort community development patterns and practical data associated with developmental patterns. The results suggest that corporate ownership does cause a significantly higher rate of residential growth in and around the communities, significantly larger home sizes, and a significantly higher median home price. The findings will help the communities to further examine existing policies, growth rates, compact growth, second home ownership, and affordable housing in order to determine their adequacy. This work will contribute to future research of the relationship between corporate control of ski resorts and the general impacts on their communities.

The Regulation of Signs: An Evaluation and Revision of a Sign Ordinance

Jesena Lopez

The regulation of signs is a challenging part of municipal planning. Signs come in all shapes, sizes and colors and may be located in places such as a window, on a building or on a pole. Signs are also a form of communication that trigger First Amendment protection. Without regulation, excessive signage may clutter the streetscape, reduce community aesthetics, affect traffic safety or infringe on free speech protection. Municipalities must regulate signs within constitutional confines of the Amendment and with a careful balance of (1) the need for businesses and others to communicate with the public, (2) the need for the public to receive that communication and (3) community planning goals that relate to environmental aesthetics and traffic safety. This project reviews substantive issues in sign regulation and outlines a model of sign ordinance as the criteria to evaluate the City of Lompoc sign ordinance (May 1974). This project concludes with a proposed sign ordinance that is a user-friendly, easy to understand, implement and enforce.

Implementing an Appropriate Affordable Housing In-Lieu Fee Process for the City of Arroyo Grande, Calif.

Tyler J. Montgomery

This project's client is the City of Arroyo Grande which, like many cities in California, has an inclusionary housing requirement. For all new residential construction of more than a single unit, the City requires that a certain percentage of units is dedicated as affordable for low-income and moderate-income households. For developments of between two and six dwelling units, an affordable housing in-lieu fee may be used to satisfy the requirement. The City has no ordinance for assessing this fee, and this study determined the most appropriate method for determining it while maintaining conformance with the city's 2003 Housing Element. Based on a literature review, an evaluation of affordable housing fee practices in other jurisdictions in central and southern coastal California, and their policies' effectiveness and Housing Element compatibility, the present study recommends that the affordable housing in-lieu fee be based on a specific percentage of the difference between the median sale price of homes within the City for the previous calendar year and the sale price for a similar-sized unit affordable to a moderate-income household.

Finding Common Ground for Development: A Design Proposal for Arroyo Grande

Tamera Pullen

As urban growth and the need for housing consume natural resources and cultural history, cities struggle to balance simultaneous growth and preservation. This is a topic of heated debate among stakeholders, who often become opponents in the process. This project develops a design proposal for an area in Arroyo Grande, Calif. through a research-based approach informed by a literature review, a survey, and interviews. The positions and interests of a sample of stakeholders—the public, the local municipality's planning agency, a developer, a landscape architect, and a professional planner—were examined to define key development issues and to identify commonalities of interests. The results are used to inform a design proposal for a 13.64-acre site which represents a nexus of interests including land use, roads, housing, quality, character, open space, and ecology. The proposal sought to achieve a satisfying solution to the competition between development and the city's natural and cultural character.

Sense of Community: A Comparative Study between Two Design Methods, New Urbanism and Participatory Design

Esther Valle

New Urbanism and Participatory Design are two approaches claiming that their design processes and methods contribute to a sense of community. This thesis explores the relationships of New Urbanism principles and Participatory Design methods with sense of community through the evaluation of four multi-family developments in California—two for each approach. Differing from past research, all of the communities are urban middle, low and very low-income households with various ethnic backgrounds. The goal of the study is to determine the contributing attributes that heightened resident sense of community. The results indicate that residents of communities developed with significant public participation have the strongest community, and sense of community is attributed to amenities and formal settings which encourage interaction among residents. The cognitive mapping completed by respondents suggests that residents in multi-family housing consider places they visit as part of their daily routine, such as a grocery store and school, more of their community than the actual design of their neighborhood. Results imply that the Participatory Design method more successfully fosters a sense of community.