

2011
USP 186/187

STUDENT ABSTRACT READER



UNIVERSITY OF CALIFORNIA, SAN DIEGO

~ Ho Chung Au ~

21st Century Ideal Buildings: Design Sustainable Architecture with the contribution of Art

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Recent studies suggest the importance of sustainability when designing buildings and architecture. This paper identifies a new and ideal form of buildings for the near future: green buildings with the contribution of art. The result from interviews and surveying shows that people think art make a significant difference from green buildings that have not considered any artistic element, and they want urban planners and architects to pay more efforts to design artistic sustainable architecture. The findings from analyzing case studies illustrate the role of art in designing buildings can contribute in two sustainable aspects, environmental sustainability and social sustainability. First, art can be used as a design tool to construct environmental sustainable architecture by putting artistic elements into sustainable concepts. Second, art is already an influential instrument for social sustainability in architecture. This study proposes that urban planners and architects should place art into a vital position when they are designing sustainable architecture.

~ Lynor Belen ~

Recovered [In]equalities: Empowering Communities to Impact Environmental Change

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

This research project examines public participation in the community planning

process in two different San Diego communities. Current research on public participation suggests that environmental justice is achieved through impacting land use; however, research lacks in discussing whether a disconnection exists between private and community interests in how land is used. This study aims to improve our understanding of the disparities in two distinct communities and to provide lessons that can create better equitable land use planning and policies. This research includes a comparative study of the communities of Barrio Logan and Carmel Mountain Ranch and relies on census data, interviews, land use plans and projects, and data observed from each community's urban planning meetings. Based on the analysis and findings, the results proved to be divided. The results show that a relationship exists between both private and public interests; but it is ultimately economic, cultural, historical, and social factors that impact the type of built environment seen across different levels of communities.

~ Lance Billingsley ~

Farm to School, San Diego: Promising programs with unequivocal barriers

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

Farm to School Programs have been successfully implemented throughout the United States, bringing in fresh local fruits and vegetables to schools. This is then reflected upon schoolchildrens health and education towards the importance of fostering a local farming community. The local farming community has been generally associated with significant production costs and sub-par profit margins. Farm to School opens a new market to local farms and provides them with a consistent level of demand, however lack of local food processing infrastructure severely limits the range of foods made available to local schools. This study seeks to identify the merits of such processing facilities including levels of inputs and outputs on such scales and the reasons why they are failing the local farming community in San Diego.

~ Joann Carlisle ~

Building Public Space Alternatives for Dense Urban

Centers

Area of Concentration:

Urban and Regional Planning

Winter Senior Research Project (SRP) Abstract:

Dense Urban Centers are primarily prone to expand vertically with the use of high rise residential and commercial structures. As a result, public space is being compromised. This study is intended to examine alternative options to the continuing vertical expansion of our dense cities. The goal of this project will be to show the benefits of mixed use building and building revitalization as a method of efficient alternatives to vertical building. The success of these projects have been evaluated on case to case bases using criteria of what makes a successful public space through observational studies, surveys of users, interviews of officials, and general literature and case study research. The conclusion that has been reached is that the alternative building practices of mixed use and restored historic building are more successful in meeting the needs of users and thus are better alternatives to vertical building. Furthermore it has been concluded that vertical building has adversely affected the public's use of public space.

~ AJ Cawood ~

Economic Challenges Associated with the LEED Certification of Architecture in San Diego

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Recent studies suggest that the number of LEED Certified architecture projects in San Diego is primarily limited by fiscal cost. This research report examines the economic costs and benefits which a LEED Certification places upon projects applying to become certified by the United States Green Building Council. The Research Strategy focuses upon several primary case studies of San Diego's LEED certified buildings and in-depth interviews with LEED Certified architects. The analysis aims to provide a critical evaluation of the costs associated with building to LEED certification standards to promote a more efficient use of resources in future projects

looking to incorporate LEED design guidelines. Evidence was gathered through archival research, interviews, and first hand observation of LEED oriented construction sites. The report found that if several LEED design guidelines were removed project costs would lower significantly and LEED design guidelines would become increasingly mainstream.

~ Wendy Chan ~

Environmental Impacts and Conservation Practices of Urban Farms

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

Urban farms are not like regular development in the urban landscape but still create a carbon footprint and an impact on the environment. The specific purpose of this study is to ask what are the environmental impacts of an urban community farm and what new methods can be offered to conserve and rehabilitate the surrounding landscape. This research study is focused on New Roots Community Farm, San Diego observing the current environmental practices and measuring the degree of environmental impact. Research findings was based on analyzing data collected from published literature on sustainable and conservation practices, interviews of relatable organizations, and direct observations. The main findings conclude New Roots to be a highly rated sustainable farm, practicing principle conservation methods through their farming techniques. However, more rehabilitation techniques are needed to help achieve their goals of promoting habitat restoration in their local region.

~ Fai Chan ~

Public Transportation in San Diego

Area of Concentration:

Transportation Planning

Winter Senior Research Project (SRP) Abstract:

Public transportation decline in American cities is nothing new. San Diego's public transportation system is no different. It is the result of planning practices that focused solely on freeway constructions as well as suburbanization and decentralization. With the continuous decline of the urban public transportation system and the lack of improvement being implemented, people will be left with one less mode of transportation to choose from. This paper identifies the cause that led to the decline of the urban public transportation system in San Diego. It also explores how the implementation of a Bus Rapid Transit (BRT) system can revive the public transportation as a mode of transportation. Through interview with an expert on the development of effective regional rapid transit and surveys of students at UCSD who drives to school and workers in a business park that commute to work in their cars, this study shows that BRT can improve the level of service as well as connectivity.

~ Calvin Chan ~

Thinking Inside the Box: Shipping Container Architecture and its Role for a Sustainable Future

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

As cities and suburbs encounter critical, consequential problems related to sprawl and unsustainable growth, the pressing need to achieve more while concurrently using less has become a priority for urban planning. The purpose of this study was to explore the potential role that shipping containers have in engendering high-quality urban infill development. Specifically, the study provided expository insight into the challenges and opportunities container architecture faces in providing solutions for sustainable growth management and land use planning within San Diego County. The research design focused on a case study of the Periscope Project located in downtown San Diego. Ultimately, the cognizant realization that a better form of urban planning does exist, one in which rules are not made to restrict but rather to help find new solutions to persisting problems, is what is important and valuable to gather from the Project's success with container architecture. This study provides a realistic account of shipping container architecture, what it means for urban planning, and improves the consideration of shipping containers as an alternative building component.

~ Jennifer Chang ~

Bus Rapid Transit: an alternative form of transportation

Area of Concentration:

Transportation Planning

Winter Senior Research Project (SRP) Abstract:

On July 23rd, 2010, the San Diego Association of Governments (SANDAG) reconfirmed the Mid-Coast Corridor Transit Project. It will extend the already existing Light Rail Transit (LRT) system from Old Town Transit Center to University City, passing through major stops such as the University of California, San Diego and University Town Center (UTC). The purpose of this research is to examine if the Bus Rapid Transit (BRT) system is a better alternative form of public transportation than the proposed LRT solution. By comparing the operation and capital costs, fare, ridership and economic development of the Light Rail Transit and Bus Rapid Transit through transit plans, case studies, surveys and interviews, I found that not only is the Bus Rapid Transit system more economically feasible, it is also easier to implement and more flexible than the Light Rail Transit system. Through these findings, it shows that the Bus Rapid Transit system is indeed a better alternative method for this region than the trolley extension of the Mid-Coast Corridor Transit Project.

~ Carmen Chen ~

Road Pricing for Los Angeles

Area of Concentration:

Transportation Planning

Winter Senior Research Project (SRP) Abstract:

This study suggests a road pricing scheme to relieve traffic congestion along major roadways in Downtown Los Angeles. For proper and successful implementation, this proposal examines existing and rejected schemes to identify the characteristics of urban cities which influence the effectiveness of road pricing. Current research suggests that while road pricing undoubtedly reduces congestion in major cities, applying similar schemes to other cities may not be as successful or necessary. The research strategy compares Los Angeles to international case studies of successful and rejected road pricing schemes. Evidence from traffic data analyses, census data,

and government policy reports is used for a cross-city comparison. The analysis provides a critical insight into the factors which can aid and/or hinder the success of a road pricing scheme in Los Angeles. Visually, a GIS traffic analysis of Los Angeles illustrates the need for road pricing. The objective is to not only identify appropriate locations for road pricing, but also identify areas which cannot accommodate it. The study contributes to literature on congestion pricing and traffic management. The results will be shared with public sector officials in hopes that the findings will help identify prime locations to have road pricing systems.

~ Christina Chon ~

Eliminating Plastic Bags

Winter Senior Research Project (SRP) Abstract:

The success and popularity of the plastic bag has caused more negative environmental impact than was ever anticipated. Though plastic bags occupy less than four percent of all landfill space, it can take anywhere from a hundred to a thousand years to decompose. In an effort to curb these damaging changes, various cities and countries from around the world have proposed solutions. The two most common fixes being either to ban plastic bags or charge a bag tax. As more new data and research reveals the outcome of these policy changes in several cities, it is critical to take note and use this information to think about the best ways to encourage the rest of the world to reduce their dependence and use of plastic bags. This study, set in the theoretical framework of sustainable development, examines several existing case studies of areas that have made an effort to create a sustainable environment through the use of alternative shopping bags and/or additional policies, including fees and taxes. It begins with an investigation into the negative impacts of plastic bag use then seeks to determine which government initiative has proven to be the most effective in changing consumer bag use. While the collected data does not decisively conclude in favor of either bag bans or bag fees and taxes, it is clear that these further actions have helped work towards a greener environment.

~ Arthur Chow ~

Trash Wave Into the Future: A Feasibility Study of a Cogeneration Wastewater Treatment Plant in Hunt

Area of Concentration:

Infrastructure and Public Facilities

Winter Senior Research Project (SRP) Abstract:

The state of California currently sends approximately fifteen tons of waste to landfills each year wasting thousands of acres of real estate, contaminating essential local resources, and perpetuating an unsustainable system of waste management. This study will analyze the viability of large scale biogas production in California as a technique in reducing landfill waste and creating an alternative source of energy. The research will focus specifically toward the feasibility and effectiveness of such a plant in the Hunters Point community of San Francisco. The objective is to address the issues that prevent the development of such plants and rationalize state investments into the biogas industry. The hypothesis is that the biogas industry is an untapped resource in terms of energy production, economics, and industry. The argument will be driven by research on case studies of existing biogas plants, studies of the economic and geographic environment of the Hunters Point community, and surveys of local sentiments on such a facility in their community. Analysis of this research will ultimately determine how well a biogas facility will function in the region.

~ Michael Christensen ~

Implications of an Uneven Distribution

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

As the San Diego region continues to expand into previously undeveloped areas, the quality of public facilities in those areas becomes higher than the quality of public facilities in older areas. The primary reason for this is the use of development impact fees to finance new, needed infrastructure for these residents. This study examines the body of literature surrounding these fees, and their ability to raise housing prices and lead to income segregation between newer and older neighborhoods. Additionally, it examines the impact that these fees have on neighborhoods undergoing development, finding that in these developing neighborhoods, newer and better facilities are present, largely due to the availability of development impact fees and assessments to fund these projects. At the conclusion of this report, recommendations are made to create a more socially equitable distribution of these fees.

~ *Maribel Contreras* ~

Effectiveness of community based organization

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

Recent studies suggest that low-income and minority communities bear a disproportionate burden of environmental threats. Unfortunately, efforts by Federal, state and local governmental to diminish environmental racism have been limited, and thus many members of color communities and working class neighborhoods continue to face disproportionate risk from toxic waste, including industrial and mobile pollution. To counteract the detrimental effects of environmental racism, grassroots organizations have collaborated with many researchers and political officials to fight the problems and establish a more sustainable environment. This study focuses on the efforts of community-based organizations to eliminate toxic pollution in the San Diego region. The objective is therefore: to examine the effectiveness of the Environmental Health Coalition in aiding low-income minority communities affected by environmental inequalities. In the attempt to diminish environmental inequalities by EHC, interviews, survey, scholarly journals, observations, and textual analysis, illustrate the degree to which the organization has successfully acquired positive outcomes in reducing the levels of mobile pollution, and overall improving the quality of life. Furthermore, the Environmental Health Coalition has laid the base for future efforts in constructing more viable communities.

~ *Jolene Crixell* ~

Conveying Hope VI: A Comparative Analysis Across Newspaper, Think Tank, and Governmental Arenas

Area of Concentration:

Housing

Winter Senior Research Project (SRP) Abstract:

Implemented in the 1990s the Housing Opportunities for People Everywhere (Hope VI), plan administered by the Department of Housing and Urban Development, sought to revitalize the country's worst public housing projects. This was achieved by demolishing housing projects in major American cities, replacing them with mixed-income developments, and re-locating former residents. Debate has flourished over the legitimacy and continued outcomes of Hope VI, in think tank, governmental, and media spheres. The purpose of this study is to cross-analyze the coverage of Hope VI in these different arenas. Content analysis of Urban Institute reports, governmental hearings, and New York Times coverage reveal how differently Hope VI's outcomes are measured, interpreted, and communicated across different spheres. This kind of analysis has implications for understanding the varying ways in which urban policy is understood and reported on in American society.

~ Chi Dang ~

From Yesterday's Novice Pre-Service Teachers to Tomorrow's Educators

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

This research project examines how teacher education programs incorporate teaching methods that successfully create culturally competent and responsive teachers. Current research suggests that teachers in the United States must address demographically changing classrooms. This raises a fundamental problem of the superficial treatment of diversity that currently prevails in teacher education programs. Using the University of California San Diego's Education Studies Masters of Education and Teaching Credentialing program as a case study, this project utilizes data from interviews and observations to address how the program's teacher educators implement issues of equity and student diversity in their classroom. Specifically, this project examines how the program's teacher educators help prepare pre-service teachers to become culturally responsive in their classrooms. Ultimately, this research will contribute to teacher preparation literature by providing examples of methods that one teacher preparation program uses in assisting their pre-service candidates in using equitable teaching practices in diverse classrooms.

~ Allison Dawson ~

Securing a Sustainable Future for San Diego: Collaborative Planning & a Regional Transit Equity Strg

Area of Concentration:

Transportation Planning

Winter Senior Research Project (SRP) Abstract:

The San Diego Regional Transportation Plan for 2050 is currently being updated by San Diego Association of Governments and is creating the very first Sustainable Communities Strategy. Sustainable San Diego Coalition is a collaborative organization bringing advocacy organizations together to develop regional planning messages to provide input. The Coalition is currently in the process of formalizing its structure to be in a better position to support the organizations of San Diego. This paper identifies the social and political process involved. It is believed that collaborative planning is most effective in ensuring equitable distribution of transportation funding. However, through data collection from case studies, planning documents, Sustainable San Diego Coalition meetings and SANDAG meetings this study shows SANDAG and the coalition have differing visions for the future transportation plans currently being proposed for a number of reasons which include they define the needs for the region using different methodological monitoring, and they have differing agendas. This paper argues that the processes and structures involved in the case studies constitute an ideal model for future efforts in collaborative planning for the San Diego Region.

~ Raman Deol ~

Examining Water Abuse from a Point of Privilege: Why People Cannot Stop Running Their Taps

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

Water is a critical but limited resource enjoyed by those privileged enough to access it. Current research on water abuse suggests that groups not directly affected by water

shortage are likely to use the resource most recklessly. The research fails to holistically address the effectiveness of intervention methods, such as tools and education, in discouraging this abuse from privileged consumers. This proposal outlines a research strategy that focuses on these issues by examining water privilege abuse by testing if educational material and tools for conservation can stop or minimize over consumption at the University of California, San Diego. Specifically, the study utilizes a randomized experiment at residential units on campus that evaluates water usage of students with virtually unrestricted access to water. Additionally, it introduces and analyzes the effectiveness of strategies for reduction demonstrating that where there are no financial or restrictive incentives to conserve water, education and discourse can encourage privileged groups reduce their water abuse. The research contributes to the literature on sound water management and will also be disseminated throughout the campus to encourage more water-conscious living.

~ Mously Diakhate ~

Public Health in the Age of Globalization

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

According to the United Nations Habitat Program, the largest increase in population growth will occur in cities of developing nations¹. This study examines the impact this phenomenon will have on public health. Focus is paid to health disparity that exists between urban and rural regions, and the cultural, economic and social motives at play. The aim of the study is threefold (1) understand the factors contributing to disparities in distribution of healthcare, (2) Dissection of established programs at hand to tackle these issues, and (3) final analysis of the economic, social, and cultural factors contributing to the increased existence of these disparities. Information was gathered through archival analyses of country health statistics and other country profiles of Senegal. The study found profound social, economic, and cultural practices leading to inequities between the rural and urban communities in terms of access and quality of healthcare. Ranging from diminishing international aid to migration of prominent health providers, these outcomes play a significant role in the many factors contributing in the increasing discrepancy between rural and urban regions of Senegal.

~ Chad Diep ~

Green Materials Are Not Only for the Homes of the Rich

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Current research suggests that usage of green materials in affordable housing is well below levels of demand despite the many benefits that tenants could receive from their widespread implementation. The shortage can be attributed to the fears and uncertainties of developers due to a lack of experience and knowledge in using green materials. This paper identifies the infrastructure and information sources that make the use of green materials in affordable housing a reality. Through the creation of a green material information database informed by literature research and interviews with two affordable housing developers, the study examines the types of information currently available to developers. It also provides suggestions as to what information sources may be most relevant and useful for green affordable housing. The results may be used as a reference for developers hoping to implement green materials in future affordable housing.

~ Tricia Dietz ~

Reaching New Heights

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

City Heights, a low-income neighborhood with high diversity, faces the same problems as many up-and-coming districts as it struggles to develop. In the last couple decades, City Heights has been successful at conquering its largest misery, high crime rates. Although the newspapers herald the lower crime rates as the achievement of a mobilized community, City Heights' success in using community action is astonishing considering the multitude of academic literature, emphasizing

collective action as irrational. The Community Rally events and the building of the police station can be more accurately understood as a complex process in which the demand of the masses and the demand of the resource and property controlling elite coincided. Using content analysis of newspaper articles from the San Diego Union Tribune, the key actors of influence and actions, which occurred in City Heights are brought to light. After analyzing these actors contributions, a picture of a healthy community dependant on all actors with different roles in providing mobility, and public goods was apparent. This neighborhood's success was due to the health of these interactions, all focused on a similar interest of bettering the community by decreasing crime.

~ Sarah Dillon ~

Senior Research Project

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

Current discourse on Community Supported Agriculture (CSA) tends to discuss the programs as positive solutions to food insecurity. Less often discussed, however, is the idea of equity and social sustainability as it relates to this food distribution technique. More specifically, who has access? Using San Diego's CSAs as an example, this study examines the benefits of CSAs and how one's income and geographic location affect their ability to participate. This study's aim is twofold: (1) to provide an evaluation CSAs that addresses the concept equitable social sustainability and (2) consider the benefits of CSAs accepting SNAP benefits (formally known as Food Stamps). The research design uses mapping and spatial analysis of income and CSAs in San Diego County, as well as observation, interviews, surveys, and literature. I find that people residing in southern San Diego are less able to access CSAs due to financial and geographic barriers and that farmers had a diversity of reactions to this fact. Ideas drawn from successful programs in other regions were also suggested as methods for improvement. The study leads the reader with the question: Should participation in community programs and activism in sustainability be a privilege for the elite?

~ Danielle Dowler ~

Public Space within a Dense Urban Center

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

This study focuses on the development and current existence of public spaces within the city of San Francisco. Current research suggests that public space is one of contention, often spurring a great amount of discussion between public and private interests (Goheen 1998, 479). The study asks how traffic (public transportation) and accessibility lead to the popularity and or use of public space within the city of San Francisco. The study compares two concurrent projects used within the city of San Francisco that address the issues of lack of public space within a dense urban center. By using participant observation, archival research and spatial analysis, the study has concluded that the Pavement to Parks Project contains open space that is more accessible than Privately Owned Public Open Space. The project will include a comparative case study approach, participant observation, archival analysis and spatial analysis.

~ *James Evans* ~

Truths and Fallacies Surrounding the Mortgage Interest Deduction: A Case Study of San Diego County

Area of Concentration:

Housing

Winter Senior Research Project (SRP) Abstract:

The mortgage interest deduction (MID) represents the federal government's largest housing subsidy. The MID is surrounded by significant debate regarding its equality and effectiveness. Opponents of the policy argue that it favors the rich, while supporters see it as a vital housing stimulus. The focus of this project is to provide a case study to use as complimentary evidence to the current literature, which is largely conceptual and policy based. To do this, the project is rooted in analyzing the 2007 IRS income tax data for San Diego County. Through examining six diverse communities, the study found that the MID is not a subsidy for the rich and is widely

used in the middle-income ranges. The MID-based literature largely predicted that the policy produced exclusivity in housing. However, this study found that widespread geographic inequalities and isolation of the poor are more to blame for the policy's equity concerns than inherent flaws within the MID.

~ Robert Felix ~

Bicycle Mode Share and Trip Making in San Diego.

Area of Concentration:

Transportation Planning

Winter Senior Research Project (SRP) Abstract:

The greenhouse gas reduction targets set by Senate Bill 375, requires the California Air Resources Board to develop regional greenhouse gas (GHG) emission reduction targets for passenger vehicles. As regions look toward sustainable modes of transportation, bicycle transportation is considered a practical option that will have a significant impact if used en lieu of automobiles. This study focuses on bicycle use for transportation, not recreation, and answers the question: What are the key factors of bicycle trip making? Evidence from surveys, interviews, documentary analysis, and participant observation show that bicycle transportation mode share increases with improved bicycle facilities. Other key factors include safety on roads shared with motor vehicles, distance to destinations, and the convenience of the automobile. This study will contribute to the literature on transportation policies, bicycle use, bicycle facilities, and sustainable transportation. The conclusions here can be further analyzed by local and regional officials seeking to increase bicycle transportation mode share.

~ Oliver Fries ~

LEED Certification: Motives for Implementation

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

This research investigates environmentally friendly buildings and the incentives or

disincentives behind their construction. More specifically, this paper describes the incentives to build LEED (Leadership in Energy and Environmental Design) projects. Current research displays that LEED buildings generate higher rents and sales price. LEED certification also helps to lower building life-cycle costs meaning lower expenditures for utilities and maintenance. This raises two fundamental questions: Is there incentive to build LEED certified buildings? If so, when and where? Are consumers willing to pay extra to live or work in a LEED certified building? Interviews, case studies, archival research, and GIS mapping are tools used in this research to draw conclusions about the incentives and disincentives behind building LEED certified. The comparison of two different marketplaces and the professional viewpoints included show how LEED can be deterring for a developer as well as where and how these projects can be successful.

~ *Gerrlyn Gacao* ~

When Transportation Planning Meet Innovative Design: The Case of the Uptown District in San Diego

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Transit-oriented development (TOD) has gained currency in the United States as a means of promoting smart growth, injecting vitality into inner-city settings, and expanding life choices. This research project analyzed the Uptown District Project of 1988, a case which has served as a model for successful transit-oriented development in the form of mixed-use infill development for many communities. The study examined its success, not only in terms of the environment its compact mixed-use buildings yield, but also of the unique role that the city and community played in the planning process. The research design used qualitative and quantitative data in the form of interviews, surveys, on-site observation, planning documents, and census data. This range of research components provided insight into the actual nature and effectiveness of the program, the challenges in successful implementation, and offered inferential data into the plausibility of applying such practices in potential redevelopment areas. The research contributes to the literature on the benefits of transit-oriented development by demonstrating that high-density projects such as the Uptown District can be effective in promoting pedestrian-friendly, mixed-use environments within an otherwise automobile-oriented urban society.

~ Alexis Glasgow ~

Developing Improved Urban Space, the Effects of Walkability

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

The purpose of this research is to identify and examine the effects that walkability has on communities throughout San Diego, specifically low income urban communities, including Central Imperial and Southcrest, with a comparison to Gaslamp Quarters and Midtown, and find which aspect of walkability affects the community the most. Walkability is the extent to which the built environment is friendly to the presence of people living and spending time in an area. The first phase of the research involves interviews with current community leaders who promote walkability, as well as gathering information from current research that has been conducted to examine their conclusions and methods. The final phase involves plotting out spots on maps of each neighborhood to have a visual of the built environment as well as creating graphs and charts that analyze the effects that income and built environment have on walkability. By doing so, this research shows that walkability has a positive association with health and the built environment, in particular the street design; of a community has the greatest effect on a walkability score.

~ Karina Gonzalez ~

Placement in the ELD Program: A Case Study of Cien Elementary's Program Effectiveness

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

The most frequently asked questions about the education of English Language learners is how long they need special language services, such as English-

as-a-Second-Language (ESL) and other sources of bilingual education. Educational programs and policies related to English Learners (ELs) are based on the belief that fluency in English is the principal requirement for academic success. This exploratory research project will outline a strategy to examine the effectiveness of the current placement system for the English Language Development Program (ELD). Existing research suggests that ELD offers a “systematic” education intended to provide supplementary instruction for non or-limited-English speaking students. However, there are several fundamental problems with the ELD program. Often time students are not placed properly or they do not make the adequate progress to advance an ELD level per year. This study is an analytical investigation of the effectiveness of the ELD placement system at Cienega Elementary. This research relies on interviews to teachers, the ELD school coordinator, parents and my participant observation as a teacher’s assistant in the classroom. Concluding data from this research determines that there are limits to ELL students’ opportunities for access to college readiness courses, if students do not complete the program by the time they graduate elementary–potentially increasing dropouts and college unpreparedness. Lastly, this study will examine the ways in which the administrators at Cienega serve their parents because there is a lack of parental involvement and awareness in the ELD curriculum, which hinders a child’s academic achievement.

~ Jonny Gose ~

Mighty Oaks From Acorns Grow: Gompers Preparatory Academy as a model for Urban Education

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

Equality in the provision of and access to education is crucial within the urban environment. Current numbers of failing inner city schools suggest a need for better educational policies and procedures. Through the use of charters, some institutions have found success in deviating from the traditional public school structure. The purpose of this study was to take an in depth look at one particular charter school, Gompers Preparatory Academy, following its transformation from failing inner city school to academically and socially improved charter school. This study used detailed statistical analysis, policy analysis, and review of programs and practices in effect at Gompers Preparatory Academy to explain long term trends in academic growth and

the potential for scalability of such practices. Key findings show that academic performance, measured by the Academic Performance Index (API), has greatly increased at this school due to internal policy shifts in discipline, dress code, parental involvement, instruction time, staff employment, student expectations, and campus culture. Implications from these findings for urban education reform suggest improved teacher employment and evaluation methods, a decreased student-teacher ratio, collaborative family support and social services integrated through the school system, and flexibility in campus climate and culture development depending on local community needs, as well as the need for prioritization of funding to provide necessary educational supports for students.

~ Sarah Hu ~

City Heights: A Rehabilitative Plan for Homeownership

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

Homeownership not only contributes to the stability of a neighborhood but also, provides residents with a financial stake in the city. Under the City Heights Redevelopment Plan enacted in 1992, the Redevelopment Agency for the City of San Diego recognized that there was a high incidence of overall residential transience rate and low homeowner occupancy in the community of City Heights. Therefore, the redevelopment agency made it their highest priority to increase homeownership by establishing programs that enable housing opportunities for low-income and displaced residents. This study examined the repercussions such programs have on prospective homebuyers and whether the redevelopment agency has sufficiently carried out their goal of increasing homeownership in the community of City Heights. Using Geographic Information Systems mapping, I was able to compare homeowner occupancy rates before the Redevelopment Plan was enacted to current standing. Withstanding literature denotes that homeownership assistance programs, in actuality, pose major implications for low-income buyers. Others contend that loan agencies should focus on providing affordable housing while attracting middle class residents. Furthermore, opposing arguments contend that redevelop agencies should focus on development-oriented approaches as well as, consumer choice when addressing issues of homeownership occupancy.

~ *Andrew Johnson* ~

LEED Building Design: Overview of free market and government incentives

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Abstract:

Green building design has become an increasingly popular way to apparently reduce energy, water, and resource consumption. Considering commercial LEED certified buildings (Leadership in Energy and Efficiency Design) cost anywhere from 3-10 percent more than standard building construction, this article attempts to dismantle the mechanisms that drive the LEED industry despite these higher start up costs. For the purpose of this study, I have classified incentives into two categories; 1.) State and local government incentives. 2.) Market driven incentives. Conclusions drawn from this study find that state and local governments offering incentives such as expedited permitting (Priority in building permit processing and plan review), tax reduction (particularly property tax abatements), density bonuses and reduced-cost building permits offered for LEED certified commercial buildings have not been widely adopted. Also, the corporate decision to “go green” is predicted by a succession of factors including the condition of ownership, target marketing, and the role of the company in relation to environmental stewardship. The research was composed through email, over the phone and in person interviews with LEED building project managers, architects, consultants, and other knowledgeable staff. This study has contributed to literature regarding the role of economics in the context green commercial infrastructure. My findings have been shared with planners, environmental activists, local developers and interested business professionals in order to provide information regarding the policy and market driven motives driving green technology.

~ *Curtis Ju* ~

How can physical designs affect the way society makes use of public spaces?

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Current studies on public space designs suggest that public spaces and parks in urban settings need to provide multiple functions to society. The purpose of this study is to identify whether or not technologies and innovative designs provide new functions to public spaces and parks in addition to their traditional usage. Additionally, I will examine how different designs could affect the way society makes use of them. Specifically, I did comparative case studies on current public spaces and park projects, including onsite observation at completed projects such as the California Academy of Science in San Francisco and the Natural History Museum in San Diego; I also relied on archival research on the topic and statistic information based on surveys. The main findings include technologies and innovative designs that planners could apply to their projects for better energy efficiency, and how a society benefits from such projects. This research will be shared with a goal of improving the sustainability of urban design. Moreover, it will contribute to the literatures on public space and park designs for a greener environment.

~ Bita Kamoei ~

Increasing Coachella's housing affordability through awareness

Area of Concentration:

Housing

Winter Senior Research Project (SRP) Abstract:

Research studies demonstrate the recent real estate crisis and its affects on the housing market. Because properties have shown a rapid increase in foreclosures, private investments have flourished, affecting the affordability of housing due to new inflated prices. However, there is a lack of action and public awareness in this matter. This proposal examines the following question: how can public awareness and advertising increase attainability of affordable housing? The research design is intended to focus on conducting interviews with bank owned property realtors while also gathering survey responses from Coachella Valley residents. In addition, participant information will also be incorporated as an intern for one of the leading bank owned realtors of the desert. Providing more awareness tactics about the importance of affordable housing will create more opportunity at obtaining cost efficient homes. Because Coachella is an agricultural city that consists of

predominantly low income residents, achieving affordable housing is essential. Moreover, the results will be shared with community housing markets and public officials in hopes of providing awareness and improving housing affordability.

~ Ghina Kim ~

List here a catchy phrase that conveys the heart of your research project; you can come back to edit

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

The geographical configuration of a city is not an outcome of chance. Rather, it is the result of pressure from various dependent needs such as that of the federal and local government, investors, large-scale financial institutions and private investors. So many different groups of varying objectives take an interest in local politics because change is most visibly implemented at the local level, and it is these local levels of change that most directly impacts individual lives. While the political strife between local governments and private investors is a reoccurring cliché in the study of urban planning, the impact of citizen groups is often understated despite their growing role as molders of public policy and key participants in community development. Despite their growing influence, there are few studies available pertaining to the citizen's involvement in local politics. This research focuses on a case study of a local citizens association, La Jolla Shores Tomorrow. This analysis aims to provide insight into the struggles of citizens associations in the politics of land use and planning as well as their growing influence in a sphere that had been previously dominated by the community elite. This study will contribute to the literature on citizen involvement and growing influence in community land-use politics. The results will be shared with local community leaders in hopes to encourage greater civic involvement.

~ Andrew Ko ~

**Compact Growth: A Model for Future Urban
Development**

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

This research outlines the inefficiency of sprawling communities and provides a more sustainable approach to urban planning: compact growth. Current research suggests that urban sprawl has been inefficient, unprofitable, and unstable. This study spatially examines two different community developments – Downtown Glendale (compact growth) and Westlake Village (urban sprawl). This research addresses three questions: (1) are services accessible to nearby residents at a walkable distance, (2) are urban spaces used efficiently and effectively, and (3) how sustainable are the communities in terms of social health. Through comprehensive research methods using archival records and observations, I concluded the successful benefits of compact growth in terms of walkability, mixed-use spaces and social integrity compared to urban sprawl. This research will be shared with future urban planners in the hope that the findings will help create a new sustainable future in an urban setting that adheres to the concept of “live, work and play.”

~ Maksim Labutin ~

localizing agriculture production to ensure our sustainable future

Area of Concentration:

Urban and Regional Planning

Winter Senior Research Project (SRP) Abstract:

The study focuses on the efforts of grassroots organizations to improve the production and distribution of food in San Diego County. Most of the food people consume today are processed foods, though they have a nutrition label we do not know their origins, we do not know where the ingredients came from or how they were prepared. All we know is the company that created the product and the location of the distribution office. The objective of this research is; to examine how we can localize agricultural production 2. Determine if it is possible to change the demand for food with localization of agricultural production. 3. Examine the effects that localizing will have on pollution, energy consumption, water consumption associated with agriculture production. 4. To determine if we can improve food distribution and equity through localization. The project will utilize a case study approach to determine if a new local food system will solve the problems associated with industrial farming. The survey will ask what people prefer and how have they been affected with the current

situation. The study's main goal is identify the best level and scale of agriculture production and to indentify the barriers and benefits of each level of localization.

~ Caroline Lao ~

New Energy, Old Waste

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

This research project addresses the issue of using methane gas as energy in the City of San Diego, focusing on gas extracted from landfills. Urbanized areas are historically accustomed to the use of energy through non-renewable fossil fuels. Currently, the San Diego Miramar Landfill captures methane and provides energy for electrical generators at the Metropolitan Biosolids Center and North City Water Reclamation Plant. Problems surfacing from the use of methane gas include cost-effectiveness and pollution. In this research project, I investigated the use of capturing landfill methane gas. The purpose of the study was to gain understanding of the settings that allowed the energy methods to occur. My research strategy included the use of public information online, interviews, and a cost-benefit analysis. The main findings were supportive of the use of methane gas as energy because of its numerous benefits, though a solid conclusion would require further research.

~ Jason Lee ~

Affordable Housing: An Impact on Families

Area of Concentration:

Housing

Winter Senior Research Project (SRP) Abstract:

Homeowners would agree that the housing market is unaffordable. This research will advocate for the development of low-income housing by presenting evidence on how affordable housing has affected families and homeowners in a positive manner. The purpose of this study is to demonstrate that low-income housing is beneficial to the

health of families and homeowners, provides better opportunities for the academic success of students, deters crime, promotes sustainability, will not lower property values, and reduces traffic congestion. This research design will be based on a comparison between homeowners currently residing in low-income apartment and those living in ordinary apartments. Data from various tenants were gathered through surveys and extensive interviews. This research will contribute to the literature based on affordable housing. These results will be shared with public and private sector officials in the hope that the findings will increase the awareness of affordable housing.

~ Samantha Lee ~

Farmers' Markets as Community-Based Health Interventions

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

There is an increasing amount of attention placed on the link between public health and planning, due to findings which relate health outcomes and the built environment. The rising obesity epidemic in the United States presents a challenge to policymakers and researchers to find solutions to this issue. Research indicates there is a link between access to fresh produce and chronic disease outcomes. There is also a growing body of research on the disparities in health and socioeconomic status. This study examined the Farmer's Market in City Heights, California and the Fresh Fund program, an incentive program which expands access to low-income clients. This study's aim was to understand the farmers' market's role as a health promotion tool and its influence on dietary intake. This was conducted through examination of existing health data, conducting interviews, surveys, and literature review. The study found direct relationships between health perceptions and fruit and vegetable consumption and the spatial relationship between body mass index and the proximity to the market. However, more work must be done to increase the servings of fruits and vegetables consumed despite the market's success in raising awareness of nutrition-related health problems.

~ Daniel Lee ~

LEED: Sufficient for National Policy?

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

The specific purpose of this study was to research the legitimacy behind LEED's green building rating critique to see if it is sufficient to be instituted into the US national policy today. I did this by creating my own critique based off interviews with people that have dealt with LEED or any other green building institution and by doing archival research. The research strategy I used was mainly interviews, case studies, and archival research because it provided for me a solid base of information relating to LEED and it gave me a much more hands-on experience into the LEED process. The main things I found was that LEED is ready to be implemented into national policy because it provides for a much more sustainable approach to developing new buildings. Starting with LEED in the green building arena would suggest a significant improvement to the current trend of sustainable living. Although there are improvements to be made to the LEED process, LEED has shown to be very responsive to these issues and I expect them to be ready to be instituted on a national scale.

~ Jennifer Leonard ~

Trans-border Trash Tracking Study: Scientific Data for Policy Change

Area of Concentration:

US-Mexico Border Planning

Winter Senior Research Project (SRP) Abstract:

Waste flows are not contained by international boundaries; therefore, the subject of solid waste disposal is of interest to the entire San Diego/Tijuana border region. Uncontrolled informal dump sites that litter the Tijuana River Valley are a product of the disconnect between federal environmental regulations and local policy enforcement. The purpose of this study is to produce a scientific record of dump sites and solid waste flows that can be used as a tool to affect policy change toward the eradication of illegal dumping practices. Although open dump sites exist throughout

the river valley, the geographic unit of analysis covered by this study is confined to the Los Laureles Canyon in Tijuana, Baja California, Mexico. The research strategy for this study includes direct observation in the field and GIS spatial analysis of site locations and canyon topography and hydrology. Our findings constitute first-time scientific evidence of informal dump sites in the Tijuana River Watershed and point to economic practices that discriminate against canyon residents and threaten ecosystem viability in sub-basins such as Los Laureles Canyon.

~ Rance Leslie ~

Designing for the future as it becomes our past

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Abstract

Walkability is a widely discussed topic in terms of walkability as a plan to make a city more sustainable improving the cities ecology and environment. Walkability is the idea that the people of a community could walk to common places of travel including grocery stores, work, food places, supply stores, clothing stores, bus stops, etc. Automobiles have been increasing problems surrounding CO2 emissions throughout major cities such as San Diego. The eliminations of mass travel in small city confinements through a walkable city design will decrease emissions issues bettering the environment by making the cities such as San Diego, more sustainable. The project will aim to focus on walk audits and using the result to show how many cities are not designed to be walkable in San Diego. Many cities will have a low percentile of walkability allowing the audits to demonstrate what things need to be corrected in order for a particular city to become more walkable. The paper will establish how significant walkability is in designing for a future of sustainability and also conclude that designing for a walkable city is the next step and not educating for walkability on the design that cities already have.

~ Frank Li ~

Musical Culture, Street Performance, and Coherent Urban Design

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Street musicianship can be a powerful element in a city's unique musical culture, but such socio-cultural elements are often overlooked in planning and design. This study examined social perceptions of street musicians and the elements of urban form that contribute to their success in order to offer planners a reason and a model for promoting street music. The project surveyed pedestrians on their opinions of and behavior with street musicians, interviewed the musicians themselves on where and why they play as well as how long they have done so, and utilized GIS mapping data to determine the relationships between building mass and the success of street music. The study found that the majority of pedestrians feel positively about street musicians, and that musicians themselves prefer to play in areas with approximately a 2:1 ratio of building mass to open space.

~ *Michael Lin* ~

Where Does Affordable Housing Money Come From? Understanding the flow of investment in City Heights

Area of Concentration:

Housing

Winter Senior Research Project (SRP) Abstract:

With inflation outpacing wage increases along with the economic downturn in recent years, the need and demand for affordable housing units has skyrocketed. In the last decade development firms have increasingly tried to provide affordable housing units, but the obstacle is how much funding and incentives do they receive for these types of units? This proposal analyzed the affordable housing situation in City Heights by looking at the sources of funding for affordable housing developments, how it has changed in the last decade and what was the effect of the economic recession and failure of the real estate market on the ability to meet the needs of the community. The study focused in the city of San Diego, specifically the area of City Heights where the average income is well below the county average. The comparison of policy reports, fiscal reports, past, current and planned housing sites showed that the

there is not just one entity and funding source for all projects and even with the economic recession the demand for affordable housing is met to a certain extent.

~ Melissa Liu ~

Saving the Environment: Green Skyscrapers

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Recent findings suggest that skyscrapers use up a lot of resources and have negative impacts to our natural environment. Because of the high population density and lack of land, building skyscrapers are necessary for some countries. However, the construction of traditional skyscrapers are completely not environmental friendly as it requires great amount of natural materials including steel, concrete and glass, therefore, building eco-towers will be the best solution to this environmental problem. In this study, the cost and benefit of Green Skyscrapers would be examined by comparing two skyscrapers in San Diego, survey and interviews from professional; showing how green skyscrapers could help to save the environment. In comparison, although green skyscrapers have both advantages and disadvantages, it is believed that applying green to skyscrapers is a beneficial method to preserve the environment.

~ Mona Logan ~

Necropolis Planning and Design: Green Burial for the Mission San Luis Rey

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

This study will demonstrate how natural burial methods, although a great idea to consider in order to reach a goal of becoming a more environmentally sound establishment, may not be a possible method to introduce to the current cemetery

property at the Mission San Luis Rey. The Mission's current cemetery has been there for many years, thus its interred remains had a less restrictive policies to adhere to than the cemetery planning of today. Because of the cemetery's location (proximity to gardens/ food production areas and property bioswells), and the Mission's plan to consider 100% well water use for all aspects of the Missions water needs, the idea of a natural burial concept being incorporated into the current cemetery space may not fit with today's regulatory factors.

~ Erica Lucero ~

More than Just a Place to Live: A Case Study of Affordable Housing Units in City Heights

Area of Concentration:

Housing

Winter Senior Research Project (SRP) Abstract:

If tax credit subsidized housing is to be successful it must not only follow basic business principles, but also provide residents with more than just a place to live. Research shows that there has been a shift in the design and purpose of affordable housing to include more onsite services and links to offsite services throughout the community in order to provide an environment where residents can both live, thrive and realize their greater potential. This study examines the whole service model of tax credit subsidized housing in City Heights, the driving forces behind these types of developments and the systems that sustain them. The case study research design relies heavily on direct observation and interviews with the developers, property management, and residents. This study found that the success of affordable housing requires sound management that is multi-culturally sensitive in providing resident services and maintaining satisfaction, as well as the importance of basic business fundamentals to ensure proper building function. Funding sources and the competition between developers for tax credits, drive projects and the services that will be available to the residents.

~ Sanh Luong ~

The Pros and Cons of Rainwater Catchment in San Diego

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

Currently, the Southern California Metropolitan Water District and San Diego Water Authority provide rebates for high-efficiency water appliances in single homes in San Diego as an incentive to reduce drought and the city's dependence on imported water. However, these agencies do not provide rebates for rainwater catchment (RWC) system, a known alternative water-saving method that is practical and widely studied. This research examines the differences between investing in rainwater catchment (RWC) system and high efficiency water appliances for rebates. Its purpose is to address the question of whether rainwater catchment is a feasible investment for future rebates based on the three measures of environmental value, economic value, and social value that were calculated from precipitation records, product costs, benefit-cost ratio, and direct interview with Brook Sarson. The findings indicate that rainwater catchment is not sufficient to meet the high demands of single homes in San Diego. While rainwater catchment's potential to reduce imported water consumption is not beneficial in terms of the amount of water saved and its benefit-cost ratio, it has high social value towards the water conservation efforts in San Diego.

~ *David Luu* ~

Big Push for Big Box Stores

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

The purpose of this study was to examine how big box retail stores, Wal-Mart in particular, affected the surrounding community. Over the past decades, Wal-Mart has earned the title of world's largest retailer by offering the lowest prices found anywhere. Its success has raised many questions as to how their annual revenue was achieved and at what cost? Data was gathered from various methods including research, surveying, and an interview with a former City Manager of San Diego. This study found that the incorporation of Wal-Mart stores drastically changes the dynamic of a city, specifically infrastructure and public criticism. Conversely, these stores contribute to much sales tax revenue that the city can use to reinvest back into the community. This study provides supplementary information to previous literature on

big box stores and Wal-Mart associated investigations. The results of the research will be shared with the community in the hopes that for those who feel uncertain about Wal-Mart superstores, that they may receive a factual representation of their neighboring retail provider.

~ Daisy Miguel ~

Empowering the Mixtecos in Linda Vista

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

This research project is specifically trying to analyze how the Intercambio Cultural Mixteco along with the Bayside Community Center tries to empower the Mixtecos in Linda Vista. The purpose of conducting this research is to help the Intercambio Cultural Mixteco improve their organization by seeing how effective their programs are being in the Mixteco community. This research project has used in depth interviews and surveys among the community members and the volunteers who make up the organization as evidence of whether the Intercambio Culutral Mixteco and the Bayside Community Center have indeed being able to empower the Mixtec community. An ethnographic approach to the Mixteco community has also guided the rest of this research. Field notes from my own participation in the organization have also provided evidence on the organization, its board, its events and the participants in the Intercambio Cultural Mixteco. The overall findings from this research project suggest that while the Mixtecos have not been empowered the organization has been very helpful in the community and that with time the Mixtecos will gain empowerment.

~ Benjamin Mills ~

Transit Oriented Development: Light Rail Transit in Dense Urban Area

Area of Concentration:

Transportation Planning

Winter Senior Research Project (SRP) Abstract:

This study focuses on the most efficient placement of light rail systems in San Diego. The objective of the study is to provide insight into the relationship between transit participation and dense urban areas, elaborate on both the positive and negative features of light rail transit development, and to objectively critique the Mid-Coast Corridor Transit Project. The project utilized a comparative case study process, GIS, and statistical research. The case study shows the relationship between efficient transit systems and dense urban areas. The GIS and statistical research offer spatial and non-spatial data to support the project and to provide factual evidence. The study's main goal was to discover what factors impact the efficiency of a light rail transit system and the explanation of those factors. By doing so, this paper can evaluate the efficiency of SANDAG's Mid-Coast Corridor Transit Project. The result is that the Mid-Coast Corridor Project is not the most efficient implementation of light rail transit due to factors including population density, income level, property values and access to the light rail stations.

~ Audrey Mitchell ~

Does Physical Design Actually Promote Pedestrianism?

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Pedestrian friendly design features of the built environment are the denominator to challenging the car culture in Southern California, changing the habits of residents is the numerator to the Pedestrianism equation. Changing the middleclass Southern California residents' car culture mindset and making them walk more instead of drive requires each individual's desire to be in public spaces over private spaces and the function-ability of walking instead. A presumed walkable community, Liberty Station, is designed to be more pedestrian friendly than a sprawling suburban community, such as the Point Loma suburbs. Liberty Station includes features that promote pedestrianism. Through survey research, interviews, and GIS analysis I performed an analysis of pedestrian activity in each of these communities and compared them to find that promoting pedestrianism through design is a successful approach encouraging people to walk instead of drive to obtain their daily needs so long as it is functional. Usually people's preference to walk instead of drive to destinations change over time as the individual becomes more comfortable with being

in public spaces rather than the privacy of their vehicle. Pedestrianism within communities is important for environmental, personal and community/social health. Pedestrian oriented communities are becoming more and more popular as time progresses and generations change.

~ Brittany Montgomery ~

Comparative Analysis of Why Certain Foods Enter the Home

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

Obesity is a central public health issue because it affects the community as a whole. Childhood obesity has become a high priority in America and has been found to be more prevalent in African American and Latino communities. As a result, there has been an abundance of research on what children are eating in their communities such as schools and local restaurants. There has been little correlation between the rate of obesity and the factors listed above. This research examines what the children are eating in the home in order to see how this food influences their weight. Findings from this research show that children influence the type of food in their home by expressing likes and dislikes. Parents did not buy foods that their children did not eat and children tended to eat similar foods as their parents.

~ Mireya Morales ~

Access to Higher Education: Spatial Mapping of Military Recruitment

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

This is a qualitative study focused on investigating the role of military recruitment in

low-income areas and access students have to institutions of higher education. This study will aim to find this by analyzing GIS data to bring a visual form of representation of a community in South East San Diego. Layers include: income, race/ethnicity, military areas/recruitment centers, schools, and transportation. By layering these populations the study will analyze the correlations between the groups and use scholarly work to support my conclusions.

This study will include a spatial analysis of GIS maps that have been created with an educational research lens and understanding. The existing GIS maps include layers for San Diego County that show data on income, locations of institutions of higher education and racial demographics. This work will be unique in that it will incorporate a layer of military recruitment. The maps exist with separate layers, but my intention is to analyze the data and find the correlations between race, space, access, schools and military recruitment centers.

~ Suchitra Mukherjee ~

The Built Environment and Human Health: Examining the Relationship Between Parks and Obesity

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

Recent studies demonstrate that the built environment can impact physical activity levels. Higher levels of physical activity decrease the risk of obesity. Yet, there is limited discussion on what elements of the built environment are responsible for doing so. The objective of this study is to examine the specific role of informal recreation areas, specifically parks, in affecting obesity. Using GIS technology, zip code level obesity data from the California Health Information Survey (CHIS) was mapped against the number of parks present in San Diego, CA. Results demonstrate that areas with lower numbers of parks have higher levels of obesity. These findings, supported by community interviews, suggest that the lack of accessible parks within San Diego is a significant barrier to health. These results can be used by planning and healthcare agencies to promote better environmental design practices and improved health outcomes.

~ James Nguyen ~

Evaluating the Potential of a HOT BRT Synergistic Model for Low-Mid Density Cities

Area of Concentration:

Transportation Planning

Winter Senior Research Project (SRP) Abstract:

This paper investigates the potential of merging high-occupancy toll (HOT) lanes with bus rapid transit (BRT) as a way of ameliorating suburban congestion and transit woes. Using the San Diego the I-15 HOT/BRT FasTrak project as a case of best practice, this research investigate FasTrak project's potential to serve as a suburban transportation model by utilizing archival planning documentations, academic journals and literature and geographic information systems (GIS). In addition, the research also examined spatial and institutional forces favoring the creation a HOT BRT synergic model. The research found a HOT BRT synergic model is the most favorable transportation alternative for low-mid density city. Furthermore, this research suggests that it may be more beneficial for regional planning and transportation agencies to consider a HOT BRT synergic model over a transit oriented development (TOD) vision that has traditionally rely on the use of light rail transit (LRT).

~ Jeannie Park ~

List here a catchy phrase that conveys the heart of your research project; you can come back to edit

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

San Diego is developing day by day and the population is increasing each year. Compare San Diego city to other major cities; New York City, Chicago, San Francisco and more, San Diego is known as part of the cleanest and greenest city in the United States. I believe that we could make our city or communities build in green

design. This proposal outlines a research strategy to examine how green design can affect the way campus society makes use of space in UCSD. Current UCSD research team is working on the environmental issues of Green design and benefits. This goes to the questions: which is the green building in our campus? And what are the benefits of the green building? And how could non green design building and green building effect to students and staffs? Specifically, I do research on the Green building in UCSD; price center, UCSD solar system and newest graduate student dorms. And the research will contribute to the literature on benefits of Green Design in UC San Diego.

~ Seiyoung Park ~

Urban Vitality Through Regional Parks

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Introduced as the new competent methods to deliver urban policy objectives, parks have been recently recognized in more practical ways to their potentials in three areas: public health, job growth, and sense of community. The purpose of the study is to identify the reasons parks keep gaining more extended meanings in their contributions to the urban communities. The study looked into the past park policies to examine the different views on parks in history, and also sought to answer the question by comparing San Diego's major urban park, the Balboa Park, and major shopping center, the Fashion Valley in terms of their qualities to realize the new practical view change on parks to find out if this new perspective is only applicable to parks or also to shopping centers. It was found that not only parks but shopping malls are able to deliver job growth and sense of community objectives.

~ Sareeta Patel ~

Pre-Modernist Architecture vs. Modernist Architecture: Impact on educational experience

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

This research project examines the importance of architecture in our daily lives through the change from pre-modernist architecture to modernist (sustainable) architecture. Current research suggests sustainable architecture is not only environmentally friendly but also has a very positive impact on human behavior. This research is a comparative study looking at two different educational facilities, University of California San Diego and Ohlone Community College, of which both consist of pre-modernist architecture and sustainable architecture. Through surveys, observational comparative research, and a few interviews, the impact both types of architecture has on current students is analyzed; the findings show sustainable architecture being more suitable in the learning experience and personal growth of the students.

~ Christopher Pegg ~

Inheriting Sustainability: Problems of Induction, the Individual, and the Architect

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

This paper explores a host of speculative threats to sustainable building which could develop from inattention to the temporally dynamic demands placed on a static built environment. This exploration is justified as a step towards mitigating potential threats to sustainability by circumventing latent inefficiencies in resource utilization. This paper also surveys a sample of regional architects' opinions to gauge the prescience of these same issues in an influential sub-population's mind. The research summarized in this paper includes an interdisciplinary translation effort to deduce a set of axioms describing a temporally-robust sustainability as well as a survey of architects' opinions regarding some of these issues in the San Diego region. This research exposes a set of speculative challenges to sustainability which stem from issues such as demographic change and economic restructuring, and finds that while these issues loom large in many architects' minds; this concern is not met with equal concern for the potential consequences to sustainability associated with these issues.

~ *Nina Phinouwong* ~

Urban Consciousness and Mobile Music Culture

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

Mobile music devices continually rework the social dynamics of how individuals interact in public spaces. As the dimensions of both aural and virtual spaces are escalated during users' experiences of the urban fabric, it is disconcerting that urban planners have neglected to address its effects on sociability in their design of public spaces. Through a series of shadowing sessions, participant diaries, and semi-structured interviews, this study sought to find out which spatial characteristics prompted people to use mobile music devices, and whether it was feasible for the planning profession to establish public space practices sensitive to music device use. Using comparative observations and pictures from the shadowing sessions, alongside the feedback from participants' diaries and interviews, it became evident that rather than space informing mobile music use, it was the senses which informed patterns of use. As the sense of hearing hierarchically overtook visual perception of immediate surroundings, spaces within the cityscape became decontextualized—thus, an agenda in which planners create spaces which are sensorially informed rather than simply visually is suggested to create engaging environments in light of rising technologically driven behavior.

~ *Brock Pruter* ~

Offshore Wind Farms in San Diego

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

This paper addresses the feasibility of offshore wind farms off the coast of San Diego. It also examines factors that influence the construction and operation of offshore wind farms in San Diego. These factors include public perception of such a project as well as finding locations off the coast that meet the required specifications

to build an offshore wind farm. When surveyed, the majority of respondents believed that the offshore wind farms would have a positive affect on the community. When compared to the responses of a similar survey in Cape Cod the results differed in that the project was perceived positively by a majority of respondents. Additionally it was concluded after looking at NOAA nautical charts that there are suitable locations off the coast of San Diego that could support an offshore wind farm.

~ Joseph Reinagel ~

Section 8 in San Diego: Determining the effectiveness of Section 8 from the tenant's perspective

Area of Concentration:

Housing

Winter Senior Research Project (SRP) Abstract:

This research project examined the neighborhood selection of San Diegan Section 8 participants and their satisfaction levels. Prior research suggests that recipients are relocating to neighborhoods that are marginally superior to their previous ones. There are concerns that Section 8 recipients need more neighborhood choices because their neighborhoods have discrimination, poverty, and slumlords. If true, Section 8 is ineffective at deconcentrating urban poverty and is failing to provide recipients with acceptable living environments. This study analyzed spatial patterns of Section 8 recipients and found that they were located in racially-mixed, working-class neighborhoods with significant amounts of poverty and crime. However, these neighborhoods are considered more desirable than the environs that those on the waiting list for Section 8 assistance have to endure. Current Section 8 participants were surveyed; they indicated that Section 8 has been a positive experience. The most pressing concerns were the deteriorating condition of their homes and neighborhood crime.

~ Melissa Reyes ~

Examining Our Water Shortage: Desalination Plants

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

After ten years of planning, the Carlsbad Desalination project began its construction in 2009 in an effort to increase fresh water access and availability. Unfortunately, the desalination of ocean waters has spurred a debate within the categories of environmental impacts, costs, benefits, and efficiency. This paper identifies the social and political processes that enabled the Carlsbad Desalination project to be adopted and implemented. This study investigates and examines the debate if desalination is a feasible solution to Southern California's water crisis. In terms of its context, political and policy action has a strong role in desalination. After close observation, it became evident that a large percentile of San Diego residents lacked basic knowledge of desalination, which had a direct impact on their political and social position on the use of desalination as a solution to the water shortage. In the end, this research contributes to the debate on the public's awareness of desalination and its political influences.

~ Natanael Roberts ~

Pathways Towards Financial Inclusion: Assessing Financial Resources Through Asset Mapping– DD SESD

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

Community economic development requires financial resources. This research project examines the availability of financial resources in the Diamond District neighborhoods of Southeastern San Diego to determine whether they are inclusive operations beneficial to the community. A research strategy was formed aimed at finding these resources by utilizing Geographic Information System (GIS) collected data obtained from onsite visits and online resources. The data collected showed that the area is not financially inclusive as there are a higher amount of alternative financial institutions that are considered predatory. Case studies of some existing inclusive financial institutions are then offered as an example for potential change in these neighborhoods. The research will contribute to the literature on financial services in low-middle income communities. The results will be shared with other

organizations and individuals that are interested in using this information to establish community-based financial institutions.

~ Zee Sa ~

The Effects of Water Storage and Irrigation on Human Vulnerability to Disease

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

The study examined and evaluated water policy in the San Diego Basin 9 plan for water sheds, Safe Drinking Waters Act, Clean Waters Act, Title 22 of the California Code of Regulations, and the World Health Organizations Guidelines for Drinking Water Quality. The study's aim was to improve the public health by promoting safer, cleaner, water systems by understanding different water regulations and examine the efficiency of the use of chemical treatments to clean water and promote the public health. The research consisted of data collection from different water systems and regulations they abide by, the level of chemical treatment used such as chlorination, level of fluoride used if any, interviews and data collected from different water system sites. The result shows that most water systems follow similar regulations to manage their water systems and the type of chemical treatment used is similar but the use of fluoridation differs between system depending on number of service each system provides. The research includes the comparative study of different water systems in San Diego County such as the Small Drinking water program, Environmental Protection Agency Drinking Waters and the San Diego Regional Water Quality Control Board relying on interviews and data obtained to assess their similarities and differences. The result obtained demonstrates that the water regulations these water systems abide by acts as a prevention of potential outbreaks from water borne diseases but there has been no policy or awareness on the potential health issues that can arise from chemical by products resulting from the excessive amount of chemical treatments used in these water systems.

~ Ryan Sclar ~

Localizing agricultural distribution networks in San

Diego County

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

Contemporary farming techniques come with considerable external social costs to the environment, food security, healthcare, and other public entities. Sustainable agricultural practices (SAP) offer solutions to many of these problems, however many aspects of SAP are hard to apply in a fashion which is environmentally and economically beneficial. Agricultural distribution localization shares many of the benefits of other SAP and is easier to put into practice because it can be implemented independently of other changes and can potentially lead directly to immediate cost savings. This study examines ways in which the distribution network can be utilized and enhanced to advance localization within San Diego County. Research is centered on the farms to school (FTS) program in the San Diego Unified School District (SDUSD) and conducted through interviews, tours, and primary documents. This project identifies the major obstacle to the adoption of localized distribution networks as a lack of appropriate local crop supply and analyzes ways to overcome these impediments by examining the successes of the FTS program at the SDUSD. It is concluded that not all products can be locally distributed; however localization in San Diego is becoming increasingly viable and entities such as the FTS program at SDUSD are acting as agents of change to promote the localization effort.

~ Ryan Seda ~

The need for Microfinance to be implemented using a multipronged approach

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

Microfinance continues to receive recognition as a valuable tool in providing business capital to the poor and under-served. Currently four main business models of microfinance exist: the not-for-profit business model, the social business model, the for-profit-business model, and the hybrid social business model. Many practitioners

are in a disagreement about which business structure stands superior in fostering economic development. This study looks at all four business models to determine if in-fact a superior model of microfinance exists. The best method of microfinance implementation was established by lending to entrepreneurs through microfinance companies on KIVA, conducting interviews from different microfinance institutions and from recipients of microfinance loans, and gathering information through a random participant survey. The research findings suggested microfinance institutions utilizing the for-profit distribution structures have the greatest ability to expand microfinance's access, thus bolstering the economy through job creation and increased income of microenterprise business owners.

~ Erick Serrano ~

Developing Efficient and Sustainable Transportation Systems in San Diego

Area of Concentration:

Transportation Planning

Winter Senior Research Project (SRP) Abstract:

As the world continues to develop and resources continually become scarce, alternatives to sustain the American way of life have become more important than ever. The American transportation system has become increasingly dependent on one mode of transportation, the personal automobile. Throughout the 20th century the American transit system of the postwar boom developed in favor of the automobile, especially in the sprawling cities of the west coast, like San Diego. The developed transportation system of the United States needs to look for new answers within transportation planning that is sustainable and efficient. The San Diego region has a multitude of transportation planning that is sustainable and efficient. San Diego incorporates light rail, bus, and automobiles into the city's transit system. This paper deals with the idea of creating a system that can be both efficient and sustainable. By using various cities and models that have created efficient and sustainable transportation systems, this paper aims to incorporate these models into the San Diego region. Data from this paper can in turn be used by other regions and cities to help promote efficient and sustainable planning. The reach in the paper will provide additional value in the field of transportation planning because it will provide characteristics necessary to produce a successful transportation system that is efficient and sustainable.

~ Kristy Shields ~

It Takes a Vision to Raise a Village: A Case Study of The Village at Market Creek

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

This paper analyzes how developers can use community participation in the planning and development process to enhance the social infrastructure of a neighborhood. A case study of the Village at Market Creek development project in Southeastern San Diego was conducted, beginning November 2010 and continuing through February 2011. The developer of the Village at Market Creek project, The Jacobs Center for Neighborhood Innovation, held three planning meetings during the study period in an effort to collect input that will be used to update The Village at Market Creek plan. Based on observational data collected at each of these meetings as well as interviews with key players in the development process, this paper will detail methods to: 1) Increase participation and attendance at development meetings. 2) Provide community members with the skills they need to make informed development decisions. 3) Address concerns about the effect of the development project on the future of the community. The symbiotic relationship of these three aspects of the development process serves as a model for planning a viable project for the community it is intended to serve.

Key Terms: community participation, urban design, sustainability, equitable development

~ Adrian Tamas ~

Community Gardens: Building community through Gardening

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

The goal of this research paper was to analyze the effects of a community garden on a college campus and the community as a whole. The questions asked was, will the garden attract greater community participation and involvement? The research's main focus was on the success of a community garden on a college campus in bringing the Warren College population together, fostering community, and increasing the level of resident involvement in the community as a whole and its overall impact. Evidence was gathered through resident surveys, interviews, as well as participant observation, as a Resident Advisor. Based on the evidence gathered, the conclusion in this particular case study is that the garden had no significant impact on resident interaction and community building, however, it had success on the individual and group level, with a promising future for greater community participation.

~ Hien Thach ~

Epidemiological study of HIV/AIDS in Hillcrest

Area of Concentration:

Public Health, Safety and Welfare

Winter Senior Research Project (SRP) Abstract:

The City of San Diego, more specifically Hillcrest, like many large cities has dealt with HIV/AIDS as an urban health problem. Recent data suggests that HIV transmission rates are rising. HIV/AIDS has been known to create social injustice, and political instability in many cities and countries. The purpose of this study is to determine how social factors: social capital, social networks, and physical space influence the effectiveness of healthcare organizations. These healthcare organizations are the sole providers of education and prevention for at risk populations. They also provide support groups for those that are infected or affected with HIV/AIDS. By understanding the roles of the organizations, the study provides evidence of correlation, allowing healthcare providers and public health workers a study that can help implement preventative measures. Through qualitative research this study was able to answer the question of how HIV/AIDS health-care organizations play a role in the prevention of HIV/AIDS as influenced by social capital, social networks, and physical space. The findings provide evidence that healthcare organizations provide prevention through encouragement of status disclosure, educational measures, while maintaining the confidentiality of their clients.

~ Frederico Tou ~

Sustainable Designs in La Jolla—Building La Jolla as a Low Automobile Dependency Community

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

In the 21st Century, many cities in the United States are suffering from urban sprawl because of the high dependency of automobiles; La Jolla in San Diego is no exception. Vehicles have already become the major transportation tool for the residents of La Jolla traveling from one spot to another spot. However, high dependency of automobiles is absolutely not meeting with the concepts of sustainability. In order to build a sustainable environment in La Jolla, sustainable designs are needed. Two examples of sustainable designs are pedestrian and bicycle friendly equipments. In this research, I will examine why and how to build a pedestrian and bicycle friendly environment in La Jolla through sustainable designs such as safety islands, bicycle lanes and widen the sidewalks. The results will be addressed by interviews with the residents from La Jolla and related organizations, surveys, observation, cases study, and community plan analysis.

~ *Kathy Tran* ~

The Economic Effectiveness of Historic Designation in San Diego

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

Over the past 45 years, the goals of historic preservation have evolved from simply protecting aged buildings from destruction to using historic preservation as a tool to economically revitalize neighborhoods. After comparatively examining census data, historical documents, and conducted interviews, for four central San Diego neighborhoods - Golden Hill, Sherman Heights, North Park, and South Park, research suggests that historic designation does not directly lead to neighborhood economic improvement and gentrification. Rather, this study finds that historic designation may indirectly contribute to economic development. The study concludes that

gentrification cannot be equated with historic preservation. The research overall contributes to current literature on community and economic development as well as historic preservation, and provides city and community official with greater insight on historic designation in San Diego.

~ Amy Truong ~

The Possibilities of Sustainable Development through the Public Sphere

Area of Concentration:

Urban and Regional Planning

Winter Senior Research Project (SRP) Abstract:

As our advancements in technology grow throughout the years, the ideas of sustainable cities or “eco-cities” slowly deteriorate. This study will examine the ideas of sustainable development and why they are not put into practice due to the need for economic growth. The objective is to understand why politicians, private corporations, and other high end businesses are able to jump into a city and build what they want, when the city obviously belongs to the community. Sustainable development will promote a better lifestyle for the community and thus they should do something about it. This study will focus on what business people are doing to achieve their goals and what the community can do to stop them from creating more unsustainable developments. This study would be conducted through observations, analyzing online forums and news articles.

~ Tien Tu ~

Smart Growth in San Diego: Measuring Policy Effectiveness-Analyzing Efficacy of Smart Growth Policie

Area of Concentration:

Urban and Regional Planning

Winter Senior Research Project (SRP) Abstract:

The concept of Smart Growth has been an emerging guiding principle for professionals in the field of planning. Smart Growth theories advocating compact transit oriented and mixed land uses are hailed as a big solution to the problems of urban sprawl. The San Diego Association of Governments, the planning organization for the county, has integrated Smart Growth policies into many developments throughout San Diego. This research paper examines the effectiveness of a smart growth development to see if there are disconnects between planning and implementation. The research is conducted in a development that is designated as a Smart Growth site by SANDAG. Research comprises examining a variety of effectiveness indicators through data and site assessment, and has found that effectiveness in regards to implementation is superior in the site I studied. The perceptions and habits of citizens in the area however, hinder the progress of Smart Growth policies. The study's purpose is to add to the discussion on the value of Smart Growth in the West.

~ Casey Uy ~

Public Participation: The Importance of Community Participation in Neighborhood Planning

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

This paper draws on the importance of public participation in the neighborhood planning process. In some ways citizens are the forgotten part of collaborative planning, which results to a failed community. Failed communities that did not consider public participation is evidence for the need of input from the community. The purpose of this paper is to address the effectiveness of community participation in creating an updated Neighborhood Plan for the Hillcrest community. Quantitative data and literature show that citizen participation is very effective in creating excellent neighborhood plans that will bring needed and accepted change into a community. The research strategy used to support the findings was a series of business forums—called Hillcrest 2.0—organized by the Hillcrest Business Association. The Hillcrest Business Association acts as a liaison between the business community and the city, and encourages economic development for the Hillcrest area through events and promotion. The main result of the business forums was a set of neighborhood-specific urban design guidelines for Hillcrest that was based off

statements the residents made during Hillcrest 2.0.

~ Ellis Valencia ~

Building Community through Art: A Case Study of Writerz Blok Art Program in San Diego

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

Current research suggests that community art projects have a positive impact on community development. This research project will seek to evaluate the degree of efficacy and impact that community art centers and the strategies they utilize have on community development in terms of community identity, crime prevention, and economic growth. Specifically, I conducted a case study of San Diego's only legal graffiti park, "Writerz Blok". The research project utilizes secondary document analysis, interviews, personal observation, and archival record analysis to evaluate the perceived benefit of these programs for all stakeholders. The results conclude that community art projects do have a positive impact on community identity and participation, and crime prevention. However, the correlation between Writerz Blok and these impacts cannot be solely attributed to the Writerz Blok program because of the collaborative nature of community efforts and the complexities in evaluating interventions. This research project will add to the literature regarding community art projects, development, and community participation, so that others may improve the efficiency of their programs.

~ Josh Van Zak ~

Sim City Realized and its Implications

Area of Concentration:

Community and Economic Development

Winter Senior Research Project (SRP) Abstract:

Systems thinking is an approach for developing models to facilitate our understanding of complex concepts, patterns of behavior, and the underlying structure responsible for the patterns of behavior. With respect to the city, phenomena like economic growth, taxes, population density, and zoning, are rendered as algorithms that are visible, dynamic, spatial processes occurring on the computer screen according to the rules by which they function in the city. By creating a computer game simulation of an existing city in real time and real space, citizens, politicians, and city planners, will gain greater understanding for how the mechanisms of the city work, and how they can work for and against the citizens. This will produce better informed voters and more honest politicians. To this end, it is conceivable that the platform that a politician runs on, ie. proposed taxes, budget cuts, etc., can be run through this simulation and would then return realistic predictions of the consequences of these proposed initiatives. This paper seeks to explore the feasibility, benefits, and ethical implications of creating such a program by using what has been researched about using realtime statistical feeds, urban planning simulations, and optimization algorithms.

~ Riley Weissenborn ~

Reuse Warehouses: Recycled Building Materials Making Their Way into Everyday Life

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

The purpose of this study was to analyze the way in which reuse warehouses curb the amount of construction and demolition waste that enters dump sites, as well as to look at the way in which reuse warehouses affect the communities around them. In order to discover the answers to these questions, three case studies were looked at along with three different sources of evidence: (1) data collection of waste and recycling at the country, state, and local levels (2) direct observation of reuse warehouses (3) interviews with members of the selected reuse warehouses. The findings of the study showed that reuse warehouses throughout the country made an extremely large impact in diverting construction and demolition waste from dumpsites, and using the diverted materials for a myriad of other uses. Another major finding showed that no matter what type or form of reuse warehouse was being used, it made a positive significant

~ *Allison Weston* ~

It's More Than Just Planting Seeds, Picking Beans, and Pulling Weeds

Area of Concentration:

Environment

Winter Senior Research Project (SRP) Abstract:

Unless radical changes are made to the way the national food system interacts with the land, American agriculture will soon face a serious prospect of decline. While there is an abundance of research detailing innovative strategies working to make the national food system more sustainable, World Wide Opportunities on Organic Farms (WWOOF) is notably absent from this discourse. WWOOF is an organization that connects organic farms and volunteers. In exchange for farm work, WWOOF host farms provide volunteers with food, housing, and the chance to learn about organic farming. In order to fully understand WWOOF's transformative power, this study explores why host farmers are motivated to participate in WWOOF using semi-structured ethnographic interviews with farmers and participant observation working on farms. This study found that the most significant motivating force for all five WWOOF host farmers is the desire to harness the sense of community that WWOOF provides. This suggests that Americans not only need to change the way their national food system interacts with the land, but Americans also need to change the way that they relate to each other within the national food system.

~ *Melody Wu* ~

Creating Cycling Campuses: Following the European Example

Area of Concentration:

Transportation Planning

Winter Senior Research Project (SRP) Abstract:

This purpose of this study is to evaluate how many cities in Northern European have adopted innovative tactics to foster an inviting cycling community and how

transferrable these approaches are to college campuses. Current research reveals that these European cities have made cycling an effective mode of personal transportation through pro-bike policies, strong bicycle infrastructure, and programs that work to increase ridership. Among the various conveniences of bicycle activity, the focus regards utility cycling—bicycling for transportation purposes rather than for recreational sport and fitness. Using UCSD as a case study, this research involved discussion regarding the success of such European cycling measures and how these ideas have been or could be applied around campus. Evidence is based on a culmination of extensive observations, personal experiences, interviews and encounters along my travels around Northern Europe and as an undergraduate attending UCSD. Over the course of this project, the key to encouraging more ridership around campus is a strong transportation infrastructure that tackles and reinforces the safety, convenience and attractiveness of cycling. This research will contribute to the literature on sustainable transportation planning in the hope of creating stronger bicycle communities. It offers a set of guidelines and suggestions for UCSD to consider when planning for a more bicycle-friendly campus.

~ Jamie Yan ~

Visualizing Sustainability

Area of Concentration:

Architecture and Urban Design

Winter Senior Research Project (SRP) Abstract:

As the natural resources are being extensively depleted, sustainability is an issue that needs to be addressed not only at the authoritative level, but also with the general public as well, as it is a collaborative effort. As a result, this research endeavors to determine effective elements to be incorporated into the design of buildings in hopes to further the efforts of sustainability. It aims to connect the aesthetics of the building seen by the visible eye to the ideology of sustainability, while encouraging developers and architects to abide by effective guidelines in promoting this ideal through effective elements found including the characteristics of the buildings itself along with its relationship with its surroundings. The idea of the visual culture is the artistic tastes and interpretation of what is aesthetically pleasing to an individual and connects to how people communicate ideas, opinions, facts, art, and theories in a visual way with building designs as a medium. The focus of the paper analyzes the importance of aesthetics in order to formulate design guidelines that can be implemented in sustainable building with hopes of contribution to the current sustainable design.