Schools by Design
Finding solutions to school “walkability” in the Coachella Valley region of Southern California

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This report acknowledges that the Schools by Design project was conceived by Andy McCue, former Managing Director of the Center for Sustainable Suburban Development at the University of California, Riverside, as part of a CVAG task force. He created the original two-page proposal with Catherine McMillan, Governmental Services Director with the Coachella Valley Association of Governments.

This report also acknowledges the passing of Catherine McMillan, one of the Project’s original directors. Catherine’s belief that students in the Coachella Valley should enjoy a safe route to school, regardless of socioeconomic status, was a guiding force for this Project. Her guidance and advice are greatly appreciated and missed.
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Executive Summary:

Providing safer routes to school while encouraging exercise and social skills was the focus of a two-year research project recently completed in Riverside County’s Coachella Valley. *Schools By Design* was a collaborative project that brought together local school district and government officials, county health specialists, parents, teachers, urban planners and engineers to develop a model that could be used by other communities for establishing safer routes to school.

The *Schools by Design* project’s personnel gathered data on traffic around Coachella Valley schools; surveyed thousands of the region’s students and parents about their attitudes on walking or biking to school and related issues; and successfully built relationships among representatives of local schools, school districts, cities, and public health agencies to identify how cities and school districts might work together to improve safety and promote greater “walkability” in the Coachella Valley, especially for children going to and from school.

Working together, *Schools by Design* personnel and community partners produced new data about student pedestrian safety in the Coachella Valley that indicates public support for, and institutional capacity to create, safer routes to school. This information was used to solicit $1.8 million in funded grant proposals to cover the costs of infrastructural and other changes currently needed to ensure safe routes to school for the region’s children. Finally, *Schools by Design* partners instituted a Memorandum of Understanding (MOU) between cities, school districts, and regional planning agencies to guide the implementation of regularly scheduled meetings and ongoing dialogue regarding new models and best practices for maintaining safe routes to school and generally encouraging walking and other self-propelled means of transportation to and from school in the Coachella Valley.
Introduction

Schools were once widely regarded as safe places, far removed from the dangers and complexities of the outside world, where students could learn and plan for the future. However, in an era where tragic violence and pressing legal and social issues have moved onto campuses, the provision of a physical environment where learning and maturing is paramount has become a pressing concern. The literature on schoolhouse safety and maintenance ranges from crime deterrence, to new, “green” energy efficient designs. School safety is an issue that is greater than the school campus. Yet remarkably little has been written on what happens during the trip to school. As important as it is to provide a safe environment during the school day, it is equally important that students be able to travel to and from their places of learning in an environment that protects them from traffic, provides relatively safe and monitored routes for travel, and allows children to exercise and associate with peers while walking to campus.

Due to the difficulty and costs associated with securing land, schools in California are increasingly placed with insufficient attention to social needs, and often designed without adequately considering the safety of school children or the needs of adjacent communities. National model guidelines for school construction standards recommend one acre of land for every 1,000 students, leaving school districts in the position of clearing land in urban areas
(which often has a deleterious effect on neighborhoods) or finding large open spaces on the urban fringe, thus creating schools “in the middle of nowhere.” No wonder that today schools are often located on any large parcels available in largely built-out areas that are still expanding in population, or parcels that are most cost-efficient, which are typically far away from the center of the neighborhood. Such guidelines for school site location often place campuses on the forefront of urban sprawl (Beaumont, 2002: 27). The social implications for “neighborhoods” near schools has become clear in marked declines in student pedestrian commuting. The National Center for Safe Routes to School (NCSRS) estimates that in 1969, 42% of adolescent children walked or biked to school; however in 2001 only 16% of children walked or biked (NCSRS, 2006: 1).

As community schools have become divorced from the traditional neighborhood setting, negative externalities, including traffic accidents and poor health, have emerged as potent threats to the safety of children. For example, “in Marin County, California, ... it is estimated that 21 percent to 27 percent of peak morning traffic is school related” (Appleyard, 2003: 34). In 2004, approximately 29,000 adolescent pedestrians or bicyclists were injured getting to school, and 493 were killed. Moreover, a survey by the U.S. Centers for Disease Control and Prevention ranked traffic safety as the second leading cause for why parents prohibit their children from walking to school (NCSRS, 2006: 3).

But not walking to school also has associated dangers. The American Medical Association (AMA) has found that approximately 16% of American children between the ages of six and nineteen are obese, and that related diseases, like diabetes and arthritis, are on the rise. The AMA notes, “[f]ocusing... efforts on nutrition and exercise in schools can help prevent obesity and overweight in many children who may be at risk” (AMA, 2005: 1).
evaluating the problems of traffic safety and childhood health, it becomes clear that a balance must be found that will assist to “reconnect” schools with neighborhoods, and to expand the opportunities for children to exercise during the longest scheduled activity of their day. Building partnerships that will allow children to walk safely to and from school becomes of paramount importance.
The Schools by Design Project (hereon referred to as the Project) was formed in response to concerns about insufficient communication and collaboration between representatives of cities, schools, school districts, and interested community members in the Coachella Valley about issues of student safety on the streets and in the neighborhoods near and around the region’s schools. In contrast to standard planning models that require schools simply to be located within the street grid and placed on a per-capita basis, the Project sought to establish a broader set of community partnerships to address the locations of schools proactively, and specifically in relation to the provision of safe routes to school.

The Project required gathering data on school traffic issues in the Coachella Valley via surveys and traffic modeling, and establishing ongoing dialogue among community members and selected, interested representatives as partners in the creation of safe routes to school for the Coachella Valley’s children. In addition to meeting these requirements, the Project also generated the funding partnerships between school districts and public health agencies that successfully won four grants totaling more than $1.8 million in government support to address structural problems that had impeded the creation and maintenance of safe routes to school. Participants roundly regard the Project to have been a success in its provision of the information and resources needed to develop better relationships and guidelines for improving “walkability” – particularly around schools – in the Coachella Valley as the region continues to develop.
This project had three distinct phases. During the first phase of the Project, researchers affiliated with the Center for Sustainable Suburban Development (CSSD) examined existing rules and practices governing school site location and design in California, and analyzed traffic patterns, land-use, and planning issues relevant to schools and the safety of children moving to and from them. In addition, researchers collaborated with staff from the Coachella Valley Association of Governments (CVAG) to develop relationships with key personnel from the Coachella Valley, Desert Sands, and Palm Springs school districts. Finally, a local oversight committee, consisting of CSSD and CVAG staff, representatives of city and county agencies and offices who were interested in the Project and willing to contribute their expertise.

During the Project’s second phase, CSSD shared the results of its research and began working with local representatives to develop surveys with the aim of understanding what students and their parents regarded as the barriers to “walkable” schools in their communities. The finalized “student” surveys were administered to more than 7,000 children in K-8 classrooms throughout the Coachella Valley; likewise, the “parent” surveys were administered to nearly 2,000 parents. Student researchers at CSSD coded responses to the survey and worked with the Center’s research staff to analyze the resulting data.

On the basis of the what participants learned from CSSD’s research and survey results, the third phase of this Project consisted of CSSD’s facilitation of a series of meetings intended to develop a uniform Memorandum of Understanding (MOU) between CVAG and the Coachella Valley school districts that will enable these bodies to continue collaborating on site location standards and school site design with an eye to minimizing traffic and improving student accessibility to safe routes to school as a component of greater “walkability” in the region.
The Coachella Valley is situated in Riverside County, which at 7,207 square miles is one of the fastest growing counties and the fourth largest county in California. In Riverside’s eastern region, the Coachella Valley boasts a richly diverse cultural and economic environment. Two hours from Los Angeles and San Diego, and an hour from the heart of the Riverside-San Bernardino Counties, the Coachella Valley is comprised of nine cities and four unincorporated Riverside County communities. The Coachella Valley has gained its international acclaim as a tourism destination with snow-capped mountains, manicured golf courses, and excellent weather year-round. Figure 2 below provides a map of the Coachella Valley with school district boundaries highlighted.

With some of the most affordable housing and land markets in California ($187,000 median for a single-family home versus $220,000 median for Riverside County and $285,600 median in the State of California, according to the California Association of Realtors in November 2008), the Coachella Valley has emerged as a highly desirable destination because of its highly trained workforce and the availability of affordable homes. A diverse racial composition is one of the Coachella Valley's greatest resources. Like most of Southern California, the Coachella Valley has a well-established and growing Hispanic population (49.9% of the Coachella Valley in 2004). The median age for the Coachella Valley is 36.1 years, and is projected to decrease during the next decade, making for a well-balanced community and work force.
The Coachella Valley has three K-12 school districts: Palm Springs Unified, Desert Sands Unified, and Coachella Unified. All of the school districts in the Coachella Valley are expanding with new and remodeled schools to meet the growing population. In 2005, Palm Desert High School was identified as a California Distinguished High School, making it one of only 192 schools out of the state's 2,300 public high schools and middle schools to receive this honor. Figure 1 highlights the California Distinguished Schools in the Coachella Valley.
**Figure 1: California Distinguished Schools in the Coachella Valley**

<table>
<thead>
<tr>
<th>District</th>
<th>School</th>
<th>Year</th>
<th>Type</th>
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<tbody>
<tr>
<td>Desert Sands Unified</td>
<td>Amelia Earhart School</td>
<td>2008</td>
<td>Elementary</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>Indio Middle</td>
<td>1996</td>
<td>Middle</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>James Monroe Elementary</td>
<td>2000</td>
<td>Elementary</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>La Quinta High</td>
<td>2003</td>
<td>High</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>La Quinta High</td>
<td>1999</td>
<td>High</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>La Quinta Middle</td>
<td>1994</td>
<td>Middle</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>Lincoln Elementary</td>
<td>2006</td>
<td>Elementary</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>Palm Desert High</td>
<td>2005</td>
<td>High</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>Palm Desert Middle</td>
<td>2007</td>
<td>Middle</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>Palm Desert Middle</td>
<td>2003</td>
<td>Middle</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>Truman Elementary</td>
<td>2006</td>
<td>Elementary</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>Washington Charter School</td>
<td>2004</td>
<td>Elementary</td>
</tr>
<tr>
<td>Desert Sands Unified</td>
<td>Washington Charter School</td>
<td>1998</td>
<td>Elementary</td>
</tr>
<tr>
<td>Coachella Valley Unified</td>
<td>Oasis Elementary</td>
<td>1998</td>
<td>Elementary</td>
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<tr>
<td>Coachella Valley Unified</td>
<td>West Shores High</td>
<td>1992</td>
<td>High</td>
</tr>
<tr>
<td>Palm Springs Unified</td>
<td>Cathedral City Elementary</td>
<td>1998</td>
<td>Elementary</td>
</tr>
<tr>
<td>Palm Springs Unified</td>
<td>Landau Elementary</td>
<td>1995</td>
<td>Elementary</td>
</tr>
<tr>
<td>Palm Springs Unified</td>
<td>Palm Springs High</td>
<td>1986</td>
<td>High</td>
</tr>
<tr>
<td>Palm Springs Unified</td>
<td>Rio Vista Elementary</td>
<td>2008</td>
<td>Elementary</td>
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Figure 2: The Coachella Valley with delineated school districts
Ensuring Pedestrian-Safe Paths of Travel for Students

The ability of school-aged children to access school on foot, bike, scooter, or other form of non-motorized transportation, has benefits both for the community and the students. Schools are community assets, through which the interaction of schools and communities can merge neighborhood and educational interests to solve problems and create a positive nexus for neighborhood life. Students get much needed exercise by walking to school, in addition to time for associating with peers and gain mentoring from any adults who accompany them. Creating safe corridors for school travel, requires attention to: infrastructure concerns, design, traffic patterns, the assurance of “eyes on the street,” and community – representatives of and advocates for schools, regional planning agencies, and municipalities, etc.

- **Infrastructure Concerns** – Providing safe routes to school begins with providing an infrastructure environment that promotes “walkable” sidewalks and streets. Do safe paths of travel have street lights that are timed for safe pedestrian access, crosswalks with well marked and accessible signals, and wide sidewalks and bike lanes for safe travel?

- **Design** – “Walkable” schools are not just an issue of external traffic measures. How students access school campuses is also of extreme importance. The ability to control access to schools may have the effect of controlling student traffic to particular safe routes. If students can access school grounds from multiple points, then traffic patterns cannot
be controlled, and students will continue to take the shortest or easiest travel paths, but not necessarily the safest routes.

- **Traffic Concerns** – Are there streets besides main arterials that can be used for travel? If main arterials must be used, can better street design techniques, such as lower speed limits, dedicated lanes, and/or temporary lane contractions, be incorporated to make the trip to school safer for children?

- **Eyes on the Street** - Originally attributed to the great urban planning book, *The Death and Life of Great American Cities*, by Jane Jacobs. An extension of the concept of “eyes on the street” is the idea that a diverse neighborhood will watch that children are safe as they walk to school, and provide well-marked safe havens if a child feels in danger along a path of travel to campus.

- **United Community Effort** – Creating safe travel paths for students cannot be the work of schools alone. Rather, such a project should be viewed as a community-wide concern. Partners in the creation of safe travel paths may include school districts, regional planning agencies, cities and counties, neighborhood groups, and parents. As schools often run on a year-round schedule, the creation of safe travel paths is a partnership between groups that should last longer than the school year and be an ongoing effort to ensure student (and community) safety.

- **The Creation of Partnerships** – Part of a united community effort is the recognition that safe paths of travel for students are “community goods.” Schools, cities, community groups, and parents are often viewed as having competing, not complimentary, needs and objectives and therefore do not work towards common goals. Safe routes to school only exist if they are facilitated by the community and parents of school-aged children who actively encourage their children to use these safe paths.
Figure 3: Schools by Design community meeting
A comprehensive partnership between parents, schools, city/regional governments, and regional planners is needed to create better school design and location. Schools are often located simply in areas where land is available or cost effective. The location of schools in relation to pedestrian-friendly environments has been a secondary concern. Can schools exist amidst the dedicated bicycle paths, street design (narrowed roads, traffic islands), high capacity cross walks, high visibility signage, recalibrated street lights, and insulated walking entries into school grounds that can make the walking trip to school a safe and enjoyable experience (Appleyard, 2003: 35)? The answer is ABSOLUTELY! But how do we get to a better model?

- **TRAFFIC ANALYSIS** – This Project began with a series of traffic analysis projects. CSSD, in association with UC Riverside’s College of Engineering’s Center for Environmental Research and Technology (CE-CERT), and with the cooperation of CVAG staff, used traffic count data to identify traffic problem areas near schools in the desert communities of Riverside County during periods of high and low traffic. Identifying traffic problems provided a basis for informed communication with Coachella Valley’s school districts and

When pedestrian-friendly streets were installed in one city in Denmark, child pedestrian and cyclist casualties fell by 80%.
individual schools, and eventually the drafting of survey questions to better assess problems with school “walkability” issues.

- **SURVEY DATA** — Together, with input from members of the Project’s Steering Committee and participants at the first community meetings, CSSD and CVAG implemented a “Parent Survey” and a “Student Survey” that ascertained local attitudes toward problems and solutions for creating “walkable” schools. CSSD developed the survey instrument and analyzed results. With the approval and support of the Coachella Valley school districts, CVAG coordinated with teachers and administrators at selected schools to disseminate paper surveys that asked a short series of school travel questions related to preferences for student travel and problems with modes of transit. [A final, brief survey of administrators and officials affiliated with the region’s school districts and city governments was conducted to assess these leaders’ awareness of school safety issues and likely commitment to the Project’s goals.] These surveys produced wider Project participation by providing information that can be, and has already been, used by schools and their partners in the community to write grants and secure funds for projects to increase the number and viability of “walkable” schools.

- **COMMUNITY MEETINGS** — Traffic and survey data were the foundation for a series of community meetings facilitated by CSSD, with support from CVAG, that enabled participants to work together linking school design and school placement with community concerns. Several important questions were addressed: Can schools be located in areas with existing street and infrastructure that can accommodate safe trips to school, or
do stronger partnerships for cost sharing need to be in place between cities and schools to ensure student pedestrian safety through street improvements (e.g., improved sidewalks, street crossings, street signals, street design, visible signage)? Can community partnerships be formed to ensure that resources are available to partnerships between school districts and cities so that children don’t feel threatened by traffic hazards on their way to school?
A Project Divided into Tasks

The Project’s final product - a Memorandum of Understanding (MOU) - is meant to be a model for participation and communication among parents, students, and school district representatives; city and regional governments and agencies; public health officials; and interested members of the community aimed at ensuring safe routes to school and greater walkability, in general. The specific tasks involved with providing a safe and “walkable” environment to school are complex. Hence the Project was intentionally broken down into tasks to allow for the timely completion of the Project, while giving ample opportunity for input into the final document. The tasks roughly mirrored a set of recommendations for a “planning process for safe and effective schools” by the California Department of Education, which recommends the following seven steps:

1. Identify your planning committee members.
2. Create a vision of your school as a place where students are safe to learn.
3. Gather and analyze data;
4. Identify areas of desired change and set major goals;
5. Select and implement strategies;
6. Communicate the safety plan to the public; and
7. Evaluate your progress and revise the plan (California Department of Education 2002: 4-5).

Task # 1 – Development of a Traffic Measurement Tool and Preliminary Meetings

In this task, CVAG and CSSD cooperatively developed vehicular traffic analyses of schools administered by the Coachella Valley school districts. Schools were also analyzed in terms of socioeconomic and geographic indicators to make for easier comparisons. Observations for traffic measurement were
made via Geographic Information System (GIS) analysis. Both aerial and cadastral maps with traffic data were produced by CVAG and CSSD, which identified major paths of vehicular travel for school sites, origins of cars, and access points into school areas.

Simultaneously, CVAG and CSSD arranged a series of area meetings with participating schools in the Coachella Valley, Desert Sands, and Palm Springs school districts, as well as interested local government managers. Participants included school superintendents, municipal traffic safety personnel, local parent-teacher groups, etc. The goal of these meetings was to introduce the Project and set up a Steering Committee to provide input for project tasks, and create an inter-governmental dialogue on school planning and “walkability” issues. The Steering Committee met bi-monthly for the duration of the Project.

**City and School District Meetings**

CVAG and CSSD conducted ongoing meetings throughout the Project’s duration with area school districts and cities to garner and maintain support for the Project’s scope, intent, and goals. Meetings involved representatives of the Desert Sands School District, Palm Springs Unified School District, and Coachella Valley School District, as well as 10 area cities and the Riverside County Department of Public Health. These meetings culminated with two half-day conferences at the UC Riverside’s Palm Desert Campus, which were held on November 5, 2008 and January 28, 2009. The meetings presented the results of data collection efforts to date, and facilitated round-table discussions regarding key areas of concern that should be included in the MOU document. Breakout groups were also professionally facilitated and input was integrated into the MOU, which is discussed below in detail. Additionally, several successful state/federal “safe routes to school” applications for the Coachella Valley were announced to the Steering Committee. At both meetings, area school districts and cities strongly endorsed the MOU concept.
Agencies represented at the various Project meetings included CVAG, UCR-CSSD, Caltrans--District 8, City of Palm Desert, City of Cathedral City, Coachella Valley Water District, Sunline Transit, Coachella Valley Unified School District, Palm Springs Unified School District, Desert Sands Unified School District, Agua Caliente Band of Cahuilla Indians, Riverside County Department of Public Health, Building Industry Association, City of Indian Wells, a local planning consultant, developer, and an architect.

Figure 4: Schools by Design community meeting

Task # 2 – Survey Evaluation Processes: Student and Parent “Walkability” Surveys

Two surveys were presented and approved by desert-area school districts over the life of the Project, which were intended to determine both how and why children walk to school. The first survey, implemented by a planning and transportation consultant, was an “in-class” survey that asked how children travel to school. A follow-up survey implemented by CSSD, in collaboration with CVAG, asked parents questions about why school travel decisions were made. The parent survey inquired about student travel modes, time and miles traveled, school access, barriers to walking, and parent participation regarding knowledge of student travel choices and willingness to participate in the Project. The “in-
“class” survey was implemented from February to April of 2008, and the parent survey was implemented from June to August of 2008. A final survey of school districts and cities was conducted in October 2008.

As student pedestrian safety often deals with issues outside of the power of school districts, partnerships between schools, cities, and regional partners for external funding are key. A principal player in this process was the federal Safe Routes to School (SRTS) Program, which was funded by the federal Department of Transportation. The infusion of federal funds nationwide led to a recent burst of planning and collaboration in finding solutions to the provision of “walkable” routes to school. A close collaborative effort between CVAG, CSSD, and the local oversight board produced collaborative models that were used to attract much needed funding and produce partnerships for future grant applications. As an outgrowth of the Project, several successful State and Federal “safe routes to school” grants were awarded to Coachella Valley school districts to address physical issues that impeded the ability of students to walk to school.
Findings from the Surveys

Student “Walkability” Survey

A survey of school-aged students was successfully implemented by the Project in the Palm Springs and Coachella Valley Unified School Districts. The purpose of the survey was to gain information at the classroom-level from school-aged students about how they actually arrive at school (“actual”), and how they would like to get to school, given a choice (“aspirational”). The student survey, designed by the Project Steering Committee, listed ten scenarios illustrating how children travel to school (e.g., walking, driving, public transportation). The “in-class” survey was implemented by the school districts and analyzed by CSSD.

The project student survey consisted of 330 classrooms and 7,379 students between kindergarten and the 8th grade.

The survey encompassed two school districts, ten individual schools, 330 classrooms between kindergarten and the 8th grade, and approximately 7,379 individual students. CSSD produced a question-by-question analysis of the survey, as well as statistical analysis based on class size and school tenure. CSSD’s analysis indicated that the car remains a key mode of transportation and most students who are not driven to school want to be driven. However, the survey also showed that other modes of transportation (bus and bicycle), while not as popular as the car as a mode of transit, hold promise of expansion as a mode of student transit.

Parent Survey Analysis

CSSD coded and analyzed 1,874 survey responses from the Palm Springs and Coachella Valley Unified School Districts. For the first two children included in the parent survey (the survey accommodates answers for up to four children), a majority of respondents drove to school and did so with greater frequency than those who walked to school (walking was the second most popular choice...
among respondents). Biking and carpooling were the least popular answers, although those who carpooled did so with a greater frequency than those students who rode a bike. Parents strongly thought that there were traffic concerns along routes to school. Among parents who drove their children to school, the most popular reasons why they chose to drive included safety, speeding vehicles, and campuses that were too far to walk. Parents might allow their children to bike to school if their children were accompanied, cars slowed, and sidewalks were improved.  

**Task # 3 – Evaluation Forums & the Compilation of a Model Memorandum of Understanding (MOU) Between Schools, Cities, and Local Agencies to Ensure Safe and “Walkable” Routes to School**

There were several outcomes anticipated for the Project. The collaborative process was expected to produce a number of safety recommendations, perhaps in the form of a guidebook, in addition to establishing actual safe routes to school for students. While the expectation was that these recommendations would be specific to the desert communities of Riverside, participants hoped that they would also be largely generalizable to other jurisdictions using a step-by-step process that is easy to follow. This guidebook would address issues of traffic, crime, school design, parental and municipal involvement, and other issues that create “walkable” (and safe) schools.

The associated task was to create an MOU between cities and schools that could be used elsewhere and in the future. As a whole, the outcomes of the Project were to be presented nationally as a way to tout what has been learned and to add to a knowledge base to improve the existing Project recommendations.

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1 Based on the most frequent answers from the parent survey.
Memorandum of Understanding

The Project’s final result was the MOU between schools and cities that can be replicated elsewhere, where government parties can work with regional planning bodies to use frequent meetings to form an ongoing dialogue regarding issues of “walkability” and school safety for children. The MOU is attached as Appendix “F” of this report. The MOU is anticipated to facilitate alternative strategies, which will allow for children to travel to school safely by addressing issues, such as school site location, offsite infrastructure, utilities, and local resident concerns regarding schools, and safe routes of travel for students. Possible grant partnerships between cities and school districts are emphasized in the MOU.
Outcomes for the Schools by Design Project

CSSD and CVAG anticipated several deliverables for the Project. The first was the MOU between cities and schools that aimed to facilitate cooperation between cities and schools, with attention to relevant local and regional planning bodies, to locate schools where the traffic grid was amenable to the safety of children. Second, the Project investigated a number of alternative strategies to compare school designs and location standards to find a “best of fit” criteria, which can be used as a local standard (where none currently exists) for ensuring that children can travel to and from school safely so that they may exercise and interact with others.
Meeting Goals & Objectives
Set by the Project Grant

Were the Project Purposes Met?

The Project showcased the creation of “livable” communities by creating a lasting dialogue about the benefits of walking to school, how schools integrate into the fabric of the community, and strategies for making schools better designed to serve students by promoting walking and other self-propelled means of transportation to and from school. The Project also leveraged many sources of funding, from in-kind staff time from the County of Riverside, to external state and federal grants that were successfully obtained by the intergovernmental partnerships, strengthened by Project discussions and activities. In all, the Project made a small, but significant step toward addressing a serious challenge to livable and sustainable communities in the Coachella Valley.

Were the Project Objectives Met?

The original goals of the Project included promoting a dialogue that would improve student-pedestrian safety by promoting walking and biking, examining schools and transportation systems, and reintroducing the notion of ties between neighborhoods and schools. The Project has been a success in all of these areas. First, the Project amassed a body of data for use in grants to improve student safety and encourage walking to school in the Coachella Valley. One outstanding outcome of this effort is that the Project has already led to grant partnerships that attracted funding to improve student safety when walking to school. Second, the Project led to new tools (e.g., the MOU) to institutionalize an ongoing dialogue between cities and schools regarding school site location and construction to lead to safer and better planned campuses.
Finally, and most importantly, the Project re-ignited a dialogue about the links between schools and the larger/broader community, which has encouraged local partners to look beyond the confines of the campus and examine linkages between home and school to make for safer and more “walkable” routes to school for students. The Project looks at these accomplishments as a small first step in addressing student “walkability” issues, but regards the core objectives related to Caltrans funding to have been met.

What Were the Strengths of the Project?

There were three main strengths of Project: 1) the establishment of intergovernmental partnerships in the Coachella Valley, where few existed prior to the Project; 2) the successful application for grant funds to fix structural problems that had previously impeded school "walkability" in several area; and 3) the institutionalization of an MOU that will assist in structured and ongoing meetings about school development and student walking/transit issues. In short, the Project strengthened a dialogue about student safety and walking, and structured partnerships so that the issue will continue to be addressed after the Project is completed.

What are the Weaknesses that Might have Inhibited Project Accomplishment?

A survey of school districts and cities in the Coachella Valley completed by the Project indicated that intergovernmental partnerships were strained by a lack of communication and insular attitudes between government entities regarding school site location and development (this survey is attached in Appendix E). The project took a strong first step in getting government parties to agree to meet on a regular basis to address student school safety. The Project surmounted the largest weaknesses that may have hindered meaningful accomplishments.
What are the Next Steps to be Towards the Implementation of the Project?

It is paramount that the meetings instituted by the Project via the MOU be continued. Continued discussion between schools and cities, to include other government agencies and community members when relevant and appropriate, as partners can lead to better school planning and better intergovernmental relations. Also, partnerships for grant applications need to be continued with the expectation of attracting more external funding to address specific problems related to school “walkability” in the Coachella Valley.
For More Information:

Coachella Valley Association of Governments
73-710 Fred Waring Drive
Palm Desert, CA 92260

University of California, Riverside
Center for Sustainable Suburban Development
B101 Highlander Hall
Riverside, CA 92521

http://www.cssd.ucr.edu/schoolsbydesign.htm
Figure 5: “Schools by Design” Project Timeline for Completion

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Planned Completion (Month/Year)</th>
<th>Actual Completion (Month/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Information Gathering</td>
<td>June, 2007</td>
<td>October, 2007</td>
</tr>
<tr>
<td>#2 Individual Forums with Schools</td>
<td>December, 2007</td>
<td>May, 2008</td>
</tr>
<tr>
<td>#3 Two School Surveys</td>
<td>March, 2008</td>
<td>September, 2008</td>
</tr>
<tr>
<td>#4 Broader Public/Schools Meetings</td>
<td>June, 2008</td>
<td>December, 2008</td>
</tr>
<tr>
<td>#5 Website Development</td>
<td>December, 2008</td>
<td>January, 2009</td>
</tr>
<tr>
<td>#5 Memorandum of Understanding</td>
<td>December, 2008</td>
<td>February, 2009</td>
</tr>
<tr>
<td>#5 Final Report</td>
<td>December, 2008</td>
<td>February, 2009</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY:


ATTACHMENTS:

Attachment A – Parent Survey Form
Attachment B – Parent Survey Results
Attachment C – Student Survey Form
Attachment D – Student Survey Results
Attachment E – City/School District Survey
Attachment F – MOU
Safe Routes to School Program
“Schools by Design”

The…….. Unified School District, the Coachella Valley Association of Governments, and UC Riverside are working together to conduct a survey of how students get to and from school. We want to make it safer for your child to walk or bike to school. Please complete the attached survey (Spanish version on back) and return it to the school by January 25, 2008. Thank you for your cooperation.

Parent Survey: How Our Children Travel to School  Date _____________

1. What school does your child attend? _____________________________________________

2. What is your zip code and the city of your residence?
   Zip code: _______________  City: _____________________________________________

3. What is the approximate distance from your home to the school?
   ☐  1/4 mile or less
   ☐  1/4 to 1/2 mile
   ☐  1/2 mile to 1 mile
   ☐  between 1–2 miles
   ☐  over 2 miles

4. How does your child usually travel to and from school? Complete a chart below for each child.

TO SCHOOL IN THE MORNING:
What is your child’s sex and grade level?
   Boy _______ Girl _______ Grade _______

<table>
<thead>
<tr>
<th>CHILD No. 1</th>
<th>Every Day</th>
<th>2-3 X per week</th>
<th>Once a week</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bike</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driven</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpool</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is your child’s sex and grade level?
   Boy _______ Girl _______ Grade _______

<table>
<thead>
<tr>
<th>CHILD No. 2</th>
<th>Every Day</th>
<th>2-3 X per week</th>
<th>Once a week</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bike</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driven</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpool</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is your child’s sex and grade level?

<table>
<thead>
<tr>
<th>CHILD No.</th>
<th>Every Day</th>
<th>2-3 X per week</th>
<th>Once a week</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FROM SCHOOL IN THE AFTERNOON:

What is your child’s sex and grade level?

<table>
<thead>
<tr>
<th>CHILD No.</th>
<th>Every Day</th>
<th>2-3 X per week</th>
<th>Once a week</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is your child’s sex and grade level?

<table>
<thead>
<tr>
<th>CHILD No.</th>
<th>Every Day</th>
<th>2-3 X per week</th>
<th>Once a week</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is your child’s sex and grade level?

<table>
<thead>
<tr>
<th>CHILD No.</th>
<th>Every Day</th>
<th>2-3 X per week</th>
<th>Once a week</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is your child’s sex and grade level?

<table>
<thead>
<tr>
<th>CHILD No.</th>
<th>Every Day</th>
<th>2-3 X per week</th>
<th>Once a week</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is your child’s sex and grade level?

<table>
<thead>
<tr>
<th>Child</th>
<th>No.</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Walk</th>
<th>Bike</th>
<th>Driven</th>
<th>Carpool</th>
<th>Bus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Does the school provide a safe place to store bikes?  yes_____ no_____

6. Do you have concerns about traffic safety along the routes to school?  yes_____ no_____

7. Please explain (include specific streets or intersections that you believe are not safe).

8. If you drive your child to and from school, why do you make that choice?

- Safety
- Convenience
- Drop off on way to work
- Too far to walk
- Sidewalks (lack of or incomplete)
- High speed vehicles
- Child is too young
- Bad weather
- Child would not obey safety rules
- Backpacks too heavy
- Carrying projects or musical instruments
- Tardiness
- Safe place to cross the street
- Scary people
- Lack of safe place to store bikes
- No biking or walking route maps
- Paths are incomplete or not wide enough
- Unfriendly dogs
- Other

9. Would you allow your child to walk or bike to school if:

- Accompanied by other children
- Accompanied by other parents
- The school provided route maps
- Crossing guards were more effective
- Safety training was provided for students
- Sidewalks and bike paths were improved
- Cars slowed down
- Secure bike storage was available
- Paths were separated from traffic
- Other

10. Would you let your child carpool if:

- You were familiar with the driver
- Someone organized it
- Other

11. Would you be interested in volunteering to help set up or maintain a walking or biking program?  yes_____ no_____

If so, please give your name and phone number
Name: ___________________________ Phone #: ___________________________

PLEASE RETURN TO SCHOOL OFFICE BY JANUARY 25, 2008
Total number of surveys = 1,874.

<table>
<thead>
<tr>
<th>Every Day</th>
<th>2-3x’s Per Week</th>
<th>Once a Week</th>
<th>Occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

### Selected Mean Answers –

<table>
<thead>
<tr>
<th>Child # 1</th>
<th>TO School</th>
<th>FROM School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td>1=48 (9%); 2=87(16%); 3=44(8%); 4=363(67%)</td>
<td>1=39 (18%); 2=7(3%); 3=26(12%); 4=145(68%)</td>
</tr>
<tr>
<td>Bike</td>
<td>1=7(32%); 2=4(18%); 3=4(18%); 4=7(32%)</td>
<td>1=6(55%); 2=1(9%); 3=1(9%); 4=3(27%)</td>
</tr>
<tr>
<td>Driven</td>
<td>1=28(3%); 2=125(12%); 3=32(3%); 864(82%)</td>
<td>1=17(4%); 2=2(.005%); 3=13(3%); 353(91%)</td>
</tr>
<tr>
<td>Carpool</td>
<td>1=10(10%); 2=17(17%); 3=9(9%); 4=67(65%)</td>
<td>1=8(19%); 2=1(2%); 3=1(2%); 4=31(72%)</td>
</tr>
<tr>
<td>Bus</td>
<td>1=11(3%); 2=61(15%); 3=12(3%); 4=312(79%)</td>
<td>1=6(5%); 2=0(0%); 3=7(6%); 4=102(86%)</td>
</tr>
<tr>
<td>Child # 2</td>
<td>TO School</td>
<td>FROM School</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Walk</td>
<td>1=14 (6%); 2=27(12%); 3=19(8%); 4=168(74%)</td>
<td>1=20 (19%); 2=3(3%); 3=11(10%); 4=70(65%)</td>
</tr>
<tr>
<td>Bike</td>
<td>1=3 (30%); 2=1(10%); 3=2(20%); 4=4(40%)</td>
<td>1=3(38%); 2=0(0%); 3=1(13%); 4=4(50%)</td>
</tr>
<tr>
<td>Driven</td>
<td>1=15 (3%); 2=51(10%); 3=15(3%); 4=415(84%)</td>
<td>1=8(4%); 2=1(.004%); 3=8(4%); 182(91%)</td>
</tr>
<tr>
<td>Carpool</td>
<td>1=4 (8%); 2=6(12%); 3=5(10%); 4=35(70%)</td>
<td>1=1(5%); 2=2(10%); 3=0(0%); 4=16(80%)</td>
</tr>
<tr>
<td>Bus</td>
<td>1=6 (3%); 2=27(14%); 3=5(3%); 4=157(81%)</td>
<td>1=3(5%); 2=0(0%); 3=2(3%); 4=55(89%)</td>
</tr>
<tr>
<td>Child # 3</td>
<td>TO School</td>
<td>FROM School</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Walk (84 Answers - TO)</td>
<td>1=101 (12%); 2=8(9%); 3=7(8%); 4=59(70%)</td>
<td>1=8 (17%); 2=2(4%); 3=2(4%); 4=34(71%)</td>
</tr>
<tr>
<td>(48 Answers – FROM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bike (3 Answers - TO)</td>
<td>1=1 (33%); 2=1(33%); 3=N/A; 4=1(33%)</td>
<td>1=1(100%); 2=0(0%); 3=0(0%); 4=0(0%)</td>
</tr>
<tr>
<td>(1 Answer – FROM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driven (167 Answers)</td>
<td>1=4 (2%); 2=16(10%); 3=5(3%); 4=142(85%)</td>
<td>1=3(3%); 2=0(0%); 3=3(3%); 81(92%)</td>
</tr>
<tr>
<td>(88 Answers – FROM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpool (17 Answers - TO)</td>
<td>1=1 (6%); 2=1(6%); 3=1(6%); 4=14(82%)</td>
<td>1=1(8%); 2=0(0%); 3=0(0%); 4=11(85%)</td>
</tr>
<tr>
<td>(13 Answers – FROM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus (65 Answers - TO)</td>
<td>1=3 (5%); 2=7(11%); 3=2(3%); 4=53(82%)</td>
<td>1=2(7%); 2=0(0%); 3=0(0%); 4=26(93%)</td>
</tr>
<tr>
<td>(28 Answers – FROM)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q6: Do you have concerns about traffic safety along routes to school (yes/no)? (number of responses, n=1,631) Yes: 904 (55.4%) No: 727 (44.6%)

Q8: If you drive your child, why do you make that choice? (number of responses)
Safety=999 Convenience=194 Drop off/way to work=235 Too far to walk=441 Sidewalks=291 Speeding vehicles=462 Child too young=398 Weather=245 Child not obeying rules=50 Backpacks heavy=173 Projects/instruments=62 Tardiness=123 Safe place to cross=201 Scary people=367 Lack safe bike storage=34 No bike/walk maps=87 Incomplete paths=200 Dogs=270

Q9: Would you allow your child to walk or bike if: (number of responses)
School name _____________________________ Grade ____  #Students enrolled in classroom____

Teacher _________________________________ Date __________________________

**Teachers: Here are some simple instructions for using this form:**
- Before doing anything, please write all the answers on the board or hand them out.
- Please ask the students to read all the answers before they decide on the **one answer** that best applies to them.
- Ask your students as a group Question 1: “How did you arrive at school today?”
- Remind them to raise their hand only once.
- Read each answer aloud and record the number of students below who raise their hands for each.
- Then ask Question 2: “How would you like to come to school?”
- Follow the same process as before.
- Record the tally below. Please return this form to Principal (name) ___ by (date) .

<table>
<thead>
<tr>
<th>Question 1</th>
<th>Question 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td></td>
</tr>
<tr>
<td>Bicycle</td>
<td></td>
</tr>
<tr>
<td>Other self-driven (skateboard, in-line skates, scooter, etc.)</td>
<td></td>
</tr>
<tr>
<td>School Bus (only put this in if they have them)</td>
<td></td>
</tr>
<tr>
<td>Family vehicle driven by a parent (only with children from your family)</td>
<td></td>
</tr>
<tr>
<td>Carpool driven by a parent (riding with children from other families)</td>
<td></td>
</tr>
<tr>
<td>Sunline Bus</td>
<td></td>
</tr>
<tr>
<td>Drive alone (High School surveys only)</td>
<td></td>
</tr>
<tr>
<td>Motorcycle, moped, etc. (High School surveys only)</td>
<td></td>
</tr>
<tr>
<td>Other not listed (please specify) ___________________________</td>
<td></td>
</tr>
</tbody>
</table>

**Thank you for your cooperation!**
“Schools by Design”
California Department of Transportation
Coachella Valley Association of Governments
UCR Center for Sustainable Suburban Development

Safe Routes to School
Student Survey Analysis

www.cssd.ucr.edu
Purpose of Survey

• To gain information at the classroom level from school aged students on how they actually arrive at school ("actual"), and how they would like to get to school if given a choice ("aspiration")
Survey Overview

- Number of Participating Districts: 2
- Number of Schools: 10
- Number of classrooms/teachers: 330
- Grade levels: kindergarten to 8th grade
- Average Class Size: 22.36
  - Percentages in this study are based on Average Class Size (rounded).
Glossary

- **Correlations** = A test that seeks to find a linear relationship between variables
- **Median** = Answer that divides the dataset at the 50\(^{th}\) percentile
- **Mean** (average) = Central tendency
  - Sum of scores divided by number of scores
Correlations

• Why use class size?
  - Possible indicator of school size
  - Peer pressure indicator

• Why use grade level?
  - Decisions change with age
Question # 1

• How did you arrive at school today?
  Walk - Actual
• Minimum/Maximum: 0/21
• Mean Answer: 5.25 (23.5%)
• Median Answer: 4 (17.9%)
• Correlations:
  - Class Size: Coef.=0.058  Std. Err.= 0.032  \( R^2=0.010 \)
  - Grade Level: Coef.=-0.396***  Std. Err.=0.090  \( R^2=0.055 \)

*p<.10  **p<.05  ***p<.01
Question #1

- How would you like to come to school? 
  Walk - Aspire
- Minimum/Maximum: 0/20
- Mean Answer: 3.56 (15.9%)
- Median Answer: 3 (13.4%)
- Correlations:
  - Class Size: Coef.=0.030 Std. Err.=0.025 R^2= 0.004
  - Grade Level: Coef. =-0.277*** Std. Err.=0.071 R^2=0.044

*p<.10  **p<.05  ***p<.01
Question # 2

• How did you arrive at school today? **Bicycle - Actual**
• Minimum/Maximum: 0/6
• Mean Answer: 0.421 (1.9%)
• Median Answer: 0
• Correlations:
  - Class Size: Coef.=0.018** Std. Err.=0.005
    \[ R^2=0.031 \]
  - Grade Level: Coef.=0.063*** Std. Err.=0.016
    \[ R^2=0.043 \]

*p<.10  **p<.05  ***p<.01
Question # 2

- How would you like to come to school?
  Bicycle - Aspire
- Minimum/Maximum: 0/26
- Mean Answer: 4.13 (18.5%)
- Median Answer: 3 (13.4%)
- Correlations:
  - Class Size: Coef.=0.022 Std. Err.=0.027 R²=0.00
  - Grade Level: Coef.=-0.174** Std. Err.=0.078 R²=0.014
  *p<.10  **p<.05  ***p<.01
Question # 3

• How did you arrive at school today?
  Other Self Driven - Actual
• Minimum/Maximum: 0/12
• Mean Answer: 0.306 (1.4%)
• Median Answer: 0
• Correlations:
  - Class Size: Coef.=0.011* Std. Err.=0.006 R²=0.00
  - Grade Level: Coef.=0.074*** Std. Err.=0.018 R²=0.045
*p<.10  **p<.05  ***p<.01
Question # 3

• How would you like to come to school?
  Other Self driven - **Aspire**

• Minimum/Maximum: 0/18
• Mean Answer: 2.36 (10.6%)
• Median Answer: 2 (8.9%)
• Correlations:
  - Class Size: Coef.=0.077***  Std. Err.=0.020  
    \( R^2=0.044 \)
  - Grade Level: Coef.=0.142**  Std. Err.=0.059  
    \( R^2=0.017 \)

*p<.10  **p<.05  ***p<.01
Question # 4

• How did you arrive at school today?
  School Bus - Actual
• Minimum/Maximum: 0/20
• Mean Answer: 2.66 (11.9%)
• Median Answer: 2 (8.9%)
• Correlations:
  - Class Size: Coef.=0.112*** Std. Err.=0.024
    $R^2=0.066$
  - Grade Level: Coef.=0.200** Std. Err.=0.070
    $R^2=0.024$

*p<.10  **p<.05  ***p<.01
Question # 4

• How would you like to come to school? 
  School Bus - Aspire

• Minimum/Maximum: 0/13
• Mean Answer: 1.62 (7.2%)
• Median Answer: 1 (4.5%)
• Correlations:
  - Class Size: Coef.=0.009  Std. Err.=0.016  R²=0.001
  - Grade Level: Coef.=-0.101**  Std. Err.=0.047  R²=0.014

*p<.10  **p<.05  ***p<.01

www.cssd.ucr.edu
Question # 5

• How did you arrive at school today?  
  **Family Vehicle - Actual**
  • Minimum/Maximum: 0/34
  • Mean Answer: 11.99 (53.6%)
  • Median Answer: 12 (53.6%)
  • Correlations:
    - Class Size: Coef.=0.541***  Std. Err.=0.035  
      \( R^2=0.429 \)
    - Grade Level: Coef.=1.218***  Std. Err.=0.117  
      \( R^2=0.248 \)

*\( p<.10 \)  **\( p<.05 \)  ***\( p<.01 \)
Question # 5

- How would you like to come to school?
  Family Vehicle - **Aspire**
- Minimum/Maximum: 0/39
- Mean Answer: 7.74 (34.6%)
- Median Answer: 6 (26.8%)
- Correlations:
  - Class Size: Coef.=0.486*** Std. Err.=0.041 $R^2=0.314$
  - Grade Level: Coef.=1.221*** Std. Err.=0.125 $R^2=0.226$

*p<.10  **p<.05  ***p<.01  www.cssd.ucr.edu
Question # 6

• How did you arrive at school today?
  **Carpool - Actual**
• Minimum/Maximum: 0/15
• Mean Answer: 1.68 (7.5%)
• Median Answer: 1 (4.5%)
• Correlations:
  - Class Size: Coef.=0.087*** Std. Err.=0.017
    $R^2=0.076$
  - Grade Level: Coef.=0.114** Std. Err.=0.051
    $R^2=0.015$

*p<.10  **p<.05  ***p<.01
Question # 6

• How would you like to come to school?
  **Carpool - Aspire**
• Minimum/Maximum: 0/17
• Mean Answer: 1.26  (5.6%)
• Median Answer: 0
• Correlations:
  - Class Size: Coef.=0.083***  Std. Err.=0.017  
    $R^2=0.070$
  - Grade Level: Coef.=0.203***  Std. Err.=0.050  
    $R^2=0.048$

*p<.10  **p<.05  ***p<.01  
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Question # 7

• How did you arrive at school today? **Sunline Bus - Actual**
  • Minimum/Maximum: 0/11
  • Mean Answer: 0.193 (.863%)  
  • Median Answer: 0
  • Correlations:
    - Class Size: Coef.=0.015* Std. Err.=0.006 R²=0.017
    - Grade Level: Coef.=0.054** Std. Err.=0.018 R²=0.026

*p<.10  **p<.05  ***p<.01
Question # 7

• How would you like to come to school? **Sunline Bus - Aspire**
  • Minimum/Maximum: 0/13
  • Mean Answer: 1.62 (7.2%)
  • Median Answer: 1 (4.5%)
  • Correlations:
    - Class Size: Coef.=0.041***  Std. Err.=0.007  \( R^2=0.087 \)
    - Grade Level: Coef.=-0.101**  Std. Err.=0.047  \( R^2=0.014 \)

*\( p<.10 \)  **\( p<.05 \)  ***\( p<.01 \)
Question # 8

• How did you arrive at school today?
  Drive Alone - Actual

• Unable to Analyze - Significant blank answers make statistical analysis impossible
Question # 8

• How did you arrive at school today?
  Drive Alone – Aspire

• Unable to Analyze – Significant blank answers make statistical analysis impossible
Question # 9

• How did you arrive at school today? **Motorcycle – Actual**

• Unable to Analyze – Significant blank answers make statistical analysis impossible
Question # 9

• How did you arrive at school today? **Motorcycle - Aspire**

• Unable to Analyze - Significant blank answers make statistical analysis impossible
Question # 10

• How did you arrive at school today?
  Other - Actual

• Unable to Analyze - Significant blank answers make statistical analysis impossible
Question # 10

• How did you arrive at school today?
  Other – Aspire

• Unable to Analyze – Significant blank answers make statistical analysis impossible
Question # 10

- Question 10 – Free response answers (most popular):
  - Van
  - Fly
  - Limo (4)
  - Helicopter
  - Horse
  - Taxi
  - Airplane (2)
  - Grandmother
  - Neighbor/Friend Drive (2)
Analysis

• The car remains a key mode of transportation, and most students who are not driven want to be driven.

• Other modes of transportation (bus and bicycle) are not popular, but hold promise of expansion as a mode of student transit.
“Schools by Design”
California Department of Transportation
Coachella Valley Association of Governments
UCR Center for Sustainable Suburban Development

Safe Routes to School
Student Survey Analysis

www.cssd.ucr.edu
The Center for Sustainable Suburban Development at the University of California, Riverside and the Coachella Valley Association of Governments are conducting a study of school planning and development issues in the Coachella Valley. This questionnaire has been developed to collect information about planning and communication related to the site location of schools. Your responses to this survey are confidential, meaning reports using this survey information will combine all responses and not identify you specifically or single out your answers. You may choose to not answer any specific question, or disregard the survey entirely. Your assistance is greatly appreciated.

We understand you are busy and we have intentionally kept this survey brief (14 questions). If you need additional information about this project or would like a copy of the report on the information we collect, contact Jeff McLaughlin, University of California, Center for Sustainable Suburban Development, Riverside, CA 92521. Additional contacts are Phone: 951-827-6290, or email at jmcla001@ucr.edu.

1. What are the most important issues that you believe should determine the location of a school? Please rank your top three choices:
--- cost of land;
--- donated land;
--- existing owned site;
--- location that reduces operation expenses, such as busing;
--- sites that provide land for multiple schools;
--- sites that reduce infrastructure expenses (e.g., sidewalk improvements/road improvements/water and utility connections);
--- Other: _______________________________________________

2. If you are a CITY, how do you rate your intergovernmental relations with SCHOOL DISTRICTS in your area?
   a. Relations are often strained;
   b. Relations are fair;
   c. Relations are good;
   d. Relations are very strong.
3. Per question #2 above, if you do not have good intergovernmental relations, please use the space below to explain why. Remember, all answers are CONFIDENTIAL.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

4. Per Question #2 above, if you could make one suggestion to make relations “better” (e.g., smoother, more efficient, more cordial) what would that suggestion be? Please use the space below to share your answer.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

5. Rank your top three DEVELOPMENT ISSUES (e.g, use “1” for the biggest issue, etc.)

--- Neighborhood opposition;
--- Communication with cities;
--- State mandates;
--- Water and utilities;
--- Offsites (e.g., streets, sidewalks, traffic signals);
--- Cost overruns;
--- Others (Please explain): ________________________________________________.

Please Turn the Page
6. Per question #5 above, what one suggestion would you make that would improve (e.g., smoother, more efficient, more cordial) the government process in tackling the above issues? Use the space below for your answer.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

7. How would you rate your intergovernmental relations with cities on SITE RELATED ISSUES?

   e. Relations are often strained;
   f. Relations are fair;
   g. Relations are good;
   h. Relations are very strong.

8. Per question #7 above, if you do not have good intergovernmental relations regarding SITE ISSUES, please use the space below to explain why. Remember, all answers are CONFIDENTIAL.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

9. Per Question # 7 above, if you could make one suggestion to make relations “better” (e.g., smoother, more efficient, more cordial) regarding SITE ISSUES what would that suggestion be? Please use the space below to share your answer.

10. Has your city/district utilized agreements to produce JOINT USE FACILITIES?
   a. No;
   b. Yes.

11. If your city has NOT utilized agreements to produce JOINT USE FACILITIES, what has been the biggest impediment? Please use the space below to provide your answer.

12. If you could implement other types of partnerships/programs with your district partners, what would be your highest priority?

   --- After school activities;
   --- Joint use facilities;
   --- “Walkable” schools partnerships;
   --- Site planning partnerships;
   --- Grant application partnerships;
   --- Offsite development funding partnerships;
   --- Other: ___________________________________________________.

Please Turn the Page ➔
13. Thinking generally, what would you recommend to best improve the process of site selection and construction with your district partners? Please use the space below to give your answer.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

14. If we were to develop a Memorandum of Understanding (MOU) to promote partnerships between school districts and cities in the Coachella Valley, what parts of your answer to Question #12 should be included in this agreement? Please use the space below to provide your answer.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Please identify your City (This is voluntary): ____________________________________

Please fax your Survey responses to (951) 827-2619 or mail the survey to:

Jeff McLaughlin
UCR – CSSD
B101 Highlander Hall
Riverside, CA  92521

The Survey is now complete. Thank You!
MEMORANDUM OF UNDERSTANDING

Parties to the Memorandum of Understanding (“MOU”)

This memorandum of Understanding (“MOU”) is entered into between the City of ________; the ________ Unified School District; and the Coachella Valley Association of Governments. This MOU is for the development of partnerships and the establishment of scheduled forms of communication between school districts, local utilities and transit agencies, cities, and regional planning entities.

Purpose of the MOU

WHEREAS, in 2006 the National Center for Safe Routes to School (NCSRS) estimates that in 1969, 42% of adolescent children walked or biked to school, however in 2001 only 16% of children walked or biked; and

WHEREAS, in 2005 the American Medical Association (AMA) found that approximately 16% of American children between the ages of six and nineteen were obese, and that related diseases like diabetes and arthritis are on the rise in the United States; and

WHEREAS, it is recognized that the establishment of safe routes to school is beneficial to school districts in curbing childhood disease and promoting social interaction among students through walking, biking, and exercise, and assists cities in the establishment of safe and healthy communities; and

WHEREAS, traffic, site planning, and community issues represent key constraints to the creation of safe routes to school that can be successfully addressed via an open dialogue on these issues; and

WHEREAS, it is recognized that a partnership between school districts and cities can assist in the location of new schools by addressing community concerns, planning for infrastructure issues, and addressing site specific issues such as utilities and street access that can make for a school that is properly designed while decreasing building costs; and

WHEREAS, it is recognized by the City of ___________; the ________________ School District and the Coachella Valley Association of Governments that bureaucratic isolation and lack of communication is detrimental to the creation of safe routes to school and the important benefits that walking has for students; and

WHEREAS, these agencies desire to establish a long-term process which allows each individual agency to discuss on a frequent and ongoing basis the issues associated with school site location issues, creating safe routes to schools for existing campuses, and working partnerships for external funding; and

2/19/2009
WHEREAS, it is recognized that opportunities to compete for external funding to solve the problems related to safe routes to school can be achieved by partnerships between school districts, cities, and regional planning agencies; and

NOW, THEREFORE, IT IS RESOLVED that the parties to this MOU agree to form standing collaborative meetings to address the issues of creating safe routes to school and further agree to adhere to the following guidelines in the formation, management and operations of the collaborative meeting group.

**Collaborative Discussion Group for Safe Routes to School**

I. Core Participants. Core Participants are the signatories to this Agreement.

II. Scheduled Meetings. There shall be initiated among the Core Participants a standing series of meetings that shall be arranged to occur on an as-needed basis, but not less than once a quarter. These meetings shall exclude federal, state, and school district holidays.

III. Discussion Topics. The agreed scheduled meetings shall generally address the issues of creating safe routes to school with discussion topics that include (but are not limited to) planning and development for present school site locations, offsite infrastructure inclusive of streets, sidewalks, and roads, water, power, and other utility issues, local resident concerns regarding school sites, student health issues related to walking to school, engaging and educating parents, grant applications and partnerships to fund projects related to the creation of safe routes to school, and future school site selection issues.

IV. Meeting Format. Scheduled meetings will adhere to a format set by a simple majority vote of the Core Participants and shall be open to the public as appropriate and/or required by law. Time and duration of these meetings will be set by the Core Participants to this Agreement. Meetings will be appropriately noticed.

V. Grant Partnerships. The Core Participants will, to the extent possible, participate in partnerships to enhance and attract external grant funding from federal, state, local, and private sources for the purpose of school planning and the creation of safe routes to school for students.

VI. Outreach. The Core Participants will make a good faith effort to outreach and seek advice from other interested parties and agencies including (but not limited to) school district superintendents or their representatives; municipal mayors or their representatives, city managers or their representatives, regional utilities and transit agencies, public health agencies, law enforcement, parent-teacher associations, regional planning agencies, and other organizations that may be named in Attachment “A” of this Agreement.
Data Sharing and Acknowledgement

I. It is acknowledged that any data and information shared in meetings that are considered confidential by law shall remain confidential among the parties to this Agreement.

II. Any successful grant applications or outcomes from the meetings and partnerships formed under this Agreement will be generally acknowledged to all parties to this Agreement.

Duration and Termination

This MOU is to remain in effect for 5 (five) years following it’s execution by the parties to this MOU. This MOU may be terminated at any time by any of the parties to the Agreement with a 30 (thirty) day notice to the remaining parties. Should one party elect to terminate participation under this Agreement, the remaining parties may continue the meetings and collaboration contemplated in this Agreement. This Agreement will automatically terminate should a simple majority of parties to the Agreement terminate participation with appropriate notice as defined above.

Liability and Insurance

Each party to this MOU hereby assumes any and all risks for personal injury and property damage attributable to the negligent acts or omissions of that party and the officers, employees, and agents thereof. Each Agreement member warrants that it has adequate Worker’s Compensation Insurance and liability insurance for its own employees. Agreement members agree to indemnify and hold each other harmless from any obligations, costs, claims, judgments, attorney fees, and/or attachments in any way connected with the services provides under this agreement.

Independent Contractor

In the performance of all services and obligations under this Agreement, all parties shall act as independent agents. Parties shall not be considered as an employee or agent of another participant organization in this MOU.

Force Majeure

No parties to this Agreement shall be liable or deemed to be in default for any delay or failure in performance under this Agreement or interruption of services resulting, directly or indirectly, from acts of God, civil or military authority, acts of the public enemy, strikes, labor disputes, or any similar cause beyond the reasonable control of participants to this Agreement.
Assignment

This Agreement shall inure to the benefit of and be binding upon and enforceable by the parties and their successors and permitted assigns.

Governing Law

The validity and interpretation of this Agreement shall be governed by the laws of the State of California.

Execution

IN WITNESS THEREOF, City of ________________, City of ________________, ________________ Unified School District, and the Coachella Valley Association of Governments have executed this Agreement on the date first herein written.

For the City of ________________: Date: ________________

For the City of ________________: Date: ________________

For the ________________ Unified School District: Date: ________________

For the Coachella Valley Association of Governments: Date: ________________
Attachment “A”
Other Parties for Outreach