

Proposal for Solano Safe Routes to School 2011 Plan Update & Mapping Project

RFP # 2011-04

PREPARED BY:

Alta Planning + Design

IN ASSOCIATION WITH:

Brian Fulfroast Associates

Finger Design

PREPARED FOR:

Solano Transportation Authority





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September 1, 2011

Sam Shelton, Project Manager
Solano Transportation Authority
1 Harbor Center, Suite 130
Suisun City, 94585

Re: Solano Safe Routes to School 2011 Plan Update & Mapping Project

Dear Sam,

Alta Planning + Design is pleased to submit this proposal for the Solano Transportation Authority's Safe Routes to School 2011 Plan Update and Mapping Project.

Alta is the premier firm in California in the development of Safe Routes to School (SRTS), bicycle and pedestrian projects. We have teamed with Brian Fulfroast Associates (BFA), who bring extensive GIS mapping and analysis experience, and Finger Design, a UDDBE firm who will provide graphic design services. Some of our team's recent local school-area projects include the previous Solano Countywide Safe Routes to School Master Plan, MTC School and Youth Outreach Program, Contra Costa Safe Routes to School Plan, and Marin County Safe Routes to Schools Program.

We believe that the Alta Team has the experience and capacity to deliver both the SR2S Plan Update and Mapping projects within the timeline and in the highest quality. Alta Planning + Design will serve as overall project manager of the Plan Update and lead the project for the STA, and Brian Fulfroast Associates will lead the mapping element. Each firm will provide support to the other firm in our areas of specialty and where efficiencies can be achieved. This arrangement will facilitate the STA's management of the project, ensure consistent, high-quality graphics and final reports, and enable our team to complete the project within the nine-month timeframe.

Brett Hondorp, AICP will serve as Principal-in-Charge providing overall project leadership and oversight. Brett is a nationally-certified SRTS instructor who has over 14 years of experience in bicycle and pedestrian planning, and has led all of Alta's California SRTS work. Casey Hildreth will be Alta's Project Manager for the SR2S Plan Update, and Brian Fulfroast will act as GIS Manager of the mapping project. Brett, Casey, and Brian will be supported by Alta and BFA's planning and technical staff, in addition to graphics support from Finger Design.

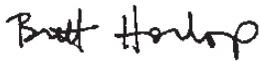
The Alta Team is uniquely qualified for several reasons:

- **Unparalleled Safe Routes to Schools involvement.** Our team consists of some of the top national leaders in Safe Routes to Schools projects. At Alta Planning + Design, bicycle, pedestrian and SRTS projects are all we do. We bring direct expertise working on similar projects that involve partnerships of cities and school districts, and we have structured our approach to ensure that we can quickly and effectively gather data, schedule critical path items, and meet a very aggressive schedule.
- **Team efficiency.** Our team structure will maximize efficiency, ensuring that the project meets the schedule and that all products are consistent across schools and of the highest quality.
- **Suggested Routes Mapping graphic and technical expertise.** Our team's talented GIS specialists and graphic designers have extensive experience developing compelling and user-friendly maps, including Walking and Bicycling Routes to School Maps for dozens of schools in California.

- **School outreach experience.** A key component of this project is ongoing outreach and coordination with school-based stakeholders. All of our planning staff are trained and experienced in this type of outreach, including leading presentations and conducting walking audits.
- **Local knowledge and access.** Our Bay Area team includes an office in Benicia and members with familiarity and access to the area, allowing us to start immediately without a long learning curve.

We have developed a work plan that responds to the goals and timeline set forth in the RFP and that is based on our experience working on similar projects in similar communities. We look forward to working with you on this important project. Please feel free to contact me directly at (510) 540-5008 ext.101 or bhondorp@altaplanning.com.

Sincerely,

A handwritten signature in black ink that reads "Brett Hondorp". The signature is written in a cursive, slightly slanted style.

Brett Hondorp, Principal
Alta Planning + Design

Project Understanding

The Solano Transportation Authority (STA) seeks to update the 2008 Safe Routes to School (SR2S) Plan and expand the Suggested Routes to School Maps Project countywide.

The updated SR2S Plan will build upon the plan developed by Alta Planning + Design to include new projects, priorities, and other information and by expanding a comprehensive school travel education, encouragement, and enforcement program to seven additional schools throughout the county by 2012. A key component of this overall effort will be a robust public involvement process including facilitation of local task forces and a continued emphasis and expansion of school walk audits that engage local school communities and identify school travel improvements and priorities.

As part of its 2009 pilot Suggested Routes to School Maps Project, the STA developed a strategy and method for utilizing Geographic Information Systems (GIS) to produce SR2S maps. This work provides a strong foundation from which to generate the remaining 65-70 SR2S maps necessary to complete the project. We will refine, test, and expand the initial mapping project results and establish systems for promoting and sustaining the utility of these maps over time. Beyond a comprehensive set of user-friendly maps to encourage more students to walk or bike to school, we believe specific objectives of the project include: engaging school communities (including students) on key issues and concerns around school sites; testing and refining a range of marketing strategies that deliver maps into the hands of students and families; and developing a best-practice methodology and easy-to-understand training manual for reproducing and revising the mapping products in the future.

Since the Suggested Routes to School Mapping Project is funded through MTC's Climate Initiatives program, a key objective is to reduce vehicle miles travelled (VMTs) and greenhouse gases (GHGs) associated with school-based travel. Alta's role as part of the MTC Climate Initiatives Evaluation Team will ensure that our approach to this project is coordinated with MTC's regional evaluation efforts for SR2S and Creative Grant funded projects. Providing and promoting better routes for walking and biking will also help improve the health of school aged children (through regular physical activity) as well as the community as a whole (through improved neighborhood connections and school engagement).



The updated SR2S Plan will expand a comprehensive school travel education, encouragement, and enforcement program to seven new schools.

Approach

The Alta/BFA team (comprised of Alta, Brian Fulfrost & Associates, and Finger Design) is excited about the opportunity to propose on the Safe Routes to School (SR2S) Plan Update and Mapping Project for the Solano Transportation Authority. The STA can be confident that the project will be managed by professional staff with a proven track record of delivering effective school-based planning in Solano County and throughout California, as well as innovative GPS and GIS-based mapping services to support strategic community plans and programs.

For the Plan Update portion of the project, Alta will maintain and expand upon the initial 2008 plan framework to include the latest in Safe Routes planning, programming, outreach and evaluation. Our range of services and deliverables will include facilitation of local task force meetings and school-specific walk audits, project development ranking, cost estimating, and providing top-notch finished materials and implementation strategies to ensure continued overall success of the STA's Safe Routes to School program.

The Alta/BFA team approach for the mapping component of the project is to continue with the existing network routing methodology but to supplement it with three key additions. First, we will include additional criteria to better represent the actual walking and biking network and experience on the ground. Second, we will add numerous levels of automation to the GIS process. Lastly, we will develop web and/or mobile-based mapping

application(s) to increase SR2S map outreach to stakeholders and the public as well as provide platform(s) for acquiring data for updates. These modifications will increase the value of the mapping products while ensuring flexibility and ease of use in future updates.

From finalizing the mapping methodology and marketing strategies, to selecting and ranking SR2S improvement projects and adopting the final plan, the Alta/BFA team's goal will be to ensure a consistent and transparent outreach process that builds local ownership and understanding. At the same time, our strategy will be to schedule and coordinate review meetings and outreach activities to maximize people's time and efficiencies while limiting stakeholder "fatigue" as the project advances.

Following is a more detailed breakdown of our project approach by task.

Task 1: Project Management

Overall management of the Solano Safe Routes to School Plan Update and Mapping Project will be provided by Alta Planning + Design, with Brett Hondorp as Principal-in-Charge. Brian Fulfroft, from Brian Fulfroft & Associates, will assist with project management (Tasks 1 & 2) and be Task Leader for the Mapping Project (Task 3) with support from Alta and Finger Design. Alta's Casey Hildreth will be Task Leader for the SR2S Plan Update (Task 4) and will oversee the project(s) integration & outreach component (Task 5).

Alta will employ a three-tier quality control program, including review of all materials by the Project Manager, Principal-in-Charge, and a copy editor prior to sending to STA staff. Alta will develop and share with the City a detailed project schedule identifying all deliverables, staff review time, and other elements of the project.

Deliverables

- Monthly conference calls/meetings and weekly emails with STA staff to coordinate scheduling, report progress, respond to client requests, and anticipate next steps

Task 2: Project Initiation

Task 2.1 Kickoff Meetings to Finalize Project Scopes & Schedules

Upon authorization to proceed, the Alta/BFA team will hold two initial kickoff meetings – one with STA staff

and one with the SR2S Advisory Committee (SR2S-AC) – and conduct follow-up as necessary to confirm project scope and schedule, gather and/or identify critical data and potential sources, and confirm the route mapping methodology and list of stakeholders. Based on input from the kick-off meeting with the STA, we will develop a final project scope and schedule.

Task 2.2 Identify Mapping Project Stakeholders

Based on input from the kick-off meetings, we will identify key stakeholders for the Mapping Project and develop a contact list and communication/review protocol for use throughout project development (Task 3). We anticipate the stakeholder list will include contacts from public works and planning departments for each jurisdiction, as well as representatives from each school district. We also suggest including key STA technical staff, who will ultimately be responsible for future updates of the maps.

Task 2.3 Refine & Confirm Suggested Route Map Methodology

Based on our initial review of the pilot mapping methodology, we propose supplementing the existing 'safe criteria' database by adding more walking and biking network details. These supplemental criteria will improve suitability ranking and the ability to automatically generate suitable routes and standard maps. We recommend considering adding the following additional criteria to the safe criteria database:

- Sidewalk characteristics (e.g. width, side of street)
- Presence and type of street calming features (e.g. speed bumps, bulb-outs, etc.)
- Paths and trails not included in street network
- Presence, type and quality of bike lanes
- Universal access (e.g. curb cuts, sidewalk condition)
- Frequency of bike or pedestrian accidents (SWITRS geocoded data)
- Frequency of crimes (geocoded from participating law enforcement agencies)
- Preferred routes or locations identified by school staff, students and stakeholders

These proposed additions will increase the flexibility of

the existing methodology and streamline future identification of SR2S capital improvement opportunities. We will balance the level of effort required to collect these criteria countywide against the usefulness of the criteria in developing safe walking routes to come up with a final set of new criteria. Proposed modifications to the mapping methodology and criteria will be reviewed and approved by the SR2S-AC.

Deliverables

- SR2S Kickoff Meeting Facilitation/Attendance/Notes
- Finalized Project Scope and Revised Schedule
- Final Recommended Mapping Methodology
- List of Mapping Project Stakeholders

Task 3: Mapping Project

Task 3.1: Existing Conditions Data Inventory

Task 3.1.1: Project, School, and GIS Data Collection & Assessment

Once the recommended mapping methodology has been approved by STA staff and the SR2S-AC (Task 2.3), we will identify the availability of existing data regarding the locations of schools, enrollment boundaries, routes and criteria. Beyond common resources such as the US Census, County Office of Education and the Statewide Integrated Traffic Record System (SWITRS), we will work with the mapping project stakeholders (public works, planning, etc.) to share existing data sources.

Task 3.1.2: Individual School Walk/Bikeshed Definition

The commutesheds around each school will be defined by a series of predetermined incremental distances from each school using the service area function of network analyst. We will base the anticipated walking and biking distance to school on surveys and research that indicates the distance students are willing to travel to school by these modes. We will use local surveys and research as available. Our initial “commutesheds” will be created utilizing (1) the geocoded location of the schools included in the study, (2) the most current street centerline datasets; and (3) the “service area” tool in network analyst (using only the length along the network as an impedance). Data collection efforts described in Task 3.2 will focus on this commuteshed.

Deliverables

- Technical Memorandum #1 summarizing and assessing existing data availability and quality

Task 3.2: School Route Data Collection

Task 3.2.1: Virtual Walking/Biking Audits & Base Mapping

Prior to commencing field work described in Task 3.2.2, we will collect field data virtually (for features not available in digital form) using Google Maps/Streetview and high resolution aerial photography including oblique imagery available from Pictometry (online as “birds eye” view in Bing Maps). Data will be collected using a criteria-based digital survey form developed in Terrasync software (right). A polyline feature class with our walking and biking attributes will be edited as our photo interpreters navigate through the photo imagery block-by-block.

The criteria data from both the field and virtual data collection methods will be transferred directly into the appropriate polyline or point feature class in the geodatabase data structure (or similar data structure) outlined in the pilot methodology. The revised database will be used to develop the initial school walk/bikeshed base maps for review, editing, and verification during subsequent site visits.

Task 3.2.2: GPS Field Audits & School Site Review Meeting #1

While virtual audits will provide efficient base mapping for many criteria, we fully anticipate the need to capture additional information and verify existing data through site visits. For this task, we will use mapping grade Trimble Receiver (GeoXT or Yuma w/ ProXT external receiver) to conduct GPS field audits within the area defined by the preliminary commutesheds for each identified school.

This task represents a substantial commitment to ensure high-quality data and familiarity with each school site before developing the Suggested Route Maps.

We will schedule the first school site map review meeting to coincide with the GPS field audits. At these meetings we will identify stakeholder preferences, including existing routes, for use in the mapping geodatabase, and gather feedback on the base maps developed in Task 3.2.1. To reduce costs, maximize efficiency, and reduce stakeholder “fatigue,” we suggest holding one general meeting per jurisdiction where all stakeholders for that

jurisdiction, including school representatives, are invited to review and comment on base maps, followed by field audits and informal meetings at each school site to permit other school representatives to review and comment on the draft maps.

Our approach will allow us to digitally capture qualitative preferences for use in the geodatabase and engage schools early in the process so their input can be integrated into the mapping process.

Deliverables

- ▶ Planning-level base maps identifying individual school commutesheds and available existing features
- ▶ Facilitation of initial map review meetings at school sites (7 jurisdictional meetings, up to 70 school site visits)
- ▶ Revised geodatabase with all physical criteria data incorporated from field audits/site meetings
- ▶ Technical Memorandum #2 summarizing and cataloguing data collection methods and results

Task 3.3: Route Map(s) Generation and Review

Task 3.3.1: Generate Initial Draft Route Maps in ArcGIS

Ranked Suitability Maps

Within each walkshed (and bikeshed) we will sum the value scores of all the criteria for each network segment. This summed value will serve as an index of overall suitability for each network segment. As an additional deliverable, we will create a Graphical User Interface driven tool in ArcToolbox to allow users to decide the specific type and number of criteria to include in a modified index score. This allows each step to be efficiently rerun and edited in the future without the need of overly complicated GIS knowledge.

Generate Routes using Network Analyst

We will utilize network analyst to auto generate the “least cost” (and hopefully safest) routes to each school. This “least cost” walking or bicycling route will utilize each criterion as a cost attribute for traversing the potential routes to school.

Identifying Origin Points for Routes

The SR2S walking network will enable the generation

of routes from any location within the commuteshed boundary using ArcMap. We will also generate a number of ‘least cost’ routes to serve as preliminary recommendations for each school. The ‘origin’ points for these routes will be identified by mapping the density of potential students within school enrollment and commuteshed boundaries. We will utilize the “percentage of school age children” (appropriate for the school) available from 2010 census data at the block level to generate a weighted “heat map” of student density. The origin points will be generated from the “hot spots” (or clusters of student density) within these maps, and by including input gathered during Task 3.2.2.

Generate Draft Maps in ArcMap using Map Books

Once we have completed our network analysis and generated our preliminary routes, we will utilize the Data Driven Pages and Map Book functions of ArcMap to auto generate a series of draft maps for each school.

Map Graphic Design Template

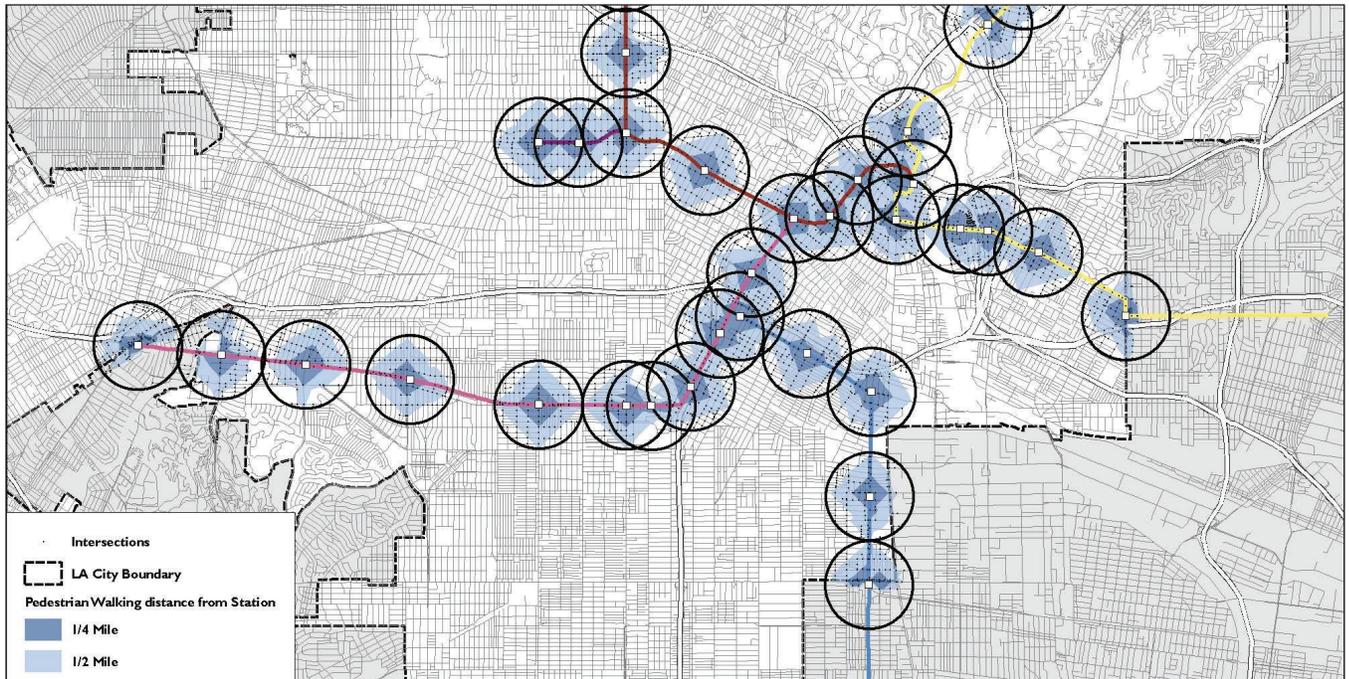
The success of the Mapping Project will be based not only on the “correctness” of the suggested routes to school, but also the map’s legibility and richness and the ability to integrate/promote related elements of the Safe Routes to School Program (e.g., Walking School Buses and Bicycle Trains). For this reason the Alta/BFA team has included Finger Design consultants to help develop a graphic template.

Task 3.3.2: STA and SR2S Advisory Committee Initial Review

Once we have generated the draft maps from ArcMap for each school (80-85 total, including the 15 pilot schools) and inserted into a draft graphic template, the Alta team will present these to STA staff and SR2S-AC for initial review before our second school site review meeting and formal marketing efforts. The focus of this meeting will be on (a) map design and layout; and (b) initial comments regarding the routes so that any requested edits can be made before presentation to school staff, task forces, and stakeholders.

Task 3.3.3: School Site Map Review Meeting #2

The Alta/BFA team will hold a second school site meeting to review and comment on the draft maps and suggested routes. At each meeting we will provide an easy to understand review of the process for developing the maps and highlight the particular elements and suggested routes. We will also distribute the draft maps (as PDF files)



Brian Fulfroost created this map showing network-based walkability for the City of Los Angeles Sustainable Transit Communities Scorecard Project.

online in order to obtain additional input. Participants will also be able to make comments after the meeting via an online interactive Google map of the routes (see Task 3.4.1).

The specific approach and final strategies for the second school site meetings will be confirmed with the STA and the SR2S-AC prior to their scheduling. This will include consideration of which schools to prioritize review meetings and map finalization for use during the pilot map marketing and outreach. We again recommend hosting one citywide meeting with local mapping stakeholders, followed by one to two days of informal meetings at school sites.

Deliverables

- Technical Memorandum #3: Suggested Route Map Generation Process
- Map graphic template
- Initial and Revised Draft Suggested Route Maps for all schools, including the 15 pilot schools
- Facilitation of second school site map review meetings
- SR2S Advisory Committee, School Task Force, and School Site Meeting Notes & Summaries
- Draft Route Map Web Application (see Task 3.4)

Task 3.4: Pilot Marketing Mediums of Suggested Route Maps

Task 3.4.1 Develop & Implement Draft Map Marketing Mediums

The Alta team will develop a range of both traditional and social media mechanisms to test market the draft maps in consultation with STA, the SR2S Advisory Committee, School Task Forces, and with information obtained from school site meetings. We will explore traditional media (newspapers, posters, flyers, etc.), online forums (such as Patch.com, Facebook, www.solanosr2s.ca.gov, and other opportunities), cultural and linguistic access (e.g., translation services), and other non-traditional strategies designed to reach school staff, students and their families. Alta will leverage our involvement with the MTC School & Youth Outreach Project to ensure focus-group tested messages, themes, and strategies are considered as part of this task. Due to the expected timing of the pilot marketing efforts, coordination with Earth Day 2012 outreach and events may be included. We will pilot the marketing mediums using 15 pilot maps, then expand to all maps once approved.

Route Map Web Application

The draft and final maps will be made available via an interactive mapping application, hosted either internally or externally to the STA, using the Google Maps API.

The online maps will contain standard navigation tools, provide quick access to specific school commutesheds, allow users to interactively turn on or off individual layers, provide tools for obtaining and uploading information about individual features, and print-out (or download) high-quality color maps.

Task 3.4.2 Draft Map Marketing Feedback and Revisions

Based on the selected pilot mediums and strategies, Alta/BFA will determine appropriate feedback mechanisms in order to finalize both the draft maps and pilot marketing efforts – potentially including an online survey or stakeholder focus groups. Final details related to this task will be developed in consultation with the STA and the SR2S Advisory Committee.

Deliverables:

- Marketing Memorandum #1: Draft Map Pilot Marketing Mediums & Approach
- Draft Pilot Marketing Mediums and Approach Materials, including Web Application
- Marketing Memorandum #2: Draft Map Pilot Marketing Mediums & Approach Evaluation
- Final Map Marketing Mediums and Approach



Principal-in-Charge Brett Hondorp leads a parent workshop for the previous Solano Countywide Safe Routes to School Plan.

Task 3.5: Mapping Manual and Training

Building off the work already conducted during the pilot study and revised based on information from Technical Memoranda #1-3, Alta/BFA will develop an easy-to-understand manual and training module to cover each step in the process of using GIS and Network Analyst to develop SR2S maps. The mapping manual will cover: SR2S geodatabase structure and layers included, developing commutesheds in Network Analyst, field and virtual walking audits, editing routes and route criteria, route development and ranking, and final map production.

Once the mapping manual is completed, we will conduct and record (audio and video) a one-day workshop for STA staff and other stakeholders. Video from the training will be edited and included as an additional attachment or accompanying CD to the mapping manual.

Deliverables

- Suggested Routes to School Mapping Manual
- Suggested Routes to School Mapping Training and Video from Training
- Custom Model Builder files (of GUS processes) and SR2S ArcToolbox (for running the models using a GUI) for automation

Task 4: SR2S Plan Update

Task 4.1: Plan, Policy, and Existing Conditions Review

As stated in the RFP, many of the high priority projects identified in the 2008 SR2S Plan have been implemented. Several other significant projects from the Countywide Pedestrian and Bicycle Plans have also been completed – such as the Central County Gap Closure and Suisan Parkway projects – and have improved travel conditions and choices for many school families. The Alta team will identify these projects with assistance from STA staff and the SR2S-AC and document conditions and outcomes through site visits, photos, mapping, and presentation of available data (e.g. counts, surveys, cost estimates, etc).

Alta will also review relevant local planning documents including bicycle and pedestrian plans, trails plans, and transportation plans, general plans, specific/concept plans. The findings of the existing conditions and policy/plan inventory will provide our team with a detailed understanding of the current state of SR2S Plan implementation in Solano County and current and completed

priorities for improving pedestrian and bicycle infrastructure related to school travel.

Deliverables

- Working Paper #1 Report on Existing Conditions and Plan Review, summarizing revised demographic, school enrollment, and travel data, and summary of plans and completed projects since 2008

Task 4.2: SR2S Community Task Force Meetings

With direction from STA staff, the SR2S Steering Committee and other key stakeholders, Alta will identify and work with a SR2S Community Task Force within each of the seven participating jurisdictions (Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville, and Vallejo). Similar to the 2008 Plan process, these multidisciplinary advisory groups may include a combination of the following: a City Engineer, a Bike/Ped Advisory Committee member, City Council and School Board appointees, and a police or fire department representative.

Alta will conduct three meetings with each of these Task Forces throughout the Plan process:

- Kick-off Meeting to review/determine priority schools for walk audits and review project scope details
- Walk Audit(s) “Download Session” to report out on school site conditions and assess improvement concepts, as well as draft route maps and pilot marketing mediums
- Plan Review Meeting to present draft SR2S Plan, priority projects list, and route maps

Deliverables

- Attendance and facilitation of up to 21 community task force meetings
- Task Force Meeting Minutes
- Summary of Task Force Review Process and Comments (Appendix to Final Plan)

Task 4.3: School Site Walking Audits

Working with Community Task Forces, Alta will schedule and host school site walking audits at fourteen schools: the original seven included in the 2008

SR2S Plan and the additional seven included in the update. In addition to the Community Task Force, teachers, administrators, parents and students from each school will be invited to participate in the walk audits. Whenever possible, walking audits will be scheduled to coincide with school commute times, so that drop-off or pick-up conditions can be observed. Audits will include a 45 minute tour of the school where participants indicate issues related to walking and biking, followed by a 45 minute debrief and brainstorming session to confirm issues, identify high-priority concerns, and brainstorm potential solutions, both infrastructure and programmatic.

Deliverables

- Attendance and facilitation of at minimum 14 school walking audits
- Walking audit meeting minutes/notes

Task 4.4: 2011 SR2S Evaluation Report

The Alta team will produce an end-of-year status report documenting SR2S plans, programs, and conditions throughout Solano County, including progress on the mapping project and evaluation of the 2008 Plan priorities. This report will encompass a number of new and revised elements that will serve as the basis for project/program selection and prioritization in 2012, and as a stand-alone element within the final plan.

Task 4.4.1: 2008 Plan Performance Measures Analysis

The 2008 Plan included a number of performance measures related to the goals of Safety and Security, Health & Air Quality, and Traffic Congestion. These measures include: number of children walking and biking to school, number of severe accidents and criminal incidents involving school children, vehicle speeds near schools, and frequency of SR2S Advisory Committee and local task force meetings. Each of these measures will be assessed as part of the Evaluation Report, along with revised maps and images of completed and existing high priority projects identified in Task 4.1.

Task 4.4.2: Parent Survey and Student Hand Tally Summaries/Analysis

Participating schools in Solano County conduct student travel surveys twice per year using the National Safe Routes to School Student Arrival and Departure Tally Sheet. Results from these surveys can be tabulated for

free by submitting completed surveys to the National Center for Safe Routes to School “data center”. The Alta team will utilize this free resource, and will also work with the SR2S-AC and Community Task Forces to confirm which schools have conducted surveys and to collect data not uploaded to the National SR2S website. Alta will also collect and assess school parent surveys conducted as part of the MTC evaluation of the Safe Routes to School grant award.

Task 4.4.3: Updated Safe Routes to School Toolbox & Capital Unit Costs

The Alta team will update the Solano County Safe Routes to School Toolbox (Appendix A of the 2008 Plan, produced as a stand-alone product by Alta in 2006). While many aspects of this existing document remain valid, there are several opportunities to refresh and customize the toolbox based on Solano County’s experiences and to ensure the document is more accessible. The Toolbox will also include planning-level unit cost estimates for typical SR2S capital projects based on recent projects completed by local jurisdictions.

Deliverables

- Draft 2011 Safe Routes to School Evaluation Report
- Final 2011 Safe Routes to School Evaluation Report
- Updated Solano County SR2S Toolbox

Task 4.5: SR2S Project Identification & Development

Task 4.5.2: School Site Improvement Plans

Using walk audit summaries, field work, information provided by schools, and GIS, aerials and parcel data, Alta will develop up to two graphical school site improvement plans for each of the seven schools added to the Safe Routes to School Plan, and update/expand the existing improvement plans for the seven initial schools. These planning-level designs can be used in grant applications to apply for infrastructure grant money to design and construct the projects.

Task 4.5.3: Project Prioritization & Cost Estimation

We will develop a list of all proposed Safe Routes to School capital projects for the county. Where project costs have already been estimated, we will utilize those costs. For projects identified during the walking audit

process, we will develop planning-level cost estimates based on unit costs developed in Task 4.4.3. We will escalate all costs to 2012 dollars, and provide the STA with a total estimate for Safe Routes to Schools capital funding needs for the County.

Our team will use the information gathered in earlier tasks and in additional conversations with STA staff to help the agency develop an approach to prioritize potential SR2S projects throughout Solano County. The ultimate approach will ensure that Solano County agencies maximize the amount of available Safe Routes to School program funds and other funds secured in the next 20 years.

Alta will use established criteria for Federal and State SR2S funding programs, along with other criteria developed by the STA and local agencies to develop a short, mid, and long term phasing plan for all Safe Routes to School infrastructure projects in Solano County. We recommend a ranking process that considers (a) funding the best and most ready projects first, (b) equitable geographic distribution, (c) maximizing the chances to be selected for projects, and (d) identifies any potential funding shortfalls that may be covered by other sources, such as a future county sales tax.

Deliverables

- School Site Improvement Plans (up to 21 new or revised improvement plans)
- Estimated countywide Safe Routes to School capital cost needs
- Draft and final prioritization methodology for ranking SR2S capital projects
- Ranked list of SR2S capital projects

Task 5: Development of Final SR2S Plan and Maps

In Task 5, Alta will bring together and refine all of the work that has taken place in Tasks 1-4 to produce the Final Updated SR2S Plan and Safe Routes to School Maps.

For all draft documents/maps, we will respond to one set of consolidated, internally consistent, comprehensive comments. We assume STA staff will collect, consolidate, and review the comments prior to delivering to the Alta/BFA Team.

Task 5.1: Development of Final Safe Routes to School Maps

Final edits to the criteria, routes or maps will be vetted with STA staff for approval. Approved changes will be used to make modifications to the final maps. Any changes to overall criteria or route development will be made directly in model builder so that route generation is not only automated but also easily repeated by STA staff.

Final maps will be edited in Adobe Illustrator and made available in PDF (or other desired) format(s).

Task 5.2: Development and Adoption of Draft and Final SR2S Plan

As the number of school walk audits expands and with the addition of new School Route Maps, the scale of the Plan Update will be significantly larger than the 2008 Plan. We propose a new report format that includes stand-alone School Community Travel Plans that supplement a countywide plan that is generalized to the county and overall plan development process.

With direction from the STA, we will revise and combine technical and other memoranda provided in earlier deliverables to develop an Admin Draft SR2S Plan. After

responding to STA staff comments, we will produce a Public Review Draft Plan for review by the SR2S-AC, Community Task Forces, STA Committees, and approval by the School Boards and City Councils. After incorporating feedback from these groups, we will develop a Draft Final Plan for review and approval by the STA Board.

We will attend up to three STA Advisory Committee meetings, and up to one STA Board meeting to present the Final SR2S Plan. We assume STA staff or Community SR2S Task Force Members will attend local School Board and/or City Council meetings, if necessary, to recommend plan approval.

Deliverables

- Final Safe Routes Maps (PDF)
- Admin Draft (1 PDF/ 1 Word copy), Public Review Draft (1 PDF/ 1 Word copy) and Final Draft SR2S Plan (1 PDF/ 1 Word Copy)
- PowerPoint Presentations for STA Committees and Board
- Attendance at up to 3 STA Advisory Committee Meetings and 1 STA Board Meeting



Alta prepared this walking and biking network map for the Santa Clarita Safe Routes to School Program.

Qualifications & Experience

Alta Planning + Design

Alta Planning + Design is North America's leading sustainable transportation firm specializing in the planning, design and implementation of bicycle, pedestrian, and Safe Routes to School corridors and systems. Alta's mission is to create active communities where bicycling and walking are safe, healthy, fun, and normal daily activities. Alta will lead the Safe Routes to School Plan Update and Mapping team from our Berkeley office.

Alta offers a wide range of management, mapping, and data collection and analysis services related to school transportation that provide us with the unique experience to lead STA's Safe Routes to School Plan Update and Mapping Project. Over the last 10 years, Alta has been involved in over 40 Safe Routes to School projects. Our experience ranges from developing detailed routes to school maps to conducting school walking audits and survey efforts. We have two certified National SR2S Instructors on our staff, including Principal in Charge, Brett Hondorp.

Alta is exceptionally skilled at integrating all five "E's" - engineering, education, enforcement, encouragement, and evaluation - in a holistic manner to increase walking and bicycling to schools throughout the country.

Alta has extensive experience providing clear and concise maps to support a variety of user needs. Alta's GIS-based transit and school access mapping allows seamless integration of data from land use, demographics, transit, and safety into improvement plans. An alternative use of these maps is to create Safe Routes to School walking and biking routes.

Alta's count and survey methodology has been implemented and tested nationally and internationally. We have administered more than 10,000 surveys and designed dozens of municipal count programs. Unique tools include on-line surveys, intercept surveys, and use of infrared automated counters.

Brian Fulfrost Associates

Brian Fulfrost and Associates (BFA) is an Oakland, CA based consulting firm specializing in Geographic Information Systems (GIS), web/mobile mapping and Remote Sensing. Brian Fulfrost started the firm in 2011 after working for nearly 20 years developing robust and

innovative GIS applications in government, the private sector, and academia. The firm's focus is on utilizing geospatial technologies to assist in improved social and environmental decision making. The firm is committed to bridging the gap between the technology and it's effective use as a decision support system. The firm specializes in applying these tools and techniques to sustainable planning and urban design, public health and active transportation, natural resources management, and conservation planning.

Brian Fulfrost and Associates are recognized experts in GIS database development, spatial data modeling, and (2D/3D) cartographic visualization. Our team of GIS analysts has platform expertise with ESRI products as well as Open Source platforms. BFA can custom design and build a web based mapping application in a platform of your choice (Google, ArcGIS Server, GeoServer). Brian Fulfrost has nearly 15 years experience teaching GIS and Remote Sensing to a range of professionals.

Finger Design (UDBE)

Finger Design will serve as the graphics design leader on overall graphics strategy, design and format for media. Finger Design has extensive experience designing and producing newsletters, annual reports, brochures, corporate identity programs, technical reports, presentation materials, display boards, websites, and signage programs for a variety of clients. The long-term relationships Finger Design has established with clients such as the Metropolitan Transportation Commission have given them valuable insight into the unique challenges facing the Bay Area transportation community. Finger Design is certified DBE/UDBE and their certification can be found in Appendix B.

Relevant Projects

The development of the Solano Safe Routes to School 2011 Plan Update and Mapping Project requires a team that combines mapping and Safe Routes to School planning and implementation experience with an understanding of local issues. The projects on the following pages demonstrate the Alta Team's breadth of work in:

- Safe Routes to Schools Plans and Maps
- Mapping & GIS Analysis Expertise
- Collection and Assessment of Data
- Public Outreach

Alta Planning + Design Project Experience

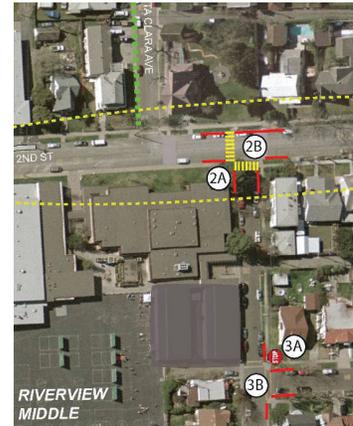
Solano Countywide Safe Routes to School Plan

Alta managed the creation of a countywide safe routes to school program in Solano County, California working with the Solano Transportation Authority. Alta helped develop a project Steering Committee and seven Task Forces in the county's jurisdictions. Working with local parents and teachers, Alta held training presentations and walking audits at pilot schools in each of the cities. With results from these audits and stakeholder meetings, improvement plans were developed for each pilot school. Alta took the individual improvement plans and combined them into one countywide plan, organized by priorities and implementation measures for each jurisdiction, with a SR2S Toolbox for further resources. The STA SR2S Plan won an APA award for its grassroots process.

Client: Solano Transportation Authority, Sam Shelton, 707-399-3211

Dates: 2005-2006

Key Staff: Brett Hondorp, PIC/Project Manager



MTC School and Youth Outreach Program

Alta is currently leading MTC's School and Youth Outreach Program, creating a toolbox containing the most effective and innovative school and youth outreach approaches to reducing greenhouse gases and vehicle miles traveled in the Bay Area. After extensive research, programs with the greatest potential for success will be implemented and closely evaluated. The SYO program involves close collaboration with the other Climate Initiatives Program elements, and Alta is working with these program recipients to provide as-needed technical support and coordination of technical interfaces with both MTC / BAAQMD and other potential SYO partners.

Client: Metropolitan Transportation Commission, Ursula Vogler, 510.817.5785

Dates: 2011-present

Key Team Members: Brett Hondorp, PIC/PM; Casey Hildreth, Planner



Contra Costa Transportation Authority Safe Routes to School Plan

Alta is part of the consultant team working with the Contra Costa Transportation Authority and its partners to develop a SR2S Master Plan. Alta is providing technical assistance to local schools and jurisdictions and creating a detailed approach to the allocation of regional SR2S funding. Alta is helping identify obstacles to walking and bicycling around specific schools and projects and programs that could overcome those obstacles and may help support education and outreach efforts.

Client: Contra Costa Transportation Authority, Brad Beck, 925-256-4726

Dates: 2011-present

Key Team Members: Brett Hondorp, PIC; Casey Hildreth, Project Manager



Marin County Safe Routes to School Program

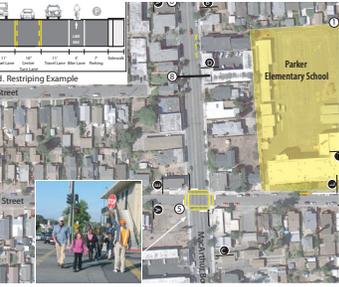
Alta has been a key team member design and mapping for the Marin County Safe Routes to Schools Program since 2001. The program has involved dozens of site visits, community workshops, walking audits, and development of engineering plans to improve the safety of school commute routes in individual communities. Specific improvements have included new bikeways, paths, high-visibility crosswalks, signal improvements, plans for bridges, reconstructed drop-off areas, and traffic-calming features such as curb extensions.

Client: Transportation Authority of Marin Dianne Steinhauser, Executive Director, (415) 226-0820

Dates: 2001-present

Key Team Members: Brett Hondorp, Casey Hildreth, Tony Salomone





Safe Routes to School Alameda County Partnership Program

Alta is in its fourth year working with team member TransForm to conduct Walking Audits and Conceptual Improvement Plans as part of the Alameda County Safe Routes to School Program. In collaboration with the cities and the schools, several of these plans were successful in receiving approximately \$1 million in State Safe Routes to School grant funding for project improvements.

Client: TransForm, Nora Cody, 510-740-3150

Dates: 2007 - on-going

Key Team Members: Brett Hondorp, PIC / Tony Salomone, GIS



Union City Safe Routes to School Pilot Project

Alta led a SR2S Pilot Project at four schools in Union City as part of the city's Pedestrian and Bicycle Master Plan. This effort involved the development of a survey form to identify primary school walking and bicycling routes, and identification of a list of key improvement areas to evaluate at each school. Alta led a workshop and walkabout at each school that included parents, teachers, the school Principal, School District officials, city staff, and law enforcement, to identify and discuss issues in the field and brainstorm solutions.

Client: City of Union City, Joan Malloy, Planning Manager, (510) 675-5319

Date: 2004

Key Team Members: Brett Hondorp, PIC/PM



Santa Clarita Safe Routes to School Program

Alta was hired by the City of Santa Clarita to develop and implement a Safe Routes to Schools education and encouragement program for the City's elementary schools. Alta has developed Walking School Bus Training and Safe Routes to Schools Toolkit for the entire City, has conducted walk audits to identify infrastructure improvements at all of the City's 26 elementary schools and hosted a city-wide Safe Routes to Schools Workshop as part of Bike to School and Work celebrations. Alta has worked closely with the City, schools and school districts to bring encouragement programs and bicycling and walking safety education to four elementary schools selected as pilot schools.

Client: City of Santa Clarita, Ian Pari, Senior Traffic Engineer, (661) 284-1427

Dates: 2008-2010

Key Team Members: Brett Hondorp, PIC; Tony Salomone, GIS

Brian Fulfrost Associates Project Experience

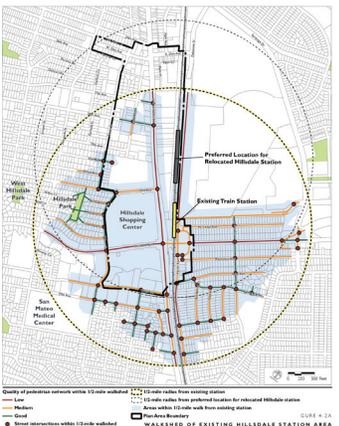
Healthy Planning Framework for Santa Clara and San Mateo Counties

Brian Fulfrost and Associates (BFA) is partnering with PHLP and the CA Center for Public Health Advocacy (CCHPA), to use GIS to identify, analyze and map of a number of "healthy indicators" related to the built environment in order to assist in the development of a regional "healthy planning framework". State and regional government are looking to identify mechanisms to guide and assist local and regional governments in their attempt to meet rising challenges related to GHG emission, public health and environmental conservation. BFA is utilizing Network Analyst and other analytical techniques in GIS to model the relationship between the built environment and public health outcome using a number of public health indicators to assist with making better decisions regarding healthy planning.

Client: Heather Wooten, Public Health Law and Policy (PHLP), (510) 302-3380

Date: 2011-present

Key Staff: Brian Fulfrost, Will Fourt, Shaun O'Bryan



Proximity of Food Retailers to Schools: an Ecological Study in CA

This study utilized GIS and Network Analyst to explore the frequencies of convenience stores, grocery stores, fast food restaurants and supermarkets within an 800m network buffer of schools, and their potential associations with the school rate of overweight 9th grade students in the state of California. Inequalities in access to these retailers were observed—schools with a greater percentage of low-income, African American, or Hispanic/Latino students were more likely to be located adjacent to grocery stores, convenience stores and fast food restaurants than schools with more affluent or non-Hispanic white students. Proximity to convenience stores, grocery stores and fast food restaurants had small, but significant associations with school rates of overweight students.

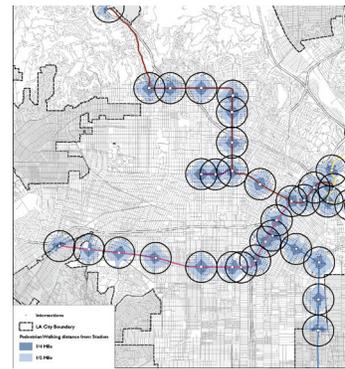
Key Staff: Brian Fulfroast



Sustainable Transit Communities, Los Angeles

While working at Design, Community and Environment, Brian oversaw, with Will Fourn as the lead GIS analyst, and developed the methodology for the Office of the Mayor, City of Los Angeles (as part of SCAG's Compass Blueprint program). Along with project partners, Brian assisted in the development of a "scorecard" of sustainability indicators using GIS to prioritize near-term efforts to transform station areas into "sustainable transit communities". The scorecard included a series of criteria based on GIS analyses (network based walkability, infill opportunity, residential density, essential services, etc.). This Study identified ten station areas that have significant opportunity sites for transit oriented development (TOD).

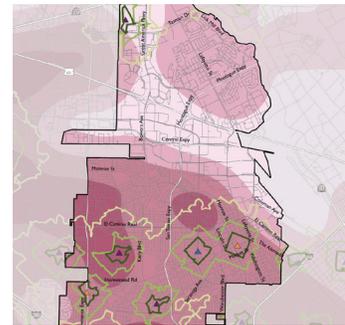
Key Staff: Brian Fulfroast, Will Fourn



Trinity County GIS Economic Development Mapping Plan

While at DC&E, Brian designed and managed, with Will Fourn as the lead GIS analyst, a project to use GIS to identify the geographical locations most suitable for Trinity County to focus new economic development activities. Mr. Fulfroast utilized Network Analyst, kernel density, data mining, and weighted suitability to complete the project. DC&E presented the results of this mapping work to the public at a community workshop and refined the plan as appropriate based on public input. The final maps were compiled into a visually appealing and data-driven report that informed the County's on-going General Plan Update.

Key Staff: Brian Fulfroast, Will Fourn



Finger Design Project Experience

MTC Transportation 2035 Plan – Change In Motion

Finger Design worked with MTC to design and produce the T2035 Plan — Change in Motion. The two-color plan features editorial content, photography, maps, charts, graphs and tables. Finger Design also created the four-color Transportation 2035 Change in Motion logo to be used on supporting collateral material. The companion Draft Environmental Impact Report was designed to accompany the T2035 Plan.

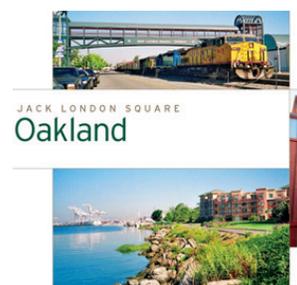
MTC: New Places, New Choices - TOD in the SF Bay Area Report

The publication profiles ten existing transit-oriented development areas that are already thriving and working well. Small maps of each area showed existing and future development and its proximity to public transit.

Client: Metropolitan Transportation Commission, Brenda Kahn, (510) 817-5773

Date: 2006 & 2009

Key Staff: Arlene Finger, Creative Director



Key Personnel

Alta Planning + Design will manage the Team for the Solano SR2S Plan Update and Mapping Project. Alta is a national leader in the management and development of safe routes to school best practices, infrastructure improvements, outreach, education and encouragement. Alta will manage the plan update portion of the project, including recommendations, cost estimates, data collection and assessment, and public outreach. BFA will lead

the mapping element, building on their local knowledge and experience in expert GIS analysis. Finger Design will provide graphics support for both the plan and maps. Staff roles and experience are described on the following pages. Full resumes can be found in Appendix A of this proposal. Key staff will be available throughout the duration of the project to deliver on assigned tasks.



Brett Hondorp, AICP, Alta Principal, \$190/hour, Role: Principal-in-Charge

Brett is a leading national SR2S expert who has worked on SR2S projects in California since joining Alta in 2001. His work has involved a wide range of activities aimed at improving school area safety: leading walking audits, developing engineering improvement plans, preparing grant applications, creating walking route maps, and managing strategic SR2S implementation programs. As a SR2S National Course instructor, Brett has given trainings across the country to local agency staff, advocates, and community leaders on how to implement effective SR2S programs. Brett holds a Masters in Urban Planning from San Jose State. Brett's previous projects include the 2008 Solano Countywide Safe Routes To School Program, Marin Non-motorized Transportation Pilot Program, Marin County Safe Routes To School Improvement Plans, Pasadena Suggested Routes to School Program, and the San Jose School Access Enhancement Program.



Casey Hildreth, Alta Associate, \$110/hour, Role: Project Manager

Working closely alongside Brett, Casey will serve as Alta's Project Manager. He joined Alta in 2010; his experience includes managing a Safe Routes to School Toolkit for the City/County Council of Governments of San Mateo County, leading improvement plans for the Marin County Safe Routes to School Program, and providing technical assistance to local schools and jurisdictions for the Contra Costa Safe Routes to School Program. Casey brings five years of transportation planning experience to the Alta Team. His expertise includes multi-modal hub development, complex intersection design, and public realm planning with a focus on green infrastructure and urban infill open space. While with the Seattle Department of Transportation, he helped initiate Seattle's Complete Streets Program, involving significant planning, systems oversight, capital program coordination, and project scoping and design. Casey holds a Masters in Urban Planning from the University of WA.



Jennifer Donlon, Alta Senior Planner, \$100/hour, Role: Assistant Project Manager

Jennifer brings strong skills in transportation planning, policy analysis and research to the team. Since joining Alta in 2008, she has developed bicycle and pedestrian master plans, contributed to path feasibility studies, and coordinated numerous count efforts. Jennifer has also contributed to Alta's research projects investigating count methodologies, the relationships between land use and bicycle and pedestrian activity, and methods to improve safety at multilane roundabouts. Prior to joining Alta, Jennifer was instrumental in the development of Oakland's bicycle parking requirements and neighborhood bicycle parking plans. Jennifer has a Master's Degree from San Jose State University in Urban and Regional Planning. Her previous projects include the San Joaquin Council of Governments Bicycle, Pedestrian and Safe Routes to School Plan; the National Bicycle and Pedestrian Documentation Project; and the San Benito County Bikeway and Pedestrian Master Plan.

Tony Salomone, Alta GIS Analyst, \$65/hour, Role: GIS Support

Tony brings strong skills in cartography, spatial analysis and GIS project management to the team. Since joining Alta in 2008, he has been essential in providing colleagues and clients with technical expertise in GIS and creating compelling maps for Master Plans and feasibility studies. Tony strongly believes that maps are vital for communicating ideas about the utilization of space. He is able to tailor his GIS management approach and cartographic styles to meet the individual and unique needs of the client. Tony has a B.A. in Geography from San Francisco State. Past projects include: City of San Mateo Bicycle Master Plan, Milpitas Bicycle User Map, San Jose ADA Implementation Analysis, and Humboldt County Pedestrian Needs Assessment.

**Kristin Maravilla, Alta Planner/Designer, \$80/hour, Role: Planner/Graphics Support**

Kristin joined Alta in 2009 after completing graduate degrees in landscape architecture and city and regional planning at UC Berkeley. Kristin has a passion for environmentally sensitive design. She has prepared design guidelines, mapped bicycle and pedestrian facilities and created a variety of illustrative graphics. Kristin's skills include design development, report writing and computer generated and hand drawn graphics. Past projects include: City of Fremont Bikeway Map Update, Tahoe Regional Planning Agency Pedestrian & Bicycle Master Plan Design Guidelines, The California Delta Trail Blueprint Report, and San Joaquin County Bicycle Master Plan.

**Brian Fulfroost, BFA Principal, \$115/hour, Role: GIS Manager**

Brian Fulfroost will serve as GIS technical lead and be responsible for designing and implementing GPS field data collection methods, network analysis and final map production. Brian will assist with the development of the mapping manual, will provide training to STA staff on the mapping methods, and will work with Atlas team staff to develop the Google based web mapping application. Brian established Brian Fulfroost Associates in 2011 and has nearly 20 years of experience developing GIS databases and processes from specific desktop applications to enterprise wide models for large organizations. His work has supported a wide variety of industry, government, and non-profit organizations. Brian has extensive expertise applying GIS techniques to understand the relationship between the built environment and public health and active transportation. He innovated the use of Network Analyst to assist in urban design and "walkability" studies while teaching GIS at UC Santa Cruz and integrated the use of network based analytical methods into a wide range of active transportation based planning projects while at DC&E. He has an MS from the University of Arizona.

**Shaun O'Bryan, BFA GIS Specialist, \$90/hour, Role: Lead GIS Analyst**

Shaun will be the lead GIS analyst, under the guidance of Brian Fulfroost, responsible for using Network Analyst to develop and implement the network dataset and for performing network analyses. Shaun will bring his combined GIS and planning knowledge to the field, by assisting with field data collection. Shaun joined BFA in 2011 and is experienced in CADD, GIS mapping, and transportation planning. Since earning his MCP from the University of Maryland, his projects have included GIS analysis for 2011 Napa County Bicycle Master Plan update, Breuner Marsh Parking and Traffic Study, GIS Analysis for Santa Clara County Development Potential, and the Bay Trail Gap feasibility studies for segments in Pittsburg, Newark, and Fremont. His previous project experience includes CEQA traffic impact analysis for several development projects in Oakland, developing a GIS based bicycle routing model for Washington, DC, and drafting proposed bicycle facility plans and creating a facility implementation priority list for the District of Columbia's Bicycle Master Plan.





Will Fourt, BFA GIS Analyst, \$80/hour, Role: GIS Support

Will will be responsible for assisting with development of the network database using network analyst, assisting with development of processes in Model Builder, and implementation of automation of map production using the “map book” features in ArcMap. While working at DC&E, prior to joining BFA in 2011, Will was a key staff member on several projects developing GIS project databases and utilizing Network Analyst tools to assist municipal government with promoting active transportation. His recent experience also includes developing network databases and a GIS-based walkability analysis for the Hillsdale Station Area Plan for the City of San Mateo. Will was the lead GIS analyst on the Sustainable Transit Communities Study for the Southern California Association of Governments. Prior to joining DC&E, Will conducted GIS analysis at the Metropolitan Transportation Commission. Will has a B.A. in Geography from Dartmouth.



Arlene Finger, Finger Design Director, \$100/hour, Role: Graphic Design

In September 2002, Arlene Finger became the principal of Finger Design Associates. Prior to that, Arlene Finger was a partner with Finger & Smith Design Associates in San Francisco for 19 years. She has been responsible for the creative aspects of the business, including graphic design, art production, print, photo supervision and quality control. Arlene Finger has prepared reports and marketing materials for AC Transit, Bay Area Air Quality Management District, BART, Caltrain, Caltrans, Genentech, Metropolitan Transportation Commission, and Yosemite National Park. Arlene Finger received a Bachelor of Fine Arts from Parsons School of Design and the New School of Social Research. She also holds a Masters of Fine Arts from Hunter College.

Work Plan & Schedule

The Key Personnel Availability table below demonstrates the availability of the Alta Team to successfully complete the project in the stated time frame.

Name	Title	Estimated Time for Other Work	Estimated Time for Project
Brett Hondorp	Principal	70%	30%
Casey Hildreth	Associate	55%	45%
Jennifer Donlon	Senior Planner	60%	40%
Tony Salomone	GIS Analyst	53%	47%
Kristin Maravilla	Designer	45%	55%
Brian Fulfroost	Principal	50%	50%
Will Fourt	GIS Analyst	0%	100%
J. Shaun O'Bryan	GIS Analyst	50%	50%
Gavin Archbald	GIS Analyst	50%	50%
Arlene Finger	Principal	70%	30%
Greg Nelson	Art Director	70%	30%

The schedule has been carefully organized to sequence key tasks, meetings, and deliverables, providing an efficient process and early and thorough review of all products as they are developed and made public. Also included is a proposed fee breakdown by task. We are flexible in developing an allocation of work effort and budget that best meets the needs of the Solano Transportation Authority.

Task	Task Budget	2011				2012								
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep
Task 1: Project Management	\$15,000	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 2: Project Initiation	\$6,000													
Task 3: Mapping Project	\$229,250													
Task 3.1 Data Inventory	\$16,000													
Task 3.2 Data Collection/Site Review Meetings	\$82,000													
Task 3.3 Map Generation/Site Review Meetings	\$42,000													
Task 3.4 Pilot and Final Marketing Mediums	\$71,250													
Task 3.5 Mapping Manual and Training	\$18,000													
Task 4 Safe Routes to School Plan Update	\$51,750													
Task 4.1 Existing Conditions Assessment	\$4,000													
Task 4.2 School Task Force Meetings	\$12,750													
Task 4.3 School Walk Audits	\$15,000													
Task 4.4 SR2S Evaluation Report	\$8,000													
Task 4.5 Project Development & Ranking	\$12,000													
Task 5 Final SR2S Plan & Maps	\$28,000													
Task 5.1 Final Safe Route to School Maps	\$20,000													
Task 5.2 Develop/Adopt Draft & Final Plan	\$8,000													
Mapping Project Total Budget*	\$265,000													
SR2S Plan Update Total Budget*	\$65,000													
Direct Costs	\$5,000													
Total Project Budget	\$335,000													

	Project Management
	Mapping
	Plan Update
•	Monthly Progress Meeting

* We allocate 25% of project management and project initiation to the SR2S Plan Update and 75% to Mapping Project.

Cost Control

The Alta Team is adept at navigating project cost control measures and prides itself in producing plans that are implemented and have resulted in thousands of miles of bikeways and pedestrian improvements. As a primary cost control measure, we assign the most appropriate project management team at the beginning. In this case, Alta's Project Manager Casey Hildreth is a highly-capable project manager who has worked on numerous complex projects involving concurrent tasks and multiple subcontractors. The second step is having the right project management tools in place. Alta relies on electronic time tracking and budget management software, as well as

standard monthly written progress reports tracking budget, schedule and deliverable progress toward completion. Alta uses an Open Item Status Report to track ongoing program responsibilities/deadlines, which will be used as a tool in our progress meetings with the STA to keep budget expectations current. There is no substitute for local knowledge and experience, an area in which the Alta Team excels, having completed numerous non-motorized and transportation projects in Solano County. Project Manager Casey Hildreth will serve as the primary contact responsible for all day-to-day activities and will control project costs to meet STA's expectations.

Additional Relevant Information: Alta Sample Maps

DRAFT 3-21-2011

Recommendations

Number of Parking Spaces: 23

A Provide 6' continuous, protected walkway around parking lot perimeter to school entrance

Pathway Option

- Remove existing asphalt curb, modify parking layout, and stripe or paint continuous walkway
- Relocate/replace concrete wheel stops or provide new physical barriers (e.g., bollards, planters, or barrier logs) to ensure vehicles do not overhang onto path

Sidewalk Option

- Install 6' continuous sidewalk with 6" curb at edge of parking lot. Feather transition to match existing grades at existing sidewalk
- Relocate/replace wheel stops to ensure vehicles do not overhang onto sidewalk

B Provide curb or painted walkway extension into parking lot at school entrance to ensure adequate capacity and provide room for parental interaction/supervision

C Reduce parking lot exit to single lane and include appropriate buffer striping to maintain good visibility of sidewalk

D Repave or grind out existing parking lot striping. Eliminate striped walkway through lot and modify parking layout with primarily 60 degree angled parking for maximum efficiency and safety

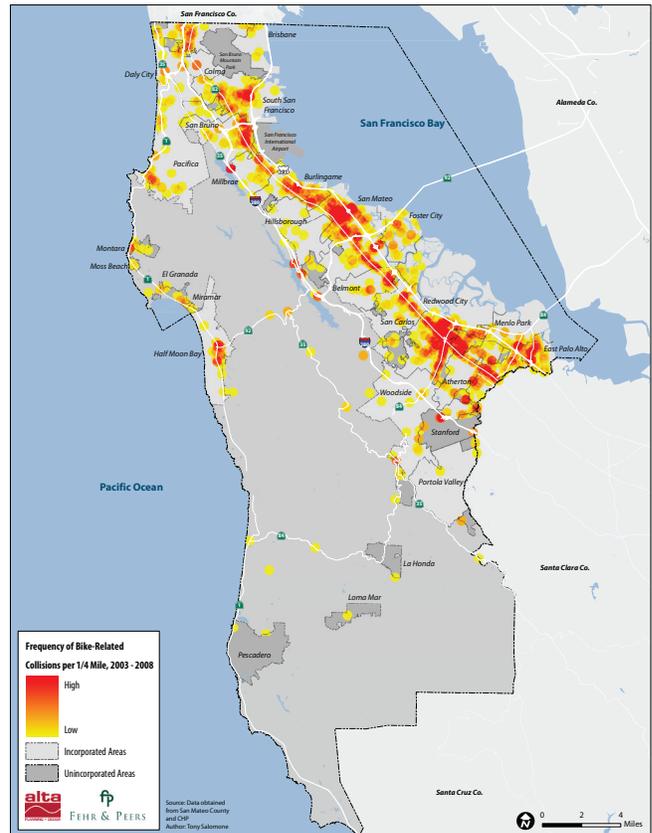
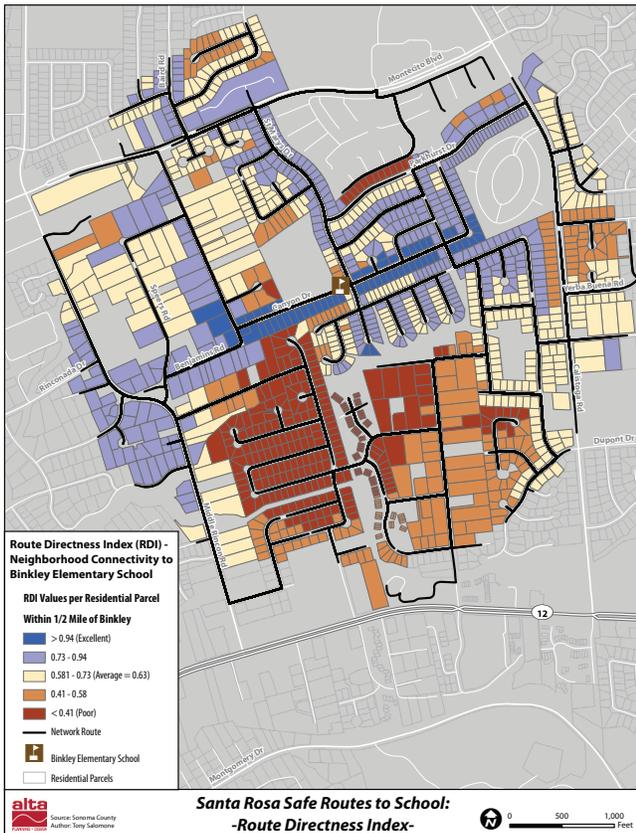
E Potential school gateway locations to consider additional pedestrian and/or bicycle amenities, such as seating, racks, or signage

F Consider continuous barrier (such as timber logs or salvaged utility poles) to prohibit vehicle encroachment onto exiting sidewalk

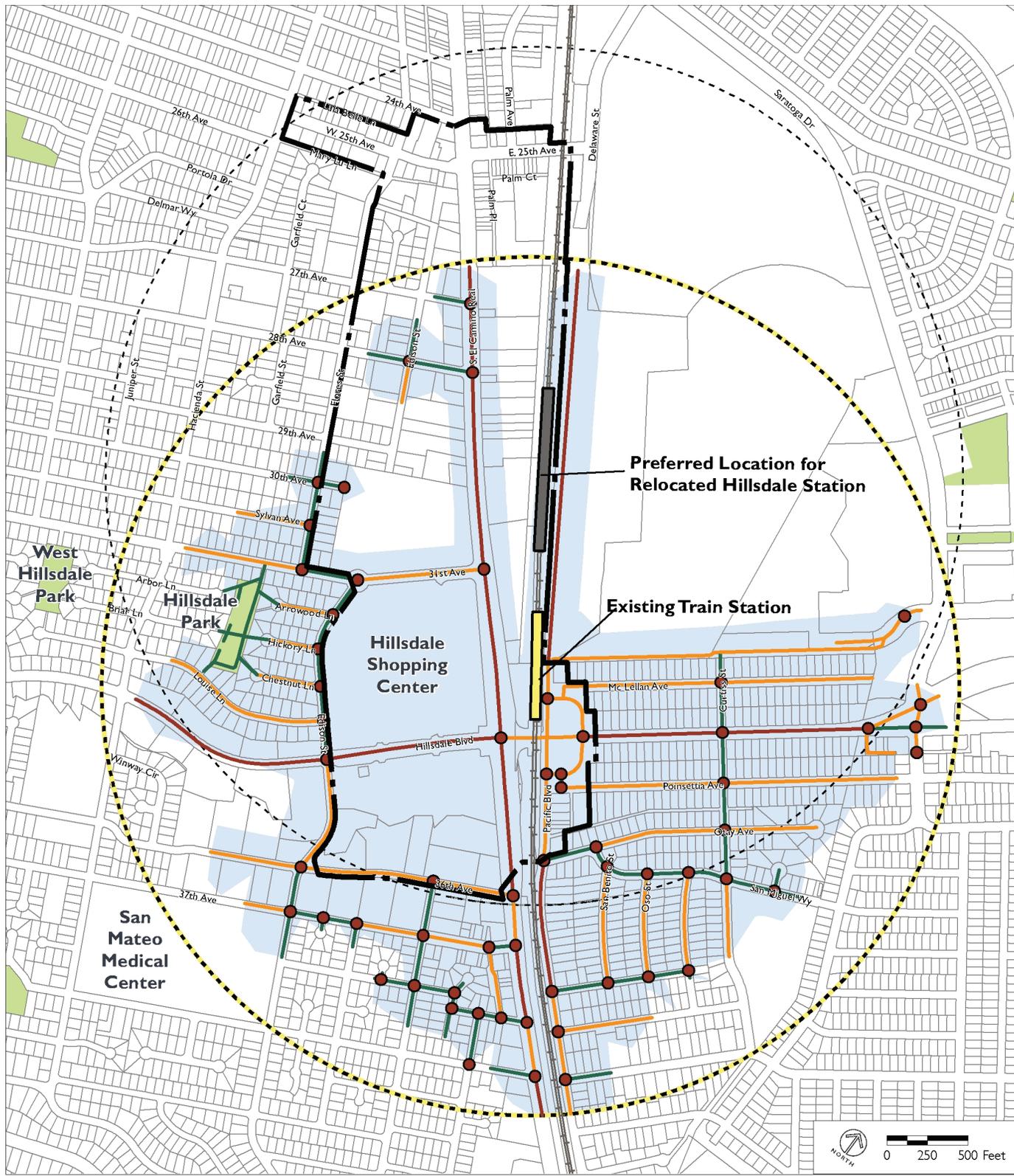
SAFE ROUTES TO SCHOOL - Brookside Elementary Upper Campus

Improvement Plan ID: 49_1

Designed by Alta as a subconsultant to Parisi Associates.



Additional Relevant Information: BFA Sample Map



Quality of pedestrian network within 1/2-mile walkshed	1/2-mile radius from existing station
Low	1/2-mile radius from preferred location for relocated Hillsdale station
Medium	Areas within 1/2-mile walk from existing station
Good	Plan Area Boundary
Street intersections within 1/2-mile walkshed	

GURE 4-2A
WALKSHED OF EXISTING HILLSDALE STATION AREA