

Examining Practices that Promote Access to Safe Routes to School Programs in Vulnerable Communities

Applying for and implementing a federally-funded Safe Routes to School award can be particularly challenging for low-income communities in need of safe and active transportation programming. Approaches for equitable funding have been identified and adopted by several states. This report presents the findings on which approaches may best facilitate awards in vulnerable communities.

Background

The Safe Routes to School (SRTS) Program aims to enable children, including those with disabilities, to safely walk and bicycle to school, thereby encouraging a healthy and active lifestyle. To make bicycling and walking to school a safer and more appealing alternative, the program facilitates the planning, development, and implementation of projects “to improve safety and reduce traffic, fuel consumption, and air pollution” near primary and middle schools.^[1] SRTS is a Federal-Aid program of the U.S. Department of Transportation’s Federal Highway Administration, and was initiated in 2005 with over \$1 billion in funding to U.S. State Departments of Transportation (DOT’s) to improve infrastructure and programming to facilitate safe active travel.^[2] Each state administers its own program and develops its own procedures to solicit and select projects for funding.

Low-Income Communities: Higher Need, Scarce Resources

Applying for a federally-funded SRTS award can require the expertise of planners and engineers, as well as coordination with the local school district and city. Once a project is awarded, recipients must comply with federal regulations, which can require additional assistance and staffing. And since the program is operated on a reimbursement basis, in some cases, local communities must expend the funds and wait for reimbursement.^[3]

The many requirements of the SRTS Program can pose particular challenges for low-income communities applying for SRTS awards and implementing projects. These challenges are largely due to resource limitations in low-income communities, including school or community capacity, lack of access to individuals with necessary engineering expertise, and ability to absorb implementation costs prior to

The 6 E’s of Safe Routes to School

Evaluation
Engineering
Education
Encouragement
Enforcement
Equity

reimbursement. Yet, these communities are often the most in need of programming for safe and active travel. Injury and crash rates are higher in low-income communities^[4-7] and physical and social environments surrounding schools in these areas are often less favorable for walking and bicycling.^[8, 9]

Children from low-income families are also more likely to walk or bicycle to school than peers from higher income families,^[10, 11] which puts them at increased risk of safety hazards. Addressing equity concerns and incorporating solutions that address equity issues is a key tenet of successful SRTS programs. Nationally, SRTS advocates promote programs that are comprehensive in addressing several principles, called the “Six E’s.” *Equity* is listed as one of the Six E’s, to ensure that funded projects incorporate “equity concerns throughout the

other E’s to understand and address obstacles, create access, and ensure safe and equitable outcomes.”^[12]

Approaches for Equitable Funding

SRTS programs in multiple states have adopted several approaches to reduce barriers faced by schools in low-income communities. These identified practices for equitable funding span the process from planning to implementation (Figure 1).^[3, 13] Researchers surveyed state program representatives to determine which practices their state used to address the key tenet of equity.

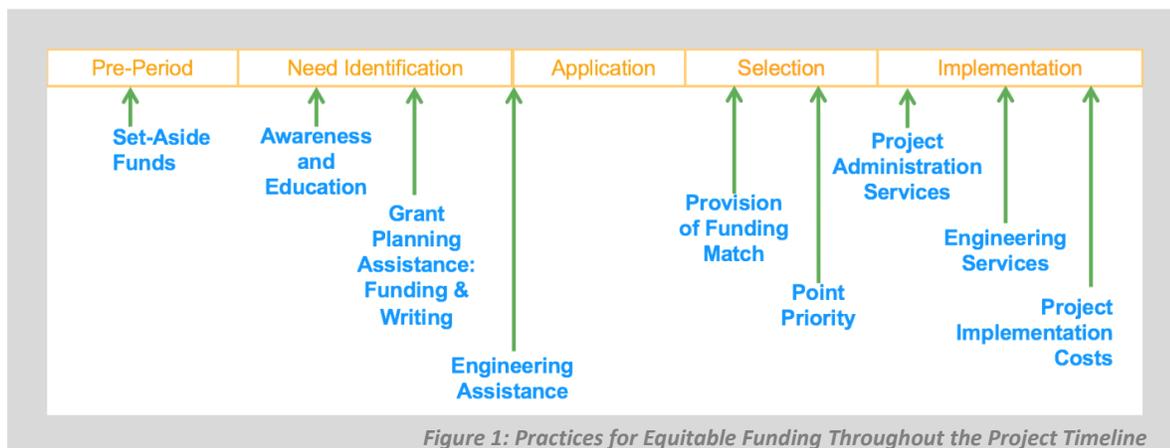


Figure 1: Practices for Equitable Funding Throughout the Project Timeline

Although low-income schools have been well-represented in SRTS awards at the national level,^[2, 14] data were previously lacking on the distribution of SRTS funds by school income level within states. Given the differences in state program practices and policies, this study aimed to determine which types were successful in promoting SRTS implementation within vulnerable communities.

The Study: Assessing State Practices

Purpose & Methods

To determine which practices may facilitate awards in vulnerable communities, researchers:

- **Collected award data** (which are reported quarterly by state SRTS contacts) from the *National Center for Safe Routes to School State Project List* for years 2005-2015,^[15]
- **Sent web-based surveys** to individual state-level respondents to collect information on their use of identified practices for equitable funding;
 - **Conducted follow-up interviews** with a sample of state coordinators to gather additional information on the practices collected in the survey; and,
- **Reviewed** state program and legislative **websites**, as well as **reports** produced by states or other partners.^[3, 16-18]

Several states reported using a number of practices for equitable distribution of funds, or awarded projects to low-income schools at a rate higher than expected during more than one funding cycle. This expected rate was based on the percentage of all schools that were low-income, defined as having 75% or more of students eligible for free or reduced priced meals, and the number of awards granted in each year.^[19] Researchers linked the annual award data from the National Center for Safe Routes to School to the annual school-level proportion of students eligible for free or reduced priced meals, gathered from the National Center for Education Statistics.^[20]

Defining Vulnerable Communities

During the review of survey and interview data, researchers learned that states' SRTS programs define "vulnerable" or "low-income communities" using many different standards, such as criteria set by other state agencies or local jurisdictions. Therefore, this analysis may have missed certain states that could be classified as "noteworthy" based on their state's definition of vulnerable communities. In some cases, the state's definition of a vulnerable community may or may not coincide with the definition of a low-income school used in the analysis of annual award data. In other cases, the definition of vulnerable communities used by the state had changed over time. The specific examples provided below, and on pages 6-8, feature terminology provided by the state regarding their strategies for defining vulnerable communities.



In Michigan, the Office of the Governor identified eight "particularly distressed" communities, or those that experienced devastating effects related to population decline, poverty, infrastructure challenges, and blight.



In California "disadvantaged communities" are defined by both free or reduced price school meal eligibility, as well as CalEnviroScreen—a tool used to identify communities using a combination of pollution and socioeconomic indicators.

States used various threshold levels for indicators that could include:

- School characteristics such as:
 - Proportion of students eligible for free or reduced price meals
 - Title I School Status
 - Department of Education School Building Aid Formula
 - Walking rates
 - Crash reports or crash or injury rates around a school
 - Known safety hazards

- Community-level indicators such as:
 - Median household or per capita income
 - Unemployment or lack of year-round stable employment
 - Low housing values compared to the state average
 - Proportion of the population receiving public assistance
 - Municipality financial status
 - Crash reports or crash or injury rates

Practices for Equitable Funding

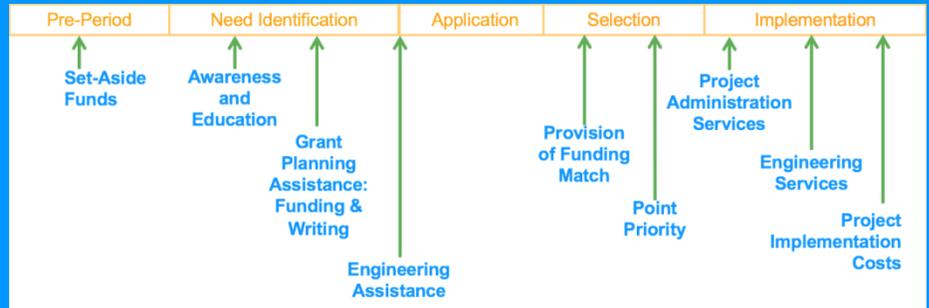
Many states have chosen one or more practices that may promote funding in low-income communities. *Table 1* provides a list of practices used by states and noteworthy states, listed by the phase in which they occur during the funding process. Further definition and description of these practices and examples from selected states are listed within the project timeline on pages 6-8. Additional examples and insights collected from surveys and interviews can be found at: <https://hsph.me/prc-srts-practices>

Phase in Project Timeline	Practice that may promote SRTS funding in low-income communities	States Using Practice (N=51)	50 States & DC	Noteworthy States Using Practice (N=16)	CA, CO, DE, FL, KS, MI, MN, MS, NE, NH, NJ, PA, TX, VT, VA, WA
Pre-Period	Set-aside funds for low-income communities	1	CA	1	CA
Need Identification	Practice awareness and education strategies aimed at encouraging applications from low-income communities	15	CA, CO, DE, FL, MA, MI, MS, NC, NJ, OH, PA, SD, VT, VA, WA	11	CA, CO, DE, FL, MI, MS, NJ, PA, VT, VA, WA
	Provide grant planning assistance: funding	8	CA, DE, MN, MS, NH, NM, OH, VA	6	CA, DE, MN, MS, NH, VA
	Provide grant planning assistance: writing	8	AZ, FL, MI, MS, MO, NJ, OH, VA	5	FL, MI, MS, NJ, VA
Application	Provide engineering assistance to communities before they apply	9	CO, DE, MD, MA, MI, NH, OH, VT, VA	6	CO, DE, MI, NH, VT, VA
Selection	Provision of funding match	12	CA, DE, DC, FL, LA, MA, MI, NJ, OH, PA, TX, WV	7	CA, DE, FL, MI, NJ, PA, TX
	Assign extra points or provide special consideration for applications from low-income communities (“point priority”)	18	AZ, CA, CO, FL, MI, MS, MN, NE, NH, NJ, NY, OH, PA, SD, TX, VT, VA, WA	14	CA, CO, FL, MI, MS, MN, NE, NH, NJ, PA, TX, VT, VA, WA
Implementation	Provide project administration services to communities during project implementation	14	CA, CO, DE, FL, KY, MA, MI, MS, NJ, OH, PA, VT, VA, WA	11	CA, CO, DE, FL, MI, MS, NJ, PA, VT, VA, WA
	Provide engineering services to communities during project implementation	14	DE, FL, KY, MA, MI, MS, NH, NJ, NM, OH, PA, SD, VT, WA	9	DE, FL, MI, MS, NH, NJ, PA, VT, WA
	Assist with project implementation costs	7	DE, FL, MA, MI, NJ, SD, VA	5	DE, FL, MI, NJ, VA

Table 1: Practices for Equitable Funding

SRTS Project Timeline: Practices and Examples for Equitable Funding

Practices for equitable funding are listed by the phase in which they occur during the funding process. Definitions and descriptions of each practice are included below, along with examples from select states.



Pre-Period

← Set-Aside Funds

A portion of SRTS funding is set aside specifically for communities that have higher proportions of people that are identified as high-need or low-income.



California sets-aside 25% of funds for “disadvantaged communities” in its Active Transportation Program, which includes SRTS as well as other bicycle and pedestrian projects.

← Awareness and Education

Special outreach efforts and educational workshops are carried out to reach and encourage low-income communities to apply for funding. Several states reported general methods to reach all schools in the state, such as distributing emails or newsletters, maintaining a website that provides guidance on applying for and implementing SRTS projects, and holding informational sessions or webinars on the application process. Other states reported using more targeted strategies.

Need Identification

Michigan tailors trainings to provide a higher level of technical assistance to low-income communities, including leading them through the planning and application process.



Mississippi worked with partners at the Departments of Education’s Office of Healthy Schools, which had a program focused on low-income communities and schools. They also worked with the Department of Health with its county-level health programs to spread information about SRTS.

Washington identifies areas with high rates of pedestrian and bicycle collisions and targets those communities (many of which are low-income) for outreach.



← Grant Planning Assistance: Funding

States may provide assistance through grant planning awards or funding. Some states offer financial awards for any community that wants to develop SRTS action plans. In these states, applicants can obtain small planning awards through a simplified application process to provide funding to help low-income communities with initial assessments and develop the plans necessary to apply for a larger-scale award.

In Mississippi, planning funds were given to larger urban areas to develop circulation studies that looked at routes that students travel to/from school. These studies intended to assess what the priority infrastructure improvements would be, and to help communities prioritize for a phased approach.

← Grant Planning Assistance: Writing

States may also provide assistance with writing grants. Strategies reported to reach all schools included providing workshops and toolkits, and local coordinators assisting with applications if requested by a community.

In New Jersey, Transportation Management Association SRTS Coordinators may assist "disadvantaged communities" with grant applications as part of the NJ SRTS Non-Infrastructure Program.

← Engineering Assistance Pre-Application

Low-income communities can be deterred from even applying for funding because of limited access to municipal engineers or planners. Several states have contracted with statewide planning or engineering firms that provide expertise to low-income communities at the state's expense, to help them develop plans for SRTS projects.

← Provision of Funding Match

Initially, federal funding for SRTS did not require communities to provide partial funding support, or local match. However, since dedicated federal funding for the SRTS program ended in 2012, communities are required to provide up to a 20% local match when they receive federal dollars for SRTS projects. This federally-mandated funding match can be a considerable impediment for low-income communities in applying for SRTS programs. In response, many states reported that they provide the funding match through bridge and toll credits, and the match is often provided for all projects, regardless of the community's socioeconomic status.

← Point Priority or Special Consideration

During the scoring of funding applications, many states award extra points or provide special considerations for applications from low-income or disadvantaged communities. Fourteen out of 16 noteworthy states provided special considerations or used point priority.



In California, the 2011 SRTS application rating system (by law) provided for consideration of projects that would provide benefit to a low-income school.^[21] The Active Transportation Program, created by CA Senate Bill 99 (Chapter 359, Statutes of 2013) and CA Assembly Bill 101 (Chapter 354, Statutes of 2013) currently has an application rating system that gives priority for projects reaching “disadvantaged communities.”^[22]

← Project Administration Services

Providing administrative support can help to ensure that communities are able to participate, even when they lack the staff to handle the administrative burden of the award. Many states reported that they provide general project administration services to reach all schools, such as a website with guidance documents, or assigning a local agency coordinator to provide local technical assistance. In some states the DOT administers all aspects of project implementation including hiring the consultants for the planning and design, reviewing bids and managing the contracts for construction or agreements for materials/supplies for non-infrastructure, thereby ensuring all state and federal-aid requirements are followed. This may be available in all or some vulnerable communities only.

← Engineering Services

Some communities may not have access to engineering staff with the necessary expertise to implement an awarded infrastructure project in compliance with federal and state regulatory processes. Several states reported providing engineering services or technical assistance to low-income communities during project implementation through firms and consultants on retainer. This may be available in all or some vulnerable communities only.

← Project Implementation Costs

Communities with limited resources may also face significant challenges in absorbing the costs of implementing a SRTS project while waiting for reimbursement. Some state DOT’s order all materials needed for non-infrastructure programs—such as curricular materials or safety or encouragement promotional materials—or provide non-infrastructure SRTS support services for all communities. Several states reported that they pay up-front for some or all of the project implementation costs.

A Comprehensive Approach

Employing a variety of these identified practices throughout the project process can be a successful approach to facilitate SRTS applications and awards in vulnerable communities. Some examples of states that have used multiple practices throughout the project process are highlighted below.

*In **Michigan**, the Michigan Fitness Foundation and MDOT provide all planning, design, and project implementation costs and engineering services for eight identified distressed communities.*

*In **Florida** the District SRTS coordinator has the option to identify projects and assist with application writing, administer the project (including design and construction), and let the project directly (resulting in no out-of-pocket expenses for the community).*

Sustaining & Tracking Equity

While the federal set-aside funding for state SRTS projects and programs has ended, SRTS projects are still eligible for federal funding via other transportation programs like the Transportation Alternatives Program (TAP), the new Surface Transportation Block Grant (STBG) Program, and via state-specific program funding. Some states have taken steps to institutionalize the SRTS program in their DOT's, integrating a focus on low-income or disadvantaged communities. Other states have even begun to track how they serve vulnerable communities. Over time, these strategies will help sustain state SRTS programs with a focus on ensuring applications and awards in vulnerable communities.

- Sustained Approaches for Equity -

***California** began its state Active Transportation Program in 2014, which includes SRTS. 25% of funds are set aside for disadvantaged communities.*

*In **Florida**, funds will be set aside beginning in 2017 for SRTS projects. Florida DOT will transfer federal safety funds specifically for SRTS activities. The state promotes use of these funds in its Rural Economic Development Initiative Communities.*

- Tracking Equity -

***Washington** maintains a database of applicants and awards, and can track the number of both applications received and awards given to low-income schools.*

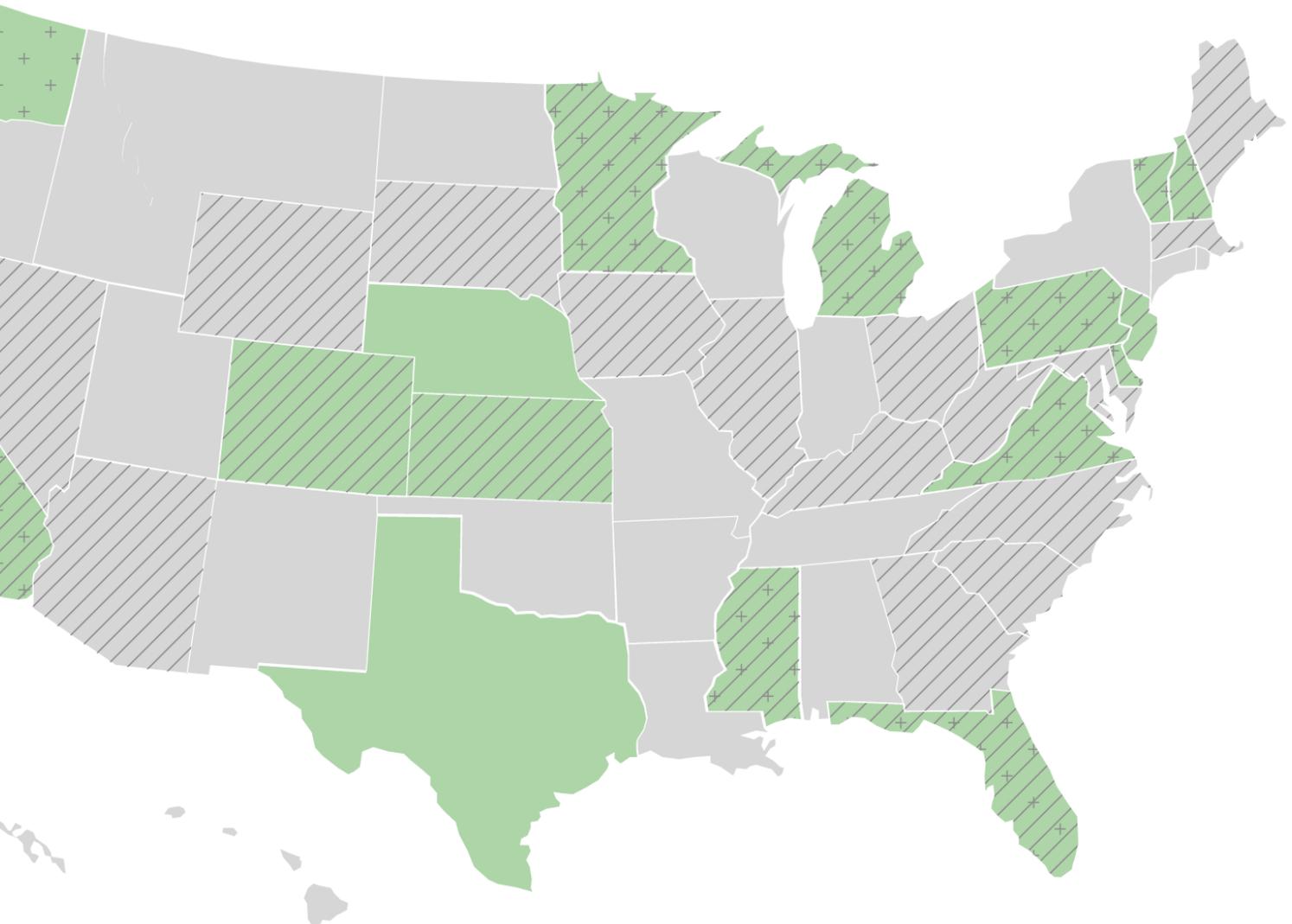
***Delaware** maintains a database including income status of schools receiving awards, as well as the funding amounts they receive.*

Discussion & Policy Implications

- **Awareness and education, provision of funding match, point priority, project administration services, and engineering services** were the identified practices most frequently reported by states that were successful in funding low-income communities.
- The most frequently employed practice among states that funded low-income schools at a rate higher than expected in one or more funding cycle was the **point priority**.

This study suggests that multiple practices can help ensure that low-income schools and communities are encouraged to apply for awards, that these applications have a likelihood of success, and that implementation of projects in low-income communities receive project administrative and engineering support and services.

Although states no longer receive federal set-aside funding for SRTS projects and programs, some states have taken steps to institutionalize the SRTS program in their DOT's, integrating a focus on low-income or disadvantaged communities. All states will need to identify new solutions to secure ongoing funding and institute key practices to ensure that more students can walk or bicycle to and from school safely, particularly in vulnerable communities.



References

1. U.S. Department of Transportation Federal Highway Administration. *Safe Routes to School*. October 2015 [cited 2016 September 9]; Available from: http://www.fhwa.dot.gov/environment/safe_routes_to_school/overview/.
2. National Center for Safe Routes to School. *Creating Healthier Generations: A Look at the 10 Years of the Federal Safe Routes to School Program*. September 2015 [cited 2015 December 2]; Available from: http://saferoutesinfo.org/sites/default/files/SRTS_10YearReport_Final.pdf.
3. Safe Routes to School National Partnership. *Addressing the Needs of Low-Income Communities through the Federal Safe Routes to School Program: Best Practices from and for State SRTS Programs*. April 2009 [cited 2016 August 15]; Available from: http://saferoutespartnership.org/sites/default/files/pdf/Addressing_the_Needs_of_Low_Income_Communities_FINAL.pdf.
4. Laflamme, L. and F. Diderichsen, *Social differences in traffic injury risks in childhood and youth--a literature review and a research agenda*. *Inj Prev*, 2000. **6**(4): p. 293-8.
5. Wazana, A., et al., *A review of risk factors for child pedestrian injuries: are they modifiable?* *Inj Prev*, 1997. **3**(4): p. 295-304.
6. Stoker, P., et al., *Pedestrian Safety and the Built Environment: A Review of the Risk Factors*. *Journal of Planning Literature*, 2015. **30**(4): p. 377-392.
7. Morency, P., et al., *Neighborhood social inequalities in road traffic injuries: the influence of traffic volume and road design*. *Am J Public Health*, 2012. **102**(6): p. 1112-9.
8. Green, R.S., et al., *Proximity of California public schools to busy roads*. *Environ Health Perspect*, 2004. **112**(1): p. 61-6.
9. Zhu, X. and C. Lee, *Walkability and safety around elementary schools economic and ethnic disparities*. *Am J Prev Med*, 2008. **34**(4): p. 282-90.
10. McDonald, N.C., *Critical factors for active transportation to school among low-income and minority students. Evidence from the 2001 National Household Travel Survey*. *Am J Prev Med*, 2008. **34**(4): p. 341-4.
11. Babey, S.H., et al., *Sociodemographic, family, and environmental factors associated with active commuting to school among US adolescents*. *J Public Health Policy*, 2009. **30 Suppl 1**: p. S203-20.
12. Safe Routes to School National Partnership. *The 6 E's*. [cited 2016 August 12]; Available from: <http://saferoutespartnership.org/healthy-communities/101/6Es>.
13. National Center for Safe Routes to School. *Integrating Safe Routes to School into the Transportation Alternatives Program: Reducing Barriers for Disadvantaged Communities*. [cited 2015 December 2]; Available from: http://saferoutespartnership.org/sites/default/files/pdf/srts_brief_TAP_MatchingBrief.pdf.
14. National Center for Safe Routes to School. *Federal Safe Routes to School Program Progress Report*. August 2011 [cited 2015 December 2]; Available from: http://www.saferoutesinfo.org/sites/default/files/resources/progress%20report_FINAL_web.pdf.
15. National Center for Safe Routes to School. *National SRTS State Project List*. [cited 2015 December 2]; Available from: http://apps.saferoutesinfo.org/project_list/.
16. Lieberman, M., M. Pedroso, and S. Zimmerman. *Making Strides: 2016 State Report Cards on Support for Walking, Bicycling, and Active Kids and Communities*. March 2016 [cited 2016 August 15]; Available from: <http://saferoutespartnership.org/resources/2016-state-report-cards>.
17. Zimmerman, S., *Equitable Funding for Safe Routes to School Grants. Memorandum to LeeAnn Ferguson*. July 29, 2014, Safe Routes to School National Partnership.
18. Frost, N. and K. Mees, *Safe Routes to School -- State Review Report. Memorandum to American Heart Association*. November 13, 2014, Public Health Law Center at William Mitchell College of Law.
19. U.S. Department of Education and National Center for Education Statistics. *Concentration of Public School Students Eligible for Free or Reduced-Price Lunch*. May 2015 [cited 2015 December 2]; Available from: http://nces.ed.gov/programs/coe/indicator_clb.asp.
20. U.S. Department of Education and National Center for Education Statistics. *Common Core of Data (CCD), Public Elementary/Secondary School Universe Survey Data*. [cited 2016 April 8]; Available from: <http://nces.ed.gov/ccd/pubschuniv.asp>.
21. State of California, *Assembly Bill No. 516, An act to amend Section 2333.5 of the Streets and Highways Code, relating to transportation*. 2011.
22. California Transportation Commission. *2017 Active Transportation Program Guidelines*. 2016, March [cited 2016 September 20]; Available from: http://www.catc.ca.gov/programs/ATP/2017/Final_Adopted_2017_ATP_Guidelines.pdf.

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