

# Minnesota Safe Routes to School

*Improving Health, Safety, and Transportation*



# Why Safe Routes to School?



1. Fewer kids today walk and bike to school
2. This has resulted in unintended consequences
3. SRTS programs can be part of the solution

# Fewer kids are biking and walking More parents are driving



**1969**

48% walked or biked

12% driven

**2009**

13% walked or biked

44% driven

# School travel by private vehicle accounts for 10-14% of morning rush hour traffic.

*(McDonald, Brown, Marchetti, Pedroso, 2011)*



# What caused the shift?



# School siting: A generation ago

- Small (average of 127 students)
- Located in community centers
- 48% of kids walked or biked to school  
(*EPA, 2003*)



# School siting: Today

- Current average enrollment: 517 students
- Mega-schools: up to 2,800 students
- Schools located on 10 to 30+ acres fringe land
- Lowest-cost construction

*(National Center for Education Statistics, 2012)*



# It's not just distance

Students living within 1 mile or less who walk or bike to school:

- 1969: 89%
- 2009: 35%

*(USDOT, 2009)*





# Most common barriers to walking and bicycling to school

- Long distances 62%
- Traffic danger 30%
- Adverse weather 19%
- Fear of crime danger 12%

Note: Sum of percentages is more than 100% because respondents could identify more than one barrier.

*(CDC, 2005)*

# Traffic danger



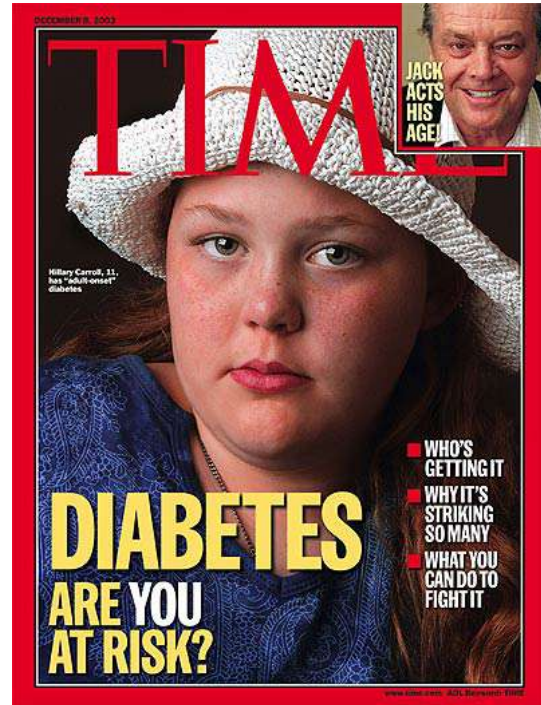
# Adverse weather



# Fear of crime danger

- Range of concerns is broad, often not unique to walking and bicycling to school
- Both reality and perceptions need to be addressed
- SRTS can be a part of a larger, community-wide response

# What are the unintended consequences of less walking and bicycling?



# 1996 Summer Olympic Games banned single occupant cars in downtown Atlanta



# Results of the ban

- Morning traffic – decreased 23%
- Peak ozone – decreased 28%
- Asthma-related events for kids – decreased 42%

*(Friedman, 2001)*

Air quality is measurably better around schools with more walkers and bicyclists

*(EPA, 2003)*





# Physical inactivity



- Many kids aren't getting the physical activity they need
- Recommended at least 60 minutes daily

*(Trust for America's Health & Robert Wood Johnson Foundation, 2011)*

Healthy lifestyle habits, including healthy eating and physical activity, can lower the risk of becoming obese

*(CDC, 2013)*



# Obese children have an increased risk of...

- Heart disease and stroke
- Type 2 Diabetes
- Low self esteem
- Sleep apnea
- Several types of cancer
- Osteoarthritis

*(CDC, 2014)*

# Good news!

Communities are taking action on behalf of children through Safe Routes to School



# Safe Routes to School programs are part of the solution...

- to increase physical activity
- to improve unsafe walking conditions
- to improve poor air quality by reducing vehicle emissions



# More benefits of SRTS programs

- Reduce traffic congestion around schools
- Cost savings for schools (reduce need for “hazard” busing)
- Increase child’s sense of freedom and responsibility
- Teach fundamental safety skills
- Strengthen family bonds
- Benefit local economy
- Provide more transportation options for everyone

# Elements of SRTS programs

- Equity
- Education
- Encouragement
- Enforcement
- Engineering
- Evaluation



# Equity

## Equality



## Equity





# Education

- Teaches safety skills
- Creates safety awareness
- Fosters life-long safety habits
- Includes parents, neighbors and other drivers



# Encouragement

- Increases popularity of walking and bicycling
- Is an easy way to start SRTS programs
- Emphasizes fun of walking and biking



# Enforcement

- Increases awareness of pedestrians and bicyclists
- Improves driver behavior
- Helps children follow traffic rules
- Decreases parent perceptions of danger



# Engineering

- Creates safer, more accessible settings for walking and bicycling
- Can influence the way people behave



# Evaluation

**Parent Survey About Walking and Biking to School**

**Dear Parent or Caregiver,**  
 Your child's school wants to learn your thoughts about children walking and biking to school. This survey will take about 5 - 10 minutes to complete. We ask that each family complete only one survey per school year children attend. If more than one child from a school brings a survey home, please fill out the survey for the child with the next birthday from today's date.  
 After you have completed this survey, send it back to the school with your child or give it to the teacher. Your responses will be kept confidential and neither your name nor your child's name will be associated with any results.  
 Thank you for participating in this survey!

+ CAPITAL LETTERS ONLY - BLUE OR BLACK INK ONLY +

**School Name:** \_\_\_\_\_

1. What is the grade of the child who brought home this survey?  Grade (PK,K,1,2,3...)  Male  Female

2. Is the child who brought home this survey male or female?  Male  Female

3. How many children do you have in Kindergarten through 8<sup>th</sup> grade?

4. What is the street intersection nearest your home? (Circle the names of two intersecting streets)  
 \_\_\_\_\_ and \_\_\_\_\_

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box.

5. How far does your child live from school?  
 Less than 1/4 mile  1/4 mile up to 1 mile  More than 2 miles  
 1/2 mile up to 1/4 mile  1 mile up to 2 miles  Don't know

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box. +

6. On most days, how does your child arrive and leave for school? (Select one choice per column, mark box with X)

<u>Arrive at school</u>		<u>Leave from school</u>	
<input type="checkbox"/> Walk	<input type="checkbox"/> Walk	<input type="checkbox"/> Walk	<input type="checkbox"/> Walk
<input type="checkbox"/> Bike	<input type="checkbox"/> Bike	<input type="checkbox"/> Bike	<input type="checkbox"/> Bike
<input type="checkbox"/> School Bus	<input type="checkbox"/> School Bus	<input type="checkbox"/> School Bus	<input type="checkbox"/> School Bus
<input type="checkbox"/> Family vehicle (only children in your family)	<input type="checkbox"/> Family vehicle (only children in your family)	<input type="checkbox"/> Family vehicle (only children in your family)	<input type="checkbox"/> Family vehicle (only children in your family)
<input type="checkbox"/> Carpool (Children from other families)	<input type="checkbox"/> Carpool (Children from other families)	<input type="checkbox"/> Carpool (Children from other families)	<input type="checkbox"/> Carpool (Children from other families)
<input type="checkbox"/> Transit (city bus, subway, etc.)	<input type="checkbox"/> Transit (city bus, subway, etc.)	<input type="checkbox"/> Transit (city bus, subway, etc.)	<input type="checkbox"/> Transit (city bus, subway, etc.)
<input type="checkbox"/> Other (skateboard, scooter, inline skates, etc.)	<input type="checkbox"/> Other (skateboard, scooter, inline skates, etc.)	<input type="checkbox"/> Other (skateboard, scooter, inline skates, etc.)	<input type="checkbox"/> Other (skateboard, scooter, inline skates, etc.)

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box. +

7. How long does it normally take your child to get to/from school? (Select one choice per column, mark box with X)

<u>Travel time to school</u>		<u>Travel time from school</u>	
<input type="checkbox"/> Less than 5 minutes	<input type="checkbox"/> Less than 5 minutes	<input type="checkbox"/> Less than 5 minutes	<input type="checkbox"/> Less than 5 minutes
<input type="checkbox"/> 5 - 10 minutes	<input type="checkbox"/> 5 - 10 minutes	<input type="checkbox"/> 5 - 10 minutes	<input type="checkbox"/> 5 - 10 minutes
<input type="checkbox"/> 11 - 20 minutes	<input type="checkbox"/> 11 - 20 minutes	<input type="checkbox"/> 11 - 20 minutes	<input type="checkbox"/> 11 - 20 minutes
<input type="checkbox"/> More than 20 minutes	<input type="checkbox"/> More than 20 minutes	<input type="checkbox"/> More than 20 minutes	<input type="checkbox"/> More than 20 minutes
<input type="checkbox"/> Don't know / Not sure	<input type="checkbox"/> Don't know / Not sure	<input type="checkbox"/> Don't know / Not sure	<input type="checkbox"/> Don't know / Not sure

+ \_\_\_\_\_ +

**Safe Routes to School Students Arrival and Departure Tally Sheet**

+ CAPITAL LETTERS ONLY - BLUE OR BLACK INK ONLY +

**School Name:** \_\_\_\_\_ **Teacher's First Name:** \_\_\_\_\_ **Teacher's Last Name:** \_\_\_\_\_

**Grade:** (PK, K, 1, 2, 3...) \_\_\_\_\_ **Monday's Date (Month, day, year, month, day, year)** \_\_\_\_\_ **Number of Students Enrolled in Class:** \_\_\_\_\_

• Please conduct these counts on two of the following three days: Tuesday, Wednesday, or Thursday. (Three days would provide better data if counted)  
 • Please do not conduct these counts on Mondays or Fridays.  
 • Before asking your students to raise their hands, please read through all possible answer choices so they will know their choices. Each student may only answer once.  
 • Ask your students as a group the question: "How did you arrive at school today?"  
 • Then, read each answer choice and record the number of students that raised their hands for each. Place just one character or number in each box.  
 • Robust the same procedure for the question: "How do you plan to leave for home after school?"  
 • You can conduct the counts once per day, but during the count please ask students both the school arrival and departure questions.  
 • Please conduct this count regardless of weather conditions (i.e., ask these questions on rainy days, too).

**Step 1:** Fill in the weather conditions and number of students in each class. **Step 2:** AM - "How did you arrive at school today?" Record the number of hands for each answer. PM - "How do you plan to leave for home after school?" Record the number of hands for each answer.

Key	Weather So sunny No rainy Overcast Other	Student Tally	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Sample AM	S	M	2	0	2	0	3	0	1
Sample PM	R	1	9	3	2	0	1	2	2
Tues. AM									
Tues. PM									
Wed. AM									
Wed. PM									
Thurs. AM									
Thurs. PM									

Place list any disruptions to these counts or any unusual travel conditions to/from the school on the days of the tally.

+ \_\_\_\_\_ +

Is the program making a difference?

# Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21)

- Legislation passed in 2012
- Established new program: Transportation Alternatives
- SRTS activities eligible to compete for funding
- State DOTs and MPOs administer funds
- Some states have SAFETEA-LU funds remaining



# Minnesota Programs

Minnesota Safe Routes to School Coordinator

Dave Cowan

[dave.cowan@state.mn.us](mailto:dave.cowan@state.mn.us)

651-366-4180



# Safe Routes to School Goals

- Where it's safe, get children walking and biking
- Where it's not safe, make changes





