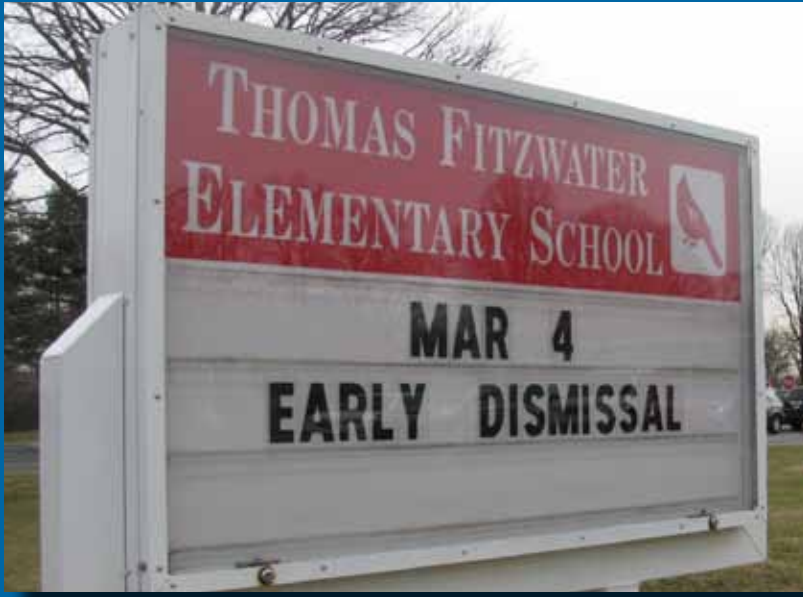


Leaving the Car at Home:

Encouraging the Students and Parents of the
Thomas Fitzwater Elementary School to Walk and Bike



Prepared for Upper Dublin Township by:



ACKNOWLEDGEMENTS:

GVF is appreciative of the opportunity to conduct this report for the Upper Dublin Township and recognizes the contributions of the following organizations:

Paul Leonard - Upper Dublin Township

Ryan Cochland - Upper Dublin Township Police Department

Robert Stover - Upper Dublin School District

Peter Alston - Thomas Fitzwater Elementary School

It was through their assistance and dedication that GVF was able to provide the report.



GVF is a non-profit transportation management association based in King of Prussia, PA. Since 1990, GVF has worked with local and regional organizations, private for profit corporation, and state, county and local governments to identify and implement solutions to congestion issues affecting the region's workforce.

GVF's mission is to achieve a desirable quality of life and a healthy, competitive economic environment by developing multi-faceted transportation strategies. Through strong partnerships we are able to advocate for a more sustainable region.

GVF is located at:

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INTRODUCTION:

The Thomas Fitzwater Elementary School, located in Upper Dublin Township, Montgomery County, PA is like many suburban elementary schools. Its location within a primarily residential district on a quiet residential street makes it a prime location for school children to walk and bike to school. Despite the school's location within a neighborhood, many parents choose to drive their children to the school. Township and school district officials have recognized that significant traffic problems related to student arrivals and departures are typical. The choice of parents to drive their children, rather than let them walk or bike, cause significant and unnecessary traffic congestion on a roadway network that was never intended to handle a large volume of automobiles.

Upper Dublin Township has requested that the Greater Valley Forge Transportation Management Association (GVF) to conduct a multi-modal access study of the Thomas Fitzwater Elementary School with an evaluation of low cost, (generally under \$2,000), solutions that the Upper Dublin School District and Upper Dublin Township can implement to improve peak traffic flows.

STATEMENT OF THE PROBLEM:

Upper Dublin Township has recognized that traffic related to parents dropping off and picking up children from the Thomas Fitzwater Elementary School is a continual and growing problem. This problem is not individual to the Thomas Fitzwater Elementary, but is a growing concern for school districts across the United States. According to the Safe Routes to School National Partnership, nearly half of all students biked or walked to school in 1969; in 2009 approximately 13 percent were walking. In terms of driving, in 1969 12 percent of students were driven to school compared to 44 percent in 2009 (Safe Routes to School National Partnership).

STUDY AREA:

The Thomas Fitzwater Elementary School is located on School Lane in the northeast corner of the township. The study area was determined by an approximate one half mile radius surrounding the school. The study area was then bound by Susquehanna Road to the south, Fitzwatertown Road and North Hills Avenue to the east, Woodlyn Avenue and Dale Avenue to the north, and Twining Road to the west. The eastern boundary of the study area is also the contiguous boundary of both Upper Dublin Township and the Upper Dublin Township School District.

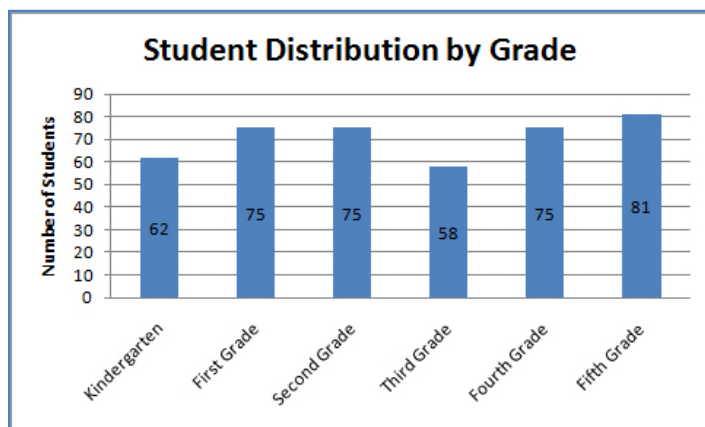
The study area is primarily residential; there are 584 dwelling units, with the elementary school at their center. The neighborhood and the school were developed during



the 1960's and reflect the mid-twentieth century suburban landscape. The neighborhood streets are residential with low posted speed limits. Almost all streets in the study area have sidewalks, most with sidewalks on both sides of the street.

THOMAS FITZWATER ELEMENTARY SCHOOL:

The school hosts grades kindergarten through fifth grade. The school has a total of 426 students. The distribution by grade is:



STUDENT TRANSPORTATION:

According to an interview conducted with Principal Peter Alston on January 14, 2011 the school services an area of approximately one square mile. The school district will provide bus services for students that live further than quarter of a mile from the school. Students that live within a quarter of a mile are responsible for their own transportation. Upper Dublin School District and Upper Dublin Township cooperatively employ crossing guards to ensure safe passage of students walking to and from the school. The school provides bus service for 170 students, and the remaining 256 are responsible for their own

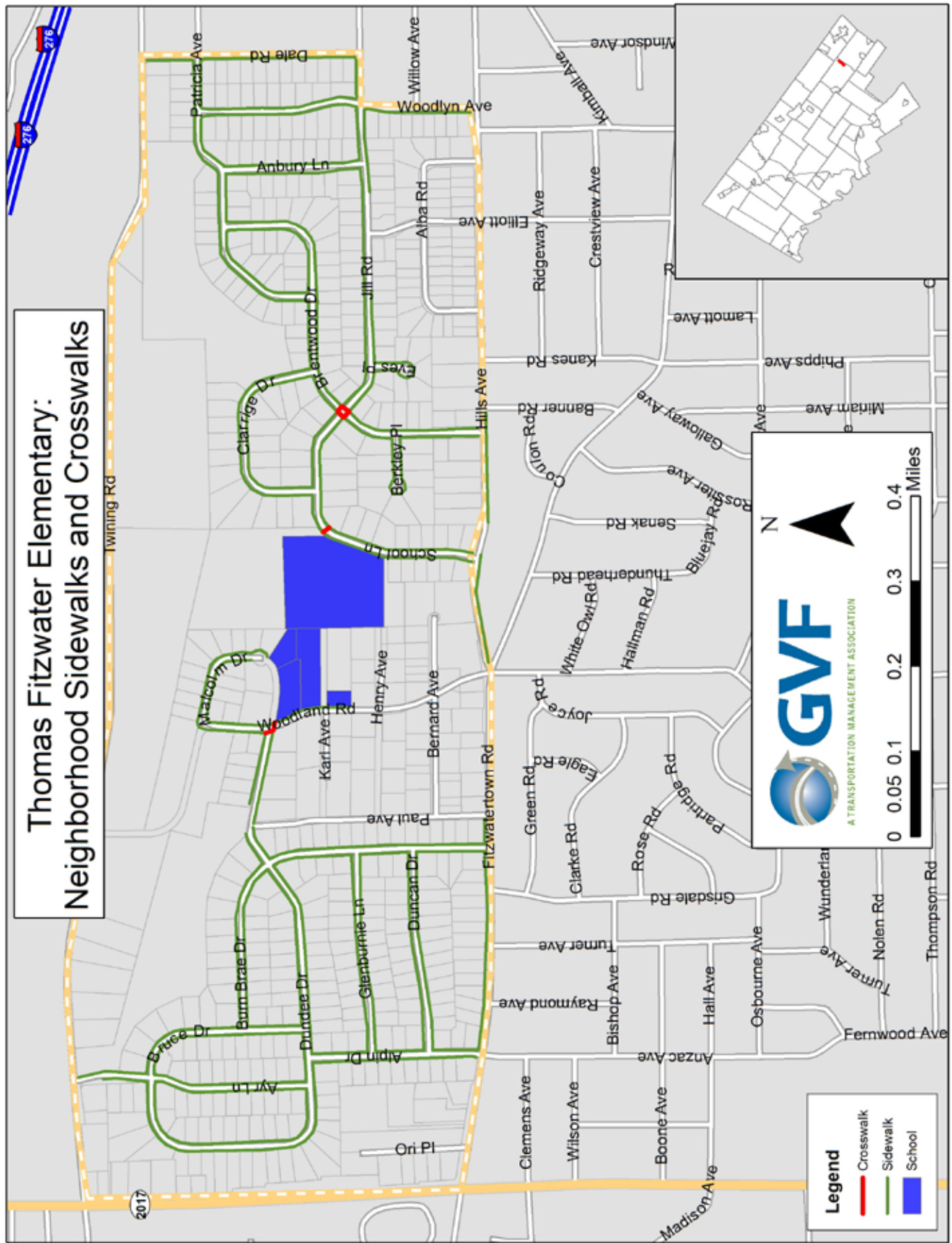


Figure 2: Sidewalks and Crosswalks. Source, GVF

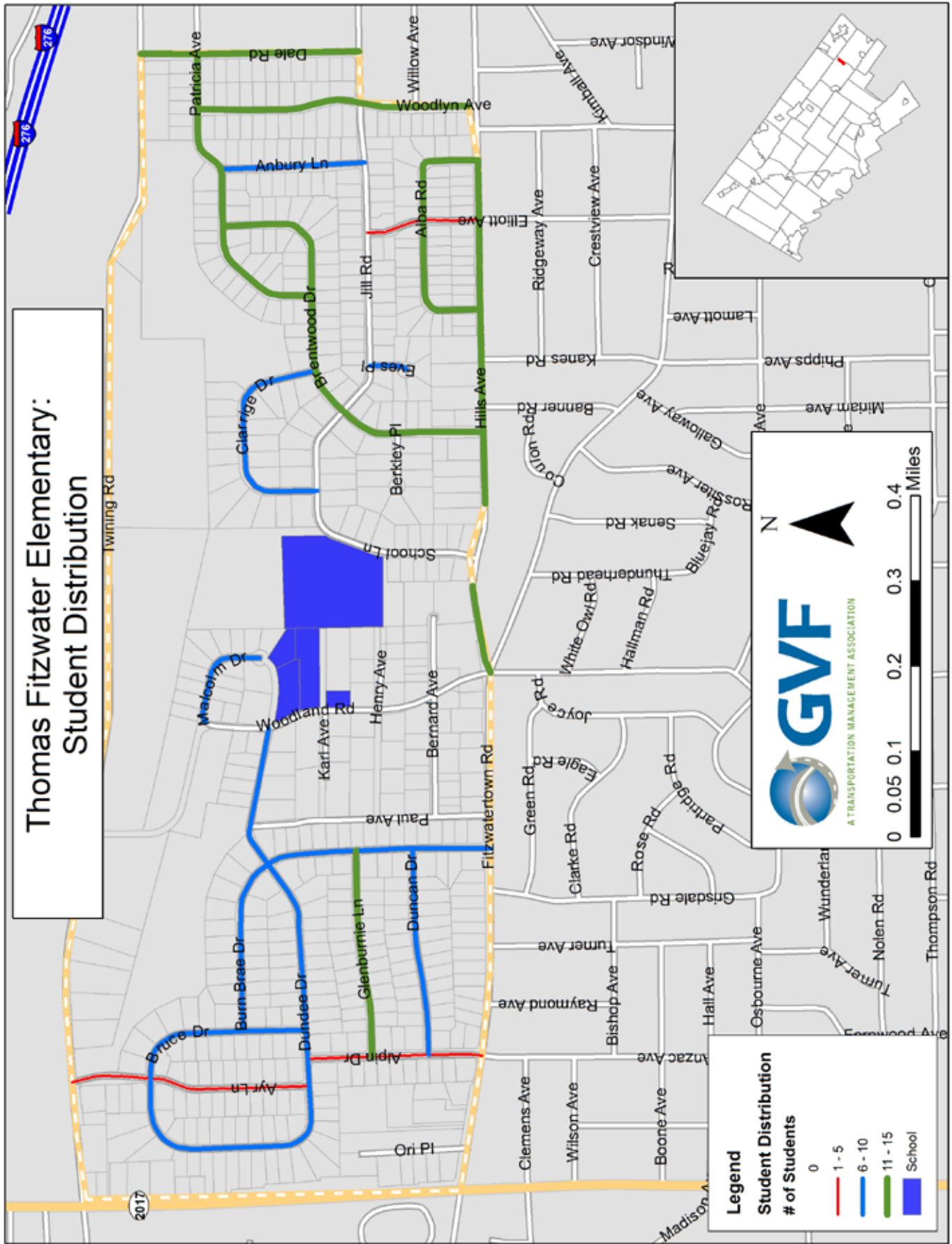


Figure 3: Student Distribution. Source, GVF

transportation. There are five buses to and from the school provided by the Upper Dublin School District.

The school administration provided a count of students by street. The data did not include student addresses, so the concentrations do not represent the location on the street. The information was used to determine the distribution of students across the surrounding neighborhoods. Figure 3 displays the information geographically. There is a higher concentration of students to the east of the school, 93 were found to be living on the streets to the east. There are 74 students found to be living to the west of the school. The students living on the streets to the west of the school are distributed fairly evenly across all streets, where as the streets to the east have higher concentrations of students.

The distribution of students does not change the programs recommended to encourage more walking and biking. Streets on both sides of the school share similar characteristics of low posted speed and continuous sidewalks in either direction of travel on the street.

FIELD OBSERVATIONS:

On afternoon of March 8, 2011, GVF, in cooperation with Upper Dublin Police Department, conducted field observations. The field observations were to better understand the extent of the problem. Two locations were monitored for vehicle activity. One location that was monitored by the Upper Dublin Police Department was on the school property in the designated carpool lane. The location was identified by school officials as the only authorized location where parents can pick up their children. The second location chosen for observation was the intersection of Woodland Road and Dundee Drive. This location was chosen because there is a path across the school property to the intersection. A crossing guard is stationed at the intersection, however, traffic volume is very low.



Vehicles lined up to pick up students on Woodland Drive.

The school day ends at 3:20PM, however parents begin arriving to pick up students around 3:00PM and the majority of parents depart by 3:40PM. At the school car pool lane 34 vehicles were observed picking up students. At the site at the rear of the school 17 vehicles are observed, while 16 students were observed to be walking. The observations did not include a survey of parents to determine their final destination.

RECOMMENDATIONS:

The purpose of this study is to identify solutions that come at little to no cost to either the school district or the township. The problem was created by a cultural change in values in which a higher value has been placed on the individual transportation than on collective transportation. Parents are more concerned with driving their child to school than how all the children arrive to school. The challenge and the solution to this problem is in changing the culture from one that accepts parents driving children to school to one that encourages children to walk to school.

Changing the culture will require a cooperative effort between the school, the school district, the township, the parents of school children, and residents of the neighborhood surrounding the school. For any of these recommendations to be successful, the stakeholders must commit to making them successful. The Safe Routes to School National Partnership is a national organization that provides information to schools and school districts that are struggling with the very same issues as Thomas Fitzwater Elementary School. Through the federally funded Safe Routes to School program, the partnership has produced a series of manuals and publications that aid schools in encouraging students to walk and bike to school. In the instance where capital funding is required, the Safe Routes to School program can provide grants to schools to install the required infrastructure to increase the amount of students walking.

Safe Routes to School, although federally funded, is a state administered program through the Pennsylvania Department of Transportation (PennDOT). At present time PennDOT is not providing grant funding, however, funds may be made available at any time. To be a prime candidate for funding, the following low cost programs should be considered for implementation. Having an active program in place will demonstrate the school's commitment to the Safe Routes to School philosophy.

Eight Steps to Creating a Safe Routes to School Program (courtesy of National Safe Routes to School Partnership)

1. Create a Safe Routes to School team;

2. **Document parental concerns and safety problems around the school;**
3. **Make needed short-term safety improvements;**
4. **Map safe walking routes and create a “walking school bus”;**
5. **Hold a pedestrian and bicycle safety education workshop;**
6. **Step up traffic safety enforcement;**
7. **Build excitement through small promotional contests and activities;**
8. **Apply for funding for longer-term, more costly improvements.**

- **Could you follow the safety rules?**
- **Was your walk pleasant?**

An example of a walkability audit is included in Appendix A.

Make needed short-term safety improvements:

After completing a walkability audit, the results should point to locations where pedestrian and bicyclist safety is a concern of the SRTS Team. The short-term improvements are generally low cost, quick implementation items that will have a direct and immediate impact. Examples of short-term improvements are:

- **Restripe and/or brightly paint crosswalks to make them more noticeable;**
- **Place highly visible signage to alert passing motorists that children are walking to and from the school;**
- **Prune over grown shrubs or bushes that block the passage of a pedestrian on the sidewalks;**
- **Install bicycle racks at the school, making minor repairs to damaged sidewalks.**

These types of improvements can generally be implemented at a low cost to the township or school district, and can be completed quickly.

Create a Safe Routes to School Team:

The Safe Routes to School (SRTS) Team will be the leaders in the community that direct the changes in school policies, direct the Safe Routes to School Program, and see that implementation of the program occurs. The Safe Routes to School Team should be comprised of parents, teachers, school administrators, school health officials, school district officials, local law enforcement officers, and township officials. The team will take the lead on following through with the steps prescribed above.

Document parental concerns and safety problems around the school:

The first steps in implementing a successful Safe Routes to School Program is to know what problems need to be solved. Once the Safe Routes to School Team has been assembled, the first course of action is to compile a list of the concerns parents have about letting their children walk to school. Along with parental concerns, the barriers and safety concerns should be documented.

Conduct a walkability audit in the neighborhood surrounding the school to document the physical issues preventing students from walking. A walkability audit is a simple form that intended to answer the question “how walkable is the neighborhood?” The audit can be conducted by volunteers on the Safe Routes to School Team and includes questions such as:

- **Did you have room to walk?**
- **Was it easy to cross streets?**
- **Did drivers behave well?**

Map “Safe Routes” to the school and implement a Walking School Bus:

Mapping “safe routes” to the school are routes that have well maintained sidewalks, visible signage, crosswalks, crossing guards, lower vehicle speeds, little to no traffic, and have many “eyes on the street”. An area with “eyes on the street” is well populated with people that either have school age children, or pay attention to the children as they walk by.

A walking school bus is an established group of children, parents, volunteers, and crossing guards that begin a predetermined route at a predetermined time and chaperone the children as they walk to school. The walking school bus will “pick up” children along the route, and ensure they arrive to school safely and on time. The walking school bus should have a set schedule, as would a traditional school bus, however it should have one adult per three children ages 4 to 6; and one adult per six children ages 7 to 9.

Hold a Bicycle and Pedestrian Safety Workshop:

A bicycle and pedestrian safety workshop can be a two part program with a school wide assembly during the day for students and an evening seminar for parents. The school wide assembly should include topics such as: walking safely, bicycle safety, staying out of danger and making walking fun. The parent seminar should introduce parents to the SRTS Team and educate them on the program. It will be necessary to present the proposed walking school bus routes, teach parents about walking and bicycle safety, and the walking and biking goals the school would like to achieve.

Step Up Traffic Safety Enforcement:

Once the results of the walkability audit have been compiled and the short term improvements have been implemented, it may still be necessary to calm traffic in vicinity of the school. Increasing traffic safety enforcement is another relatively low cost solution to implement. The SRTS Team can work with the Upper Dublin Police Department to locate traffic safety officers at locations throughout the neighborhood and charge them with aggressively enforcing traffic safety laws.

Increasing traffic safety enforcement will have a two-fold benefit in that the traffic moving through the neighborhood will do so legally and cautiously, but also the increased police presence will ease the minds of weary parents by providing a secondary level of protection for students that walk or bike. The length of time for increased enforcement will depend on how quickly results are seen.

Build Excitement Through Promotional Contests and Activities:

For a Safe Routes to School program to be successful the children and parents must be excited about the idea. When kids are excited about the program, parents will be more likely to participate. Building excitement for the program can be achieved through promotional contests.

Simple contests to implement can put grades against grade for recording the highest number of days walking or classrooms in the same grade could compete to record the most students walking to school. Prizes could be low cost, or possibly donated and could include a pizza party for the winning classroom, or a school assembly with certificates awarded to the classroom or grade with the highest number of students walking to school.

Implementing a Safe Routes to School program can start at a small scale and build up to a robust program. The students can begin by participating in international "Walk to School Day" on October 5, 2011. The National Center for Safe Routes to School promotes "Walk to School Day."

and offers a free registration for any school to participate. Once registered, the school will be listed as a participant and included in the searchable database of participating schools. "Walk to School Day" is a great way to introduce parents and students to the idea of walking to school and requires minimal commitment, as it is only a single day event.

If the interest of the SRTS team is greater than a single day event, another international movement to encourage walking to school is "Walking Wednesdays". Participating in "Walking Wednesday" is free, and can be another excellent method to encourage walking, if only one day each week.

Apply for Funding for Longer-Term, More Costly Improvements:

The SRTS Team may identify solutions that include costly infrastructure construction. Infrastructure solutions are generally expensive and time consuming to install, however PennDOT does provide funding for schools to construct infrastructure solutions through their Safe Routes to School Grant Program. The grants will fund larger scale projects that the school district or township may not be able to fund on their own.

Safe Routes to School funding for infrastructure projects is limited and highly competitive. A successful school will demonstrate prior efforts to achieving the desired outcomes of PennDOT's Safe Routes to School program. Infrastructure funding is generally awarded where all other solutions have been implemented and the final hurdle is the expensive infrastructure project.

ADDITIONAL RESOURCES:

Getting Students Active Through Safe Routes to School: Policies and Action Steps for Education Policymakers and Professionals. Safe Routes to School National Partnership. <http://www.saferoutespartnership.org/media/file/EducatorsGuide.pdf>

The Walking School Bus: Combining Safety, Fun and the Walk to School. National Center for Safe Routes to School and the Pedestrian and Bicycle Information Center. http://www.saferoutesinfo.org/guide/walking_school_bus/pdf/wsb_guide.pdf

Safe Routes to School: Putting Traffic Safety First. Safe Routes to School National Partnership. http://www.saferoutespartnership.org/media/file/Safety_report_final.pdf

Kids Walk to School: A Guide to Promote Walking to School. Department of Health and Human Services Center for Disease Control and Prevention. <http://www.cdc.gov/nccdphp/dnpa/kidswalk/pdf/kidswalk.pdf>

www.walktoschool.org

Appendix A: Walkability Checklist

Provided by:
Partnership for a Walkable America
Pedestrian and Bicycle Information Center
U.S. Department of Transportation
U.S. Environmental Protection Agency

Walkability Checklist

How walkable is your community?

Take a walk with a child and decide for yourselves.

Everyone benefits from walking. These benefits include: improved fitness, cleaner air, reduced risks of certain health problems, and a greater sense of community. But walking needs to be safe and easy. Take a walk with your child and use this checklist to decide if your neighborhood is a friendly place to walk. Take heart if you find problems, there are ways you can make things better.

Getting started:

First, you'll need to pick a place to walk, like the route to school, a friend's house or just somewhere fun to go.

The second step involves the checklist. Read over the checklist before you go, and as you walk, note the locations of things you would like to change. At the end of your walk, give each question a rating. Then add up the numbers to see how you rated your walk overall.

After you've rated your walk and identified any problem areas, the next step is to figure out what you can do to improve your community's score. You'll find both immediate answers and long-term solutions under "Improving Your Community's Score..." on the third page.



Partnership for a
Walkable America



Pedestrian and Bicycle Information Center



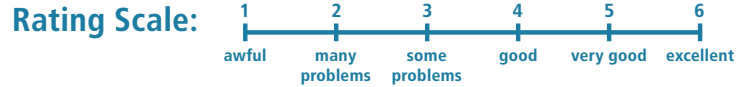
U.S. Department
of Transportation



Take a walk and use this checklist to rate your neighborhood's walkability.

How walkable is your community?

Location of walk _____



1. Did you have room to walk?

- Yes Some problems:
- Sidewalks or paths started and stopped
 - Sidewalks were broken or cracked
 - Sidewalks were blocked with poles, signs, shrubbery, dumpsters, etc.
 - No sidewalks, paths, or shoulders
 - Too much traffic
 - Something else _____
- Locations of problems: _____

Rating: (circle one) _____
 1 2 3 4 5 6 _____

2. Was it easy to cross streets?

- Yes Some problems:
- Road was too wide
 - Traffic signals made us wait too long or did not give us enough time to cross
 - Needed striped crosswalks or traffic signals
 - Parked cars blocked our view of traffic
 - Trees or plants blocked our view of traffic
 - Needed curb ramps or ramps needed repair
 - Something else _____
- Locations of problems: _____

Rating: (circle one) _____
 1 2 3 4 5 6 _____

3. Did drivers behave well?

- Yes Some problems: Drivers...
- Backed out of driveways without looking
 - Did not yield to people crossing the street
 - Turned into people crossing the street
 - Drove too fast
 - Sped up to make it through traffic lights or drove through traffic lights?
 - Something else _____
- Locations of problems: _____

Rating: (circle one) _____
 1 2 3 4 5 6 _____

4. Was it easy to follow safety rules?

Could you and your child...

- Yes No Cross at crosswalks or where you could see and be seen by drivers?
- Yes No Stop and look left, right and then left again before crossing streets?
- Yes No Walk on sidewalks or shoulders facing traffic where there were no sidewalks?
- Yes No Cross with the light?
- Locations of problems: _____

Rating: (circle one) _____
 1 2 3 4 5 6 _____

5. Was your walk pleasant?

- Yes Some unpleasant things:
- Needed more grass, flowers, or trees
 - Scary dogs
 - Scary people
 - Not well lighted
 - Dirty, lots of litter or trash
 - Dirty air due to automobile exhaust
 - Something else _____
- Locations of problems: _____

Rating: (circle one) _____
 1 2 3 4 5 6 _____

How does your neighborhood stack up?

Add up your ratings and decide.

1. _____ **26-30** Celebrate! You have a great neighborhood for walking.
2. _____ **21-25** Celebrate a little. Your neighborhood is pretty good.
3. _____ **16-20** Okay, but it needs work.
4. _____ **11-15** It needs lots of work. You deserve better than that.
5. _____ **5-10** It's a disaster for walking!

Total _____

Now that you've identified the problems,
 go to the next page to find out how to fix them.

Now that you know the problems,
you can find the answers.

Improving your community's score...



1. Did you have room to walk?

Sidewalks or paths started and stopped
Sidewalks broken or cracked
Sidewalks blocked
No sidewalks, paths or shoulders
Too much traffic

What you and your child can do immediately

- pick another route for now
- tell local traffic engineering or public works department about specific problems and provide a copy of the checklist

What you and your community can do with more time

- speak up at board meetings
- write or petition city for walkways and gather neighborhood signatures
- make media aware of problem
- work with a local transportation engineer to develop a plan for a safe walking route

2. Was it easy to cross streets?

Road too wide
Traffic signals made us wait too long or did not give us enough time to cross
Crosswalks/traffic signals needed
View of traffic blocked by parked cars, trees, or plants
Needed curb ramps or ramps needed repair

- pick another route for now
- share problems and checklist with local traffic engineering or public works department
- trim your trees or bushes that block the street and ask your neighbors to do the same
- leave nice notes on problem cars asking owners not to park there

- push for crosswalks/signals/parking changes/curb ramps at city meetings
- report to traffic engineer where parked cars are safety hazards
- report illegally parked cars to the police
- request that the public works department trim trees or plants
- make media aware of problem

3. Did drivers behave well?

Backed without looking
Did not yield
Turned into walkers
Drove too fast
Sped up to make traffic lights or drove through red lights

- pick another route for now
- set an example: slow down and be considerate of others
- encourage your neighbors to do the same
- report unsafe driving to the police

- petition for more enforcement
- request protected turns
- ask city planners and traffic engineers for traffic calming ideas
- ask schools about getting crossing guards at key locations
- organize a neighborhood speed watch program

4. Could you follow safety rules?

Cross at crosswalks or where you could see and be seen
Stop and look left, right, left before crossing
Walk on sidewalks or shoulders facing traffic
Cross with the light

- educate yourself and your child about safe walking
- organize parents in your neighborhood to walk children to school

- encourage schools to teach walking safely
- help schools start safe walking programs
- encourage corporate support for flex schedules so parents can walk children to school

5. Was your walk pleasant?

Needs grass, flowers, trees
Scary dogs
Scary people
Not well lit
Dirty, litter
Lots of traffic



- point out areas to avoid to your child; agree on safe routes
- ask neighbors to keep dogs leashed or fenced
- report scary dogs to the animal control department
- report scary people to the police
- report lighting needs to the police or appropriate public works department
- take a walk with a trash bag
- plant trees, flowers in your yard
- select alternative route with less traffic

- request increased police enforcement
- start a crime watch program in your neighborhood
- organize a community clean-up day
- sponsor a neighborhood beautification or tree-planting day
- begin an adopt-a-street program
- initiate support to provide routes with less traffic to schools in your community (reduced traffic during am and pm school commute times)

A Quick Health Check

Could not go as far or as fast as we wanted
Were tired, short of breath or had sore feet or muscles
Was the sun really hot?
Was it hot and hazy?

- start with short walks and work up to 30 minutes of walking most days
- invite a friend or child along
- walk along shaded routes where possible
- use sunscreen of SPF 15 or higher, wear a hat and sunglasses
- try not to walk during the hottest time of day

- get media to do a story about the health benefits of walking
- call parks and recreation department about community walks
- encourage corporate support for employee walking programs
- plant shade trees along routes
- have a sun safety seminar for kids
- have kids learn about unhealthy ozone days and the Air Quality Index (AQI)

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