

New Vernonia Schools Campus Recommended Safe Routes to School Programs

Introduction

Walking and bicycling are key aspects of student travel to school in Vernonia. According to the Vernonia School Siting Travel Mode Study (Kittleson and Associates, 2008), walking is the most common mode of travel to school for students living inside the Vernonia city limit. Approximately 46 percent of students walk to school on a given day. Rates for student bicycling are lower, approximately 3 percent, but may reach levels as high as 10 percent during fair weather months at the beginning and end of the school year.

The high rate of students traveling to and from school on foot and by bike in Vernonia will likely be impacted by the relocation of the school campus from its current location in the center of the city to a new campus at the Boot Site at the existing Spencer Park. In addition to its central location, the current school campus has an adjacent sidewalk network that is among the most complete in the city.

The new Vernonia schools will be located to an area that generally lacks sidewalks. Furthermore, the new school location east of O-A Hill will create a challenge for students living west of O-A Hill. Nearly 70% of students inside the Vernonia city limits live west of O-A Hill, and represent more than 74% of students currently walking to school. The only existing route to access the new school site from west of O-A Hill uses the six foot wide sidepath along the south side of Bridge Street.

Maintaining the historic high rate of trips to Vernonia schools by way of active transportation modes will require a combination of infrastructure improvements and programmatic strategies to encourage students to walk and bike to the new school campus. In addition to the health benefits of encouraging students to walk or bicycle to school, taking steps to limit the number of vehicles picking up and dropping off students will alleviate congestion along Missouri Avenue (which will be the only street providing vehicular access to the campus) as well as Bridge Street (where vehicles may queue waiting for opportunities to turn onto Missouri Ave).

This memo provides a review of potential programmatic strategies for encouraging walking and bicycling to Vernonia schools.

Refer to the 2011 TSP update for short and long-term infrastructure recommendations.

Recommended Safe Routes to School Programs

Because the new school campus will be in a less central location for many Vernonia residents, programmatic strategies will be particularly important for encouraging Vernonia students and parents to maintain the historic trend of students walking and biking to school. This section provides a menu of recommended programs which encompass education, encouragement, and enforcement strategies related to walking and bicycling at Vernonia schools. Each recommendation includes the target audience, primary staff and partners, key elements of the program, a suggested time frame, and a detailed description. Where available, the recommendations include links to sample programs.

The following strategies are highlighted in this section:

- **Walking School Buses and Bike Trains** – Where adults accompany students on their walk or bike to school, picking up additional students along the way.
- **Stop and Walk Program** - To encourage students to walk or bike part of the way to school when they live too far away
- **Pedestrian and Bicycle Safety Education** – Providing students with in-class instruction on how to practice safe walking and bicycling habits.
- **School Zone Traffic Safety Campaign** – To encourage motorists to drive safely in school zones and along the most common walking and bicycling routes to school.
- **Walk and Bike to School Day** – To celebrate walking and bicycling to school through participation in an annual national event.
- **Walking and Biking Incentive Programs and Friendly Competitions** – To create friendly and fun incentives that encourage students to walk and bike to school.
- **New Drop-off and Pick-up Procedures** – To reduce conflicts between cars and students walking or bicycling to school.
- **Back-to-School Blitz** - To encourage students and parents to start good walking and bicycling habits at the beginning of the school year.

Walking School Buses and Bike Trains

Target audience	Students and parents
Primary staff	Vernonia school administrators, faculty, and staff; parent volunteers
Partners	Community volunteers
Key elements	Volunteers staff daily 'bus' routes for groups of children who are walking or bicycling to school. The 'bus' picks up students along a regular route at consistent times.
Time frame	Monthly, weekly, or daily during school year
Sample programs	http://www.walkingschoolbus.org/ http://www.saferoutesinfo.org/guide/walking_school_bus/index.cfm

With the relocation of Vernonia schools out of the center of town, some parents may feel uncomfortable allowing their children to walk or bicycle alone to or from school. This may be particularly true until additional bicycle and pedestrian infrastructure improvements are made along suggested routes to school. To address this issue, parent volunteers can organize a group of children walking or bicycling to school together in a "Walking School Bus" or "Bike Train." A Walking School Bus is a group of children walking to school with one or more adults. The "bus" follows the same route every time and picks up children from their homes or designated meeting points at designated times. A Bike Train follows the same concept, but the group bicycles to school. The walking patterns of Vernonia lend themselves well to a Walking School Bus or Bike Train, since many students follow similar routes. Walking School Buses or Bike Trains could also begin from locations such as the old school site and the lake parking area.



Walking school buses and bike trains escort younger students to school on

Children like the Walking School Bus, because it gives them active social time before the school day begins. Adults like the walking school bus, because they feel more comfortable with children walking when there are trained, trustworthy adults accompanying children. Teachers and principals like the walking school bus, because it helps students arrive ready to concentrate on school. Parents offer a level of supervision and protection, and the larger numbers allow the children to be more visible to traffic. Because many parents in Vernonia walk for exercise, they may appreciate and enjoy this opportunity to incorporate additional walking into their own day while spending additional time with their children.

Usually, one parent acts as the organizer, recruiting other parents, neighbors, or community volunteers to walk or bicycle with the children. Older students can also help

lead a bus or train. One parent and one or more older children can take charge of the walking group; this is a great way to engage older students in mentoring younger ones, which helps internalize the behavior for all ages.

Walking School Buses and Bike Trains can include other elements, such as reflective vests for participants, brightly colored t-shirts or other fun ways to help the children feel pride in their bus or train, or parents pulling a wagon with heavy backpacks or large school projects. A Walking School Bus or Bike Train can be as simple as an informal arrangement between a few neighbors or as organized as a school-wide planning effort; it is up to the school and will depend on interest and involvement from parents.

Stop and Walk Program

Target audience	Students who live too far to walk or bike to school
Primary staff	Vernonia schools faculty and staff
Partners	Parents
Key elements	Encouragement and support to help students walk or bike part of the way to school when they live too far away
Time frame	Ongoing; can be combined with other efforts, such as Walk and Bike to School Day, Walking School Buses/Bike Trains, and competitions and incentive programs
Sample program	http://www.walktoschool-usa.org/

This year-round campaign is designed to encourage parents to stop several blocks from school and walk the rest of the way to school. Not all students are able to walk or bike to school. They may live too far away from school to walk or their route to school may include hazardous traffic situations, such as a major arterial road. This type of campaign is used to allow students who are unable to walk or bike to school a chance to participate in school walking programs.



Stop and Walk programs encourage parents to drop students further from school to promote walking and reduce traffic congestion near school.

This program could be extremely effective in Vernonia for several reasons. First, the new school campus location will result in a longer walk to school for many students. Second, once dedicated walking facilities are provided on Missouri Avenue, the intersection of Bridge Street and Missouri Avenue would be logical stop point that provides students with a short walk to school. Finally, the Stop and Walk Program would reduce the amount of vehicular traffic along Missouri Avenue and directly surrounding Vernonia schools. Reducing the number of motor vehicles in the school environment increases traffic safety, decreases traffic congestion, and improves the air.

To implement this program, designated drop-off points should be established and Stop and Walk should be encouraged along with other walking and bicycling programs

Pedestrian and Bicycle Safety Education

Target audience	Students in all grades
Primary staff	Vernonia schools faculty and staff; local instructors; local law enforcement
Partners	Parents, community volunteers
Key elements	Age-appropriate curriculum and activities for learning pedestrian and bicycling skills and safety.
Time frame	Twice per year, once in the fall and spring, or ongoing
Sample programs	LAB's Kids I and Kids II curriculum: http://www.bikeleague.org/programs/education/courses.php#kids1 BTA's Bike Safety Education Program: http://www.bta4bikes.org/resources/educational.php

Nearly every child in America can look forward to in-depth training before receiving a driver's license. Pedestrian and bicycle safety are equally important, but most Americans do not receive any training about the rules and responsibilities of using the road as a pedestrian or bicyclist. Pedestrian and bicycle safety education makes sure that each child understands basic traffic laws and safety rules.

Vernonia schools should launch a pedestrian and bicycle safety education program for students. The curriculum can be part of P.E. classes or general classroom education. Local trainers or advocates can lead assemblies, in-classroom activities, and on-road lessons. Vernonia could also choose to recruit local law enforcement for lessons on safety and rules of the road. Bike rodeos, bicycling safety events that include safety checks, lessons, and interactive courses, and mock pedestrian "safety cities" are a great way to put in-classroom education into action before children try their new skills on streets.



Bicycle safety education should include on-bike skills training.

Pedestrian safety education teaches children basic traffic safety rules, sign identification, and decision-making tools. Pedestrian training is typically recommended for first- and second-graders, with refresher courses as students get older, and teaches basic lessons such as "look left, right, and left again," "walk with your approved walking buddy," "stop, look, and listen," and "lean and peek around obstacles before crossing the street." Trained safety professionals can administer pedestrian safety in the classroom or P.E. class. Classroom teachers may use established pedestrian safety curriculum, such as the curriculum taught by the Bicycle Transportation Alliance (see

above) or use online resources, such as the National Center for Safe Routes to School, to develop their own.

Bicycle education should focus on older students (third grade and up) and should include the following:

- Parts of a bicycle
- How a bike works
- Flat fixing
- Rules of the road
- Rules of right of way
- Road positioning
- On-bike skills lessons (braking, turning, steering)
- On-bike community ride

Two excellent model programs are the League of American Bicyclists' Kids I and Kids II classes, and the Bicycle Transportation Alliance's Bike Safety Education Program (see "sample programs" links above for more information). School staff should determine how best to implement pedestrian and bicycle safety education in Vernonia.

Build Walking and Bicycling Education into School Curriculum

Target audience	Students, particularly older students
Primary staff	School faculty
Partners	School administrators and staff
Key elements	Math, environmental science, and other lessons related to walking and bicycling
Time frame	During school year, as appropriate
Sample programs	National Highway Safety Administration: http://icsw.nhtsa.gov/people/injury/pedbimot/bike/safe-routes-2002/toc.html National Center for Safe Routes to School: http://www.saferoutesinfo.org/guide/education/strategies_for_educating_children.cfm

Class curriculum can be tailored to highlight walking and bicycling, making the connection between active transportation and health, the environment, urban planning, geography, and even math. Examples include mapping safe walking and bicycling routes in geography class, calculating greenhouse gas emissions saved by not driving in math class, or discussing the benefits of walking and biking in health or environmental lessons. Lessons should be grade-appropriate. Sample lesson



The benefits of walking and bicycling can easily be incorporated into classroom curriculum.

plans are available at the sample program websites listed above.

School Zone Traffic Safety Campaign

Target audience	Parents, bus drivers, general public
Primary staff	Vernonia school administrators, faculty, and staff
Partners	Students, parents
Key elements	Awareness and education campaign including signs, backpack mail, pledges, etc.
Time frame	Can vary: in tandem with policy changes, at the beginning of the school year, in conjunction with special events
Sample program	http://www.traffictamers.com/school.htm

A School Zone Traffic Safety Campaign at Vernonia schools would help create awareness of students walking and bicycling to school. A safety campaign is an effective way to reach the general public (those affiliated with the school and those not) and encourage drivers, including parents and bus drivers, to slow down and look for students walking and biking to school.

A School Zone Traffic Safety Campaign uses signs and banners located near schools (for example, in windows of businesses, yards of people's homes, and print publications) to remind drivers to slow down and be careful in school zones. The campaign can also include a pledge for parents and bus drivers to take (like the one that is part of the Traffic Tamers program, link above). The pledge commits parents and bus drivers to driving slower in school zones and can help educate parents about new policies such as drop-off/pick-up procedures. The campaign can kick off at the start of each school year or in conjunction with special events or policy changes.

Large banners with memorable catch phrases can be hung over or along roadways near schools cautioning traffic to slow down, stop at stop signs, or watch for students in crosswalks.

Walk and Bike to School Day

Target audience	Students and their parents
Primary staff	Vernonia schools administration, faculty, and staff
Partners	Parents, local volunteers
Key elements	Activities to celebrate walking and bicycling to school
Time frame	Annually
Sample program	http://www.walktoschool-usa.org/

Walk and Bike to School Day is a special event encouraging students and parents to try walking or bicycling to school. The event can be celebrated for one day, a week, or an entire month, and can be part of International Walk to School Day, a major annual event in October that attracts millions of student participants in over 30 countries.

Walk and Bike to School Day can include contests and prizes for students who walk and bike, special events such as celebrity guests, mascots, or assemblies, and celebrations, such as class parties. The event can be promoted through press releases, articles in school newsletters, and posters and flyers for students to take home and circulate around the community. Walk and Bike to School Day can also be a great opportunity to host or launch other walking and bicycling activities like the ones recommended below, such as safety assemblies, competitions, or campaigns.



Walk and Bike to School Day creates excitement around active transportation.

Walking and Biking Incentive Programs and Friendly Competitions

Target audience	Students
Primary staff	Vernonia school administrators, faculty, and staff
Partners	Parents
Key elements	Individual, classroom, or grade level incentives and rewards for walking and bicycling to school
Time frame	One-time or ongoing

Contests and incentive programs reward students by tracking the number of times or how far they walk or bike to school. Contests can be individual, classroom competitions, or grade level competitions. Local businesses may be willing to provide incentive prizes for these activities. Students and classrooms with the highest percentage of students walking or biking compete for prizes and “bragging rights.” Small incentives, such as shoelaces, stickers and bike helmets, can be used to increase participation.

Each of the examples of programs below can be modified for students who live too far away from school to walk or bike. Modification can include walking or biking at lunch time or gym class, counting the miles walked or biked with parents and guardians outside of the school day, or getting dropped off within walking distance of school and walking with their parents the last several blocks. Vernonia faculty and staff, with support from parent volunteers, should launch one or more of the following in incentive programs.

School Walking or Mileage Clubs

Children are issued tally cards to keep track of “points” for the each time they walk, bike, bus or carpool to or from school. When they earn a specified number of points they get a small prize and are entered in a raffle for a larger prize. At the end of the school year, there is a drawing for major prizes.

Pollution Punchcard

This year-round program is designed to encourage school children and their families to walk and bike. Every time a student walks or bikes to school, a parent volunteer or school representative stamps the card. Then students receive a reward when the punch card is complete.



Example of a Pollution Punchcard

Golden Sneaker Award

Each class keeps track of the number of times the students walk or bike to school and compiles these figures monthly. The class that has the most participation gets the Golden Sneaker Award. The award can be created by taking a sneaker, mounting it to a board like a trophy, and spray painting it gold.

Walk Across America

This is a year-round program and is designed to encourage school children to track the number of miles they walk throughout the year. Students will be taught how to track their own mileage through learning about how many steps or blocks are in a mile and will also learn about places in the United States on their way. Teacher or volunteer support is required.

Each of these programs can use incentives to increase participation and reward the students for their efforts. Examples of incentives include shoelaces, reflective zipper pulls, bicycle helmets, raffle tickets for a bicycle from a local bike shop, early dismissal, extra recess time, or pizza parties.

New Drop-off and Pick-up Procedures

Target audience	Parents, students, bus drivers
Primary staff	Vernonia school administrators
Partners	Vernonia schools faculty and staff, parent groups
Key elements	New procedures for cars and buses to improve safety for those walking and bicycling and to reduce congestion
Time frame	Beginning of school year

The following procedure options improve safety for all students. Vernonia schools should consider all of them and implement the procedure(s) most appropriate for the school's layout and current issues. Implementing policies can often be very low cost, although they may involve staff resources, and new procedures may take some time to gain acceptance.



Older students assist with the drop-off process.

Parent Drop-off/Pick-up Loop

The establishment of a parent drop-off/pick-up “loop” can help maximize capacity and safety and minimize delay in drop-off and pick-up operations. The loop can be either a dedicated lane just for pick-up/drop-off, or a portion of the larger parking lot that has been marked with cones to serve as the pick-up/drop-off loop. Having supervisors present can help to ensure that loading/unloading moves forward smoothly, efficiently and safely.

Valet Drop-off

Valet drop-off is a technique to improve traffic flow within the drop-off and pick-up loop by assisting students into and out of vehicles. A “valet” is present at the pick-up/drop-off area to open car doors and assist students into and out of arriving vehicles, improving the traffic flow. The valet system eliminates the need for parents to get out of the vehicle to open the door for a child and remove bags or other items. The valet system is typically staffed by school staff or parent volunteers, who can quickly and efficiently move children into and out of vehicles and hold onto backpacks, umbrellas and other items. Some schools use older grade students as valets, for example 7th or 8th graders help younger students. However, student volunteers must get out of class early to prepare for pickup.

A supplement to the valet system is a nameplate in the vehicle window that identifies what student needs to be picked up. This allows the valet to find students and bring them to the vehicle as it arrives.

Platooning Drop-off/Pick-up System

In a platooning system, all vehicles are unloaded/loaded simultaneously, then proceed to the exit. If a vehicle unloads or loads more efficiently than the vehicle in front of it, the rear vehicle must wait for the lead vehicle to finish the unloading/loading, then follow it out of the loop. This tool is best used to control the parent inclination to always drop-off and pick-up the student directly in front of the school. Often additional curb loading is available downstream of the school and is severely underutilized, creating excess congestion and delay prior to entering the lot. At least two monitors are needed to effectively operate the vehicle platoon – one at the loop entrance to direct the maximum number of vehicles into the lot for a single cycle, and a second to ensure that the lead vehicle proceeds to the front-most loading stall.

Dedicated Bus Zones

Establishing separate areas for vehicular and bus traffic can help improve traffic flows in the pick-up/drop-off area. Conflicts often occur when private vehicles and buses arrive at the same time and in the same location. Separating traffic often necessitates establishing an off-street bus zone, dedicated solely to buses. Private vehicles should not be allowed to load/unload in the bus zone. Bus zones need to be large enough to accommodate all the buses that might be parking there at one time. Sometimes it is possible to stagger the arrival times of the buses, thus requiring less space. The zones must be clearly marked and there should be adequate sidewalk space for students to wait for the bus.



The cones mark the dedicated bus zone.

Staggered Bell Times

Staggered bell times can help to disperse the traffic peak at schools with a large student population or when two or more schools are in close proximity to one another. For a single school application, students' start and end time should be grouped by grade levels. The start times of these groups should be at least 15 minutes apart. This allows the vehicles from the first group to leave the school or be completely out of the area by the time the second group arrives. With multiple schools, staggering the bell times can be coordinated

among two or more schools to ensure that significant levels of vehicles do not use competing transportation facilities simultaneously.

Early/Late Departure for Walkers and Bikers

Vernonia schools could develop after school clubs for students that walk and bicycle to school to encourage these students to travel home after the traffic associated with parents picking their children up from school has passed. Care should be taken to ensure the after school activity is fun (i.e., at the playground) so it is not seen as a punishment. The primary consideration for this type of activity will be identifying school staff or volunteers to supervise students after the school day. Alternatively, as a part of a managed pick-up program, students walking or bicycling home could be allowed to begin their journey home five minutes in advance of the students being picked up by car.

Back-to-School Blitz

Target audience	Incoming and returning parents and students
Primary staff	School administrators, faculty, and staff
Partners	Law enforcement; interested parents
Key elements	Distribution of suggested route maps and other helpful resources; walking and bicycling events and incentives; traffic enforcement activities
Time frame	Annually

Families set transportation habits during the first few weeks of the school year, and families are often not aware of the many walking and bicycling resources available to them. Because of this, most families will develop the habit of driving to school. A “Back-to-School Blitz” can be used at the beginning of the school year to promote walking, bicycling, taking the bus, and carpooling as school transportation options.

The Back-to-School Blitz includes many of the other programs recommended here, including suggested route maps, information about Walk and Bike to School Day in October, and tips and resources for starting walking school buses or bike trains.

The main goal of the Blitz is to provide parents with information and resources so that they can choose their travel options wisely. To this end, each family receives a packet containing information about school transportation options, including:

- A letter signed by the principal encouraging parents to create transportation habits with students that promote physical activity, reduce congestion, increase school safety, and improve air quality

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- Suggested route to school maps that include bicycling and walking routes and other important information specific to the school, such as drop-off/pick-up procedures and bus information
 - Tips on how to start a Walking School Bus or Bike Train
 - Pledge forms so parents and students commit to reducing the number of times they drive to school
 - An incentive gift such as reflective stickers to attach to backpacks or a sticker or window decal to show their support for walking and bicycling

In addition to the packet, the following strategies can be included:

- A table at back-to-school night with materials and trained volunteers who can answer questions about transportation issues
- An article in first school newsletter about transportation options and resources
- The kick-off of organized walking school buses/bike trains or school competitions, as described above
- Enforcement activities with help from local law enforcement, such as school zone speed and crosswalk enforcement
- Strict enforcement of parking and drop-off/pick-up policies during first month of school (and throughout the year if possible)