Safe Routes to School Program

Linden School No. 6 School Travel Plan

19 East Morris Avenue Linden, NJ 07036

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DISCLAIMER

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Executive Summary

A Safe Routes to School (SRTS) Travel Plan is a resource to encourage and increase the number of students walking or bicycling to school. It provides directions for schools, students, families and the city to build a safer walking and biking environment for residents.

School Travel Plans are site specific and describe the needs of each particular school being studied. The plan includes observations, ideas and an action plan to address issues and problem areas. The Plan covers five aspects of the Safe Routes to School program – Education, Encouragement, Enforcement, Evaluation, and Engineering.

The School Travel Plan outlines the timeframe and funding priorities to support a coordinated schedule of streetscape improvements. In fact, the New Jersey Safe Routes to School (SRTS) infrastructure funding program strongly recommends applicants have an approved School Travel Plan in order to apply for a grant.

1. Goals
The goals of the Linden School No. 6 School Travel Plan are:
   a. Determine and label the key travel routes used by students
   b. Identify any issues that impact safety
   c. Provide a list of suggestions to improve the safety of the travel environment around the school
   d. Prioritize the action items in terms of cost and time needed to make improvements
   e. Detect and describe ways to reduce traffic congestion and car emissions around the school
   f. Implement solutions to encourage more students to walk and bike to school

2. Task Force
This School Travel Plan is the product of a robust and productive partnership. The Linden School No. 6 SRTS Task Force came together out of a shared community interest in improving the lives of students and residents. The involvement of local stakeholders is an important part of ensuring the sustainability of the SRTS initiative and the enactment of the Action Plan.

3. Community Barriers to Health
In May 2014 a Parent/Caregiver survey was conducted and analyzed by the Alan M. Voorhees Transportation Center (VTC) of Rutgers University. Parents of Linden children, age three to eighteen,
were surveyed to identify their top concerns with students walking or biking to school. The top three concerns identified by parents include:

a. Crossing guard availability  
b. Traffic speed on roads  
c. Unsafe intersections

4. School Travel Data

In October 2014, Linden School No. 6 teachers conducted a School Travel Tally to determine how students travel to and from school.

Despite parental concerns regarding traffic and street safety, 28 to 35 percent of students walk to school, 45 to 60 percent of students are driven to school, four to five percent carpool, seven to ten percent use the school bus, and another one to five percent of students ride bicycles to school.

5. Barriers and Opportunities Identified for Safer Walking & Biking

The Safe Routes to School Taskforce and Community Partners conducted a detailed walkability assessment of the road conditions along the main routes used by the students to walk to school on May 9, 2014. The major intersections surrounding the school are West Linden Avenue and South Wood Avenue, West Linden Avenue and South Stiles Street, South Wood Avenue and Morris Avenue, South Wood Avenue and Wood Place, South Wood Avenue and Pennsylvania Railroad Avenue, South Wood Avenue and West Elizabeth Avenue and South Wood Avenue and Blancke Street.

Key opportunities for safety improvements around Linden School No. 6 include: adding school zone signage, adding speed limit signs, painting new high visibility crosswalk striping, repainting crosswalk striping, and adding truncated domes to meet American with Disabilities Act (ADA) compliance.

6. Action Plan

The Safe Routes to School program categorizes the Action Plan into the “Five E’s:” Education, Encouragement, Enforcement, Evaluation and Engineering. This is a useful tool because it helps the school prioritize next steps. In a particular community, some of the action items may be more urgently needed than others, so the school can execute the recommendations based on their priorities. This School Travel Plan recommends a number of improvements that can be made to encourage safe walking and biking. The action plan can be used to support SRTS and other Federal or State grant applications to fund pedestrian and bicycle safety infrastructure improvements.

Key Actions/Recommendations in Action Plan include:
- Install school zone signs and speed limit signs
- Paint high visibility crosswalks at each intersection along West Linden Avenue, at South Wood Avenue & East Stimson Place, South Wood Avenue & Cedar Avenue, and South Wood Avenue & Wood Place
1. Walking and Cycling to Health

1.1 The Challenge

Over the past few decades, a number of societal and environmental changes have limited children’s access to safe places where they can walk, bike and play. For example, increased traffic, neighborhoods that lack sidewalks and urban sprawl have contributed to a sharp decline in the number of students who walk or bike to school. Nationally, while 42 percent of children walked or biked to school in 1969, only 13 percent of children did so in 2001. Additionally, the popularity of television and video games as a means to entertain children has contributed to a more sedentary lifestyle. As a result, children and adolescents are less physically active than they were several generations ago.

The decrease in walking and biking to school and less physical forms of play has resulted in an alarming increase in childhood obesity. During the past four decades, the obesity rate for children ages 6 to 11 has more than quadrupled (from 4.2 to 17 percent), and the obesity rate for adolescents ages 12 to 19 has more than tripled (from 4.6 to 17.6 percent).

Developing policies and practices to address these environmental and social barriers to daily physical activity are critical to reducing and preventing obesity among children. Supporting “active transport” (or walking and bicycling) to school presents an excellent opportunity to increase daily physical activity among youth.1

1.2. The Program

Safe Routes to School (SRTS) is a federal program that encourages, teaches, and enables children to safely bicycle and walk to school. The program aims to help children be more physically active with the intent to reduce chronic disease and prevent and reduce obesity. SRTS focuses on increasing the number of children walking and bicycling to school by building and repairing infrastructure such as sidewalks, crosswalks, and bicycle lanes. The program also encourages changes in travel behavior, supports increased enforcement of traffic laws around schools, and educates communities on the benefits and safety aspects of active transport. This report summarizes research on active transport to school, physical activity levels and health outcomes. It also explores the factors that influence walking and biking to school, including the impact of SRTS programs.

The SRTS Program is a collaborative effort of multiple stakeholders that include community members, elected officials, city planners, school administration and staff, parents and police

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1 Walking and Biking to School, Physical Activities and Health Outcomes, Robert Wood Johnson Foundation
departments. SRTS brings a community closer together by implementing programs such as walking school buses, walkability audits, bicycle rodeos and pedestrian safety presentations. The benefits of SRTS extend far beyond the schools into the community as a whole.

A SRTS School Travel Plan “maps out” specific ways to improve pedestrian and bicycle travel to increase the number of students who walk and bike to school and to improve safety. A School Travel Plan identifies the following:

- Where students currently walk and bike?
- Where students would walk and bike if they could?
- What changes need to be made so that students can and will walk and bike to school?

The School Travel Plan identifies short term solutions for immediate action and implementation as well as long term solutions that may require planning and additional funds. Benefits of developing a School Travel Plan include:

- Creating partnerships between the school and surrounding community
- Generating ideas and actions so walking and bicycling is safer
- Building community excitement and support
- Making an application for a SRTS grant more competitive by demonstrating a connection between goals, actions and targets.

1.3. The Team

The New Jersey Department of Transportation (NJDOT) funds and administers the SRTS program in New Jersey, and the Voorhees Transportation Center (VTC) at Rutgers’ University provides technical and administrative support.

The actual implementation of the SRTS walkability audit and safety program at Linden School No. 6 was undertaken by the City, the local Police, the School District, the School PTA, and two non-profit organizations – Meadowlink and Tri-State Transportation Campaign (TSTC).

**Meadowlink**

In New Jersey, Transportation Management Associations (TMAs) have taken the lead in coordinating the implementation of the SRTS programs. TMAs are non-profit organizations whose mission is to implement transportation programs and services like carpools, vanpools, shuttles, biking and walking that reduce congestion and improve air quality. Meadowlink is one of eight Transportation Management Associations (TMAs) in New Jersey and primarily serves Bergen, Essex, Monmouth, Passaic and Union counties.

**Tri-State Transportation Campaign (TSTC)**
Tri-State Transportation Campaign is a non-profit transportation policy advocacy organization working for a more balanced and equitable transportation system in New Jersey, downstate New York and Connecticut. In the 20 plus years since their founding, the Campaign has enjoyed a strong record of accomplishment. Among their notable victories are encouraging smart growth approaches at state departments of transportation, and calling for millions of dollars of investment in public transportation, pedestrian, bicycle, and transit-oriented development initiatives. Tri-State provided legal advocacy to promote the SRTS program at the Linden School No. 6.

A key element of the SRTS program is to engage community groups and local stakeholders to support and sustain the SRTS program after the travel plan is completed. Their role is to implement the School Travel Plan within the community. A Linden School No. 6 Travel Plan Task Force was established and a series of meetings was held to collect information and build support for the program. A list of the members of the Task Force and their roles are included in the table below.

**Linden School No. 6 Travel Plan Task Force**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Role/Responsibility</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linden School No. 6</td>
<td>Program Activity and Implementation</td>
<td>Atiya Perkins, Principal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19 Morris Avenue, Linden, NJ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(908) 862-3003</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:aperkins@lindenps.org">aperkins@lindenps.org</a></td>
</tr>
<tr>
<td>SRTS Champion</td>
<td>Program Activity and Implementation</td>
<td>Tanya Grissett, PTA President</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19 Morris Avenue, Linden, NJ</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td></td>
<td><a href="mailto:tgrissett@lindenps.org">tgrissett@lindenps.org</a></td>
</tr>
<tr>
<td>Linden Police Department</td>
<td>Enforcement School Crossing Guard Unit</td>
<td>Lieutenant Mike Babulski, Traffic Bureau Commander</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Linden Police Department</td>
</tr>
<tr>
<td></td>
<td></td>
<td>301 North Wood Avenue, Linden, NJ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(908) 482-5822</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:mbabulski@lpdnj.org">mbabulski@lpdnj.org</a></td>
</tr>
<tr>
<td>City of Linden</td>
<td>Engineering Project Implementation</td>
<td>Joseph Chrobak, Linden City Engineer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>301 North Wood Avenue, Linden, NJ</td>
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<td></td>
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<td><a href="mailto:engineering@linden-nj.org">engineering@linden-nj.org</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>908-474-8470</td>
</tr>
<tr>
<td>Organization</td>
<td>Services Offered</td>
<td>Contact Person</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
<tr>
<td>Tri-State Transportation Campaign</td>
<td>Advocacy, Policy Change, Community Resource</td>
<td>Janna Chernetz, Esq.</td>
</tr>
<tr>
<td>Meadowlink - Transportation Management Association</td>
<td>SRTS Program Assistance, Community Resource, Safety Education</td>
<td>Meeta Patel*</td>
</tr>
<tr>
<td>Alan M. Voorhees Transportation Center</td>
<td>Web-based resources, Technical Assistance, SRTS Recognition Program, Helpdesk assistance, SRTS Tools, Tips and Training</td>
<td>Leigh Ann Von Hagen, AICP/PP Senior Research Specialist</td>
</tr>
<tr>
<td>NJ DOT</td>
<td>Grant Funding, State SRTS Resource, SRTS Best Practices</td>
<td>Elise Bremer-Nei, AICP/PP State Bike &amp; Pedestrian Program Coordinator</td>
</tr>
</tbody>
</table>
2. City, District & School Profile Characteristics

A profile for the City of Linden and its schools was developed using various sources such as state reports, the Linden School District website, the 2010 U.S. Census, and the 2014 – 2015 data from the National Center for Education Statistics. Additional site-specific information was collected from parent surveys, interviews and on-site visits.

Linden is a city named after the trees that were brought in from Germany, and it is located in southeast Union County. Originally a township in 1861, Linden was incorporated into a city by the state legislature in 1925. According to the 2010 U.S. Census, there were 40,499 Linden residents across its 11.4 square miles of total land. The median household income in 2010 was $55,859.

Linden’s Master Plan includes adoption of a Transit Oriented Development (TOD) plan as part of the Transit Village Initiative in 2008. A TOD is a residential, commercial or mixed-use development project, made up of one or more buildings, that has been designed to take advantage of nearby transit and includes features that encourage walking, biking and transit ridership. Linden also adopted a resolution to support a Complete Streets Policy in 2013.

The Linden School District is a smaller school system in a suburb of New Jersey with 11 schools, 956 staff members, and a student population of 6,049. The district has a favorable student to teacher ratio of 12:1. Student demographics are shown in Table 1 below. The different ethnicities of students provide a diverse educational experience for pre-kindergarten to secondary school students.

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<thead>
<tr>
<th>Ethnicity</th>
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<tr>
<td>African-American</td>
<td>2,154</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2,208</td>
</tr>
<tr>
<td>Caucasian</td>
<td>1,421</td>
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<tr>
<td>Asian/Pacific Islander</td>
<td>167</td>
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<tr>
<td>American Indian/Native American</td>
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<tr>
<td>Two or More Races</td>
<td>91</td>
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<table>
<thead>
<tr>
<th>Gender</th>
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<td>Male</td>
<td>3,118</td>
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<tr>
<td>Female</td>
<td>2,931</td>
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</table>

<table>
<thead>
<tr>
<th>Grade Level</th>
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</table>

Table 1. Linden Public Schools – Student Demographics
According to the New Jersey Department of Education 2013 – 2014 data, Linden’s public schools are rated as lagging or significantly lagging in academic performance when compared with other schools in the state. Schools are compared to a group of schools that have similar student demographic characteristics (such as free/reduced lunch eligibility), known as a peer group. When compared with their peer group, four of the eleven Linden schools are rated as being average in academic performance. This trend continued in 2014 – 2015 as the district scored in the 33rd percentile statewide and in the 10th percentile in their peer group for English Language Arts/Literacy on the PARCC test. Math percentile scores were not available.

The Linden school district is classified by the NJ Department of Education as District Factor Group “B,” the second lowest of eight groupings. A District Factor Group (DFG) is an indicator of the socioeconomic status of citizens in school districts of New Jersey. DFGs were first developed by the New Jersey Department of Education in 1975 for the purpose of comparing student performance on statewide assessments across demographically similar school districts. Linden is also classified as a disadvantaged community by NDOT that identifies districts with DFGs of A and B as disadvantaged.

2.1. Linden Health Profile – Union County Community Health Assessment

In 2016, the North Jersey Health Collaborative worked with the Center of Population Sciences and the Atlantic Health System to conduct a Community Health Assessment of Union County. The North Jersey Health Collaborative is a 501(c)3 organization with over 120 partner organizations aligned around shared goals for collective impact. In 2015, the Collaborative conducted a year-long process of community-based assessment entitled “Painting a Picture of Community Health”. Throughout this process, 107 community leaders participated from 56 organizations representing 12 community sectors. After data was collected, three data review sessions were held in Union County and a total of 125 issues were identified.

Understanding Social Determinants of Health

Conditions in the places where people live, learn, work, and play affect a wide range of health risks and outcomes. These conditions are known as social determinants of health. We know that poverty may limit healthy food access and coincide with unsafe neighborhoods and that more education is a predictor of better health. We also know that differences in health are striking in communities with
poor social determinants of health such as unstable housing, low income, unsafe neighborhoods, or substandard education. By applying what we know about social determinants of health, we can not only improve individual and population health but also advance health equity.

Source: Centers for Disease Control and Prevention

Chart 1: Poverty Level 2015

Source: 2016 Community Needs Assessment Union County; US Census Bureau: Income and Poverty Estimates

Chart 2: Estimated Median Household Income - Linden, NJ
Data reveals the median household income for Linden was approximately $4,000 lower when compared with Union County and $8,800 lower when compared with New Jersey.

Chart 3: Income Households by Type - Linden, NJ
Percentage of Linden Household types

Almost 1 in 4 households in Linden are managed by a single parent. This is lower but follows a similar trend throughout New Jersey. As shown in Chart 4, in the past decade the percent of single – parent households has increased from 31.8 percent to 33.3 percent.
Childhood Obesity

Between 2009 – 2011, 19.3 percent of low income preschool aged children in Union County were reported as obese. The trend appears to be on the decline in recent years as it was reported that 21.3 percent of low-income preschool aged children were obese when data was collected in 2006 – 2008.

Adult Obesity

In 2013, data collected showed that 24.7 percent of Union County adults over the age of 20 were obese. This is a slight increase from a previous reported value of 24.5 percent.

Media Viewing Habits

The American Academy of Pediatrics recommends that children spend a maximum of two hours per day on entertainment media like television, computers, and video games.

Exercise
The HHS 2008 Physical Activity Guidelines for Americans recommend that adults get at least thirty minutes of moderate to vigorous activity daily and that children get at least sixty minutes of moderate to vigorous physical activity daily.

2.2 Linden School No. 6
Linden School No. 6 prides itself in educating all of its students to develop skills that will enable them to be fully functioning and diversely educated individuals. Its mission is to provide an optimal learning environment where every student can attain success by developing an active and inquisitive mind. The school’s curriculum is aligned with the Common Core State Standards and is tailored to utilize strategies for constructing arguments and evidence based responses across content areas.

Linden School No. 6 is located in such a diverse area that is difficult to designate and categorize. On one hand, its front entrance is located on East Morris Avenue composed of a small residential area that reminds one of the suburbs. On the other hand, its rear entrance is located on East Linden Avenue, a widely used industrial road. This road is heavily used by cars and trucks alike as there are several truck transportation companies, a Villani school bus lot, the Rosehill Cemetery, and truck repair/parts supply shops. The road is also a widely used route to reach the BJ’s Warehouse Club Store. In addition to generating traffic, there is a distinct smell and noise levels that offend the senses. The school’s closest intersecting road is Wood Avenue, a main street that hosts a lot of traffic as there are many shops down Wood Avenue, local and big chain alike. Finally, the school is located within a half mile from Route 1/9 where a large amount of vehicles turn onto Wood Avenue and generate traffic.

According to the New Jersey Department of Education 2014 – 2015 Performance Report, Linden School No. 6 serves approximately 345 students in Pre-Kindergarten to Grade Five. As Chart 7 following shows, about 43 percent of the students enrolled are White, 33 percent are Hispanic, 18
percent are Black or African American, four percent of students are Asian, and two percent of students are Two or More Races.

**Chart 7: Linden School No. 6 Enrollment by Student Ethnicity**

The number of students has slightly decreased from 367 in 2012 to 345 in 2014. As shown in Table 2 below, English is the predominant language spoken at home by 47.7 percent of the students at home. Polish is spoken by 19.6 percent of students in their homes. Spanish is spoken by 16.4 percent by students in their home. Slovak is spoken by 2.6 percent. Ukrainian is spoken by 2.6 percent. Portuguese is spoken by 2.1 percent. Finally, 9.1 percent identify “Other” as a language spoken at home. Such a broad use of different languages testifies to the ethnic diversity of the Linden school district.

**Table 2. Student Language Diversity (2014-15)**

<table>
<thead>
<tr>
<th>Language Diversity</th>
<th>Percent of students who speak the following languages at home</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>47.7%</td>
</tr>
<tr>
<td>Polish</td>
<td>19.6%</td>
</tr>
<tr>
<td>Spanish</td>
<td>16.4%</td>
</tr>
<tr>
<td>Slovak</td>
<td>2.6%</td>
</tr>
<tr>
<td>Ukrainian</td>
<td>2.6%</td>
</tr>
<tr>
<td>Portuguese</td>
<td>2.1%</td>
</tr>
<tr>
<td>Other</td>
<td>9.1%</td>
</tr>
</tbody>
</table>
The Safe Routes to School program was initiated when the Tri-State Transportation Campaign introduced Meadowlink to the Linden Police Department in the fall of 2013. With assistance from the municipal police, Meadowlink was able to reach out to Linden School No. 6.

A winter dismissal observation was held in order to observe pedestrian and driver behavior around each school. Surveyors witnessed and recorded unsafe behaviors by both pedestrians and drivers. Additionally, there were several locations where the sidewalks were not cleared of snow, thereby discouraging students from walking to or from school.

In May a walkability audit was conducted to evaluate the walking and biking conditions around each school. The weather conditions from the audit were generally warm with some light drizzle on May 9, 2014. The organizations that participated in the walkability audit were the Linden Police Department, Linden School No. 6’s Parent Teacher Association, Meadowlink, and the Tri-State Transportation Campaign.

3. Journey to School

In the 1960s, about 50 percent of children in the United States walked or bicycled to school. Over the last few decades, concerns about vehicle traffic, safety for children, and longer commutes have led more and more parents to drive their children to school. This resulted in more traffic on the road and less children who walk to school. Today, on average only about 15 percent of children walk or bike to school. Map 1 provides a broad overview of the residential area near Linden School No. 6.

Map 1: Two Mile Radius around Linden School No. 6

Map 1 shows a two-mile radius surrounding the school. The neighborhood is in close proximity to Route 1/9, I-95, and I-278.
3.1. Current Student Travel Environment

School Hours
The school day for students starts at 8:00 am and the day ends at 4:00 pm Monday through Friday. Students can attend extended learning programs conducted by the Rahway YMCA at the school Monday through Friday until 6:30 pm. There are no late buses provided for students after these programs.

Drop-off/Pickup Procedure
Buses drop off and pick up students at the rear entrance to the school on East Linden Avenue at a designated area. Parents drop off their children at the rear entrance of the school on East Linden Avenue at a designated area in front of the designated school bus area.
Crossing Guards

Crossing guards are stationed at the intersections of Stiles Street and Munsell Avenue, Wood Avenue and Morris Avenue, Clinton Avenue and Morris Avenue, and Linden Avenue and Wood Avenue.

Student Travel Mode

In May 2014, the teachers at Linden School No. 6 conducted a Travel Tally to document how the children in their classes get to and from school. Tallies were taken by teachers three times during one week. A total of 1,832 trips were documented and the data was analyzed by the NJ Safe Routes to School Resource Center at the Voorhees Transportation Center, Rutgers University.

As shown in Table 3, the analysis found that 28 percent walk to school and 35 percent walk home from school. 45 percent were driven home from school and 60 percent were driven to school. Four percent carpooled from school and five percent students carpooled to school. School bus service accounted for seven and ten percent of the trips to and from school respectively. As for bicycles, one and five percent of students reported riding bikes to and from school.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Arrival</th>
<th>Dismissal</th>
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<tbody>
<tr>
<td>Walk</td>
<td>28 percent</td>
<td>35 percent</td>
</tr>
<tr>
<td>Driven in personal car</td>
<td>60 percent</td>
<td>45 percent</td>
</tr>
<tr>
<td>School Bus</td>
<td>7 percent</td>
<td>10 percent</td>
</tr>
<tr>
<td>Carpool</td>
<td>5 percent</td>
<td>4 percent</td>
</tr>
<tr>
<td>Bike</td>
<td>1 percent</td>
<td>5 percent</td>
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</table>

Pedestrian Safety

Meadowlinc conducted an analysis of the pedestrian-related crashes within a one-mile radius of the school over a 10-year period from 2003 to 2015 based on police incident reports. The reported incidents were plotted on Map 2.

Map 2: Pedestrian Crashes within One Mile of Linden School No. 6, 2003-15
<table>
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<td>14</td>
<td>18</td>
<td>9</td>
<td>15</td>
<td>9</td>
<td>14</td>
<td>150</td>
<td>41%</td>
</tr>
</tbody>
</table>
Table 4. Pedestrian Crashes by Age, In the City of Linden (2003-2015)

<table>
<thead>
<tr>
<th>Ages 60+</th>
<th>5</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>1</th>
<th>5</th>
<th>6</th>
<th>3</th>
<th>3</th>
<th>5</th>
<th>5</th>
<th>7</th>
<th>3</th>
<th>58</th>
<th>16%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>19</td>
<td>23</td>
<td>34</td>
<td>26</td>
<td>30</td>
<td>33</td>
<td>31</td>
<td>30</td>
<td>24</td>
<td>28</td>
<td>26</td>
<td>33</td>
<td>369</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

For the city of Linden, there were 369 pedestrian crashes between the years 2003 – 2015. On average, Linden had 28 pedestrian crashes per year. While the majority of the crashes (41 percent) involved pedestrians aged 36-60, about 22 percent (81) of the total incidents involved children in the 0-17 age group.

3.3 Walkability Assessment
The SRTS Task Force conducted a walkability assessment of the major routes used by students to get to Linden School No. 6. School children and residents of all ages and abilities walk in and through the neighborhood. Map 3 below shows the walking routes which were assessed in the audit.

A Walkability Assessment evaluates the sidewalks, roads, crosswalks, lighting, signs, signals, and conditions of the environment along the walking route. A walkability assessment identifies pedestrian and bicycle safety improvements that can be made and notes what is currently done well. The SRTS Taskforce took photos of areas on each route. Comments and recommendations are listed with each photo and are summarized in the Action Plan at the end.

Map 3, on the following page, shows all three of the walking routes which were assessed.
Map 4: Walking Assessment of Route 1:
Walking Southwest on East Linden Avenue

Photo 1: Walking Southwest on East Linden Avenue
Observations

1. Linwood Inn’s large driveway creates dangerous walking path
2. Broken sidewalk posing tripping hazards
3. Large driveway attracts drivers and creates dangerous environment for pedestrians

Intersection of East Linden Avenue and Wood Avenue
Photo 2: Intersection of East Linden Avenue and Wood Avenue
Observations

1. Crosswalk striping in good condition
2. Pedestrian crossing signals present
3. Truncated domes present on three out of four corners
4. Install additional “School Zone” signage

Sidewalk on East Linden Avenue
Photo 3: Sidewalk on East Linden Avenue
Observations

1. Abandoned business property
2. Sidewalk is littered and not maintained
3. Overgrown brush
4. Driveway is cracked and broken presenting tripping hazards

Intersection of Penn Place and West Linden Avenue
Photo 4: Intersection of Penn Place and West Linden Avenue
Observations

1. Crosswalks are missing and need to be installed
2. Truncated dome pads are missing and need to be installed
3. No pedestrian signal heads
4. Poor pedestrian lighting
5. Connects with train station parking lot - potential for high volume of vehicles

Intersection of West Linden Avenue and Jefferson Avenue

Photo 5: Intersection of West Linden Avenue and Jefferson Avenue
Observations

1. No crosswalks
2. No truncated domes
3. No pedestrian signal heads
4. Connects with train station parking lot - potential high volume of vehicles
Observations

1. No crosswalks
2. No truncated domes
3. No pedestrian lighting
Intersection of West Linden Avenue and North Stiles Street
Photo 7: Intersection of West Linden Avenue and North Stiles Street

Observations

1. Roadway is cracked and in need of repair
2. No crosswalks
3. No pedestrian signal heads
Map 6 shows the blue route which was assessed also by the SRTS Community taskforce.
Observations

1. Crosswalks present
2. Truncated dome pads present
3. Pedestrian signal heads present
4. Wide Lanes
Intersection of South Wood Avenue and Munsell Avenue
Photo 2: Intersection of South Wood Avenue and Munsell Avenue

Observations

1. Truncated domes are absent
2. Crosswalks present for one direction
3. Insufficient “School Zone” signage
Intersection of South Wood Avenue and East Stimson Avenue

Photo 3: Intersection of South Wood Avenue and East Stimson Avenue

Observations

1. Truncated domes absent
2. Crosswalk absent
3. No pedestrian lighting
Observations

1. No truncated domes
2. No crosswalks
3. Wide lanes may be able to support bike lanes
4. No pedestrian lighting
Intersection of South Wood Avenue and Wood Place

Photo 5: Intersection of South Wood Avenue and Wood Place

Observations

1. No truncated dome pads
2. No crosswalks
3. No pedestrian lighting
Intersection of Wood Place and Union Avenue

Photo 6: Intersection of Wood Place and Union Avenue

Observations

1. No truncated domes
2. No crosswalks
3. No pedestrian lighting
Map 6: Walking Assessment of Route 3

Linden School No. 6  Route 3
Observations

1. High visibility crosswalk present but beginning to fade
2. No truncated domes
Observations

1. Parking space lines are fading
Intersection of Wood Avenue and Price Street

Photo 3: Intersection of Wood Avenue and Price Street

Observations

1. Low visibility crosswalks present
2. No truncated domes
3. Parking space lines need repainting
Intersection of Wood Avenue and Blancke Street

Photo 4: Intersection of Wood Avenue and Blancke Street

Observations

1. Low visibility crosswalks present
2. No truncated domes
4. Action Plan & Recommendations

The Safe Routes to School Action Plan is organized into the “Five E’s”: Education, Encouragement, Enforcement, Engineering and Evaluation. Additionally, each element of the Action Plan considers two parameters – time and cost as shown below. Together, they comprise a set of directions to help the community prioritize their action steps to increase safety for students. The tables below identify preliminary recommendations specific to Linden School No. 6 and its immediate area. It is suggested that this School Travel Plan be used to apply for SRTS grant funds to assist with the infrastructure needs identified in the action steps.

<table>
<thead>
<tr>
<th>Timeframe Definition</th>
<th>Cost Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term = less than 3 months</td>
<td>Low = Less than $2,000</td>
</tr>
<tr>
<td>Mid-term = between 3 to 6 months</td>
<td>Medium = between $2,000 and $10,000</td>
</tr>
<tr>
<td>Long-term = longer than 6 months</td>
<td>High = more than $10,000</td>
</tr>
</tbody>
</table>

1. **Education**: Programs to educate students, parents and the public about safe walking and biking

<table>
<thead>
<tr>
<th>Education Actions</th>
<th>Responsibility</th>
<th>Time Frame</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circulate Travel Plan Report on school website</td>
<td>Board of Education</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Confirm School Zone signs adequately identify the school area</td>
<td>Board of Education</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Create and update Family Handbook that defines arrival and dismissal procedures with map and text that defines drop-off/pick-up areas, the rules and procedures for driving along local streets, within school campus, and school driveway</td>
<td>School, School Liaison, PTA</td>
<td>Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Notify parents/guardians and school staff by publishing information/uploads in the Parent/Family Handbook, School Newsletters and on the school website</td>
<td>School</td>
<td>Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Invite Meadowlink to help with bicycle and pedestrian safety education with assemblies or Bike Rodeos</td>
<td>School, Meadowlink</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Integrate walking and safety education into classroom curriculum</td>
<td>School, Meadowlink</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
</tbody>
</table>
Leverage Social Media to spread awareness of school zone and enforcement activities

<table>
<thead>
<tr>
<th>Encouragement Actions</th>
<th>Responsibility</th>
<th>Time Frame</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold a student poster or bookmark contest about on Walking and Biking to school</td>
<td>School, Meadowlink</td>
<td>Short-term</td>
<td>Low</td>
</tr>
<tr>
<td>Circulate Time Radius Map and Travel Plan Report via Linden School Number 6 website</td>
<td>VTC, Meadowlink, School</td>
<td>Short-term</td>
<td>Low</td>
</tr>
<tr>
<td>Host Bike/Walk to School Days throughout the school year</td>
<td>School Action Team, PTA, School Liaison, Meadowlink</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Participate in International Walk to School Day in October and National Bike to School Day in May, as well as NJ Walk and Bike to School Day in April</td>
<td>School Action Team, PTA, Meadowlink</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Utilize the school website to advance Safe Routes to School safety messages</td>
<td>Meadowlink, School Tech Coordinator</td>
<td>Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Establish and organize Bike Trains/Walking School Buses to connect students and families who are already walking or are considering walking/biking</td>
<td>School, Meadowlink</td>
<td>Mid-term, Long-term</td>
<td>Low</td>
</tr>
</tbody>
</table>

2. **Encouragement:** Programs to encourage or promote walking and biking

<table>
<thead>
<tr>
<th>Encouragement Actions</th>
<th>Responsibility</th>
<th>Time Frame</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold a student poster or bookmark contest about on Walking and Biking to school</td>
<td>School, Meadowlink</td>
<td>Short-term</td>
<td>Low</td>
</tr>
<tr>
<td>Circulate Time Radius Map and Travel Plan Report via Linden School Number 6 website</td>
<td>VTC, Meadowlink, School</td>
<td>Short-term</td>
<td>Low</td>
</tr>
<tr>
<td>Host Bike/Walk to School Days throughout the school year</td>
<td>School Action Team, PTA, School Liaison, Meadowlink</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Participate in International Walk to School Day in October and National Bike to School Day in May, as well as NJ Walk and Bike to School Day in April</td>
<td>School Action Team, PTA, Meadowlink</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Utilize the school website to advance Safe Routes to School safety messages</td>
<td>Meadowlink, School Tech Coordinator</td>
<td>Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Establish and organize Bike Trains/Walking School Buses to connect students and families who are already walking or are considering walking/biking</td>
<td>School, Meadowlink</td>
<td>Mid-term, Long-term</td>
<td>Low</td>
</tr>
</tbody>
</table>

3. **Enforcement:** Activities to improve safety and security for those walking and biking to school

<table>
<thead>
<tr>
<th>Enforcement Actions</th>
<th>Responsibility</th>
<th>Time Frame</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create safety patrol unit of 5th grade students</td>
<td>School, PTA</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Conduct bicycle registration and helmet giveaways at Back to School night, National Night Out or Bike Rodeos</td>
<td>School, Police, City, Meadowlink</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Investigate training Walking School Bus volunteers in pedestrian safety</td>
<td>School Liaison, Police</td>
<td>Mid-term, Long-term</td>
<td>Low</td>
</tr>
</tbody>
</table>
Conduct speed studies along Wood Avenue, South Wood Avenue, and West Linden Avenue | Police, City | Short-term, Long-term | Medium
---|---|---|---
Ask police to setup electric signs that post drivers speeds and remind people to not speed in school zone – twice a year | Police, School Liaison | Short-term, Long-term | Low
Pedestrian Decoy Operation – target unsafe drivers, especially during school commute time | Police, Board of Education | Long-term | Low

4. **Engineering**: Infrastructure upgrades that improve walking and biking environment

<table>
<thead>
<tr>
<th>Engineering Actions</th>
<th>Responsibility</th>
<th>Time Frame</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install sturdy bike racks and skateboard racks near school entrance</td>
<td>City Engineering, Police, School</td>
<td>Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Post “School Zone” signs and paint “school zone” on roadways surrounding Linden School Number 6</td>
<td>City Engineering, Police</td>
<td>Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Install push button activated Rectangular Rapid Flash Beacon pedestrian crossing signs at Wood Avenue &amp; Blancke Street, Elizabeth Avenue &amp; Linden Avenue</td>
<td>City Engineering, Police</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Paint Pavement Quilts or Crosswalk Designs on major intersections surrounding school. For example, Wood Avenue &amp; West Linden Avenue, South Wood Avenue and Morris Avenue</td>
<td>City Engineering, Police</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Post signs and paint area on street to define Bus and Car drop-off zones</td>
<td>City Engineering, Police</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Investigate driveway and parking lot circulation at school and enact measures for safety</td>
<td>City Engineering, Police</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Restripe faded crosswalks all along Wood Avenue, West Linden Avenue</td>
<td>City Engineering, Police</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Investigate and ensure ADA compliancy of crosswalks, install truncated domes</td>
<td>City Engineering, Police</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Medium</td>
</tr>
<tr>
<td>Investigate traffic speeds around the school and post speed limit signs as traffic calming concepts</td>
<td>City Engineering, Police</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Install pedestrian lighting down West Linden Avenue and South Wood Avenue</td>
<td>City Engineering</td>
<td>Short-term and mid-term</td>
<td>Low to Medium</td>
</tr>
</tbody>
</table>
Install School Zone signs that define the school area; install signs with augmented flashing beacons

<table>
<thead>
<tr>
<th>Evaluation Actions</th>
<th>Responsibility</th>
<th>Time Frame</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue to conduct student travel tallies to measure how effective the SRTS program has been in increasing the number of students walking, biking or carpooling</td>
<td>School, Meadowlink, School Tech Coordinator</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Improve communications between school officials and families establishing a convenient mechanism to share information and get feedback on safety</td>
<td>School Action Team, PTA, School Tech Coordinator</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Determine if school has passed any walking or biking policies to support safe travel for students</td>
<td>School, PTA</td>
<td>Mid to long term</td>
<td>Low</td>
</tr>
</tbody>
</table>

5. **Evaluation**: Efforts to monitor and evaluate progress towards the achievement of SRTS goals

<table>
<thead>
<tr>
<th>Evaluation Actions</th>
<th>Responsibility</th>
<th>Time Frame</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue to conduct student travel tallies to measure how effective the SRTS program has been in increasing the number of students walking, biking or carpooling</td>
<td>School, Meadowlink, School Tech Coordinator</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Improve communications between school officials and families establishing a convenient mechanism to share information and get feedback on safety</td>
<td>School Action Team, PTA, School Tech Coordinator</td>
<td>Short-term, Mid-term, Long-term</td>
<td>Low</td>
</tr>
<tr>
<td>Determine if school has passed any walking or biking policies to support safe travel for students</td>
<td>School, PTA</td>
<td>Mid to long term</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Conclusion**

The community priorities should include posting ‘School Zone” signs near the surrounding area of the school, painting high visibility crosswalks down West Linden Avenue and South Wood Avenue, installing truncated domes along West Linden Avenue and South Wood Avenue at key intersections where students cross (Elizabeth Ave, Union Ave., Cedar Ave., Blanche St., Wood Place, East Stimson Ave., Munsell Ave., Coolidge St., Jefferson St., etc.), and installing pedestrian lighting down West Linden Avenue and South Wood Avenue.

After the walkability audit, it was apparent that Linden is a very walkable community. The measures that are recommended in this travel plan will further improve the city’s walkability, increase pedestrian safety, and encourage more students and parents to walk or bike to school. Meadowlink is proud to work with the community to improve safety and bring SRTS programming to the schools. It is hoped that this report will be used to apply for an SRTS infrastructure grant to make the intersection, sidewalks, and streets safer for students to walk and bike to Linden Public School No. 6.
Appendix A
Abandoned Properties Tool Kit

The National Vacant Properties Campaign (NVPC) defines vacant properties as residential, commercial, and industrial buildings and vacant lots that exhibit one or both of the following traits:

- The site poses a threat to public safety (meeting the definition of a public nuisance), or
- The owners or managers neglect the fundamental duties of property ownership, for example:
  - failure to pay taxes or utility bills
  - default on mortgages
  - carry liens against the property

Abandoned and foreclosed properties generate a host of interrelated problems. Higher rates of crimes occurring in these areas are common, utilizing municipal resources. These homes become crime magnets, resulting in illegal use by prostitutes, drug dealers, squatters, and property criminals. These homes become a fire hazard, with arson and accidental fires causing harm to surrounding properties. Some homes become dumping grounds which strain municipalities and their services. This results in lower standards throughout the community/neighborhood, and lost confidence in future. It takes years for a neighborhood to “come back” as abandoned property deescalates a community.

Communities can take action against vacant properties

The following Internet links provide information and tools that a community can use to deal with vacant properties that are a public nuisance

Resources:
Creating an Abandoned Property List (Housing and Community Development Network of New Jersey

Community Housing Development Organization (CHDO) Checklist: This checklist should be used as a tool to educate participating jurisdictions about the documents they must receive from a nonprofit before it may be certified as a CHDO