### North Plainfield Safe Routes to School







# West End Elementary School North Plainfield, New Jersey



# Travel Plan October 2011

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#### Introduction:

The North Plainfield Board of Education seeks to improve the overall health and safety of all students traveling to and from West End School. As a part of West End Elementary School's effort to achieve a Fiscal Year 2012 New Jersey Department of Transportation federal-aid Safe Routes to School Grant, the North Plainfield Board of Education, has agreed to allow Ridewise to study and make recommendations for possible improvements within this travel plan for the North Plainfield Safe Routes to School Committee.

The North Plainfield Safe Routes to School Committee meets monthly during the school year to discuss issues related to the Safe Routes to School Program in North Plainfield. Committee members include: Mayor of North Plainfield, North Plainfield Police, Board of Education Secretary/Business Administrator, Principals or Representatives from each of the four schools participating in the program (East End, West End, Somerset, and Stony Brook), PTA members, and representatives of Ridewise TMA.

#### Aims & Intentions:

The West End School Travel Plan is a continually evolving work-in-progress and should be viewed as a working document intended to outline possible areas of improvement that might assist the school district with increasing the volume, frequency, and safety of students who choose to walk to school.

This travel plan should not be viewed has a final policy statement, definitive plan of action, or contractual obligation binding the North Plainfield Board of Education, its officers, employees, or agents to any particular action, set of actions, time frames, or any particular spending expenditures for items not funded through this grant allocation.

#### Goals:

- To promote walking as a primary travel option for school related travel.
- To emphasis the personal and public health benefits of frequent exercise.
- To create a safe, uniform and accessible walking corridors for students.
- To encourage the development of walking groups so students do not walk alone.
- To reduce automotive traffic near school facilities.

#### **Community and District Description:**

North Plainfield is the sixth most populous municipality in Somerset County with a Census 2010 population of 21,936 and 24.5 % of the population is under 18 years old. The Borough has an ethnic breakdown of 44.2% Latino; 30.7% White; 17.5% African American, and 5.7% Asian. The North Plainfield School District has an overall student population of 2,254 in K-12 Grade. The K-6<sup>th</sup> Grade Population is 1,748 and makes up roughly 54% of the total district population.

#### **West End School Description:**

West End Elementary School is located at 447 Greenbrook Road in the Borough of North Plainfield, New Jersey (Area 17 on the enclosed map). This K-4 school has a current student population of 525 that represents 30% of the K-6 population and 23% of the overall district population. The school has about 150 students who live North of RT.22 and must cross the roadway to walk to school. See satellite photo below.



Yellow Line = High Level of Student Population Concentration Red Line = Established Safe Route to School Red Circle = West End School Location Crossing guards currently escort students across RT.22 at West End, Wilson and Watchung Avenues. A number of streets near and adjacent to the school including Ayres, Rockview and Parkview avenues do not have sidewalks.





Parking availability is constrained for both on-street and off-street parking.





The Borough also operates a Department of Public Works facility behind the West End School. The Borough tries to coordinate operations at the facility to reduce traffic impact on school operations and to avoid generating conflicts with school bound travel.



#### **School Leadership Support**

West End Principal Beth Sobel has been very supportive of the North Plainfield Safe Routes to School Committee. She has a representative that attends the monthly NPSRTS Committee meetings and has also allowed Ridewise to conduct safe walking seminars, attend school events, distributed program materials, and to conduct monthly travel surveys. The school has participated in every walk to school day event held by the NPSRTS Committee. This support has been an essential element in our program success to date.

#### **Disadvantaged Community Qualification: No**

For purposes of the NJDOT Safe Routes to School Grant Program, no school within the North Plainfield School District has been designated as "Disadvantaged Community".

#### **Program Narrative:**

The North Plainfield School District responded to a solicitation from Ridewise to become involved in the Safe Routes to School Program in August of 2010. Ridewise meet with District Administrators and individual school leaders in the early fall of 2010 and set-up a program structured around Education, Encouragement, Evaluation, Enforcement, and Engineering.

As part of this planning process the North Plainfield Safe Routes to School Committee was formed to structurally introduce the program to the districts four participating schools at East End, West End, Stony Brook, and Somerset Schools.

#### **Education**

Our educational component consisted of information letters to parents explaining program goals, distribution of tri-fold program brochures, and links to resource information on Ridewise.org, NJDOT Safe Routes to School, and the National Center for Safe Routes to School websites. Ridewise staff conducted safe walking training seminars for the entire student body at all four participating schools in fall of 2010 and spring of 2011. SRTS introductory program presentations were provided to all PTA organizations at all four schools and made periodic updates on program progress were provided throughout the school year. Ridewise staff also attended special event nights at the various schools throughout the school year and gave a special year-end program summary to the North Plainfield Board of Education in May 2011.

#### **Encouragement**

Starting in December 2010, the NPSRTS program held regularly scheduled monthly walk-to-school day events at all four participating schools. Events were announced through in-school announcements, flyers and posters placed throughout the school. The Somerset Patriot's team mascot "Sparkee" attended the monthly events and provided excitement to the events and encouragement to children walking to school. In addition, students walking on event days were provided with special event stickers each month.

For the 2011-2012 school year, all walk-to schools event days have been placed on the district website and school calendar to remind parents of upcoming events. In September, Ridewise provided each participating school with a large event banner to display on designated event days. In October 2011, the NPSRTS committee approved the Shoe Award encouragement program. Shoe Awards certificates and special award stickers are distributed at the Gold, Silver, Bronze levels at each school based upon the three highest event participation rates.

In the spring 2011, NPSRTS successfully applied for a mini-grant from the National Center for Safe Routes to School to create an educational/encouragement video to increase safe routes to school program awareness and event participation. In September 2011, NPSRTS formed a video club at Somerset School consisting of 24 students from the fifth and sixth grade to film the video with oversight and direction from Ridewise TMA.

#### **Evaluation**

The NPSRTS Committee has gathered statistical data on travel mode choice since its inception. In December 2010 and again in June 2011, the NPSRTS Committee undertook two parent surveys modeled in large part on question samples from the National Center for Safe Routes to School.

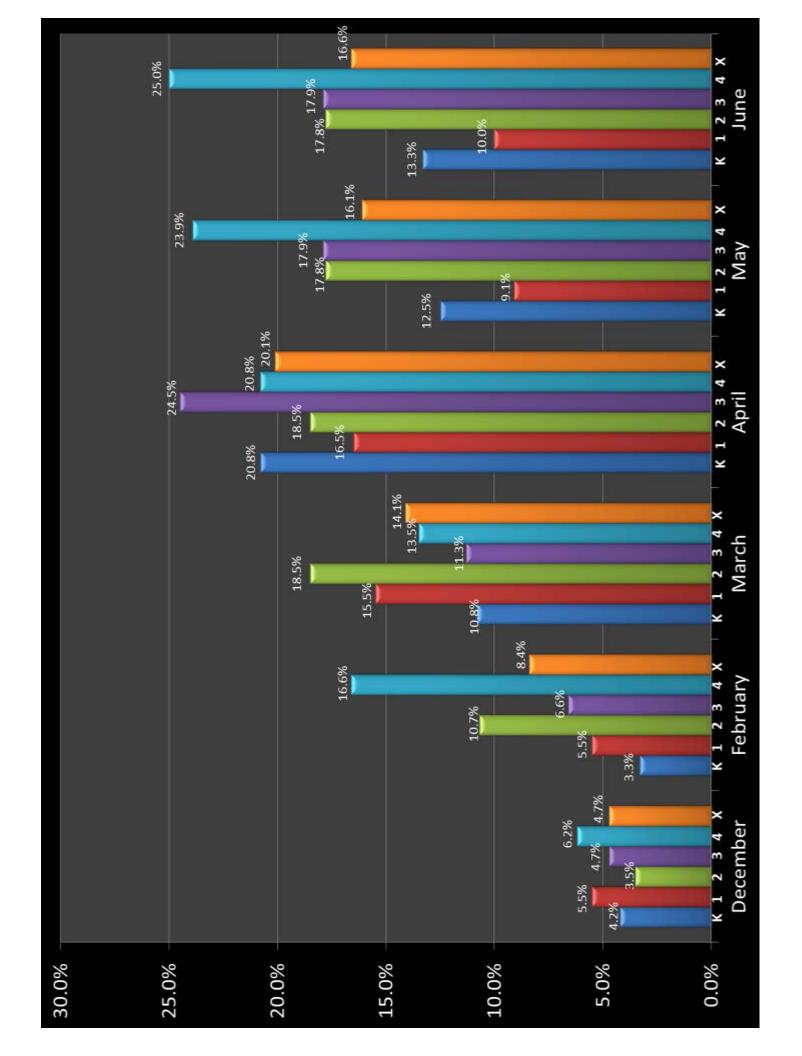
The December 2010 Parent Survey for West End School had 307 responses to both part I: travel mode and part II: short answer, this translates into a response rate of 55%. Due to the anonymous nature of the survey it is impossible to determine if the results were a reliable representative sample of the population.

The June 2011 Parent Survey for West End had 198 responses to part I: travel mode and 169 responses to part II: short answer, this translates into a 36% and 30% response rate for each section. Again, due to the anonymous nature of the survey it is impossible to determine if the results were a reliable representative sample of the population. The outcomes of both surveys are enclosed in the charts below.

The NPSRTS also collects information on current walking trends through the use of monitoring associated with our monthly walk to school events. All classes at the school conduct in class surveys both prior to the event and on the event day to measure event impact. The system of in-class surveying allows a separate and independent way to cross-check the accuracy of the parent survey as well as to check on the overall progress of the program. In the 2011-2012 school year, Ridewise proposed and the NPSRTS Committee approved the use of electronic tally collection via on-line surveys directly to teachers to increase timely and accurate submission of data and to reduce distribution, collection and evaluation time and expenses.

#### **Survey Outcome Charts**

Following represent the outcomes of some of our data collection efforts.



**Part I: West End School Parent Survey** 

	Raw				
Basis 307	Numbers		Basis 198		
<u>Dec 2010</u>			<u>June 2011</u>		
<u>Type</u> Drive	<u>AM</u>	<u>PM</u>	<u>Type</u> Drive	<u>AM</u>	<u>PM</u>
Alone	204	175	Alone	128	116
Carpool	49	59	Carpool	24	27
W/P.M.	18	16	W/P.M.	30	34
W/NPM	1	6	W/NPM	5	10
W/Group	0	2	W/Group	3	3
W/Alone	2	6	W/Alone	5	2
Bus	3	11	Bus	3	5
Other	30	32	Other	0	1

#### <u>Dec 2010</u> <u>June 2011</u>

			Walk	Walk				Walk	Walk
<u>Type</u> Drive	<u>AM</u>	<u>PM</u>	AM	PM	Type Drive	<u>AM</u>	<u>PM</u>	AM	PM
Alone	66.4%	57.0%	6.6	9.6	Alone	64.6%	58.5%	21.6	24.7
Carpool	15.9%	19.2%			Carpool	12.1%	13.6%		
W/P.M.	5.8%	5.2%			W/P.M.	15.1%	17.2%		
W/NPM	0.3%	1.9%			W/NPM	2.5%	5.0%		
W/Group	0.0%	0.6%			W/Group	1.5%	1.5%		
W/Alone	0.5%	1.9%			W/Alone	2.5%	1.0%		
Bus	0.9%	3.5%			Bus	1.5%	2.5%		
Other	9.7%	10.4%			Other	0.0%	0.0%		

Comparison of West End: Part I Parent Survey to National Survey findings by National Center for Safe Routes (Jan 2010)

<b>West End</b>	NCSRTS	Difference

#### School Bus

	AM	<u>PM</u>	<u> </u>	<u>PM</u>	<u> </u>	<u>PM</u>
Dec	.9%	3.5%	<b>37%</b>	42%	+36.1%	+38.5%
June	1.5%	2.5%	<b>37%</b>	42%	+35.5%	+39.5%

#### Family Vehicle

	<u>AM</u>	<u>PM</u>	<u>AM</u> <u>PM</u>	<u> </u>	<u>PM</u>
Dec	66.4%	57.0%	45% 35%	-21.4%	-22%
June	64.6%	58.5%	45% 35%	-19.6%	-23.5%

#### Carpool

	AM	<u>PM</u>	<u> </u>	<u>PM</u>	<u> </u>	<u>PM</u>
Dec	15.9%	19.2%	4%	5%	+11.9%	+14.5%
June	12.1%	13.6%	4%	5%	+8.1%	+8.6%

#### Walk

	<u>AM</u>	<u>PM</u>	<u> </u>	<u>PM</u>	<u> </u>	<u>PM</u>
Dec	6.6%	9.6%	11%	<b>15%</b>	-4.4%	-5.4%
June	21.6%	24.7%	11%	<b>15%</b>	+10.6%	+9.7%

#### Other

	<u>AM</u>	<u>PM</u>	<u> </u>	<u>PM</u>	<u> </u>	<u>PM</u>
Dec	9.7%	10.4%	.3%	.5%	-9.4%	-5%
June	0.0%	0.0%	.3%	.5%	+0.3%	+.5%

## Part II: West End School Parent Survey Dec 307; June 169

		<u>Yes</u>	<u>No</u>	<u>Uncertain</u>
1. Pick-Up Drop Area is easy and convenient to use	Dec-10	59.6%	26.3%	14.0%
	Jun-11	58.5%	23.6%	17.7%
2. It is easy to find parking in/around school	Dec-10	24.7%	68.0%	7.1%
	Jun-11	30.7%	57.9%	11.2%
3. My work schedule is a major influence on travel	Dec-10	56.0%	30.6%	13.3%
	Jun-11	60.9%	23.6%	15.3%
4. Children should walk to school to reduce traffic	Dec-10	22.1%	58.6%	19.2%
	Jun-11	33.1%	40.2%	26.6%
5. Weather plays a major role in travel choice	Dec-10	53.0%	36.4%	10.4%
	Jun-11	53.8%	33.1%	13.0%
6. After-school activities play a major role in travel choice	Dec-10	29.3%	50.1%	20.5%
	Jun-11	39.0%	41.4%	19.5%
7. We live too far from school to walk	Dec-10	49.8%	41.6%	8.4%
	Jun-11	33.7%	52.0%	14.2%
8. I routinely walk my neighborhood or to school w/child	Dec-10	28.9%	63.5%	7.4%
	Jun-11	40.2%	50.2%	9.4%
9. Sidewalks near my home are in good condition	Dec-10	54.7%	35.1%	10.0%
	Jun-11	52.6%	34.9%	12.4%
10. Seminars would encourage more children to walk	Dec-10	45.6%	20.8%	33.5%
	Jun-11	49.7%	23.0%	27.2%
11. I can participate in a Safe Walking Seminar	Dec-10	26.7%	39.0%	34.2%
	Jun-11	40.2%	41.4%	17.7%
12. I would allow my child to participate in WTS event	Dec-10	39.0%	38.7%	22.1%
	Jun-11	71.0%	4.7%	24.2%

## West End Comparison to National Survey based on event outcome tallies.

	West End	<u>National</u>	At/Above
K	4.2, 3.3, 10.8, <b>20.8</b> , 12.5, 13.3	15%	1
1st	5.5, 5.5, 15.5, <b>16.5</b> , 9.1, 10	16%	1
2nd	<b>3.5</b> , <b>10.7</b> , <b>18.5</b> , <b>18.5</b> , <b>17.8</b> , <b>17.8</b>	16%	4
3rd	4.7, 6.6, 11.3, 24.5, 17.9, 17.9	20%	1
4th	6.2, 16.6, 13.5, 20.8, 23.9, 25	21%	3
			10

Meets or exceeded equals 33%

#### **Positive Data Summary:**

- Student participation in monthly Walk to School events among all West End grade levels
  has increased on a month-to-month basis starting from an average of 4.7% and raising
  to a high of 20.1% in April. This year's compatibles will provide more information on the
  seasonality of the travel trends and the effectiveness program elements in the walking
  campaign.
- Based on a comparison of December to June Parent Survey responses walking behavior seemed to increase in each walking sub-set: Primary Member, Non-Primary Member and Group. From December AM/PM went from 6.6/9.6 to 21.6/24.7 in June.
- The December Parent Survey showed only 39% of parents indicating that would let their child participate in a walk to school day event. In June, this same question received a 71% support which translates into an parental acceptance gain of 32%. This is one of the highest percentage gains Ridewise has recorded in seven years of working on this issue. NPSRTS believes this is directly due to support generated from program activity.
- The West End Second Grade met or exceeded national baselines 2/3 of the time for monthly events and the Fourth Grade met or exceed national baselines 1/2 of the time. This is truly encouraging information for the program. All grade levels met or exceed national standards at least once during the measuring period showing that these goals are reachable by the West End community.

- North Plainfield's limited busing availability helped the district to exceed the national baseline by 35%-40%. Not only does the limited busing help reduce overall travel costs but it also provides a powerful incentive for parents/students to use alternative travel options.
- West End School has doubled and in some cases tripled the national baseline for carpooling to school according to two parent surveys.
- About 60% of parents surveyed indicate that the drop-off and pick-up area is easy or convenient to use. West End already has some policies in place to control and regulate the area.
- About 40-50% of parents indicated that after school activities did not play a major role in travel choice decisions.
- In December **49.8%** of parents thought they lived too far for students to walk. In June this had dropped to **33.7%**. Due to sample populations and other consideration we cannot conclusively say this **16.1%** reduction is due to the program but it is a sizable positive decline none the less.
- The number of parents reporting that they walked around the neighborhood with their child, (a good positive indication of walking behavior), rose from December to January by 11.3%
- **54.7%** of respondents reported that sidewalks near their home were in good condition in December and **52.6%** in June. This is a vague and unquantified question but it seems to indication that residents have sidewalks that are available and accessible, but that they are evenly divided on their satisfaction with them. Reading this question with information on how often parents walk the neighborhood also reveals that only **28.9%** had walked their neighborhood in December and **40.2%** indicated so in June. Perhaps a wider focus and inventory of sidewalk infrastructure conditions can be done in the future.
- In both December and June 53% of parents indicated that weather played a major factor in travel choice. This finding is higher than finding by the National Center for Safe Routes to School survey data which pegged weather conditions at around 44%. The national survey also found only a 2% difference between walking behavior on sunny vs. cloudy/rainy/snowy days. On all events days this year with exception of January which was cancelled due to snow and April all events occurred on overcast, rainy or snowy days. Biggest impact was for Kindergarten and 3<sup>rd</sup> Grade classes which both saw about a 10% raise. Our conclusion is that good weather might get more marginal walkers to walk but that travel behavior is highly dependent on routine and comfort with alternatives.

#### **Negative Data Summary:**

- Family Vehicle Travel to School in December for AM/PM was 21.4%/22% greater than national survey findings. However this changed in June to AM/PM 19.6%/23.5%. In aggregate if we compare this underperformance in family travel to positive gains from the lack of busing the school still seems better than the norm. Subtracting the overages from the exceptional performance in busing still translates into positive gain of about 15% for the present configuration.
- Data trend seemed to flatten out in May and June. This could have been due to yearend issues and most schools generally benefited when Sparkee the mascot for the Somerset Patriots Baseball Team visited or Mayor of North Plainfield attended an event. The weather in April and the visitation schedule may have driven April rate artificially higher.
- Carpooling to school declined from December AM/PM of **15.9/19.2** to **12.1/13.6** in June a **-3.8/-5.6**. This may be due to weather, mode switch or possible dissolution of carpools. In our June 2011 survey we included additional questions on carpooling:

"Would you allow your child to participate in a carpool-to-school program" results:

Yes: 33.7%; No: 46.1%; Uncertain 20.1%

"Would you be willing to be a driver for carpool to school program" results:

Yes: 12%; No: 61.5%; Uncertain 26%

Mailings and phone calls in Aug/Sept. 2011 identified only two volunteer drivers.

- Most parents agree that finding parking around the school is difficult. December
  Survey revealed a 68% agreement on issue with the June Survey showing a 57.9%
  agreement. Parking will continue to be a major problem with no clear solution beyond
  off-site lot drop-off and pick-up or purchase of land for parking. We do not recommend
  this as increases in parking availability also tends to generate more traffic volume and
  reduce use the attractiveness of other short and long term cost-effective alternatives.
- In December **56%** of parents indicated that their work schedules played a major role in travel choices. In June this rose to **60.9%**. In the comment section of the surveys about a dozen parents indicated interest in expanded, free, or reduced cost short/long term early care and/or afterschool care for their children.
- In the survey comment area, the issue of crossing from Rt.22West to Rt.22 East was addressed. This issue has also been raised at several PTA meetings and public forums. Currently crossing guards are stationed at West End, Wilson, and Watchung Avenues. Control of the intersection is in the hands of NJDOT and subject to their authority and review. On a short-term basis the community may consider identifying a remote drop point south of RT.22 were people who live north of Rt.22 can drop-off their children at a mutually convenient place and have the children walk from location to school.

Half a dozen parents asked for more crossing guards to be employed at the school.
 They have indicated that they want an extra guard at the front of the school to control crossing on Greenbrook Road. Any decision on this issue will have to be considered by NP Police.

#### **Enforcement:**

The NPSRTS committee has reviewed various school policies on drop-off/pick-up procedures, dismissal time prioritization, inter-school dismissal coordination, parking availability, parking regulation, and driver behaviors around participating schools.

West End has 12 regular off-street parking spaces and 2 disabled parking spaces at the Harrington Avenue entrance for parent drop-off and pick-up.





Travel movements both right and left hand turns from Greenbrook Road to Harrington Avenue are not permitted during the drop-off and pick-up periods.





North Plainfield Police have conducted periodic educational and ticketing campaigns throughout the school year to maintain on-street parking enforcement near West End School and all other schools in North Plainfield.

The NPSRTS Committee has also considered developing uniform policy statements regarding drop-off/pick-up policies, Ridewise staff developed a proposed policy based on information gathered from national source search, and the committee has considered developing palm cards to be given out to drivers at the school to further enforce our driving safety message.

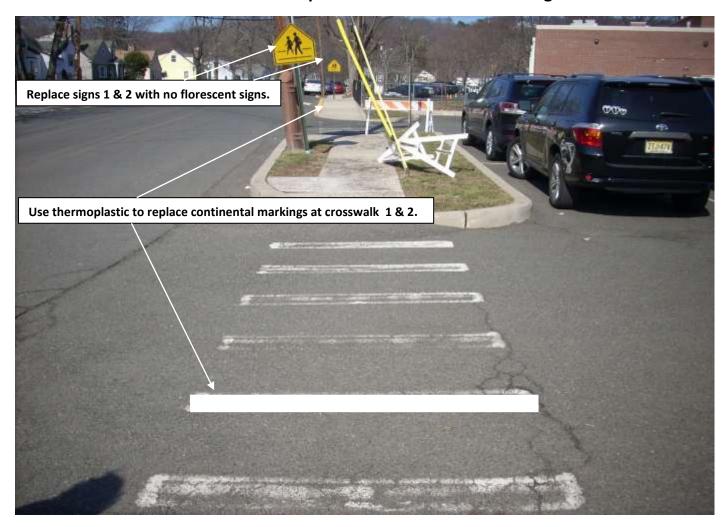
The committee also evaluated the North Plainfield Police existing crossing guard and school route map to compare it to information obtained from the district on student population concentrations. We found that it was accurate based on known residential concentration levels.

An additional area of concern at West End has been parent access and use of the facility parking lot for pick-up and drop-off. In the past, the school banned use of the lot for drop-off and pick-up and used barriers in the morning and afternoon to prevent access. However, parents would routinely remove barrier to access facility. The NPSRTS Committee is working with Principal Sobel on this issue as part of an overall examination of parking around the school. See enclosed photos below.



#### **Engineering**

Ridewise conducted photo and walking inventory inspections for all four schools (Stony Brook, Somerset, East End and West End) participating schools in the NPSRTS program. We have also enclosed presentations for the Grove, Somerset, and Grandview SRTS Corridors. All corridors have strong overlaps among the four school and detailed individual travel plans are in the works for all schools. The West End travel plan was given high priority due to the needs of the school. Our West End inspections revealed the following items outlined below.



































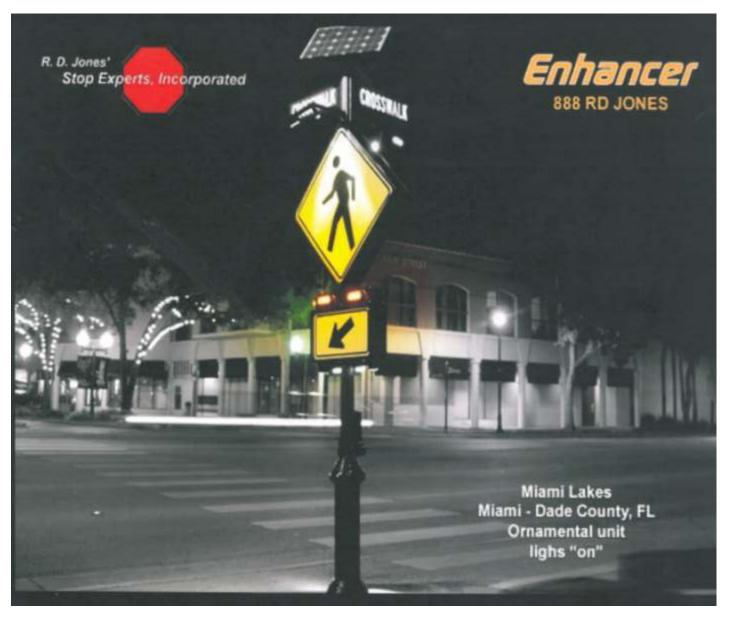
#### **Notes on Crosswalk Marking Materials**

#### **Thermoplastics**

North Plainfield Borough might want to consider the merits of using white reflective paint for crosswalks as it can increase night time visibility for drivers. The Borough may also want to consider applying either epoxy resin, thermoplastic or an inlay tape applications for crosswalk markings as they generally last longer and require less yearly maintenance expenses then traditional paint based techniques which require at least one to two applications per year. Thermoplastic have been used successfully in both Westfield and Hoboken in recent years.

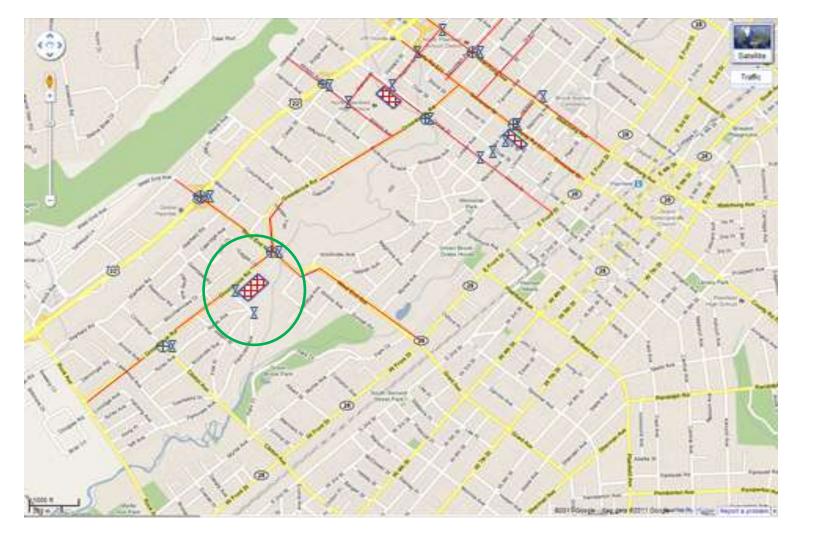
#### Flashing Crosswalk Sign for Rt.22

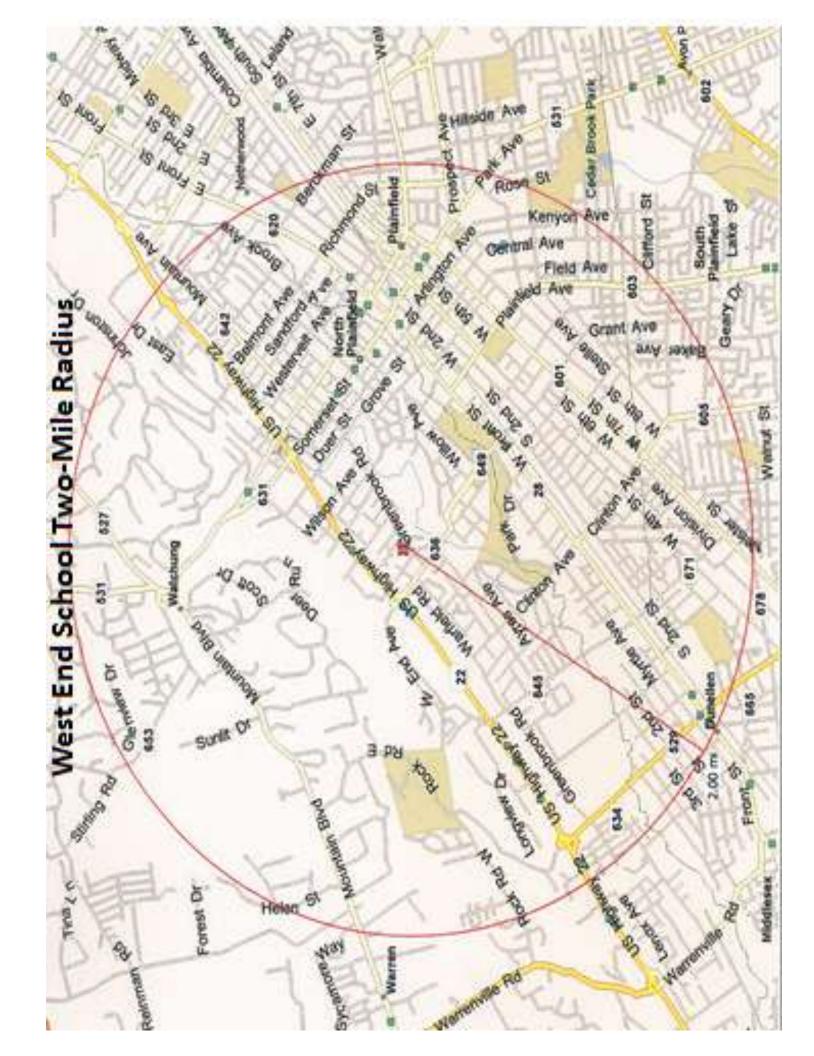
Enclosed is a sample of a new flashing crosswalk sign. The NPSRTS Committee would like to recommend that NJDOT consider using this signal set at **RT.22 and Wilson Avenue**. We understand that this treatment maybe expensive but consider that its use could greatly enhance safety in the area. The NPSRTS Committee will work with NJDOT Project Managers on the analysis and scoping of this safety enhancement.

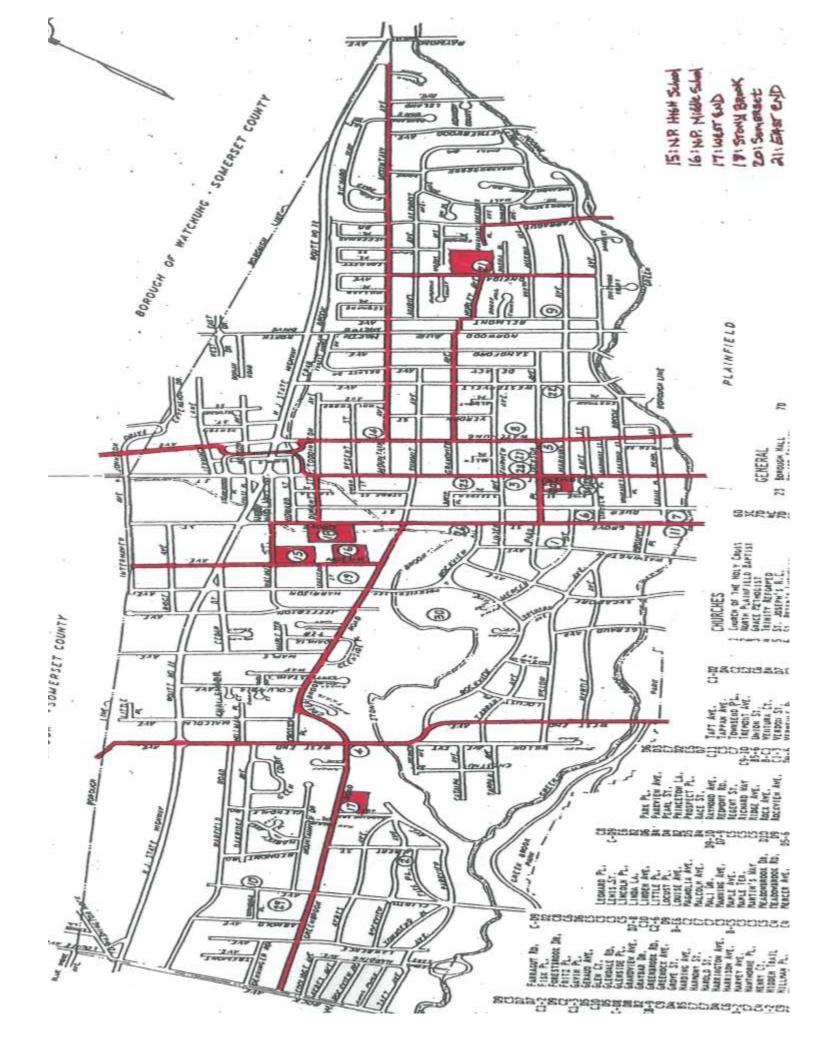


Appendix: Crossing Guard Locations: X = Crossing Guard; + = Traffic Light









### **END DOCUMENT**