Appendix 9.5:

Transportation

This Appendix contains the following data:

- A Intercept Survey Methodology & Findings
- B Detailed Maps of Proposed Regional Connections
- C Individual Park Transportation Analyses
- D Parking Demand Table
- E Bike Rack Recommendations



Appendix A: Survey Methodology, Findings, and Responses

Introduction

The Voorhees Transportation Center at Rutgers assisted The School of Environmental and Biological Sciences at Rutgers (SEBS) in collecting and analyzing data for the transportation component of the Bergen County Parks Master Plan. The purpose of the research was to evaluate park usage and plan for existing and future park needs throughout Bergen County. An intercept survey of park users was conducted where participants were asked about their use of the parks, how they arrived at the parks, their concerns about access to the park, and their assessment of park safety. This survey was conducted at five parks on both weekdays and weekends. The survey effort resulted in 929 responses, which are analyzed later in this report.

Methodology

In order to collect data from park users, the research team implemented a pedestrian intercept survey. A brief literature review was conducted where surveys from similar efforts around the country were referenced in order to create a list of suitable questions. The initial list of questions was then paired down to a final selection that could fit on a single double-sided sheet of paper. The length of the survey was controlled so that park users would be able to complete the questionnaire in a timely manner.

The research team then selected five parks where the survey would be administered. These parks were selected because they included a broad range of activities found throughout the system, including both active and passive areas of recreation. Although a golfing area was initially considered, the timing of the survey (November) would not have allowed for a suitable sample of results. The five parks surveyed, and the dates they were canvassed were:

- Hackensack River Park: Friday November 18 and Saturday November 19
- Overpeck Park: Saturday November 12 and Thursday November 17
- Riverside County Park: Friday November 18 and Saturday November 26
- Saddle River Park: Wednesday November 16 and Saturday November 19
- Van Saun County Park: Saturday November 12 and Sunday November 26

A demographic analysis of the area was conducted to determine if the survey should be translated into additional languages. The analysis found a significant population of residents near the parks whose primary language was Korean. The survey questionnaire was translated into Korean by a professional translation service, and was made available to respondents.

Teams of trained graduate students were dispatched to each park with maps of the park in hand, along with instructions of how long to spend in each area of the park. Surveyors wore t-shirts that identified them as Rutgers VTC staff, had clipboards and pens, and were given letters explaining their authorization to conduct the survey. The researchers spent multiple hours at each park and were

instructed to approach all park users that were 18 or over. As an incentive to take the survey, participants could provide their contact information for a chance to win an activity package or a round of golf. Additionally, park users were informed that their opinions would be used to improve the parks. The surveyors were also instructed to record which area of the park the survey was distributed in, to see if the results varied by location within the park. The distribution of areas was based off the mapping created by SEBS.

The team was able to collect 929 responses. Those responses were then coded digitally for analysis. The following section discusses the findings.

Survey Data

Combined Bergen County Parks

Surveys were collected at five parks. Table 1 shows the number of surveys collected in each park. Most surveys were collected at Saddle River Park and Van Saun County Park, with the lowest amount of surveys collected at Hackensack River Park.

Table 1. Surveys Collected by Park

Park Location	Surveys Collected	Percent of Total
Riverside County Park	154	17%
Overpeck Park	143	15%
Van Saun County Park	303	33%
Saddle River Park	316	34%
Hackensack River Park	13	1.4%
Total	929	100%

Each park was segmented based on maps provided by SEBS. Surveyors made note of where each survey was collected within the park, to allow for a comparison of data within the parks. The largest number of surveys were given out at Overpeck Park Area 2 and at the Van Saun County Park Zoo. Surveys for these parks account for 30% of total. Results are shown in Table 2.

Table 2. Surveys Collected by Park Segment

Park Segment	Surveys Collected	Percent of Total
Riverside County Park North	85	9 %
Riverside County Park South	69	7%
Overpeck Park Area 1	8	1%
Overpeck Park Area 2	135	15%
Van Saun County Park Zoo	136	15%
Van Saun County Park North	83	9%
Van Saun County Park South	31	3 %
Van Saun County Park Winter	53	6%
Wonderland		
Saddle River Wild Duck Pond	70	8%
Saddle River Mill Run	22	2%
Saddle River Glen Rock	48	5%
Saddle River Dunkerhook	23	2%
Saddle River Maple Glen	35	4%
Saddle River Fair Lawn	28	3%
Saddle River Otto Pehle	52	6%
Saddle River Rochelle Park	38	4%
Hackensack River Park	13	1%
Total	929	100%

The first question in the survey asked respondents how often they visited the park, and provided them with six options. The most common response indicated that respondents visited the park on a weekly basis (35.61%). The results are shown in Figure 1.

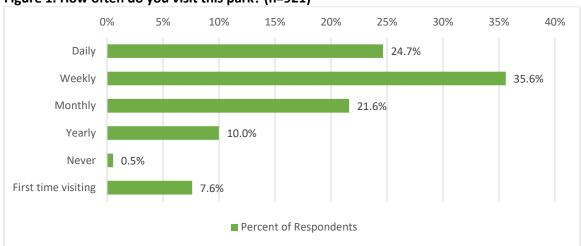


Figure 1. How often do you visit this park? (n=921)

The next question asked respondents to select <u>all</u> applicable reasons for visiting this park. **Over half of** respondents (53%) stated that they go to the park to exercise. The next most common responses were to relax (31%) and to bring their children to play (28%). The results are show in Table 3, and do not add up to 100%, as respondents could select more than one choice.

Table 3. Why do you visit the park? (n=926)

Reason for visit	Percent of Respondents
To exercise (run, walk, jog, yoga)	53%
To relax	31%
To bring my children to play	28%
To spend time with family and/or friends	21%
To ride my bicycle	12%
To attend events	11%
To sightsee	9%
To picnic/BBQ	3%
To play organized sports	2%
To skate	2%
To go fishing	1%
To volunteer	1%
Other	23%

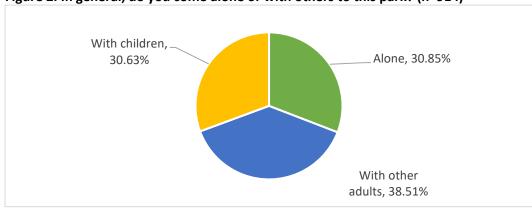
Respondents were asked to indicate what types of events they frequently attend at this park. Over onethird of respondents (36%) reported attending family and children-focused events, and 23% of respondents reported attending other events than those categorized. Respondents were allowed to write in what they meant with "other," with most respondents citing the zoo and walking their dog. Complete results are shown in Table 4, and do not add up to 100%, as respondents could select more than one choice.

Table 4. What types of events to you frequently attend at this park? (n=758)*

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Type of Event	% of total respondents
Family and children-focused	36%
Athletic	20%
Music	8%
Ethnic/Cultural	6%
Art	5%
Other	23%

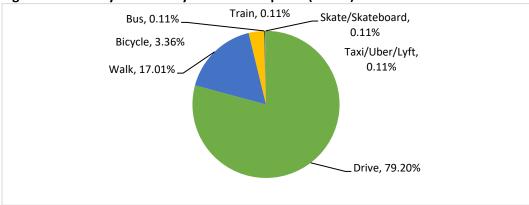
Respondents were asked with whom they go to the park. The responses were split closely between visiting the park alone, visiting with children, or visiting with other adults. The most popular response was with other adults (38.51%). Results are displayed in Figure 2.

Figure 2. In general, do you come alone or with others to this park? (n=914)



Respondents were asked to pick one mode of transportation that they normally use to travel to the park. The overwhelming majority stated that they drove to the park (79.20%), and 17% usually walked. Results are shown in Figure 3.

Figure 3. How do you normally travel to the park? (n=923)



Respondents were then asked how far they travel to visit the park on average. Just over one-third of respondents travel less than one mile to park (34%), 35% travel between one mile and five miles, and 30% travel farther than five miles to visit the park. Results are shown in Figure 4.

Under 1/4 mile 11% More than 5 miles 1/4 to 1/2 mile 31% 6% 1/2 to 1 mile 17% More than 1 mile 35%

Figure 4. On average, how far do you travel to visit this park? (n=925)

Question 7 asked respondents whether or not the park's entrances and exits were clearly marked. Over 80% of respondents indicated that they are marked clearly. The results are shown in Figure 5.

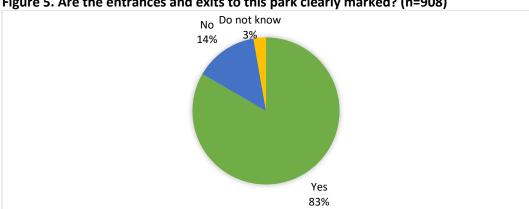


Figure 5. Are the entrances and exits to this park clearly marked? (n=908)

Respondents were asked if they felt that there are too many cars traveling within the park. *The majority* said no, there are not too many cars traveling within the park (86%). The results are shown in Figure 6.

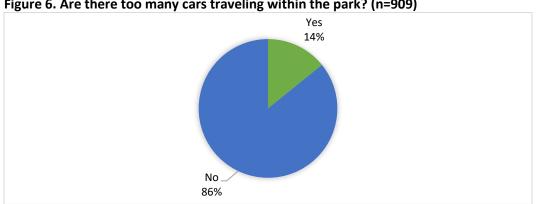


Figure 6. Are there too many cars traveling within the park? (n=909)

The following question asked if respondents have ever used public transportation to visit the park. The overwhelming majority (98%) had never used public transportation to visit the park. Results are shown in Figure 7.

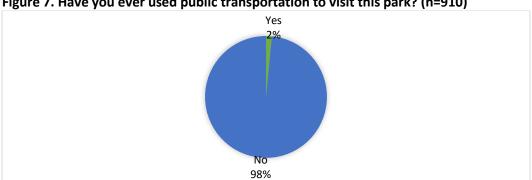


Figure 7. Have you ever used public transportation to visit this park? (n=910)

Respondents were asked to select safety concerns in the neighborhood surrounding the park. Respondents most commonly reported that none are present (62%). Poor lighting (14%) and heavy traffic (12%) were the next most popular problems identified. The results are displayed in Table 5.

Table 5. Which of the following safety concerns are present in the neighborhood surrounding the park? * (n=881)

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Safety Concern	Percent of Total
Poor lighting	14%
Heavy traffic	12%
Poorly maintained properties	4%
Excessive littering	4%
Excessive noise	3%
Vandalism	2%
Lack of eyes on the street	2%
Graffiti	1%
Evidence of threatening persons or behaviors	1%
Vacant or dilapidated buildings	.5%
Other	4%
None Present	62%

^{*}The percentages are based on the total survey population (n=929). Respondents could select more than one answer choice for this question or choose not to respond.

The next question asked respondents to rate the quality of walking paths within the park on a fivecategory scale. 93% of respondents indicated that the paths were either in good, very good, or excellent condition. Results are displayed in Figure 8.

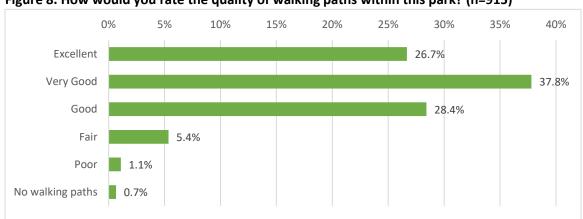


Figure 8. How would you rate the quality of walking paths within this park? (n=915)

Question 12 asked how often respondents used vehicular parking spaces in the park. Almost 75% of respondents (74.6%) either almost always use, or frequently use vehicular parking spaces within the park. Almost 13% of respondents never or almost never use a space. Results are shown below in Figure 9.

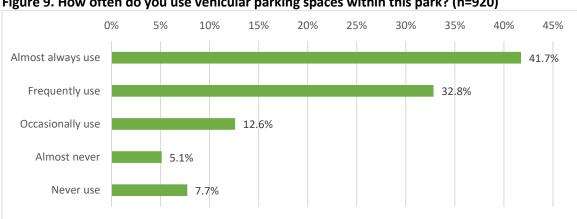
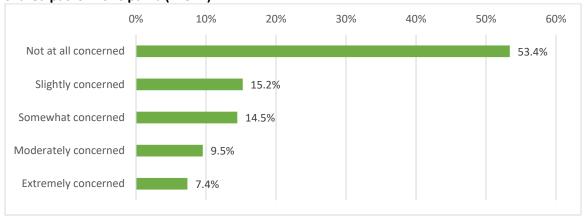


Figure 9. How often do you use vehicular parking spaces within this park? (n=920)

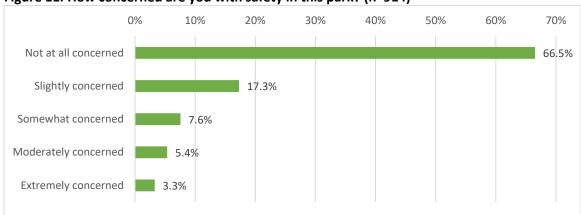
Next, respondents were asked about conflicts between bicyclists, joggers, and walkers on shared paths within the park. Slightly more than half of respondents (53.40%) are not at all concerned about conflicts between bicyclists, joggers, and walkers on shared paths. Results are shown in Figure 10.

Figure 10, How concerned are you with potential conflicts between bicyclists, joggers, and walkers on shared paths in this park? (n=912)



Respondents were then asked how concerned they are about safety in the park. Two-thirds of respondents were not concerned with safety in the park at all (66.52%). About one-fifth of respondents were slightly concerned with safety (17.29%). Complete results are shown in Figure 11.

Figure 11. How concerned are you with safety in this park? (n=914)



The next question asked how safe respondents would feel in the park at night. The most common response was that respondents are not in the park at night (43.81%). Of those that do visit the park at night, one-third of respondents felt very safe or safe (33.41%). Results are displayed in Figure 12.

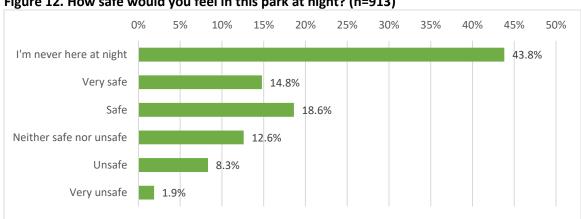


Figure 12. How safe would you feel in this park at night? (n=913)

The next question asked respondents to rate the lighting in the park, as lighting can influence if people feel safe using the park at night. The majority of respondents (51.54%) indicated that they are never in the park at night. The next most common response was that the park is well-lit (14.58%), followed closely by the park is poorly-lit (12.72%). The full results are shown in Figure 13.

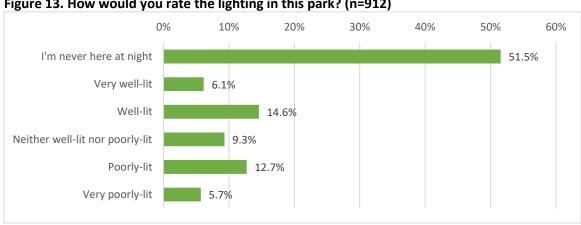


Figure 13. How would you rate the lighting in this park? (n=912)

Next, respondents were asked to select reasons they feel unsafe in the park. The majority of respondents do not feel unsafe in the park (61%). Lack of lighting (12%), lack of police presence (9%), and a dislike of darkness (7%) were the most common concerns across the parks for those who do feel unsafe. Table 6 shows the complete results.

Table 6. Concerning safety, for what reasons do you feel unsafe in this park? (n=929)*

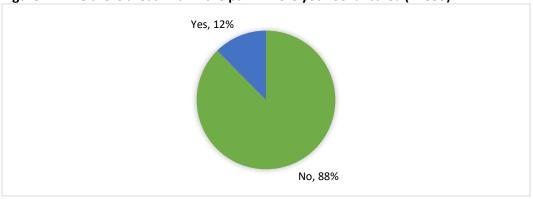
Safety Concern	Percent of Total
Lack of lighting	12%
Lack of police presence	9%
I do not like darkness	7%
Mugging or attack	3%
Teenagers gathering	3%
Fear of violent or sex crimes	3%
Drug users or drug dealers	2%
Drunken activity	1%

Fear of bullying	1%
Beggars/panhandlers	0%
Other	5%
I do not feel unsafe in the park	61%

^{*}The percentages are based on the total survey population (n=929). Respondents could select more than one answer choice for this question or choose not to respond.

When asked if there are areas within the park where they feel unsafe, most respondents said no, there are not areas in the park where they feel unsafe (88%). The results are shown in Figure 14.

Figure 14. Are there areas within the park where you feel unsafe? (n=855)



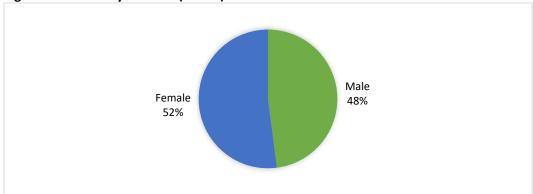
Respondents were asked to provide their zip code. In total, 177 different zip codes were represented. The most frequent zip code represented 7.61% of the survey population and was located in Fair Lawn (07410). The next most commonly listed zip codes were located in Lyndhurst (07071, 6.00%), Ridgewood (07450, 4.73%), Hackensack (07601, 4.61%), and Paramus (07652, 4.38%). Table 7 shows zip codes which accounted for at least two percent of the sample, along with their corresponding municipalities.

Table 7. What is your home zip code? (n=867)

14516 71 111141 15 YOUR 1151116 21p 454161 (11 567)		
Zip Code	Municipality	Frequency Percentage
07410	Fair Lawn	7.61%
07071	Lyndhurst	6.00%
07450	Ridgewood	4.73%
07601	Hackensack	4.61%
07652	Paramus	4.38%
07666	Teaneck	3.91%
07661	River Edge	3.81%
07452	Glen Rock	3.34%
07031	North Arlington	2.77%
07646	New Milford	2.31%

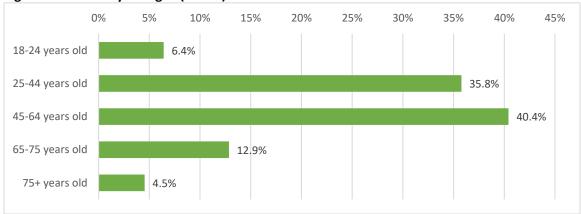
Respondents were then asked their sex: male, female, or other. There were slightly more female respondents (51.93%) than male respondents (47.85%), and two respondents selected other (.22%). The results are shown in Figure 15.

Figure 15. What is your sex? (n=909)



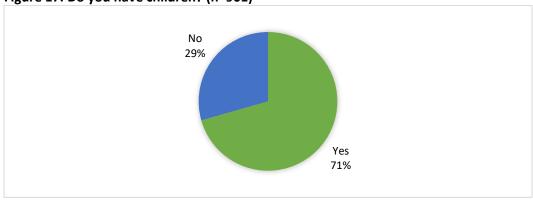
Respondents were then asked to select their age, which was grouped into five categories. *The most* common age group was 45-64 year olds (40.42%), followed by 25-44 year olds (35.77%). Slightly less than five percent of respondents were 75 years old and older (4.54%). The results are shown in Figure 16.

Figure 16. What is your age? (n=903)



The next question asked respondents if they have children; 71% answered yes. The results are shown in Figure 17.

Figure 17. Do you have children? (n=901)



Next, respondents with children were asked to indicate the children's ages, grouped into four categories. Almost half (47.04%) of respondents to this question had children five years old and younger. Results to this question are shown in Figure 18.

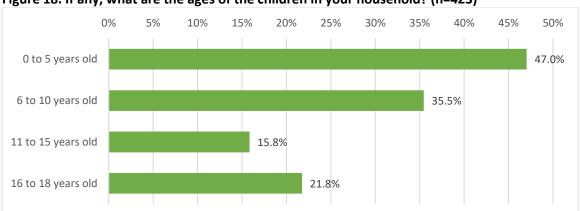


Figure 18. If any, what are the ages of the children in your household? (n=423)*

Respondents were then asked to select one race which best applies to them. The majority of respondents selected White (77.97%). The next most common selection was Asian (10.60%). The results are shown in Figure 19.

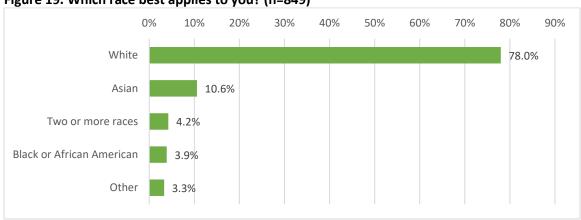
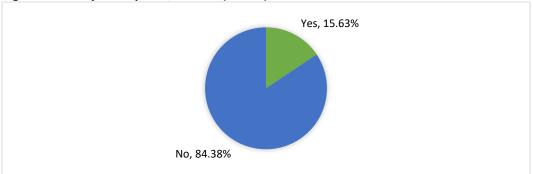


Figure 19. Which race best applies to you? (n=849)

The next question asked respondents if they were Hispanic or Latino. 16% of respondents indicated that they were Hispanic or Latino. The results are shown in Figure 20.

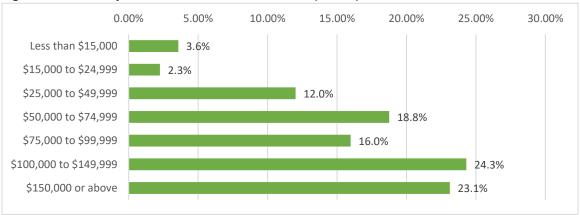
^{*}Respondents could select more than one answer. Percentages are based on total number of responses to this question only (n=423).

Figure 20. Are you Hispanic/Latino? (n=864)



The final question asked respondents their annual household income, which was grouped into seven categories. The most frequent response indicated that the respondent's household earned \$100,000 to \$149,999 annually (24.31%), which was followed closely by households that earned over \$150,000 (23.12%). The results are displayed in Figure 21.

Figure 21. What is your annual household income? (n=757)



Results from Individual Parks

In this section, the survey data is broken down and analyzed for each individual park: Riverside County Park, Overpeck Park, Van Saun County Park, Saddle River County Park, and Hackensack River Park.

Riverside County Park

The following figures report data gathered for Riverside County Park. Data was collected in Riverside County Park North (85 respondents) and Riverside County Park South (69 respondents).

The first question asked how often respondents visit Riverside County Park. The majority of respondents visit on at least a weekly basis (82.12%). Complete results are shown in Figure 22.

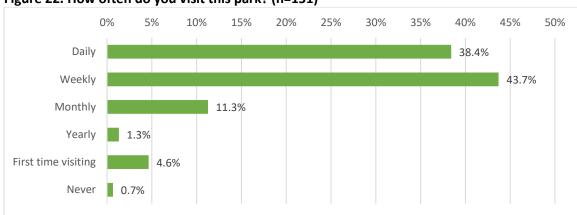


Figure 22. How often do you visit this park? (n=151)

The next question asked respondents to select all applicable reasons for visiting this park. *More than* half (51%) of respondents go to the park to exercise. The next most common responses were "other" (44%) and to relax (29%). The majority of respondents who selected "other" wrote that they visit Riverside County Park to go to the dog park. The complete results are shown in Table 8.

Table 8. Why do you visit the park? (n=154)*

Reason for visit	Percent of Respondents
To exercise (run, walk, jog, yoga)	51%
To relax	29%
To bring my children to play	8%
To ride my bicycle	6%
To sightsee	6%
To spend time with family and/or friends	5%
To attend events	3%
To picnic/BBQ	2%
To play organized sports	1%
To skate	1%
To go fishing	0%
To volunteer	0%
Other	44%

^{*}The percentages are based on the total survey population (n=154). Respondents could select more than one answer choice for this question or choose not to respond.

The following question asked respondents to indicate what types of events they frequently attend at Riverside County Park. 31% of respondents frequently attend athletic events here, and 34% of respondents selected "other." The complete results are in Table 9.

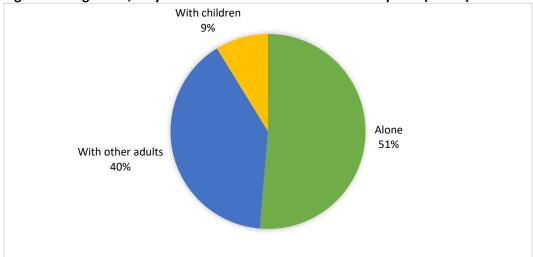
Table 9. What types of events do you frequently attend at this park? (n=125)*

Type of Event	% of total respondents
Athletic	31%
Family and children-focused	16%
Music	6%
Art	3%
Ethnic/Cultural	1%
Other	34%

^{*}The percentages are based on the total survey population (n=154). Respondents could select more than one answer choice for this question or choose not to respond.

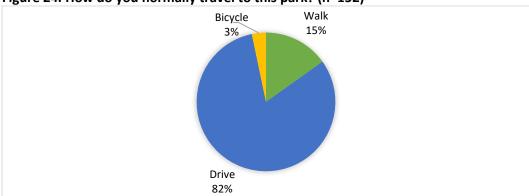
The next question asked with whom respondents go to the park. More than half of respondents go to the park alone (51%). Results are displayed in Figure 23.

Figure 23. In general, do you come alone or with others to this park? (n=148)



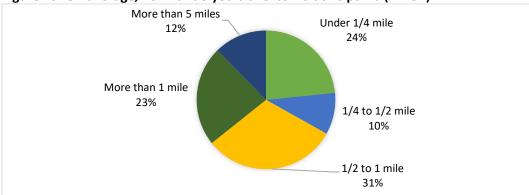
The following question asked respondents to pick one mode of transportation that they normally use to travel to the park. The overwhelming majority of the sample drove to the park (82%). The survey included the options of bus, train, taxi/Uber/Lyft, and skate/skateboard, and 0 respondents chose these options. Results excluding those categories are displayed in in Figure 24.

Figure 24. How do you normally travel to this park? (n=152)



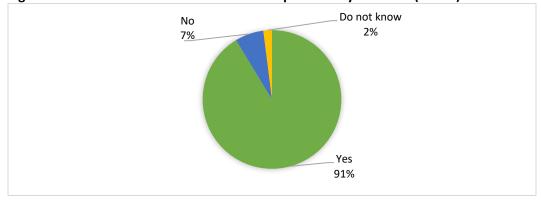
Question 6 asked how far respondents travel to visit the park on average. The highest number of respondents indicated that they travel between ½ mile and one mile (31%). The next most common responses were under ¼ mile (24%) and more than one mile (23%). Complete results are shown in Figure 25.

Figure 25: On average, how far do you travel to visit this park? (n=154)



The next question asked respondents if they felt that entrances and exits to the park are clearly marked. The overwhelming majority (91%) of respondents indicated that they are marked clearly. The results are shown in Figure 26.

Figure 26. Are the entrances and exits to this park clearly marked? (n=150)



The following question asked respondents if there are too many cars traveling within the park. *The* majority (91%) said no, there are not too many cars traveling within the park. The results are shown in Figure 27.

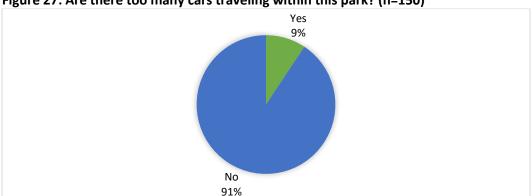


Figure 27: Are there too many cars traveling within this park? (n=150)

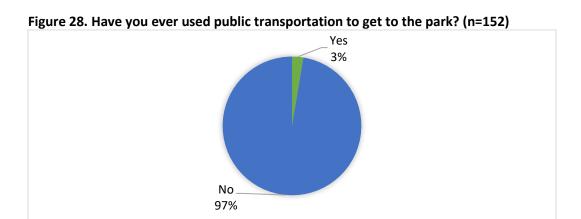
Question 9 asked respondents to select safety concerns in the neighborhood surrounding the park. The majority of respondents reported that there are no concerns present (62%). Poor lighting was the next most popular response (18%). Complete results are shown in Table 10.

Table 10. Which of the following safety concerns are present in the neighborhood surrounding the park? (n=150)*

Safety Concern	Percent of Total
Poor lighting	18%
Heavy traffic	8%
Poorly maintained properties	5%
Excessive littering	5%
Vandalism	3%
Excessive noise	2%
Vacant or dilapidated buildings	1%
Graffiti	0%
Lack of eyes on the street	0%
Evidence of threatening persons or behaviors	0%
Other	4%
None Present	62%

^{*}The percentages are based on the total survey population (n=154). Respondents could select more than one answer choice for this question or choose not to respond.

The next question asked if respondents had ever used public transportation to get to the park. *The* overwhelming majority said no, they have never used public transportation to get to the park (97%).



Question 11 asked respondents to rate the quality of walking paths within the park on a five-category scale. Almost 90% of respondents indicated that the paths were in good, very good, or excellent condition. Zero respondents said the paths are in poor condition. The complete results are shown in Figure 29.

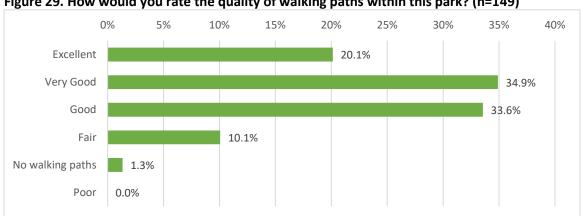


Figure 29. How would you rate the quality of walking paths within this park? (n=149)

The following question asked respondents how often they use vehicular parking spaces within the park. Nearly half of respondents almost always use a space (48%), and 11% of respondents never or almost never use a parking space in the park. Complete results are shown below in Figure 30.

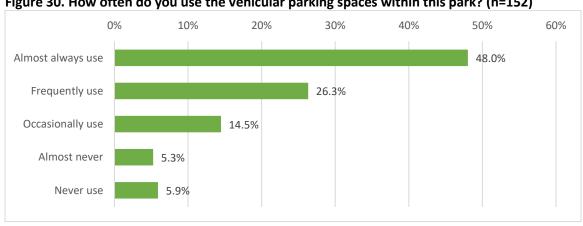
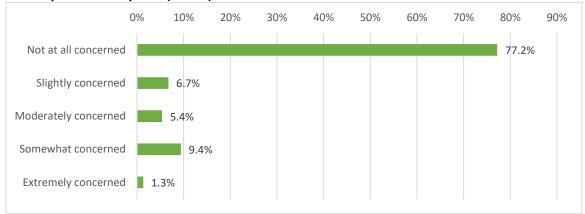


Figure 30. How often do you use the vehicular parking spaces within this park? (n=152)

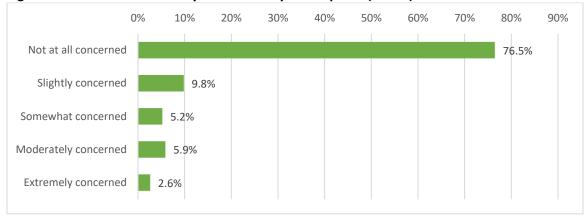
Next, respondents were asked about conflicts between bicyclists, joggers, and walkers on shared paths within the park. The majority of respondents were not concerned about conflicts (77%). Almost 10% of respondents were somewhat concerned. Complete results are in Figure 31.

Figure 31. How concerned are you with potential conflicts between bicyclists, joggers, and walkers on shared paths in this park? (n=149)



Respondents were then asked how concerned they are about safety in the park. The majority of respondents (76%) were not concerned about safety at all. Complete results are shown in Figure 32.

Figure 32. How concerned are you with safety in this park? (n=153)



Respondents were asked how safe they would feel in the park at night. The most common choice indicated that respondents are never in the park at night (44%). Almost one third of respondents indicated that they would feel safe or very safe in Riverside County Park at night. Figure 33 shows the complete results.

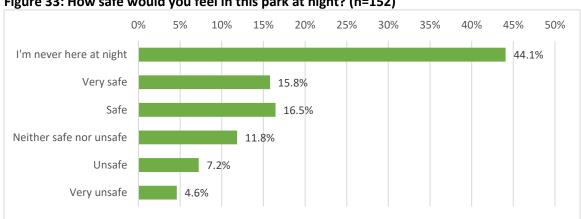


Figure 33: How safe would you feel in this park at night? (n=152)

The next question asked respondents to rate the lighting in the park. Again the most common choice indicated that respondents are never in the park at night (47.68%). Almost 20% of respondents rated the lighting as poor. The full results are shown in Figure 34.

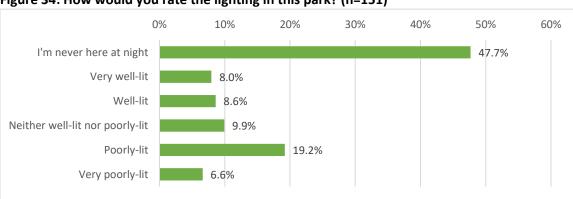


Figure 34: How would you rate the lighting in this park? (n=151)

Next, respondents were asked to select reasons they feel unsafe in the park. The majority of respondents do not feel unsafe in the park (62%). Lack of lighting (13%), lack of police presence (7%), a dislike of darkness (6%), and "other" (5%) were the most common safety concerns in Riverside County Park. Table 11 shows the complete results.

Table 11. Concerning safety, for what reasons do you feel unsafe in this park? (n=143)*

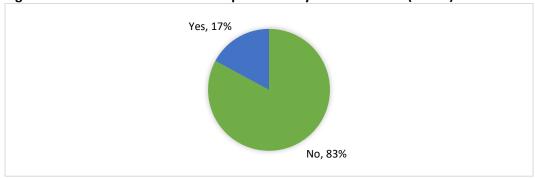
Safety Concern	Percent of Total
Lack of lighting	13%
Lack of police presence	7%
I do not like darkness	6%
Drug users or drug dealers	5%
Teenagers gathering	3%
Fear of violent or sex crimes	3%
Mugging or attack	2%
Fear of bullying	1%
Beggars/panhandlers	0%
Drunken activity	0%
I do not feel unsafe in the park	62%

Other
Other

^{*}The percentages are based on the total survey population (n=154). Respondents could select more than one answer choice for this question or choose not to respond.

When asked if there are areas within Riverside County Park where they feel unsafe, most respondents said no (83%). Of those who said yes, the most common areas of concern were by the river and on the walking path. Most common reasons for concern included poor lighting and animals.

Figure 35. Are there areas within the park where you feel unsafe? (n=146)



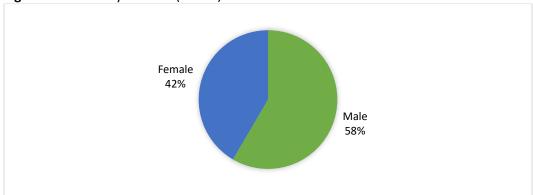
Respondents were asked to write in their home zip code. Twenty-nine different zip codes were represented, and 70% of respondents came from the same 4 zip codes (07071, 07031, 07032, and 07070). Table 12 shows the most frequently represented zip codes and their municipalities.

Table 12: What is your home zip code? (n=145) (Top 5 most frequent shown)

Zip Code	Municipality	Frequency
07071	Lyndhurst	35.66%
07031	North Arlington	16.08%
07032	Kearny	10.49%
07070	Rutherford	6.99%
07109	Bellville	5.59%

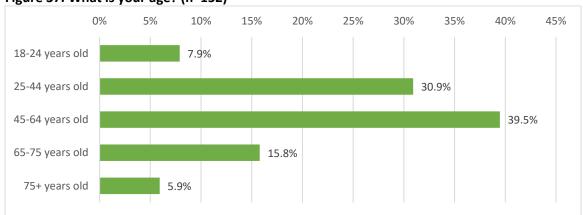
Respondents were then asked their sex: male, female, or other. Almost 60% of respondents were male, and zero respondents selected other. The results are shown in Figure 36.

Figure 36. What is your sex? (n=154)



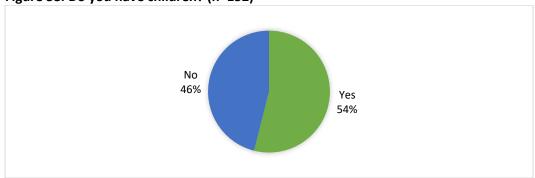
Respondents were asked to select their age, which was grouped into five categories. *Most commonly*, respondents were between 45 and 64 years old (39.47%). The results are shown in Figure 37.

Figure 37. What is your age? (n=152)



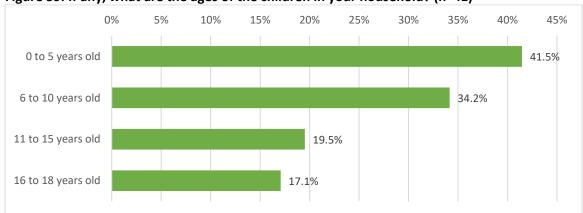
The next question asked respondents if they have children; 54% answered yes. The complete results are shown in Figure 38.

Figure 38. Do you have children? (n=152)



Respondents were then asked to select the ages of their children who were under 18, grouped into four categories. 75% of those with children had kids that were 10 years old and younger. The complete results are shown in Figure 39.

Figure 39. If any, what are the ages of the children in your household? (n=41)*



^{*}Respondents could select more than one answer. Percentages are based on total number of responses to this question only (n=41).

When asked about their race, the majority of the sample selected White as their racial category (81.16%). The results are shown in Figure 40.

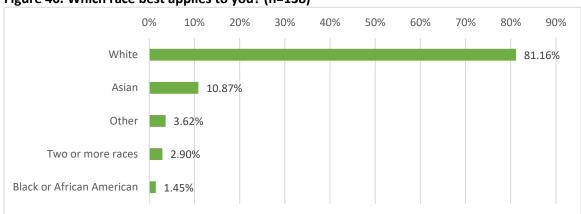


Figure 40. Which race best applies to you? (n=138)

Figure 41 shows that 20% of the sample was Hispanic or Latino.

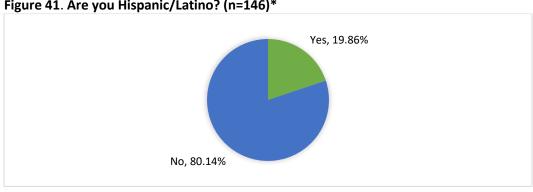


Figure 41. Are you Hispanic/Latino? (n=146)*

The last question asked respondents their annual household income. The most frequently reported income was between \$50,000 and \$74,999 annually (25.60%). The full results are shown in Figure 42.

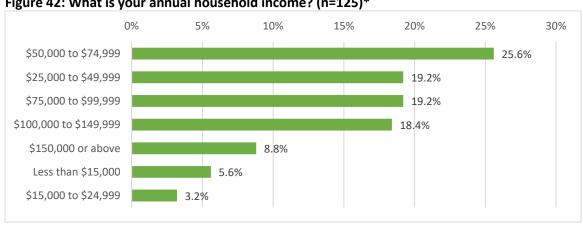


Figure 42: What is your annual household income? (n=125)*

Overpeck Park

The follow figures report data gathered by survey respondents in Overpeck Park (143 respondents). Data was collected in Area 1, the Teaneck Creek Conservancy (8 respondents) and Area 3, Ridgefield (135 respondents).

The first question asks how often respondents visit Overpeck Park. Most respondents visit either weekly (32%) or daily (27%). Almost 15% of respondents indicated that it was their first visit to the park. Complete results are shown in Figure 43.

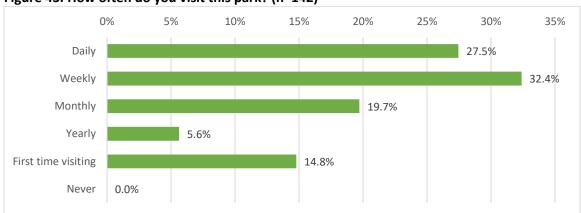


Figure 43. How often do you visit this park? (n=142)

The next question asked respondents to select all applicable reasons for visiting this park. The majority of respondents go to the park to exercise (68%). The next most common reasons were to relax (32%), to spend time with family and/or friends (21%), and to attend events (20%). Of those who selected "other" (11%), the most commonly written-in reason for visiting the park was to walk the dog. Table 13 shows full results.

Table 13. Why do you visit the park? (n=142)*

Reason for visit	Percent of Respondents
To exercise (run, walk, jog, yoga)	68%
To relax	32%
To spend time with family and/or friends	21%
To attend events	20%
To bring my children to play	13%
To sightsee	11%
To ride my bicycle	8%
To volunteer	6%
To play organized sports	5%
To go fishing	3%
To skate	2%
To picnic/BBQ	2%
Other	11%

^{*}The percentages are based on the total survey population (n=143). Respondents could select more than one answer choice for this question or choose not to respond.

The following question asked respondents to indicate what types of events they frequently attend at Overpeck Park. The most common responses indicated that respondents attend athletic events (27%) and family/children-focused events (27%). The results are shown in Table 14.

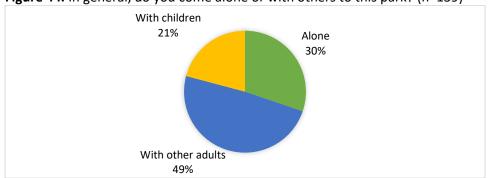
Table 14. What types of events do you frequently attend at this park? (n=122)*

Type of Event	% of total respondents
Family and children-focused	27%
Athletic	27%
Music	22%
Ethnic/Cultural	12%
Art	8%
Other	22%

^{*}The percentages are based on the total survey population (n=143). Respondents could select more than one answer choice for this question or choose not to respond.

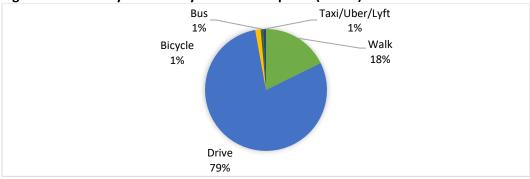
The next question asked with whom respondents go to the park. Nearly half (49%) of respondents reported generally going to the park with other adults. The results are shown in Figure 44.

Figure 44. In general, do you come alone or with others to this park? (n=139)



The following question asked respondents to choose one mode of transportation that they normally use to travel to the park. The overwhelming majority drove to the park (80%). The survey included the options of train and skate/skateboard, and zero respondents chose these options. Only one respondent took a bus or a taxi/Uber/Lyft, and two respondents normally bicycle to the park. Results excluding those categories are displayed in in Figure 45.

Figure 45. How do you normally travel to the park? (n=141)



Question 6 asked how far respondents travel to visit the park on average. The highest number of respondents indicated that they travel over five miles to get to the park (37%). The next most common responses were ½ to one mile (24%), and one mile (24%). Complete results are shown in Figure 46.

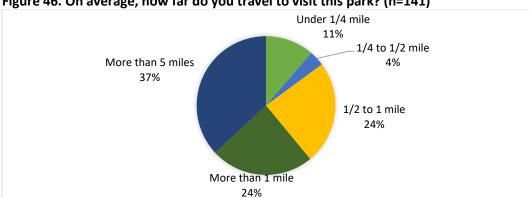


Figure 46. On average, how far do you travel to visit this park? (n=141)

The next question asked if entrances and exits to the park are clearly marked. *The overwhelming* majority (89%) of respondents indicated that they are marked clearly. The results are shown in Figure 47.

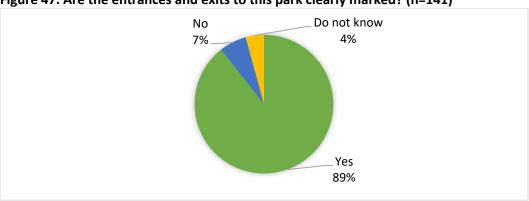


Figure 47. Are the entrances and exits to this park clearly marked? (n=141)

The following question asked respondents if there are too many cars traveling within the park. The majority (91%) said no, there are not too many cars traveling within the park (91%).

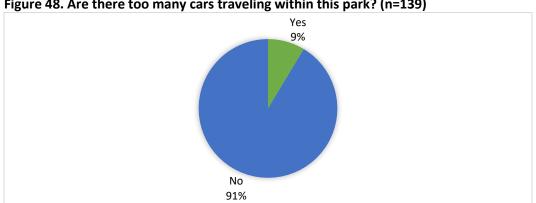


Figure 48. Are there too many cars traveling within this park? (n=139)

Question nine asked respondents to select safety concerns in the neighborhood surrounding the park. The majority of respondents reported that there are none present (59%). Poor lighting was the next most popular response (11%), followed by heavy traffic (10%). Complete results are shown in Table 15.

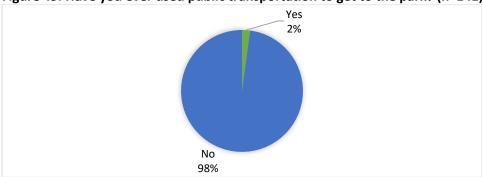
Table 15. Which of the following safety concerns are present in the neighborhood surrounding the park? (n=132)*

Safety Concern	Percent of Total
Poor lighting	11%
Heavy traffic	10%
Excessive littering	3%
Lack of eyes on the street	3%
Excessive noise	2%
Poorly maintained properties	2%
Evidence of threatening persons or behaviors	2%
Vandalism	1%
Graffiti	0%
Vacant or dilapidated buildings	0%
Other	3%
None Present	59%

^{*}The percentages are based on the total survey population (n=143). Respondents could select more than one answer choice for this question or choose not to respond.

The next question asked if respondents had ever used public transportation to get to the park. The overwhelming majority said no, they have never used public transportation to get to the park (98%). Full results are in Figure 49.

Figure 49. Have you ever used public transportation to get to the park? (n=141)



Question 11 asked respondents to rate the quality of walking paths within the park on a five-category scale. 85% of respondents indicated that the paths were in very good or excellent condition. Zero respondents said they are in poor condition. The complete results are shown in Figure 50.

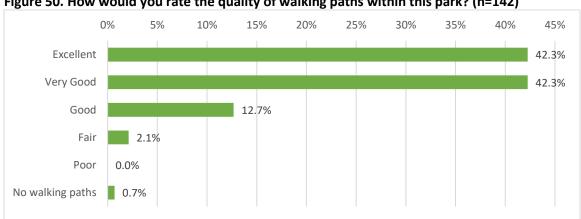


Figure 50. How would you rate the quality of walking paths within this park? (n=142)

The following question asked respondents how often they use vehicular parking spaces within the park. Almost three out of four respondents either almost always use or frequently use a vehicular parking space (72.86%). 11% of respondents never use a space. Complete results are shown below in Figure 51.

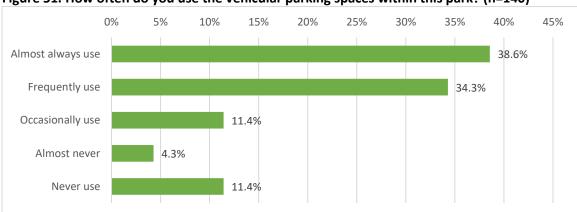
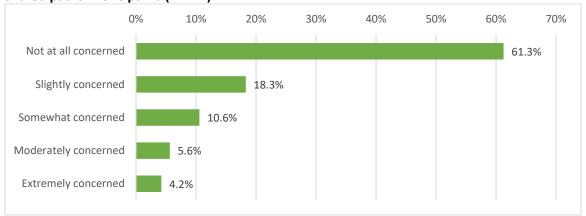


Figure 51. How often do you use the vehicular parking spaces within this park? (n=140)

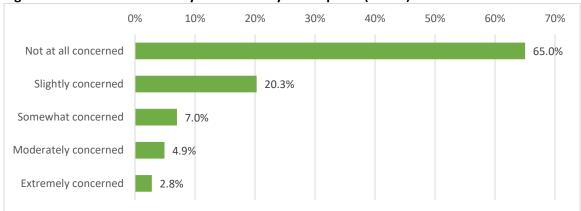
Next, respondents were asked about conflicts between bicyclists, joggers, and walkers on shared paths within the park. The majority of respondents were not concerned about conflicts between bicyclists, joggers, and walkers (61.27%). 11% of respondents were somewhat concerned. Complete results are in Figure 52.

Figure 52. How concerned are you with potential conflicts between bicyclists, joggers, and walkers on shared paths in this park? (n=142)



Respondents were then asked how concerned they are about safety in the park. The majority of respondents were not concerned about safety (65.03%). 20% of respondents were slightly concerned about safety in Overpeck Park. Complete results are shown in Figure 53.

Figure 53. How concerned are you with safety in this park? (n=133)



Question 15 asked respondents how safe they would feel in the park at night. The most common choice indicated that respondents are never in the park at night (35.46%), followed by respondents who reported that they would feel very safe (21.28%) and safe (23.40%) in Overpeck Park at night. Figure 54 shows the complete results.

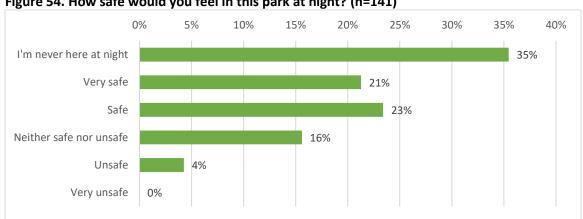


Figure 54. How safe would you feel in this park at night? (n=141)

The following question asked respondents to rate the lighting in the park. Again the most common choice indicated that respondents are never in the park at night (42%). 28% of respondents rated the park as well-lit. The full results are shown in Figure 55.

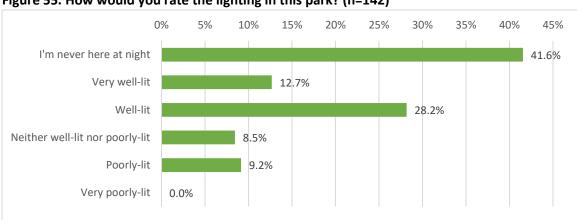


Figure 55. How would you rate the lighting in this park? (n=142)

Next, respondents were asked to select reasons they feel unsafe in the park. Slightly more than half of respondents do not feel unsafe in the park (52%). Lack of police presence (11%), lack of lighting (10%), a dislike of darkness (7%), and "other" (7%) were the most common safety concerns in Overpeck Park.

Table 16. Concerning safety, for what reasons do you feel unsafe in this park? (n=130)*

<i>"</i>	
Safety Concern	Percent of Total
Lack of police presence	11%
Lack of lighting	10%
I do not like darkness	7%
Drug users or drug dealers	4%
Drunken activity	3%
Teenagers gathering	3%
Mugging or attack	3%
Fear of violent or sex crimes	3%
Beggars/panhandlers	0%
Fear of bullying	0%
I do not feel unsafe in the park	52%
Other	7%

When asked if there are areas within Overpeck Park where they feel unsafe, the overwhelming majority of respondents said no (91%). Of those who said yes, areas of concern that were mentioned included the baseball fields, the fish pond, and areas without lighting. The reasons behind the concerns included low levels of pedestrian traffic and low lighting. The results are shown in figure 56.

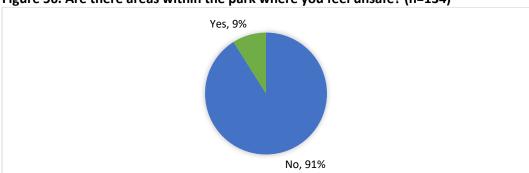


Figure 56. Are there areas within the park where you feel unsafe? (n=134)

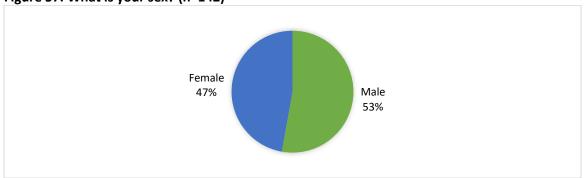
Respondents were asked to write in their home zip code. Fifty-seven different zip codes were represented. Table 17 shows the most frequently represented zip codes and their corresponding municipalities.

Table 17. What is your home zip code? (n=131) (Top 5 most frequent shown)

Zip Code	Municipality	Frequency
07066	Clark	14.50%
07605	Leonia	10.69%
07650	Palisades Park	6.87%
07601	Hackensack	6.11%
07660	Ridgefield Park	4.58%

Respondents were then asked their sex: male, female, or other. 53% of respondents were male, 47% female, and zero respondents selected other. The results are shown in Figure 57.

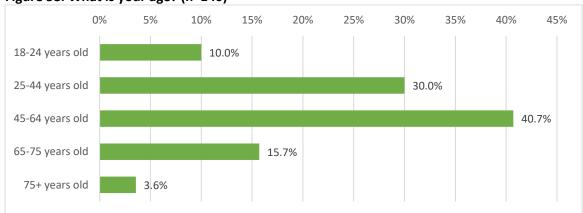
Figure 57. What is your sex? (n=142)



Respondents were asked to select their age, which was grouped into 5 categories. Most commonly respondents were between 45 and 64 years old (41%). The results are shown in Figure 58.

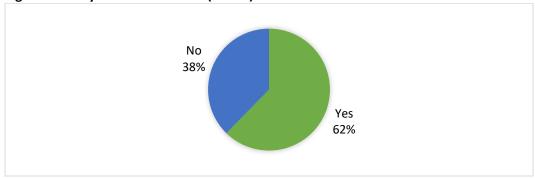
^{*}The percentages are based on the total survey population (n=143). Respondents could select more than one answer choice for this question or choose not to respond.

Figure 58. What is your age? (n=140)



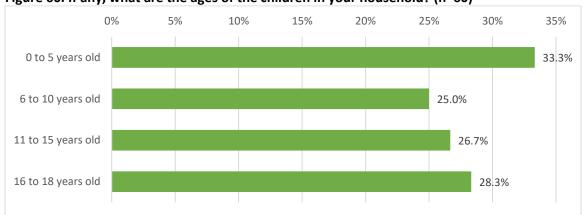
The next question asked respondents if they have children; 62.32% answered yes. The complete results are shown in Figure 59.

Figure 59. Do you have children? (n=138)



Respondents were then asked to select the ages of their children who were under 18, grouped into four categories. One third of respondents had children five years old and younger. The complete results are shown below in Figure 60.

Figure 60. If any, what are the ages of the children in your household? (n=60)*



^{*}Respondents could select more than one answer. Percentages are based on total number of responses to this question only (n=60).

As Figure 61 shows, the majority of question 24 respondents selected White as their racial category (61.72%). 20% of respondents selected Asian.

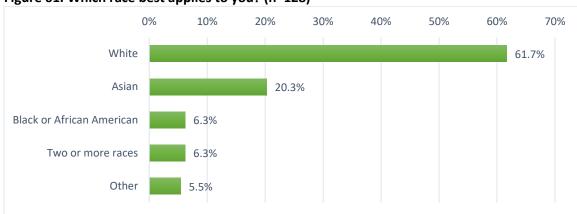


Figure 61. Which race best applies to you? (n=128)

Figure 62 shows that 18.18% of respondents identified as Hispanic or Latino.

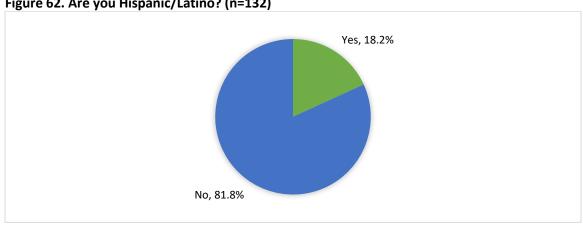
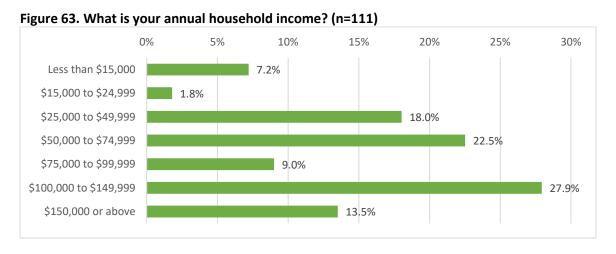


Figure 62. Are you Hispanic/Latino? (n=132)

The last question asked respondents their annual household income. 41.44% of respondents to this question have an annual household income of \$100,000 or above. The full results are shown in Figure 63.



Van Saun County Park

The following figures report data from Van Saun County Park. 303 surveys were distributed in four areas: the Van Saun County Park Zoo and parking lot (136 surveys), Van Saun County Park North (83 surveys), Van Saun County Park South (31 surveys), and the Van Saun County Park Winter Wonderland (53 surveys).

The first question asks how often respondents visit Van Saun County Park. The most common selection indicated that respondents visit the park on a monthly basis (36%). Only 8% of respondents reported going to the park daily. Complete results are shown in Figure 64.

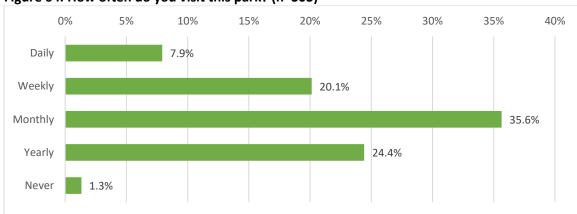


Figure 64. How often do you visit this park? (n=303)

The next question asked respondents to select all applicable reasons for visiting this park. *More than* half of respondents go to the park to bring their children to play (60%). The next most common responses were to spend time with family and friends (32%), to exercise (28%), to relax (28%), and to attend events (22%). Respondents who selected "other" (17%) primarily wrote that they visit the park to go to the zoo or to bring their dog. The complete results are shown in Table 18.

Table 18. Why do you visit the park? (n=301)*

Reason for visit	Percent of Respondents
To bring my children to play	60%
To spend time with family and/or friends	32%
To exercise (run, walk, jog, yoga)	28%
To relax	28%
To attend events	22%
To sightsee	11%
To ride my bicycle	8%
To picnic/BBQ	5%
To skate	3%
To play organized sports	1%
To go fishing	1%
To volunteer	0%
Other	17%

^{*}The percentages are based on the total survey population (n=303). Respondents could select more than one answer choice for this question or choose not to respond.

The following question asked respondents to indicate what types of events they frequently attend at Van Saun County Park. The overwhelming majority (70%) of respondents frequently attend family and children-focused events at Van Saun County Park. The complete results are in Table 19.

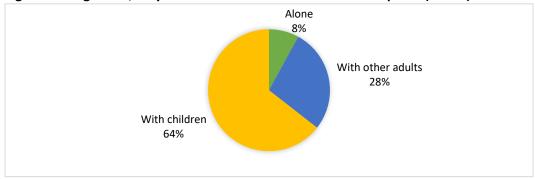
Table 19. What types of events do you frequently attend at this park? (n=285)*

Type of Event	% of total respondents
Family and children-focused	70%
Ethnic/Cultural	9%
Art	8%
Athletic	8%
Music	5%
Other	12%

^{*}The percentages are based on the total survey population (n=303). Respondents could select more than one answer choice for this question or choose not to respond.

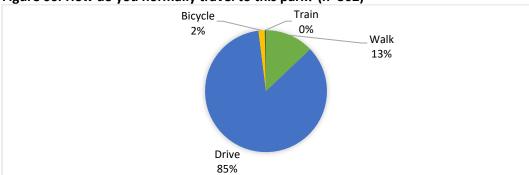
The next question asked with whom respondents go to the park. About two-thirds of respondents go to the park with children (64%). Results are displayed in Figure 65.

Figure 65. In general, do you come alone or with others to this park? (n=301)



The next question asked respondents to pick one mode of transportation that they normally use to travel to the park. The overwhelming majority drove to the park (85%). The survey included the options of bus, taxi/Uber/Lyft, and skate/skateboard, and zero respondents chose these options. Results excluding those categories are displayed in in Figure 66.

Figure 66. How do you normally travel to this park? (n=302)



Question 6 asked how far respondents travel to visit the park on average. Less than 20% of respondents travel less than one mile to get to the park. 44% of respondents travel more than five miles. Complete results are shown in Figure 67.

Under 1/4 mile 1/4 to 1/2 mile 6% 4% 1/2 to 1 mile More than 5 miles 8% 44% More than 1 mile 38%

Figure 67. On average, how far do you travel to visit this park? (n=301)

The next question asked if entrances and exits to the park are clearly marked. The majority of respondents (83%) indicated that they are marked clearly. The results are shown in Figure 68.

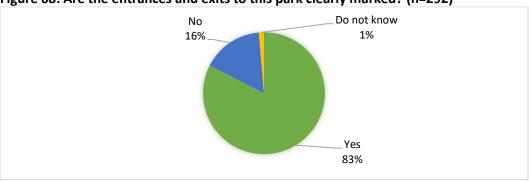
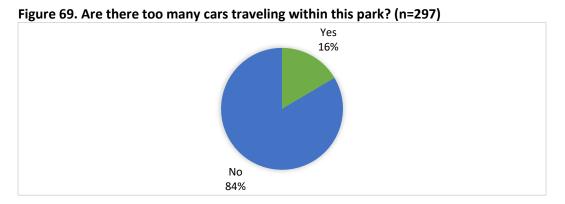


Figure 68: Are the entrances and exits to this park clearly marked? (n=292)

The following question asked respondents if there are too many cars traveling within the park. The majority (84%) said no, there are not too many cars traveling within the park. The results are shown in Figure 69.



Question nine asked respondents to select safety concerns in the neighborhood surrounding the park. The majority of respondents reported that there are none present (69%). Heavy traffic (14%) and poor lighting (9%) were the next most popular responses. Complete results are shown in Table 20.

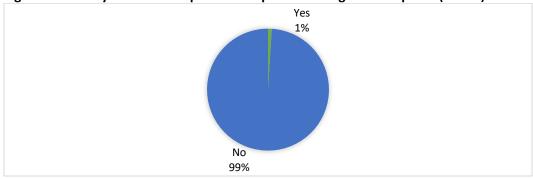
Table 20. Which of the following safety concerns are present in the neighborhood surrounding the park? (n=291)*

Safety Concern	Percent of Total
Heavy traffic	14%
Poor lighting	9%
Excessive noise	3%
Lack of eyes on the street	3%
Poorly maintained properties	1%
Vandalism	1%
Excessive littering	1%
Evidence of threatening persons or behaviors	1%
Graffiti	0%
Vacant or dilapidated buildings	0%
Other	3%
None Present	69%

^{*}The percentages are based on the total survey population (n=303). Respondents could select more than one answer choice for this question or choose not to respond.

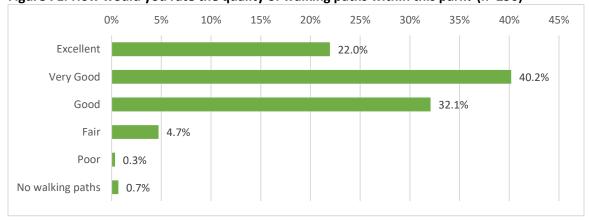
The next question asked if respondents had ever used public transportation to get to the park. The overwhelming majority said no, they have never used public transportation to get to the park (99%).

Figure 70. Have you ever used public transportation to get to the park? (n=152)



Question 11 asked respondents to rate the quality of walking paths within the park on a five-category scale. 94% of respondents indicated that the paths were in good, very good, or excellent condition.

Figure 71. How would you rate the quality of walking paths within this park? (n=296)



The following question asked respondents how often they use vehicular parking spaces within the park. Nearly half of respondents almost always use a space (46%), and 33% of respondents frequently use a parking space in the park. Complete results are shown below in Figure 72.

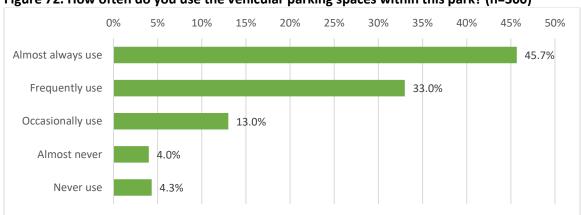
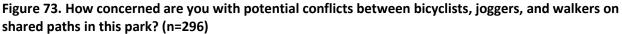
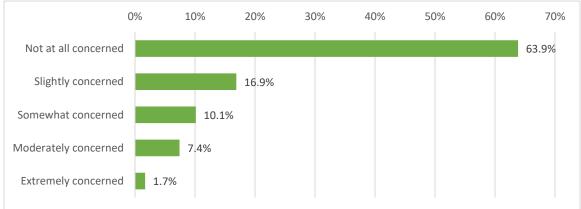


Figure 72. How often do you use the vehicular parking spaces within this park? (n=300)

Next, respondents were asked about conflicts between bicyclists, joggers, and walkers on shared paths within the park. The majority of respondents were not concerned about conflicts at all (64%). 7% of respondents were moderately concerned about conflicts. Complete results are in Figure 73.





Respondents were then asked how concerned they are about safety in the park. The majority of respondents were not concerned about safety at all (70%). 16% were slightly concerned about safety.

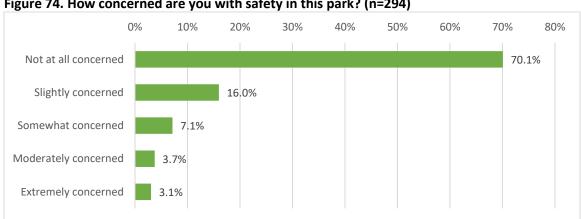


Figure 74. How concerned are you with safety in this park? (n=294)

Question 15 asked respondents how safe they would feel in the park at night. The most common choice indicated that respondents are never in the park at night (45%). More than one third (35%) of respondents indicated that they would feel safe or very safe in Van Saun County Park at night.

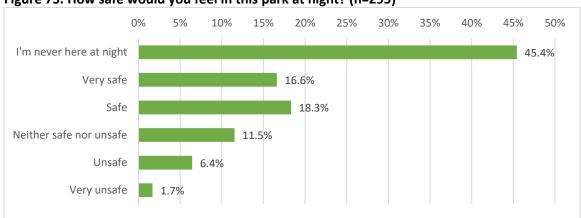


Figure 75. How safe would you feel in this park at night? (n=295)

The next question asked respondents to rate the lighting in the park. The majority of respondents are not in the park at night (55%). 17% of respondents indicated that the park is well-lit.

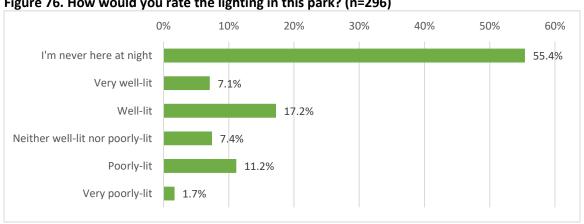


Figure 76. How would you rate the lighting in this park? (n=296)

Next, respondents were asked to select reasons they feel unsafe in the park. The majority of respondents do not feel unsafe in the park (71%). Lack of lighting (8%) and a lack of police presence (7%) were the most common safety concerns in Van Saun County Park. Table 21 shows the complete results.

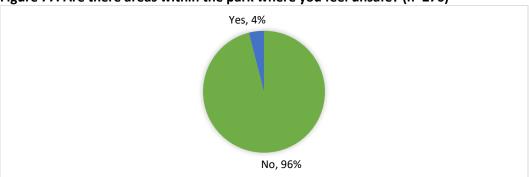
Table 21. Concerning safety, for what reasons do you feel unsafe in this park? (n=284)*

Safety Concern	Percent of Total
Lack of lighting	8%
Lack of police presence	7%
I do not like darkness	5%
Teenagers gathering	3%
Fear of violent or sex crimes	3%
Drug users or drug dealers	2%
Drunken activity	1%
Fear of bullying	1%
Mugging or attack	1%
Beggars/panhandlers	0%
I do not feel unsafe in the park	71%
Other	4%

^{*}The percentages are based on the total survey population (n=303). Respondents could select more than one answer choice for this question or choose not to respond.

When asked if there are areas within Van Saun County Park where they feel unsafe, the overwhelming majority of respondents said no (96%). Of those who said yes, the most common areas of concern were near the bathrooms and areas with a lot of trees. Most common reasons for concern included poor lighting and isolation. The results are shown in Figure 77.

Figure 77. Are there areas within the park where you feel unsafe? (n=276)



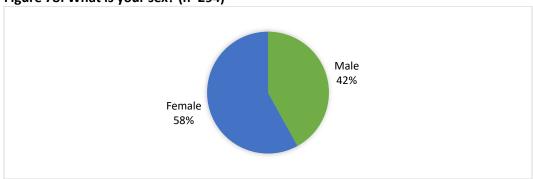
Respondents were asked to write in their home zip code. 107 zip codes were represented, and 32% of respondents came from the five most frequently listed zip codes. Table 22 shows the most frequently represented zip codes and their corresponding municipalities.

Table 22. What is your home zip code? (n=285) (Top 5 most frequent shown)

Zip Code	Municipality	Frequency
07661	River Edge	10.53%
07652	Paramus	7.02%
07646	New Milford	5.96%
07410	Fairlawn	4.56%
07601	Hackensack	4.21%

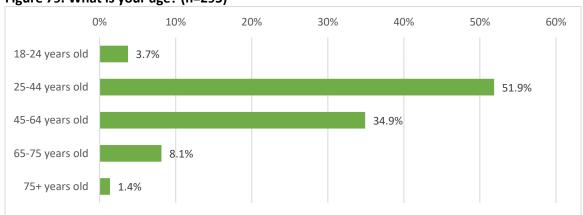
Respondents were then asked their sex: male, female, or other. Almost 60% of respondents were female. One respondent selected other (.34%). The results are shown in Figure 78.

Figure 78: What is your sex? (n=294)



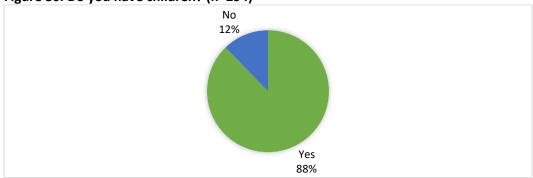
Respondents were asked to select their age, which was grouped into five categories. *More than half of* respondents were between 25 and 44 years old (51.86%). The results are shown in Figure 4.21.

Figure 79. What is your age? (n=295)



The next question asked respondents if they have children; 88% answered yes. The complete results are shown in Figure 80.

Figure 80. Do you have children? (n=294)



Respondents were then asked to select the ages of their children who were under 18, grouped into four categories. Respondents could select as many categories as were applicable, resulting in 207 selections. 61% of respondents with children had children aged 5 years and younger. The results are shown below in Figure 81.

0% 10% 20% 30% 40% 50% 60% 70% 0 to 5 years old 61.4% 6 to 10 years old 42.5% 11 to 15 years old 10.6% 16 to 18 years old 9.7%

Figure 81. If any, what are the ages of the children in your household? (n=207)*

As Figure 82 shows, the majority of the sample selected White as their racial category (76.07%).

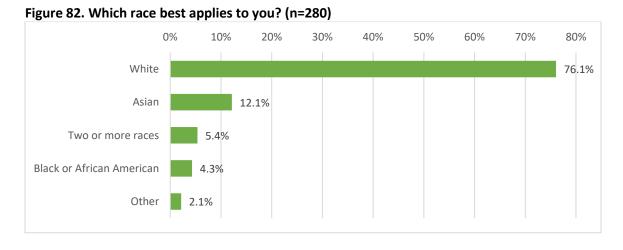
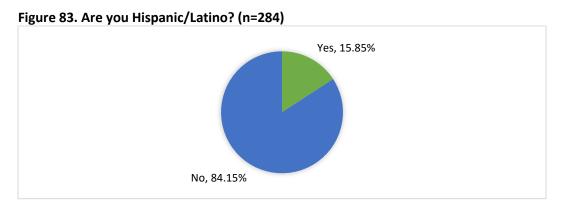
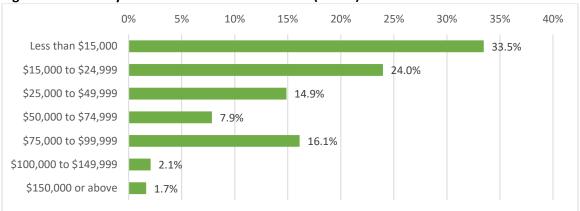


Figure 83 shows that 15.85% of the sample identified as Hispanic or Latino.



The last question asked respondents their annual household income. *More than half of respondents* reported a household income of \$100,000 or more annually (57.44%). The full results are shown in Figure 84.





Saddle River County Park

This section contains data gathered in eight locations throughout Saddle River County Park (316 total surveys): Wild Duck Pond Area (70 surveys), Mill Run Area (21 surveys), Glen Rock Area (48 surveys), Dunkerhook Area (24 surveys), Maple Glen Area (35 surveys), Fair Lawn Area (28 surveys), Otto Pehle Area (51 surveys), and Rochelle Park Area (38 surveys).

The first question asks how often respondents visit Saddle River County Park. Almost half of survey respondents visit the park weekly (48.72%), and one-third of respondents (32.69%) visit the park on a daily basis. Complete results are shown in Figure 85.

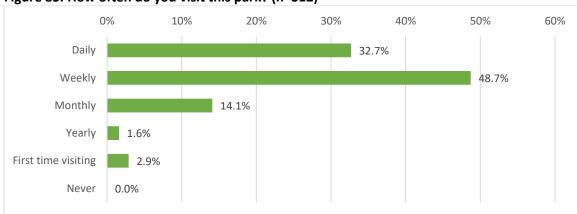


Figure 85. How often do you visit this park? (n=312)

The next question asked respondents to select all applicable reasons for visiting this park. 73% of respondents go to the park to exercise. The next most common responses were to relax (32%), to ride a bicycle (22%), to spend time with family and friends (18%), and "other" (25%). The overwhelming majority of respondents who selected other wrote that they visit the park to go to the dog park. The complete results are shown in Table 23.

Table 23. Why do you visit the park? (n=316)*

Reason for visit	Percent of Respondents
To exercise (run, walk, jog, yoga)	73%
To relax	32%
To ride my bicycle	22%
To spend time with family and/or friends	18%
To bring my children to play	15%
To sightsee	8%
To attend events	2%
To play organized sports	2%
To skate	2%
To go fishing	1%
To volunteer	0%
To picnic/BBQ	2%
Other	25%

^{*}The percentages are based on the total survey population (n=316). Respondents could select more than one answer choice for this question or choose not to respond.

The following question asked respondents to indicate what types of events they frequently attend at Saddle River County Park. Almost one quarter of respondents (23%) frequently attend athletic events here, and 30% of respondents selected "other". The complete results are in Table 24.

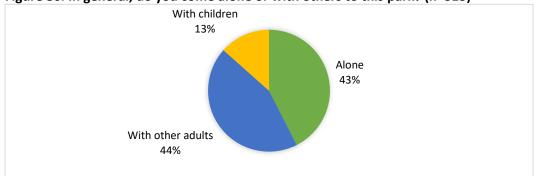
Table 24: What types of events do you frequently attend at this park? (n=219)*

	<i>.</i>	
Type of Event		% of total respondents
Athletic		23%
Family and children-focused		17%
Music		4%
Ethnic/Cultural		3%
Art		2%
Other		30%

^{*}The percentages are based on the total survey population (n=316). Respondents could select more than one answer choice for this question or choose not to respond.

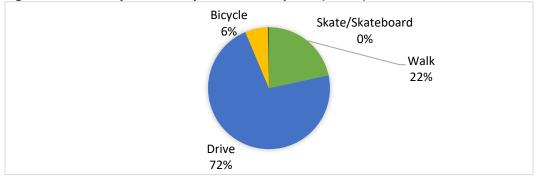
The next question asked with whom respondents go to the park. A similar number of respondents go to the park alone (43%) or with other adults (44%). Results are displayed in Figure 86.

Figure 86. In general, do you come alone or with others to this park? (n=313)



The following question asked respondents to pick one mode of transportation that they normally use to travel to the park. The majority of respondents drove to the park (72%). The survey included the options of bus, train, taxi/Uber/Lyft; zero respondents chose these options. One respondent normally skates or skateboards to the park. Six percent of respondents usually get to the park by bicycling. Results excluding those categories are displayed in in Figure 87.

Figure 87. How do you normally travel to this park? (n=315)



Question six asked how far respondents travel to visit the park on average. Slightly more than two thirds of respondents travel more than one mile to the park (42% travel between 1 and 5 miles, 25% travel more than 5 miles). Complete results are shown in Figure 88.



Figure 88. On average, how far do you travel to visit this park? (n=316)

The next question asked if entrances and exits to the park are clearly marked. The majority of respondents (80%) indicated that they are marked clearly. The results are shown in Figure 5.7.

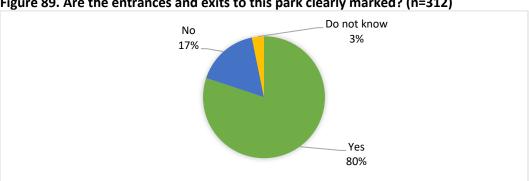


Figure 89. Are the entrances and exits to this park clearly marked? (n=312)

The following question asked respondents if there are too many cars traveling within the park. The majority said no, there are not too many cars traveling within the park (84%). The results are shown in Figure 90.

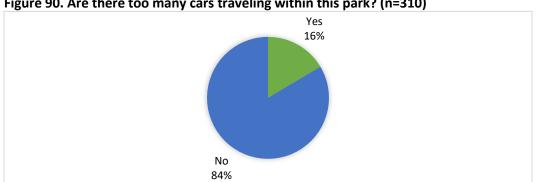


Figure 90. Are there too many cars traveling within this park? (n=310)

Question nine asked respondents to select safety concerns in the neighborhood surrounding the park. The majority of respondents reported that there are none present (59%). Poor lighting (17%) and heavy traffic (14%) were the next most popular responses. Complete results are shown in Table 25.

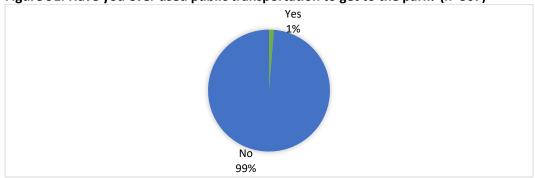
Table 25. Which of the following safety concerns are present in the neighborhood surrounding the park? (n=295)*

Safety Concern	Percent of Total
Poor lighting	17%
Heavy traffic	14%
Excessive littering	6%
Poorly maintained properties	4%
Excessive noise	3%
Vandalism	2%
Graffiti	2%
Lack of eyes on the street	2%
Evidence of threatening persons or behaviors	1%
Vacant or dilapidated buildings	0%
Other	4%
None Present	59%

^{*}The percentages are based on the total survey population (n=316). Respondents could select more than one answer choice for this question or choose not to respond.

The next question asked if respondents had ever used public transportation to get to the park. *The* overwhelming majority said no, they have never used public transportation to get to the park (99%). Results are shown in Figure 91.

Figure 91. Have you ever used public transportation to get to the park? (n=307)



Question 11 asked respondents to rate the quality of walking paths within the park on a five-category scale. 94% of respondents indicated that the paths were in good, very good, or excellent condition. The results are shown in Figure 92.

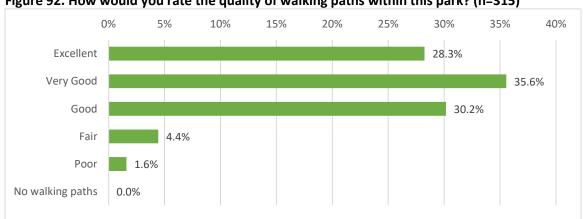


Figure 92. How would you rate the quality of walking paths within this park? (n=315)

The following question asked respondents how often they use vehicular parking spaces within the park. More than 70% of respondents either almost always use or frequently use a vehicular parking space. 10% of respondents never use a parking space in the park. Complete results are shown below in Figure 93.

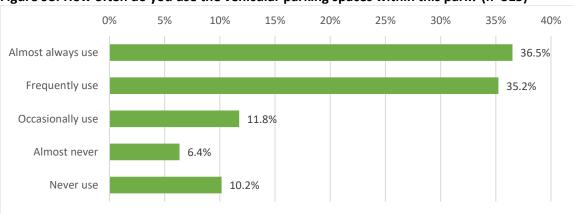
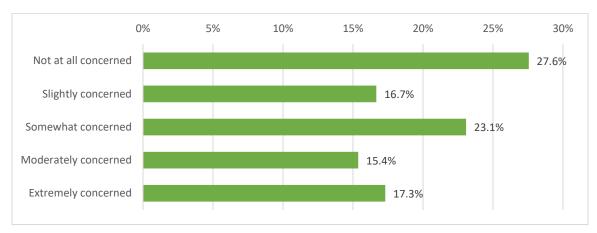


Figure 93. How often do you use the vehicular parking spaces within this park? (n=315)

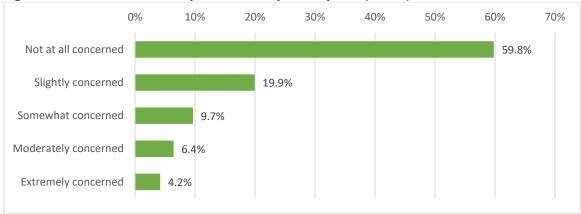
Next, respondents were asked about conflicts between bicyclists, joggers, and walkers on shared paths within the park. Slightly more than one quarter of respondents were not at all concerned (27.56%). One-third of respondents reported being either moderately (15.38%) or extremely concerned (17.31%) about conflicts between bicyclists, joggers, and walkers. Complete results are in Figure 94.

Figure 94. How concerned are you with potential conflicts between bicyclists, joggers, and walkers on shared paths in this park? (n=312)



Respondents were then asked how concerned they are about safety in the park. The majority of respondents were not concerned about safety at all (60%), and 20% of respondents were slightly concerned. Complete results are shown in Figure 95.

Figure 95. How concerned are you with safety in this park? (n=311)



Question 15 asked respondents how safe they would feel in the park at night. The most common choice indicated that respondents are never in the park at night (45.83%). Slightly less than 20% of respondents indicated that they would feel safe in Saddle River County Park at night (17.95%).

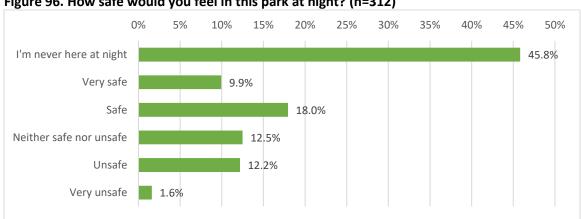


Figure 96. How safe would you feel in this park at night? (n=312)

The next question asked respondents to rate the lighting in the park. The most frequently selected choice indicated that respondents are never in the park at night (54%). One quarter of respondents rated the lighting as either poor (13.23%) or very poor (11.29%). The full results are shown in Figure 97.

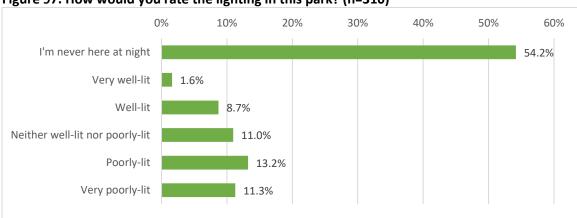


Figure 97. How would you rate the lighting in this park? (n=310)

Next, respondents were asked to select reasons they feel unsafe in the park. The majority of respondents do not feel unsafe in the park (54%). Lack of lighting (16%), lack of police presence (10%), and a dislike of darkness (9%) were the most common safety concerns in Saddle River County Park. Table 26 shows the complete results.

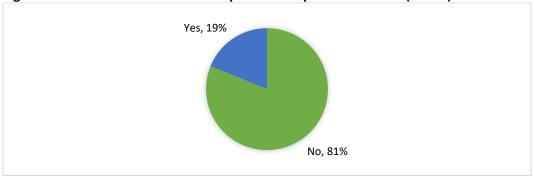
Table 26. Concerning safety, for what reasons do you feel unsafe in this park? (n=288)*

Safety Concern	Percent of Total
Lack of lighting	16%
Lack of police presence	10%
I do not like darkness	9%
Mugging or attack	5%
Teenagers gathering	3%
Fear of violent or sex crimes	3%
Drunken activity	1%
Drug users or drug dealers	1%
Fear of bullying	1%
Beggars/panhandlers	0%
I do not feel unsafe in the park	54%

^{*}The percentages are based on the total survey population (n=316). Respondents could select more than one answer choice for this question or choose not to respond.

When asked if there are areas within Saddle River County Park where they feel unsafe, most respondents said no (81%). Of those who said yes, the most common areas of concern were the paths, the wooded areas, and by the underpass. Most common reasons for concern included poor lighting and speeding bicyclists. The results are shown in Figure 98.

Figure 98. Are there areas within the park where you feel unsafe? (n=287)



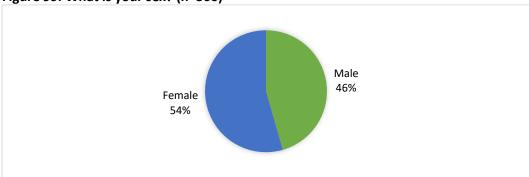
Respondents were asked to write in their home zip code. 61 zip codes were represented, and 55% of respondents came from the six most frequently listed zip codes. Table 27 shows these most frequently represented zip codes and their corresponding municipalities.

Table 27. What is your home zip code? (n=291) (Top 6 most frequent shown)

Zip Code	Municipality	Frequency
07410	Fair Lawn	18.56%
07450	Ridgewood	11.00%
07452	Glen Rock	8.59%
07601	Hackensack	5.50%
07652	Paramus	5.50%
07663	Saddle Brook	5.50%

Respondents were then asked their sex: male, female, or other. 54.25% of respondents were female, and one respondent selected other (.33%). The results are shown in Figure 99.

Figure 99. What is your sex? (n=306)



Respondents were asked to select their age, which was grouped into five categories. Most commonly, respondents were between 45 and 64 years old (45.21%). The results are shown in Figure 100.

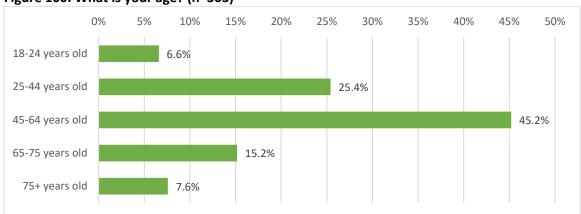


Figure 100. What is your age? (n=303)

The next question asked respondents if they have children; 67% answered yes. The complete results are shown in Figure 101.

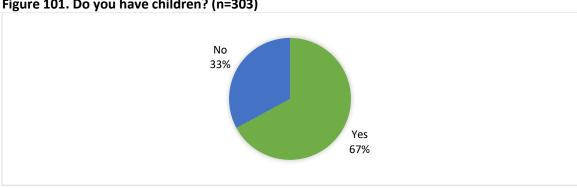


Figure 101. Do you have children? (n=303)

Respondents were then asked to select the ages of their children who were under 18, grouped into 4 categories. Of those with children, 41.82% had children between the ages of 16 and 18. The complete results are shown below in Figure 102.

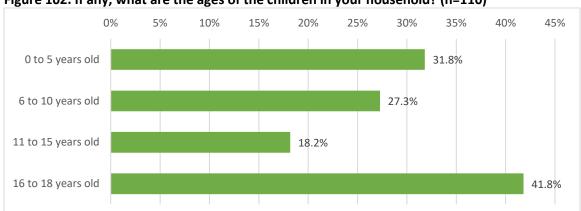


Figure 102. If any, what are the ages of the children in your household? (n=110)*

As Figure 103 shows, the majority of the sample selected White as their racial category (85.22%). Respondents were asked to choose one option.

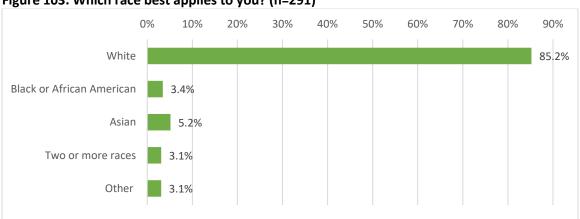
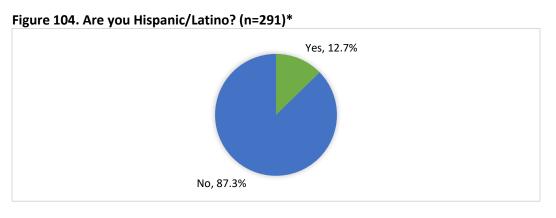


Figure 103. Which race best applies to you? (n=291)*

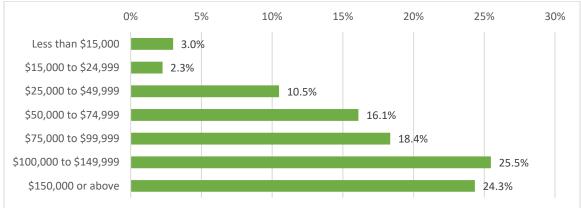
Figure 104 shows that 12.71% of the sample was Hispanic or Latino.



^{*}Respondents could select more than one answer. Percentages are based on total number of responses to this question only (n=110).

The last question asked respondents their annual household income. *Half of respondents' households* earned at least \$100,000 annually (49.81%). The full results are shown in Figure 105.

Figure 105. What is your annual household income? (n=267)*



Hackensack River Park

The following figures report data gathered by 13 surveys taken in Hackensack River Park.

The first question asked respondents how often they visit Hackensack River Park. The most frequent response was daily (31%), followed by weekly and yearly (both 23%). Complete results are shown in Figure 106.

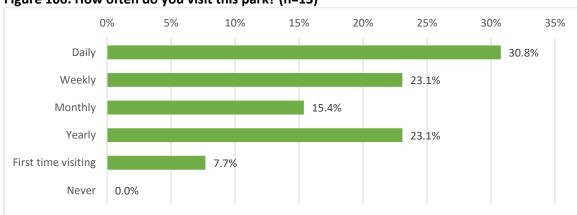


Figure 106. How often do you visit this park? (n=13)

The next question asked respondents to select all applicable reasons for visiting this park. *More than* half of respondents go to the park to relax (54%). Respondents also chose to exercise (38%), to sightsee (23%) and to spend time with family and friends (23%). Of the 38% of respondents who chose other, three were in the park to go to the adjacent mall, one was walking a dog, and one went to **read.** The complete results are shown in Figure 6.2.

Table 28. Why do you visit the park? (n=13)*

Reason for visit	Percent of Respondents
To relax	54%
To exercise (run, walk, jog, yoga)	38%
To sightsee	23%
To spend time with family and/or friends	23%
To picnic/BBQ	1%
To ride my bicycle	0%
To bring my children to play	0%
To attend events	0%
To go fishing	0%
To play organized sports	0%
To skate	0%
To volunteer	0%
Other	38%

^{*}The percentages are based on the total survey population (n=13). Respondents could select more than one answer choice for this question or choose not to respond.

The following question asked respondents to indicate what types of events they frequently attend at Hackensack River Park. Three respondents (23%) attend other types of events than the categories *listed.* The complete results are in Figure 6.3.

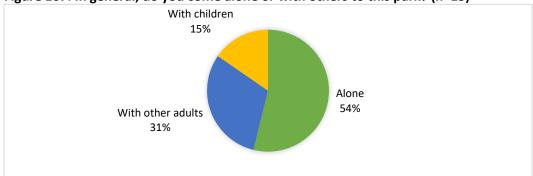
Table 29. What types of events do you frequently attend at this park? (n=7)*

, ,	,	. ,	
Type of Event			% of total respondents
Family and children-focused			15%
Music			8%
Art			8%
Athletic			8%
Ethnic/Cultural			8%
Other			23%

^{*}The percentages are based on the total survey population (n=13). Respondents could select more than one answer choice for this question or choose not to respond.

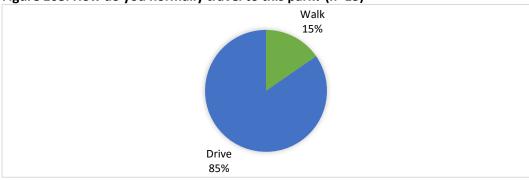
The next question asked with whom respondents go to the park. The majority of respondents go to the park alone (54%). Results are displayed in Figure 107.

Figure 107. In general, do you come alone or with others to this park? (n=13)



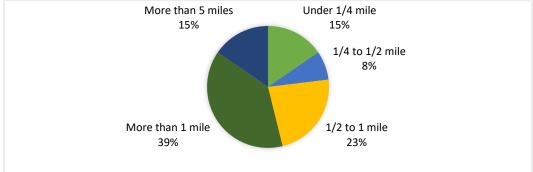
The following question asked respondents to pick one mode of transportation that they normally use to travel to the park. Most respondents drove to the park (85%), and two respondents normally walked (15.38%). Zero respondents selected the options of arriving by bicycle, bus, train, taxi/Uber/Lyft, and skate/skateboard. Results, excluding those categories, are displayed in in Figure 108.

Figure 108. How do you normally travel to this park? (n=13)



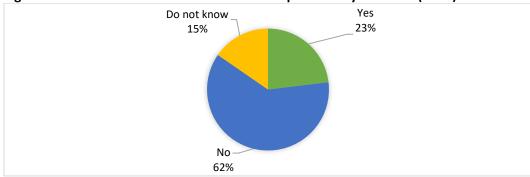
Question six asked how far respondents travel to visit the park on average. The highest number of respondents indicated that they travel more than one mile, but less than five miles (39%). Complete results are shown in Figure 109.

Figure 109. On average, how far do you travel to visit this park? (n=13)



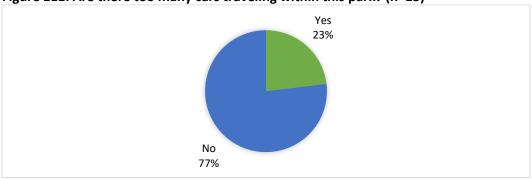
The next question asked if entrances and exits to the park are clearly marked. The majority of respondents (62%) reported that the entrances are not marked clearly. The results are shown in Figure 110.

Figure 110. Are the entrances and exits to this park clearly marked? (n=13)



The following question asked respondents if there are too many cars traveling within the park. *The* majority said no, there are not too many cars traveling within the park (77%). The results are shown in Figure 111.

Figure 111. Are there too many cars traveling within this park? (n=13)



Question nine asked respondents to select safety concerns in the neighborhood surrounding the park. The most commonly selected concern reported that poorly maintained properties (38%) are present in the neighborhood surrounding the park. Complete results are shown in Table 30.

Table 30. Which of the following safety concerns are present in the neighborhood surrounding the park? (n=13)*

Safety Concern	Percent of Total
Poorly maintained properties	38%
Excessive littering	23%
Heavy traffic	23%
Excessive noise	23%
Poor lighting	15%
Graffiti	15%
Vandalism	15%
Vacant or dilapidated buildings	8%
Evidence of threatening persons or behaviors	8%
Lack of eyes on the street	0%
Other	0%
None Present	23%

^{*}The percentages are based on the total survey population (n=13). Respondents could select more than one answer choice for this question or choose not to respond.

The next question asked if respondents had ever used public transportation to get to the park. All (100%) respondents said no, they have never used public transportation to get to the park. This is shown in Figure 112.

Figure 112. Have you ever used public transportation to get to the park? (n=13)



Question 11 asked respondents to rate the quality of walking paths within the park on a five-category scale. Zero respondents said the paths were in excellent condition. Nearly one third of respondents indicated that the paths were in poor condition (30.77%). The complete results are shown in Figure 113.

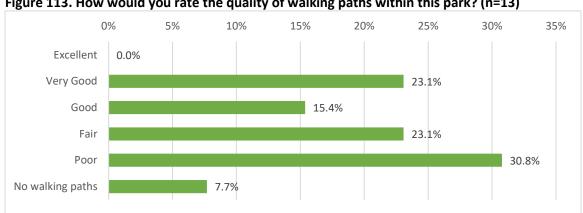


Figure 113. How would you rate the quality of walking paths within this park? (n=13)

The following question asked respondents how often they use vehicular parking spaces within the park. Nine of the thirteen respondents almost always or frequently use vehicular parking spaces (69%). Results are shown below in Figure 6.12.

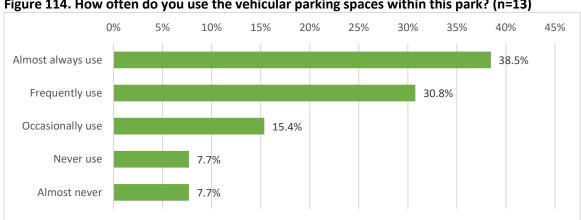
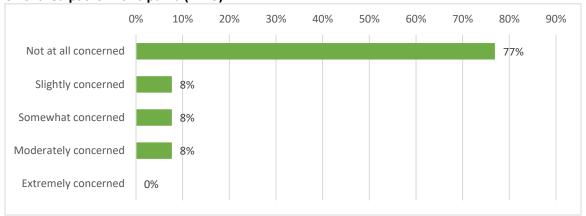


Figure 114. How often do you use the vehicular parking spaces within this park? (n=13)

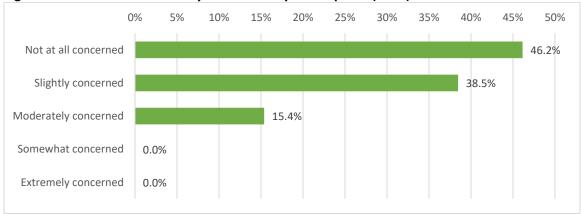
Next, respondents were asked about conflicts between bicyclists, joggers, and walkers on shared paths within the park. Most respondents were not concerned about conflicts (77%). The results are in Figure 115.

Figure 115. How concerned are you with potential conflicts between bicyclists, joggers, and walkers on shared paths in this park? (n=13)



Respondents were then asked how concerned they are about safety in the park. Slightly less than half (46.15%) of respondents were not at all concerned about safety; two respondents (15.38%) were moderately concerned about safety. Complete results are shown in Figure 116.

Figure 116. How concerned are you with safety in this park? (n=13)



Respondents were asked how safe they feel in the park at night. The most common choice indicated that respondents are never in the park at night (46%). One respondent (7.68%) said they would feel very safe. Figure 117 shows the complete results.

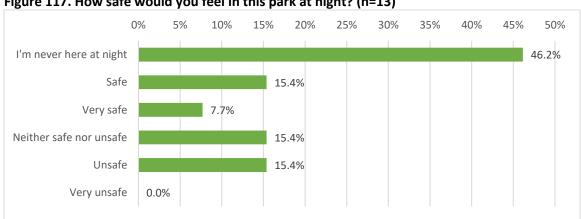


Figure 117. How safe would you feel in this park at night? (n=13)

The following question asked respondents to rate the lighting in the park. Again the most common choice indicated that respondents are never in the park at night (53.85%). The remaining responses were divided equally between well-let (15.38%), neither well-lit nor poorly-lit (15.38%), and very poorly-lit (15.38%).

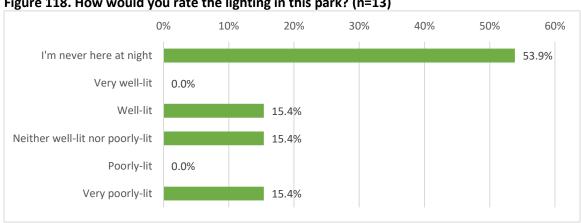


Figure 118. How would you rate the lighting in this park? (n=13)

Next, respondents were asked to select reasons they feel unsafe in the park. The most popular choice of respondents indicated that they do not feel unsafe in the park (46%). Lack of police presence (31%) was a concern in Hackensack River Park. Table 31 shows the complete results.

Table 31 Concerning safety, for what reasons do you feel unsafe in this park? (n=13)*

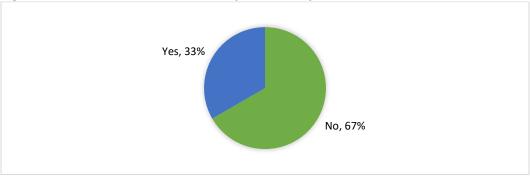
Safety Concern	Percent of Total
Lack of police presence	31%
I do not like darkness	8%
Mugging or attack	8%
Lack of lighting	8%
Drunken activity	0%
Teenagers gathering	0%
Drug users or drug dealers	0%
Fear of bullying	0%
Fear of violent or sex crimes	0%
Beggars/panhandlers	0%

I do not feel unsafe in the park	46%
Other	8%

^{*}The percentages are based on the total survey population (n=13). Respondents could select more than one answer choice for this question or choose not to respond.

When asked if there are areas within Hackensack River Park where the survey respondents feel unsafe, one-third of respondents said yes (33%). Those who said yes reported the southern corner of the park, the parking garage at night, and on the trail due to idling cars and persons, lack of light, and overgrowth of vegetation. The results are shown in Figure 119.

Figure 119. Are there areas within the park where you feel unsafe? (n=13)



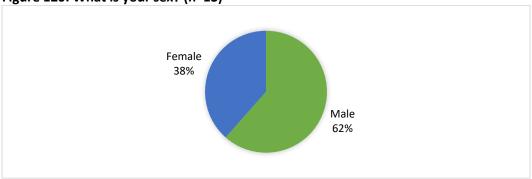
Respondents were asked to provide home zip code. Eight zip codes were represented and are show in in Table 32 below.

Table 32. What is your home zin code? (n=13)

Table 32. What is your nome zip code. (ii-13)				
Zip Code	Municipality	Frequency		
07601	Hackensack	30.77%		
07662	Rochelle Park	15.38%		
07666	Teaneck	15.38%		
07010	Cliffside Park	7.69%		
07407	Elmwood Park	7.69%		
07630	Emerson	7.69%		
07650	Palisades Park	7.69%		
10031	New York, NY	7.69%		

Respondents were then asked their sex: male, female, or other. 61% of respondents were male, and zero respondents selected other. The results are shown in Figure 120..

Figure 120. What is your sex? (n=13)

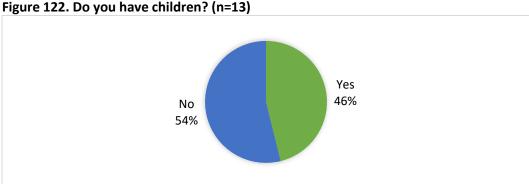


Respondents were asked to select their age, which was grouped into five categories. All of the respondents were younger than 65 years old. The results are shown in Figure 121.

0% 10% 20% 30% 40% 50% 60% 70% 18-24 years old 7.7% 25-44 years old 30.8% 45-64 years old 61.5% 65-75 years old 0.0% 75+ years old 0.0%

Figure 121. What is your age? (n=13)

Next, respondents were asked if they have children; the responses were nearly evenly split between the two choices (54% had children and 46% did not). The complete results are shown in Figure 122.



Respondents were asked to select the ages of their children who were under 18, grouped into four categories. More than one age range could be selected. Most commonly, respondents had children that were between the ages of six and 10. The complete results are shown below in Figure 123.

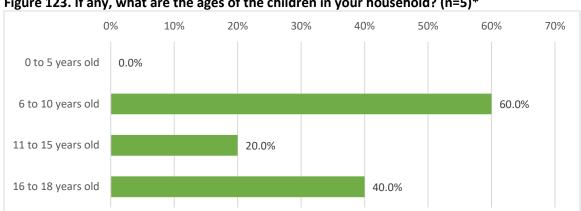


Figure 123. If any, what are the ages of the children in your household? (n=5)*

As Figure 124 shows, the majority of the sample selected White as their racial category (83.33%).

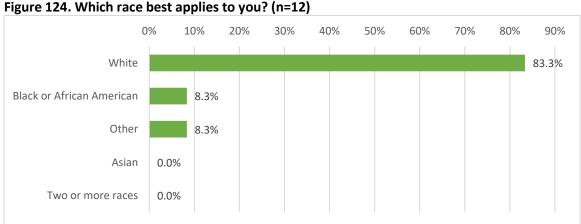


Figure 125 shows that none of the respondents were Hispanic or Latino.

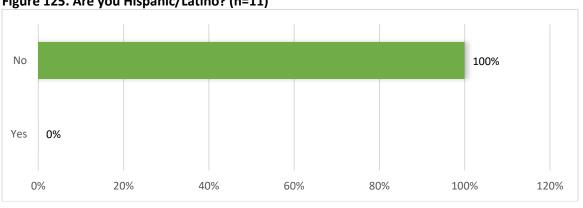
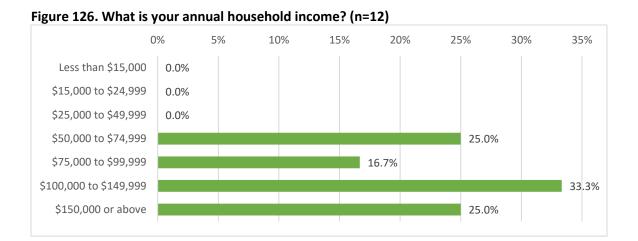


Figure 125. Are you Hispanic/Latino? (n=11)

The last question asked respondents their annual household income. All (100%) respondents reported annual household incomes of \$50,000 or more. The results are shown in Figure 126.

^{*}Respondents could select more than one answer. Percentages are based on total number of responses to this question only (n=5).



Survey Questions



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Center for Urban Environmental Sustainability 93 Lipman Drive, New Brunswick 848-932-9334 www.cues.rutgers.edu

Bergen County Park Master Plan Update

			Location =
1. How often do you visit thi	is park? (Check one)		_
☐ Daily	☐ Monthly	☐ Never	
☐ Weekly	☐ Yearly	☐ First time visiting	
2. Why do you visit this park	33.34		
 □ To ride my bicycle □ To bring my children to play □ To attend events 	 □ To go fishing □ To exercise (run, walk, jog, yoga) □ To play organized sports 	☐ To relax ☐ To sightsee ☐ To spend time with family and/or friends	 □ To skate □ To volunteer □ To picnic/BBQ □ Other
3. What types of events do yo	ou frequently attend at this park	? (Check all that apply)	
☐ Music ☐ Art	☐ Athletic ☐ Ethnic/cultural	☐ Family and children-focused	□ Other
4. In general, do you come al	one or with others to this park?	(Check one)	
☐ Alone	☐ With other adults	☐ With children	
5. How do you normally trav	el to this park? (Check one)		
□ Walk	☐ Bicycle	☐ 'I'rain	☐ Skate/skateboard
☐ Drive	□ Bus	☐ Taxi/Uber/Lyft	
6. On average, how far do yo	u travel to visit this park? (Chec.	k one)	
☐ Under ¼ mile ☐ ¼ to ½ mile	☐ ½ to 1 mile ☐ More than 1 mile	☐ More than 5 miles	
7. Are the entrances and exit	s to this park clearly marked? ((Check one)	
☐ Yes	□ No	☐ Do not know	
8. Are there too many cars tr	aveling within this park? (Check ☐ No	cone)	
9. Which of the following sal	fety concerns are present in the	neighborhood surrounding	this park? (Check all that apply)
☐ Poor lighting ☐ Graffiti ☐ Vandalism ☐ Excessive littering	 ☐ Heavy traffic ☐ Excessive noise ☐ Vacant or dilapidated buildings 	☐ Poorly maintained properties ☐ Lack of eyes on the street	 □ Evidence of threatening persons or behaviors □ Other □ None present
10. Have you ever used publi	c transportation to visit this par	rk? (Check one)	
☐ Yes	□ No		
11. How would you rate the	quality of walking paths within	this park? (Check one)	
□ Poor	□ Good	☐ Excellent	
☐ Fair	☐ Very Good	☐ No walking paths	
12. How often do you use the	vehicular parking spaces withi	n this park? (Check one)	
☐ Never use	☐ Occasionally use	☐ Frequently use	
☐ Almost never	☐ Almost always use		
		P	lease continue on back

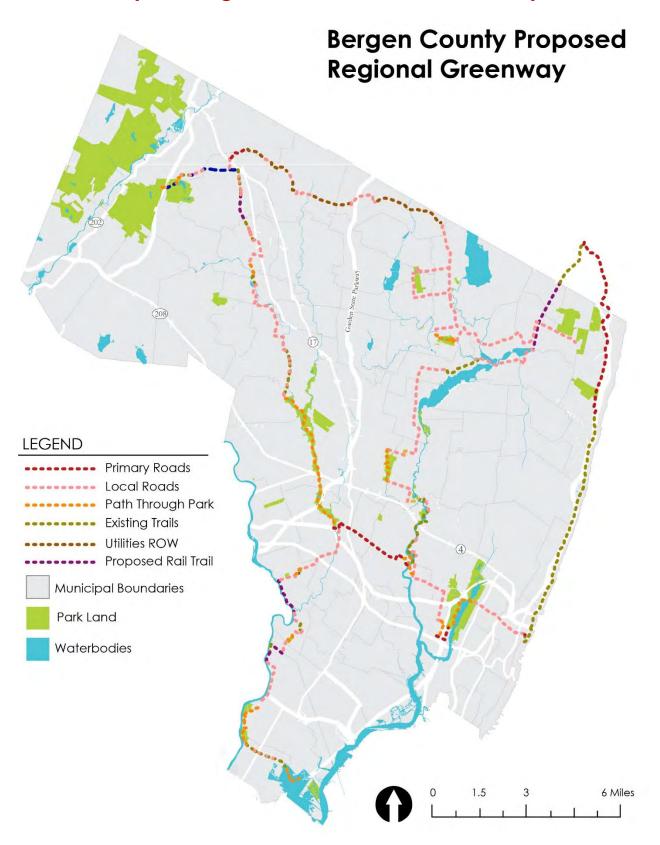
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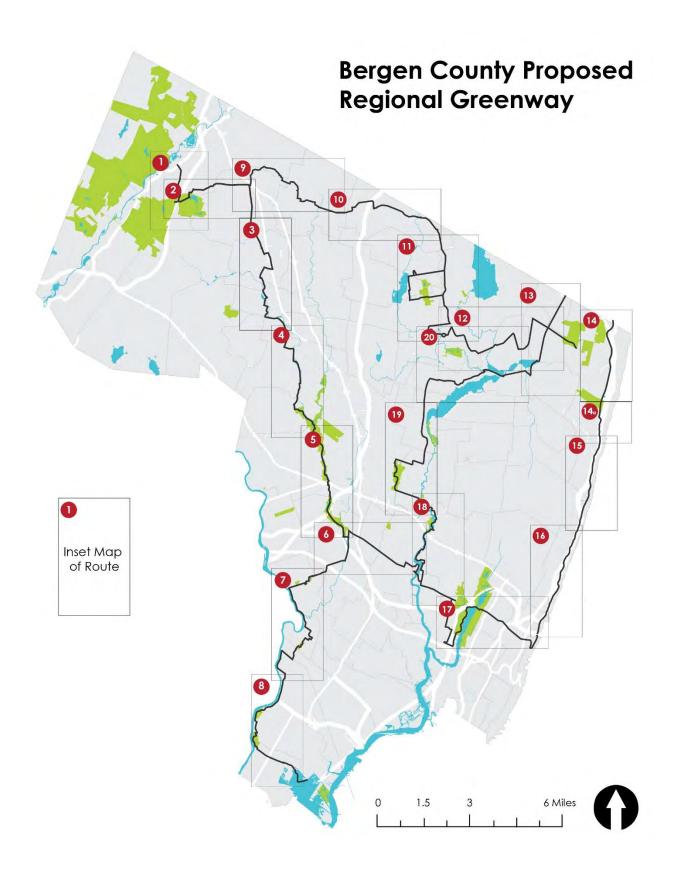
13. How concerned are you v (Check one)	vith potential conflicts between	bicyclists, joggers and walkers	on shared paths in this park
☐ Not at all concerned ☐ Slightly concerned	 ☐ Somewhat concerned ☐ Moderately concerned 	☐ Extremely concerned	
14. How concerned are you w	with your safety in this park? (Ch	ieck one)	
☐ Not at all concerned ☐ Slightly concerned	☐ Somewhat concerned ☐ Moderately concerned	☐ Extremely concerned	
15. How safe would you feel	in this park at night? (Check one)		
☐ Very safe ☐ Safe	☐ Neither safe nor unsafe	☐ Unsafe ☐ Very unsafe	☐ I'm never here at night
16. How would you rate the l	ighting in this park? (Check one)		
☐ Very well-lit ☐ Well-lit	☐ Neither well-lit nor poorly-lit	☐ Poorly-lit ☐ Very poorly-lit	☐ I'm never here at night
17. Concerning safety, for wl	nat reasons do you feel unsafe in	this park? (Check all that apply	y)
☐ Teenagers gathering ☐ Mugging or attack ☐ Lack of lighting ☐ Drunken activity	 □ Lack of police presence □ Drug users or drug dealing □ Fear of bullying 	☐ Fear of violent or sex crimes ☐ Beggars/panhandlers ☐ I do not like darkness	☐ I do not feel unsafe in the park ☐ Other
→ B. If yes, why?	1.1		
☐ Male	☐ Female	□ Other	
21. What is your age? (Check	one)		
☐ 18-24 years old ☐ 25-44 years old	☐ 45-64 years old ☐ 65-75 years old	☐ 75+ years old	
22. Do you have children? (C	heck one)		
☐ Yes	□ No		
23. If any, what are the ages of	of the children in your household	d? (Check all that apply)	
□ 0 to 5 years old	☐ 6 to 10 years old	☐ 11 to 15 years old	☐ 16 to 18 years old
24. Which race best applies t	o you? (Check one)		
☐ White ☐ Black or African Americ ☐ Asian ☐ Two or more races	an	☐ Other (including Native Hawaiian or Other Pacific Islander, American Indian, Native Alaskan)	
25. Are you Hispanic/Latino	? (Check one)		
☐ Yes	□ No		
26. What is your annual hou	sehold income? (Check one)		
☐ Less than \$15,000 ☐ \$15,000 to \$24,999	□ \$25,000 to \$49,999 □ \$50,000 to \$74,999	□ \$75,000 to \$99,999 □ \$100,000 to \$149,999	☐ \$150,000 or above

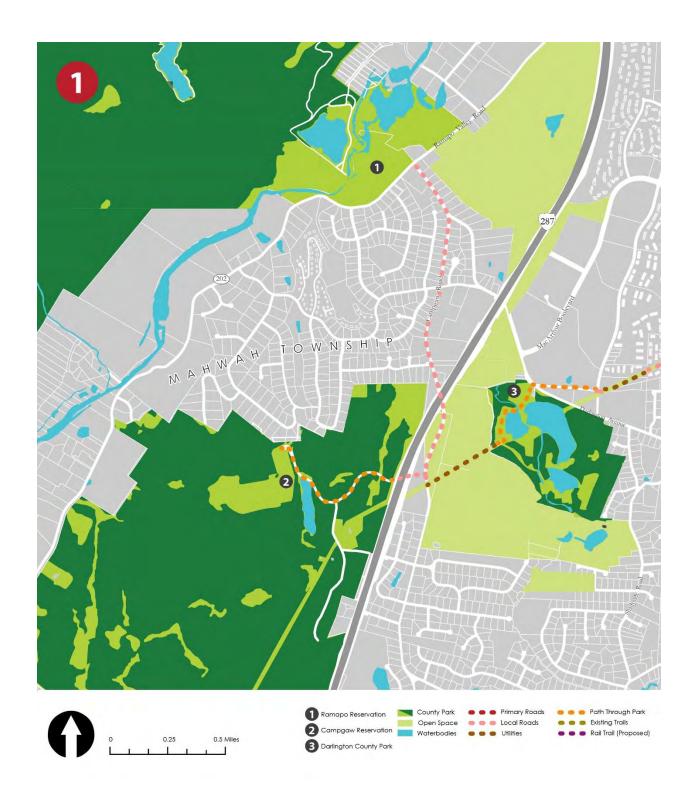
Thank you for participating in this survey!

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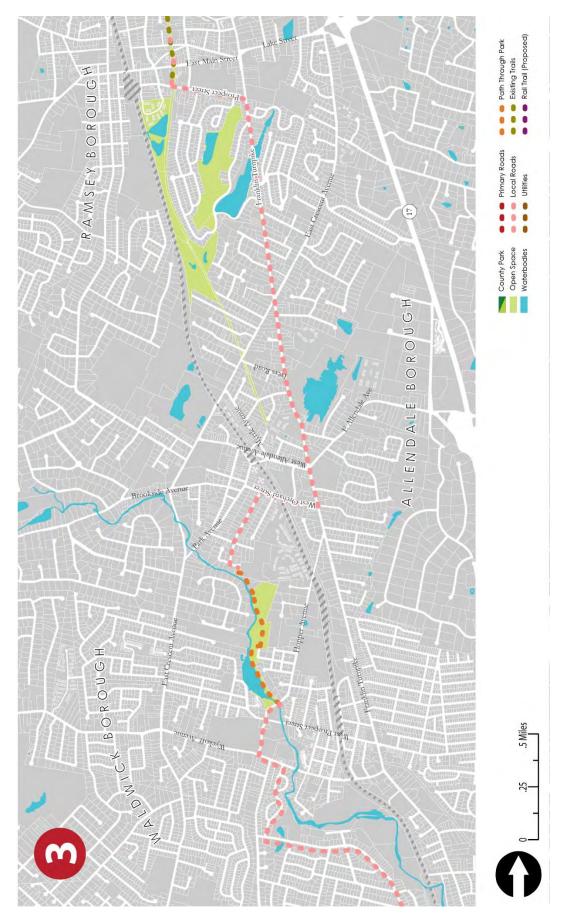
Appendix B: Proposed Regional Connections and Inset Maps



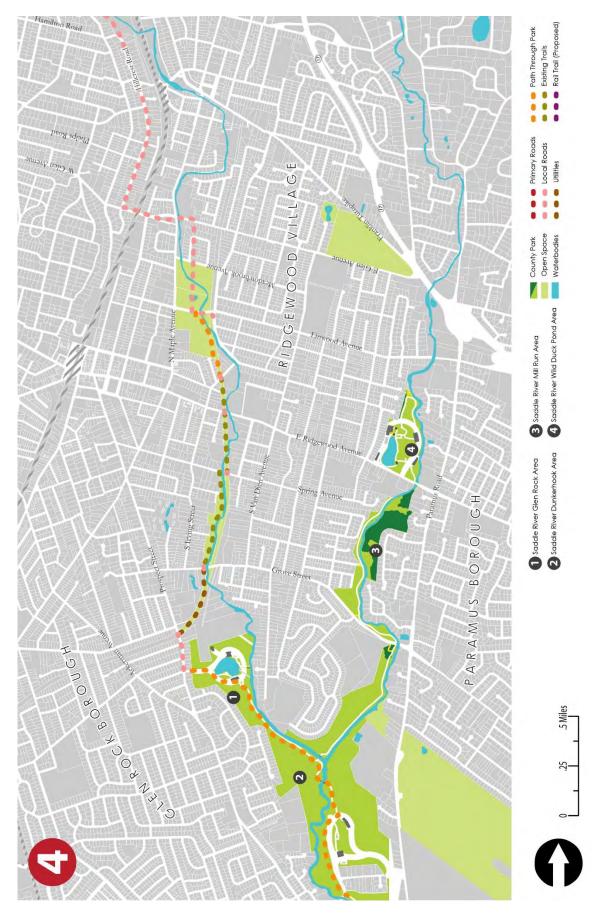




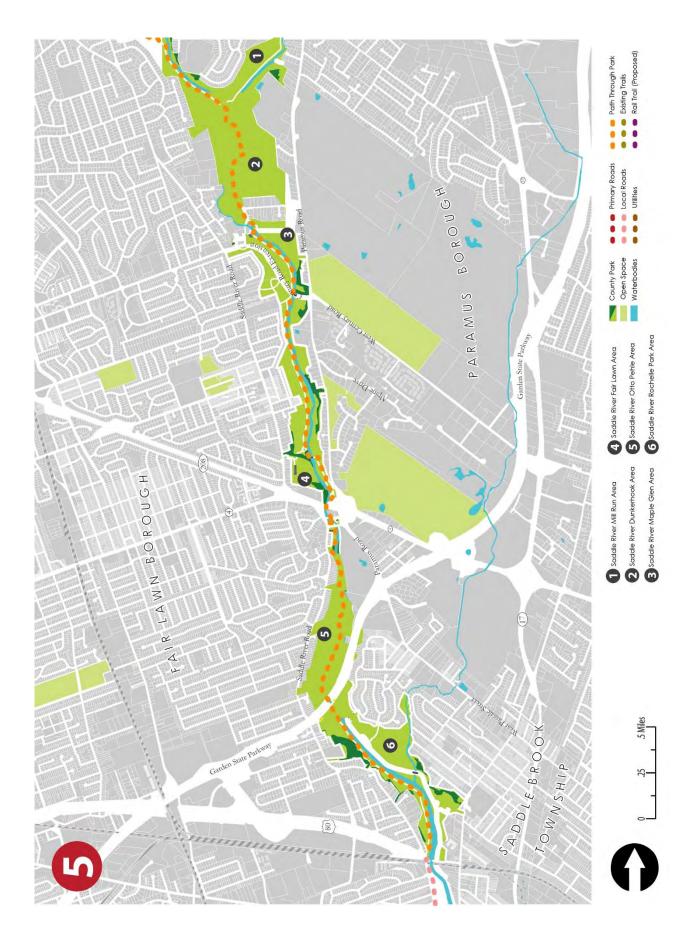




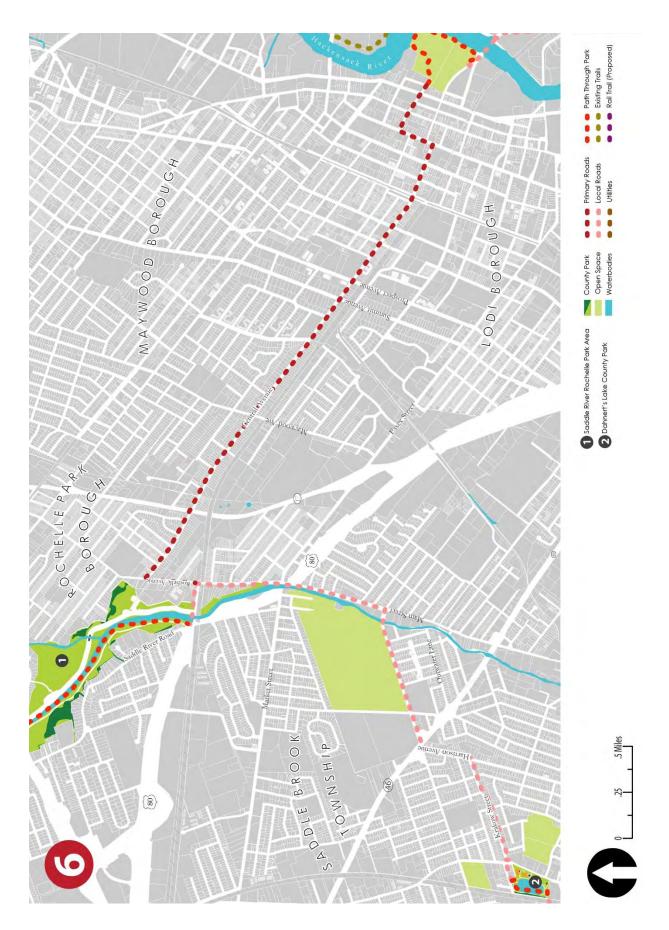
Appendix B: Bergen County Parks Transportation Assessment | 5



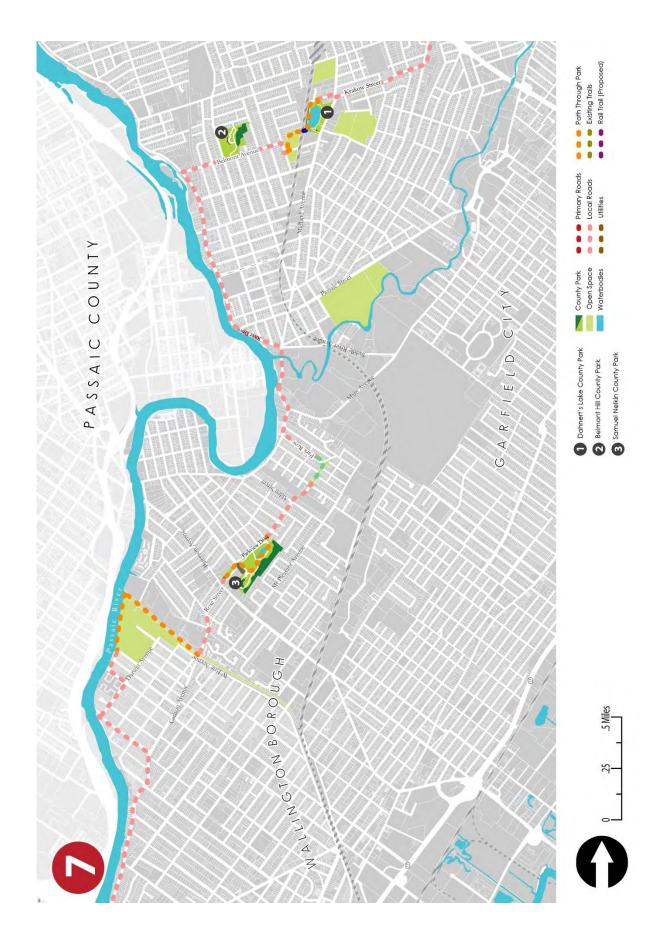
Appendix B: Bergen County Parks Transportation Assessment



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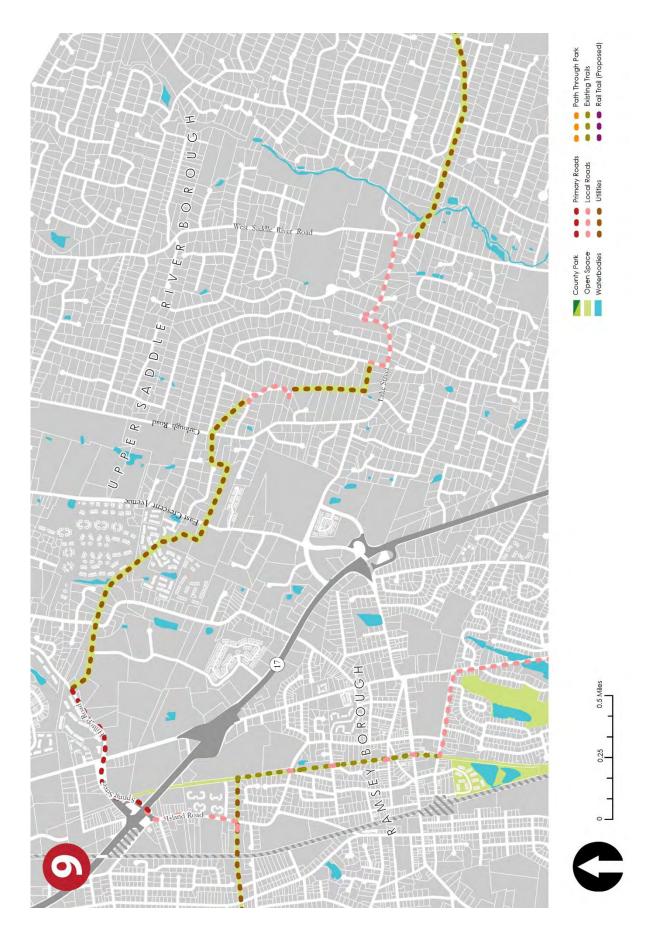


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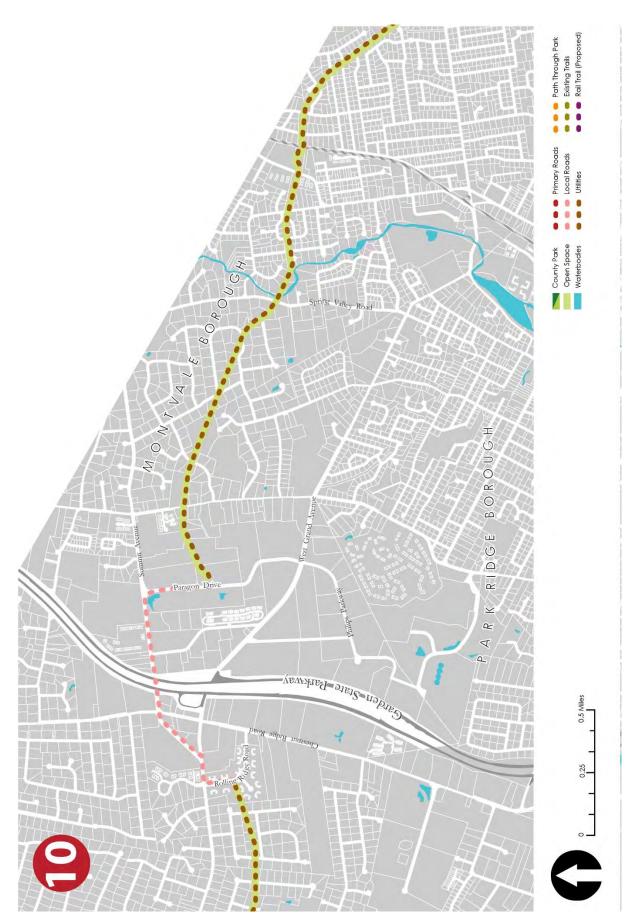


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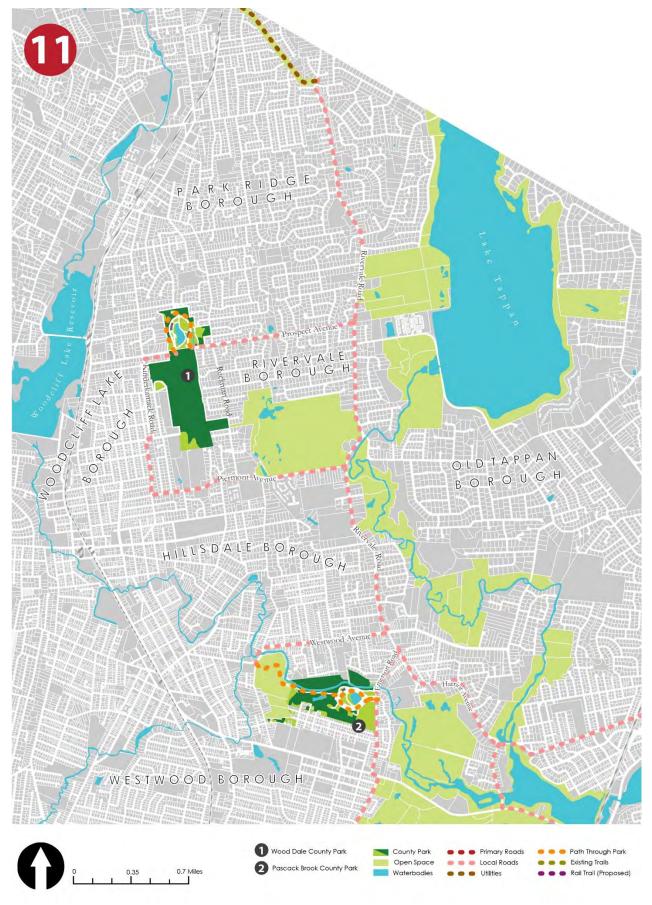




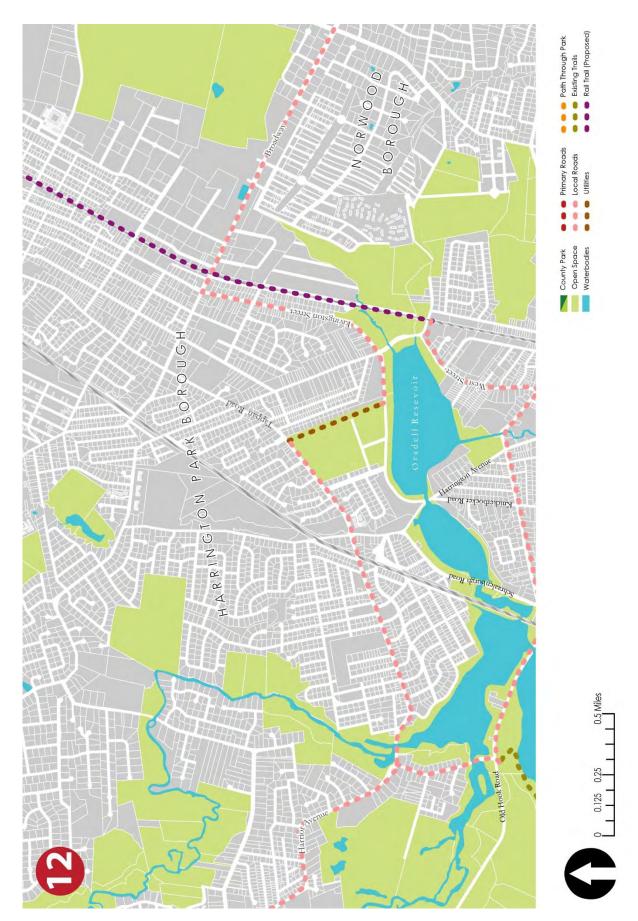
Appendix B: Bergen County Parks Transportation Assessment | 11



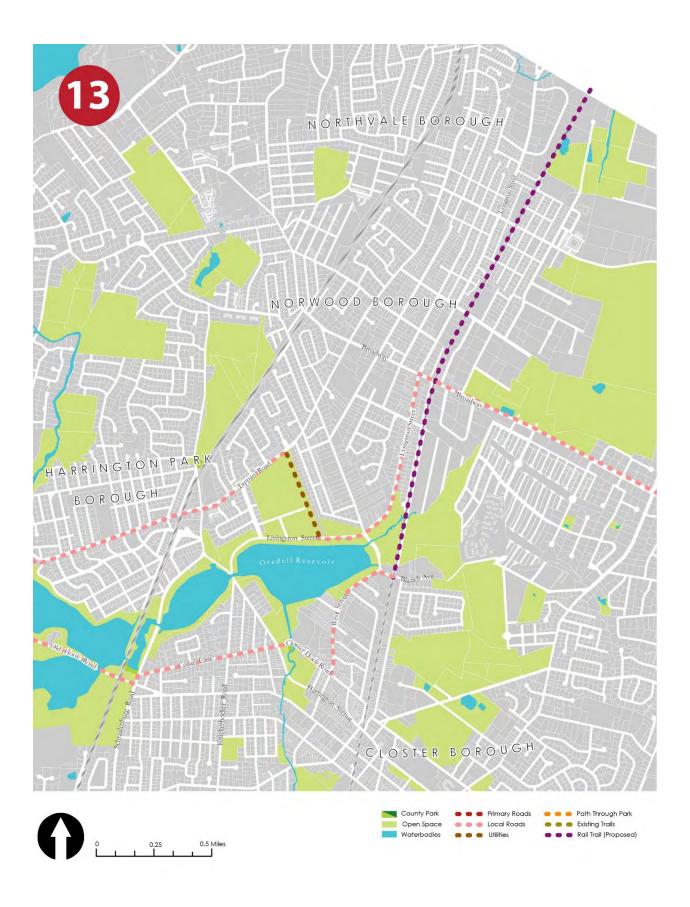
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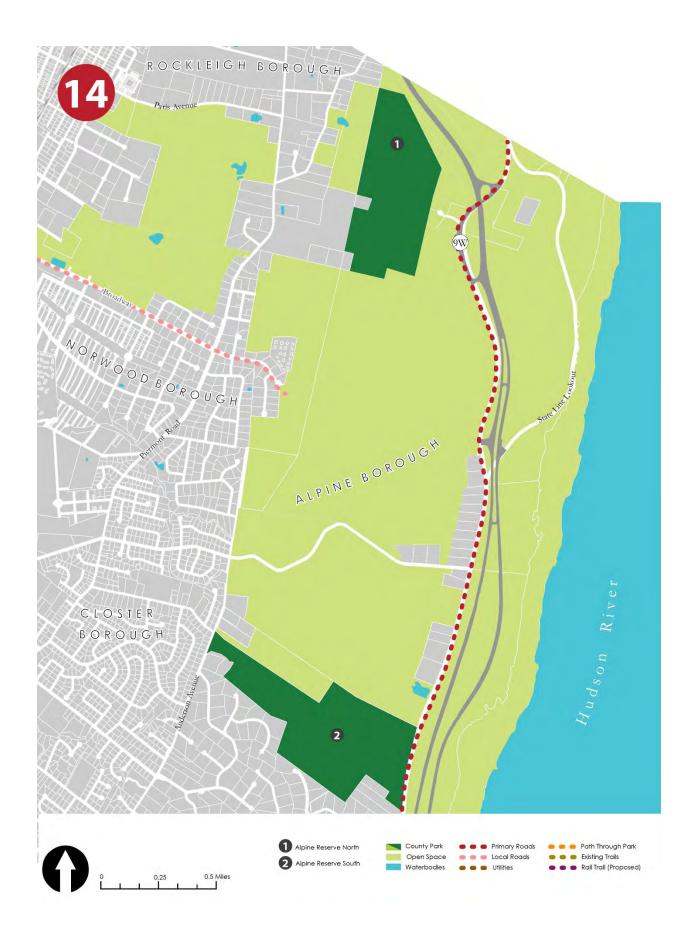


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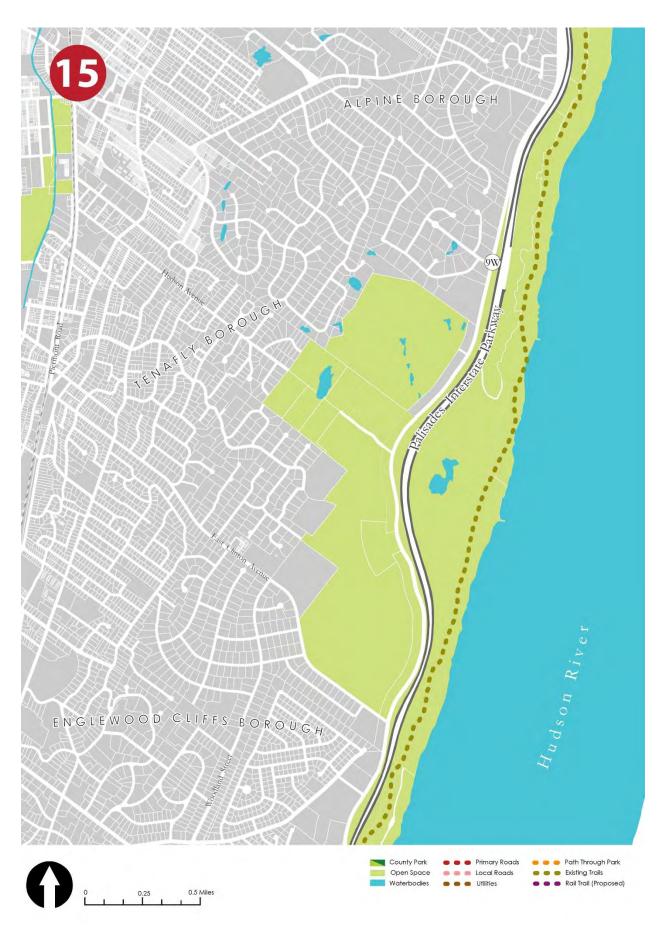
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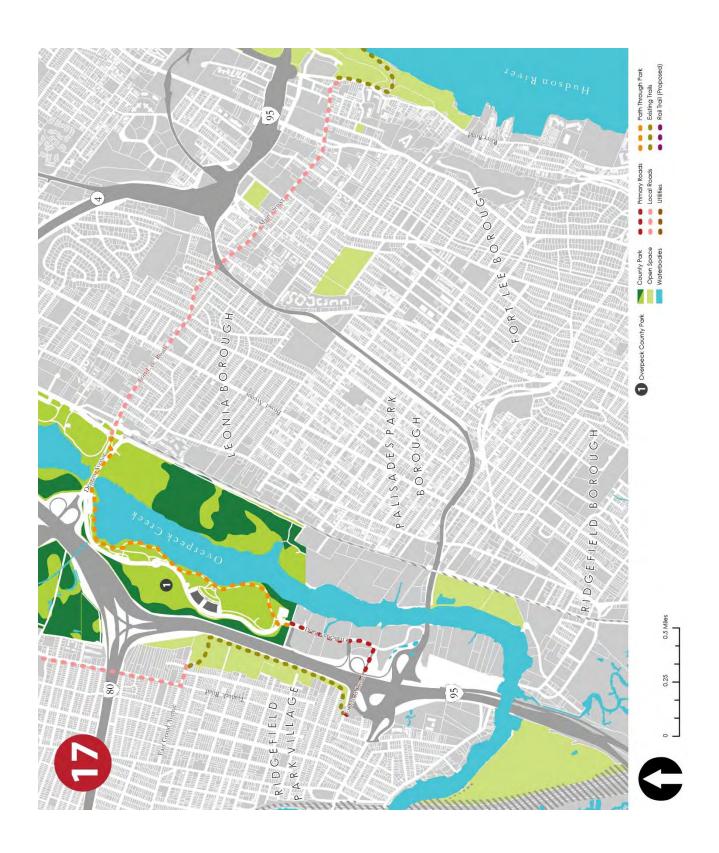
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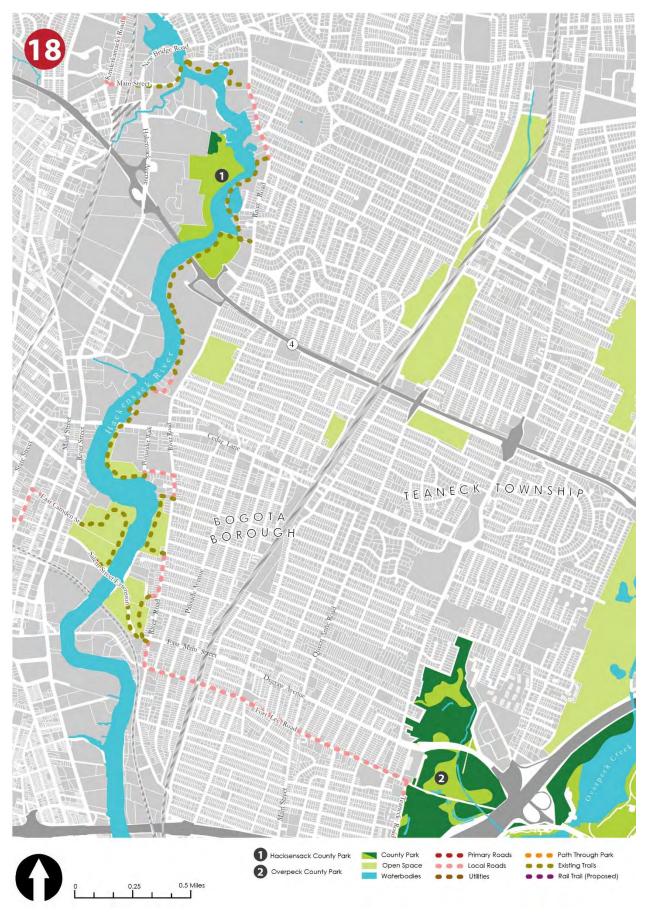


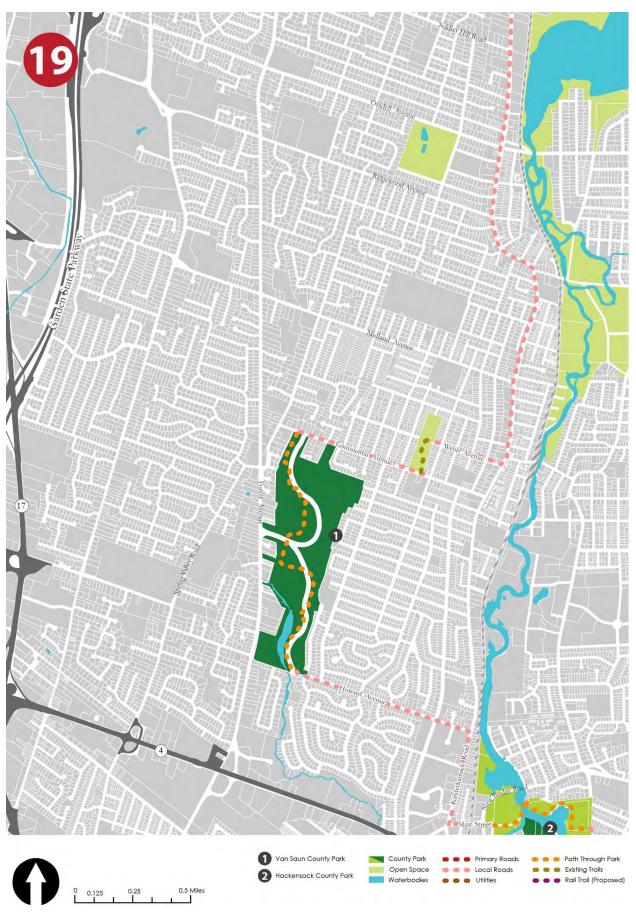


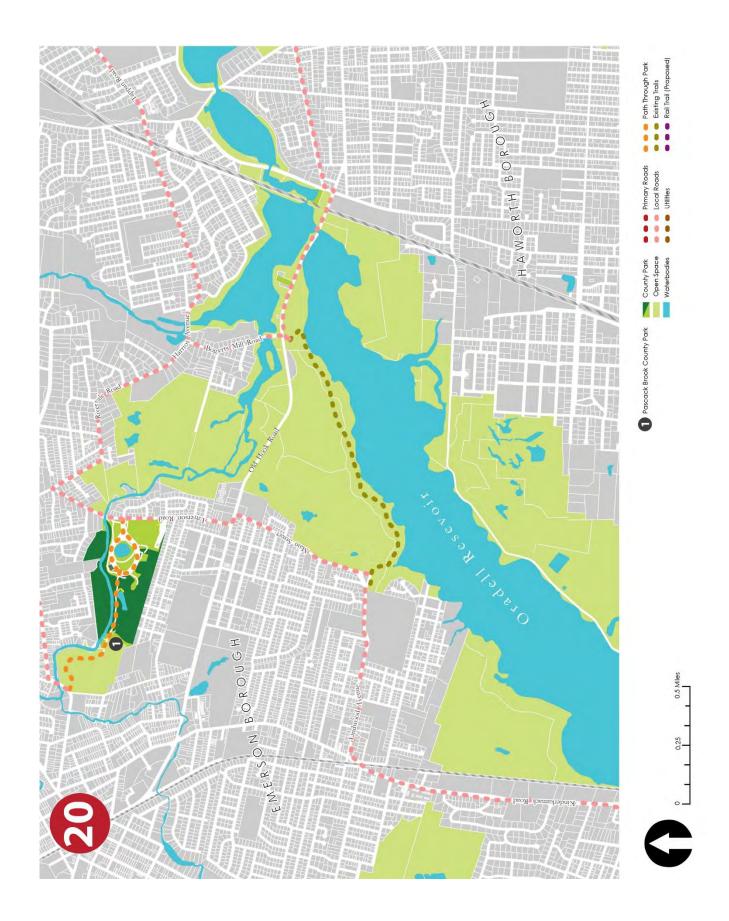


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Belmont Hill County Park Transportation Assessment

Context & Location

Belmont Hill County Park is a relatively small neighborhood park in the city of Garfield, New Jersey located between Route 21 and Route 46. The 10-acre park is surrounded by dense single-family residential housing (14,874 people per square mile) and shares a portion of its eastern border with an elementary school (see number 3 in Figure 1). Four additional schools are within walking distance of the park. More than half of Belmont Park's border abuts with residential backyards. The park has street frontage and access along Palisade Avenue and the western section of Botany Street. Belmont Hill Park offers a scenic overlook with views of the City of Paterson and the surrounding area as well as a playground, a large and open grassy area, and abundant seating across twenty-seven benches. The park offers residents open lawn atop a hill where guests can picnic or gather for small events.

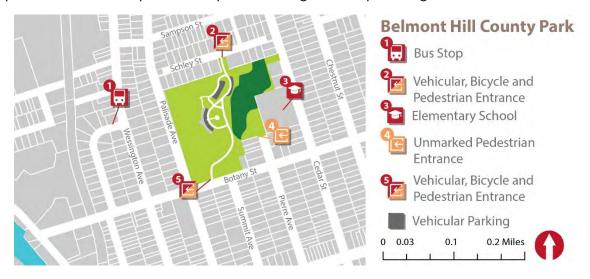


Figure 1. Existing Transportation Points in Belmont Hill County Park.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

Belmont Hill Park is accessible to motorists via two vehicular entrances connected by approximately 0.2 miles of roadway. The northern entrance is located along Schley Street (see number 2 in Figure 1) which is a small residential street that terminates before it intersects with Palisade Avenue to the west and Cedar Street to the east. As such, motorists can only access the Schley Street entrance from Sampson Street, another small residential street. There is no signage marking the park's entrance on Schley nor are there wayfinding signs along Sampson, Palisade Avenue or Cedar Street. Motorists traveling south along Palisades Avenue must either utilize the Botany Street entrance (see number 5 in Figure 1) or access Schley Street from Sampson Street. Alternatively, guests could park along Palisade Avenue and walk up a set of stairs to reach the Schley Street entrance or park directly adjacent to the park on Palisade Avenue and walk up the steep hill to the top of the park. Although

there is no signage at the Botany Street entrance, a wooden park sign is located at the corner of Palisade Avenue and Botany Street and is highly visible to traffic traveling in all directions at the intersection.

Proposed Motor Vehicle Improvements

- 1. Install wayfinding signs along Palisade Avenue, Cedar Street and Sampson Street to highlight the presence of the park's entrance. Signage is particularly important along Cedar Street, as there is no signage along the park's eastern side. (See *Figure 3*)
- 2. Install park signage at both entrances to inform motorists of the entrances. This is particularly important along Schley Street as this entrance is located between a residence and the water tower and is not as obvious a park entrance as the Botany Street entrance. (See Figure 3)

Pedestrian and Bicycle Access & Circulation

Belmont Hill does not restrict access to the park via fencing, so incoming pedestrians may walk up the steep grassy slopes from almost any direction. However, the lack of ADA compliant entrances into the park presents a major barrier to access that also effects pedestrians and bicyclists. Compounding this barrier is the lack of pathways within the park, which forces guests to utilize the roadway.

The surrounding neighborhood is well-served by a nearly complete network of sidewalks and crosswalks, but lacks continuity into the parks as well as bicycle infrastructure. Sidewalks terminate shortly before each of the park's entrances. The image in Figure 2 depicts the Botany Street entrance, where the sidewalk ends approximately 125 feet before the park entrance. A similar condition occurs at the Schley Street entrance. This creates potential conflicts between motorists and non-motorists when pedestrians, bicyclists and those requiring ADA accommodations are forced to utilize the roadway.



Figure 2. Botany Street Entrance to Belmont Hill County Park. (Source: Google Maps)

A third, although unofficial, pedestrian entrance is located at the terminus of Pierre Avenue behind the elementary school. The unpaved trail passes through an opening in the trees and appears to function as an access point for students as well as residents east of the park.

Proposed Pedestrian and Bicycle Improvements

- 1. Install a paved pathway throughout the park to minimize potential conflicts between motorists, pedestrians and bicyclists.
- 2. Connect the proposed Belmont Hill pathway with the Garfield sidewalk network so that guests may safely access the park from all directions. This is an important step in ensuring the park and its facilities are accessible to all users including pedestrians, bicyclists, and those requiring ADA

- accommodations (see numbers 1 and 4 in Figure 3). This should include the unofficial entrance at the termination of Pierre Avenue (see number 3 in Figure 3).
- 3. Install a walkway or graded path with lighting along Palisade Avenue (see number 3 in Figure 3). Palisade Avenue is the busiest street around the park and currently has no designated path for entry. While some pedestrians may choose to walk up the grassy slope, others that may struggle on uneven or steep surfaces are excluded from this access point. An additional benefit of a walking path is its ability to encourage foot traffic through the park which in turn would discourage disagreeable uses of the park.
- 4. Install designated bicycle lanes or sharrows in the neighborhood surrounding the park to improve circulation and access. Currently, none of the roads surrounding Belmont Hill Park are considered bicycle-friendly. Palisade Avenue is a two-lane roadway with sidewalks on either side of the road and traffic travels at 40 miles per hour. Encouraging bicyclists to share the road with vehicles would allow pedestrian access to the narrow sidewalks without conflict.
- 5. Install bicycle parking to compliment the installation of bicycle lanes and provide guests with a safe place to keep their bicycle while they enjoy the park's amenities (see number 2 in Figure 3).

Public Transit Access & Circulation

Although Belmont Hill is located in an urban setting, public transit access to the park is limited. The closest public transit access is the Plauderville NJ TRANSIT rail station. This station accommodates two lines: the Main/Bergen County Line and the Port Jervis Line. These lines offer connections to Hoboken and New York City. The station is located about one mile from the park and could be reached on foot, though most people would likely visit Columbus Park or Dahnert's Lake County Park, as both are located less than one half mile from the station.

The nearest bus stop to the park is located at the intersection of Outwater Lane and Wessington Avenue. This stop is served by the 702 line (see number 1 in Figure 1). The 702 line travels through Clifton, Passaic and Garfield. The bus runs from 5:50 AM to 7:15 PM on weekdays, 8:00 AM to 5:00 PM on Saturdays, and does not provide service on Sundays.

Public Transit Proposed Improvements

1. Completing the Botany Street sidewalk will improve the accessibility of the park from the Wessington Avenue bus stop. (See number 4 in *Figure 3*).

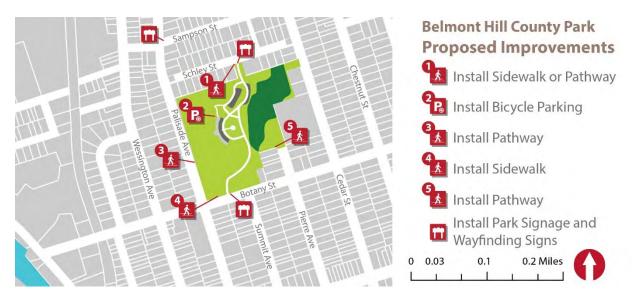


Figure 3. Belmont Hill Proposed Improvements.

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the potential feasibility and impacts of holding a proposed Kids Movie Series in Belmont Hill County Park. For analysis purposes, it was assumed such an event might attract up to 750 attendees. There are several important factors to consider when planning for this type of event in this location:

Parking demand – Table 1 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 75 to a high of 338 depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. 1 Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle could be as high as 4-6 persons per vehicle. If one assumes "average" driving demand, a 750 attendee event of this type would require between 94 and 141 parking spaces.

Currently there are only approximately 30 parking spaces available on-site though on-street parking (64-111 spaces) could accommodate a portion of the overflow parking. There will be competing demand amongst residents and attendees for on-street parking in the area. Belmont Hill's steep incline also eliminates the use of grassy areas for temporary parking. It is also very possible that driving demand for this type of event might be higher than average given the need to bring along chairs, blankets, snacks, etc. On-site and nearby parking is inadequate to accommodate an event of this nature and size at this park location without the use of satellite parking.

¹ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

Table 1. Parking Demand Scenarios

EVENT ATTENDANCE 750 PEOPLE							
DRIVING DEMAND SCENARIO		Low		Average		High	
		Percent	People	Percent	People	Percent	People
MODE OF TRAVEL	Drive & Park	60%	450	75%	562.5	90.0%	675.0
	Drop-off or Taxi	5%	37.5	5%	37.5	5.0%	37.5
	Walk	25%	187.5	16%	120	4.3%	31.9
	Bike	7%	52.5	3%	22.5	0.5%	3.8
	Transit & Charter	3%	22.5	1%	7.5	0.3%	1.9
	Total	100%	750	100%	750	100%	750
REQUIRED	2 passengers per car	225		281		338	
PARKING SPACES	4 passengers per car	113		141		169	
	6 passengers per car	75		94		113	

 Access and Circulation – Belmont Hill Park is accessible from both the Botany Street entrance and the Schley Street entrance. The roadway through the park creates a circle that provides an excellent opportunity for motorists to drop passengers or turn around. Pedestrians and bicycles may access the park from the same entrances, but the park is accessible for those willing to climb the grassy hill from all along Palisades Avenue. This could be a benefit to the park's accessibility, but could also create a dangerous situation as guests may leave after dark without considering crossing Palisade Avenue at a designated crosswalk. Considering these park characteristics and event details, the following recommendations highlight opportunities to improve access and circulation throughout the event.

Recommendations

- 1. Designate parking within the park for handicapped parking only in order to minimize the number of cars passing through area. This will be especially important as it gets darker and becomes more difficult to see pedestrians.
- 2. Consider establishing satellite parking arrangements with the Garfield High School and municipal building. These parking lots are only approximately one half mile away. Shuttles can be provided to bring guests to the event or guests may utilize a designated drop-off area within the park.
- 3. **Designate drop-off and pick-up zones during the event** so groups with cars are able to drop individuals and any supplies, such as blankets and snacks, before being directed to the school parking lot. However, some conflicts may arise between vehicles, pedestrians and bicyclists accessing these zones. To minimize this risk of conflicts, zones should be monitored by event volunteers who help direct and control traffic. Zones should be clearly marked with signage to alert vehicles to increased pedestrian activity. The traffic circle at the center of the park may be the best location for this designation.
- 4. Utilize crossing guards at key intersections to ensure the safety of guests walking from surrounding neighborhoods and the designated parking area. The event will attract a number of children and guests will be leaving long after dark, so safety when crossing the roads will be especially important. Providing crossing guards at all intersections surrounding the park, as well

- as those that lead to the high school, will help ease safety concerns before, during and after the event.
- 5. Provide incentives and/or games for walking and bicycling to the park. Since the area surrounding the park is fairly residential, a large portion of event attendees may live within a reasonable walking or bicycling distance from the park. The event organizers could provide extra games or raffles for families who chose to walk or bicycle to the event. A photo-scavenger hunt could encourage pedestrians to stay aware of their surroundings while they walk to the event.
- 6. Strengthen access between the Wessington Avenue bus stop and Belmont Hill through the suggestions made above, including hiring temporary crossing guards and installing wayfinding materials between the bus stop and event space.

Campgaw Mountain Reservation Transportation Assessment

Context & Location

The Campgaw Mountain Reservation is a large, active recreation park located in Mahwah, New Jersey, across Interstate 287 from Darlington County Park (see number 2 in Figure 4). Ramapo Valley Road runs along the park's western border parallel to Interstate 287 to the east. Nearly three quarters of the reservation's 1,373 acres are forested. Low density residential cul-de-sacs border Campgaw Mountain to the north and south. A number of these homes, especially to the north of the reservation, are multimillion dollar estates.

In contrast to other Bergen County parks, Campgaw Mountain offers a unique terrain and diverse array of activities including miles of hiking across seven different trails (see Figure 4), disc golf, archery, and camping. Most notably, the reservation has the Campgaw Mountain Ski Area located within its boundaries (see number 3 in Figure 4). Given its heavily forested and mountainous terrain, Campgaw Mountain is relatively difficult to access for most of the surrounding neighborhoods except to utilize the one vehicular entrance (see number 1 in Figure 4). The neighborhood south of Campgaw Mountain has access to an unofficial trail entrance near Chuckanutt Drive (see number 4 in Figure 4). This entrance is located one half mile from Manito Elementary School. Additionally, the main vehicular entrance to Campgaw Mountain is approximately 1.6 miles from Ramapo College. Coach USA is the only bus that services the area and the nearest train station is more than four miles away.



Figure 4. Existing Transportation Points in Campgaw Mountain.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

Vehicular access to Campgaw Mountain Reservation is located at the intersection of Campgaw Road and Fyke Road (see number 1 in *Figure 4*). The entrance is clearly marked with a wooden sign visible to motorists traveling in both directions on Campgaw Road as well as a ski slope sign visible to motorists traveling south on Campgaw Road. Although Interstate 287 borders the reservation, the nearest exits are located roughly 3.5 miles north and south of Fyke Road. Similarly, guests accessing the park from Ramapo Valley Road must first encircle the mountain.

The Fyke Road entrance provides an overpass over Interstate 287 and splits in two directions once inside the park. The southern portion leads guests to the camping areas while the northern portion provides access to the ski slope parking area, the largest parking area in the park. Fyke Road extends almost two miles and provides access to more than 1,000 parking spaces, though respondents to the CUES survey reported parking challenges. These challenges were largely related to confusion attributed to inconsistent parking enforcement and unclear signage throughout the park.

Proposed Motor Vehicle Improvements

- 1. Improve parking signage throughout the park. To avoid confusion about parking regulations, Bergen County Parks should ensure that all signage in the park is clear and in good condition. Repainting parking lines can help with keeping the lots orderly as well.
- 2. Consider developing shared parking agreements with locations in the western and southern areas of the park, including the location previously utilized as a Carmelite Retreat and the Saddle Ridge Riding Center (see number 1 and 2, respectively, in *Figure 6*). This would allow guests along Ramapo Valley Road easier access to the park and provide better access to the western area of the park, in general, without requiring additional development. In both locations, the current trail system could be easily altered to provide access to arriving guests.

Pedestrian and Bicycle Access & Circulation

Unlike many other parks in Bergen County, Campgaw Mountain is located in an area where sidewalk coverage is limited nearly as much as bicycle infrastructure. Key roadways around the reservation, such as Campgaw Road, Fyke Road and Ramapo Valley Road, provide no sidewalks or crosswalks. This creates a greater challenge for addressing pedestrian and bicycle access than in other areas. However, the reservation offers miles of trails within its borders that support the movement of pedestrians much more than that of vehicular traffic.

The neighborhood adjacent to the reservation's southern border, however, is well-served with sidewalks and is also supported by an unofficial trail entrance (see number 4 in *Figure 4*). This is the reservation's only pedestrian access point. There are no designated bicycle entrances as bicycling is currently not permitted on Campgaw Mountain trails.

Proposed Pedestrian and Bicycle Improvements

1. Create a trail connecting Darlington Park to the Campgaw Mountain Reservation (see number 3 in Figure 6). This trail should begin in Darlington Park along the proposed right-of-way trail and connect with Campgaw Mountain via Fyke Road. This would require widening the Interstate 287 overpass to accommodate a shared use pathway for

- pedestrians and bicyclists as well as installation of a crosswalk to ensure the safety of trail users crossing Campgaw Road.
- 2. Designate trails within the reservation that permit bicycle use. Comments from CUES survey respondents noted unofficial use of the trails by bicyclists which creates a dangerous situation. Instead, Campgaw Mountain should work with mountain bicycling and trail support groups to identify the best trails for shared use and designate them as such. Trail courtesy signs, such as the one pictured in *Figure 5*, could be installed along the trails to encourage proper yielding for bicyclists.



Figure 5. Example Trail Courtesy Sign.

- 3. Install bicycle infrastructure along roadways approaching the park and within the park. Currently, the park's surrounding roadways support only vehicular traffic. Aside from I-287, roads surrounding the park would benefit from sharrows or bicycle lanes to increase the use of multi-modal transportation to the park.
- 4. The unofficial trail entrance located along Chuckanutt Drive should be designated as an official pedestrian access point and should be connected with the broader Campgaw Mountain trail system (see number 4 in *Figure 6*). This would greatly improve access for residents in the neighborhood south of the reservation where a nearly complete sidewalk network is already installed. Wayfinding signs should be installed throughout the neighborhood to encourage alternative modes of transportation to the reservation from this access point. Additionally, this trail should be considered for bicycle use as it would create an excellent bicycle access point.

Public Transit Access & Circulation

The Main/Bergen County Line and Port Jervis line are located approximately four miles away from the reservation entrance. Coach USA, a private carrier, also runs service via Shortline to the ski area of the park. This bus runs along Route 17 and stops at Suffern, Mahwah, Ramsey, Paramus and Ramapo College. Service on weekdays starts at 4:45 AM and runs until 11:46 PM at fifteen minute intervals, while on weekends and holidays it runs from 5:29 AM to 11:46 PM twice an hour. Ramapo College also has an off-campus shuttle service that stops at the Ramsey 17 Train Station.

Proposed Public Transit Improvements

1. Coordinate with Ramapo College to designate Campgaw Mountain as an additional off-campus shuttle stop. The shuttle currently stops at the train station and could provide an excellent connection for both transit users, residents, and college students to Campgaw Mountain.



Figure 6. Campgaw Mountain Proposed Improvements.

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the feasibility and impacts of holding the Campgaw Mountain Music Jam in Campgaw Mountain Reservation. For analysis purposes, it was assumed that the event might attract up to 10,000 attendees. There are several important factors to consider when planning for an event of this size at Campgaw Mountain Reservation:

Parking demand – Table 2 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 1,000 to a high of 4,500 depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. ² If one assumes "average" driving demand, a 10,000 attendee event of this type would require between 1,250 and 3,750 parking spaces.

Currently there are approximately 1,035 available parking spaces on-site. It would appear that on-site and nearby parking is inadequate to accommodate an event of this nature and size at this park location without the use of satellite parking.

² Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

Table 2. Park Visitors by Transportation Mode for Special Events

EVENT ATTENI	DANCE	10,000 PEOPLE					
DRIVING DEMAND SCENARIO		Low		Average		High	
		Percent	People	Percent	People	Percent	People
MODE OF TRAVEL	Drive & Park	60%	6000	75%	7500	90.0%	9000
	Drop-off & Taxi	7%	700	6%	600	5.1%	510
	Walk	16%	1600	8.5%	850	0.1%	14
	Bike	7%	700	3%	300	0.3%	30
	Transit & Charter	10%	1000	7.5%	750	4.5%	450
	Total	100%	10,000	100.0%	10,000	100.0%	10,000
PARKING SPACES REQUIRED	2 passengers per car	3000		3750		4500	
	4 passengers per car	1500		1875		2250	
	6 passengers per car	1000		1250		1500	

 Access and Circulation – Campgaw Mountain Reservation is located in a relatively rural area and may be inaccessible by walking or bicycling for most attendees. In order to work towards increasing alternative modes of transportation for those located close enough to the park, the pedestrian and bicycle infrastructure improvements suggested in the previous section should be coupled with the recommendations below. It will be important, to ensure the safe movement of guests throughout the event by limiting interactions with motorists and ensuring safety at unavoidable intersections, especially if the event is expected to continue after dark.

Recommendations

- 1. Consider parking agreements with key locations in the area including Ramapo College or the corporate campuses along MacArthur Boulevard. These locations would require continuous shuttles beginning at least 90 minutes prior to the concert's start time and culminating approximately two hours after the end of the concert. Shuttles should run continuously at the start and end of the concert and approximately every 15 to 20 minutes throughout the duration. Guests riding the shuttle should be dropped off and picked up from the small parking lot behind the Campgaw Mountain Ski lodge, in order to avoid confusion with the taxi drop-off area (see the following recommendation). It would be simplest to partner with Ramapo College, if possible, as they already have the shuttle infrastructure in place and the parking areas should be underutilized given the concert's summer weekend date. It is not suggested that Darlington County Park be utilized for overflow parking as the park's lots are already under pressure during summer weekends.
- 2. Designate a pick-up and drop-off area within Campgaw Mountain Reservation where taxis, Ubers, and other drivers may drop-off or pick-up guests. Designating one section of the ski area parking lot for handicapped parking and another section for guest drop-offs and pick-ups will help to mitigate congestion and confusion within the parking area.

- 3. Charge for parking in order to incentivize carpooling and alternative modes of transportation. The funds raised could be used to offset the shuttle costs.
- 4. Stagger event departure times to avoid large rushes of incoming and outgoing crowds. Event planners should consider programming before and after the main event that promotes staggered arrival and departure times.
 - Offer bicycle valet parking for those who bicycle to the event, if the recommendation to permit bicycling within the park is utilized. Bicycle valet parking would not only provide adequate bicycle parking for event attendees, but would encourage others to bicycle at future events and attract interest to the form of transportation
- 5. Create a walking challenge. For those living in nearby neighborhoods, create a walking challenge to the event and add prizes for those who make the walk. This should be coupled with the installation of crosswalks and utilization of crossing guards at key intersections surrounding the reservation.
- 6. Provide incentives for those who arrive by foot or bicycle, such as discounts at vendors or concert t-shirts.
- 7. Provide shuttle buses from local transit areas such as the Ramsey train station and the Hackensack Bus Terminal.
- 8. Provide rail and bus riders an opportunity to participate in a raffle or an upgraded VIP status. The Mountain Music Jam could incentivize the use of public transit by allowing transit users to enter a raffle or get special VIP status by showing a public transit ticket.

Darlington County Park Transportation Assessment

Context & Location

Darlington County Park is a 178-acre recreation area in a rural setting at the foothills of the Ramapo Mountains. It is situated along Interstate 287 and is largely located within Mahwah Township, though its southeastern corner falls within the borders of the Borough of Ramsey. The Darlington Golf Course is located just south of the park, while a small section of the park's eastern border abuts residential housing. This active recreation park is surrounded by a diverse array of open space, corporate campuses, small commercial areas and low-density housing (roughly 1,000-2,000 people per square mile, according to the US Census). Darlington Park's entrance is located directly across from the UPS headquarters and is about one mile from Ramapo College. Additionally, the Mahwah High School is located about one and a half miles from the park's entrance.

Darlington Park is different from many of the other Bergen County parks in that access is restricted by fencing and entrance fees are charged in the summer months. Interstate 287 and the golf course create additional barriers along the park's western and southern borders. The park offers a number of amenities including water activities across three lakes, picnic areas, multi-use pathways, and a bird and wildlife observation area. Additionally, the YMCA operates a summer camp within the park throughout the summer.

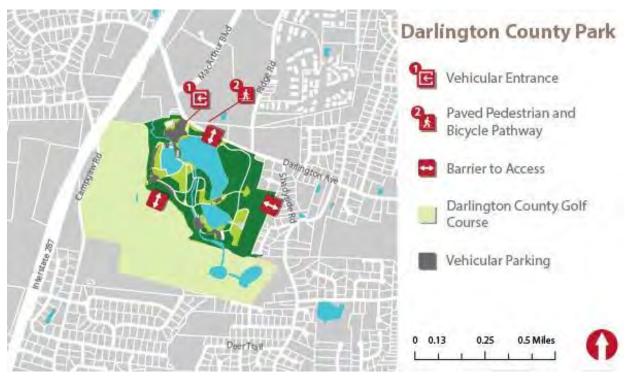


Figure 7. Existing Transportation Points in Darlington County Park.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

Darlington Park, though relatively large, has only one motor vehicle access point into the park, which is located along Darlington Avenue and also serves as the park's only exit (see number in 1 in



Figure 7). Darlington Avenue is a rural two-lane roadway with an average traffic volume of just over 4,000 vehicles per day (NJDOT, 2013). The park is accessible from Interstate 287, though the nearest exit is 3.6 miles north of the park. The entrance is marked by a large wooden sign and gatehouse that are both visible to traffic traveling in either direction along Darlington Avenue. The entrance lanes are 150 feet wide and the gatehouse, where payment is collected, is set back by 130 feet which allows ample room for cars to queue.

Once inside the park, motorists have access to more than 600 parking spaces and nearly three miles of bi-directional roadway, encircling each of the park's three lakes. According to RU-CUES' Bergen County Parks Inventory and Analysis, the paved roads witness heavy vehicular use. Additionally, a number of online survey respondents noted a need for "additional parking" and described the park as "difficult to access" and "a nightmare on weekends."

Proposed Motor Vehicle Improvements

1. Open the currently closed access point opposite Ridge Road as a designated exit in order to decrease the movement of cars within the park (see number 1 in Figure 9). Currently, this roadway is not open for public use. This leaves the Darlington Avenue entrance as the park's only exit, making it necessary for vehicles located in the eastern areas of the park to drive back through the entire park again in order to exit. This causes unnecessary congestion and traffic within the park, especially during high attendance events such as track meets. The access point south of the main entrance along Darlington Avenue is currently closed off to the public. Opening this access point to one-way exiting traffic would

- help to alleviate congestion throughout the park, but a park official may need to be stationed at the exit to ensure it is not used as an illegal entrance.
- 2. Alleviate the demand for parking and driving within the park by providing the infrastructure necessary for area residents and park attendees to walk or bicycle to, and within, the park (see the recommendations in the following section).

Pedestrian and Bicycle Access & Circulation

Darlington Park, as mentioned above, is designed for vehicular access. As such, there are no designated pedestrian or bicycle entrances to the park. The Mahwah High School is located just 1.5 miles from the Darlington Avenue entrance. Sidewalks and trails are provided along the entirety of MacArthur Avenue and Darlington Avenue, but pedestrians and bicyclists are left on the other side of Darlington Avenue with no safe way to cross three lanes of traffic. Similarly, a paved pathway almost connects Ramsey residents with the park, but once the pathway reaches Darlington Avenue users must cross three lanes of traffic with no designated crosswalk (see Figure 8). Finally, residents in the large neighborhoods located west of the park are as close at 0.6 miles, a short walk, but must drive to the Darlington Avenue entrance because there are no pedestrian and bicycle access points near these residential areas.

These conditions create a barrier to safe pedestrian and bicycle access. Additionally, park entrance fees are paid on a per-person basis, but the gatehouse is tailored to vehicular traffic. It is unclear how a pedestrian or bicyclist would approach a line of cars queued to pay. Once inside the park, limited and disjointed trails allow some pedestrian movement within the park, but it is not possible to walk from one end of the park to another without walking along the roadway at some points.



Figure 8. Bicycle and Pedestrian Trail Across from Park Entrance. (Source: Google Maps)

Proposed Pedestrian and Bicycle Improvements

- 1. Install a crosswalk connecting Ramsey's paved trail with the Darlington Avenue entrance (see number 2 in Figure 9). With the installation of a crosswalk, pedestrians and bicyclists from neighborhoods and office parks along the trail would have improved access to Darlington. Additionally, there should be some demarcation of a pedestrian walkway and a bicycle lane in the setback leading to the gatehouse in order to avoid conflicts with vehicles.
- 2. Create designated entrances for pedestrians and bicyclists around the park. This could be a particularly strong incentive to walk as motorists, waiting in line to enter, watch pedestrians and bicyclists move into the parks more easily. The Darlington Avenue entrance would serve residents east of the park, while a second pedestrian and bicycle entrance could be created for residents west of the park. This entrance could be created along Campgaw Road by utilizing the

- high tension wire right-of-way located across from the Campgaw Mountain entrance (see number 4 in Figure 9). This right-of-way provides an excellent access opportunity for Mahwah residents living to the south and west of the park. It should be accompanied with pedestrian and bicycle improvements along Campgaw Road, including the installation of ADA compliant sidewalks, appropriate lighting and bicycle infrastructure.
- 3. Install bicycle signage and/or lanes. Currently, Darlington Park lacks a designated path or lane for bicycling throughout the park. Instead, bicyclists must either use the pedestrian trail, though it is unclear if this is permitted or use the same roadway as vehicles which may discourage bicycling and put bicyclists at risk, particularly during high traffic times. The Darlington roadway is too narrow to simply stripe a bicycle lane, so one option for increasing awareness of bicyclists is to add signage that encourages motorists to share the road. While a separate pathway for bicyclists would be ideal, adding more asphalt would take away from the aesthetics of the park. Alternatively, shared pathway signs could be installed along the pedestrian pathways within the park and these trails may be widened.
- 4. Install bicycle parking throughout Darlington Park (see Figure 9). Installing bicycle parking in highly visible areas near where people are likely to stop, such as the lakes and courts, discourages unsafe or undesirable parking behavior while also signaling to bicyclists that they are welcome at Darlington Park.
- 5. Expand the park's trail system to better connect all activities within the park, particularly in the southern areas of the park including the area between the upper and lower lakes. Creating a trail that also brings guests from the main entrance through the wooded area at the park's eastern border would help to entirely separate pedestrians and bicyclists from motorists and will increase guests' connection with the park's more natural areas.
- 6. Charge reduced entrance fees for pedestrians and bicyclists to encourage alternative forms of transportation. Alternatively, charging entrance fees per vehicle could encourage walking and bicycling, and even increase carpooling.

Public Transit Access & Circulation

Public transit access to Darlington is limited. The Ramsey NJ TRANSIT rail station is approximately two miles from the entrance of the park. This station is part of the Main/Bergen County Line and the Port Jervis Line which runs from Rutherford to Mahwah, while the Port Jervis line is an extension of this line continuing from Sloatsburg to Port Jervis. Services on these lines start around 5 AM and stop at approximately 1:30 AM on weekdays and run between 4:45 AM and 1:30 AM on weekends and holidays. Sidewalks and crosswalks are installed along the route to Darlington Park in downtown Ramsey which switches to a paved trail that later merges with the roadway approximately one mile from the park entrance, at the intersection of Darlington Avenue and Hosking Way.

Proposed Public Transit Improvements

1. Provide shuttle service from the train station to the park in order to encourage transit use since train station is roughly a 40-minute walk from the park. To accommodate visitors without a car or bike, a shuttle could make a short loop around town, stopping at the park. These buses could pick up guests from the train station approximately every 20 minutes and make stops throughout Ramsey and the surrounding area, including Ramapo College. Additionally, the route should be improved for bicyclists by installing bicycle lanes.

- Encourage Ramapo College to add Darlington as a stop for their off-campus buses (see number 3 in Figure 9). The college's off-campus shuttle buses currently stop at the Ramsey Station. If the bus route were slightly altered to make an additional stop at the park, it would greatly improve public transit access to the park and could prevent the need for the aforementioned shuttle bus.
- 3. Extend the paved trail along Darlington Avenue so that it reaches the park entrance. This will allow bicyclists an opportunity to safely reach the park from the train station and will also benefits homes along the route. This pathway would also benefit from the pedestrian and bicycle access proposed for the access road at the intersection of Darlington Avenue and Ridge Road as it would decrease the trip from the train station by nearly one half mile.



Figure 9. Darlington County Park Proposed Improvements.

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the potential feasibility and impacts of holding a Dance Series event in Darlington County Park. For analysis purposes, it was assumed the event might attract up to 1,000 attendees. There are several important factors to consider when planning an event of this type at Darlington County Park:

Parking demand – Table 3 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 100 to a high of 450 depending on the assumptions made. The "average" scenario reflects how Bergen

County residents typically access county parks for regular use. ³ Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle could be as high as 2-4 persons per vehicle. If one assumes "average" driving demand, a 1,000 attendee event of this type would require between 188 and 375 parking spaces.

Currently there are approximately 605 available parking spaces on-site. While Darlington Park has ample parking space to accommodate event attendees, if these parking demands are coupled with high weekend demands, then parking will become much more of a challenge. Under these circumstances, it would appear that on-site parking may be adequate to accommodate an event of this nature and size, however the use of satellite parking may help to alleviate parking difficulties for non-event park attendees.

Table 3. Parking Demand Scenarios

EVENT ATTE	1,000 PEOPLE						
DRIVING DEMAND SCENARIO		Low		Average		High	
		Percent	People	Percent	People	Percent	People
MODE OF TRAVEL	Drive & Park	60%	600	75%	750	90.0%	900.0
	Drop-off & Taxi	5%	50	5%	50	5.0%	50.0
	Walk	25%	250	16%	160	4.3%	42.5
	Bike	7%	70	3%	30	0.5%	5.0
	Transit & Charter	3%	30	1%	10	0.3%	2.5
	Total	100%	1000	100%	1000	100%	1000
PARKING	2 passengers per car	300		375		450	
SPACES REQUIRED	4 passengers per car	150		188		225	
	6 passengers per car	100		125		150	

 Access and Circulation – Darlington County Park is located in a rural residential area with a number of nearby office campuses. The nearest exit from Interstate 287 is nearly four miles away. The park is somewhat accessible by foot for residents located near the surrounding trail system, though accessing the main entrance is challenging by foot or bicycle as it is designed for motorist entry. Without pedestrian and bicycle infrastructure improvements, it is not likely that driving demand could be lowered significantly.

Recommendations

³ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

- 1. Develop a parking agreement with the UPS Headquarters as they have a large deck located across Darlington Avenue which has easy access to the park via the Ramsey paved pathway. Crossing guards should be located at the intersection of the trail and Darlington Avenue to ensure pedestrian and bicycle safety. This parking garage would more than double the amount of available parking and could be utilized as the designated parking location for all event attendees or simply as overflow parking. Handicapped parking should remain available inside Darlington Park regardless.
- 2. Charge entrance fees per vehicle rather than charging per person. This technique will encourage carpooling and other alternative modes of transportation to the park while still generating revenue.
- 3. Allow exiting traffic to utilize the Ridge Road access point. Promoting one-way traffic during the event will help to minimize conflicts between attendees and motorists.
- 4. Stagger event departure times. Event planners should consider opportunities and activities that would encourage guests to arrive and leave at staggered times rather than all at once at the end of the event.
- 5. Utilize crossing guards within the park to ensure the safety of all attendees and guide incoming motorists to available parking spaces.
- 6. Crossing guards, coupled with a crosswalk, should be utilized at the Darlington Avenue entrance to ensure the safe arrival of pedestrians, bicyclists and those that may park in the UPS garage. If a Campgaw Road entrance be created, the same suggestions would apply there, as well.
- 7. Bicycle valet parking would provide attendees arriving by bicycle a safe place to leave their bicycle while simultaneously generating interest in bicycling as a form of transportation. Providing this sort of infrastructure for events also encourages event attendees that return for future events to consider bicycling.
- 8. Shuttle buses from the Ramsey train station would encourage attendees from out of town to use public transportation when attending the event. These shuttle buses should be marketed in the area prior to the event which will serve to encourage regular transit riders to attend the event.

Hackensack River County Park Transportation Assessment

Context & Location

Hackensack River County Park is located in central Bergen County in the City of Hackensack, six miles from the George Washington Bridge. As its name suggests, the park is situated on the western banks of the Hackensack River near Route 4. It comprises approximately 30 acres and stretches one half mile. The park is one of the few Bergen County parks that does not directly border any residential properties. Instead, the park shares its entire eastern border with the Hackensack River, its southern border abuts Route 4, and to the east is a large 72-store shopping mall (see number 4 in Figure 10). There are a number of moderately dense residential neighborhood (6,700 people per square mile) located across the river to the west in Teaneck Township. Although the neighbors are located only about 0.5 miles from the park, residents lack easy and safe access to the park across the river. Another notable feature is the presence of Teaneck Township's Andres Park and the Teaneck Greenway, which are located immediately across the river along River Road (see Figure 10). The colocation of these two park facilities in such close proximity to one another offers a potential future opportunity to reorient the entrance to Hackensack River County Park via a footbridge across the river through Andreas Park.

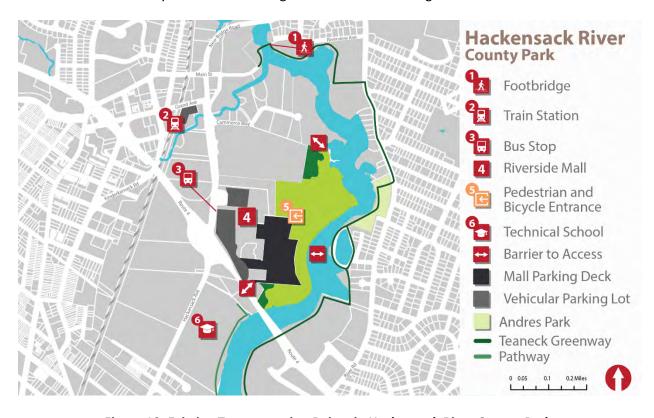


Figure 10. Existing Transportation Points in Hackensack River County Park.

Hackensack River County Park is currently fairly isolated behind the Shops at Riverside with Hackensack River and Route 4 providing further barriers to access. A footbridge connects Teaneck with River Edge Township, just north of the park (see number 1 in Figure 10), and is famously dubbed as the "Bridge that Saved the Nation" as it was used by George Washington and his troops during their retreat from New York. A second footbridge is located on the Fairleigh Dickinson University campus, just over one half mile from the Hackensack River trail entrance. Unfortunately, there is no safe way for pedestrians and bicycles to access Hackensack River Park from either of these footbridges. Additionally, the Bergen County Technical School (see number 6 in Figure 10) and Fairleigh Dickinson University are less than a half mile south of the park, but cannot easily access it due to the barrier created by Route 4. While the mall isolates the park, it also provides a number of access opportunities for park attendees who are aware of the park's presence including several transit stops and unofficial parking opportunities.

The New Bridge Landing train station (see number 2 in *Figure 10*), serviced by NJ TRANSIT's Pascack Valley Line, is located across Hackensack Avenue from the Shops at Riverside. NJ TRANSIT also provides bus access to the park via the 83 bus route which stops at the entrance to the mall parking area (see number 3 in *Figure 10*).

The handful of park visitors surveyed as part of the park master planning process overwhelmingly reported that they arrive to Hackensack River Park by car (85%), more than other Bergen County parks (79%), while only 15 percent walk (see *Table 4*). Despite the park's close proximity to the New Bridge Landing train station and the 83 bus route, no one reported using public transportation to access the park (see Table 16).

There is no vehicular entrance to Hackensack River Park nor is there designated parking. Additionally, there is no parking agreement between the mall and Hackensack River Park; however, park attendees utilize the mall parking deck (see Figure 10) when accessing the pedestrian and bicycle entrance (see number 5 in Figure 10). Park users reported a number of challenges related to the park's isolated location, including poorly marked entrances, lack of police presence, vandalism, and unsettling loitering. Hackensack Park visitors are less likely to feel safe (45%) as compared to other Bergen County parks (65%).

> Table 4. Transportation mode to Hackensack River Park (n=13) Compared to all Bergen County Parks studied (n=923)

Transportation Mode	Hackensack River	All Bergen		
	County Park	County Parks		
Drive	85%	79%		
Walk	15%	17%		
Bicycle	0%	3%		
Bus	0%	0.1%		
Taxi/Uber/Lyft	0%	0.1%		
Train	0%	0.1%		
Skate/Skateboard	0%	0.1%		
Total	100%	100%		

Overall, Hackensack River Park does not appear to be heavily used. Given the park's low usage and lack of vehicular access points and parking, visitors did not express concerns related to conflicts between pedestrians and bicyclists. Most of the park visitors surveyed reported going to the park alone rather than with others. This pattern was different than park users surveyed at other parks where only thirty percent reporting visiting parks alone.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

Hackensack River Park does not have a designated vehicular entrance. Instead, guests often access the park via the same entrance as the Shops at Riverside on Hackensack Avenue. Hackensack Avenue is a major arterial roadway with multiple turn lanes in each direction, creating a roadway width up to nearly 110 feet at some points. The regular traffic volume on this street is over 23,000 vehicles per day where the speed limit is 40 miles per hour. The entrance to Hackensack River Park is situated among a number of ramps connecting Hackensack Avenue, Route 4 and the mall entrance. The entrance is marked by a small wooden sign which is visible only to motorists traveling north on Hackensack Avenue (see Figure 11). Upon entering the mall parking lot, park visitors must follow the mall perimeter road to arrive at the rear-most parking garage, from which park access is available on foot or bicycle. There are no wayfinding signs for motorists once they have entered the mall parking area. There is no vehicle circulation within the park as trails are exclusively for pedestrians and bicycles.



Figure 11. Hackensack River Park Entrance Shared with the Shops at Riverside.

Proposed Motor Vehicle Improvements

- 1. Improve visibility of the park entrance by adding park signage the southbound side of Hackensack Ave before the left turn jug-handle (see number 1 in Figure 12). The current signage at the mall entrance should have the park name on both sides and should either be increased in size or surrounded by plantings in order to stand out among the numerous other signs competing for motorist's attention.
- 2. Improve wayfinding with signs placed on the interior road that leads to the rear parking deck with park access. A sign should also be placed at the entrance to the park designating permitted uses, as well as providing trail information.
- 3. In the longer term, reorient the park's entrance such that parking is made available at Andres Park and pedestrian/bicycle access is made available via footbridge (see number 5 in Figure 12).

Pedestrian and Bicycle Access & Circulation

The sidewalk network connecting to the Hackensack River Park entrance is fragmented and largely incomplete. There is also no bicycle infrastructure in the neighborhoods surrounding the park. This is particularly dangerous and discouraging for pedestrians and bicyclists given the park's entrance is located at the intersection of fourteen lanes of traffic and multiple on and off ramps.

Pedestrians must access the Shops at Riverside parking area from the south via sidewalk, but crosswalks and ADA compliant ramps are missing or require maintenance along the route. Park access is also provided via a makeshift path from the "Avalon Hackensack at Riverside" residences along the park's western edge. The park entrance is located at the rear of the shopping mall (The Shops at Riverside), and while a sidewalk does run the length of the front of the mall, pedestrians have no easy way to access the rear of the mall. As discussed previously, the Hackensack River, Hackensack Avenue, and Route 4 all act as barriers to entry to the park.

A plan is in place to replace the Route 4 bridge and add separated sidewalks on both sides of the bridge. This will provide an opportunity to connect residents in Hackensack with the Teaneck Greenway and Andres Park.

Proposed Pedestrian and Bicycle Improvements

- 1. Construct a new footbridge across the Hackensack River and reorient the park entrance through Andres Park in Teaneck. The footbridge entrance would be much more pleasant for residents accessing the park and would significantly improve connections between the park and residential neighborhoods in Teaneck as well as the Bergen County Technical School and Fairleigh Dickinson campuses.
- 2. Incorporate the Hackensack River Trail with the park by providing a trail connection to the historic footbridge and the Hackensack River trails (see number 2 in Figure 12). This will improve pedestrian and bicycle access from the north. This will provide an off-road access opportunity for residents in the Township of Teaneck and the Borough of River Edge, as well as visitors to the Steuben House museum. Connecting these two areas could also provide more visibility and foster greater usage of the park.
- 3. Provide a connection from the Route 4 bridge to the Teaneck Greenway such as stairs or a ramp on the Teaneck side of the bridge (see number 4 in Figure 12). Although the Route 4 bridge improvements are not expected to be completed for several more years, they will transform the bridge into a much more pedestrian friendly route. This is an excellent opportunity to connect Hackensack residents with the Teaneck Greenway and ultimately the reoriented entrance within Andres Park.
- 4. Incorporate bicycle infrastructure into the surrounding community in order to provide residents in the surrounding neighborhood an opportunity to utilize the bicycle pathway without having to first get in their car to drive to the park.
- Install designated bicycle and pedestrian routes through the mall parking lot that would allow for safer access to the park in the rear of the parking lot. This could take the form of additional sidewalks, a marked bike lane, or a dedicated shared-use path that runs directly from the road to the park entrance.
- 6. Install wayfinding signs targeted to residents of the Avalon Hackensack at Riverside which is situated along the border northern border of the mall parking lot. Wayfinding signs that direct residents toward the park entrance would encourage park use.
- 7. Installing boat ramps to be utilized by non-motorized water activities, such as kayaks, paddle boards and canoes, would increase use of the park and could help connect it with the many parks situated along the Hackensack River.

Public Transit Access

Hackensack River County Park is seemingly well served by public transportation; however, park guests do not utilize the nearby bus stop or train station. The 756 bus and the 762 bus stop immediately outside of the entrance to the Shops at Riverside. Additionally, the New Bridge Landing Train Station is located on Grand Avenue, less than a 10-minute walk from the park entrance. Bus riders must traverse a large parking lot, circumnavigate or walk through the mall, and then walk through the rear parking garage before finally reaching the park's entrance. Many bus riders may not even be aware that the park is located so close. A similar situation is present for train riders, except they must also cross six lanes of traffic on Hackensack Avenue, without a crosswalk, and then cross several on and off ramps.

Proposed Public Transit Access Improvements

- 1. Install wayfinding signs targeted for transit users including signage along the route from the train station and at the bus stop in front of the mall.
- 2. Designate pedestrian access from the bus stop to the park entrance by extending the trail system or installing sidewalks.
- 3. Improve access from the train station by installing an overpass over Hackensack Avenue which will make the trip from the train station to the park less intimidating (see number 2 in *Figure* 12). The improvement would also benefit the River Edge Township neighborhood, northwest of the park as it would improve their access to the park and area shopping.

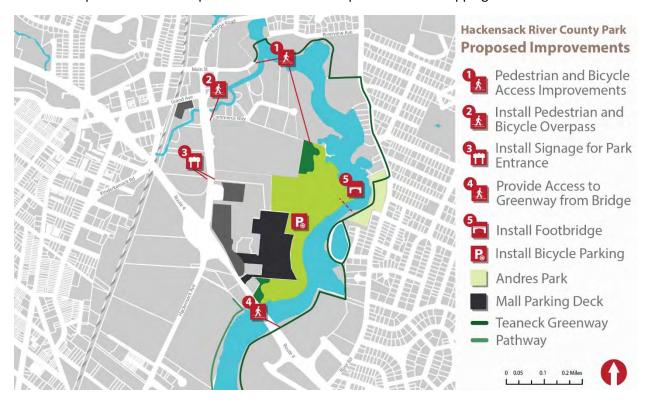


Figure 12. Hackensack River County Park Proposed Improvements.

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the feasibility and impacts of holding a proposed Kids Movie Series in Hackensack River County Park. For the purpose of analysis, it

was assumed such an event might attract up to 750 attendees. Based on current conditions in the park, it does not appear that this type of event is appropriate in this location. If such an event was to be planned, there are a number of important factors to consider as part of the event planning process:

Parking demand – Table 5 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 75 to a high of 338 depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. 4 Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle as high as 4-6 persons per vehicle. If one assumes "average" driving demand, a 750 attendee event of this type would require between 94 and 141 parking spaces.

Currently Hackensack River County Park provides no parking, leaving guests to utilize the mall parking spaces. Abundant parking is available in the garages and lots surrounding the mall, but utilizing more than 100 spaces at a given time would require coordination with the mall. Currently there is no formal shared parking agreement with the mall operator. Additionally, the mall closes at 9pm on Saturday and is closed on Sunday, therefore events held during these hours should ensure additional security due to the secluded nature of the park and the parking garage.

Table 5. Parking Demand Scenarios

EVENT ATTE	750 PEOPLE						
DRIVING DEMAND SCENARIO		Low		Average		High	
		Percent	People	Percent	People	Percent	People
MODE OF	Drive & Park	60%	450	75%	562.5	90.0%	675.0
TRAVEL	Drop-off or Taxi	5%	37.5	5%	37.5	5.0%	37.5
	Walk	25%	187.5	16%	120	4.3%	31.9
	Bike	7%	52.5	3%	22.5	0.5%	3.8
	Transit & Charter	3%	22.5	1%	7.5	0.3%	1.9
	Total	100%	750	100%	750	100%	750
REQUIRED	JIRED 2 passengers per car 225		.5	281		338	
PARKING SPACES	4 passengers per car	113		141		169	
	6 passengers per car	75		94		113	

 Access and Circulation – The park's location adjacent to several major highways and large parking structures make it highly accessible for cars without negatively impacting the local community. However, these same structures create barriers for pedestrian and bicycle access that can be partially addressed with the previously proposed improvements, as well as the recommendations discussed below.

⁴ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

Recommendations

- 1. **Designate a specific parking area** for special event attendees in order to minimize interference with mall patrons. This should be considered even if the park vehicular entrance is relocated to Andres Park as parking there is limited and unable to support a large event.
- 2. Install lighting within the park so that guests can safely move throughout the event.
- 3. Encourage walking and bicycling to the event by providing crossing guards and offering discounts at vendors or the mall for guests who arrive by walking or bicycling. Guests could also be encouraged to play along in a scavenger hunt that would encourage walking while incorporating the area's history, including the Martin Luther King, Jr. memorial and the New Bridge Crossing.
- 4. Employ "tactical urbanism" approaches by setting up temporary bike lanes that could stretch from areas such as the train station, or the nearby university. This would allow individuals to see the success and potential value of this bike infrastructure while also providing safe passage and encouraging bicycling and walking as opposed to driving to the event.
- 5. Bicycle valet parking may encourage people to ride to park events rather than drive and will generate interest in park events.

Overpeck Park Transportation Assessment

Context & Location

Overpeck County Park is a major regional park located in the southeastern corner of Bergen County. Comprising close to 800 acres of land area and bisected by Overpeck Creek, the park is divided into eight unique activity areas, and spans almost 3 miles from its northernmost to its southernmost points. As shown in Figure 13, the park is located less than 3.5 miles from the northern portion of Manhattan, with easy access from the George Washington Bridge. Given its central location the park attracts visitors from both New Jersey and New York. Regional access is made easier by the immediate proximity of two major interstate highways, I-95 (New Jersey Turnpike), and I-80. Overpeck boasts a wide range of attractions and amenities, including scenic trails through forests, a large golf course, an equestrian area, a 3,000person amphitheater, a boat launch, and various sports courts and fields.

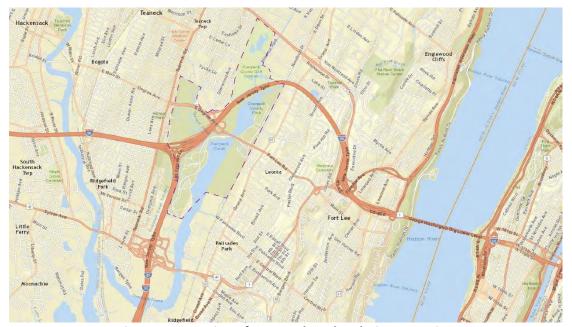


Figure 13. Location of Overpeck Park Relative to Region

(Source: City of New York, State of New Jersey, Esri, HERE, Garmin, INCREMENT P, NGA, USGS)

The park's proximity to major highways makes it easy to access by car, but those same highways can also act as a barrier to access from nearby municipalities that border the park, especially for pedestrians and bicyclists. Major highways also make it difficult to travel between different areas within the park. With limited access points, users of the park are encouraged to use cars to arrive to, and travel within the park. Additionally, the limited access points contribute to congestion during times of high use.

Visitor's reliance on car use to access the park was confirmed by park user survey collected by the research team, which found that the overwhelming majority of respondents from Overpeck Park primarily drove to the park (8 percent). See Table 6.

Table 6. Transportation mode to Overpeck Park (n=141)

Transportation Mode	Percent of Total
Drive	80%
Walk	18%
Bicycle	1%
Bus	1%
Taxi/Uber/Lyft	1%
Train	0%
Skate/Skateboard	0%
Total	100%

Five municipalities border Overpeck Park. The Township of Teaneck (Pop. 39,776) is located on the northwestern edge of the park. Overpeck Bergen County Golf Course, Area 1 (Teaneck Creek Conservancy) and Area 2 are all located in Teaneck. Area 1, the Teaneck Creek Conservancy, is the most accessible to local residents, with a significant portion of the park area bordering residential neighborhoods. Parts of Area 3 (Ridgefield) are also located in Township but cannot be accessed directly due to the interchange between I-95 and I-80. In addition to the residential neighborhoods near the park, there are a large commercial complex located nearby that includes a Marriot hotel and various office buildings. The hotel advertises itself as being "just 15-minutes from NYC," and can be directly accessed from a New Jersey Turnpike interchange.

South of Teaneck is the municipality of Ridgefield Park (Pop. 12,729), which includes most of Area 3. Ridgefield Park Jr.-Sr. High School is located less than 700 feet from Area 3, but that distance is entirely consumed by the thirteen lanes of I-95. As such, the school and nearby residential neighborhoods lack convenient access to the park. There is a single access point at the southern end of the park, using Emerson Street, which crosses over the Turnpike. This route offers a single travel lane in each direction and a sidewalk. This route is about a mile from the nearest home to the beginning of the recreational area.

The Borough of Palisades Park (Pop. 19,622) which includes the Palisades Parks section of Overpeck Park, along with portions of Area 4 is located across Overpeck Creek. The municipality is separated from the park by a rail line, and a series of industrial buildings. The Roosevelt Place entrance to the park is the only access point located in the Borough.

North of Palisades Park is Leonia (Pop. 8,937), which includes the remainder of Area 4, the entire Equestrian Center, the Henry Hoebel Area, and a small portion of the golf course. The same rail line that separates Palisades Park from Overpeck impeded access to the park in Leonia as well. The Equestrian center and the Henry Hoebel Area share an access point at Fort Lee Road, splitting south and north to reach each destination, respectively.

Englewood (pop. 27,147) is the final municipality to border Overpeck, and a small section of the golf course lies within its border. The areas of Englewood closest to the park are industrial or commercial, and there is no direct access point from Englewood into any section of Overpeck Park.

Multimodal Conditions & Opportunities

1. Area 1 – Teaneck Creek Conservancy

The Teaneck Creek Conservancy area is located in the northwestern part of Overpeck Park, just across from Area 2. It consists of 48.47 acres of land with approximately one acre of water and 34 acres of wetland. The Conservancy is a nature reserve with walking trails and art installations. As such, neither motor vehicles nor bicycles are allowed within the park.

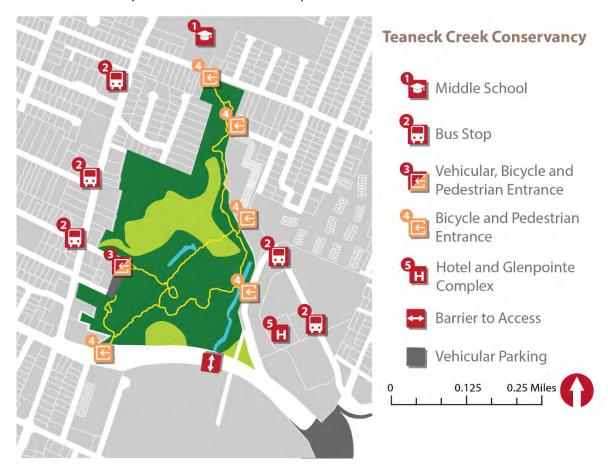


Figure 14. Existing Transportation Points for Teaneck Creek Conservancy

Motor Vehicle Access & Circulation

There is a single parking lot containing approximately 66 regular parking spots and 2 handicap spaces. Access to the parking lot for motor vehicles is from Teaneck Road, which has a single lane in each direction (see number 3 in Figure 14). Vehicles must turn onto Puffin Way, to access the parking lot that is not visible from the street. In the northbound direction, there are three signs marking the park, but there is only one sign visible from the southbound direction (Figure 15). Additionally, Puffin Way has two large "Dead End" signs, which might confuse drivers looking for the park. Vehicular access is easy for those who know where they are going, but the park and parking lot are invisible for those who do not know what to look for.



Figure 15. View of Puffin Way and existing signage from Teaneck Road (Source: Google Maps)

Proposed Motor Vehicle Improvements

1. Improve visibility of the park entrance for vehicles looking for the parking lot at Puffin Way. MUTCD compliant signage should be installed at Puffin Way in both directions, advertising the turn for the parking lot, and at least 200 feet before Puffin Way, displaying the name of the park area. The existing decorative park sign should be maintained, but could be reoriented to provide higher visibility. (See number 1 in *Figure 19*)

Pedestrian and Bicycle Access & Circulation

The neighborhood to the west of Teaneck Creek is residential with low-speed streets and sidewalks, making the area relatively walkable. The sidewalks have curb ramps with tactile domes, although the lip height of the ramps may violate ADA standards. Unfortunately, Teaneck Road may be a barrier to access; there is no traffic signal or stop sign at Puffin Way, and the crosswalks are not painted nor signed. Additionally, while the street has only one lane in each direction, the lanes are close to 20 feet wide, which is conducive to speeding. There are no bicycle lanes or amenities in the area, despite the ample space.

The neighborhood to the north of the park has access to the trails through Fycke Lane, which is a low volume residential roadway (Figure 16). There is an entrance to the trail system directly across from Thomas Jefferson Middle School, and a crosswalk is provided. Vehicles may also use the roadway for onstreet parking.



Figure 16. Crosswalk at Fycke Lane (Source: Google Streetview)

There are additional pedestrian access points on the east side of the park, adjacent to the Glenpointe Complex, which contains a large Marriot and various offices. Office workers or Marriot patrons are a short walk from the park trails, which feature welcome signs. However, as shown in Figure 17, the trails are accessed from a 4-lane roadway, and there is no sidewalk, crosswalk, or curb-cut into the Glenpointe development.



Figure 17. No crosswalk near the trail entrance by the Glenpointe Complex (Source: Google Maps)

An additional interior trail terminates at Degraw Avenue, which is a high-speed roadway. Signage at the entrance is inconsistent, with a welcome trail map near a "no trespassing" sign. Once Area 2 is developed, this access point may see more demand.

There are no bicycle lanes or other bicycle facilities in the neighborhoods surrounding Teaneck Creek Conservancy.

The park is designed around walking, and features three trails, as shown in Figure 18. Motor vehicles are not allowed inside the park, aside from the parking lot, and bicycles are not allowed to use the trails. Trail surfaces range from natural, to woodchip, to fully improved. There are no direct connections within the park to other area of Overpeck Park. Maintenance of the trail signage was noted as lacking by the SEBS observation team.

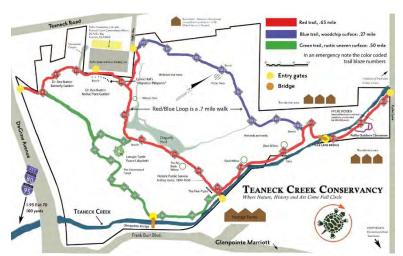


Figure 18. Map showing Teaneck Creek Conservancy Trails (Source: Teaneck Creek Conservancy)

Proposed Pedestrian and Bicycle Improvements

- 1. Improve pedestrian access to the park entrances by painting continental crosswalks, ensuring curb ramps meet ADA standards, and installing signage informing motorists of the crosswalks. At the entrance serving the Glenpointe Complex, pedestrian access can be improved by continuing a sidewalk or pathway towards the building access points. (See number 3 in Figure 19)
- 2. Enhance access to the main entrance through Puffin Way by installing a HAWK signal, which would maximize access and safety for pedestrians coming from the residential neighborhood. A HAWK signal only stops traffic when a pedestrian needs to cross. (See number 2 in Figure 19)
- 3. Welcome pedestrian access at the Degraw Avenue entrance by removing the "no trespassing" signage and widening the trail access point. Improvements to this entrance should be coordinated with the development of Area 2, as pedestrians will use the nearby intersection to move between park areas. (See number 3 in *Figure 19*)
- Incorporate bicycle infrastructure into the surrounding community by adding bicycle lanes or shared lane markings (sharrows) between the park and the neighboring residential area.
- 5. **Provide secure bicycle racks** at each of the park entrances.
- 6. Install new wayfinding signage within the park, replacing the existing signage which has been damaged by the elements or vandalism.

Public Transit Access

The Teaneck Creek Conservancy is accessible by the 167 and 751 bus lines, which stop on Puffin Way. It can also be reached from Glenpointe Centre using the 167 and 182 buses. The stops near the Glenpointe center all have shelters, but the stops on Teaneck Road do not.

The 167 bus runs from the New York City Port Authority bus terminal to Harrington Park Station Plaza, starting at 6:15 AM and runs until 1:45 AM on weekdays at fifteen-minute intervals on weekdays. Saturdays, the bus runs from 6:15 AM to 1:15 AM at fifteen to thirty-minute intervals and Sundays it runs twice an hour from 7:00 AM to 12:15 PM. The 751 travels from the Edgewater Commons Mall to the Bergen Community College Ender Hall. On weekdays, service begins at around 5:30 AM and end at 10:00 PM—traveling every forty-five minutes; on Saturdays, the bus service begins at 7:45 AM and end at 10:00 PM with buses every forty-five minutes and on Sundays there is no service on this bus line. The 182 bus route travels from the G.W. Bridge Bus Station to the Hackensack Bus Terminal starting at 6:00 AM and running until 12:40 AM, four times an hour, on weekdays. Saturdays, the 182 line starts at 6:20 AM and runs until 9:20 PM, with buses every forty minutes and Sundays it service begins at 8:35 AM and ends at 7:35 PM, running every thirty minutes. The lines are oriented towards New York City commuters, and as such, may not provide the best access to the park.

Proposed Public Transit Access Improvements

1. Install a bus shelter and bench at the bus stops adjacent to the Puffin Way entrance. (See number 4 in *Figure 19*)

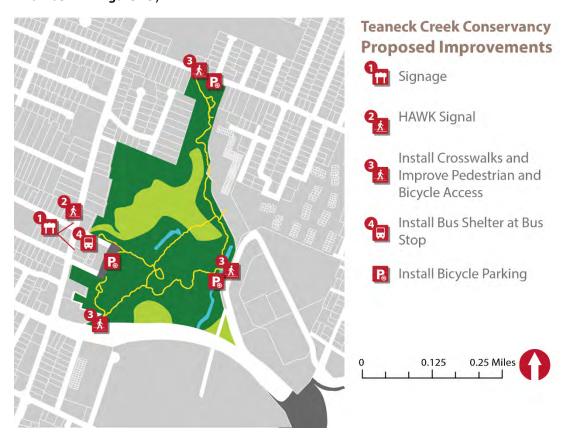


Figure 19. Teaneck Creek Conservancy Proposed Improvements

2. Area 2 - Undeveloped

Area 2 of Overpeck County Park is located just south of the Teaneck Creek Conservancy. It consists of 74 acres of land, 2.96 of which are water and 32.88 of which are wetlands. Area 2 is not developed and there are no park amenities within the area. However, the county has developed an initial set of plans that will impact how the area is developed. Of note is that Area 2 is the proposed permanent location for the Dinosaur Field Station. Figure 20 shows the initial design concept for Area 2, including a proposed parking lot layout and locations for interior trails.



Figure 20. Initial design concept for Area 2

Motor Vehicle Access & Circulation

Area 2 currently has no parking, although there is a sign that reads "Overpeck Park" at the end of Fort Lee Road (see Figure 21). Area 2 is bordered by major roadways, including DeGraw Avenue to the north and a major interchange between the New Jersey Turnpike and I-80 to the south. The park can be reached by vehicle on Fort Lee Road, East Maple Street or Parkview Drive; however, there is currently only one entrance that is at the end of Fort Lee Road. Parking on these streets is restricted because they are within residential areas. There is a larger parking lot near the Fort Lee Entrance, but it is reserved for residents in the local development next to it.



Figure 21. View of Area 2 from Fort Lee Road

(Source: Google Street View)

When this area is developed, a new parking lot will be added at the existing signalized intersection of Degraw Avenue and Frank W. Burr Boulevard.

Proposed Motor Vehicle Improvements

1. The new parking lot should include signage consistent with the rest of Overpeck Park.

Pedestrian and Bicycle Access & Circulation

Reaching the park as a pedestrian is difficult from Degraw Avenue, as it is a six-lane roadway that borders the park with no sidewalk. The only existing pedestrian entrance is via Fort Lee Road. Fort Lee Road has inadequate sidewalks from Teaneck Road to the park entrance, although it is a low traffic area in a residential neighborhood. Teaneck Road has sidewalks on at least one side of the street; however, there is no crosswalk to cross Teaneck Road at Fort Lee Road. Since the park is bordered by the New Jersey Turnpike and I-80, there is no way to easily access Area 3. For a pedestrian to travel from Area 2 to Area 3, they would walk down Teaneck Road, cross at the Emerson Street Bridge and then walk through the Samsung campus to get to the other side of Overpeck Park. However, this walk is outside of the park and is approximately 2.5 miles. Access to the conservancy area of the park is possible by walking along Teaneck Road, or directly across Degraw Avenue once the new entrance is built at the signalized intersection.

For bicyclists, Teaneck Road and Fort Lee Road are considered bicycle friendly roads that go through residential areas, though there is no signage or designation that asserts bicycle presence in the area. DeGraw Avenue is not a bicycle friendly road—it has two lanes, no shoulder or sidewalk, and a speed limit of 40 miles per hour. The southern end of the park is inaccessible by bicycle due to the major roadways.

Pedestrian Access & Circulation Proposed Improvements

- 1. Install a crosswalk across Teaneck Road at Fort Lee Road.
- 2. Extend the sidewalk on Fort Lee Road into the park.
- Add bicycle lanes or shared lane markings (sharrows) between the park and the neighboring residential area.
- 4. Continue the sidewalk along Frank W. Burr Boulevard to provide a connection to the Teaneck Creek Conservancy trails.
- 5. **Provide secure bicycle racks** at each of the park entrances.
- 6. Ensure that the future trail system provides as many connections as possible to the neighborhood to the west.

Public Transit Access & Circulation

There is a bus stop (167) at the corner of Teaneck Road and Fort Lee Road. The 167 bus goes from the New York City Port Authority bus terminal to Harrington Park Station Plaza, starting at 6:15 AM and runs until 1:45 AM on weekdays at fifteen-minute intervals on weekdays. Saturdays, the bus runs from 6:15 AM to 1:15 AM at fifteen to thirty-minute intervals and Sundays it runs twice an hour from 7:00 AM to 12:15 PM. One can easily walk to the entrance of this area of the park as long as proper crosswalks are provided to get across Teaneck Road.

Proposed Public Transit Improvements

1. Install a sidewalk along Fort Lee Road into the park to provide access to bus riders.

3. Area 3 – Ridgefield; and Area 4 – Undeveloped

Area 3 is perhaps the most utilized area of Overpeck County Park. It consists of 240 acres of land and has 123 acres of recreation space as well as 5 miles of walking paths. It contains a boat docking area and a

kayak rental center called Paddle Overpeck near the main entrance. There are two baseball fields, two soccer fields, six tennis courts and a large playground. At the center of the park is the Overpeck County Amphitheater where many public events and concerts take place. To the east of the park is Overpeck Creek, which is utilized by many kayakers and to the west is the NJ Turnpike. To the north is DeGraw Avenue which becomes Fort Lee Road near the major entrance to the park and to the south is the Samsung Campus along with the Hilton Garden Inn and AMC Starplex Movie Theater where the other entrance is located.

Area 4 of Overpeck Park is located across Overpeck Creek, between the Equestrian Center and the Palisades Park areas. There is no direct entrance into this area of the park as it is a former landfill currently being capped. Because the area has maintained restricted access, it is isolated from the rest of Overpeck Park, lacking connection to other areas and opportunities for movement within Area 4. At this time, Bergen County does not have a planned design for this area, although opportunity exists to connect areas 3 and 4 via a new bridge. Doing so would create a loop road that would enhance access to almost every section of the park. Additionally, there is a proposal to relocate the Bergen County Zoo into Area 4, rather than expanding it in its existing Van Saun Park location. Combined with the proposed loop road and the Hudson Bergen Light Rail extension, a zoo located in Area 4 would be easily accessible to Bergen County residents.



Figure 22. Existing Transportation Points for Area 3 - Ridgefield

Motor Vehicle Access & Circulation

There are only two access points into Area 3, for pedestrians, bicyclists, and vehicles. The northern access point is through Fort Lee Road (see number 3 in *Figure 22*). Drivers turn into the Equestrian Center through a signalized intersection, and then use the first roundabout exit to navigate towards Area 3. This interior park roadway parallels Fort Lee Road, and crosses Teaneck Creek. It then traverses Area 3 towards the southern entrance.

The southern access point is through Challenger Road, which has direct connections to the New Jersey Turnpike and Route 46 West. Challenger Road connects to Emerson Street, which is the only bridge over the Turnpike. Emerson Street connects to Ridgefield Park Borough, and has sidewalks.

From north to south, drivers encounter four different parking areas. The parking lots are spaced out relative to the recreational facilities—boat area, playground and fields, and amphitheater; there are 681 regular parking and 24 handicap spaces. This parking is enough for regular operations of the park, although events may need additional parking. The field adjacent to the Amphitheater serves as overflow parking for the amphitheater, and is also used to stage other events or fairs. Park visitors have complained that events overwhelm the parking areas set aside for the boat launch.

The northern entrance has no signage until after the turn into the park, making it easy to miss for people who are not familiar with the area. The southern entrance also only has a sign once one has turned into the park, but none on Challenger Road or near the bus stop. Motorists moving northbound on Route 46 are informed of an exit to towards West 80, but there is only a small sign pointing towards Overpeck Park past the decision point to take the exit. Motorists southbound on Route 26 are not informed of Overpeck Park access until after they have exited onto local roads.

Area 4 has no current vehicular access. Future development of the area would likely see access added through the Equestrian Center and the Palisades Park area, rather than through a dedicated entrance.

Proposed Motor Vehicle Improvements

- 1. Add signage to Route 46 and the New Jersey Turnpike to inform motorists of the southern entrance to Area 3. (See number 1 in Figure 23)
- 2. Add signage on the New Jersey Turnpike, Degraw Avenue, and Fort Lee Road to inform motorists of the northern entrance to Area 3.
- 3. Limit access to the boat launch parking area during events to ensure that regular park visitors are able to use the park amenities during events.
- 4. Realign the northbound New Jersey Turnpike exit (70A) at Degraw Avenue in order to reactivate a closed entrance to the park. This entrance will decrease vehicle miles travelled and decrease movements at the northern park entrance that is further east on Fort Lee Road. Access can be limited during events to ensure traffic does not back up onto the Turnpike. (See number 2 in *Figure 23*)
- 5. Limit cut-through traffic by installing traffic-calming infrastructure and lowering the speed limit on the interior roadway. Effective traffic-calming techniques include mini-roundabouts, chicanes, and speed humps. Combined with a lower speed limit, GPS navigation software will be less likely to recommend Area 3 as a way to avoid traffic on the adjacent highways.
- 6. Create a new bridge at the southern end of Area 3, providing connections to the east side of the park. Such a bridge would mirror the existing bridge on the north end of the park and facilitate that creation of a loop roadway, connecting Area 3, the Palisades Park Sportsplex, Area

4, and the Equestrian Center. Additionally, such a connection would allow residents of communities east of the park access to Area 3. Allowing nearby residents to walk and bicycle into the park can reduce congestion during peak times. In the future, a new bridge would also create connections to the proposed Hudson Bergen Light Rail stations and associated parking garages (Figure 24).

Pedestrian and Bicycle Access & Circulation

The northern park entrance has sidewalks on both side of the road to the east (Fort Lee Road), with crosswalks at key locations. The area to the east has a mixture of commercial and residential land uses, which generate pedestrian travel.

DeGraw Avenue, the western half of Fort Lee Road, is not accessible to pedestrians as there is no continuous sidewalk along the road. Adding sidewalks becomes complicated, as Degraw Avenue interacts with on-ramps to the New Jersey Turnpike. However, access from the residential areas to the west would be best served by connections from Area 2 or a new highway pedestrian overpass.

The southern entrance to the park is accessible for pedestrians from the nearby neighborhood by crossing Emerson Street Bridge and walking through the Samsung Campus. However, this walking route is not attractive, due to the indirect routing and the many high-speed on-ramps pedestrians must cross.

Within the park, circulation is very pedestrian friendly, as there are dedicated trails connecting all the major amenities. Pedestrians can choose between an interior path or one along the water.

There are no dedicated bicycle facilities into the park. Within the park, bicyclists can share the wide trails with pedestrians.

Area 4 currently does not have any bicycle or pedestrian access.

Pedestrian and Bicycle Access & Circulation Proposed Improvements

- 1. Improve pedestrian access via the southern entrance by installing crosswalks and signage along **Emerson Street**, especially at the on and off-ramps.
- 2. Connect the residential neighborhood to the park by building an over- or underpass across the **New Jersey Turnpike.** An overpass is preferable because the width of the NJ Turnpike would create a very long enclosed space, which may feel unsafe to park users. Additionally, it is important that the overpass be designed to take into account the comfort of park users. This would include the use of plexi-glass walls to combat the high noise level of the turnpike, while still providing natural light. (See number 3 in Figure 23)
- 3. Improve bicycle access by adding bicycle lanes or shared lane markings (sharrows) between the park and the neighboring residential area.
- 4. Improve bicycle access by providing secure bicycle racks near each amenity inside the park. A bicycle maintenance station should be included at the busiest bicycle parking location, most likely by the baseball and soccer fields.
- 5. A new bridge at the southern end of Area 3 (see proposed motor vehicle improvements) would also provide improved access to bicyclists and pedestrians.

Public Transit Access & Circulation

Travel to this area of Overpeck County Park by public transit is possible with the 157 and 167 buses that stop at Overpeck Corp Centre/Agfa Building on Challenger Road; from here it is a little over a quartermile to get to the entrance and approximately 0.5 miles to get to the amphitheater within the park. The 167 bus goes from the New York City Port Authority bus terminal to Harrington Park Station Plaza, starting at 6:15 AM and runs until 1:45 AM on weekdays at fifteen-minute intervals on weekdays. The stop has a shelter and bench.

Saturdays, the bus runs from 6:15 AM to 1:15 AM at fifteen to thirty-minute intervals and Sundays it runs twice an hour from 7:00 AM to 12:15 PM. The 157 bus only runs on weekdays from New York City Port Authority Bus Terminal to Cedar Lane at Lincoln Place in Teaneck. Service for this line begins at 4:00 PM and ends at 7:02 PM, with only seven buses at 30-minute intervals in that time frame. The closest existing rail station to the park is the Essex Street Station of NJ TRANSIT's Pascack Valley Line—it is a direct 3 miles from the DeGraw Avenue entrance to the park and the Teterboro stop on the same train line is a straight line distance of 3 miles from the entrance to the park near the Samsung Campus. The Pascack Valley Line runs from 5:55 AM to 12:54 AM, which covers the park's general hours of operation.

Overpeck Park may be served in the future by an extension of the Hudson-Bergen Light Rail line. Two stations are proposed near Area 4. See the Palisades Park and Equestrian Center sections for details.

Proposed Public Transit Improvements

There are no proposed improvements for public transit access. The proposed bridge across Overpeck Creek would improve transit access into the park, by providing a safe walking path from the east. Additionally, the development of the light rail stations would create convenient access to frequent public transit.



Figure 23. Ridgefield Area 3 Proposed Improvements.



Figure 24. Possible Routing of New Loop Road Connecting Various Areas of Overpeck Park

4. Palisades Park Sportsplex

The Palisades Park section of Overpeck Park is located in the southeastern corner in the Borough of Palisades Park. It is bordered to the west by Overpeck Creek and to the east by a strip of commercial and industrial facilities including a grocery store, restaurant, and warehouse. Beyond the commercial strip is a dense neighborhood of single and multi-family housing units. Between the commercial strip and the dense residential neighborhood lies a freight rail line, which is the right of way for the proposed Hudson Bergen Light Rail extension (see number 2 in Figure 25).

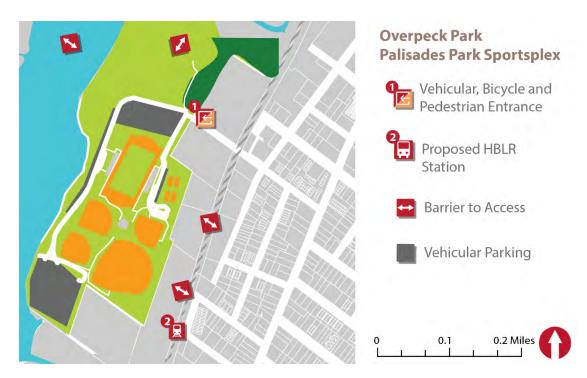


Figure 25. Existing Transportation Points in Palisades Park Sportsplex.

Motor Vehicle Access & Circulation

There is a single access point to Palisades Park, through Roosevelt Place (see number 1 in Figure 25). This roadway provides the only opportunity to cross the freight rail line. To the east, Roosevelt Place intersects with Route 93 (Grand Ave), which provides north-south connections. There is a sign for northbound traffic on Route 93 that points towards a "County of Bergen Park Area" but it does not offer specifics. Additionally, the sign is placed after the intersection. There is no signage for southbound motorists. Driving down Roosevelt Place, drivers arrive at an industrial area, with little indication that the park exists.

Movement within the area for vehicular traffic is supported by three-quarters of a mile of two-way roads and ample parking. Drivers immediately encounter a large parking area, with seven rows of parking stalls. Drivers can follow the interior roadway to access additional parking. At the end of the roadway is another large parking area, for the Palisades Park Swim Club, which is not part of Overpeck Park. However, visitors of the swim club have no other access point.

A new light rail station is proposed near Palisades Park, at Grand Avenue between Fairview Street and West Ruby Avenue. The light rail vehicles would cross Roosevelt Avenue, and require frequent closures. The crossing would be updated with modern signals and gates. A traffic analysis concluded that the addition of the station would not result in additional congestion at the nearby intersections.

Proposed Motor Vehicle Improvements

- 1. Install new signage on Route 93 to direct motorists towards the park. (See number 1 in Figure
- 2. Landscape Roosevelt Place to make the park entrance more welcoming. The county should work with the city to and provide a visual cue that one is approaching a park. (See number 2 in Figure 28)

- 3. Given the Palisades Area's ample parking and the lack of boat ramps in the southern section of the park, there is an opportunity to add a boat ramp and increase the area's connectivity with the western areas of the park. Currently, the closest boat ramp to the Palisades Park area is located near the amphitheater.
- 4. Ensure that the future development of Area 4 includes vehicular access, which would provide the Palisades Park Sportsplex with a secondary entrance.

Pedestrian and Bicycle Access & Circulation

While the Palisades Park neighborhood is supported by a network of sidewalks, the sidewalk ends as it reaches Palisades Park (see Figure 26). Additionally, there is no other access point into the park.



Figure 26. Palisades Park Entrance (Source: Google Streetview)

Inside the park, there are trails along the waterfront, and in the interior connecting the various amenities. However, these trails are oriented towards bringing people to and from their parked cars, rather than connecting to the surrounding neighborhood.

There are no bicycle facilities in the surrounding community.

The proposed light rail station will create an opportunity to provide a new connection to the existing neighborhood. The station development would involve new sidewalks along Fairview Street, connecting to Grand Avenue. Additionally, there would be a walkway across the tracks (see Figure 27).



Figure 27. Proposed Palisades Park HBLR station Source: New Jersey Transit Supplemental Draft Environmental Impact Statement, March 2017

Proposed Pedestrian and Bicycle Improvements

- 1. Provide a direct connection into the park by connecting the existing sidewalk with the interior trail network. (See number 3 in Figure 28)
- 2. Work with the municipality to install bicycle markings and signage on the roads approaching the park, especially Commercial Avenue and West Central Boulevard.
- 3. Install bicycle parking near the various park amenities, and include a bicycle maintenance station.
- 4. As mentioned in the Area 4 analysis, continuing the Palisades Park trail through Area 4 would provide better connectivity among the eastern areas of Overpeck Park.
- 5. Create a secondary pedestrian entrance into the park by taking advantage of the proposed infrastructure to be installed by New Jersey Transit. A new trail should connect to the proposed walkway across the train tracks. (See number 5 in *Figure 28*)

Public Transit Access & Circulation

The area is accessible seven days a week around the clock by NJ TRANSIT's 166 bus line and Monday through Saturday by the 751 line. Bus riders exit at the corner of Broad Avenue and East Palisades Boulevard and have less than a three-quarter mile walk to the entrance of the park on Roosevelt Place. Crosswalks and sidewalks ensure pedestrian safety along the route at all intersections, except that of Commercial Avenue and West Central Boulevard and Commercial Avenue and Roosevelt Place.

The proposed extension of the HBLR would provide convenient and frequent access to the park, from 6am until 10pm.

Proposed Public Transit Improvements

- 1. Install signage and crosswalks at the intersections along Commercial Avenue to provide bus riders with a safe route into the park.
- 2. Ensure the future HBLR station is connected to the park with a new bicycle and pedestrian trail (see number 5 in Figure 28).

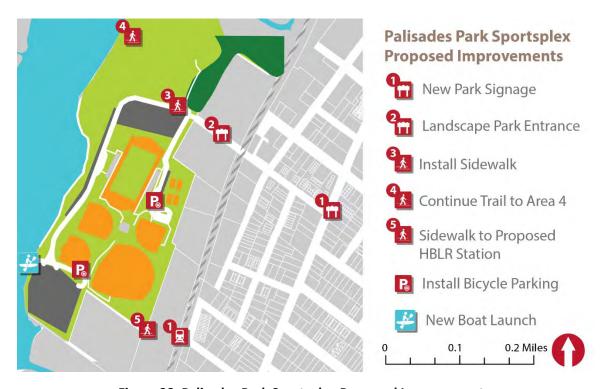


Figure 28. Palisades Park Sportsplex Proposed Improvements.

5. Bergen County Equestrian Center

The Bergen County Equestrian Center is located to the east of Overpeck Creek, south of the Henry Hoebel Area, and north of Area 4. The center includes corrals and riding area for horses, an indoor arena, and space for classes. Additionally, the Equestrian Center section also provides access to a boat launch. A rail line to the east of the center creates a barrier between the park area and the nearby residential neighborhood. Although pedestrian access is not allowed, the vegetation at the end of Maple Street shows clear sign of people walking across it to access the park.



Figure 29. Existing Transportation Points in the Equestrian Center.

Motor Vehicle Access & Circulation

The only access point to the Center is via a signalized intersection on Fort Lee Road. This intersection allows for vehicular access from both directions, and the signal features an exclusive turning phase. Fort Lee Road provides access to the NJ Turnpike half a mile to the west. Upon entering the park, users encounter a roundabout, where they can choose to turn towards Area 3 or continue into the Equestrian Center. A large sign in the middle of the roundabout welcomes users to the park.

This area of the park includes 79 regular parking spaces and six handicap spaces. The larger parking lot is located by the Equestrian Center, with a smaller lot by the boat ramp. There is also a large blacktop area, which appears to have been used in the past for sports, but now sits abandoned. This area could be used for overflow parking.

The Equestrian Center is well connected to other park areas. An interior road with an adjacent trail takes park users west over the creek into Area 3. Park users can also cross Fort Lee Road at a signalized intersection to access the Henry Hoebel Area. Because Area 4 is not in use, there is currently no access into it.

The proposed Leonia Station on the Hudson Bergen Light Rail Line would involve the creation of a new parking garage at the location of the existing blacktop (see Figure 30). According to the Northern Branch Corridor SDEIS, this would involve a diversion of 2.3 acres of park space. While this is will be offset through the proposed acquisition of a new park area to the north, it is important to consider how new commuter traffic would interact with park users, especially at pedestrian crossings.

Proposed Motor Vehicle Improvements

- 1. Install signage in advance of the park entrance to advertise the park. Signage should be located at the New Jersey Transit off-ramps to the west, and at Grand Avenue to the east (see number 1 in *Figure 31*).
- 2. If there is a short-term increase in parking demand, take advantage of the existing blacktop area for overflow parking by installing a curb cut (see number 2 in *Figure 31*).
- 3. Request that NJ TRANSIT use best practices in sustainable design for their proposed HBLR parking deck. Because the garage will be built in the middle of a park area, it is important that the design minimize the heat-island effect, uses vegetation to shield the structure, and carefully manages water runoff. Lighting within the garage should also be considered.

Pedestrian and Bicycle Access & Circulation

The main park entrance at Fort Lee Road is signalized, with crosswalks in all directions. To the west, there are no sidewalks, but rather paths that lead into the park areas on both sides of the road. Half a mile to the west sits a major interchange with the New Jersey Turnpike, which is hostile to pedestrians and bicyclists. Sidewalks exist on both sides of Fort Lee Road to the east, into Leonia. Leonia appears to be friendly to walking and bicycling, with sidewalks on most roads feeding into residences and businesses. However, there are no bicycle lanes or other bicycle infrastructure in the area.

Inside the Equestrian Center, an interior trail provides direct access to the points of interest within the park area and is wide enough for use by pedestrians and bicyclists. The location where the trail crosses the interior park road is well marked, although it lacks an overhead light.

There is no other pedestrian access into the park due to the rail line on the east side and the proposed Area 4 to the south. However, at the intersection of Station Parkway and Maple Street, it is clear that pedestrians cross the rail line to access the park.

The proposed Leonia Station on the Hudson Bergen Light Rail Line would straddle the existing freight line (see Figure 30). The proposal includes a pedestrian walkway across the tracks, which would provide a new pedestrian entrance into the park. The walkway should be designed to feed into the existing trail system.

Proposed Pedestrian and Bicycle Improvements

- 1. Improve pedestrian access by formalizing the crossing of the rail line at Maple Street. Depending on the frequency of rail movements, the crossing can be a simple asphalt path with signs or require an automatic signal (see number 3 in *Figure 31*).
- 2. Increase pedestrian safety by installing an overhead light where the trail crosses the interior park road (see number 4 in Figure 31).
- Improve bicycle access by restriping the shoulders inside the park into bicycle lanes (see number 5. in *Figure 31*)
- 4. Improve bicycle access by converting the neighboring residential streets into bicycle greenways, using signage, striping, and traffic calming. See the section on bicycle infrastructure for details.
- 5. Improve bicycle access by installing bicycle racks at points of interest, such as the boat launch area and the Equestrian Center.

Public Transit Access

NJ TRANSIT bus lines 182, 751, and 755 stop less than a quarter-mile away from the main park entrance at Fort Lee Road and Grand Avenue. Weekdays, route 182 travels from the G.W. Bridge Bus Station to the Hackensack Bus Terminal starting at 6:00 AM and running until 12:40 AM, four times an hour. Saturdays, the 182 line starts at 6:20 AM and runs until 9:20 PM, with buses every forty minutes and Sundays, the service begins at 8:35 AM and ends at 7:35 PM, running every thirty minutes. The line also serves Teaneck Creek Park. Route 751 travels from the Edgewater Commons Mall to the Bergen Community College Ender Hall. On weekdays, service begins around 5:30 AM and end at 10:00 PM running every forty-five minutes; on Saturdays, the bus service begins at 7:45 AM and end at 10:00 PM with buses every forty-five minutes and on Sundays there is no service on this bus line. This line also serves Teaneck Creek Park. Route 755 follows a similar path, with some deviations.

There is a continuous sidewalk from the bus stops to the park entrance along Fort Lee Road.

New Jersey Transit has proposed extending the Hudson Bergen Light Rail line north, using the existing right-of-way of the freight rail line that borders Overpeck Park (see Figure 30). The plan proposes a new station directly adjacent to the Equestrian Center, which would include a new parking garage for 583 vehicles. Additionally, the intersection of Fort Lee Road and the park entrance would be modified to install various bus pullout bays. This plan would significantly enhance transit access to the park, but also have some negative impacts to park users

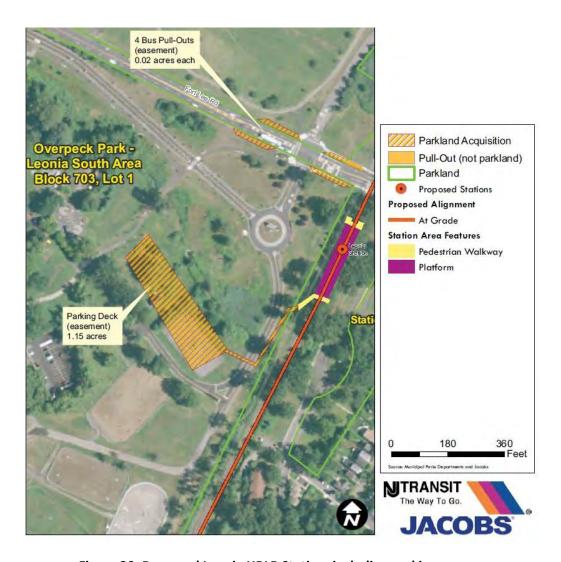


Figure 30. Proposed Leonia HBLR Station, including parking garage.

The creation of a parking garage for commuters within the park would have the greatest impact on park users. According to the Northern Branch Corridor SDEIS from March 2017, the station and garage would generate 254 new vehicle trips during the morning peak hours. Additionally, the intersection of Fort Lee Road and Overpeck Park currently operates at a "B" Level of Service, which would change to a "C" during the morning peak period. The plan proposes altering the signal timing to lower the impact on the intersection. Additionally, vehicles would have to navigate the park roundabout to access the new garage. The SDEIS did not analyze how the new traffic would affect the roundabout.

Proposed Public Transit Access Improvements

- 1. Install bus shelters at the bus stops on Fort Lee Road and Grand Avenue. Adding well-lit bus shelters that provide bus service maps and information could improve the convenience of visiting the park via NJ TRANSIT buses.
- 2. Once the new bus pullouts are installed, ensure they are well-lit and include bus shelters.
- 3. Once the new HBLR station is built, ensure it provides a well-lit walkway and convenient access for both transit riders and the neighboring community.

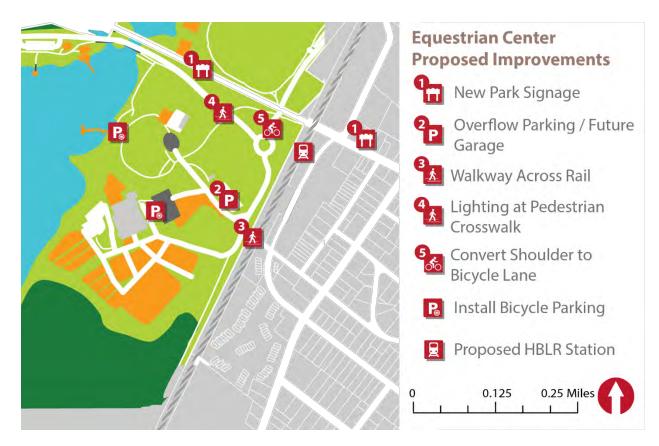


Figure 31. Bergen County Equestrian Center Proposed **Improvements**

6. Henry Hoebel Area

The Henry Hoebel Park Area is directly north of the Equestrian Center. The primary attractions in this section are located on the east bank of Overpeck Creek. The park area features a large green space, a popular dog park, various athletic facilities, and the "Field Station: Dinosaurs" exhibition and play area. There is a proposal to relocate and enlarge the Dinosaur Field Station to Area 2, once it is developed. Leonia sits to the east of the park, separated from the park by a freight rail line. The high school and some commercial buildings sit closest to the rail line and park, with the residential areas slightly further to the east. The New Jersey Turnpike cuts off access to the park from the north. Additionally, if the Hudson Bergen Light Rail line extension is built, the area north of the park, between the existing park and the NJ Turnpike, would be developed as parkland, as mitigation for the construction of a parking garage in the Equestrian Center park area.

There is a secondary portion of the Henry Hoebel Area located to the west of Overpeck Creek. The primary attraction in that sector is a flying field, for use by drones and model airplanes. There is no interior connection between the two sections of the park, as visitors are required to drive or walk along Degraw Avenue to cross Overpeck Creek and transit between the sections.



Figure 32. Existing Transportation Points in the Henry Hoebel Area.

Motor Vehicle Access & Circulation

There is only one entrance to the eastern section of the park and the western section of the park. The first entrance, to the eastern section, (see 1 in Figure 32) is located along Fort Lee Road/Degraw Avenue at a signalized intersection. This is the same intersection that serves the Equestrian Center and access to Area 3 of Overpeck Park. The intersection has turning lanes in both directions. Once vehicle turn into the park, they find a wide roadway. Sixty-six parking spaces are located on the west side of the road, providing access to the green space and dog park. Deeper into the park, there are two large parking lots for the athletic fields and the Dinosaur Field Station, providing close to 200 parking spots. Although the roadway continues to the end of the park, it is intended for maintenance vehicles and school buses.

The second entrance, providing access to the western section of the park, is located on Degraw Avenue, shortly before the interchange with the New Jersey Turnpike. Although it is accessible from both directions, there is no left turn lane. This means that southbound traffic must stop in the through-lane and wait for an opportunity to turn into the park. Signage noting the "Bergen County Flyers" is posted at the entrance, although it is angled towards northbound traffic. Vehicles enter the park into a narrow 10mph roadway which leads to a parking area for the flying field. There are 17 marked parking spots, although the lot is large enough to allow for another 15 or so cars to park informally.

Proposed Motor Vehicle Improvements

1. Install signage in advance of the park entrance to advertise the park. Signage should be located at the New Jersey Transit off-ramps to the west, and at Grand Avenue to the east. Additionally,

- signage at the park entrance should be angled so it can be seen from both directions of traffic (see number 1 in Figure 34).
- 2. Formalize parking in the western park area by marking out spaces. Doing so can ensure the space is used to its maximum capacity.

Pedestrian and Bicycle Access & Circulation

The eastern section of the Henry Hoebel Area has pedestrian and bicycle access through the signalized intersection on Fort Lee Road. This intersection provides marked crosswalks that link the Henry Hoebel Area with the trail system in the Equestrian Center. Additionally, there are sidewalks leading east into Leonia. Once inside the park area, bicyclists and pedestrians can use a trail that parallels to roadways, or one that runs along the river. Both trails connect the various park amenities and also act as a recreational loop. However, due to the presence of the freight rail line, there is no authorized crossing between the northern sections of the park area and the surrounding residential community. The Leonia High School is located just 200 feet from the Henry Hoebel area, but without a safe crossing over the train tracks students must walk a mile down Willow Street and up the park road to reach the athletic fields...

There is no safe pedestrian or bicyclist access to the western section of the park. There are no sidewalks along Fort Lee Road/Degraw Avenue, forcing visitors to walk on the shoulder (see Figure 33). Because of the New Jersey Turnpike, there is no alternative access into this area from the west.



Figure 33. Entrance to the western portion of the Henry Hoebel Area.

Proposed Pedestrian and Bicycle Improvements

1. Improve pedestrian and bicycle connectivity for Leonia residents and school children by providing safe access over the railroad tracks along Willow Tree Drive near the Leonia High **School.** This at-grade crossing would benefit both the students of the high school and those in the middle school as these students are provided with a sidewalk and lighted crosswalk along the route. However, ensuring the safety of students crossing the tracks will require considerations for this at-grade track crossing. Signage, lighting and educational outreach efforts

- within the schools should help to keep access point safe for pedestrians and bicyclists of all ages and abilities (see number 2 in Figure 34).
- 2. Create pedestrian access to the western section of the park by installing a sidewalk along Degraw Avenue. Aside from linking the eastern and western sectors, a sidewalk would also allow residents of Leonia improved access to the flying field (see number 3 in Figure 34).
- 3. Explore extending the interior trail system around Overpeck Creek to link the eastern and western sections of the Henry Hoebel Area through the northern section of the park. This can be done in conjunction with the development of the new parkland to be created as mitigation for the Light Rail project (see number 4 in Figure 34).
- 4. Install bicycle parking near the park attractions.

Public Transit Access

Public transit access to the Henry Hoebel Area is identical to that of the Equestrian Center. NJ TRANSIT bus lines 182, 751, and 755 stop less than a quarter-mile away from the main park entrance at Fort Lee Road and Grand Avenue, and there is a continuous sidewalk. Additionally, as part of the proposed HBLR project, new bus bays are to be created directly adjacent to the park entrance. Further, park visitors will have access to a new light rail station across the street. See the Equestrian Center section for additional details.

Proposed Public Transit Access Improvements

The proposed improvements stated in the Equestrian Center section would serve the Henry Hoebel Area equally. Those improvements are:

- 1. Install bus shelters at the bus stops on Fort Lee Road and Grand Avenue. Adding well-lit bus shelters that provide bus service maps and information could improve the convenience of visiting the park via NJ TRANSIT buses.
- 2. Once the new bus pullouts are installed, ensure they are well-lit and include bus shelters.
- 3. Once the new HBLR station is built, ensure it provides a well-lit walkway and convenient access for both transit riders and the neighboring community.

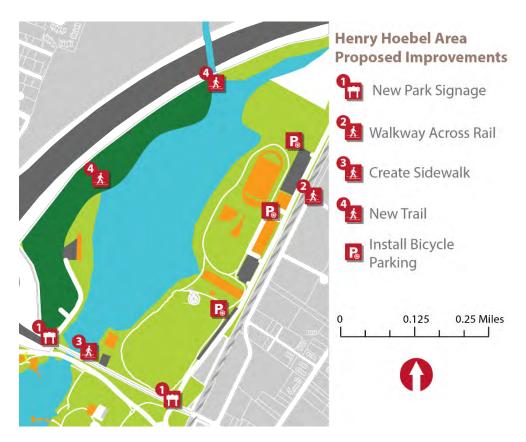


Figure 34. Henry Hoebel Area Proposed Improvements

7. Bergen County Golf Course

The Overpeck Bergen County Golf Course sits at the northernmost point of Overpeck Park. However, due to the New Jersey Turnpike, there is no direct access from the golf course to any other section of the park. Various residential neighborhoods lie to the west of the golf course, and to the east, there is a thin strip of medium-density apartment buildings separating the course from an industrial neighborhood. A buffer of vegetation and a highway (Route 4) frame the course on the northern side, dividing it from another industrial development.



Figure 35. Existing Transportation Points in the Bergen County Golf Course.

Motor Vehicle Access & Circulation

There is a single vehicular access point into the golf course from East Cedar Lane in Teaneck (see number 1 in *Figure 35*). Drivers coming from the Turnpike have no direct access, and need to drive through a series of residential streets to access the golf course. This is also true for drivers coming from Route 4. The single access road quickly ends at a large parking lot. Internal park movement is limited to golf carts and pedestrians.

Proposed Motor Vehicle Improvements

1. Install signage in advance of the park entrance to ensure motorists take the preferred route into the park (see number 1 in Figure 36).

Pedestrian and Bicycle Access & Circulation

This park entrance does not welcome pedestrians, as the sidewalk terminates at the park boundary. However, there is a pedestrian walkway from the apartment building on the east side of the park into the parking area. Additionally, pedestrians could use the internal trails to access the industrial area to the east of the golf course. Due to the nature of golfing, this limited access is appropriate; all golfers must start at the same place, and golf requires the transport of heavy equipment. However, employees may need to arrive by other modes of transportation, so pedestrian and transit improvements are warranted.

Proposed Pedestrian and Bicycle Improvements

1. Provide pedestrian access into the golf course by extending the sidewalk from the current terminus at the park entrance to the clubhouse (see number 2 in Figure 36).

- 2. Ensure that pedestrian access between the eastern side of the park and the neighboring apartment complexes is maintained.
- 3. Install bicycle parking by the clubhouse for employees.

Public Transit Access

Public transit access to the golf course is available through a bus stop at Teaneck Road and East Cedar Lane, a distance of .7 miles. There are sidewalks on the north side of East Cedar Lane from the bus stop to the course entrance, and the walk appears pleasant, with beautiful trees and low traffic volumes. This bus stop is served by NJ TRANSIT routes 175, 753, 755, 772, and 780.

Proposed Public Transit Access Improvements

1. Install bus shelters at the bus stops on East Cedar Lane and Teaneck Road. Adding well-lit bus shelters that provide bus service maps and information could improve the convenience of visiting the park via NJ TRANSIT buses.



Figure 36. Bergen County Golf Course Proposed Improvements

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the feasibility and impacts of holding the Summer Festival Series at the Overpeck Park Amphitheater. For analysis purposes, it was assumed that the event might attract up to 3,500 attendees, which is slightly more than the Amphitheater is designed to hold. There are several important factors to consider when planning for an event of this size in Overpeck Park:

Parking demand – Table 7 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 350 vehicles to a high of 1,575 vehicles depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. ⁵ If one assumes "average" driving demand, a 3,500 attendee event of this type would require between 438 and 1,313 parking spaces, depending on how many attendees arrive in each vehicle.

Currently there are approximately 705 available parking spaces in the section of the park closest to the amphitheater. As such, there is enough parking if attendees are encouraged to carpool, with 4 people per car (estimated demand of 656 spaces). However, under a worst-case scenario where most attendees drive alone or with only one other person, there would be a shortage of 870 spaces.

Table 7. Park Visitors by Transportation Mode for Special Events

EVENT ATTEN	DANCE	3,500 PEOPLE						
DRIVING DEM	DRIVING DEMAND SCENARIO		Low		Average		High	
		Percent	People	Percent	People	Percent	People	
MODE OF	Drive & Park	60%	2100	75%	2625	90.0%	3150	
TRAVEL	Drop-off & Taxi	5.5%	192.5	5.5%	192.5	5.0%	175	
	Walk	20%	700	11%	385	1.4%	49	
	Bike	7.0%	245	3.0%	105	0.3%	11	
	Transit & Charter	7.5%	262.5	5.5%	192.5	3.3%	115.5	
	Total	100.0%	3500	100.0%	3500	100.0%	3500	
PARKING	2 passengers per car	1	1050		1313		1575	
SPACES REQUIRED	4 passengers per car	5	525	1	656		788	
	6 passengers per car	3	350		438	!	525	

⁵ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

 Access and Circulation – Area 3 of Overpeck Park has various barriers to access that make it more likely that visitors will drive, rather than using other modes of transportation. Additionally, because there are only two vehicular access points, congestion is likely immediately before and after the event. This congestion is also likely to affect movement on the New Jersey Turnpike, as the line to enter the park could back up onto the highway itself. The improvements suggested in the Area 3 section could help alleviate these concerns. Especially important is the proposed loop road, connecting Area 3 with the sections of Overpeck Park across the creek. Such a loop road would immediately open up hundreds of new parking spaces, distribute traffic accessing the park, would allow more people to walk or bicycle to the event, and would eventually provide a connection with the proposed HBLR station. Additionally, the proposed pedestrian bridge over the New Jersey Turnpike would allow local residents to attend the events without having to drive.

Recommendations

- 9. Create a parking agreement with the office complexes (Samsung) immediately south of Area 3. These large surface parking lots are unlikely to be used during periods when events would be held, and are an easy walk along the internal trail system to the amphitheater. Event planners should provide temporary lighting along the walking path, and may consider providing a shuttle service using electric vehicles for those with limited mobility. Additionally, traffic control officers would be needed to ensure pedestrians can safely cross the street to access the trail.
- 10. Limit traffic inside the park to one direction before, during, and after the event. If all traffic were directed to enter at the northern section of the park, and proceed south, slow-moving traffic would be contained to the park roadways, rather than backing up onto the New Jersey Turnpike. Additionally, this would allow drivers to drop-off their passengers closer to the event before proceeding to the satellite parking south of the park. Doing this would lessen the burden of walking a longer distance especially if the event allows attendees to bring chairs and coolers.
- 11. Designate a pick-up and drop-off area where taxis, Ubers, and other drivers may drop-off or pick-up guests. The one-way flow of traffic would allow these vehicles to enter and exit quickly. A designated area would decrease congestion caused by these vehicles attempting to find their passengers amongst thousands of people exiting at the same time.
- 12. Charge for parking in order to incentivize carpooling and alternative modes of transportation. Parking located closest to the event should be priced at a higher premium rate. To decrease waits caused by charging for parking at the entrance of the park, parking vouchers should be sold online concurrent with the event tickets.
- 13. Provide incentives for carpooling. All vehicles with four or more passengers could be given preferred access to parking spots, along with other incentives.
- 14. Offer bicycle valet parking for those who bicycle to the event. Bicycle valet parking would not only provide adequate bicycle parking for event attendees, but would encourage others to bicycle at future events and attract interest to the form of transportation.
- 15. Create a walking challenge. For those living in nearby neighborhoods, create a walking challenge to the event and add prizes for those who make the walk. This should be coupled with the installation of crosswalks and utilization of crossing guards at the intersections which cross the highway off-ramps.

- 16. Provide incentives for those who arrive by foot or bicycle, such as discounts at vendors or free prizes.
- 17. Promote the use of transit by selling charter bus tickets from the George Washington Bridge Bus Station in New York City. Event promoters would coordinate with transportation providers to advertise and encourage use of the bus service.
- 18. Stagger event departure times to avoid large rushes of incoming and outgoing crowds. Event planners should consider programming before and after the main event that promotes staggered arrival and departure times.
- 19. Use electronic signage to inform nearby residents about upcoming events, and communicate that regular park visitors may be better off utilizing other areas of the park during events. Event signage should state an estimated attendance, so other park users can make their own decisions according to expectations.
- 20. Once the loop road is created, event visitors will have access to existing parking in the Palisades Park Area, which may mitigate the need to use parking at the corporate campuses.

Additionally, RU-VTC was asked to explore the feasibility and impacts of holding the Henry Hoebel Movie Series in the Henry Hoebel section of the park. For analysis purposes, it was assumed that the event might attract up to 1,000 attendees.

Parking demand – Table 8 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 100 vehicles to a high of 450 vehicles depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. If one assumes "average" driving demand, a 1,000 attendee event of this type would require between 125 and 375 parking spaces, depending on how many attendees arrive in each vehicle.

Currently there are approximately 260 available parking spaces in the section of the park. As such, there is enough parking if attendees are encouraged to carpool, with an average of four people per car. However, if most attendees drive alone or with only one other person, there would be a shortage of 190 spaces.

Although the western area of the park offers some additional spaces, there is currently no safe way to walk between that section and the proposed location of the event.

Table 8. Park Visitors by Transportation Mode for Special Events

EVENT ATTEN	DANCE		1,000 PEOPLE					
DRIVING DEMAND SCENARIO		Low		Average		High		
		Percent	People	Percent	People	Percent	People	
MODE OF TRAVEL	Drive & Park	60%	600	75%	750	90.0%	900.0	
IIIAVEE	Drop-off & Taxi	5%	50	5%	50	5.0%	50.0	
	Walk	25%	250	16%	160	4.3%	42.5	
	Bike	7%	70	3%	30	0.5%	5.0	

	Transit & Charter	3%	30	1%	10	0.3%	2.5
	Total	100%	1000	100%	1000	100%	1000
PARKING SPACES	2 passengers per car		300		375		450
REQUIRED	4 passengers per car		150		188		225
	6 passengers per car		100		125		150

 Access and Circulation – The Henry Hoebel Area of Overpeck Park has a single entrance for vehicles, pedestrians, and bicyclists. However, unlike in Area 3, it is easier for residents of the nearby neighborhood to walk to the park. The improvements suggested in the Henry Hoebel section could help to further encourage walking, especially by providing additional access points across the freight rail line. Due to the single vehicular access point, it is likely that there will be extensive delays to exit the park at the conclusion of the event, as all drivers must wait to leave through the single signalized intersection.

Recommendations

- 1. Utilize the existing parking area in the Equestrian Center. That area contains 79 existing parking spaces, and an unused paved area that could accommodate additional parking. The Equestrian Center can be easily accessed by pedestrians using the signalized intersection on Fort Lee Road.
- 2. Allow parking in the large grassy area, on the southern end of the park. Although this has the potential to create safety conflicts and damage the grass, it could be allowed once all other parking has been utilized.
- 3. Prioritize building pedestrian connections across the rail line to encourage local residents to arrive on foot or bicycle. This proposed connection would also allow the parking area at the Leonia High School to be utilized during events.
- 4. **Provide incentives for those who arrive by foot or bicycle**, by providing prizes, raffle tickets, or discounts.
- 5. Provide bicycle valet parking to encourage individuals to ride their bicycles to the event. This will provide assurance to bicyclists that their bicycles are safe during the event and also promotes future bicycle use. Additionally, bicycle valets will discourage unwanted or unsafe bicycle parking behaviors (see Bicycle Parking Appendix).
- 6. To address post-event congestion at the signalized intersection, create a taxi/Uber pick-up area in the Equestrian Center.
- 7. **Post a police officer at the signalized intersection** to facilitate traffic flow at the conclusion of the event.

Pascack Brook County Park Transportation Assessment

Context & Location

Pascack Brook County Park is centrally located between the Garden State Parkway and the Palisades Interstate Parkway in northern Bergen County, less than four miles from the New York State border. Pascack Brook runs through the center of the park, connecting Woodcliff Lake to the north with the Oradell Reservoir to the south. The northern part of Pascack Brook Park is located within River Vale Township where low-density residential housing borders the park (approximately 2,400 people per square mile). Roberge Elementary School is located roughly 600 feet from the park's northern border (see number 1 in *Figure 37*). The southern part of Pascack Brook Park is located in the Borough of Westwood. The areas bordering the park include more densely populated residential housing and an assortment of commercial uses as well as the Hackensack University Medical Center (see number 5 in *Figure 37*). Emerson Road borders the park to the east, while Westvale Park makes up the park's western border (see number 7 in *Figure 37*) and is connected via a multiuse trail (see number 4 in *Figure 37*).

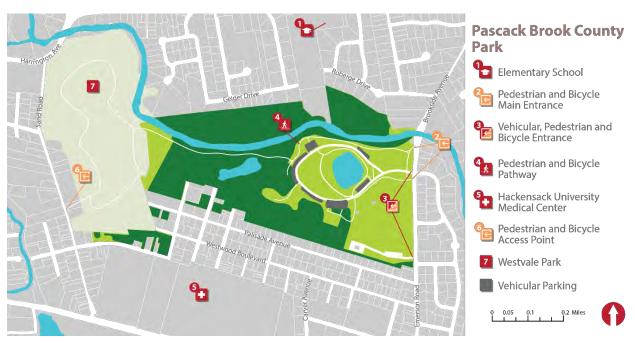


Figure 37. Existing Transportation Points in Pascack Brook Park.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

Pascack Brook Park's main entrance is located on Emerson Road and is marked by a highly visible wooden sign (see number 3 in *Figure 37*). Once inside the park, motorists travel along a one-way road which encircles the park's fishing pond. More than 100 parking spaces are available along the vehicular route. A second vehicular entrance is located 500 feet south of the main entrance and provides access to the softball fields and a small parking area. This entrance is not signed, is surrounded by mature trees,

and could easily be missed. There is no vehicular connection between the softball parking lot and the rest of the park.

Proposed Motor Vehicle Improvements

1. **Install signage at the southern Emerson Road entrance** to highlight the softball parking area (see number 1 in *Figure 38*). In order to ensure the visbility of the sign to motorists traveling in both directions on Emerson Road, it should be placed on the northern corner of the intersection.

Pedestrian and Bicycle Access & Circulation

Two paths are located within Pascack Brook Park offering nearly 1.5 miles of trail for both pedestrians and bicyclists. Entrances to the paths are located on either side of the Emerson Road vehicular entrance (see number 2 in *Figure 37*). Both pathways abruptly terminate near the Emerson Road curb without providing ADA compliant ramps. The first path begins just south of the vehicular entrance and provides a connection with the softball fields before crossing the park's internal roadway and encircling the pond. This pathway is directly connected with two parking lots, though the crosswalks providing access across the roadway are missing or worn. The second pathway begins just north of the vehicular entrance and connects with the Westvale Park pathway for an additional three quarters of a mile. This pathway connection allows residents west of the park to access Pascack Brook from the Westvale Park pedestrian and bicycle entrance (see number 6 in *Figure 37*).

Proposed Pedestrian and Bicycle Improvements

- 1. **Install crosswalks at the pedestrian and bicycle entrances along Emerson Road,** including at the entrance for the softball fields (see number 3 in *Figure 38*). Emerson Road has sidewalks on the side of the street across from the park; however, it has no marked crosswalk for access to the main entrance.
- Install ADA compliant ramps at all of the park's trail entrances so that guests requiring such accommodations, including bicyclists, are not forced to dangerously utilize the vehicular entrance.
- 3. **Install bicycle parking areas in the park** (see number 2 in *Figure 38*). Bicycle parking will encourage people to ride their bicycles to the park and allow them to leave their bicycles unattended while they fish, attend softball practice or enjoy many of the other park amenities.
- 4. **Install bicycle infrastructure on roadways surrounding the park** so that guests may safely access the park by bicycle. Brookside Avenue and Emerson Road would benefit from bicycle lanes or sharrows to indicate that vehicles should share the road.
- 5. Add a pedestrian and bicycle entrance in one of the cul-de-sacs along Palisade Avenue (see number 4 in *Figure 38*). This would require extending the trail approximately 500 feet and could be incorporated with a trail that encircles the nearby pond. Residents in this neighborhood and employees and visitors to the Hackensack Hospital would have direct access to the Pascack Brook Park trail without having to walk three quarters of a mile to reach the Emerson Road entrances.
- 6. Stripe crosswalks at each location within the park where the pathway intersects the roadway including near the bathrooms, parking lots and playground.

Public Transit Access & Circulation

NJ TRANSIT's Westwood train station, serviced by the Pascack Valley Line, is located one mile from the Westvale Park trail entrance which directly connects with the Pascack Brook Park trail (see number 6 in

in *Figure 37*). The Pascack Valley Line operates between Spring Valley and Hoboken from 5:32 AM to 12:31 AM Monday through Friday and from 6:27 AM to 8:32 PM on weekends. The train runs to Spring Valley from 9:45 AM to 1:29 AM Monday through Friday and from 8:58 AM to 1:29 AM on weekends. There are no bicycle lanes along the route from the train station and sidewalks terminate at Sand Road, approximately 1,300 feet before the trail entrance. Guests could alternatively access the trail by entering the Westvale parking lot on Harrington Avenue, but there is currently no crosswalk at the intersection of Sand Road and Harrington Avenue and there is no indication that entering here could also provide access to Pascack Brook Park.

Proposed Public Transit Improvements

- 1. Providing adequate bicycle infrastructure along streets leading from the downtown area to the park would encourage transit users to bicycle from the station to the park while simultaneously increasing bicycle access for area residents. For those who bring their bicycle on the train, proper infrastructure from the train station to the park could encourage and facilitate visits to the park. Bicycle lanes, sharrows and signage could make the roads more accessible to bicyclists.
- 2. Install wayfinding signs that provide transit users an opportunity to see just how close they are to Pascack Brook. Installing signs near the train station and along the route, including one at the intersection of Sand Road and Harrington Avenue will allow transit users to utilize the shortest route to the trail.
- 3. Install a crosswalk at the intersection of Harrington Avenue and Sand Road so that transit users are able to safely access the Harrington Avenue entrance into Westvale Park where they can then utilize the park pathway into Pascack Brook Park (see number 5 in *Figure 38*).



Figure 38. Pascack Brook Park Proposed Improvements.

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the potential feasibility and impacts of holding two proposed events, a Kids Movie Series and a Dance Series, in Pascack Brook County Park. For analysis purposes, it was assumed each event might attract up to 1,000 attendees.

There are several important factors to consider when planning for these types of events at Hackensack River County Park:

Parking demand – *Table 9* illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 100 to a high of 450 depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. ⁶ Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle could be as high as 4-6 persons per vehicle. If one assumes "average" driving demand, a 1,000 attendee event of this type would require between 125 and 188 parking spaces. The Dance Series event, however, may target adults and witness fewer people per vehicle perhaps averaging between two and four passengers per vehicle. Under the "average" driving demand, this would require between 188 and 375 parking spaces.

Currently there are approximately 130 available parking spaces on-site. It is very possible that driving demand for the Kids Movie Series might be higher than average given the need to bring along chairs, blankets, snacks, etc. Under these circumstances, it would appear that on-site and nearby parking is inadequate to accommodate an event of this nature and size at this park location without the use of satellite parking.

Table 9. Parking Demand Scenarios

	Triang Demand Seeme							
EVENT ATTE	ENDANCE	1,000 PEOPLE						
DRIVING DEMAND SCENARIO		Low		Average		High		
		Percent	People	Percent	People	Percent	People	
MODE OF	Drive & Park	60%	600	75%	750	90.0%	900.0	
TRAVEL	Drop-off & Taxi	5%	50	5%	50	5.0%	50.0	
	Walk	25%	250	16%	160	4.3%	42.5	
	Bike	7%	70	3%	30	0.5%	5.0	
	Transit & Charter	3%	30	1%	10	0.3%	2.5	
	Total	100%	1000	100%	1000	100%	1000	
PARKING	2 passengers per car	30	0	37	'5	45	50	
SPACES	4 passengers per car	15	0	18	8	22	25	
REQUIRED	6 passengers per car	10	0	12	.5	150		

Access and Circulation – Pascack Brook is located in a moderately dense area and may be accessible by walking or bicycling for a portion of attendees. Under a low driving scenario, the parking lots within the park would be sufficient if also combined with overflow parking in Westvale Park. It will be important, though, to ensure the safe movement of guests throughout the event, especially considering that the movie event will occur after dark.

⁶ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

Recommendations

- 1. Develop a shared parking agreement with Westvale Park. If Westvale requires the use of its main lot for sporting events, the park's second gravel parking lot could be utilized which offers ample overflow parking with approximately 200 parking spaces. It may even be possible to keep event attendees safer by designating Westvale Park as the parking area and keeping Pascack Brook Park closed to traffic, except to vehicles with handicapped parking permissions and those dropping off guests.
- 2. Designate pick-up and drop-off areas in the park in order to make it easier for event attendees to get a ride to the park. The triangle where the park roadway begins to loop around would be a perfect location, or the softball field parking lot, if closed to parking, could provide an alternative drop-off area.
- 3. Provide crossing guards for safe pedestrian crossings on Emerson Road. To increase pedestrian visibility and safety, the parks should have crossing guards help people access the park during events. This will be particularly important for the neighborhood east of the park as there is currently no crosswalk infrastructure. Utilizing crossing guards along Sand Road and Harrington Avenue will also be important, as it is expected residents west of the park will walk through Westvale Park to Pascack Brook.
- **4. Bicycle valet parking** may encourage people to ride to park events, thereby decreasing congestion and adding interest to events.
- **5. Incentivize walking and biking** through raffles, discounts or other games.
- **6. Lighting should be installed throughout the park and along surrounding roadways** as the movie event will occur after dark.
- **7. Shuttle buses** can be provided from the Westwood train station to increase the use of public transit. This could be further incentivized by giving guests with public transit tickets prizes or raffle opportunities.
- 8. Provide shuttle buses at key points around the neighborhood for residents located beyond a reasonable walking distance. Stops could include the intersection of Westwood Avenue and Rivervale Road and locations in the Westwood downtown area. A free shuttle bus would take the place of personal vehicles and free up space in the park, as well.

Riverside County Park – North Transportation Assessment

Context & Location

Riverside County Park – North (Riverside North) is a 37-acre park located in Lyndhurst, New Jersey in the southwest corner of Bergen County. It is bounded to the west by the Passaic River and to the east by relatively dense, single-family residential areas. The park is characterized by a large wooded area on its eastern edge and views of the Passaic to the west. Amenities include baseball fields, tennis courts, an exercise station, and several picnic areas.

Riverside North is well-served by major highways. Route 21 runs along the far banks of the Passaic River while Route 3 runs parallel to the park's northern edge. Nearby important roads include Riverside Avenue, running parallel to the park's eastern edge, and Page, Valley Brook, and Park Avenues, which have their western terminus at the border of Riverside-North.

The primary land use around Riverside-North is residential, with limited commercial uses throughout including restaurants and auto repair shops. A church and Elks, Masonic, and American Legion halls are all located within two blocks of the park's entrance. Additionally, the Lyndhurst elementary and high school are both located within walking distance (see number 5 in *Figure 39*).



Figure 39. Existing Transportation Points in Riverside - North.

According to data from a park user intercept survey conducted by the research team, individuals who use this park travel a shorter distance than individuals in other park locations surveyed (see *Table 10*). This suggests Riverside-North functions in part as a neighborhood park for nearby residents, which is substantiated by a larger survey of county residents conducted as part of the park master planning process. The dense, walkable neighborhoods around the park may help explain these results.

Table 10. Distance traveled to Riverside-North (n=154)
Compared to all Bergen County Parks studied (n=925)

Distance Traveled to Park	Riverside County - North	All Bergen County Parks
Under 1/4 mile	23 %	11%
1/4 to 1/2 mile	10%	6%
1/2 to 1 mile	31%	17%
More than 1 mile	23%	35%
More than 5 miles	12%	31%
Total	100%	100%

Table 11. Transportation mode to Riverside-North (n=152) Compared to all Bergen County Parks studied (n=923)

Transportation	Riverside	All Bergen
Mode	County - North	County Parks
Drive	82%	79%
Walk	15%	17%
Bicycle	3%	3%
Bus	0.0%	0.1%
Taxi/Uber/Lyft	0.0%	0.1%
Train	0.0%	0.1%
Skate/Skateboard	0.0%	0.1%
Total	100%	100%

Riverside-North may be attractive to people living nearby, but most still choose to drive there. People surveyed at this park indicated driving at a greater rate than individuals surveyed in parks countywide (82% to 79%, *Table 11*). This suggests there is capacity to improve pedestrian and bicycle access in areas around the park in order to increase the number of nearby residents who access the park without their car.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

Riverside-North is accessible by car through a single access point, located near the intersection of Riverside, Valley Brook, and Park Avenues (see number 3 in *Figure 39*). The intersection is signalized, but has an unconventional geometry, which leads to a non-intuitive park entrance for traffic approaching from Park and Valley Brook Avenues. Traffic traveling northeast on Riverside Avenue must turn left to access the park and are required to make a sharper than 90 degree turn. There is a 9-foot left turn lane at the intersection to accommodate this traffic. The park's entrance is marked by a large wooden sign that is offset within the park by approximately 10 feet. The sign is surrounded by trees, but is visible from all approaching directions.

The one-way entrance loops motorists through the park along 0.3 miles of roadway. Along the route are four parking lots providing approximately 135 total parking spaces. At the end of the loop, guests exit at the intersection of Post Avenue and Riverside Avenue. Exiting traffic is regulated by a two-way stop sign,

while oncoming traffic is warned of the one-way street via "Do Not Enter" signs clearly marked on the back of these stop signs.

Proposed Motor Vehicle Improvements

There are no vehicular recommendations at this time.

Pedestrian and Bicycle Access & Circulation

Pedestrians and bicyclists may access the park at a number of locations along Riverside Avenue and Page Avenue. A sidewalk runs along the entire eastern boundary of Riverside-North with marked crossings at each intersection. In all, seven marked crossings provide pedestrian and bicycle access to Riverside-North; the two crosswalks near the vehicular entrance include pedestrian signals and ADA ramps (number 2 in *Figure 39*). On the southern boundary of Riverside-North, Page Avenue leads to the Carucci pathway, an off-street path that encircles the park. This entrance is not clearly marked and the Riverside Avenue sidewalk does not extend onto Page Avenue. The northern entrance to the pathway is highly visible and accessible from Riverside Avenue near the park's vehicular entrance.

Dedicated bicycle infrastructure leading to Riverside-North is limited to a narrow striped shoulder on both sides of Riverside Avenue. While this may function as a bicycle lane for some riders in the area, sidewalks on both sides of the street likely provide accommodations for most individuals riding to the park.

Proposed Pedestrian and Bicycle Improvements

- 1. Add bicycle infrastructure along Riverside Avenue leading to Riverside-North. The current striped shoulder is too narrow for use by most bicyclists and is not designated for such use. Adding a wider bicycle lane and bicycle network signage would improve perceived and actual safety for bicyclists seeking to travel on Riverside Avenue to access the park. Vehicular travel lanes on Riverside Avenue adjacent to the park are sufficiently wide to accommodate a bicycle lane along this corridor. (See number 1 in *Figure 40*)
- 2. Improve visibility and accessibility of Page Avenue entrance to the Carucci Pathway. Install signage at the intersection of Page and Riverside Avenues to alert bicyclists and pedestrians of the pathway entrance. Additionally, the Riverside Avenue sidewalk should continue along Page Avenue in order to provide access for pedestrians, bicyclists and park guests of all abilities. A more ambitious option is to expand the pathway to the Park Avenue Bridge. This would strengthen bicyclist and pedestrian connections to Riverside-North for communities across the Passaic River. (See number 2 in *Figure 40*)
- 3. Consider adding a HAWK signal along Riverside Avenue to alert drivers to pedestrians crossing at highly-used crosswalks. Data should be collected on which crosswalks are used most commonly and driver yielding behavior at these crosswalks in order to assess if there is a need for this improvement. (See number 3 in *Figure 40*)
- 4. **Install bicycle parking throughout the park** in highly visible and safe locations. Ideal locations include a small two-space parking lot located next to the 0.3-mile in-park loop or along the Carucci pathway to both make bicycling more attractive and signify to park visitors that the path is available to multi-modal users (see *Figure 40*).

Public Transit Access

There are multiple transit stops within walking distance of the park's entrance. The Lyndhurst Train Station is approximately one-half mile away (see number 4 in *Figure 39*) and the Kingsland train station is 1.1 miles away. Both stations are served by New Jersey Transit's Main Line. New Jersey Transit's 192 bus line runs along Riverside Avenue adjacent to the park. It is a New York City commuter route that

runs 6 am to 12 am on weekdays, with most service operating in peak directions during commuting hours. There is limited 192 service on weekends; buses only operate hourly between 7 am and 12 am in each direction on Saturday and Sunday. Three local bus routes have a stop across the Passaic River in Nutley at the intersection of Park and Washington Avenues: the 13, 27, and 74 lines (see number 1 in *Figure 39*). These lines primarily operate between Irvington, Newark, and Clifton. Riverside-North is located 0.8 miles from this bus stop. The entire length of the walking route between the park and bus stop has sidewalks, and while it requires crossing the Park Avenue Bridge, the sidewalk is barrier-protected on both sides.

Proposed Public Transit Access Improvements

1. **Install wayfinding signs for transit users**. Signs should be installed leading from the Lyndhurst and Kingsland train stations to the park as well as from the well-serviced local bus stop at Washington and Park Avenues in Nutley.

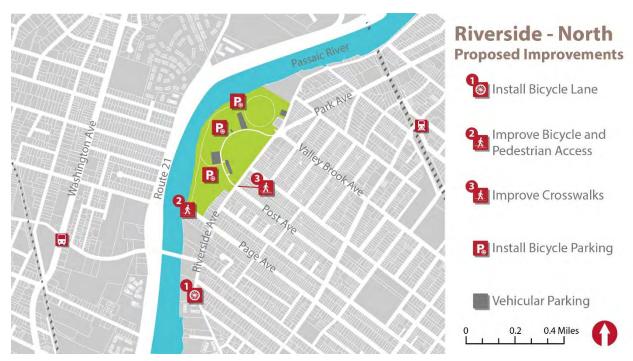


Figure 40. Riverside - North Proposed Improvements.

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the potential feasibility and impacts of holding a Movie Series event in Riverside Park North. For analysis purposes, it was assumed the event might attract up to 1,000 attendees. There are several important factors to consider when planning an event of this type at Riverside Park South:

■ Parking demand – *Table 12* illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 100 to a high of 450 depending on the assumptions made. The "average" scenario reflects how Bergen

County residents typically access county parks for regular use. ⁷ Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle could be as high as 4-6 persons per vehicle. If one assumes "average" driving demand, a 1,000 attendee event of this type would require between 125 and 188 parking spaces.

Currently there are approximately 135 available parking spaces on-site. Event planners will need to address a possible shortfall of 53 parking spaces. It is very possible that driving demand for the Movie Series might be higher than average given the need to bring along chairs, blankets, snacks, etc. Under these circumstances, it would appear that on-site parking is inadequate to accommodate an event of this nature and size at this park location without the use of satellite parking.

Table 12. Parking Demand Scenarios

EVENT ATTENDANCE 1,000 PEOPLE							
DRIVING DEMAND SCENARIO		Low		Average		High	
		Percent	People	Percent	People	Percent	People
MODE OF	Drive & Park	60%	600	75%	750	90.0%	900.0
TRAVEL	Drop-off & Taxi	5%	50	5%	50	5.0%	50.0
	Walk	25%	250	16%	160	4.3%	42.5
	Bike	7%	70	3%	30	0.5%	5.0
	Transit & Charter	3%	30	1%	10	0.3%	2.5
	Total	100%	1000	100%	1000	100%	1000
PARKING	2 passengers per car	30	00	37	'5	45	50
SPACES	4 passengers per car	15	50	18	88	22	25
REQUIRED	6 passengers per car	10	00	12	!5	15	50

Access and Circulation – Riverside North is located in a dense residential area with available on-street parking and nearly complete pedestrian infrastructure. As such, it is highly accessible by foot for residents in the surrounding community, including those located across the river in Nutely Township. The park is located just north of Riverside South where additional parking lots could be utilized for overflow parking.

Recommendations

1. Utilize the existing parking lots in Riverside County Park South. Located less than a mile away, or less than 20 minutes away on foot, Riverside County Park South has 274 parking spots, which is more than enough to address the parking shortfall. Parking spaces within Riverside County Park north should be prioritized for those with mobility issues, including the disabled and the elderly. There are continuous sidewalks on the west side of Riverside Avenue, which allow pedestrians to park in the southern park and access the northern park. To facilitate this movement, crossing guards should be positioned during events to facilitate access to the sidewalks at Wilson Avenue and Post Avenue. Temporary signage should direct vehicles to the overflow parking, with permanent signage to guide the pedestrians.

⁷ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

- 2. Consider creating a temporary parking lot on one of several grassy areas within Riverside-North. This option would be dependent upon weather conditions, as a recent rain would make grassy areas unfit for accommodating vehicular traffic. Further, use of the grass area could damage it, and make the area off-limits for regular park use. An estimated 120 parking spaces could be offered by utilizing the grassy areas north and northwest of the dog park area at the center of the park's roadway loop. This would require the use of traffic controllers to ensure the safety of motorists as they park and walk to the event's location.
- 3. Operate pick-up/drop-off zones during the event so groups with cars are able to drop-off individuals and any supplies, such as blankets and snacks, before being directed to designated affiliated parking lots elsewhere. Depending upon agreements with local businesses, suggested pick-up/drop-off zones could include the shopping center parking lot at the northern corner of Riverside and Park Avenues and the Lyndhurst Little League Parking Lot at Riverside-North's northern edge. This option would require marking a clear pedestrian path to these locations and bolstering any existing infrastructure, such as painting more visible temporary crosswalks, to ensure pedestrians heading to or from the drop-off area are safe from conflicts with vehicles.
- 4. Incentivize attendees to walk or bicycle to the event to minimize pressure on vehicle capacity and take advantage of Riverside-North's location within a relatively dense residential area. The residential areas adjacent to the park have sidewalks on both sides of the street, which walking feasible and attractive. Incentives could include discounts for neighboring businesses or food vendors directly available at the event.
- 5. **Hire temporary crossing guards at key intersections** to strengthen pedestrian routes between Nutley and Riverside-North. This could encourage people from the neighboring Township to access the event by an alternative mode to driving. There are high quality sidewalks on the Lyndhurst end of the Park Avenue Bridge that lead directly to Riverside-North.
- 6. Provide bicycle valet parking to encourage individuals to ride their bicycles to the event. This will provide assurance to bicyclists that their bicycles are safe and is also a unique attraction that could encourage more bicycle use in the future. Additionally, bicycle valets will discourage unwanted or unsafe bicycle parking behaviors (see Bicycle Parking Appendix).
- 7. Install a low-cost marketing campaign in Lyndhurst and Nutley to encourage walking to the event. The Walk [Your City] campaign provides a good template: their signs provide a destination, an arrow pointing in its direction, and the time it takes to walk there (see Signage Appendix). Similar products could be produced and hung up in proximal neighborhoods for an event at Riverside-North, simultaneously encouraging attendees to walk or bicycle, providing wayfinding, and advertising the event. These same materials could also increase the capacity for individuals to access the event by transit, particularly the three local bus lines with a stop at Park Avenue and Washington Avenue in Nutley.
- 8. **Strengthen access between the Nutley bus stops and Riverside-North** through the suggestions made above, including hiring temporary crossing guards and installing wayfinding materials between the bus stop and event space.
- 9. Activate the walking route between the Lyndhurst and Kingsland train stations and Riverside-North using low-cost materials. The route could be marked with temporary chalk paint, volunteers distributing event materials, donated planters and materials from sponsor businesses, or other highly-visible, unique wayfinding methods.

Riverside County Park – South Transportation Assessment

Context & Location

Riverside County Park-South (or Riverside South) is a 48-acre park located in Lyndhurst and North Arlington, New Jersey in the southwest corner of Bergen County. It is located between Riverside Avenue and the Passaic River just one half mile south of Riverside North. It is similarly situated near State Highway 21 and is bordered by relatively dense single- and multi-family housing as well as a variety of commercial uses including auto repair shops, restaurants and gyms. Several residences in Lyndhurst back directly up to the park.

The park is characterized by several active recreation areas including a football and track field, five baseball fields, five tennis courts, and two soccer fields. It also offers multiple picnic tables, seating areas, and views of the Passaic River. It is located 0.3 miles away from Roosevelt Elementary School and about one half mile from Lyndhurst High School (see number 3 in *Figure 41*).



Figure 41. Existing Transportation Points in Riverside South.

The closest highways to the park are Route 21 on the far banks of the Passaic River and Route 3, which runs perpendicular to Route 21 approximately 1.5 miles from Riverside South's northern edge. Nearby major local roads include Riverside Avenue, running parallel to the park's eastern edge, Jauncey Avenue, which has its western terminus at the border of Riverside South.

Table 13. Distance traveled to Riverside Park (n=154)
Compared to all Bergen County Parks studied (n=925)

Distance Traveled to Park	Riverside County Park	All Bergen County Parks
Under 1/4 mile	23 %	11%
1/4 to 1/2 mile	10%	6%
1/2 to 1 mile	31%	17%
More than 1 mile	23%	35%
More than 5 miles	12%	31%
Total	100%	100%

Table 14. Transportation mode to Riverside Park (n=152) Compared to all Bergen County Parks studied (n=923)

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Riverside	All Bergen
County Park	County Parks
82%	79%
15%	17%
3%	3%
0.0%	0.1%
0.0%	0.1%
0.0%	0.1%
0.0%	0.1%
100%	100%
	Riverside County Park 82% 15% 3% 0.0% 0.0% 0.0% 0.0%

As was the case with the Riverside North assessment, the park user intercept survey revealed that most individuals who utilize the Riverside County Parks travel a shorter distance than those guests arriving at other parks. Though Riverside attendees reported traveling shorter distances, they still largely arrive by car (see *Table 13* and *Table 14*). This suggests there is an opportunity to encourage active transportation to the park by enhancing bicycle and pedestrian access.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

There are two vehicular entrances into Riverside South. The first entrance provides access to the park's northern section and is located at the intersection of Wilson Avenue and Riverside Avenue (see number 4 in *Figure 41*). The entrance is marked by a wooden park sign that is obstructed from view for traffic traveling north on Riverside Avenue. Once inside the northern section of the park, motorists have access to 0.1 miles of roadway, a small roadside parking lot and a larger parking lot. The first parking area provides approximately 26 spaces across from the park's football and baseball fields. The second parking area holds around 110 vehicles. The area provides multiple opportunities to access the Riverside South trail. While there is no vehicular connection between the northern and southern sections of the park,

guests may utilize these numerous paved pathways which connect all areas and amenities within the park.

The southern vehicular entrance is located at the signalized four-way intersection of Jauncey Avenue and Riverside Avenue The entrance is marked by a wooden sign on the southern corner and is difficult to see for motorists traveling southbound on Riverside Avenue. The southern entrance leads motorists along approximately 0.2 miles of roadway and two parking lots. In all, the park provides around 270 parking spots. Multiple pedestrian and bicycle paths are accessible from these lots and connect guests to the northern area of Riverside South.

Proposed Motor Vehicle Improvements

1. Create gateway entrances at the northern and southern entrances to Riverside South. Despite large signage at these vehicular access points, both entrances to the park blend into the urban landscape around them. Distinct entrances will more clearly alert drivers to the park's access points and will help distinguish the park's entrances from the commercial and residential developments at its eastern perimeter. Alternatively, adding a second larger sign at the northern side of each entrance would provide better visibility at a lower cost. (See number 1 in *Figure 43*).

Pedestrian and Bicycle Access & Circulation

Pedestrians and bicyclists may access Riverside South via the same two vehicular entrances mentioned above, though neither provides designated bicycle infrastructure or a complete sidewalk network. The northern entrance lacks sidewalk coverage entirely, forcing pedestrians and bicyclists to utilize the roadway.

Consistent sidewalks are only available on the eastern edge of Riverside Avenue, on the far side of the street from the park. There are seven intersections along Riverside Avenue adjacent to Riverside South. Crosswalks along this section of the avenue are marked by two parallel solid white lines. Due to the street grid, five pedestrian crossings along this side of Riverside Avenue are angled, creating longer-than-usual crossings that expose pedestrians to more risk. Along the western edge of Riverside Avenue/River Road, there is intermittent sidewalk coverage, primarily in front of the residential or commercial developments that abut the park.

There are three striped crossings linking the Riverside Avenue sidewalk to Riverside South; only one of which is located at a designated entrance to the park. This crossing has pedestrian signals and ADA-compliant ramps on all sides of the intersection. However, formal pedestrian accommodations end here. The sidewalk cuts off at the park's entrance, forcing pedestrians and bicyclists to either use the grass or vehicular access road to reach the park (see *Figure 42*). There are no pedestrian crossings or signals at Riverside South's northern entrance.



Figure 42. Southern Entrance to Riverside South. (Source: Google Maps)

The residential areas adjacent to the park have more consistent pedestrian infrastructure. There are sidewalks on both sides of the streets and marked pedestrian crossings at every intersection. This suggests that although direct pedestrian access to the park is insufficient, there is capacity for encouraging individuals to walk from the surrounding neighborhood.

Though there is no dedicated bicycle infrastructure leading to Riverside South. Individuals who ride to the park must presumably use Riverside Avenue's shoulder or the sidewalk along its eastern edge. Once bicyclists arrive at the park, there is no clear location for bicycle parking.

Proposed Pedestrian and Bicycle Improvements

- 1. Extend the paved pathway at the northern entrance to meet the sidewalks and install ADA compliant ramps to improve safe access to the park for pedestrians and bicyclists. There is a strong network of off-street paths within Riverside South. However, accessing these paths requires navigating the vehicular access road, traveling on grass, or arriving by car. At the park's northern entrance this would require the installation less than 150 feet of sidewalk and an ADA compliant ramp at the southern corner of the entrance. A crosswalk should also be installed to provide easier access from Wilson Avenue. (See number 2 in Figure 43).
- 2. Extend the paved pathway to meet the sidewalks and ensure well-maintained crosswalks at the southern entrance. This entrance already has ADA compliant ramps, so the connection will only require extending the paved pathway approximately 600 feet along the northern side of the access road. Additionally, all four pedestrian crossings at the intersection of Jauncey and Riverside Ave/River Road should be well-maintained and clearly visible in order to ensure safe pedestrian access. (See number 2 in *Figure 43*).
- Increase the number of marked pedestrian crossings and install bicycle lanes along Riverside
 Avenue. Priority should be given to adding a marked crossing at the northern vehicular
 entrance.

- 4. Extend the paved pathway near the tennis courts to provide an additional entrance for pedestrians and bicyclists in the southern area of the park. This would require approximately 250 feet of paved pathway and should bring guests to the intersection of Bergen Avenue and River Road, where a signed crosswalk should be installed. This will provide better access to the park for residents in the southern portion of North Arlington. (See number 3 in *Figure 43*).
- **5.** Add curb extensions to the long diagonal crossings along the existing Riverside Avenue sidewalk. This sidewalk is the only dedicated pedestrian infrastructure along the corridor and its crosswalks do not support safe crossing conditions for pedestrians and bicyclists. The shape of the street grid lengthens the crosswalk, increasing exposure time for vulnerable road users who use these crossings. Adding curb extensions to these crossings will improve existing sidewalk infrastructure and pedestrian and bicycle access to the park.
- **6.** Add pedestrian crossing signage to existing crosswalks along Riverside Avenue into the park. This will alert drivers to increased pedestrian and bicyclist traffic near Riverside South and improve safety conditions for all road users.

Public Transit Access

Multiple transit stops provide guests access to Riverside South. The Lyndhurst train station, serviced by NJ TRANSIT's Main Line, is one mile from the park's northernmost entrance. Sidewalks are present along the entirety of the route, though no bicycle infrastructure is present. Additionally, guests may access the park via NJ TRANSIT's 76 bus line which runs from Newark and Hackensack along Ridge Road with regular stops in Lyndhurst and North Arlington. The closest stop to Riverside South is located at the intersection of Jauncey Avenue and Ridge Road and places guests one half mile from the park's southern entrance. Sidewalks are provided along the entirety of the route, though there is no bicycle infrastructure.

Three local bus routes stop across the Passaic River in Nutley at the intersection of Park and Washington Avenues: the 13, 27, and 74 lines (see number 1 in *Figure 42*). These lines run north-south in the area, primarily operating between Irvington, Newark, and Clifton. Riverside South is located 0.9 miles from this bus stop. The entire length of the walking route between the park and bus stop provides sidewalks, although pedestrians must walk on the western side of Riverside Avenue once crossing the bridge. This route also requires crossing the Park Avenue bridge, which has barrier-protected sidewalks on both sides (see number 2 in *Figure 42*).

Proposed Public Transit Access Improvements

- 1. **Install wayfinding materials** along Park Avenue and Riverside Avenue for guests arriving from the Nutley bus stop and along Jauncey Avenue and Ridge Road for guests arriving from NJ TRANSIT's 76 line. (See *Figure 43*).
- Install bicycle infrastructure along the routes from the train and bus stops as part of a larger bicycle and pedestrian planning initiative for the community, in order to increase the bicyclist safety.
- 3. **Fill sidewalk network gaps on the western side of Riverside Avenue** near the park. This will provide an important connection for pedestrians arriving from the Nutley bus stop (see number 1 *Figure 43*). Inconsistent sidewalk coverage on this side of the road contributes to unsafe and unpredictable pedestrian conditions. Not only will the completed sidewalk serve transit users, as noted in the CUES analysis, providing more pedestrian access points to the park can help to better serve the surrounding communities.

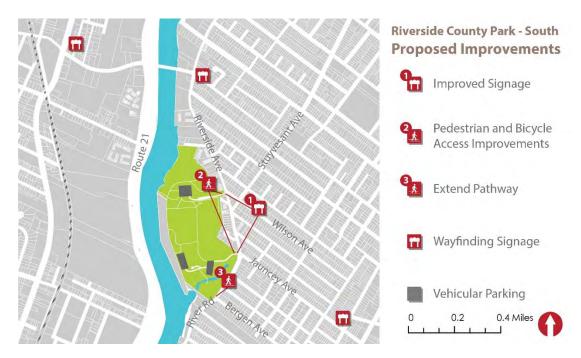


Figure 43. Riverside South Proposed Improvements

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the potential feasibility and impacts of holding a Movie Series event in Riverside Park South. For analysis purposes, it was assumed the event might attract up to 1,000 attendees. There are several important factors to consider when planning an event of this type at Riverside Park South:

■ Parking demand – Table 15 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 100 to a high of 450 depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. ⁸ Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle could be as high as 4-6 persons per vehicle. If one assumes "average" driving demand, a 1,000 attendee event of this type would require between 125 and 188 parking spaces.

Currently there are approximately 270 available parking spaces on-site. It is very possible that driving demand for the Movie Series might be higher than average given the need to bring along chairs, blankets, snacks, etc. Under these circumstances, it would appear that on-site parking is adequate to accommodate an event of this nature and size at this park location without the use of satellite parking.

⁸ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

Table 15. Parking Demand Scenarios

EVENT ATTE	ENDANCE	1,000 PEOPLE					
DRIVING DE	DRIVING DEMAND SCENARIO		Low		Average		;h
		Percent	People	Percent	People	Percent	People
MODE OF	Drive & Park	60%	600	75%	750	90.0%	900.0
IRAVEL	Drop-off & Taxi	5%	50	5%	50	5.0%	50.0
	Walk	25%	250	16%	160	4.3%	42.5
	Bike	7%	70	3%	30	0.5%	5.0
	Transit & Charter	3%	30	1%	10	0.3%	2.5
	Total	100%	1000	100%	1000	100%	1000
PARKING SPACES	2 passengers per car	300		375		450	
REQUIRED	4 passengers per car	15	0	188		225	
	6 passengers per car	10	0	12	5	150	

Access and Circulation – Riverside South is located in a dense residential area with available on-street parking and nearly complete pedestrian infrastructure. As such, it is highly accessible by foot for residents in the surrounding community, including those located across the river in Nutely Township. The park's trail system allows pedestrians to circulate within the park separetly from motorists, though it will be essential to provide lighting in areas of potential conflict.

Recommendations

- 1. Keep pedestrians and motorists entirely separated by utilizing Riverside North for additional parking as Riverside South provides approximately 270 parking spaces, which is just short of the estimated demand. Overflow parking could be accommodated on neighboring streets, though Riverside North presents an excellent opportunity to encourage walking while separating motorists from the event area. Riverside North provides 135 additional parking spaces, plus opportunities for additional parking in grassy areas. This could free up the northern entrance and parking lot in Riverside South as a designated parking lot for handicapped parking as well as a drop-off location.
- 2. Designate drop-off and pick-up zones during the event so groups with cars are able to drop-off individuals and any supplies, such as blankets and snacks, before being directed to designated parking lots elsewhere. Some conflicts may arise between vehicles, pedestrians and bicyclists accessing these zones. To minimize the risk of conflicts, zones should be monitored by event volunteers who help direct and control traffic. Zones should be clearly marked with signage to alert vehicles to increased pedestrian activity.
- 3. **Utilize crossing guards at the Park Avenue and Riverside Avenue intersection** to ensure the safety of guests walking from parking areas in Riverside North to the event at Riverside South.

- 4. **Consider offering shuttles from the Riverside North parking to the Riverside South event.** This may not be necessary given the designated handicapped parking in Riverside South and the fact that the walk takes only approximately 15 minutes.
- 5. **Incentivize walking or bicycling** to the event to minimize pressure on vehicle capacity and take advantage of Riverside South's location within a relatively dense residential area with a complete network of sidewalks. Incentives could include discounts for neighboring businesses or food vendors directly available at the event.
- 6. **Hire temporary crossing guards at key intersections** to strengthen pedestrian routes between Nutley and Riverside South. This could encourage people from the neighboring Township to access the event by an alternative mode to driving.
- 7. **Provide bicycle valet parking** to encourage individuals to ride their bicycles to the event.
- 8. Install a low-cost marketing campaign in Lyndhurst, North Arlington, and Nutley to encourage individuals to walk to the event. The materials can be simple, providing the event's name, location, an arrow pointing in the park's direction, and the time it takes to walk there. These same materials can also increase the capacity for individuals to access the event by transit.
- 9. **Strengthen access between Nutley bus stops and Riverside South** through the suggestions made above, including hiring temporary crossing guards and installing wayfinding materials between the bus stop and event space.
- 10. Activate the walking route between the park and nearby transit the Lyndhurst train station and Route 76 bus stops on Ridge Road using low-cost materials. The route could be marked with temporary chalk paint, volunteers distributing event materials, donated planters and materials from sponsor businesses, or other highly-visible, unique wayfinding methods.
- 11. Incentivize transit use by providing discounts to individuals who show their transit ticket at participating vendors throughout the event.

Saddle River County Park Transportation Assessment

Context & Location

Saddle River County Park is a regional park located in central Bergen County. The park, which functions as a linear greenway, encompasses nearly 600 acres of land alongside more than 5 miles of the Saddle River. Along the route, Saddle River Park passes through six moderately densely populated (4,000 to 6,000 people per square mile) suburban communities; Saddle Brook Township, Rochelle Park, Fair Lawn, Paramus, Glen Rock, and Ridgewood. The park is largely bordered by single-family housing and in some locations the park flows seamlessly into residential yards while in other locations the trail system directly connects with neighborhood sidewalk networks.

The Saddle River Park pathway is more than 10 miles long and loops from the northernmost area of the park down either side of the river to the southernmost portion and provides a link across the park's eight different areas. Along the trail, bridges cross Saddle River connecting its eastern and western banks while tunnels safely connect areas of the park dissected by major highways and local roadways. Entrances to the trail are located less than one half mile from a number of public and private schools such as Hawes Elementary School, Paramus Catholic High School, and Bergen County Community College. In addition to miles of flat paved pathways, Saddle River Park attracts guests to its numerous playgrounds, fishing spots, sports fields, and the historic Easton Tower. While there is no way for a car to drive directly from the northern end of the park to the southern without having to exit the park, pedestrians and bicyclists are afforded this opportunity and are able to do so without having to cross municipal roadways.

A significant majority (75 percent) of Saddle River Park users travel less than five miles to visit the park. Six percent of Saddle River Park users report bicycling to the park, which is twice that of the other Bergen County parks surveyed (see *Table 16*). Further, Saddle River Park users are more likely to access the park by walking than other parks surveyed. Very few users reported using public transit to access the park despite the fact that the Glen Rock Boro Hall Train Station, serviced by the NJ TRANSIT's Main/Bergen line, is located about one mile from the northernmost entrance to the trail, and nearly ten different bus lines stop along Saddle River Road, on the park's eastern border, and Paramus Road, on the park's western edge.

Table 16. Transportation mode to Saddle River Park (n=315)
Compared to all Bergen County Parks studied (n=923)

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Transportation Mode	Saddle River	All Bergen			
	Park	County Parks			
Drive	72%	79%			
Walk	22%	17%			
Bicycle	6%	3%			
Bus	0%	0.1%			
Taxi/Uber/Lyft	0%	0.1%			
Train	0%	0.1%			
Skate/Skateboard	0%	0.1%			
Total	100%	100%			

Saddle River Park largely attracts regularly users that visit at least once a week (81 percent). Most reported using the park for exercise (75 percent). Park users overwhelmingly reported the trails are in

good condition (93 percent). However, the park's popularity has left some attendees with safety concerns along the trail. Roughly half of the park users surveyed reported concern regarding potential conflicts between bicyclists, joggers, and walkers along the shared pathway. And while some users noted the pathway as narrow and crowded, others noted the trail as their favorite aspect of the parks system with one respondent stating, "We love that our favorite parks are connected by a safe biking trail. We hope more parks are linked to this Saddle River biking trail."

In addition to crowded pathways, challenges related to finding parking, particularly on the weekends, were also commonly mentioned during the master planning process. Parking issues could be lessened by addressing other comments such as one respondent who noted that Saddle River Park provides "a great place for a long walk or bike ride without car traffic/conflicts, but I have to drive to get to that experience." Several commenters also requested bicycle connections between the parks and local downtowns. These suggestions and other opportunities are explored in further detail in the sections that follow, which address each of Saddle River Park's eight areas; Wild Duck Pond, Mill Run, Glen Rock, Dunkerhook, Orchard Hills County Golf Course, Maple Glen, Fair Lawn, Otto C. Pehle, and Rochelle Areas.

Multimodal Conditions & Opportunities

1. Wild Duck Pond Area

The Wild Duck Pond Area of Saddle River Park is the park's northernmost area located in Ridgewood Township near the border of Paramus. The area is bordered to the south by East Ridgewood Avenue and to the north by Linwood Avenue. The remainder of the park is surrounded by a network of residential streets and cul-de-sacs with single-family housing units.

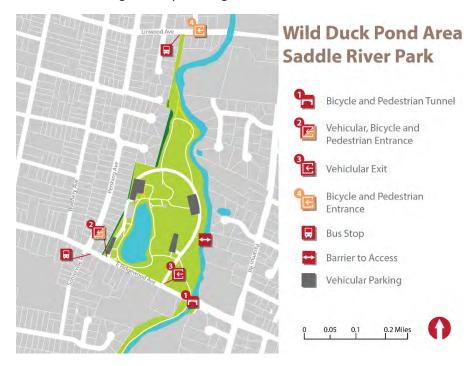


Figure 44. Wild Duck Pond Key Transportation Locations

Motor Vehicle Access & Circulation

The park's only vehicular entrance is located along East Ridgewood Avenue. This single-lane bidirectional street witnesses an estimated 15,000 vehicles daily (NJDOT, 2013) with a speed limit of 25 miles per hour. The park's entrance is marked with a sign that is difficult to see, particularly for attendees traveling east on East Ridgewood Avenue (see Figure 44). One-half mile of roadway safely loops vehicular traffic in one direction through the park. Along the route are three separate parking areas which provide approximately 90 parking spaces.

Proposed Motor Vehicle Improvements

1. Improve visibility of the park entrance by placing the park signage closer to the vehicular entrance. The sign could be situated in between the first parking space and East Ridgewood Avenue where trees would not obstruct the sign's visibility (see Figure 45 and number 3 in Figure 47). This location is ideal for motorists traveling in either direction on East Ridgewood Avenue.



Figure 45. Entrance to Wild Duck Pond Area **Source: Google Maps**

Pedestrian and Bicycle Access & Circulation

There are several pedestrian and bicycle access points around the park. Two access points are located along East Ridgewood Avenue, the first of which is located alongside the vehicular entrance (see number 2 in *Figure 44*). This entrance is about one half mile from Somerville Elementary School and Ridgewood High School. Sidewalks are installed throughout the route from both schools to the park, however crossings must be made at the lighted intersections as the entrance to the park lacks crosswalks. While the route provides buffered sidewalks, there is no infrastructure in place for bicyclists. A tunnel provides a second access point along East Ridgewood Avenue and connects the Wild Duck Pond Area with the southern Mill Run Area without the need to cross the roadway (see number 1 in Figure 44).



Figure 46. Linwood Avenue Entrance to Wild Duck Run Area (Source: Google Maps)

Finally, bicyclists and pedestrians in the neighborhood north of the park have access to the trail system via an entrance on Linwood Avenue. This entrance, tucked in between two residential properties is easy to miss as it lacks signage (see number 4 in *Figure 44* and *Figure 46*). This entrance, much like its southern counterpart, is connected to the community with an extensive sidewalk network, but lacks dedicated bicycle infrastructure.

Proposed Pedestrian and Bicycle Improvements

- 1. **Incorporate bicycle infrastructure into the surrounding community** with coverage similar to the sidewalk networks currently available. This will provide residents in the surrounding neighborhood an opportunity to utilize the bicycle pathway without having to first get in their car to drive to the park.
- 2. Add signage to the Linwood Avenue entrance similar to the signage utilized in the front of the park. Highlighting the trail's presence and easy access will benefit the local community both in terms of health and property value.
- 3. **Provide crosswalks at both pedestrian and bicycle entrances** which will serve to encourage safe motorist, pedestrian and bicyclist behavior and will highlight the park's presence for potential users (see number 4 in *Figure 47*).
- 4. **Provide trail connections for residents of the nearby Paramus neighborhood.** Residents located along the Wild Duck Pond Area's western border benefit from easy access to the trail system, while residents located on the Paramus side have no way of getting across the river without walking along Paramus Road to either East Ridgewood Avenue or Linwood Avenue (see number 2 in *Figure 47*). Providing a bridge across the river will improve pedestrian and bicycle access for residents in the Paramus neighborhood just east of the park.
- 5. **Install safe and modern bicycle parking** at key locations throughout the area, ensuring both visibility and accessibility. For example, bicycle parking near the playground area and by any of the three parking areas, particularly the parking area near the main entrance (see *Figure 47*), would be ideal.

Public Transit Access

NJ TRANSIT's 722 and 163 bus lines stop within 100 feet of the area's main entrance on East Ridgewood Avenue (see *Figure 44*). Additionally, NJ TRANSIT's 752 bus line runs hourly from 9:00 am to 8:00 pm and services a stop less than 200 feet from the Linwood Avenue trail entrance (see *Figure 44*). The

nearest train station, however, is located roughly one and a half miles away at the western end of East Ridgewood Avenue. Park attendees arriving by train have the option of taking the 163 bus line for the last mile and a half of their trip to the park entrance.

Proposed Public Transit Access Improvements

- 1. Provide safe crosswalks along East Ridgewood Avenue and Linwood Avenue to ensure that guests arriving by bus are able to safely access nearby entrances. These crosswalks could be as simple as painted stripes.
- 2. Consider a bicycle rental program, similar to Citi Bike in New York or Hudson Bike Share in Hoboken, which could provide train riders with an active transportation alternative to riding the bus for the last one and a half miles of their trip to the Wild Duck Area's main entrance.

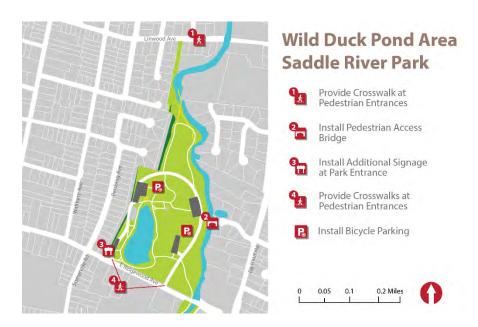


Figure 47. Wild Duck Pond Proposed Improvements

2. Mill Run Area

The Mill Run Area of Saddle River Park is the second northernmost area of Saddle River Park. This area constitutes approximately 66 acres of land and offers just over one mile of trails. It crosses through the municipalities of Ridgewood, Paramus, and Glen Rock and is surrounded mainly by single-family residential housing units located along cul-de-sacs. This area of Saddle River Park is directly adjacent to Paramus Catholic High School and is within walking distance of several additional schools and religious centers.



Figure 48. Mill Run Area Key Transportation Points

Motor Vehicle Access & Circulation

There is currently no parking or vehicular access through this narrow section of Saddle River Park, however it is easily accessible via parking lots located in the Wild Duck Pond and Glen Rock areas of the park.

Proposed Motor Vehicle Improvements

No improvements are needed as this narrow stretch of greenway is limited on space and currently accessible to vehicles parking in the Wild Duck Pond and Glen Rock areas of Saddle River Park.

Pedestrian and Bicycle Access & Circulation

There are three access points for pedestrians and bicyclists located in the northwestern section along the Ridgewood side of the Mill Run area. These access points link the neighborhood sidewalk network directly to the Saddle River pathway (see number 1 in *Figure 48*). Along the eastern side of the park

pedestrians and bicycles are granted fewer opportunities to access the trail system. Number 3 in *Figure* 48 highlights the only access point on the eastern side of the park and even here, the entrance places users on a separate trail system. From this point, users must travel roughly one half mile south to the Dunkerhook Area of Saddle River Park to access the Saddle River path. This lack of access along the eastern side of the Mill Run Area provides a barrier to residents in Paramus. For example, one home along the residential street, Mill Run, is located just 200 feet from the trail, but the nearest access point is nearly one mile away along Grove Street.

Proposed Pedestrian and Bicycle Improvements

- 1. Install a pedestrian and bicycle bridge over Saddle River in the section between East Ridgewood Avenue and Grove Street to better link this Paramus neighborhood with the trail system (see number 1 in Figure 50). This bridge could most easily connect with Mill Run, but Clauss Avenue could also provide a great opportunity for connection. A second bridge would also be useful to the west of Paramus Catholic High School, where the local trail could be better connected with the Saddle River trail.
- 2. Ensure safe, ADA compliant crosswalks are located near each access point. This is particularly important for the trail entrance located on Paramus Road as sidewalks are only located along one side of the road and the nearby intersections, Morningside Road and Midwood Road, lack designated crosswalks (see number 4 in *Figure 50*).



Figure 49. Grove Street Entrance with Crosswalk (Source: Google Maps)

3. Improve the trail entrance located along Grove Street. This entrance has a clearly marked crosswalk and ADA ramp, which helps to ensure safe access for pedestrians and bicycle users of all abilities (see number 2 in Figure 50). The Saddle River pathway provides miles of smooth surface, excellent for strollers, wheelchairs, crutches and canes, however, this entrance fails to safely connect these users to the trail system (see Figure 49). The ADA ramp is isolated from the trail, so as the entrance currently stands, it is unusable. This entrance would benefit from a better connection to the trail system and installation of clear signage, highlighting the path's existence.

4. Incorporate bicycle lanes into the communities surrounding the Mill Run Area to ensure that nearby residents are able to access the area without having to first get in their car. This is particularly important along Paramus Road and Grove Street.

Public Transit Access

The 163 bus line stops at the intersection of Paramus Road and Midland Avenue (see number 1 in *Figure 48*). This places the bus stop within 400 feet of the pathway, but at this point in the trail the path is inaccessible from street level as it crosses underneath Midland Avenue. Just 100 feet further down the road though is an emergency vehicle access which links with the trail system.

Proposed Public Transit Improvements

1. Create a designated pedestrian and bicycle entrance along Midland Avenue where the current emergency access entrance is located (see number 4 in *Figure 50*). This will provide a closer entrance for guests arriving by bus, but will also enhance accessibility for pedestrians and bicyclists accessing the park from Paramus, including those coming from Midland Elementary School which is located less than one quarter mile from this possible entrance.



Figure 50. Mill Run Area Proposed Improvements

3. Glen Rock Area

The Glen Rock Area of Saddle River Park is located along the border of Glen Rock and Ridgewood. Single-family residential housing surrounds the parks on its eastern and western borders. In some areas, residential backyards blend almost seamlessly into the park's open space. Hawes Elementary School (see number 4 in *Figure 51*) is located less than 500 feet from the Corella footpath to the east of the park

(see number 3 *Figure 51*). The Clara E. Coleman Elementary School is located less than a half mile to the west of the park's main entrance. To the north, the park is bordered by the Ridgewood Water Pollution Control Center. A number of religious institutions are also located less than a half mile away from the Glen Rock Area main entrance, including a Lutheran Church, Glen Rock Jewish Center, and Glen Rock Gurudwara.



Figure 51. Glen Rock Area Key Transportation Points

Motor Vehicle Access & Circulation

The Glen Rock Area can be accessed by motor vehicles at the main entrance along Prospect Street in Glen Rock (see number 2 in *Figure 51*). The entrance begins with two single lanes of bidirectional traffic and splits into a one-half mile one-way loop around Glen Rock Pond. Two parking areas along the roadway provide an estimated 92 parking spaces. The park's entrance is marked by one small sign that is situated for pedestrians arriving along the sidewalk and a second sign that is located more than 300 feet from the intersection of Alan Avenue and Prospect Street.

Motor Vehicle Proposed Improvements

1. Adjust the location of the park's entrance sign. The Glen Rock Area entrance is located between two residential properties, which limits the ability to install a large wooden sign on the road front (see number 2 in *Figure 53*). However, a number of opportunities are available to increase the sign's visibility and highlight the park's presence to passersby. First, the wooden sign could be situated closer to the roadway as the current setback of approximately 20 feet makes the sign extremely difficult to see, especially for motor vehicles traveling north on Prospect Street. The sign could also be moved closer to the park's edge near the bend in the sidewalk with an additional sign located on the opposite side of the street, marking the park's entrance for traveler's coming from all directions on Prospect Street and Alan Avenue. It is particularly important for this park entrance, set back behind two residential properties, that signage be installed throughout the surrounding neighborhood, highlighting the direction in which guests can find the park entrance.

2. Ensure motorists are obeying the speed limit and are cautious of pedestrians and bicyclists. This can be accomplished through a number of measures including painting speed limits along the roadway in the park and, if necessary, installing speed humps or tables.



Figure 52. Glen Rock Area Main Entrance, Prospect Avenue (Source: Google Maps)

Pedestrian and Bicycle Access & Circulation

The Glen Rock Area offers an estimated three quarters of a mile of walking and bicycling trails around the circumference of Glen Rock Duck Pond. This walking trail is located within the Alan Avenue loop and connects with various entrances around the pond by intersecting with Alan Avenue. The main pedestrian entrance is located at the intersection of Prospect Street and Alan Avenue where painted crosswalks and ADA ramps provide safe access across Prospect Street (see number 2 in **Figure 51** and **Figure 52**), which witnesses an estimated 11,600 cars per day (NJDOT Interactive Traffic County Report, 2013). An extensive network of sidewalks connects pedestrians from the neighborhoods west of the Glen Rock Area, however, there is no infrastructure in place for bicyclists.

A second entrance is provided to pedestrians accessing the area from east of the park (see number 3 in *Figure 51*). Corella Court, a cul-de-sac in Ridgewood connects with the Corella footpath. This foot path begins as a cement ramp leading into the park area and provides a bridge over Saddle River before crossing Alan Avenue. The ramp, though safe to walk a bicycle down, seems too steep to be ADA compliant. This leaves prospective guests requiring ADA accommodations to travel 1.5 miles to the Glen Rock Area's main entrance along Prospect Street.

A third access point is located at the southern portion of Glen Rock Area where the Saddle River pathway connects the Glen Rock Area with the rest of Saddle River Park (see number 5 in *Figure 51*). This connection between the pathway around the pond and the rest of the Saddle River pathway is intersected by Alan Avenue. Pedestrians and bicycles utilizing the pathways inside the Glen Rock Area cross paths with vehicular traffic more often than in other sections of the park. The Alan Avenue loop encompasses the entirety of the Glen Rock Pond walking path and intersects guests entering the park from Prospect Avenue, the Corella Street footpath, and guests traveling north along the Saddle River pathway from southern portions of Saddle River Park. Alan Avenue also intersects with a pathway that leads to the bathroom, at the southern portion of the Glen Rock Area. It is essential that each of these crossings ensure the safety of pedestrians and bicyclists utilizing the park.

Proposed Pedestrian and Bicycle Improvements

- 1. Bicycle infrastructure should be installed in the neighborhoods surrounding the park so that bicyclists are provided the same safe access to the park as pedestrians. Dedicated bicycle lanes or road marking signifying shared lanes would provide a safe opportunity for guests attracted to the miles of bicycle pathways without having to first drive to the Glen Rock Area.
- 2. ADA compliant access from the Ridgewood side of the park would ensure that the park is accessible for all (see number 4 in Figure 53). Guests arriving from the Glen Rock side of the park are supported by a network of sidewalks with ADA compliant ramps, while those arriving from the Ridgewood side are not provided the same opportunity. Given the Corella footpath's proximity to a dense network of suburban housing and the nearby elementary school, adjusting this ramp to comply with ADA guidelines could broaden the park's accessibility from Ridgewood.
- 3. Signage should be installed at the Corella Footpath which will help to encourage its use by area residents. Wayfinding signs could also be utilized at the corner of Corella Street and Stevens Avenue where residents traveling to the local elementary school would likely see it (see number 5 in *Figure 53*).
- 4. Provide safe pedestrian and bicycle crossings at all trail intersections with Alan Avenue should be made in order to limit possible conflicts between pedestrians, bicyclists and motorists (see number 3 in Figure 53).

Public Transit Access

Two NJ TRANSIT bus lines stop along Ackerman Avenue, less than one quarter mile from the Glen Rock Area's main entrance (see number 1 in Figure 51). The 164 line runs daily between New York City and Midland Park between 6:50 am and 12:50 am on weekdays and provides limited service on weekends. The 175 line runs less frequently between the George Washington Bridge Bus Station and Ridgewood between 6:45 am and 12:30 am on weekdays. The 175 provides limited service on weekends. Additionally, the main entrance to the Glen Rock Area is located approximately one mile from the Glen Rock Boro Hall Train Station which is serviced by the Main-Bergen County Line. Sidewalks are provided along the entirety of the route between the train station and the main entrance into the Glen Rock area, however, crosswalks are not always provided at all four corners of the intersections along Rock Road.

Proposed Public Transit Improvements

- 1. Provide wayfinding signs near the Ackerman Avenue bus stops so that riders can easily find their way to the park (see number 6 in *Figure 53*). Alternatively, wayfinding signs will let riders know how close they are to the park and could encourage more transit users to utilize the park.
- 2. Ensure pedestrian and bicyclist safety between the train station and the park entrance by maintaining and completing crosswalks at all intersections of Rock Road and provide bicycle infrastructure along the route. Additionally, wayfinding signs along the route would be beneficial for pedestrians and bicyclists arriving via train.



Figure 53. Glen Rock Area Proposed Improvements

4. Dunkerhook Area

The Dunkerhook Area of Saddle River Park is located just south of the Glen Rock and Mill Run areas and incorporates sections of the boroughs of Glen Rock, Fair Lawn and Paramus. To the west of the park, in Glen Rock and Fair lawn, the park is bordered by single-family residential housing. The park's eastern border includes some residential cul-de-sacs as well as restaurants, a church and the Paramus Golf Course which is situated across Paramus Road. Just north of the golf course is Bergen Community College (see number 4 in Figure 54). A section of Paramus residential housing along Dunkerhook Road is almost entirely surrounded by park land. The Dunkerhook Area includes about one mile of pathway, encompasses more than 140 acres of land, and surrounds a small section of residential housing in Paramus.

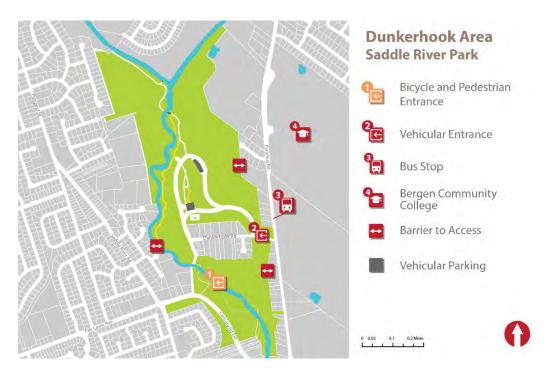


Figure 54. Dunkerhook Area Key Transportation Points

Motor Vehicle Access & Circulation

There is one vehicular entrance to the Dunkerhook Area which is located on the park's eastern border in Paramus on Dunkerhook Road (see number 2 in *Figure 54*). The signage for the entrance is approximately 350 feet from the intersection with Paramus Road. Though the sign is clearly visible for motorists traveling on Dunkerhook Road, there is no evidence from Paramus Road of the presence of the entrance. This entrance provides access to approximately one mile of roadway, half of which is one-way travel, with two parking lots offering more than 40 parking spaces.

Proposed Motor Vehicle Improvements

- 1. **Install additional signage along Paramus Road highlighting the Dunkerhook Area entrance in Paramus** (see number 2 in *Figure 56*). This signage is important because Dunkerhook Road otherwise seems like any other residential street, meanwhile it provides entrance to more than 140 acres of park land.
- 2. **Paint parking space markings on the parking lots** in the Dunkerhook Area as this will help maximize the use of the space (see number 2 in *Figure 56*).

Pedestrian and Bicycle Access & Circulation

The Dunkerhook Area of Saddle River Park is the least accessible for pedestrians and bicyclists. Unlike other sections of Saddle River Park, the Dunkerhook Area does not provide any direct pedestrian or bicycle access to surrounding neighborhoods by connecting with municipal sidewalk networks. This means that a household located in Fair Lawn, less than 150 feet from the Saddle River Pathway would have to walk a half mile outside of the park to the vehicular entrance for the Maple Glen Area in order to then access the Dunkerhook pedestrian and bicycle entrance to the Saddle River Pathway (see number 1 in *Figure 54*).

In addition to a lack of direct trail connections for neighborhoods surrounding the Dunkerhook Area, the vehicular entrance does not provide safe crosswalks or sidewalk coverage (see Figure 55). Once in the park, however, pedestrians and bicyclists are able to move safely throughout the Dunkerhook Area and into the surrounding Saddle River Park areas. This is true for the entirety of the Dunkerhook Area except for a small section of trail near the northwestern most section of the area where the trail converges with the roadway for a short period.



Figure 55. Dunkerhook Entrance, Paramus Road (Source: Google Maps)

Proposed Pedestrian and Bicycle Improvements

- 1. Provide safe pedestrian and bicycle access by installing ADA compliant sidewalks at the area's entrances. This would require sidewalk installations from the Century Road Extension intersection to the Iris Court intersection. The installation should continue along both sides of Paramus Road and onto Dunkerhook Road (see number 6 in Figure 56).
- 2. Provide connections for pedestrians and bicyclists to safely access the trail from either entrance. Currently, the eastern entrance requires pedestrians and bicyclists to walk along the roadway for nearly 800 feet before reaching the nearest trail entrance. Extending the pathway such that it meets the sidewalk network would greatly improve the accessibility of pedestrians and bicyclists in this area of the park (see number 6 in Figure 56).
- 3. Install bicycle lanes along Paramus Road that safely connect the Paramus residents and Bergen Community College students with the Saddle River Pathway. Paramus Road is currently three lanes of traffic, with two traveling north and one south, making it a possible candidate for a road diet and the inclusion of a dedicated bicycle lane.
- 4. Separate the section of the Saddle River Pathway that converges with the Dunkerhook Area roadway in the northern section of the area (see number 3 in Figure 56). This adjustment will greatly improve pedestrian and bicycle safety within the Dunkerhook Area.
- 5. Connect the trail with the Fair Lawn and Paramus neighborhood sidewalk networks similar to the connections made in the Glen Rock and Mill Run areas (see number 1 in Figure 56). The connections on the Fair Lawn side of the park will require a bridge over Saddle River similar to the one located at Corella Court in the Glen Rock Area. Debruin Drive or Fox Court may provide the easiest access to the trail. On the Paramus side, a connection could be made to the Red Trail, which ultimately merges with the Saddle River Pathway, near Iris Court.

Public Transit Access

The Dunkerhook Area entrance is serviced by NJ TRANSIT's 163, 163S, 751, 755 and 756 bus lines along Paramus Road at the intersection of Dunkerhook Road. However, as mentioned earlier, the park entrance lacks sidewalks or a safe crosswalk. The western side of the park, though close in proximity to a number of bus lines, is inaccessible without first entering the Maple Glen Area. The Radburn Train Station is also approximately one mile from the western side of the Dunkerhook Area, but cannot be reached without first entering the Maple Glen Area (see the following section for public transit accessibility to the Maple Glen Area).

Proposed Public Transit Improvements

1. Install sidewalks along Paramus Road and Dunkerhook Road so that bus riders can safely access the park (see number 4 in *Figure 56*). The Paramus Road and Dunkerhook Road intersection would also benefit from the installation of a crosswalk.



Figure 56. Dunkerhook Area Proposed Improvements

5. Maple Glen Area

The Maple Glen Area of Saddle River Park is located along the border of Fair Lawn and Paramus, just south of the Dunkerhook Area. The area constitutes an estimated 90 acres of land with more than one and a half miles of trails and one parking lot. It is bordered to the west by single-family residential housing and the Maple Glen Center nursing home (see number 3 in *Figure 57*). The eastern border in Paramus constitutes single-family residential housing intermixed with several restaurants, and a strip mall that is currently under construction. Across Paramus Road from the strip mall is a dense neighborhood of townhomes, as well as an assisted living center.



Figure 57. Maple Glen Area Key Transportation Points

Motor Vehicle Access & Circulation

Although Century Road Extension intersects the northern section of the Maple Glen Area, there is only one dedicated vehicular entrance in the Maple Glen Area. The entrance is located in Fair Lawn and currently has no sign (see number 1 *Figure 57*). Although this entrance is also located on Dunkerhook Road there is no vehicular thoroughfare connecting this Maple Glen entrance with the Dunkerhook entrance as the roadway terminates before crossing Saddle River. Guests can park in a small parking area along this portion of Dunkerhook Road and access the Saddle River Pathway, which includes a bridge over the river into the northern section of the Dunkerhook Area.



Figure 58. Maple Glen Area Vehicular Entrance (Source: Google Maps)

Proposed Motor Vehicle Improvements

1. Install a Maple Glen Area sign at the entrance to instruct passersby of the entrance where parking is available and guests can access the Saddle River Pathway (see number 1 in *Figure 59*).

Pedestrian and Bicycle Access & Circulation

The community of townhomes across Paramus Road from the Maple Glen Area contains a complete network of sidewalks, however, this network does not extend to the entrance of the park. In fact, residents in the Paramus community must walk over the Maple Glen Area along Century Road Extension to the vehicular entrance in Fair Lawn. The sidewalks terminate at the intersection of Century Road Extension and Paramus Road, leaving guests to walk along the roadway for one half mile before entering the park, where they must walk an additional 400 feet before reaching the trail or a designated pedestrian facility.

Residents in Fair Lawn are provided far more opportunities to access the Saddle River Pathway as pathway entrances are located throughout the community south of Century Road Extension. Entrances can be found along Elaine Terrace and at the Glen Rock Center nursing home (see number 2 in Figure *57*).

Proposed Pedestrian and Bicycle Improvements

- 1. Provide the Paramus community with safe access via sidewalks and bicycle lanes in order to encourage active transportation to the park and minimize opportunities for conflicts between pedestrians, bicyclists and motorists (see number 3 in *Figure 59*).
- 2. Extend the sidewalk network at the vehicular entrance by 400 feet to meet the Saddle River Pathway (see number 1 in *Figure 59*). This will decrease potential conflicts between pedestrians and motorists entering the park as pedestrians will not need to walk along the roadway to enter the park.

Public Transit Access

The Radburn train station is the closest station to the Dunkerhook Area and is located 1.3 miles west of the park. The station is serviced by the NJ TRANSIT Main/Bergen Rail Line. Sidewalks and crosswalks are installed along the entirety of the route along Fair Lawn Road to the southern entrance of Dunkerhook Road. Fair Lawn Road consists of four lanes of traffic, two traveling in either direction and witnesses approximately 11,700 cars per day (NJDOT Interactive Traffic Count Report, 2013). The area is also accessible to a number of nearby bus stops (see *Figure 57*). The 145, 164 and 175 bus lines all stop within 500 feet of the park entrance, but because there is no crosswalk, bus riders must first walk in the opposite direction to safely cross the street at the Saddle River Road and Century Road Extension intersection. The 163, 175, 751, 755, and 756 each stop just over one half mile from the Century Road Extension entrance, despite being only 0.1 miles from the Saddle River Pathway.

Similar to the challenges witnessed by pedestrians and bicyclists attempting to access the Maple Glen Area from Paramus, guests arriving by bus must traverse one half mile of Century Road Extension. This requires walking over the Saddle River Pathway on a stretch of road that lacks sidewalks and bicycle lanes.

Proposed Public Transit Improvements

- 1. **Provide a crosswalk in front of the entrance** so that bus riders can safely access the park without being encouraged to cross the street in areas that are not designated for pedestrians (see number 1 in *Figure 59*).
- 2. Encourage transit riders to utilize a bicycle to reach the southern entrance to the Dunkerhook Area. This can be achieved by creating a bicycle share program, similar to those utilized in New York City and Hoboken, so that transit riders have the option to bicycle to the park and can utilize the rented bicycles to better enjoy the Saddle River Pathway. Additionally, Fair Lawn Ave may benefit from a road diet that re-stripes the lines on the roadway such that bicycles are provided with a dedicated bicycle lane.
- 3. **Install wayfinding signs at the train station** to encourage those utilizing the station to walk or bicycle to the park.
- 4. Provide access to the Saddle River Pathway near the Century Road Extension overpass in order to provide Paramus residents and bus riders with easier access to the trail (see number 4 in *Figure 59*). This should occur in combination with the installation of crosswalks and sidewalks along Century Road Extension.



Figure 59. Maple Glen Area Proposed Improvements

6. Fair Lawn Area

The Fair Lawn Area of Saddle River Park crosses three municipalities; Fair Lawn, Saddle Brook Township and Paramus. The southern portion is intersected by Route 4 and Route 208 where a series of tunnels

provide continuity for the Saddle River Pathways as it passes under thirteen lanes of fast-moving traffic. The highway corridor that passes through the Fair Lawn Area brings with it larger commercial uses including several hotels, a large shopping center, fast food restaurants, and a corporate campus. To the west of the park, along Saddle River Road is mostly single-family housing with restaurants and other businesses interspersed throughout. The same is true east of the park along Paramus Road with the addition of a Greek Orthodox Church just north of the Route 208 onramp.



Figure 60. Fair Lawn Area Key Transportation Locations

Motor Vehicle Access & Circulation

Two vehicular entrances are located in the Fair Lawn Area. The first is situated along Saddle River Road (see number 1 in *Figure 60*) and provides access to about one tenth of a mile of roadway and approximately 54 parking spaces. Signage at this entrance is clearly visible to motorists traveling in both directions. There is no vehicular connection between this parking area and the southern entrance to the Fair Lawn Area located off of Red Mill Road south of Route 4 (see number 4 in *Figure 60*). This entrance provides immediate access to approximately 15 parking spaces alongside the historic Easton Tower. The parking lot is also directly connected with the Saddle River Pathway, but lacks signage.

Proposed Motor Vehicle Improvements

1. Install a sign marking the southern entrance to the Fair Lawn Area along Red Mill Road. Ideally, this sign should be placed alongside the exit lane near the guard rail so that it is visible to travelers coming from both directions (see number 5 in Figure 61).

Pedestrian and Bicycle Access & Circulation

Pedestrian and bicycle connections are more abundant in the southern section of the Fair Lawn Area than in the northern section. Pedestrians and bicyclists may access the park on the western side at the main vehicular entrance, though a lack of crosswalks and an incomplete sidewalk network create a

barrier for safe entrance into the park for Fair Lawn residents. Outside of this entrance the paved trail comes to an abrupt end about 900 feet prior to the nearest sidewalk.

On the southeastern side of the park, just north of the Route 4 onramp, is the Paramus Road Spur, approximately 150 feet of paved pathway that connects with the Saddle River Pathway (see number 2 in Figure 60). Outside of the entrance, along Paramus Road to the north, the sidewalk network is incomplete with abrupt endings on either side of the road and a lack of designated crosswalks. Additionally, the entrance is not marked as an access point for the Saddle River Pathway. The neighborhood south of this entrance is provided better access as there are crosswalks and sidewalks along the route. One of these crosswalks is located at the exit ramp for Route 4, though, and may not provide enough warning of potential crossings of pedestrians or bicycles.

A third pedestrian and bicycle entrance is located south of Route 4, near the intersection of Saddle River Road and Red Mill Road (see number 3 in Figure 60). This entrance is easily accessible from all directions as it is just feet away from the crosswalks installed at the lighted intersection. Once inside the park from any of these entrances, pedestrians and bicyclists have safe access to miles of paved pathway free of interaction with cars as this section of the park incorporates two tunnels (see Figure 60). These tunnels provide a safe underpass beneath Route 4 and Red Mill Road and ensure the trail's continuity and safety for users.

Proposed Pedestrian and Bicycle Improvements

- 1. Provide a paved connection between the William Street sidewalk and the Saddle River Pathway. This would require less than 100 feet of paved trail and would help to increase pedestrian and bicycle access for Fair Lawn residents in the northern section of the park area (see number 1 in *Figure 61*).
- 2. Connect the pathway at the vehicular entrance to the Fair Lawn Area with the sidewalk which would require an estimated 900 feet of sidewalk running north along Saddle River Road (see number 2 in Figure 61).
- 3. Complete the sidewalk network along Paramus Road north of the entrance so that the surrounding Paramus neighborhood can more safely access this section of the Saddle River Pathway (see number 3 in *Figure 61*).
- 4. Provide signage warning of a pedestrian crossing along the Route 4 exit ramp, so that exiting motorists are prepared to look out for pedestrians and bicyclists (see number 4 in Figure 61).
- 5. Provide a sign for pedestrians and bicyclists at the entrance to the Paramus Road Extension. Given the shrubbery, fencing and street signs at this location, choosing a highly visible spot may be a challenge. Ideally, if some of the shrubbery could be cleaned up the sign could be installed on the southern side of the entrance, closest to the onramp.
- 6. Provide a sign for pedestrians and bicyclists at the entrance near the Saddle River Road and Red Mill Road intersection. There are a number of ideal places to locate this sign, including the grassy area just north of the entrance (see number 6 in *Figure 61*).

Public Transit Access

A bus stop located on Paramus Road just north of the Greek Orthodox Church leaves riders just steps away from the Paramus Road Spur mentioned in the previous section. This stop is serviced by five NJ TRANSIT bus lines: 163, 163S, 175, 751, 755. It provides pedestrian and bicycle access to the pathway via the Paramus Road Spur connection.

The bus stop on Saddle River Road (145 and 164) leaves guests 0.4 miles from the main entrance to the Fair Lawn Area, however, sidewalks are only provided on the western side of the road and there is currently no crosswalk installed to ensure pedestrian and bicycle safety at the entrance.

Proposed Public Transit Improvements

1. Install a crosswalk connecting the Saddle River Road sidewalk with the Fair Lawn Area vehicular entrance as the sidewalk in between terminates on the eastern side and so bus riders are forced to walk on the western side of the street until they reach the park entrance at which point a safe crossing is needed (see number 2 in Figure 61). Alternatively, bus riders would benefit from the connection of the Saddle River Pathway with the sidewalk along William Street. This would require accompanying wayfinding signage, as the connection is tucked away in a residential neighborhood.



Figure 61. Fair Lawn Area Proposed Improvements

7. Otto C. Pehle Area

The Otto C. Pehle Area is the second southernmost area of Saddle River Park and is located along the border of Saddle Brook Township and Rochelle Park Township. It constitutes more than 56 acres of land and provides more than 1.5 miles of pathways. The Otto C. Pehle Area is bounded to the east by the Garden State Parkway, which intersects the area at its southern border where a tunnel provides connectivity to the Rochelle Area for pedestrians and bicyclists (see number 5 in Figure 62). To the west, the area borders single-family residential housing along Saddle River Road. The Helen I. Smith Elementary School is located less than 0.2 miles from the area's southern pedestrian and bicycle entrance (see numbers 3 and 4 in *Figure 62*).



Figure 62. Otto C. Pehle Area Key Transportation Points

Motor Vehicle Access & Circulation

There is one vehicular entrance located along Saddle River Road in Saddle Brook (see number 1 in Figure 62 and Figure 63). The clearly signed entrance leads to a short roadway and two parking lots offering more than 130 parking spaces. While there is no vehicular entrance for guests arriving from east of the Garden State Parkway, there is abundant vehicular access throughout the Rochelle Area, adjacent to the Otto C. Pehle Area.



Figure 63. Otto C. Pehle Area Vehicular, Bicycle and Pedestrian Entrance (Source: Google Maps)

Motor Vehicle Proposed Improvements

No vehicular improvements are proposed at this time.

Pedestrian and Bicycle Access & Circulation

The area's vehicular, pedestrian and bicycle entrance located along Saddle River Road is supported by crosswalks, ADA ramps, sidewalks and roadway markings warning motorists of pedestrian crossings. The pedestrian and bicycle entrance located near the elementary school, however, is not directly accessible by a crosswalk. Instead, pedestrians and bicyclists are encouraged by numerous signs to utilize the crosswalk approximately 200 feet up the road (see Figure 64).



Figure 64. Pedestrian and Bicycle Entrance (Source: Google Maps)

Proposed Pedestrian and Bicycle Improvements

- 1. Install crosswalks where the Saddle River pathway crosses the roadway within the Otto C. Pehle Area. This is particularly important near the northern parking lot where the pathway and roadway intersect (see number 1 in Figure 65).
- 2. Consider installing a crosswalk at the southern entrance across from the elementary school that utilizes a flashing signal prior to the bend in the road that notifies oncoming traffic when pedestrians are present (see number 3 in Figure 65). This should be considered given the roadway's 25 mile per hour speed limit and the direct access this crosswalk would provide to the elementary school.

Public Transit Access

Directly in front of the vehicular entrance to the Otto C. Pehle Area stands a protected bus stop that is serviced by NJ TRANSIT's 144, 164, 707 and 758 lines (see Figure 63). From here, bus patrons may walk along the sidewalk for a short distance to the pedestrian entrance of the park (see number 2 in Figure 62). This bus stop is also useful to train passengers as they can walk a short distance from the train station to either the 164 or the 770 line and are taken to the park's entrance. However, this 7-minute car-ride will take bus passengers 15 to 25 minutes.

Proposed Public Transit Improvements

1. Provide a shuttle or bicycle rental service at the Broadway train station in Fair Lawn in order to provide better access to the Otto C. Pehle Area as the station is roughly two miles from the park's entrance (see number 2 in *Figure 65*). Bicycle rentals would require a larger bicycle infrastructure plan so that riders can safely reach the entrance.



Figure 65. Otto C. Pehle Area Proposed Improvements

8. Rochelle Area

The Rochelle Area is the southernmost portion of Saddle River Park located along the border of Saddle Brook and Rochelle Park between the Garden State Parkway and Interstate 80. Directly adjacent to the park's western border is a church and the Saddle Brook Building Department. The Saddle Brook High School and Library are both located less than 1,000 feet from the Saddle River Pathway, as well (see number 2 in *Figure 66*). Both single- and multi-family housing units and a variety of businesses are found just to the east of the park. The area constitutes more than 100 acres of land and provides more than two miles of pathways on either side of the river.



Figure 66. Rochelle Park Area Key Transportation Points

Motor Vehicle Access & Circulation

The Rochelle Area includes just over one mile of roadway that runs along the Rochelle Park side of the Saddle River. Several parking lots are located along the roadway providing an estimated 110 parking spaces. There are three vehicular entrances located in the Rochelle Area, none of which are located on the Saddle Brook side of the park. The first vehicular entrance is located in the northeastern corner of the area and is tucked in the back of a residential neighborhood (see number 1 in *Figure 66*). The entrance, located off of Howard Avenue, is not signed and there are no wayfinding signs located along the nearest major cross-street, West Passaic Street. The second vehicular entrance is located on Lotz Lane and is set back about 500 feet from the Rochelle Avenue intersection from which point the signage is not visible (see number 3 in *Figure 66*). The final vehicular entrance is located at Saddle River Park's southernmost point, along Railroad Avenue (see number 5 in *Figure 66*). The signage at this entrance is visible to motorists traveling in both directions.

Proposed Motor Vehicle Improvements

- 1. Install entrance signage and wayfinding signs in the area surrounding the Howard Avenue entrance (see *Figure 67*).
- 2. **Install wayfinding signs at the intersection of Rochelle Avenue and Lotz Lane** signaling the Rochelle Area's entrance (see *Figure 67*).

Pedestrian and Bicycle Access & Circulation

The southern portion of Rochelle Area offers a number of access points for pedestrians and bicyclists coming from either side of the park. However, the central and northwestern sections of the park are not as accessible. The first pedestrian and bicycle entrance is located along Saddle River Road (see number 6 in Figure 66). At this location, there is no signage. The second entrance is located nearby the first alongside the Railroad Avenue vehicular entrance and marks the southernmost point of the Saddle River Pathway (see number 5 in *Figure 66*). Pedestrians and bicyclists could potentially enter the park at the

Lotz Lane entrance, but this location is not supported by sidewalk infrastructure (see number 3 in Figure 66). Lastly, pedestrians may access the park at the Howard Avenue entrance, but this entrance also requires pedestrians and bicyclists to walk along the roadway rather than in a designated car-free space (see number 1 in Figure 66).

Proposed Pedestrian and Bicycle Improvements

- 1. Create a trail connection in the northwestern section of Rochelle Area in order to provide better bicycle and pedestrian access for residents in this area. Ideally, a connection could be made at Riverview Avenue where a crosswalk is already along Saddle River Road, ensuring safe access for the broader Saddle Brook neighborhood (see number 1 in Figure 67). This trail link would require an estimated 500 feet of trail in order to reach the nearest section of the pathway. Additional trail connections could be designed along Saddle River Road between Leswing Avenue and Sterling Place (see number 2 in *Figure 67*).
- 2. Create a trail connection in the Rochelle Park neighborhood between Rochelle Avenue and North Drive in order to provide better pedestrian and bicycle access for residents in this area. This trail should be similar to those created in the Mill Run Area by connecting Terrace Avenue to the Saddle River Trail (see number 4 in *Figure 67*). Alternatively, a trail could be developed along Sprout Brook to connect with Forrest Place, Chestnut Street, and/or South Drive.
- 3. Install a crosswalk where the Saddle River Pathway intersects with the roadway near the **Howard Avenue entrance.** This will ensure that both pedestrians and motorists proceed carefully at this intersection (see number 5 in *Figure 67*).

Public Transit Access

Along Saddle River Road, just 300 feet from a pedestrian and bicycle access point is a bus stop serviced by NJ TRANSIT's 144, 164 and 707 bus lines (see number 5 in Figure 66). Along Rochelle Avenue, a bus stop serviced by NJ TRANSIT's 709 line leaves passengers 0.2 miles from the Saddle River Pathway at the Lotz Lane entrance (see number 4 in *Figure 66*). While sidewalks and crosswalks are installed along Rochelle Avenue they terminate at Lotz Lane, roughly 800 feet from the pathway.

Proposed Public Transit Improvements

- 1. Install sidewalks along Lotz Lane so that this entrance is more accessible not only for bus passengers, but also for the Rochelle Park community (see number 3 in *Figure 67*).
- 2. Install signage at the Saddle River Road entrance that clearly marks the Saddle River pathway, much like the signage located at the Railroad Avenue entrance. This will help bus passengers locate the access point (see *Figure 67*).



Figure 67. Rochelle Park Area Proposed Improvements

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the potential feasibility and impacts of holding two proposed movie events, in the Otto C. Pehle Area of Saddle River Park. For analysis purposes, it was assumed each event might attract up to 1,000 attendees. There are several important factors to consider when planning for these types of events at Saddle River County Park:

Parking demand – Table 17 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 100 to a high of 450 depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. ⁹ Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle could be as high as 4-6 persons per vehicle. If one assumes "average" driving demand, a 1,000 attendee event of this type would require between 125 and 188 parking spaces. Currently there are approximately 130 available parking spaces on-site. It is very possible that driving demand for the Kids Movie Series might be higher than average given the need to bring along chairs, blankets, snacks, etc. Under these circumstances, it would appear that on-site and nearby parking is inadequate to accommodate an event of this nature and size at this park location without the use of satellite parking.

⁹ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

Table 17. Parking Demand Scenarios

EVENT ATTENDANCE 1,000 PEOPLE							
DRIVING DEMAND SCENARIO		Low		Average		High	
		Percent	People	Percent	People	Percent	People
MODE OF TRAVEL	Drive & Park	60%	600	75%	750	90.0%	900.0
	Drop-off & Taxi	5%	50	5%	50	5.0%	50.0
	Walk	25%	250	16%	160	4.3%	42.5
	Bike	7%	70	3%	30	0.5%	5.0
	Transit & Charter	3%	30	1%	10	0.3%	2.5
	Total	100%	1000	100%	1000	100%	1000
PARKING	2 passengers per car	300		375		450	
SPACES REQUIRED	4 passengers per car	150		188		225	
	6 passengers per car	100		125		150	

 Access and Circulation – The Saddle River Otto C Pehle Area is located in a moderately dense area and could be accessible by walking or bicycling for a portion of attendees. If the driving demand could be decreased to the low scenario and approximately one in four attendees arrived by foot, then the parking available in the Otto C Pehle area combined with overflow parking in adjacent Saddle River Park areas would be sufficient for either event. It will be important, though, to ensure the safe movement of guests throughout the event, especially considering that the movie event will occur after dark. The following recommendations seek to address event accessibility and the safe movement of guests.

Recommendations

- 1. Encourage parking in adjacent Saddle River Park Areas as the Otto C. Pehle Area only offers approximately 134 parking spaces, so for both events alternative parking will need to be identified. The parking lots in the Fair Lawn and Rochelle areas bring the number of available parking spaces to nearly 300 spaces. This would disperse the traffic incoming and outgoing traffic across a number of vehicular entrances, but it could be difficult to limit potential conflicts between pedestrians, bicyclists and motorists across all three areas. Alternatively, designating all parking in the Fair Lawn area and utilizing some of the grassy open spaces would help to separate incoming pedestrian traffic from motorist traffic.
- 2. Allow only cars utilizing handicapped parking to park in the Otto C. Pehle Area. All other guests arriving by car should utilize the Fair Lawn Area.
- 3. Provide trams from the parking lot in the Fair Lawn Area to the movie event so that guests who cannot walk or bicycle along the 3/4 miles of pathway will have the service available to them. Two golf cart trams could be utilized starting 45 minutes prior to the event and completing 45 minutes after.
- 4. Encourage walking or bicycling to the event by attendees from communities along the Saddle River Pathway through incentives, such as a raffle or free refreshments. This will decrease the number of vehicles attempting to park at the event.
- 5. Offer opportunities for guests to purchase snacks and rent chairs in order to make walking or bicycling to the movie night much simpler for families who would otherwise drive simply to transport their stuff to the event.

- 6. Bicycle valet parking may encourage people to ride to the movie events rather than drive. It would also help ensure that the 45 to 60 bicycles arriving at the event are safely parked.
- 7. **Priority walking routes with crossing guards** at key intersections should be offered at either entrance to the park with clear signage to encourage pedestrian entry to events; these routes can be expanded into the neighboring communities as needed. A crossing guard may also be needed at the southern entrance to ensure that guests are not unsafely crossing the street rather than walking north to the designated crosswalk.
- 8. Encouraging local attendees to walk or bicycle to the event through incentives could decrease the number of vehicles attempting to park at the event. The complete network of sidewalks and crosswalks linking Saddle Brook's neighborhoods to the park makes the event a great opportunity for walkers. However, it is suggested that bicycle infrastructure be considered as extensively as the sidewalk network.
- 9. Shuttle buses can be provided from the Broadway Train Station that drop guests off at the bus stop in front of the area's main entrance. It is estimated that for either event no more than 10 guests will arrive this way, but mass transit could be incentivized to encourage more use. For example, guests arriving with a public transit ticket could enter into a raffle for a chance to win a prize.

Samuel Nelkin County Park Transportation Assessment

Context & Location

Samuel Nelkin County Park is a suburban park in south-central Wallington, New Jersey, located between state routes 21 and 17. The park spans just over 18 acres and is bordered along three sides by moderately dense single- and multi-family housing (9,603 residents per square mile, according to the US Census). The park's southern border is adjacent to an assortment of light industrial and commercial uses, including an auto repair shop, a grocery store, and a bowling alley. The park is bordered by residential housing to the east and Parkview Drive to the west. Maple Avenue borders the park's southwest corner, which has been closed off from the rest of Maple Avenue and now functions as an additional parking lot. McKenzie Elementary School is located 0.3 miles south of the park entrance (see number 1 in Figure 68) and the Frank W. Gavlak Elementary School is located 0.3 miles from the northernmost pedestrian and bicycle access point (see number 4 in Figure 68).

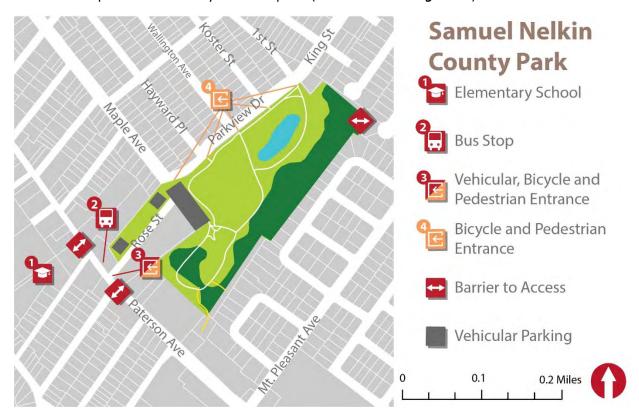


Figure 68. Existing Transportation Points in Samuel Nelkin Park.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

Automobiles can access the parking lots situated within the park via the entrance at the intersection of Rose Street and Paterson Avenue (see number 3 in *Figure 68*). A sign announcing the park is posted at this intersection and is visible to motorists traveling in both directions. Along the park's southwestern

border, Maple Avenue is closed to through traffic. This restricts motorists' immediate access to the parking area so motorists often park on unmarked asphalt at the outer edge of the intersection (see Figure 69). Two smaller parking lots flank the tennis courts along Rose Street, providing additional parking. Free on-street parking is also available along Parkview Drive, with direct pedestrian access.



Figure 69. Unmarked parking at the intersection of Maple Avenue and Parkview Drive. (Source: Google Maps)

Proposed Motor Vehicle Improvements

- 1. Deter unsafe parking at the intersection of Maple Avenue and Parkview through signage or by shifting the curb outward. The current arrangement creates an unsafe and unpredictable situation for both park patrons and other road users. One possible improvement could involve extending the curb at the corner such that the area currently used for illegal parking is curbed off and incorporated into the park area. This would turn the intersection into a slight curve rather than a 90 degree turn, eliminating the space in which patrons currently park. This would not affect the currently permitted parking spaces along Parkview Drive. (See number 1 in *Figure 73*)
- 2. Install wayfinding signage at Locust Avenue and Maple Street so that motorists traveling on Locust Avenue are aware of the park located just a few blocks to the east.

Pedestrian and Bicycle Access & Circulation

Samuel Nelkin County Park is relatively easy for most pedestrians to access from the neighborhood to the west, although crosswalks are substandard and ADA ramps are missing (see *Figure 70*). Similarly, pedestrians and bicyclists arriving from south of the park are not provided crosswalks across Paterson Avenue. Additionally, pedestrians and bicyclists must travel in the roadway along Rose Street as they reach the abrupt end of the sidewalk (see Figure 71). Rose Street also lacks lighting which creates dangerous conditions after dark.



Figure 70. Pedestrian and Bicycle Entrance at First Street and Parkview Drive. (Source: Google Maps)

There is no easy access point for pedestrians from the neighborhoods to the east; this forces pedestrians to walk south to Paterson Avenue and enter through the aforementioned Rose Street entrance. Notably, there are no wheelchair accessible entrances along the western edge of the park. Patrons using a wheelchair or other mobility assistance must enter to the east of Maple Avenue through a paved cartway designed for work vehicles. Marked crosswalks exist across Rose Street at the intersection with Paterson Avenue, across Parkview Drive with the intersection of Maple Avenue, and across Parkview Drive with the intersection of King Street and First Street. There is no evidence of bicycle accommodations, including bicycle parking, entrance signage, or dedicated facilities. Pedestrian- and bicyclist-oriented signage is lacking at the northern and southwestern entrances to the park, as discussed above.



Figure 71. Rose Street and Paterson Avenue Entrance. (Source: Google Maps)

Proposed Pedestrian and Bicycle Improvements

1. Improve pedestrian and bicycle access along Parkview Drive by adding striped pedestrian crosswalks and ADA-compliant curb ramps. In addition to improving accessibility for patrons

- with disabilities, wide ramps ease bicycle and stroller entry into the park. (See number 2 in Figure 73)
- 2. Add bicycle parking near the baseball field, playground and at the northern entrance. Bicycle parking should be highly visible, well lit, and sheltered. Locating a bicycle repair station (see *Figure 72*) next to bicycle parking in a high traffic area could provide a useful amenity for bicyclists in the neighborhood. (See *Figure 73*)
- 3. Improve pedestrian and bicycle access along Rose Street and Paterson Avenue by completing the sidewalk along the northwest side of Rose Street and adding signage clarifying that bicyclists may use the roadway. Adding striped pedestrian crosswalks and curb ramps along Paterson Avenue would



Figure 72. Bicycle Repair Station, Bloomington, MN. (Source: BrandonGJacobs/Imgur)

- also significantly improve the safety of pedestrians traveling to the park from the south. In fact, one survey respondent from the CUES analysis specifically requested a crosswalk at the Paterson Avenue entrance. This crosswalk is particularly important for park guests arriving from the south, including those coming from McKenzie Elementary School. (See number 3 in Figure 73)
- 4. Facilitate easy access for residents to the east by adding a route from Mount Pleasant Avenue to the southeast end of the park. This would avoid pedestrians and bicyclists having to take roundabout routes along either Strong Street or Paterson Avenue. Given that this area is largely developed, this may require the dedication and/or purchase of a right-of-way as the opportunity arises. (See number 4 in *Figure 73*)

Public Transit Access

NJ TRANSIT's 703 and 160 bus lines stop within 100 feet of the park's main entrance along Paterson Avenue and Rose Street, providing service from 6am to midnight on weekdays, and 11am to 7pm on Sundays. (see number 2 in Figure 68). The park lies a little over one-third of a mile southeast of the new NJ TRANSIT Westmont Station, which is located in the Borough of Wood-Ridge and operates on the Bergen County Line. Walking to the station takes approximately 45 minutes as there are few safe pedestrian crossings over the railroad tracks. If a pedestrian access point is added to the west of the station, on Mt. Pleasant Avenue, walking between the train station and the park would take only 15 minutes.

Proposed Public Transit Access Improvements

1. Add bus shelters to the stops immediately adjacent to the park's Rose Street and Paterson Avenue entrance. While sheltered stops are located further down Paterson Avenue for southbound passengers, no sheltered stops exist for northbound passengers. Adding well-lit bus shelters that provide bus service maps and information could improve the convenience of visiting the park via NJ TRANSIT buses. (See number 5 in *Figure 73*)

- 2. Improve park access to Westmont Station, by adding a bus connection or pedestrian bridge or tunnel near Spring Street. A pedestrian bridge or tunnel near this point would cut the existing 1.4-mile unbroken stretch of railway in half and generally improve the walkability of Wallington Township and Wood-Ridge Borough. This would also allow residents of the new Westmont residential development to access the park on foot or on bicycle.
- 3. Add crosswalks across Paterson Avenue at the Rose Street intersection. Currently, a bus rider disembarking a southbound bus at bus stop 11317 must walk more than 1,000 feet north and 1,200 feet south in order to safely cross Paterson Avenue using a crosswalk, adding an additional 10 minutes of travel time. Adding a crosswalk near Rose Street would make it safer for transit users and other pedestrians to access the park at this location. (See number 3 in Figure 73)

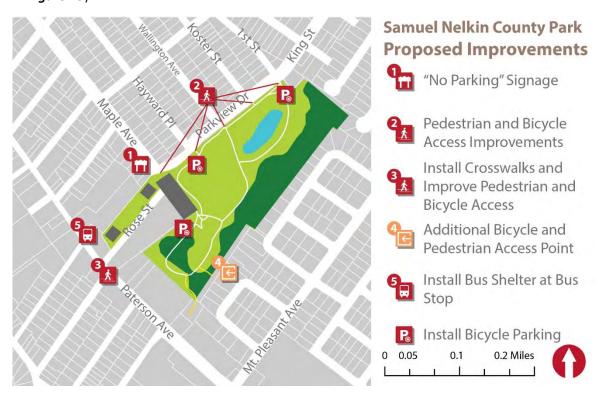


Figure 73. Samuel Nelkin Proposed Improvements.

Special Events Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the potential feasibility and impacts of holding a proposed Kids Movie Series in Samuel Nelkin County Park. For analysis purposes, it was assumed such an event might attract up to 750 attendees. There are several important factors to consider when planning for this type of event in this location:

Parking demand – Table 18 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 75 to a high of 338 depending on the assumptions made. The "average" scenario reflects how Bergen County

residents typically access county parks for regular use. 10 Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle as high as 4-6 persons per vehicle. If one assumes "average" driving demand, a 750 attendee event of this type would require between 94 and 141 parking spaces.

Currently there are approximately 50 available parking spaces on-site with an additional 96 potential spaces located along Rose Street (27 spaces) and Parkview Drive, along the park's northwestern edge (69 spaces). However, there will be competing demand for on-street parking in the area and it is very possible that driving demand for this type of event might be higher than average given the need to bring along chairs, blankets, snacks, etc. Under these circumstances, it would appear that on-site and nearby parking is inadequate to accommodate an event of this nature and size at this park location without the use of satellite parking.

Table 18. Parking Demand Scenarios

EVENT ATTENDANCE 750 PEOPLE							
DRIVING DEMAND SCENARIO		Low		Average		High	
		Percent	People	Percent	People	Percent	People
MODE OF	Drive & Park	60%	450	75%	562.5	90.0%	675.0
TRAVEL	Drop-off or Taxi	5%	37.5	5%	37.5	5.0%	37.5
	Walk	25%	187.5	16%	120	4.3%	31.9
	Bike	7%	52.5	3%	22.5	0.5%	3.8
	Transit & Charter	3%	22.5	1%	7.5	0.3%	1.9
	Total	100%	750	100%	750	100%	750
REQUIRED	2 passengers per car	225		281		338	
PARKING SPACES	4 passengers per car	113		141		169	
	6 passengers per car	75		94		113	

■ Vehicle Access and Circulation — Samuel Nelkin Park is accessible by car from the entrance off of Paterson Avenue, a busy urban arterial road witnessing approximately 19,000 vehicles per day (NJ DOT Interactive Traffic Counts, 2012). Vehicles arriving for an event may also utilize the residential streets west of the park. An event attracting 750 attendees could negatively impact residents in the neighborhood by overwhelming the available parking and creating dangerous traffic situations. Encouraging walking and bicycling will be an essential component for supporting large events at Samuel Nelkin Park, but this will require a number of infrastructure improvements and safety considerations.

Recommendations

- 1. Consider reducing the size of the event to better meet available parking (see the Parking Demand Table in Appendix D for a better understanding of how different event sizes and driving scenarios may affect parking needs).
- 2. Coordinate additional parking via shared use or parking agreements with surrounding businesses such as the bowling alley, Shop Rite or nearby schools in order to alleviate some of

¹⁰ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

- the on-street parking that may overwhelm the surrounding community. No shuttles will be required as these locations are all less than one half mile from the park.
- 3. Utilize a traffic control officer to manage local circulation and to facilitate left turns onto and out of Rose Street following the event.
- 4. Encourage more patrons to walk or bicycle to the event in order to ease the demand for parking. This could be accomplished either through special marketing or incentives. Bundling this push with new improvements along the Parkview Drive and Rose Street access points, including sidewalks, striped crosswalks, and ADA ramps, could encourage walking and bicycling.
- 5. Post a crossing guard at the intersection of Rose Street and Paterson Avenue both before and after the event could ease access for transit users arriving from southbound buses and pedestrians arriving from neighborhoods to the south. Additional lighting and signage along Rose Street and at this intersection could also improve pedestrian safety. Lighting is especially important as the anticipated movie event would occur after dark.
- Ensure adequate bicycle parking. Given that Paterson Avenue is poorly suited for bicycle traffic, we expect most bicycle traffic to arrive from the neighborhoods to the north and west of the park. Depending on how many patrons arrive by bicycle, the park will need between 22 and 75 bicycle parking spaces. Installing bike racks, and spreading them across the park's major access points, could avoid undesirable behavior, including parking bikes on trees, benches, and fences.
- 7. Encourage more patrons to take transit to the event through special marketing or incentives in much the same way that bicycling and walking are encouraged. Transit users will also benefit from the crossing guards mentioned above.
- 8. Create wayfinding signs for guests arriving by transit that provide directions and estimated walking times to the event. This can work as both a marketing tool and to ensure that guests arriving by transit are able to easily locate the event.

Van Saun County Park Transportation Assessment

Context & Location

Van Saun Park is a 130-acre regional park that provides a variety of activities ranging from sports fields to the nationally accredited Bergen County Zoological Park and the historically designated Washington Spring Gardens. Additionally, the park was recently host to the popular "Winter Wonderland" event, which activated the park during the winter of 2016 with ice skating, hot chocolate, and other winter festivities. While the park is continuous, the northern half offers primarily for-fee activities, such as the zoo, tennis courts, carousel, and pony rides. The southern half is primarily based around passive recreation, and includes a dog park, lake, and ecological area.

The park is located between the Borough of Paramus and the Borough of River Edge, just north of Route 4 and east of Route 17. Centrally located, the park is also near major commercial attractions, including the Westfield Garden State Plaza Mall, The Outlets at Bergen Town Center, and the Paramus IKEA. However, aside from a couple of banks, the properties immediately surrounding the park are all residential, primarily built as single-family homes. Paramus is home to 26,342 residents, with a median household income of \$105,000 as of 2016. River Edge is smaller, with 11,647 residents, and a similar household income of \$98,000. River Edge features a higher population density than Paramus, with 6,116 residents per square mile compared with 2,516 residents per square mile. However, this difference is due to Paramus having more commercial areas and a large country club, as the character of the residential developments are very similar.

A park user intercept survey was conducted during the Winter Wonderland event. Respondents were asked to indicate their primary mode of transportation to the park. More than eight in ten respondents (85 percent) noted driving as their primary mode of transportation to Van Saun Park. As shown in Table 19, walking was the second most commonly reported mode of transportation. Bicycling accounted for two percent of responses while public transportation was not reported by respondents.

Table 19. Transportation mode to Van Saun Park (n=302)

Transportation Mode	Percent of Total	All Bergen County Parks
Drive	85%	79%
Walk	13%	17%
Bicycle	2%	3%
Bus	0%	0.1%
Train	0%	0.1%
Taxi/Uber/Lyft	0%	0.1%
Skate/Skateboard	0%	0.1%
Total	100%	100%

Additionally, the survey found that nearly half of respondents (48 percent) travelled more than 5 miles to reach the park and an additional 38 percent travelled more than one mile. This indicates that the park is a regional attraction, and future visitors will likely continue to arrive via motor vehicles.

Currently, there are plans in place to expand the zoo from 12 to 23 acres. Doing so would require the creation of a new vehicular parking deck. A competing idea has emerged which would invest in the zoo but relocate it to Overpeck Park Area 4, which may be better suited to host regional attractions. Relocating the zoo would allow Van Saun to add new recreation opportunities and to host other events like the Winter Wonderland. Additionally, it would allow some parking areas to be replaced with ecological or recreational uses.



Figure 74. Existing Transportation Points in Van Saun Park.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

Two vehicular entrances provide access to the northern section of the park where most of the park's programming is located. The primary entrance is on Forest Avenue, which is a four-lane arterial carrying traffic north and south (see number 1 in *Figure 74*). Although many large homes front this arterial, it is also home to a few small commercial buildings, including a TD Bank. To the south, Forest Avenue connects with Route 4 at a large interchange. However, vehicles exiting the park onto Forest Avenue can only turn right, away from Route 4, and vehicles driving south on Forest Avenue cannot turn into the park.

A secondary entrance exists on the northern end of the park, on Continental Avenue (see number 2 in *Figure 74*). This roadway runs east to west, and is a local residential road. There is a sign at the intersection of Forest Avenue and Spring Valley Road directing southbound motorists to turn in order to

access the park via the Continental Avenue entrance. Although the sign is visible, it may be ignored by drivers who are determined to use the main entrance, unaware that left turns are not allowed. Drivers who pass the main entrance may attempt to then use the southern entrance, unaware that it is exitonly. During events, when many attendees may be first-time visitors, this traffic pattern may cause unneeded congestion.

The northern half of the park has an interior roadway connecting the Forest Avenue entrance with the Continental Avenue entrance, and this roadway runs in both directions. However, for the southern half of the park, this internal road only operates southbound to an exit at Howland Avenue. Drivers looking to return to the northern section of the park must exit to the right, and then turn right again on Forest Avenue to return to the main entrance

There are multiple parking lots inside the park. The northernmost lot sits directly in front of the zoo entrance, and holds 220 parking spaces. An overflow lot sits to the south of it, with room for an additional 170 vehicles. In the center of the park, there are two more large lots, which hold 257 cars vehicles and 176 vehicles. Finally, there are a series of smaller parking areas along the southern roadway, adjacent to the dog park, lake, and walking trails. In all, the park has room for close to 1,000 vehicles.

Proposed Motor Vehicle Improvements

- 1. Realign the Forest Avenue entrance and exit to create a standard signalized intersection. Currently, the main entrance to the park operates with a right-in/right-out configuration that results in park traffic using residential roadways in the surrounding area to turn in the direction they want. A signalized intersection would allow for turns in all directions, maintain the traffic on the major arterial. Additionally, the existing wide turning radius of the entrance and exit can endanger pedestrians by promoting high speeds. Finally, a traffic signal would allow for pedestrians to cross Forest Avenue to access the park (see 1 in *Figure 75*).
- 2. Concurrent with the realignment, improve signage at the park entrance.
- 3. Consider making the southern half of the interior roadway bidirectional. The roadway appears to be wide enough to support two-way traffic, and allowing vehicles to circulate in both directions will reduce miles travelled by no longer forcing drivers to exit and re-enter the park in search for parking (see 2 in *Figure 75*).
- 4. Narrow the width of the Continental Avenue entrance to improve pedestrian safety. Currently the entrance has an unnecessarily large turning radius which promotes high speeds into and out of the park (see 3 in *Figure 75*).
- 5. If a parking garage is constructed, use best practices in sustainable to minimize the impact of a parking deck on the use of the park. Because the garage would be built in the middle of a park area, it is important that the design minimize the heat-island effect, uses vegetation to shield the structure, and carefully manages water runoff. Lighting within the garage should also be considered and prioritized.

Pedestrian and Bicycle Access & Circulation

The residential neighborhoods surrounding Van Saun Park are home to many attractive low-volume streets with sidewalks. There is a pedestrian intersection with a crosswalk on Continental Avenue. However, the vehicular entrance is very wide and does not have a painted crosswalk.

Forest Avenue has a discontinuous sidewalk network, and only offers crosswalks at the major signalized intersections at Spring Valley Road or Howland Avenue. Additionally, the main park entrance on Forest Avenue does not have any sidewalk or trail into the park.

Howland Avenue, at the southern edge of the park, provides the most access points for pedestrians. There is a trail connected to the sidewalk on either side of lake, and pedestrians have the choice of two crosswalks to navigate the park's vehicular exit. Additionally, there is a well-marked pedestrian crosswalk across Howland, which features ample signage and yield triangles. However, this crosswalk is at an angle.

Inside the park, Van Saun features 3.2 miles of multi-use trails that connect the various areas and amenities of the park. The trail is well-situated inside the park, away from the vehicles. Although there is a well-marked crosswalk where the trail intersects the interior roadway, it is at a sharp angle. The VTC pedestrian intercept survey found that 94% of respondents consider the trails to be in excellent, very good, or good condition.

There is no dedicated bicycle infrastructure in or around the park, although the interior trail is well suited for bicycle use. Additionally, the surrounding neighborhoods feature plenty of low-volume residential roadways that are suitable for bicycling.

Proposed Pedestrian and Bicycle Improvements

- 1. Realign the Forest Avenue entrance and install a traffic signal. This would greatly increase the safety of pedestrians travelling along Forest Avenue, and also allow nearby residents to cross Forest Avenue and access the park (see 1 in *Figure 75*).
- 2. Create a trail from the Forest Avenue entrance to the existing interior park trail. This will allow nearby residents to safely enter from Forest Avenue (see 4 in *Figure 75*).
- 3. Realign the crosswalk where the Forest Avenue entrance intersects the interior trail. Currently, the crosswalk is at a very sharp angle, reducing visibility and increasing the time that pedestrians are in the roadway.
- 4. Narrow the Continental Avenue vehicular entrance and install a marked crosswalk.
- 5. Install lighting where the trails cross the roadway, and install lighting between the parking lots and the location of the Winter Wonderland.
- 6. Incorporate bicycle infrastructure into the surrounding community in order to provide residents in the surrounding neighborhood an opportunity to utilize the bicycle pathway without having to first get in their car to drive to the park. The surrounding neighborhoods are excellent candidates for "Bicycle Boulevards."
- 7. Install bicycle parking adjacent to the various park amenities.
- 8. Explore creating a trail connection from the end of Kensington Road, adjacent to the St. Peter the Apostle Parish Church, and the interior trail system. This would fully connect the residential neighborhood east of the park to the amenities the park offers (see 5 in Figure 75).

Public Transit Access

Forest Avenue hosts NJ TRANSIT bus service on the 168 and 752 lines. Buses stop directly in front of the Forest Avenue entrance, although there is no pedestrian walkway into the park (see Figure 74). Line 168 connects Paramus with New York City and runs from 8am to 11pm, with no service on Sundays. Line 752 runs between Hackensack and Ridgewood, serving Paramus from 6am to 9pm, Monday to Saturday. Additionally, there are two NJ TRANSIT rail stations on the Passack Valley Line within reasonable

distance of the park. The River Edge station sits 1 mile to the east, along Continental Avenue, while the New Bridge Landing station is 1.3 miles away south of the park. Trains run to Hoboken from 6am to around midnight, seven days a week.

Proposed Public Transit Improvements

- 1. Install bus shelters, lighting, and signage at the bus stops on Forest Avenue adjacent to the park entrance.
- 2. Connect the bus shelters on Forest Avenue with the park by creating a trail or sidewalk from Forest Avenue into the park trail system.
- 3. Install wayfinding signs targeted to transit users including signage along the route from the River Edge train station.



Figure 75. Van Saun Proposed Improvements.

As part of the parks master planning process RU-VTC was asked to explore the feasibility and impacts of holding the Brew at the Zoo event at the Van Saun Zoo. For analysis purposes, it was assumed that the event might attract up to 3,000 attendees. There are several important factors to consider when planning for an event of this size in Van Saun Park:

Parking demand – Table 20 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 300 vehicles to a high of 1,350 vehicles depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. 11 If one assumes "average" driving demand, a 3,000-attendee event of this type would require between 375 and 1,125 parking spaces, depending on how many attendees arrive in each vehicle.

Currently there are approximately 1,000 available parking spaces in Van Saun Park. As such, there is enough parking if attendees are encouraged to carpool, with three people per car (estimated demand of 750 spaces). However, under a worst-case scenario where most attendees drive alone or with only one other person, there would be a shortage of 350 spaces.

Table 20. Park Visitors by Transportation Mode for Special Events

EVENT ATTENDANCE			3,000 PEOPLE					
DRIVING DEMAND SCENARIO		Low		Av	Average		High	
		Percent	People	Percent	People	Percent	People	
MODE OF TRAVEL	Drive & Park	60%	1800	75%	2250	90.0%	2700	
	Drop-off & Taxi	5%	150	5%	150	5.0%	150	
	Walk	25%	750	16%	480	4.3%	128	
	Bike	7%	210	3%	90	0.5%	15	
	Transit & Charter	3%	90	1%	30	0.3%	8	
	Total	100%	3000	100%	3000	100%	3000	
PARKING SPACES REQUIRED	2 passengers per car	900		1	1125		1350	
	4 passengers per car	450			563		675	
	6 passengers per car	300			375		450	

 Access and Circulation – Most event attendees arriving in a car are likely to use the Forest Avenue entrance. As noted earlier, the right-in, right-out design may lead to frustration and congestion as drivers proceeding southbound on Forest Avenue are unable to find the entrance. However, drivers exiting the park have access to three exits, and so will be able to distribute themselves better. Because pedestrians are unlikely to use the Forest Avenue entrance to access the park, few conflicts between pedestrians and vehicles are expected during events. Once inside the park, drivers have access to close to 1,000 parking spots split over eight distinct areas. Without proper information on where open spots exist, drivers looking for parking may cause congestion within the park. It is likely that without traffic control, most drivers will turn towards the event, and attempt to find parking as close as possible to the entrance.

¹¹ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

Recommendations

- 1. Decrease congestion outside the park by installing event-specific signage, ensuring that motorists arriving in any direction follow the best route to the parking lots. For example, motorists driving southbound on Forest Avenue would see "turn left for Brew in the Zoo" at Spring Valley Road.
- 2. Charge for premium parking closest to the event entrance, and ensure that the charge is well advertised. This will encourage drivers to turn towards emptier lots further from the entrance, rather than creating congesting by circling for an empty spot.
- 3. Encourage carpooling and safe driving by creating incentives for designated drivers. Carpool drivers who do not drink at the event should be provided free access and/or free soft drinks.
- 4. Direct drivers to available parking spaces using traffic control officers, and ensure that drivers do not leave empty spaces between cars. Stationing attendants at full lots and directing drivers toward available spots could decrease congestion upon entering the event.
- 5. Partner with neighboring churches for additional parking spaces during events. The Central Unitarian Church sits directly west of the park, and the St. Peter the Apostle Parish Church lies directly to the east. They contain enough parking spots to meet high-demand scenarios.
- Operate pick-up/drop-off zones during the event so groups with cars are able to drop-off individuals and any supplies, such as blankets and snacks, before being directed to designated affiliated parking lots elsewhere.
- 7. Incentivize attendees to walk or bicycle to the event to minimize pressure on vehicle capacity and take advantage of Van Saun's location within a relatively dense residential area. The residential areas adjacent to the park have sidewalks on both sides of the street, which walking feasible and attractive.
- Provide a bicycle valet parking to encourage individuals to ride their bicycles to the event. This will provide assurance to bicyclists that their bicycles are safe and is also a unique attraction that could encourage more bicycle use in the future. Additionally, bicycle valets will discourage unwanted or unsafe bicycle parking behaviors (see Bicycle Parking Appendix).
- 9. Strengthen access between the River Edge rail station and Van Saun Park by adding eventspecific wayfinding along the walking route, and encouraging use of the train on event promotional materials. Additionally, a shuttle service could be provided to further encourage use of the rail station.
- 10. Post a crossing guard at locations where the trail crosses the roadway, and ensure the crossings are well-lit.

Wood Dale County Park Transportation Assessment

Context & Location

Wood Dale County Park comprises several distinct areas encompassing 118 acres of land across three municipalities in northern Bergen County. The main part of the park is located to the north of Prospect Avenue and is divided between the municipalities of Park Ridge and Woodcliff Lake. This area contains a half-mile pathway, a pond, vehicular parking, a playground, and a dog park. The rest of the park, which is located to the south of Prospect Avenue, is divided between the municipalities of Woodcliff Lake and Hillsdale. This part of the park includes some activity areas, but mainly consists of forested areas and preserved wetlands. Centennial Field provides baseball and soccer fields as well as vehicular parking. A short garden trail, created by the local Boy Scouts, is located just north of Pascack Valley High School, which is situated at the park's southern border (see number 7 in Figure 76). The High School has additional recreation facilities, but it is unclear whether these are publically accessible. There are no internal paths connecting the various area of the park.

Nearly all of the land surrounding Wood Dale Park within a half-mile radius is composed of relatively low density single-family housing (approximately 3,000 people per square mile), with the exception of a small area to the southeast of the park that has townhouses, apartments, and a mid-rise senior living structure. In addition to the high school at the park's southern border, East Brook Elementary School (see number 1 in Figure 76) is approximately one quarter mile from the northern pedestrian entrance along Sibbald Drive (see number 2 in Figure 76). A number of municipal parks are located just south of the park in the Borough of Hillsdale and the Hillsdale commercial center is located approximately one half mile south of the park. The park is also situated near several transit stops, including a bus stop (see number 4 in Figure 76) and train station (see number 3 in Figure 76) each situated less than one mile from the park's entrance.

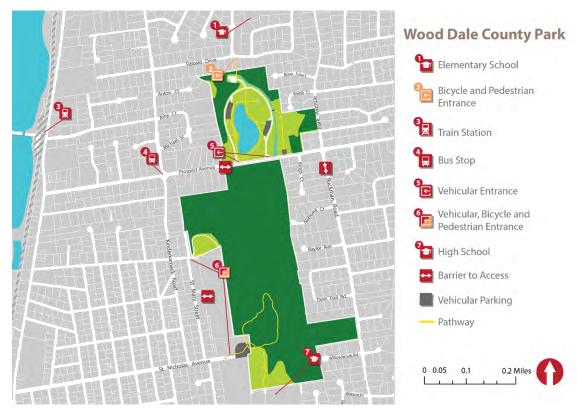


Figure 76. Location of Wood Dale County Park

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

There is one vehicular entrance for the northern section of the park which provides access to a one-way road that nearly circumnavigates the pond (see number 5 in Figure 76). Along the route, motorists are provided approximately 90 parking spaces across several parking lots before reaching the designated vehicular exit on the eastern side of the park. The entrance is clearly marked with a large wooden sign visible to motorists traveling in both directions on Prospect Avenue.

There is no parking provided inside the southern area of the park. Motorists accessing this area must utilize parking lots located at the periphery near the Boy Scout trail or the baseball fields (see number 6 in Figure 76). The vehicular entrances in the southern portion of the park lack signage. The only signage posted outside the entrance leading to the Boy Scout trail is a "No Outlet" sign at the corner of St. Nicholas Avenue and Kinderkamack Road, which may deter incoming traffic unaware of the trail's presence. Additionally, the southernmost section of the park includes newly installed tennis courts. There is no dedicated parking within the park boundaries for these courts, however parking is available at the nearby high school. Since the only access to these newer courts is across high school property, it is assumed that these facilities are effectively off limits to the public during regular school hours.

Proposed Motor Vehicle Improvements

1. Improve access to the newer tennis courts by improving the parking available of St. Nicholas Avenue or creating a shared use parking agreement with the high school that is clearly marked for guests (see Figure 78).

2. Install signage at the Lincoln Avenue, St. Mary Street and St. Nicholas Avenue entrances so that arriving motorists are aware of the entrances to Sapienza Gardens and Centennial Field (see number 4 in Figure 78). While only a portion of one ball field is technically within the county park boundaries, there may be future opportunities for intra-park access to the natural areas behind the fields. Additionally, signage on St. Mary Street, which is usually blocked off by a gate, indicating an alternative entrance on Lincoln Avenue might alleviate some confusion regarding access to this portion of the park.

Pedestrian and Bicycle Access & Circulation

Wood Dale Park offers only one dedicated pedestrian entrance which provides limited access to the northern section of the park. The entrance is located on Sibbald Drive, a small residential street surrounded by cul-de-sacs (see number 2 in Figure 76). The entrance, tucked between two residential lots, is not easily accessible for bicycles, strollers, wheelchairs or other mobility devices as there is no ADA compliant ramp (see Figure 77). The entrance is a key access point for residents in Park Ridge Township north of the park, including the nearby elementary school (see number 1 in Figure 76). However, Sibbald Drive and the surrounding neighborhood lack a sidewalk network and bicycle infrastructure. While this creates a deterrent to bicycle and pedestrian use of this entrance, it is less of a problem on small residential streets where the posted speed limit is 25 miles per hour than it is on the much busier Prospect Avenue.



Figure 77. Sibald Avenue Pedestrian and Bicycle Entrance. (Source: Google Maps)

The Prospect Avenue vehicular entrance presents a number of challenges to pedestrians and bicyclists (see number 5 in Figure 76). Approximately 3,000 cars travel along the roadway each day at speeds up to 40 miles per hour, but the roadway lacks sidewalks and bicycle lanes. Much of Prospect lane also features narrow shoulders. Along the eastern side of the park there are no pedestrian access points and Ruckman Road, much like Prospect Avenue, lacks infrastructure for pedestrians and bicycles. This analysis is supported by several comments collected during the master planning process which highlighted a need for improved pedestrian access to Wood Dale Park. But not only is access to the park limited, movement within the park is also a challenge.

Bicycle and pedestrian circulation within the northern park area is served by a single shared-use path which encircles the pond. This path also connects the activity centers in the park; the pavilion, pond overlook, playground, and parking lots. While pedestrian and bicycle movement in the northern section of the park is well-supported, there is no connection between this area and the southern portion of the park as there are no crosswalks or trails connecting the two areas.

The various activity areas in the southern section of the park, namely the Sapienza Gardens, Centennial Field and the newer tennis courts, offer unofficial pedestrian and bicycle access. While lacking sidewalks, access to the gardens and fields is located along dead-end neighborhood streets and therefore somewhat less problematic than Prospect Avenue. The only entrance that offers pedestrian infrastructure provides access to the tennis courts and is located on the high school property along Piermont Avenue. This entrance does not provide bicycle infrastructure though and its use may not be permitted during school hours. Additionally, there is no connectivity offered amongst the activity areas in the southern portion of the park. For example, guests utilizing the parking area near the baseball field would have just as much difficulty accessing the tennis area one quarter mile south as they would have accessing the northern area of the park, as neither are connected by trails, sidewalks or crosswalks.

Proposed Pedestrian and Bicycle Improvements

- 1. Install sidewalks bicycle lanes on Prospect Avenue and along roadways throughout the surrounding neighborhoods to improve pedestrian and bicycle access to the park.
- 2. Create a trail connecting the northern and southern areas of the park supported by a crosswalk on Prospect Avenue (see number 2 in Figure 78). The crosswalk will facilitate the connection while the extended trail will greatly improve mobility within the park.
- 3. Add signage to Piermont Avenue, south of the high school, to indicate the presence of county public tennis courts and clarify hours and entrances.
- 4. Connect the Sapienza Gardens trail with the tennis courts and Centennial Field (see number 5 in Figure 78). The trail should also connect further north with the crossing point along Prospect Avenue so that a continuous trail links to the entirety of the park.
- 5. Install bicycle parking to encourage multimodal access and reduce parking demands, particularly in the areas near the tennis courts and sports fields (see *Figure 78*).
- 6. Improve pedestrian and bicycle infrastructure in the neighborhoods surrounding the park so that guests can safely access the park from all directions.
- 7. Provide a pedestrian and bicycle entrance along the eastern side of the park. Natmark Court may be an ideal location for such an entrance (see number 3 in *Figure 78*).
- 8. Install signage at the Sibbald Drive entrance and ensure ADA compliance to ensure that all guests are able to safely access the park (see number 1 in Figure 78).

Public Transit Access

Wood Dale Park is serviced by a variety of close transit stops. The Rockland Coaches 11a bus line stops just one half mile from the park's main vehicular entrance along Prospect Avenue (see number 4 in Figure 76). The line operates between 6:00 am and 1:00 am Monday through Friday and 6:00 am to 6:00 pm on Saturday and Sunday and provides connections between Stony Point New York and the New York City Port Authority Bus Terminal. Just a few blocks further west sits NJ TRANSIT's Woodcliff Lake train station. The train operates on the Pascack Valley line and runs between Spring Valley and Hoboken. Service is provided between 6:00 am and 1:00 am on weekdays, though no service is available at this station on weekends. The line operates with roughly 45 minute headways during peak hours toward Secaucus and Hoboken. The most direct route to the station is along Prospect Avenue, the extent of which does not provide bicycle or pedestrian infrastructure.

Proposed Public Transit Improvements

- 1. Extend the sidewalk network that currently exists on Broadway along Prospect Avenue so that transit riders can safely access Wood Dale Park.
- 2. Install wayfinding signs around the train station and at the bus stop so that riders can easily see how close the park and its amenities are.

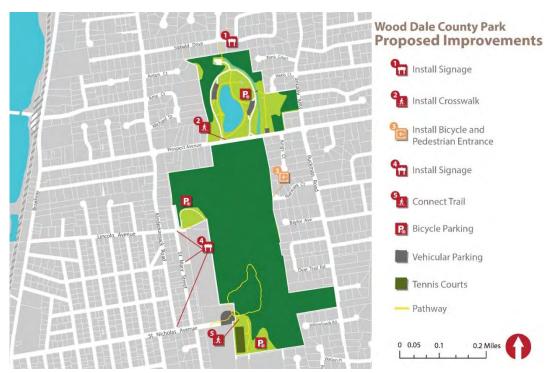


Figure 78. Wood Dale Park Proposed Improvements.

Special Event Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the feasibility and impacts of holding a proposed Kids Movie Series in Wood Dale County Park. For analysis purposes, it was assumed such an event might attract up to 750 attendees and occur in the northern section of the park. There are several important factors to consider when planning for this type of event in this location:

Parking demand – Table 21 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 75 to a high of 338 depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. 12 Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle could be as high as 4-6 persons per vehicle. If one assumes "average" driving demand, a 750 attendee event of this type would require between 94 and 141 parking spaces.

This estimate exceeds the current parking capacity of the northern park area and the problem is exacerbated by the lack of bicycle and pedestrian access points from the surrounding

¹² Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

neighborhood. Currently there are approximately 90 available parking spaces on-site though on-street parking could be accommodated on neighboring streets. However, there will be competing demand for on-street parking in the area and it is very possible that driving demand for this type of event might be higher than average given the need to bring along chairs, blankets, snacks, etc. Couple this demand with a lack of street lighting and a dangerous situation could be created for pedestrians and motorists leaving the event long after dark. Under these circumstances, it would appear that on-site and nearby parking is inadequate to accommodate an event of this nature and size at this park location without the use of satellite parking.

Table 21. Parking Demand Scenarios

EVENT ATTE	NDANCE	750 PEOPLE									
DRIVING DE	Lo	w	Aver	age	High						
		Percent	People	Percent	People	Percent	People				
MODE OF	Drive & Park	60%	450	75%	562.5	90.0%	675.0				
TRAVEL	Drop-off or Taxi	5%	37.5	5%	37.5	5.0%	37.5				
	Walk	25%	187.5	16%	120	4.3%	31.9				
	Bike	7%	52.5	3%	22.5	0.5%	3.8				
	Transit & Charter	3%	22.5	1%	7.5	0.3%	1.9				
	Total	100%	750	100%	750	100%	750				
REQUIRED	2 passengers per car	22	.5	281		33	8				
PARKING	4 passengers per car	11	.3	14	1	16	9				
SPACES	6 passengers per car	7:	5	94	4	11	.3				

■ Access and Circulation — Wood Dale Park is accessible by car from the entrance off of Prospect Avenue. Pedestrians and bicycles may access the park from the same entrance or the Sibbald Drive entrance and can move within the northern section of park largely without crossing roadways. Given the timing of the event though, it will be important to utilize lighting to ensure the safety of guests entering and exiting the park. Considering these characteristics and event details, the following recommendations highlight opportunities to improve access and circulation throughout the event.

Recommendations

- 1. Staggering departure times by offering smaller events after the main event would help to alleviate traffic in a mass exit at the end of the movie, thus reducing congestion.
- 2. Designate priority walking routes with crossing guards at key intersections. This could be particularly useful in the event that additional internal pedestrian trails/routes are added connecting the northern and southern portions of the park area.
- 3. Encourage walking or bicycling to the event by incentivizing alternative modes of transportation, through games, raffles or discounts at vendors.
- 4. Obtain a shared parking agreement with the nearby elementary school, where an additional 50 parking spaces are available. This could alleviate parking demands on neighborhood roads and should be supported by crossing guards as guests may arrive and depart after dark.

Wortendyke Barn Historic Park Transportation Assessment

Context & Location

The Wortendyke Barn is a New World Dutch barn in Park Ridge, New Jersey, located just north of Woodcliff Lake. The barn is a national historic site and houses a museum. It is located on a small lot along Pascack Road, nestled among low-density (less than 3,000 people per square mile, according to the US Census) post-war suburban homes. The residences in the area have a relatively high median income of nearly \$120,000 per household, more than one and a half times New Jersey's median household income. In terms of size and structure, the site likely would not stand out among the neighborhood's single-family houses except that a large wooden sign clearly marks the site as the historic "Wortendyke Dutch Barn."

The Park Ridge train station is located in downtown Park Ridge along a commercial corridor approximately one mile from the barn. Along the route to Wortendyke, transit users pass Park Ridge Library and High School, as well as several churches and a Catholic school. Additionally, the Woodcliff Lake municipal offices are one half mile to the south while the Woodcliff Lake train station is one mile southeast from the entrance.



Figure 79. Wortendyke Barn Existing Transportation Points.

Multimodal Conditions & Opportunities

Motor Vehicle Access & Circulation

The only vehicular access point leading to the Wortendyke Barn lies along Hillside Avenue, a small culde-sac off of Pascack Road (see number 1 in Figure 79). There are two signs for the barn along Pascack Road, visible to both northbound and southbound drivers (see number 2 in Figure 79). A small parking lot provides on-site parking for approximately 10 to 12 vehicles.

Proposed Motor Vehicle Improvements

There are no vehicular access improvements recommended at this time.

Pedestrian and Bicycle Access & Circulation

The Wortendyke Barn is accessible to pedestrians from at least as far north as the Park Ridge Borough Hall. With the exception of residential side streets, streets to the north of the barn are well supported by the municipality's sidewalk network. However, the sidewalk network to the south of the barn is not as complete. The sidewalk on the eastern side of Pascack Road is overgrown such that if an ADA compliant ramp exists, it cannot be seen. Additionally, the sidewalk extends 250 feet south before abruptly terminating at Glen Road, where a crosswalk is not present.

Proposed Pedestrian and Bicycle Improvements

- 1. Install an ADA compliant crosswalk at Hillside Avenue so that pedestrians arriving from the west and guests requiring ADA accommodations, including bicycles and strollers, are able to safely cross Pascack Road (see number 3 in *Figure 80*).
- Add a pedestrian entrance along Pascack Road (see number 3 in Figure 80). Currently, pedestrians must walk along Hillside Avenue and enter through the parking lot. A clearly marked pedestrian entrance could increase awareness of the barn and encourage walking.
- 3. Complete Pascack Road with a sidewalk and bike lane (see number 2 in Figure 80). Pascack Road is an important route connecting northern New Jersey from Montvale to Rochelle Park. At present, pedestrian access is inconsistent and bicycle access is poor. Adding a bicycle lane and ensuring consistent sidewalk coverage, particularly in Woodcliff Lake Borough, would significantly improve access to the Wortendyke Barn and improve active transportation throughout the area, overall.
- 4. Install bicycle parking near the vehicular parking lot (see number 1 in Figure 80). Adding a bike rack to the parking lot is an inexpensive way to improve bicyclist access and avoid bicyclists locking their bikes to trees and fences.

Public Transit Access

The Park Ridge NJ TRANSIT station is less than one mile to the north and provides service along the Pascack Valley Line, which runs from Spring Valley to Hoboken. Alternatively, guests may arrive from the Woodcliff Lake train station along the same line, but a majority of this route lacks sidewalks. There are no nearby bus stops servicing the area.

Proposed Public Transit Access Improvements

- 1. Install wayfinding signs that let transit users know how close Wortendyke Barn is to key locations throughout town, including the library and nearby schools. These signs should also encourage use of the Park Ridge station for accessing the barn.
- 2. Ensure that sidewalks along the route to either train station are complete and ADA **compliant**, so that transit users are able to safely access the Wortendyke Barn.



Figure 80. Wortendyke Barn Proposed Improvements.

Special Events Transportation Considerations

As part of the parks master planning process RU-VTC was asked to explore the potential feasibility and impacts of holding a proposed Kids Movie Series at Wortendyke Barn Historic Park. For the purpose of analysis, it was assumed such an event might attract up to 750 attendees. There are several important factors to consider when planning for this type of event in this location:

Parking demand -Table 22 illustrates a range of parking demand scenarios based on varying assumptions related to how patrons access the park and how many passengers arrive in each vehicle. As shown in the table, parking demand varies by scenario from a low of 75 to a high of 338 depending on the assumptions made. The "average" scenario reflects how Bergen County residents typically access county parks for regular use. ¹³ Given the nature of the movie night event, it is reasonable to assume that the average number of passengers per vehicle as high as 4-6 persons per vehicle. If one assumes "average" driving demand, a 750 attendee event of this type would require between 94 and 141 parking spaces.

Currently there are approximately 12 available parking spaces on-site with no potential onstreet parking nearby. Under these circumstances, the park will be unable to accommodate an event of this nature without the use of satellite parking. Without designating a satellite parking area, Wortendyke Barn would be challenged to support an event attracting even 100 guests (see Appendix D: Parking Demand Table). Either the event must drastically diminish in anticipated attendance or off-site parking will need to be coordinated.

¹³ Based on survey data collected as part of the park master planning process, the vast majority (79 percent) of park patrons reported accessing the parks they visit by driving. Only 17 percent reported walking and 3 percent ride a bicycle. Less than one percent reported utilizing public transportation or taxis.

Table 22. Parking Demand Scenarios

EVENT ATTE	NDANCE	750 PEOPLE									
DRIVING DE	Lo	w	Aver	age	High						
		Percent	People	Percent	People	Percent	People				
MODE OF	Drive & Park	60%	450	75%	562.5	90.0%	675.0				
TRAVEL	Drop-off or Taxi	5%	37.5	5%	37.5	5.0%	37.5				
	Walk	25%	187.5	16%	120	4.3%	31.9				
	Bike	7%	52.5	3%	22.5	0.5%	3.8				
	Transit & Charter	3%	22.5	1%	7.5	0.3%	1.9				
	Total	100%	750	100%	750	100%	750				
REQUIRED	2 passengers per car	22	.5	281		338					
PARKING	4 passengers per car	11	.3	14	1	16	59				
SPACES	6 passengers per car	7!	5	94	4	113					

■ Vehicle Access and Circulation — Wortendyke Barn Park is accessible by car from the entrance off of Hillside Avenue, a small residential road off of Pascack Road. An event attracting 750 attendees could negatively impact residents in the neighborhood by overwhelming the available parking and creating dangerous traffic situations. Encouraging walking and bicycling will be an essential component for supporting large events at Wortendyke Barn Park, but this will require a number of infrastructure improvements and safety considerations.

Recommendations

- 1. Increase parking areas through shared parking agreements. The Our Lady of Mercy parking lot is the largest in the area and is located 0.2 miles north of the barn on Pascack Road. The parking lot has more than 160 spaces and could accommodate an event with 750 people.
- 2. **Encourage event goers to walk or bicycle** to the event to decrease the need for parking. This can be done by providing incentives such as freebies, raffles or other giveaways. Since the event is focused on children, some sort of game or scavenger hunt can be made out of their walking to the event.
- 3. Ensure adequate bicycle parking. If the event is to proceed with 750 guests, there will need to be parking for between 20 to 50 bicycles. The event could even provide a bicycle valet to increase awareness of the option to bicycle to the park.
- 4. Hire a crossing guards for intersections along Pascack Road, especially between the designated parking lot and the event. Although the area is fairly residential, because of the large number of children and traffic for the event, at least one crossing guard would be beneficial for ensuring safe pedestrian crossings and to manage traffic if necessary. The intersections of Pascack Road and Hillside Avenue is the most essential location for the crossing guard, but a crossing guard could also be stationed at the intersection of Fremont Avenue and Pascack Road near the parking area.
- 5. Encourage out of town event goers to take transit to the event by providing incentives and ensuring that marketing materials provide directions to the park via transit. Since the park is about one mile away from the Park Ridge NJ TRANSIT Station as well as the Woodcliff Lake Station, people who are from out of town can potentially attend the event using public transit. This can be encouraged through proper advertising and incentives such as a raffle using transit tickets, special access or discounts on purchases that could be made at the event.

Appendix D: Parking Demand Table

Event Atte	ndance	100							150				
Driving De	Driving Demand Scenario		Low		Medium		High		Low		Medium		gh
		Percent	People										
Mode of	Drive & Park	60%	60	75%	75	90.0%	90.0	60%	90	75%	112.5	90.0%	135.0
Travel	Drop-off & Taxi	5%	5	5%	5	5.0%	5.0	5%	7.5	5%	7.5	5.0%	7.5
	Walk	25%	25	16%	16	4.3%	4.3	25%	37.5	16%	24	4.3%	6.4
	Bike	7%	7	3%	3	0.5%	0.5	7%	10.5	3%	4.5	0.5%	0.8
	Transit & Charter	3%	3	1%	1	0.3%	0.3	3%	4.5	1%	1.5	0.3%	0.4
	Total	100%	100	100%	100	100%	100	100%	150	100%	150	100%	150
Parking	2 passengers per car	30	30		38		45		45		56		8
Spaces	4 passengers per car	1!	15		19		23		23		28		4
Required	6 passengers per car	10)	1:	3	1	5	1	5	1	9	2	3

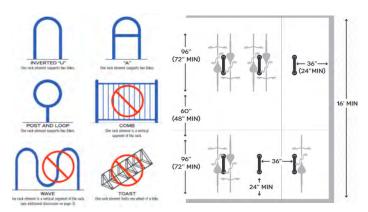
Event Atte	endance			35	50			500					
Driving Demand Scenario		Lo	Low		Medium		High		Low		lium	High	
		Percent	People										
Mode of	Drive & Park	60%	210	75%	262.5	90.0%	315.0	60%	210	75%	262.5	90.0%	315.0
Travel	Drop-off & Taxi	5%	17.5	5%	17.5	5.0%	17.5	5%	17.5	5%	17.5	5.0%	17.5
	Walk	25%	87.5	16%	56	4.3%	14.9	25%	87.5	16%	56	4.3%	14.9
	Bike	7%	24.5	3%	10.5	0.5%	1.8	7%	24.5	3%	10.5	0.5%	1.8
	Transit & Charter	3%	10.5	1%	3.5	0.3%	0.9	3%	10.5	1%	3.5	0.3%	0.9
	Total	100%	350	100%	350	100%	350	100%	350	100%	350	100%	350
Parking	2 passengers per car	10	105		131		158		105		131		8
Spaces	4 passengers per car	53		66		79		53		66		7:	9
Required	6 passengers per car	3.	5	4.	4	5	3	3	5	4	4	5	3

Event Atte	endance	750							1,000						
Driving Demand Scenario		Lo	Low		Medium		High		Low		ium	High			
		Percent	People	Percent	People										
Mode of	Drive & Park	60%	450	75%	562.5	90.0%	675.0	60%	600	75%	750	90.0%	900.0		
Travel	Drop-off & Taxi	5%	37.5	5%	37.5	5.0%	37.5	5%	50	5%	50	5.0%	50.0		
	Walk	25%	187.5	16%	120	4.3%	31.9	25%	250	16%	160	4.3%	42.5		
	Bike	7%	52.5	3%	22.5	0.5%	3.8	7%	70	3%	30	0.5%	5.0		
	Transit & Charter	3%	22.5	1%	7.5	0.3%	1.9	3%	30	1%	10	0.3%	2.5		
	Total	100%	750	100%	750	100%	750	100%	1000	100%	1000	100%	1000		
Parking	2 passengers per car	22	5	28	281		338		300		375		450		
Spaces	4 passengers per car	11	113		141		169		150		188		<u>!</u> 5		
Required	6 passengers per car	75	5	9,	4	11	.3	10	0	12	<u>!</u> 5	15	50		

Event Atte	ndance			3,5	00			10,000					
Driving Demand Scenario		Lo	Low		Medium		High		Low		Medium		gh
		Percent	People										
Mode of	Drive & Park	60%	2100	75%	2625	90.0%	3150	60%	6000	75%	7500	90.0%	9000
Travel	Drop-off & Taxi	5.5%	192.5	5.5%	192.5	5.0%	175	7.0%	700	6.0%	600	5.1%	510
	Walk	20%	700	11%	385	1.4%	49	16%	1600	8.5%	850	0.1%	14
	Bike	7.0%	245	3.0%	105	0.3%	11	7%	700	3.0%	300	0.3%	30
	Transit & Charter	7.5%	262.5	5.5%	192.5	3.3%	115.5	10.0%	1000	7.5%	750	4.5%	450
	Total	100.0%	3500	100.0%	3500	100.0%	3500	100.0%	10000	100.0%	10000	100.0%	10004
Parking	2 passengers per car	10!	1050		1313		1575		3000		3750		00
Spaces	4 passengers per car	525		656		788		1500		1875		22	50
Required	6 passengers per car	35	0	43	88	52	.5	10	00	12	50	15	00

APPENDIX 9.5E: BIKE RACK RECOMMENDATIONS

Bicycle racks should provide two points of contact with the bike frame and allow the use of a U-lock around the frame and at least one of the wheels (Fig. I). Bicycles parked at racks that do not provide two points of contact may fall over and block the pedestrian right-of-way. Bicycles that fall over are also more likely to be damaged. Additionally, it is critical that the rack be securely anchored to the ground. Figure I, an image developed by the Association of Pedestrian and Bicycle Professionals (APBP), shows three recommended bicycle rack types, as well as three common rack designs that are not recommended. APBP recommends that the racks be installed 36 inches apart, with 96 inches allocated for the bicycle. Figure 2 shows how the racks should be installed to allow full access.



Figures 1 & 2. Recommended bike rack style (left) and installation (right) (Courtesy of APBP).