# SCHOOL TRIP SAFETY AND URBAN PLAY AREAS 

# Vol. III A Survey of the Characteristics of the Urban Play Street <br> Martin L. Reiss and Allen E. Shinder 

## November 1975 <br> Final Report

This document is available to the public through the National Technical Information Service, Springfield, Virginia 22161

## Prepared for

federal highway administration
Offices of Research \& Development Washington, D.C. 20590

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## ACKNOWLEDGEMENTS

This guidebook was made possible through the efforts of a large number of individuals. The cooperation and contributions of the following individuals and agencies are gratefully acknowledged.

## U.S. Department of Transportation

## Federal Highway Administration

Julie Fee
Walter Adams
John Fegan
Seymour Bergsman

## City of Philadelphia

Model Cities Program - Cecily Banks
Department of Recreation - Mrs. Clark
Department of Traffic Engineering - Steven Butterfield
City of New York
Department of Traffic - Edward R. Bonelli, Ken Melston
Police Department -,Youth Aid Division - Captain Daley
Mayor's Office - Karl Irish
Mayor's Urban Task Force - Lettie Simon
We wish to specifically acknowledge the staff of the Police Athletic League of New York who conducted the interviews on the twenty play streets. Maura Beattie, John Ryan and Conrad Ford deserve our special thanks for all of their cooperation.

## I. INTRODUCTION

## Scope and Objectives

This report describes a study performed by BioTechnology, Inc. for the Federal Highway Administration. The play street study was started during the summer of 1973 and completed in the spring of 1975 with the publication of a play street guidebook.

The objectives of this study were threefold:

- To develop criteria for the establishment of play streets
- To develop a current status on play streets and research in this area
- To develop guidelines for traffic engineers in the implementation of play streets.

These objectives have been met and are described in detail in the companion report entitled "Guidelines for the Creation and Operation of Urban Play Streets." The thrust of the play street study was to obtain operational descriptors of the areas and the streets themselves, the physical dimensions of the street, the vehicular movements, the population using the play streets, the residents and merchants, as well as the people running the play street programs. The data was obtained through observation and interviews conducted on the streets of New York City during the summer of 1974.

## Background

The Problem. On weekdays during the summer, most inner city residential streets are crowded with youngsters playing and dodging cars. Their parents are working and the kids on every block are using the local playground - the street.

Knoblauch indicates that it is this same group of urban youngsters that are most represented in the pedestrian accident statistics (1975) (see Appendix A). Blackman indicates that the greatest danger to children comes from their undisciplined, uncautious playful behavior near their homes (1966). Backett performed an analysis of 100 children who were pedestrian accident victims with 100 children who were not involved in accidents. The control group was chosen so that both groups were similar in age, sex, school, neighborhood, social class and distance walked to school. The accident children differed significantly from their controls in having less parental supervision; in coming from homes with fewer gardens, yards and playrooms; and in coming from neighborhoods with fewer playgrounds and playfields (1959). Backett's findings that child pedestrian accident victims came from families with more maternal sickness, less maternal supervision, overcrowded homes and areas with fewer play facilities were similarly found by Read (1963).

Safety. Play streets have the potential to reduce traffic accidents. They do this by using street closure to physically separate pedestrian and vehicular movements. The play streets are located in densely populated urban areas* and are generally operated when schools are not in session. They function during daylight hours and the users live on the block.**

Studies of pedestrian accidents have indicated that the majority of victims are the young and the old in urban centers. The young are struck close to home during daytime hours, primarily in the late afternoon. Snyder and Knoblauch (1971), in a study of over 2,000 pedestrian accidents in 13 major cities, found that youngsters ( 5 to 9 years) experienced about three times the accident involvement (29.5\%) of any other age group. Slightly over 50 percent of all accidents involved youngsters under 15 years of age. A large number of the accidents occurred in the late afternoon, with 3:00 to 6:00 p.m. representing the peak accident period.

Bartholomew (1967) indicated that when a child in a congested, high accident area of the city (Philadelphia) has an accident, it will probably happen within one block of his home and during the daylight hours.

At the 12th International Study Week in Traffic Engineering and Safety conducted in September 1974 in Yugoslavia, Foote (1974) provided the general report summarizing the papers presented in Theme 1: Helping Pedestrians in Urban Areas. The findings, which seem particularly relevant to play streets, included:

- " $84 \%$ of children under ten (Great Britain) were injured within 800 meters*** of home. . $60 \%$ between $3: 00$ to $7: 00$ p.m." It was suggested that "it is play rather than travel, which is important; in other words that the problem is not one of journeys across traffic streams so much as play in the street. ${ }^{\prime \%} \%{ }^{* *}$
" $70 \%$ of all accidents involving children under six (Netherlands) do not happen on major roads, but in streets which carry less than 3,000 cars per 24 hours. ${ }^{9} \% * * * *$

The representatives from Canada, France, Great Britain, the Netherlands, Sweden, U.S.A., and Yugoslavia came to the following conclusions:

1. The primary need for helping pedestrians in urban areas is to improve the safety of residential districts, particularly for children.

[^0]2. Traffic replanning, involving closing of lightly trafficked streets, reorganization of parking, and provision of special paving treatments and amenities can bring about major reductions in accidents to pedestrians, particularly children and older people.
3. Sensitive and careful design is needed for each individual residential district to attain the greatest possible benefits and keep adverse consequences to a minimum.
4. Implementation involves many people, and careful education and demonstration is necessary.

Clearly, play streets carefully selected and approved by the residents can be very useful to the traffic engineer as one of a number of safety techniques to be considered for spot reductions of urban pedestrian accidents.

Recreation. Gold (1973), in his book Urban Recreation Planning, indicates the basic need today is to make the planning process more responsive to the outdoor recreation objectives of the inner city neighborhood. He goes on to state that the existing neighborhood parks and playgrounds are experiencing use by only a fraction of the population, and as leisure time increases proportionately less time is being spent at these facilities. Why are these trends increasing? Separate recreational studies by the National League of Cities and a task force sponsored by the U.S. Department of Housing and Urban Development find that there is little communication between the inner city resident and the urban recreation planner.

These studies recommend that facilities should be geared to meet the needs of the specific neighborhood and community rather than the entire city.

Considerable time (usually years) is required between the discovery of people's recreational desires and opening of a new facility. Playgrounds and parks require land and are expensive to construct. The cost of urban land is normally staggering. For example, a plot of 10,000 square feet can cost a million dollars or more, and the typical play street in New York provides over 17,000 square feet of recreation area.

The residents of densely populated, low income areas (especially the young and the elderly) have few recreational opportunities since their travel is limited and they do not go to areas having more abundant facilities and opportunities. The play street seems to fill a gap in offering urban recreational opportunities. Each play street can be developed to meet the unique needs of the street population and local topography.

The play street is a relatively inexpensive way of bringing these combined benefits to the exact locations where they are needed most.

## II. WHAT IS A PLAY STREET?

The play street is a residential street that is closed to vehicular traffic during specified hours to permit a supervised program of recreational activities to take place. A well run play street is usually characterized by the presence of large numbers of youngsters and smaller numbers of adults engaged in such diverse activities as games, crafts, dancing, talking, sitting, watching, etc. The play street is the meeting place and activity center for the neighborhood.

Play streets can be generally characterized as being located in densely populated, lower income, urban areas. The streets are normally one-way, and there are few if any commercial establishments located anywhere but on the street corners. The streets are barricaded with wooden sawhorses. Signs on stanchions or on the barricades are used to indicate the prohibition of through traffic and parking as well as the hours and days when the restrictions are in effect. Equipment is normally provided for group street games (volleyball, basketball) and curb or sidewalk games played by one or two youngsters (board hockey, etc.). The surface of the typical play street is marked to facilitate the conduct of many of these games.

Recreation departments in several cities use play streets as sites to temporarily locate mobile recreational vans. The play streets are usually sponsored by block associations and community organizations, and provide the physical location for recreational programs for local residents of all ages.

## Background

The barring or restricting of vehicular traffic from select urban streets is not a new concept in urban planning. Numerous European cities have created limited-access "walking streets," such as the Strøgnet in Copenhagen where the streets, as well as the sidewalks, are used for strolling and window shopping. Visitors to the ruins of ancient Pompeii can see the barriers used to restrict the access of chariots to areas serving as pedestrian ways.

A logical extension of the concept of the utilization of selected streets by pedestrians alone, is to restrict the streets for the use of pedestrians for specific purposes, such as parades, recreation and play, in densely populated areas.

Playstreets have existed in the United States since their inception in New York in 1909.

## Current Status

A survey of U.S. cities indicated that more play streets exist today than ever before. The play street is primarily an East Coast phenomena. The summary chart (Table 1) on the following page indicates that most play streets exist throughout Philadelphia and New York City for an eight-week period during the summer.

The present day play streets in New York City are being run either under the auspices of the Police Athletic League, Inc. or the Mayor's Task Force. In Philadelphia, present day play streets are run either under the auspices of the City Recreation Department or the Model Cities Program for the Recreation Department.

Of the 550 summer play streets in New York and Philadelphia, 50 in New York and 30 in Philadelphia have paid recreation directors. These streets require between $\$ 4,000$ and $\$ 5,000$ per street per summer to operate. The cost figures not only represent the salaries of the street workers, but also the administration expenses for city-wide programs, equipment costs, and street markings. Ancillary programs taking place on the play streets are funded by other agencies. Mobile van programs are supported by city recreation departments, and free lunch programs are funded by the U.S. Department of Agriculture.

## Table 1

## Summary of Play Street Status*

| Location | Streets Designated as Play Streets |
| :---: | :---: |
| Atlanta, Ga. | 65 streets are designated as play streets and are closed to traffic during the Christmas school holidays. They provide restricted access to recreational areas. Local traffic is limited to 5mph. Signs and barricades are used. |
| Baltimore, Md. | No indication of official play streets. Some streets are closed and combined with adjacent properties to provide recreational facilities. |
| Boston, Mass. | Not aware of any play streets. |
| Chicago, 111. | No permanently designated play streets. Model cities program blocks off streets for short periods of time for free street theater and block activities. |
| Detroit, Michigan | No designated play streets; summer mobile recreation program, June through August, low income areas without recreation facilities, vans used, streets closed. |
| Los Angetes, Calif. | None. |
| Miami, Florida | No city streets are used as play streets. Some streets are closed to vehicles during school hours to permit safe access to adjacent playgrounds. |
| New York City, N.Y. | 100-150 summer play streets, July and August closed to through traffic and parking, 7 hour period. School assembly streets (closed at various times during school hours, not really play streets). All year play streets, (not really play streets, no planned, supervised recreation); signs and barricades used. |
| Philacelphia, Pa. | Approximately 150 streets are operated as play streets, closed to traffic 10 a.m. to 4 p.m. during the summer, although $300-400$ requests for play streets are approved by the recreation department. Signs and barricades are used. |
| Portland, Oregon | One official play street - it separates two halves of an elementary school ground. The area has a dense apartment concentration and the street is closed during school hours. A few streets are closed for sledding during infrequent snow accumulations (every two or three years). |
| San Diego, Calif. | No play streets |
| San Francisco, Calif. | The city operates playmobiles during the summer and "a few functioning streets" areas are closed off for recreational use. |
| Southwest Michigan Council of Governments | None, except for Detroit. |

## III. METHODOLOGY

## General

Figure 1 illustrates the activities undertaken during the study. Observations of play streets and interviews with city authorities and individuals responsible for the conduct of the play street program led to the development of four evaluative surveys. The results of the surveys describe:

- The play streets ( 500 observations on 20 streets)
- The play street users (four to 19 years; 200 respondents on 20 streets)
- The play street residents and merchants (200 respondents on 20 streets)
- The play street "workers" (86 PAL respondents)

The results of these surveys are provided in each of the following chapters.

## Street Observation

Approximately 100 New York City and Philadelphia play streets were observed during July 1974 by BioTechnology personnel. A structured technique was utilized to gather several types of descriptive material. A photograph of the street was taken and the following street characteristics were described into a tape recorder:

- Street name, section of city, date, and time
- Agency responsible for running the play street
- Street characteristics (homes, apartments, etc.)
- Street width and length
- Number of vehicles parked on street
- Percent of street used for activities
- Type of barricade
- Sign legend
- Number of persons observed
- Unique characteristics

See Figure 2 for a typical street observation form.

## New York City Surveys

The street observations were followed by a more detailed data gathering process, the conduct of in-depth surveys of children, residents, and a sampling of activities of vehicles and children at predetermined time periods. Table 2 indicates the 20 streets in the survey. These were randomly selected from the 1974 PAL summer play streets. The "sample" of play streets represented over 50 percent of the 1974 PAL run New York City play streets.

## Preceding page blank



Figure 1. Play Street Study Activities


CHARACTERISTICS: This block is predominantly Residential composed of two and three story multi-family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 30.Feet
ESTIMATED STREET LENGTH: 125 Feet
NUMBER OF VEHICLES PARKED ON STREET: None

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $35 \%$

TYPE OF BARRICADE: Two Police Barriers

SIGN LEGEND: "STREET CLOSED PLAY AREA" on stanchion

NUMBER OF PERSONS OBSERVED USING THE STREET: Sixty persons
ACTIVITIES OBSERVED: Dancing, basketball, sitting and adults watching
ADDITIONAL OBSERVATIONS: Approximately five children of the $1-4$ age group were dancing, twenty-five of the 5-9 year olds were dancing, twenty of the 10-14 year olds were playing basketball, four of the $15-19$ year olds were playing basketball or dancing, and approximately $10-12$ adults were spectators. The hours of operation on this street are from 10:00 A.M. thru 6:00 P.M. This is the only street we observed having a record player and loudspeaker providing music for dancing. The street staff were running the dancing activity. The street had markings for games.

Figure 2. Play Street Observation Form

Table 2

## P.A.L. Play Streets in Survey

Precinct
Street

## Manhattan

24
28
28
30
32
32
32

West $101 \mathrm{St}$. (Man. Ave. to C.P.W.)
1 to 8:00 P.M.
West 114 St . ( 7 th to 8 th Avenues)
West 114 St. (8th to Manhattan Avenues)
West 159 St. (Broadwan to Amsterdam Avenues)
West 129 St. ( 5 th to Lenox Avenues)
West 143 St . (7th to Lenox Avenues)
West 153 St . (8th to Macombs Avenues)
Hours of Operation

## Bronx

41
42
42
48

## Brooklyn <br> 路

75
79
80
83
90
Stebbins Avenue (Jennings to 170 Street)
1 to 8:00 P.M.
167 Street (Union to Prospect Avenues)
Concord Avenue ( 150 to 151 Streets)
Mapes Avenue ( 178 to 179 Streets)
Beaumont Avenue (West 187 to 188 Streets)
1 to 8:00 P.M.
1 to 8:00 P.M.
1 to 8:00 P.M.
1 to 8:00 P.M.

Shephard Avenue (Belmont to Sutter Avenues)
Putnam Avenue (Throop to Tompkins Avenues)
Park Place (Grand to Classon Avenues)
Granite Street (Broadway to Bushwick Avenue)
Hooper Street (Farrison to March Avenue)
11 A.M. to 6:00 P.M. $11 \mathrm{~A} . \mathrm{M}$. to 6:00 P.M. $10 \mathrm{~A} . \mathrm{M}$. to 5:00 P.M. $10 \mathrm{~A} . \mathrm{M}$. to 5:00 P.M. 10 A. M. to 5:00 P. M.

## Queens

The Police Athletic League (PAL) of New York City has been conducting a summer play street program for forty years. PAL provided seven hours a day of supervised activities, five days a week, on 39 play streets during July and August 1974.*

The staff of BioTechnology, Inc. developed initial survey formats and training techniques for the staff of PAL to prepare play street employees to conduct three separate surveys on each of twenty randomly selected 1974 play streets. An additional survey was developed by PAL to provide some demographics on their play street employees.

The primary objective of the surveys was to obtain some baseline information regarding play streets so that guidelines could be created for urban areas thinking of initiating play street programs. The areas of interest were:

- Demographics of play street users (4 years to 19 years)
- Quantitative descriptors of the physical play street, the residents, and vehicle-related conditions
- Definition of the problems and benefits associated with the play street as seen by neighborhood residents and merchants
- Improvements, desired amenities and activities indicated by the street users and residents
- Indications of extent of the parking problem associated with play streets and the effectiveness of signing and barriers in prohibiting vehicular traffic

Initial surveys were developed based on these objectives and were pilot tested on a play street in the Bronx. The results of these surveys led to modifications and a second pilot test of each survey was performed at a play street in Manhattan. Neither of these streets was in the 20 -street sample used for the final data collection.

Twenty play street directors or assistant directors were then trained in conducting structured interviews. This was done in one session using tape recordings of the pilot tests. Role playing was used and each participant took the the part of a survey respondent on a play street. The written instructions used are shown in Figure 3.

## Play Street User Survey

Ten users (four to 19 years) of the play street were interviewed on each of the 20 play streets. The interviewers were instructed to attempt to obtain roughly equal numbers of males and females and to vary the ages. Thus, the distribution of the respondents should be viewed in this light. A more accurate distribution of users by age is available from the play street characteristics survey. Figure 4 provides the user survey data gathering form used.

[^1]You are being asked to help us conduct a program to find out some of the needs and feelings of the kids, residents, and merchants on some of our 1974 PAL Playstreets.

A great deal of time has been spent developing the questions. In order to compare the answers from different playstreets, the questions have to be asked exactly the same way by each of the interviewers. Read the questions exactly as they are written. Do not interview any relatives or people you know too well. They may try to give you answers that are not true to how they think.

There are no right or wrong answers. Do not suggest or help the person with the answers. You must be careful you do not encourage people to give answers you expect. If the people are confused, read the question again; several times if required.

Conduct the interviews at various times of the day, (e.g. 1p.m., 3 p.m., 5 p.m., 7p.m.). Select individuals at different parts of the playstreets. For the residents and merchants, select only one person per building or store and attempt to cover the different parts of the streets.

Only interview one person at a time. Take the individual away from where any crowds might gather. You only want his/her responses, not those of others; neither do you want others to hear the questions. Read the questions slowly. Remember this is the first time they are hearing them. Try especially to emphasize the Why guestions and fill in exactly what they say - good or bad.

Explain: "We are doing a survey about. this playstreet. Will you please answer some questions for me? It will take about ten minutes."

Figure 3. Instructions for Interviewers

Date $\qquad$
Street name $\qquad$ between $\qquad$ and $\qquad$

I'm going to ask you some questions about the playstreet. If you don ${ }^{\boldsymbol{t}} \mathrm{t}$ know what I mean by a question, tell me so I can repeat the question. I won't put your name on this paper. I just want to know what you think about the playstreet because you play here.

1. The child interviewed is $\qquad$ Male ___Female. $\qquad$ Age
2. Do you come to this street $\qquad$ Every day $\qquad$ 3 or 4 days a week
$\qquad$ 1 or 2 days a week $\qquad$ less than once a week
3. At what time do you usually come to the street? a.m. p.m.
4. At what time do you usually leave the street? $\qquad$ a.m.
5. Do you live on this street? YES $\qquad$ If no, do you live within 3 blocks of this street? NO
$\qquad$ YES $\qquad$ NO
6. Are the children you play with on the playstreet
mostly children who live on this block
mostly children from another block
don't know
7. Do you ever have to stop playing to let cars drive through the street? ___ NO If yes, how many times did you have to stop playing today to let cars go by? Circle one: $\begin{array}{lllllllll}0 & 1 & 2 & 3 & 4 & 5 & 6 & \text { more than } 6\end{array}$
8. What games do you play on the playstreet?
(Do not read suggestions below. Let the child tell you.)
a. ___Basketball
b.___ Volleyball
c._Hopscotch
d. $\qquad$ Shuffleboard
e. $\qquad$ Skelly
g. Arts and Crafts
h. $\qquad$ Dance and Dramatics
i. $\qquad$ Table pool
j. $\qquad$ Checkers
k. $\qquad$ Other $\qquad$
f. $\qquad$ Noc-Hockey (on game board)
9. Which game do you play most often? a b c d e f g h i $\mathbf{j} k$

Figure 4. Play Street User Survey Form
$\qquad$ between $\qquad$ and
10. Are there any other things (games or equipment) that you would like to use on this playstreet? YES $\qquad$
What? $\qquad$
11. In the afternoons when you do not come to play on the street what do you do? (Do not read suggestions below. Let the child tell you.)
a._ go to a park or pool
b._ go to a friend's house or street
c. go out with your family
d. stay home to play or work
e._ watch TV
f. other $\qquad$
12. Why do you come to this playstreet?
$\qquad$
13. Is there any way you would change the playstreet to make it more fun to play on?
$\qquad$
$\qquad$
15. Do you want the playstreet to open earlier each day? YES NO

Why? $\qquad$
16. Do you want the playstreet to stay open later? YES NO

Why? $\qquad$
17. Is there anything else you would like to tell me about the playstreet?
$\qquad$

$$
\because
$$

Time interview ends a.m.

Figure 4. Play Street User Survey Form (Continued)

## Play Street Adult Survey

Ten residents or merchants were interviewed on each of the 20 play streets. The interviewers were instructed that if the adult was only visiting the street for the first time, not to conduct an interview. Figure 5 provides the adult data gathering form used.

## Play Street Characteristics Survey

The interviewers were asked to complete a survey form that would provide an accurate basis for calculations of such street descriptors as:

- The extent of parking capacity utilized during play street hours
- The age distribution of street users by frequency and time
- The number of vehicles driving through the play street

Sampling at four distinct times over five days on each of the 20 play streets provided a data base that could be used with some confidence. Figure 6 presents the play street characteristics data gathering form.

## Play Street Staff Survey

Each of the two PAL paid supervisors on each of the 20 play streets as well as all other "street" workers on the PAL staff provided some demographic information on themselves as well as the streets they supervise. Figure 7 is the data gathering form used for this purpose.

Time interview starts $\qquad$ Date $\qquad$
Street name $\qquad$ Between $\qquad$ And $\qquad$

I'maing to ask you some questions about this playstreet. If you don't know what I mean by a question tell me so $I$ can repeat the question. I won't put your name on this paper. We just want to know what you think about the playstreet because you live (work) here.

1. Do you live or work on this block? __IIV IVE $\qquad$ WORK
$\qquad$ Neither, but come here quite often Neither, am only visiting today

If the person is only visiting today, stop the interview.
2. How many years have you lived (worked) on this block? $\qquad$ years
3. Was this a playstreet last year? $\qquad$ YES $\qquad$ No _DON'T KNOW
4. Do you have any children living with you? ..... YES YES $\quad$ NO
a. If yes, do these children play on the playstreet? $\qquad$ yes No
b. If yes, how many days a week do they usually play on the street?
___Everyday $\qquad$ 3 or 4 days 1 or 2 days $\qquad$ not at all
$\qquad$ other
c. If yes, do you like the children to use the playstreet? $\qquad$ YES _ No SOMEWHAT

Why? $\qquad$
5. Do you like the neighborhood children to use the playstreet? $\qquad$ yES $\qquad$ No

SOMEWHAT
Why? $\qquad$
6. From what you see on the playstreet, do you think it is good for the children?
$\qquad$ SO:MEVHAT

Why? $\qquad$
7. If this were not a playstreet, where would the children play? a__ stay inside
b.___ in a park
c.___ in street anyway
d.__ on stoops \& sidewalks
other $\qquad$
8. Is the playstreet good for the adults who live or work on the block? $\qquad$ YES NO
$\qquad$

Figure 5. Play Street Adult Survey Form
9. Do you have a car? $\qquad$ YES $\qquad$ NO
10. Have you had any problems because the street is closed to traffic? $\qquad$ YES $\qquad$ No

If yes, what was the problem? $\qquad$ .
11. Do you think cars could be allowed to drive through the street at a maximum sped of five miles per hour? $\qquad$ YES $\qquad$ NO

Comment. $\qquad$
12. Are you glad that the street is closed to traffic? $\qquad$ YES $\qquad$ NO SOMENHAT
13. How is the safety on the playstreet? $\qquad$ GOOD $\qquad$ FAIR POOR
14. Con you think of any ways to make the street safer? $\qquad$ YES $\qquad$ No

How? $\qquad$
15. Do you think having this playstreet reduces the number of children hit by cars?
$\qquad$ YES $\qquad$ NO $\qquad$ SOMEWHAT

1\%. Are there many crimes (robberies, stabbings, etc.) that happen on this block?
$\qquad$ MANY SOME VERY FEW
17. Is there any other equipment that you would like to see used on the playstreet? _______ No

What? $\qquad$
18. About how many adults play games on the street?
$\qquad$ MANY $\qquad$ SOME VERY FEW $\qquad$ NONE
19. Have you ever taken part in any playstreet activities? $\qquad$ YES $\qquad$ NO

Which ones? $\qquad$
20. Would you like the the playstreet to open earlier each morning ?
$\qquad$ YES $\qquad$ No $\qquad$ It doesn't matter
21. Would you like the playstreet to stay open later each night?
$\qquad$ yes $\qquad$ NO $\qquad$ It doesn't matter
22. The person interviewed is $\qquad$ MALE $\qquad$ female
23. Estimate the age of the person interviewed. $\qquad$ YEARS
24. Are there any other comments that you would like to make about the playstreet?
$\qquad$
Comments $\qquad$

Time interview ends $\qquad$

Figure 5. Play Street Adult Survey Form (Continued)

Street Name $\qquad$ between $\qquad$ and $\qquad$
Street Liementh $\qquad$ Street Width (curb to curb) $\qquad$

1. Count the number of playstreet users for each day for one week at the times indicated.

| Mon. (Date: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number on playstreet block |  |  |  |
|  | $1: 30$ | $3: 00$ | $5: 00$ | $7: 00$ |
| 4 \& under |  |  |  |  |
| $5-9$ |  |  |  |  |
| $10-14$ |  |  |  |  |
| $15-19$ |  |  |  |  |
| $19 \&$ over |  |  |  |  |


|  | Tues. | (Date: |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number on playsqreet block |  |  |  |
|  | $1: 30$ | $3: 00$ | $5: 00$ | $7: 00$ |
| 4 \& under |  |  |  |  |
| $5-9$ |  |  |  |  |
| $10-14$ |  |  |  |  |
| $15-19$ |  |  |  |  |
| $19 \&$ over |  |  |  |  |


| Wed. (Date: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number on playstreet block |  |  |  |
| . | 1:30 | 3:00 | 5:00 | 7:00 |
| 4 \& under |  |  |  |  |
| 5-9 |  |  |  |  |
| 10-14 |  |  |  |  |
| 15-19 |  |  |  |  |
| 19 \& over |  |  |  |  |


| Thurg. (Date:  <br> Age  <br>   Number on playstreet block |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $1: 30$ | $3: 00$ | $5: 00$ | $7: 00$ |  |
| 4 \& under |  |  |  |  |
| $5-9$ |  |  |  |  |
| $10-14$ |  |  |  |  |
| $15-19$ |  |  |  |  |
| $19 \&$ over |  |  |  |  |


| Fri. (Date: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number on playstreet block |  |  |  |
|  | $1: 30$ | $3: 00$ | $5: 00$ | $7: 00$ |
| 4 \& under |  |  |  |  |
| $5-9$ |  |  |  |  |
| $10-14$ |  |  |  |  |
| $15-19$ |  |  |  |  |
| L9 over |  |  |  |  |

Indicate the weather conditions for each of
the above days:
Temp.
Tues.
Wed.
Thurs.
Fri.
2. Circle the hour when you usually have the most people engaged in activities:

$$
\frac{10 \quad 11 \quad 12}{\text { A.M. }} \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8
$$

Figure 6. Play Street Characteristics Survey Form
$\qquad$ between $\qquad$ and $\qquad$
3. Count the number of cars parked on the playstreet at each of the hours indicated:

| Mon. |  | Tues. |  | Wed. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Time | Day I | Day II | Day III | Day IV | Day V |
| I:00 P.M. |  |  |  |  |  |
| $3: 00$ P.M. |  |  |  |  |  |
| $5: 00$ P.M. |  |  |  |  |  |
| $7: 00$ P.M. |  |  |  |  |  |
| $8: 00$ P.M. |  |  |  |  |  |

4. Count the number of vehicles going through your playstreet for one week:

| Day | Emergency <br> Vehicles | Other <br> Vehicles |
| :---: | :---: | :---: |
| Mon. |  |  |
| Tues. |  |  |
| Wed. |  |  |
| Thurs. |  |  |
| Fri. |  |  |

5. Estimate the percentage of:
$\qquad$ Black $\qquad$ Puerto Rican $\qquad$ White (non-Puerto Rican)
$\qquad$ Other
6. Identify the recreation facilitics within a five block radius including playstreets:
$\qquad$
$\qquad$
7. Indicate the types of premises on both sides of the playstreet.


Figure 6. Play Street Characteristics Survey Form (Continued)
8. How many houses are on your street?
9. What is the average number of floors in the apartment houses?
10. What is the average number of apartments on each floor?
11. How many unoccupied buildings are on your street?
12. How many commercial establishments are on the playstreet'block?
13. What part of the street is actually used for playstreet games and activities? (i.e. $2 / 3,1 / 2$, all)
14. Do cars park on ends of the street where there are no organized activities?
$\qquad$ NO

Comment: $\qquad$
16. Would you suggest a time change so that the street would be more fully utilized? Check any of the following you feel would be beneficial to the street users: (Assume only 7 hours of operation.)
Start earlier, end later
Start later, end later
Have playstreet 6 days to include Sat.
$\ldots \quad$ Have playstreet 6 days to include Sun.
$\ldots \quad$ Have playstreet 7 days to include Sat. and sun.
$\ldots \quad$ No change needed
17. In addition to our regular July/August program, would you suggest extending the playstreet by:

Beginning the first week of June after school and weekends
$\qquad$ Continuing to the end of Sept. after school and weekends
$\qquad$ Beginning the first week in April after school and weekends
$\qquad$ other $\qquad$

Figure 6. Play Street Characteristics Survey Form (Continued)

1. Date of Birth:
$\overline{\text { Day }} \quad \overline{\text { Month }} \quad \overline{\text { Year }}$
2. Age: As of July 1
3. Sex: Male Female
4. Circle the number of summers that you have worked on P.A. L. playstreets. Count this as one summer. $\quad \begin{array}{llllll}1 & 2 & 3 & 4 & 5 & \text { more than } 5\end{array}$
5. Circle the number of other paid summers of recreation experience. $\quad 0 \quad 1 \quad 2 \quad 3 \quad 4$ more than 4
6. Circle the number of years of paid recreation experience. (not counting summers) $\begin{array}{lllllll}0 & 1 & 2 & 3 & 4 & \text { more than } 4\end{array}$
7. Circle the last year you have completed in school. $\begin{array}{lllllllll}9 & 1.0 & 11 & 12 & 13 & 14 & 15 & 16 & \text { more than } 16\end{array}$
8. What was/is. your major area of study in school?
9. If you have completed school what is your occupation?
10. If you are a student what career do you intend to follow after graduation?
11. Has PAL work helped you in any way with your career goal?

Very much
Some
Not at all
Comments, if you wish:

Figure 7. Play Street Staff Survey Form
12. Check your three strongest skills:Sports
$\square$ Enthusiasm
Music, Dance, Drama
$\square$ Getting along with peoplePlaystreet games
$\square$ Sense of humorArts and Crafts
$\square$ Evenness of temperament
$\square$ Knowledge of Community
Other $\qquad$
13. Check the box that best describes the distance of your residence to the playstreet on which you work.

口 within three blocks
$\square$ four to seven blocks
$\square$ eight to 15 blocks
-greater than 15 blocks
14. What languages do you speak?

D English
$\square$ Spanish
OLher $\qquad$
15. What language do you use most often on the street?

- English
$\square$ Spanish
Other $\qquad$
Figure 7. Play Street Staff Survey Form (Continued)


## IV. RESULTS OF THE USER SURVEY

## Interviews with Play Street Users

Ten persons between the ages of four years and 19 years were interviewed on each of 20 play streets. Some of the information obtained includes:

## Effective Service Area of the Play Street.

- 67 percent live on the street
- 28 percent live within three blocks
- 5 percent live further than three blocks away


## Service Period of the Play Street.

- 83.4 percent use the street every day
- 13.1 percent use the street three or four days a week
- 3.0 percent use the street one or two days a week
- 0.5 percent use the street less than once a week
- An average of eight hours a day is spent on the play street (supervision is provided seven hours per day).
- 48 percent of the children want the play street to open sooner.
- 69 percent of the children want the play street to stay open later. (The desire to keep the streets open later is in conflict with the desires of the adult residents.)


## Games and Equipment Used Most Often

- Street Activities ( 64 percent):
- 27 percent basketball
- 11 percent volleyball
- 6 percent baseball
- 6 percent skelly
- 5 percent hopscotch
- 2 percent shuffle board
- 2 percent dance and dramatics*
- Sidewalk Activities (36 percent):
- 19 percent table pool (table game)
- 13 percent nok-hokey (table game)
- 3 percent arts and crafts
- 1 percent checkers

[^2]
## Additional Games and Equipment Desired

- 46 percent curb games for one or two children
- 22 percent mobile vans (swimming, hockey, tennis, boxing)
- 16 percent street games for large groups.

Figure 8 provides a summary of results of the user survey. The answers to each question can be analyzed by street, or by borough rather than by the average respone. This is illustrated in Figure 9.
$\qquad$
Street name $\qquad$ between $\qquad$ and

I'm going to ask you some questions about the playstreet. If you don't know what 1 mean by a question, tell me so $I$ can repeat the question. I won't put your name on this paper.

I just want to know what you think about the playstreet because you play here.

1. The child interviewed is $51 \% \mathrm{Male} \quad 49 \%$ Female. 11 Vrs. Age
2. Do you come to this street $83.4 \%$ Every day $13.1 \% 3$ or 4 days a week
$\underline{3.0 \% 1}$ or 2 days a week $0.5 \%$ less than once a week
3. At what time do you usually come to the street? a

4. Do you live on this street? $\quad 67 \%$ YES $33 \% \mathrm{NO}$

If no, do you live within 3 blocks of this street? $\quad \mathbf{2 8 \%}$ YES $\quad \mathbf{4 \%}$ NO
6. Are the children you play with on the playstreet
$\frac{84 \%}{}$ mostly children who live on this block
$\frac{10 \%}{}$ mostly children from another block
$6 \%$ don't know
7. Do you ever have to stop playing to let cars drive through the street? $62 \% \mathrm{YES} 38 \%$ NO If yes, how many times did you have to stop playing today to let cars go by? Circle one: $0 \quad 1 \quad 2$ (3) $4 \quad 5 \quad 6$ more than 6
8. What games do you play on the playstreet? (Do not read suggestions below. Let the child tell you.)
a. $12 \%$ Basketball
g. $8 \%$ Arts and Crafts
b. $14 \%$ Volleyball.
h. 4\% Dance and Dramatics
c. $6 \%$ Hopscotch

1. $14 \%$ Table pool
d. $5 \%$ Shuffleboard
j. . 7\% Checkers
e._ 7\% Skelly
k.__ Other Baseball - 3\%
f. $17 \%$ Woc-Hockey (on game board)

Jump Rope - 3\%
9. Which game do you play most often? a b c d ef g h i j $k$

$$
\begin{aligned}
& 27 \% \text { - Basketball } \\
& 11 \% \text { - Volleyball } \\
& 5 \% \text { - Hopscotch } \\
& 2 \% \text { - Shuffleboard } \\
& 6 \% \text { - Skelly } \\
& 13 \% \text { - Noc-ILockey }
\end{aligned}
$$

$3 \%$-Arts and Crafts
$2 \%$-Dance and Dramatics
$19 \%$-Table Pool
1\%-Checkers
6\% -Baseball
5\% -Jump Rope

Figure 8. Summary of Results
$\qquad$ between $\qquad$ and $\qquad$
10. Are there any other things (games or equipment) that you would like to use on this playstreet? $55 \%$ YES $45 \%$ NO \& no response What? Curb games for 1 or 2 children - $46 \%$, mobile vans (swimming, hockey, tennis,
boxing, etc.) $-\mathbf{2 2} \%$, street games for large group - $16 \%$
11. In the afternoons when you do not come to play on the street what do you do? (Do not read suggestions below. Let the child tell you.)
a. $20 \%$ go to a park or pool
b. $14 \%$ go to a. friend's house or street
c. $9 \%$ go out with your family
d. $24 \%$ stay home to play or work
e. $23 \%$ watch TV
f._Other Out-sports - $2 \%$, out-social - $3 \%$, Home-other - 5\%
12. Why do you come to this playstreet?

Play, (Fun) games, activities - 61\%, Social - $19 \%$
Live here, nothing else to do - $17 \%$, Safety - $2 \%$
13. Is there any way you would change the playstreet to make it more fun to play on? No consistent Remarks
15. Do you want the playstreet to open earlier each day? $48 \%$ YES $\quad 52 \%$ NO

Why?
16. Do you want the playstreet to stay open later?. $\quad \mathbf{~ 3 9 \%}$ YES NO

Why?
17. Is there anything else you would like to tell me about the playstreet?

No consistent Remarks

Time interview ends
a.m.
P.m.

Figure 8. Summary of Results (Continued)

| COMPARISON BY HOURS OF OPERATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number <br> of Streets | Yes | No | No Response |
| Open Earlier |  |  |  |  |
| 10 A.M. Streets | $(3)$ | $60 \%$ | $37 \%$ | $3 \%$ |
| 11 A.M. Streets | $(3)$ | $33 \%$ | $60 \%$ | $7 \%$ |
| 12 Noon Streets | $(1)$ | $30 \%$ | $70 \%$ | $0 \%$ |
| 1 P.M. Streets | $(13)$ | $48 \%$ | $49 \%$ | $3 \%$ |
| - Close Later |  |  |  |  |
| 5 P.M. Streets | $(3)$ | $70 \%$ | $30 \%$ | $0 \%$ |
| 6 P.M. Streets | $(3)$ | $87 \%$ | $13 \%$ | $0 \%$ |
| 7 P.M. Streets | $(1)$ | $20 \%$ | $80 \%$ | $0 \%$ |
| 8P.M. Streets | $(13)$ | $67 \%$ | $30 \%$ | $3 \%$ |


| COMPARISON BY BOROUGHS |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number <br> of Streets | Boro |  | Open Earlier |  |  | Close Later |  |  |
|  |  | Yes | No | No Response | Yes | No | No Response |  |
| $(7)$ | Manhattan | $41 \%$ | $53 \%$ | $6 \%$ | $67 \%$ | $29 \%$ | $4 \%$ |  |
| $(5)$ | The Bronx | $58 \%$ | $42 \%$ | $0 \%$ | $72 \%$ | $26 \%$ | $2 \%$ |  |
| $(5)$ | Brooklyn | $54 \%$ | $42 \%$ | $4 \%$ | $76 \%$ | $24 \%$ | $0 \%$ |  |
| $(3)$ | Queens | $27 \%$ | $70 \%$ | $3 \%$ | $47 \%$ | $53 \%$ | $0 \%$ |  |


|  |  |  |  |  |  |  | TOTAL |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Streets (20) | Yes | No | No Response | Respondants |  |  |  |  |  |
|  |  |  |  | Yes | No |  |  |  |  |
| Open Earlier | $46.5 \%$ | $50 \%$ | $3.5 \%$ | $48 \%$ | $52 \%$ |  |  |  |  |
| Close Later | $67.5 \%$ | $30.5 \%$ | $2 \%$ | $69 \%$ | $31 \%$ |  |  |  |  |

Figure 9. Play Street Hours

## Interviews with Play Street Adults

Ten persons were interviewed on each of 20 play streets. Seventy-five percent of the individuals lived on the street; 15 percent had jobs on these streets; and 10 percent indicated they visited the street on a regular basis. These interviews provided the following information:

- 65 percent of all respondents and 72 percent of the play street residents did not own car.
- 88 percent of the respondents indicated that they did not have a problem due to the streets being closed to traffic
- 31 percent of the respondents who lived or worked on the play street and owned a car indicated they had a problem due to play street closure to traffic. Of these, 88 percent indicated parking as the problem, and the rest indicated difficulties associated with deliveries, noise, being handicapped, vandalism, or sanitation.
- 93 percent of the respondents would not approve of vehicles being permitted to drive through the play street under controlled conditions ( 5 mph ). The primary reason given for controlled vehicular access was for deliveries.
- 96.5 percent of the respondents thought the play street "reduces the number of children hit by cars."
- 27 percent of the respondents were in favor of opening the play street earlier in the morning.
- 26.5 percent of the respondents were in favor of keeping the play street open later in the evening.
- 8 percent of the respondents were not "glad street is closed to traffic;" of these, 40 percent indicated that they have "taken part in some play street activities," and 53 percent indicated they had "problems because the street was closed to traffic."

Figure 10 provides some demographics of those persons that had problems with the street being closed.

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Figure 10. People Who Had Problems Due to Street Closure

## Street and Area Descriptors

- The longest street was 895 feet and the shortest was 190 feet. The average was 507 feet; the street width varied from 30 to 34 feet.
- The average number of family dwelling units was 272 per play street. This varied from 11 houses to 870 apartment units, with one street containing two factories and no dwelling units.
- Eleven of the 20 play streets had from one to three abandoned or otherwise unoccupied buildings. The average was one empty building per street.
- Three of the streets had no commercial establishments. One street had 12 small stores. The average was two stores, which were usually located on the corners.
- The majority of play street residents ( 20 streets) were:
black on $65 \%$ of the streets,
white on $20 \%$ of the streets,
hispanic on $15 \%$ of the streets.
- The distribution of other play streets within five blocks of the 20 studied streets was:
no play streets $-70 \%$,
one play street $-10 \%$,
two play streets $-10 \%$,
three play streets $-10 \%$.


## Observations of Street Use

- Play street hours for streets surveyed:

- The time when the most people were out on the street was 5 p.m. ( $\bar{X}=4: 40$ p.m. $\pm 1.965$ hours).
- At 5 p.m., the average play street had 112 people on the street (see Figure 11 for the distribution of ages).


Figure 11. Ages of Play Street Users

- Ninety percent of those under 20 were involved in play street activities (based on 400 observations).
- Thirty-five percent of those over 19 were involved in play street activities (based on 128 observations).
- An average of 85 percent of the play street was used for activities ( 20 street supervisors' estimations for the period of a full day).
- An average of 44 percent of the play street was used for activities ( 24 spot observations at various times).


## Observation of Vehicles on the Play Street

- On 20 play streets, the number of emergency and other vehicles driving through were counted for five days; the average per day was two vehicles ( $\overline{\mathrm{X}}=2.415, \mathrm{Std}$. Dev. $=3.276$ ). (This includes trucks delivering lunches.)
- On 20 play streets, the number of parked cars at 1 p.m., 3 p.m., 5 p.m., 7 p.m. and 8 p.m. were counted for five days; the average was six vehicles per street ( $\bar{X}=6.28, \pm 9.053$ ). (One street had an average of 33.4 parked cars.) (These represent hours when the play street was closed to traffic.)
- The average percent of parking capacity used was 14 (based on the street dimensions). The worst street had 49 percent of its parking capacity utilized. Utilization of parking capacity should be viewed in light of signing indicating total prohibition of parking during play street hours.


## VII. RESULTS OF THE STAFF SURVEY

## Interviews with "On-the-Street" Staff

The PAL employs two paid staff members per play street. One is the play street director, the other is the play street assistant director. On each street, these individuals are over 18 years of age; one is male, the other, female. The director has previous play street experience; the other has had some experience in working with children. Both live in the immediate vicinity. (Note: In Philadelphia, there is one paid street director. This individual is over 21 years old and lives on the block, or one block away. He or she is assisted by three teenagers.)

Eighty-six employees of the New York Police Athletic League were surveyed. Forty were play street directors, forty were play street assistant directors, and six were area supervisors responsible for coordinating several play streets. This group represented the PAL "on-the-street" staff for the summer of 1974. Some of the information they provided included:

- The average age of the staff was 25 years $(\bar{X}=24.8 \pm 7.43$, youngest $=17$, oldest $=45$ ).
- 48 percent $=$ male; 52 percent $=$ female
- The average staff member has worked on a PAL play street one previous summer, has had two additional paid summers of recreational experience, $11 / 2$ years of paid recreational experience, and has completed 14 years of schooling.
- The indicated occupations were:
- teaching
- social work
- student
- recreation director
- The average worker lives 13 blocks from the play street:
- within 3 blocks $=14 \%$
-4 to 7 blocks $=6 \%$
-8 to 15 blocks $=9 \%$
- over 15 blocks $=71 \%$
- The barricades are set up by:
- the play street director and/or the neighborhood youth corps workers $=65 \%$
- residents $=23 \%$
- other and no response $=12 \%$
- Time barricades set up:
$-8: 00 \mathrm{a} . \mathrm{m} .=30 \%$
- 8:30 a.m. $=5 \%$
$-9: 00 \mathrm{a} . \mathrm{m} .=11 \%$
- 9:30 a.m. $=6$
$-10: 00 \mathrm{a} . \mathrm{m} .=11 \%$
$-10: 30 \mathrm{a} . \mathrm{m} .=8 \%$
$-11: 30$ a.m. $=2 \%$
$-12: 00 \quad \mathrm{~N}=9 \%$
$-1: 00$ p.m. $=9 \%$
The earliest starting time for the PAL streets was 10:00 a.m.
- Benefits seen for the play street program:
- Educational = 25\%
- Social $=54 \%$
- Safety $=12 \%$
- Supervision $=9 \%$
- 66 percent of staff respondents indicated the residents of the area were fearful of crime.
- 96 percent of staff respondents indicated that "it was not possible to operate the play street and allow cars to drive through at a maximum speed of five miles per hour."


## VII. RESULTS OF THE STREET OBSERVATIONS IN PHILADELPHIA

The observations of the New York City play streets have not been summarized since the surveys of the previous chapters provide this information in great detail.

A selection of the Philadelphia and New York City play street observation forms is provided in Appendix B.

The characteristics of the Philadelphia play streets are summarized as follows:

- 60 percent of the Recreation Department play streets observed had no signs present.
- None of the Recreation Department play streets observed had supervision on the block.
- All of the Model City play streets observed had supervision on the block.
- An average of $36.5 \%$ of the street was utilized on the ten Model Cities play streets observed. Ranging from $5 \%$ of the street (when lunch was being served) to $50 \%$ of the street.
- An average of $6.5 \%$ of the street was utilized on the 15 Recreation Department play streets observed. Ranging from $0 \%$ on some streets to $20 \%$ on others.
- An average of 14.87 cars were parked on the Recreation Department play streets observed.
- An average of 14.70 cars were parked on the Model Cities play streets observed.
- $60 \%$ of the Recreation Department play streets observed used police barricades to block the street.
- $26.6 \%$ of the Recreation Department play streets observed used string barriers to close the street.
- $13.3 \%$ of the Recreation Department play streets observed used no barrier to close the street.
- $40 \%$ of the Model Cities play streets observed used police barricades to close the streets.
- $60 \%$ of the Model Cities play streets observed used string barriers to close the street.
- The average length is 111.67 feet on the Recreation Department play streets observed.
- The average street width is 19.36 feet on the Recreation Department play streets observed.
- Three, or $20 \%$ of the Recreation Department play streets observed had one vehicle driving through during the observation period.
- Two, or $20 \%$ of the Model Cities play streets observed had one vehicle driving through during the observation period.
- The average street length of Model Cities play streets observed was 116.25 feet.
- The average street width of Model Cities play streets observed was 22.9 feet.


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## APPENDIX A

## COMPARATIVE URBAN PEDESTRIAN ACCIDENT (BASED ON AGE)

The information in this appendix was developed by Richard L. Knoblauch of BioTechnology during the conduct of an urban pedestrian accident study (Department of Transportation Contract DOT-HS-190-2-480).

A pedestrian accident data collection system was established in six major cities. The system involved using the regular police accident report form and a specifically designed supplementary data form. The information on the forms was combined, and the precipitating and predisposing factors, as well as the distribution of accident types in the accident data base were determined. Such a data collection system, when fully operational, can provide a great deal of useful information and appears to be very appropriate for use in an accident-based evaluation of pedestrian safety countermeasures designed to impact upon specific types of urban pedestrian accidents. Descriptive data on 2,044 pedestrian accidents from the six study cities is presented.

Since the bivariate tables compare each variable versus the distribution of pedestrians' age, the reader can determine that five- to nine-year olds were involved in 24 percent of the 2,044 accidents in the cities of Akron, Ohio; Miami, Florida; New York City; San Diego, California; Toledo, Ohio; and Washington, D.C., and that 29 percent of these happened between the hours of $2: 00 \mathrm{PM}$ and 3:59PM.

Table A-1
Summary Percentage for Total Pedestrian Accident
Sample ( $\mathrm{N}=2044$ )
UPPER BOUNDS OF AGE CATEGORIES

| Descriptive Data | $\begin{aligned} & 4 \\ & 9 \end{aligned}$ | $\begin{aligned} & 9 \\ & 24 \end{aligned}$ | $\begin{aligned} & 14 \\ & 10 \end{aligned}$ | $\begin{array}{r} 19 \\ 8 \end{array}$ | $\begin{array}{r} 24 \\ 6 \end{array}$ | $\begin{array}{r} 29 \\ 5 \end{array}$ | $\begin{array}{r} 34 \\ 3 \end{array}$ | $\begin{array}{r\|r} 39 \\ 3 \end{array}$ | $\begin{array}{r} 44 \\ 3 \end{array}$ | $\begin{array}{r} 49 \\ 3 \end{array}$ | $\begin{gathered} 54 \\ 4 \end{gathered}$ | $\begin{array}{r} 59 \\ 3 \end{array}$ | $\begin{gathered} 64 \\ 3 \end{gathered}$ | $\begin{gathered} 65 \\ \text { Plus } \\ 13 \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MONTH |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 4 | 6 | 8 | 11 | 10 | 11 | 13 | 7 | 5 | 10 | 10 | 23 | 8 | 13 | 9 |
| 2 | 5 | 10 | 11 | 13 | 15 | 8 | 12 | 14 | 13 | 16 | 22 | 13 | 11 | 12 | 12 |
| 3 | 12 | 15 | 14 | 12 | 11 | 20 | 22 | 14 | 16 | 10 | 10 | 12 | 18 | 11 | 14 |
| 4 | 19 | 15 | 13 | 7 | 6 | 8 | 9 | 18 | 16 | 6 | 12 | 6 | 13 | 12 | 12 |
| 5 | 16 | 14 | 11. | 13 | 12 | 8 | 10 | 13 | 11 | 7 | 8 | 9 | 16 | 9 | 12 |
| 6 | 9 | 9 | 8 | 11 | 8 | 11 | 6 | 9 | 6 | 13 | 10 | 7 | 11 | 7 | 9 |
| 7 | 10 | 7 | 8 | 6 | 7 | 7 | 3 | 11 | 8 | 13 | 8 | 4 | 6 | 8 | 8 |
| 8 | 9 | 4 | 2 | 4 | 5 | 7 | 3 | 2 | 2 | 6 | 1 | 1 | 3 | 5 | 4 |
| 9 | 6 | 6 | 7 | 4 | 4 | 2 | 4 | 2 | 8 | 4 | 6 | 6 | 8 | 3 | 5 |
| 10 | 6 | 8 | 8 | 6 | 9 | 7 | 7 | 0 | 5 | 4 | $7{ }^{\text {. }}$ | 9 | 3 | 5 | 6 |
| 11 | 2 | 4 | 5 | 5 | 8 | 3 | 4 | 2 | 6 | 3 | 3 | 4 | 0 | 7 | 4 |
| 12 | 2 | 2 | 4 | 8 | 6 | 6 | 6 | 7 | 5 | 4 | 3 | 6 | 0 | 7 | 4 |
| TIME OF DAY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2400-0159 | 1 | 1 | 1 | 5 | 9 | 12 | 7 | 7 | 10 | 6 | 4 | 3 | 0 | 1 | 3 |
| 0200-0359 | 0 | 1 | 1 | 2 | 5 | 3 | 10 | 11 | 3 | 0 | 3 | 1 | 5 | 0 | 2 |
| 0400-0559 | 0 | 0 | 0 | 1 | 1. | 2 | 1 | 2 | 2 | 0 | 1 | 0 | 3 | 1 | 1 |
| 0600-0759 | 2 | 1 | 4 | 6 | 4 | 7 | 4 | 7 | 6 | 6 | 8 | 6 | 6 | 4 | 4 |
| 0800-0959 | 3 | 8 | 4 | 8 | 6 | 7 | 4 | 9 | 3 | 1 | 7 | 7 | 11 | 11 | 7 |
| 1000-1159 | 12 | 5 | 7 | 5 | 2 | 4 | 4 | 5 | 3 | 10 | 8 | 7 | 14 | 11 | 7 |
| 1200-1359 | 15 | 13 | 8 | 5 | 10 | 9 | 3 | 5 | 3 | 10 | 10 | 12 | 5 | 8 | 9 |
| 1400-1559 | 17 | 29 | 26 | 15 | 11 | 9 | 12 | 9 | 8 | 12 | 7 | 4 | 6 | 18 | 18 |
| 1600-1759 | 24 | 21 | 23 | 15 | 12 | 10 | 13 | 13 | 6 | 10 | 17 | 19 | 11 | 20 | 18 |
| 1800-1959 | 22 | 16 | 12 | 16 | 16 | 10 | 13 | 11 | 19 | 22 | 17 | 25 | 22 | 18 | 17 |
| 2000-2159 | 4 | 6 | 9 | 12 | 12 | 13 | 18 | 7 | 25 | 12 | 10 | 10 | 13. | 6 | 9 |
| 2200-2359 | 0 | 0 | 3 | 11 | 12 | 12 | 9 | 11 | 11 | 10 | 6 | 9 | 3 | 3 | 5 |
| DAY OF WEEK |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sunday | 15 | 8 | 6 | 10 | 9 | 9 | 9 | 11 | 15 | 6 | 6 | 10 | 17 | 9 | 10 |
| Manday | 9 | 16 | 14 | 12 | 18 | 14 | 22 | 17 | 8 | 11 | 10 | 12 | 11 | 13 | 14 |
| Tuesday | 15 | 113 | 16 | 10 | 12 | 12 | 13 | 9 | 18 | 3 | 14 | 15 | 12 | 14 | 13 |
| Wednesday | 13 | 16 | 16 | 18 | 15 | 14 | 15 | 11 | 13 | 11 | 26 | 21 | 19 | 15. | 16 |
| Thursday | 13 | 17 | 17 | 14 | 12 | 16 | 6 | 15 | 12 | 20 | 12 | 16 | 22 | 16 | 15 |
| Friday | 13 | 16 | 23 | 15 | 16 | 14 | 16 | 22 | 13 | 22 | 13 | 10 | 12 | 18 | 16 |
| Saturday | 21 | 13 | 10 | 20 | 19 | 20 | 18 | 15 | 20 | 26 | 19 | 16 | 6 | 15 | 16 |

Table A-1 (Continued)
Summary Percentage for Total Pedestrian Accident
Sampel ( $\mathrm{N}=2044$ )
UPPER BOUNDS OF AGE CATEGORIES

| Descriptive Data | 4 | 9 | 14 | 19 | 24 | 29 | 34 | 39 | 44 | 49 | 54 | 59 | 64 | 65 Plus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

DRIVER AGE

| 17 or less | 4 | 5 | 7 | 9 | 2 | 4 | 0 | 2 | 2 | 2 | 5 | 2 | 7 | 6 | 5 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $18-20$ | 11 | 11 | 13 | 11 | 12 | 7 | 17 | 12 | 11 | 9 | 5 | 8 | 7 | 13 | 11 |
| $21-24$ | 23 | 16 | 13 | 13 | 18 | 15 | 7 | 14 | 11 | 9 | 22 | 15 | 23 | 14 | 16 |
| $25-34$ | 25 | 24 | 24 | 26 | 25 | 27 | 34 | 31 | 30 | 36 | 33 | 30 | 22 | 18 | 26 |
| $35-44$ | 16 | 16 | 21 | 13 | 15 | 17 | 17 | 17 | 18 | 25 | 7 | 23 | 8 | 16 | 16 |
| $45-54$ | 10 | 16 | 11 | 12 | 9 | 15 | 7 | 14 | 4 | 12 | 20 | 10 | 13 | 15 | 13 |
| $55-64$ | 5 | 7 | 7 | 10 | 13 | 10 | 10 | 10 | 11 | 4 | 2 | 11 | 12 | 9 | 8 |
| 65 or more | 5 | 4 | 3 | 7 | 5 | 4 | 8 | 0 | 11 | 4 | 7 | 2 | 8 | 8 | 5 |

DRIVER SEX

| Male | 71 | 67 | 70 | 63 | 73 | 67 | 83 | 63 | 72 | 72 | 67 | 72 | 72 | 73 | 70 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Female | 24 | 28 | 19 | 19 | 13 | 12 | 8 | 15 | 18 | 19 | 27 | 15 | 22 | 20 | 21 |
| Hit and Run | 6 | 5 | 12 | 18 | 14 | 21 | 9 | 22 | 10 | 9 | 6 | 13 | 6 | 7 | 10 |

PED SEX

| Male | 68 | 62 | 60 | 62 | 59 | 62 | 63 | 76 | 82 | 65 | 58 | 65 | 65 | 50 | 62 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Female | 32 | 38 | 40 | 38 | 41 | 38 | 37 | 24 | 17 | 35 | 42 | 35 | 35 | 50 | 38 |

INJURY SEVERITY

| Fatal | 6 | 4 | 7 | 7 | 5 | 10 | 6 | 24 | 14 | 11 | 21 | 15 | 27 | 25 | 11 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| Serious | 34 | 32 | 25 | 24 | 33 | 33 | 28 | 33 | 34 | 34 | 31 | 33 | 36 | 35 | 32 |
| Moderate | 38 | 42 | 46 | 33 | 34 | 29 | 40 | 18 | 31 | 35 | 21 | 32 | 17 | 24 | 35 |
| Slight | 20 | 20 | 19 | 32 | 25 | 27 | 23 | 25 | 22 | 20 | 21 | 20 | 19 | 15 | 21 |
| None | 2 | 2 | 3 | 4 | 2 | 1 | 3 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 2 |

LIGHT CONDITIONS

| Daylight | 84 | 85 | 76 | 52 | 46 | 49 | 45 | 42 | 35 | 57 | 62 | 51 | 61 | 70 | 67 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Dawn or Dusk | 8 | 5 | 5 | 3 | 2 | 1 | 2 | 6 | 5 | 4 | 3 | 6 | 7 | 4 | 5 |
| Dark | 8 | 10 | 18 | 44 | 52 | 50 | 53 | 52 | 60 | 39 | 35 | 43 | 31 | 25 | 28 |

WEATHER CONDTIONS

| Clear or Cloudy | 97 | 94 | 87 | 88 | 85 | 86 | 79 | 91 | 87 | 80 | 82 | 88 | 72 | 86 | 88 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rain | 3 | 4 | 9 | 11 | 12 | 14 | 18 | 9 | 10 | 18 | 12 | 10 | 24 | 12 | 10 |
| Snow or Sleet | 0 | 1 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 1 | 6 | 0 | 3 | 1 | 1 |
| Fog or Mist | 0 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 0 | 1 | 1 | 1 | 1 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ROADWAY CONDITIONS

| Dry | 95 | 91 | 85 | 83 | 85 | 84 | 75 | 87 | 79 | 79 | 79 | 86 | 72 | 83 | 86 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wet | 5 | 8 | 14 | 16 | 13 | 16 | 24 | 13 | 19 | 20 | 18 | 14 | 27 | 16 | 13 |
| Snow, Ice, or Mud | 0 | 1 | 1 | 1 | 2 | 0 | 1 | 0 | 2 | 1 | 3 | 0 | 1 | 1 | 1 |
| Other | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table A-1 (Continued)
Summary Percentage for Total Pedestrian Accident Sample ( $\mathrm{N}=2044$ )

UPPER BOUNDS OF AGE CATEGORIES


VEHICLE TYPE

| Car | 89 | 85 | 84 | 86 | 85 | 80 | 80 | 81 | 90 | 79 | 84 | 80 | 82 | 85 | 84 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Taxi | 2 | 2 | 2 | 1 | 1 | 1 | 6 | 2 | 0 | 4 | 1 | 2 | 0 | 1 | 2 |
| Bus | 1 | 3 | 3 | 0 | 2 | 2 | 6 | 0 | 5 | 2 | 1 | 2 | 3 | 1 | 2 |
| Truck | 5 | 8 | 6 | 7 | 10 | 15 | 8 | 8 | 3 | 11 | 9 | 11 | 8 | 8 | 8 |
| Other | 3 | 3 | 3 | 5 | 2 | 1 | 0 | 8 | 2 | 4 | 4 | 6 | 6 | 5 | 4 |

TYPE OF ROAD

| Two-way | 78 | 81 | 84 | 86 | 75 | 70 | 70 | 58 | 74 | 65 | 74 | 59 | 66 | 67 | 75 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| One-way | 16 | 13 | 7 | 4 | 9 | 11 | 12 | 13 | 9 | 17 | 10 | 13 | 16 | 13 | 12 |
| Divided | 4 | 3 | 6 | 5 | 9 | 8 | 13 | 19 | 10 | 11 | 9 | 18 | 7 | 11 | 7 |
| Expressway | 0 | 1 | 0 | 2 | 2 | 5 | 5 | 4 | 5 | 3 | 3 | 1 | 7 | 4 | 2 |
| Other | 2 | 3 | 3 | 2 | 4 | 6 | 0 | 6 | 2 | 3 | 4 | 9 | 3 | 4 | 4 |

TYPE OF AREA

| Residential | 77 | 65 | 47 | 34 | 34 | 28 | 28 | 30 | 32 | 22 | 24 | 14 | 23 | 30 | 43 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial | 10 | 7 | 11 | 21 | 31 | 36 | 34 | 32 | 35 | 39 | 26 | 46 | 41 | 31 | 22 |
| Industrial | 0 | 0 | 2 | 0 | 2 | 2 | 0 | 2 | 2 | 2 | 1 | 3 | 0 | 1 | 1 |
| Undeveloped | 0 | 1 | 2 | 4 | 2 | 3 | 3 | 2 | 0 | 2 | 1 | 1 | 3 | 2 | 2 |
| School | 1 | 6 | 9 | 6 | 1 | 0 | 0 | 2 | 0 | 3 | 1 | 4 | 5 | 1 | 4 |
| Resid.Comm. | 11 | 21 | 26 | 29 | 26 | 26 | 34 | 27 | 24 | 25 | 35 | 22 | 22 | 31 | 25 |
| Resid.-Indus. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 2 | 1 | 1 |
| Comm.Indus. | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 3 | 0 | 3 | 0 | 1 | 1 |
| Other | 1 | 1 | 3 | 6 | 3 | 5 | 1 | 4 | 5 | 5 | 10 | 4 | 5 | 4 | 3 |

TRAFFIC CONTROL

| Traffic Signal | 7 | 12 | 16 | 23 | 30 | 28 | 33 | 31 | 33 | 35 | 53 | 48 | 39 | 37 | 24 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stop or Yield Sign | 3 | 6 | 6 | 6 | 9 | 8 | 7 | 6 | 7 | 15 | 4 | 15 | 6 | 12 | 7 |
| None | 89 | 82 | 76 | 71 | 60 | 62 | 60 | 57 | 58 | 47 | 41 | 37 | 54 | 50 | 67 |
| Other | 1 | 1 | 2 | 0 | 2 | 1 | 0 | 6 | 2 | 3 | 1 | 0 | 0 | 1 | 1 |

VEHICLE ACTION

| Going Straight | 82 | 86 | 81 | 68 | 57 | 62 | 65 | 62 | 71 | 54 | 60 | 54 | 67 | 65 | 72 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Backing | 3 | 1 | 0 | 4 | 7 | 6 | 6 | 9 | 3 | 5 | 9 | 7 | 4 | 6 | 4 |
| Turning Right | 3 | 2 | 5 | 5 | 6 | 5 | 6 | 7 | 3 | 12 | 7 | 6 | 3 | 7 | 5 |
| Turning Left | 2 | 3 | 3 | 6 | 10 | 9 | 13 | 9 | 10 | 15 | 10 | 16 | 13 | 10 | 7 |
| "U" Turning | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 1 |
| Stopped in Traffic | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| Starting in Traffic | 3 | 2 | 4 | 8 | 6 | 4 | 3 | 2 | 5 | 5 | 1 | 4 | 3 | 5 | 4 |
| Stopping or Slowing | 4 | 5 | 2 | 3 | 3 | 7 | 1 | 2 | 0 | 3 | 4 | 6 | 3 | 2 | 4 |
| Parking | 1 | 1 | 1 | 1 | 2 | 0 | 3 | 4 | 2 | 2 | 1 | 4 | 1 | 2 | 1 |
| Other | 1 | 1 | 3 | 4 | 7 | 4 | 3 | 4 | 5 | 3 | 4 | 3 | 3 | 3 | 3 |

Table A-1 (Continued)
Summary Percentage for Total Pedestrian Accident
Sample ( $\mathrm{N}=2044$ )


Table A-1 (Continued)
Summary Percentage for Total Pedestrian Accident
Sample ( $\mathrm{N}=2044$ )

| UPPER BOUNDS OF AGE CATEGORIES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Descriptive Data | 4 | 9 | 14 | 19. | 24 | 29 | 34 | 39 | 44 | 49 | 54 | 59 | 64 | $\begin{array}{\|l\|} \hline 65 \\ \text { Plus } \end{array}$ | Total |
| PED CROSSED |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Behind Parked Vehicle | 48 | 36 | 18 | 9 | 4 | 7 | 6 | 2 | 5 | 3 | 6 | 6 | 7 | 8 | 19 |
| Against Signal | 3 | 4 | 4 | 9 | 6 | 2 | 6 | 11 | 5 | 7 | 14 | 14 | 10 | 11 | 7 |
| Bus Stop/Front | 1 | 1 | 2 | 2 | 1 | 0 | 1 | 4 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| Bus Stop/Rear | 1 | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 1 |
| Front of Standing Traffic | 8 | 7 | 14 | 12 | 10 | 12 | 6 | 5 | 5 | 9 | 6 | 6 | 7 | 6 | 8 |
| PED ACTION |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Running | 54 | 80 | 51 | 36 | 23 | 17 | 20 | 14 | 17 | 13 | 22 | 6 | 7 | 15 | 40 |
| To/From Vendor | 6 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Crossing with Peds. | 8 | 10 | 15 | 20 | 19 | 7 | 16 | 7 | 5 | 12 | 10 | 9 | 10 | 9 | 11 |
| Not Crossing | 2 | 6 | 11. | 14 | 25 | 20 | 13 | 29 | 19 | 19. | 19 | 7 | 13 | 8 | 12 |
| In/out of Vehicle | 1 | 1 | 1 | 4 | 3 | 4 | 1 | 4 | 5 | 4 | 1 | 0 | 4 | 2 | 2 |
| Unaware Backing Vehicle | 3 | 1 | 1 | 3 | 5 | 5 | 6 | 7 | 0 | 4 | 4 | 7 | 3 | 4 | 3 |
| Appeared Suddenly | 58 | 57 | 49 | 37 | 33 | 33 | 37 | 25 | 38 | 37 | 28 | 43 | 42 | 42 | 45 |
| Walked into Vehicle | 20 | 18 | 13 | 17 | 6 | 10 | 4 | 7 | 5 | 9 | 10 | 7 | 6 | 9 | 13 |
| Working on Vehicle | 1 | 1 | 1 | 5 | 6 | 3 | 1 | 5 | 5 | 4 | 3 | 1 | 1 | 0 | 2 |
| Working in Roadway | 0 | 0 | 1 | 1 | 4 | 1 | 0 | 5 | 0 | 1 | 3 | 3 | 0 | 1 | 1 |
| Playing in Roadway | 3 | 4 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Attempted Evasion | 1 | 2 | 6 | 9 | 7 | 12 | 9 | 5 | 5 | 7 | 1 | 1 | 4 | 4 | 4 |
| Alcohol/Drugs | 0 | 1 | 0 | 2 | 6 | 4 | 16 | . 7 | 17 | 16 | 15 | : 10 | 7 | 3 | 4 |

Table A-1 (Continued)
Summary Percentage for Total Pedestrian Accident
Sample ( $\mathrm{N}=2044$ )

| UPPER BOUNDS OF AGE CATEGORIES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCIDENT TYPE | $\left\|\begin{array}{c} \bar{x} \\ \text { Conf } \end{array}\right\|$ | 4 | 9 | 14 | 19 | 24 | 29 | 34 | 39 | 44 | 49 | 54 | 59 | 64 | $\begin{gathered} 65 \\ \text { Plus } \end{gathered}$ | Total |
| D/O First |  | 44 | 32 | 18 | 13 | 11 | 14 | 6 | 9 | 21 | 12 | 10 | 12 | 18 | 15 | 21.2 |
| D/O Second |  | 7 | 12 | 13 | 8 | 9 | 7 | 4 | 5 | 10 | 3 | 4 | 6 | 6 | 6 | 8.8 |
| Int. Dash |  | 8 | 17 | 18 | 12 | 8 | 13 | 20 | 9 | 8 | 19 | 19 | 23 | 19 | 22 | 15.9 |
| T/M Conflict |  | 2 | 1 | 1 | 1 | 4 | 2 | 3 | 2 | 3 | 0 | 1 | 9 | 1 | 5 | 2.1 |
| Ped Strike Veh. |  | 2 | 2 | 3 | 5 | 2 | 3 | 3 | 2 | 2 | 4 | 6 | 1 | 3 | 2 | 2.6 |
| Mult. Threat |  | 2 | 2 | 8 | 4 | 1 | 4 | 3 | 0 | 2 | 0 | 1 | 3 | 0 | 3 | 2.8 |
| Bus Stop |  | 1 | 1 | 2 | 2 | 1 | 0 | 1 | 4 | 0 | 1 | 1 | 1 | 1 | 1 | 1.0 |
| Backingup |  | 3 | 1 | 0 | 2 | 5 | 4 | 6 | 7 | 2 | 4 | 4 | 6 | 0 | 4 | 2.6 |
| Vendor |  | 6 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.7 |
| Wierd |  | 2 | 3 | 6 | 8 | 9 | 4 | 4 | 7 | 11 | 4 | 6 | 4 | 4 | 3 | 4.8 |
| Result of Auto-Auto |  | 0 | 0 | 1 | 4 | 5 | 5 | 1 | 5 | 3 | 4 | 3 | 1 | 0 | 1 | 1.6 |
| Secondary |  | 2 | 2 | 1 | 5 | 8 | 6 | 6 | 7 | 2 | 9 | 11 | 6 | 9 | 3 | 3.9 |
| Midblock-Dash |  | 17 | 16 | 7 | 5 | 2 | 1 | 1 | 4 | 5 | 1 | 0 | 0 | 1 | 1 | 7.2 |
| Trapped |  | 0 | 1 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 1 | 1 | . 8 |
| Turning Veh. |  | 1 | 1 | 4 | 7 | 5 | 8 | 6 | 7 | 6 | 18 | 11 | 12 | 12 | 8 | 5.6 |
| Not in Road |  | 1 | 1 | 4 | 5 | 5 | 10 | 4 | 4 | 3 | 4 | 7 | 0 | 1 | 4 | 3.4 |
| Not Coded |  | 4 | 5 | 14 | 16 | 22 | 17 | 29 | 27 | 24 | 12 | 15 | 13 | 21 | 22 | 14.1 |

MISSING DATA BY CATEGORY

| Descriptive Data | Unknown |
| :--- | :---: |
| Ped Age | 3 |
| Month | 1 |
| Time of Day | 2 |
| Day of Week | 3 |
| Driver Age | 13 |
| Driver Sex | 3 |
| Ped Sex | 1 |
| Injury Severity | 5 |
| Light Conditions | 2 |
| Weather Conditions | 1 |
| Roadway Conditions | 1 |
| Vehicle Type | 5 |
| Type of Road | 7 |


| Descriptive Data | Unknown |
| :--- | :---: |
| Type of Area | 4 |
| Traffic Control | 3 |
| Intersection | 3 |
| Crosswalk | 5 |
| Traffic Lanes | 6 |
| Lane Entered | 11 |

## APPENDIX B

SELECTED PLAY STREET OBSERVATION FORMS


CHARACTERISTICS: This street is Residential composed of six and seven story multi-family dwellings. This is a one way street.

| ESTIMATED STREET WIDTH: | 30 Feet |
| :--- | ---: |
| ESTIMATED STREET LENGTH: | 200 Feet |
| NUMBER OF VEHICLES |  |
| PARKED ON STREET: |  |

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 50\%

TYPE OF BARRICADE: Two wooden Police Barriers

SIGN LEGEND: No sign present

NUMBER OF PERSONS OBSERVED USING THE STREET: One-hundred persons
ACTIVITIES OBSERVED: Volleyball, bicycling, shuffle board and nok-hockey.
ADDITIONAL OBSERVATIONS: The street shower was running while no one was using it. This is quite a densely populated area. There were 3 cars parked in front of the barrier blocking vehicular entrance to the street. Street markings present.


CHARACTERISTICS: This street is located in a Residential area composed of two story attached, single family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 24 Feet
ESTIMATED STREET LENGTH: 250 Feet
NUMBER OF VEHICLES PARKED ON STREET:

12 Cars
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: None

TYPE OF BARRICADE: String
SIGN LEGEND: Standard Recreation Department Paper Sign

## NUMBER OF PERSONS OBSERVED USING THE STREET: Ten children

ACTIVITIES OBSERVED: Playing on sidewalk
ADDITIONAL OBSERVATIONS: Approximately five children from the 5-9 age group and five from the 10-14 age group were observed playing quietly on the sidewalks. One adult was observed working in his garden.


CHARACTERISTICS: This is a Residential area composed of three and four story multi-family dwellings. This is a one way street.

| ESTIMATED STREET WIDTH: | 32 Feet |
| :--- | ---: |
| ESTIMATED STREET LENGTH: | 150 Feet |
| NUMBER OF VEHICLES |  |
| PARKED ON STREET: | 6 Cars |
| PERCENT OF STREET BEING: |  |
| UTILIZED FOR ACTIVITIES: | $25 \%$ |

TYPE OF BARRICADE: Police Barrier
SIGN LEGEND: Standard Police Athletic League sign

NUMBER OF PERSONS OBSERVED USING THE STREET: Forty-five persons
ACTIVITIES OBSERVED: Nok-hockey, board games, basketball and carroms.
ADDITIONAL OBSERVATIONS: There were four children from the $1-4$ age group, twenty of the $5-9$ age group, ten of the 10-14 age group, eight of the 15-19 age group, and five adults on the playstreet. There is a school located on the corner of the block. There were three persons cleaning the street. Lunch was delivered during the observation period. The barrier was opened to permit the truck access and then closed again. Street markings were present.


CHARACTERISTICS: This is a Residential area composed of three story attached single and multiple family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 30 Feet ESTIMATED STREET LENGTH: 175 Feet NUMBER OF VEHICLES PARKED ON STREET: 30 Cars

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 30\%

TYPE OF BARRICADE: String
SIGN LEGEND: Standard Model Cities paper sign with cardboard backing sheet

## NUMBER OF PERSONS OBSERVED USING THE STREET: Sixteen persons

ACTIVITIES OBSERVED: Volleyball, board games, and street cleaning.
ADDITIONAL OBSERVATIONS: Eight boys were playing vollyball. Their ages ranged from 7 through 15 years. Three persons were cleaning (sweeping) the street. About five girls were playing board games.


CHARACTERISTICS: This street is located in a Residential area composed of four and five story multi-family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 47 Feet ESTIMATED STREET LENGTH: 280 Feet

NUMBER OF VEHICLES 30 Cars PARKED ON STREET:

## PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 35\%

TYPE OF BARRICADE: Two Police Barriers

SIGN LEGEND: Standard Police Athletic League and Standard Traffic Engineering sign.

## NUMBER OF PERSONS OBSERVED USING THE STREET: Ninety persons

ACTIVITIES OBSERVED: Basketball, skelly, volleyball, nok-hockey, stick ball, carroms and wiffle ball.
ADDITIONAL OBSERVATIONS: A skelly tournament is in progress in the center of the photo. There is a school with a playground located on this block, but it is closed for the summer. This street was littered with a noticeable amount of glass and trash. Arts and crafts activities were taking place in an indoor facility. Street markings were present.


CHARACTERISTICS: This is a Residential street composed of two story single family attached dwellings. This one way street was barricaded at both ends.

ESTIMATED STREET WIDTH: 20 Feet
ESTIMATED STREET LENGTH: 200 Feet
NUMBER OF VEHICLES PARKED ON STREET:

## PERCENT OF STREET BEING

 UTILIZED FOR ACTIVITIES: NoneTYPE OF BARRICADE: String at one end. Wooden Police Barrier at the other end.

SIGN LEGEND: Standard Recreation Department sign

NUMBER OF PERSONS OBSERVED USING THE STREET: Twelve children
ACTIVITIES OBSERVED: Board games, jacks, etc.
ADDITIONAL OBSERVATIONS: Five girls between the ages of 4 through 6 were observed playing games on stoops. Most, if not all of the activity was taking place out of the roadway and up on the stoops. Several adults were observed on their stoops. At the time of these observations, one vehicle drove through the street. There was a permanent diamond shaped sign with black legend on yellow background "Watch for Children."


CHARACTERISTICS: This street is a densely populated Residential street composed of five and six story multi-family dwellings and several stores. This is a one way street. Both 7th and 8th Avenues are predominantly Commercial arterials.

ESTIMATED STREET WIDTH: 35 Feet
ESTIMATED STREET LENGTH: 175 Feet
NUMnBER OF VEHICLES
PARKED ON STREET: None
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 65\%

TYPE OF BARRICADE: Wooden Barrier SIGN LEGEND: No sign present

NUMBER OF PERSONS OBSERVED USING THE STREET: Two-hundred persons
ACTIVITIES OBSERVED: Volleyball, basketball, nok-hockey and shuffleboard
ADDITIONAL OBSERVATIONS: There is a school located on this block. There were approximately 100 children and 100 adults out in the street either playing games or socializing. Street markings exist.


CHARACTERISTICS: This is a Residential street composed primarily of two and three story single and multiple family attached dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 35 Feet
ESTIMATED STREET LENGTH: 150 Feet
NUMBER OF VEHICLES
PARKED ON STREET: 15 - 20 Cars
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $25 \%^{*}$

TYPE OF BARRICADE: String
SIGN LEGEND: Standard Model Cities paper sign

NUMBER OF PERSONS OBSERVED USING THE STREET: Thirty children
ACTIVITIES OBSERVED: Badminton, catch, basketball, baseball, bicycling, board games, street shower and various other games.

ADDITIONAL OBSERVATIONS: The empty corner lot on the street has been paved and is being used for various activities.

[^3]W. 129th Street (Lenox Ave. to 5th Ave.) - Manhattan, N.Y. - 17 July 1974-6:00 P.M.

Sponsoring Agency: Police Athletic League


CHARACTERISTICS: This street is predominantly Residential composed of five and six story mjlti-family dwellings with several Commercial stores. This is a one way street.

ESTIMATED STREET WIDTH: 30 Feet
ESTIMATED STREET LENGTH: 250 Feet
NUMBER OF VEHICLES PARKED ON STREET: 3 Cars

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $50 \%$

TYPE OF BARRICADE: One and one-half wooden Police Barriers

SIGN LEGEND: No sign present

NUMBER OF PERSONS OBSERVED USING THE STREET: Óne hundred ten persons
ACTIVITIES OBSERVED: Volleyball, shuffle board, baseball, bicycling, board games, basketball and nok-hockey.
ADDITIONAL OBSERVATIONS: Several street vendors were selling hot dogs on this street. The street was lined with multi-colored flags at the second story level. There were approximately 60 children from 3 thru 18 years of age using the street, approximately 50 adults were observed sitting about talking. This is quite an active play street. Street markings are used. Hydrant is being used.


CHARACTERISTICS: This is a narrow one way street. The street is located in a Residential neighborhood composed of 3 story single and multiple family dwellings. Several garages and back yards lined one side of the street.

| ESTIMATED STREET WIDTH: | 20 Feet |
| :--- | :--- |
| ESTIMATED STREET LENGTH: | 90 Feet |
| NUMBER OF VEHICLES <br> PARKED ON STREET: |  |
| PERCENT OF STREET BEING <br> UTILIZED FOR ACTIVITIES: |  |

TYPE OF BARRICADE: None in use at that time SIGN LEGEND: No signs visible

## NUMBER OF PERSONS OBSERVED USING THE STREET: None

activities ObSERVED: None
ADDITIONAL OBSERVATIONS: Two or three persons were observed walking down the street. Multi-colored flags were decorating the street. The play street had street markings which cars had parked over. There were several condemned buildings and boarded up houses on the street. The markings used were unique to this block. A barrier which was not in use is lying on the sidewalk on the lower left hand corner of the photo. The barrier is tied to the utility pole and should have been up since it was the time of day when the play street was in effect.


CHARACTERISTICS: This is a Residential street composed of four and six story multifamily dwellings. This is a one way street. 187th street is heavily Commerical with apartments over the first stories.

## ESTIMATED STREET WIDTH: 35 Feet

ESTIMATED STREET LENGTH: 100 Feet
NUMBER OF VEHICLES PARKED ON STREET: 4 Cars

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 30\%

TYPE OF BARRICADE: Police Barrier
SIGN LEGEND: Standard Traffic Engineering sign - 10:00 A.M. - 8:00 P.M.

NUMBER OF PERSONS OBSERVED USING THE STREET: Fifty persons
ACTIVITIES OBSERVED: Volleyball, basketball, shuffle board, and nok-hockey
ADDITIONAL OBSERVATIONS: There is a playground located on one corner of the block. The playground was deserted during our observations. The volleyball net was set up too close to 187 th street and the volleyball went into 187th street several times.


CHARACTERISTICS: This street is composed of two story attached single and multiple family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 20 Feet
ESTIMATED STREET LENGTH: 130 Feet NUMBER OF VEHICLES PARKED ON STREET:

8 Cars
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: None

TYPE OF BARRICADE: Two wooden police barriers painted white. The legend hand painted on the barrier itself read: Play Street-10 A.M. - 4 P.M.

SIGN LEGEND: No sign

## NUMBER OF PERSONS OBSERVED USING THE STREET: Four persons

ACTIVITIES OBSERVED: Board games
ADDITIONAL OBSERVATIONS: There were four or five children aged 7 through 13 years playing games on the sidewalk and on porches. This street intersects with 58 th street which is an arterial street composed of residences located over numerous stores.

144th Street (Bradhurst to 8th Ave.) - Manhattan, N.Y. - 17 July 1974 - 5:20 P.M.
Sponsoring Agency: Police Athletic League


CHARACTERISTICS: This street is predominantly Residential composed of five and six story multi-family dwellings and several small stores. This is a one way street.

ESTIMATED STREET WIDTH: 33 Feet
ESTIMATED STREET LENGTH: 85 Feet
NUMBER OF VEHICLES PARKED ON STREET: 4 Cars PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $35 \%$

TYPE OF BARRICADE: Wooden Police Barrier and stanchion with sign
SIGN LEGEND: Standard Traffic
Engineering Sign

NUMBER OF PERSONS OBSERVED USING THE STREET: Seventy-five persons
ACTIVITIES OBSERVED: Volleyball, cards, dice, shuffle board, basketball and bicycling
ADDITIONAL OBSERVATIONS: Approximately fifty children between 4 and 17 years of age were engaged in the various activities. Approximately thirty adults were either playing cards, dice or socializing on the street. Many of the adults provide their own folding chairs. Street markings for games.

## Sponsoring Agency: Recreation Department



CHARACTERISTICS: Primarily a Residential street composed of two story single family residences. This is a one way street.

| ESTIMATED STREET WIDTH: | 16 Feet |
| :--- | ---: |
| ESTIMATED STREET LENGTH: | 100 Feet |
| NUMBER OF VEHICLES |  |
| PARKED ON STREET: | 1 Car |

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: None

TYPE OF BARRICADE: Wooden construction barrier with flashing light

SIGN LEGEND: Torn Standard Recreation Department Paper Sign tapped to barrier

## NUMBER OF PERSONS OBSERVED USING THE STREET: None

ACTIVITIES OBSERVED: None
ADDITIONAL OBSERVATIONS: The street appears to be deserted. Some children were observed playing on a perpendicular street. One vehicle was observed going around the barrier and driving through the street.

Mapes Avenue (178th to 179th Sts.) - The Bronx, N.Y. - 18 July 1974-5:30 P.M.

Sponsoring Agency: Police Athletic League


CHARACTERISTICS: This block is primarily Residential in nature composed of five and six story multi-family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 30 Feet
ESTIMATED STREET LENGTH: 85 Feet
NUMBER OF VEHICLES PARKED ON STREET: None

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 70\%

TYPE OF BARRICADE: Two Police Barriers plus one small barrier

SIGN LEGEND: Standard Police Athletic League sign plus Standard Traffic Engineering sign

NUMBER OF PERSONS OBSERVED USING THE STREET: Sixty persons
ACTIVITIES OBSERVED: Basketball, volleyball, nok-hockey, carroms, jump rope
ADDITIONAL OBSERVATIONS: The persons utilizing this play street were of various ages from age 3 through adults. This street had a large off street meeting room where arts and crafts activities were conducted. About 100 of the luncheon paper plates had been decorated and were upon the walls.


CHARACTERISTICS: This street is in a
Residential area composed of two story single family attached dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 16 Feet
ESTIMATED STREET LENGTH: 150 Feet
NUMBER OF VEHICLES PARKED ON STREET:

10 Cars
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 5\%
TYPE OF BARRICADE: Wooden Police Barrier

SIGN LEGEND: Standard Recreation Department Paper Sign pasted on cardboard backing

NUMBER OF PERSONS OBSERVED USING THE STREET: Seven people ACTIVITIES OBSERVED: Badminton and board games

ADDITIONAL OBSERVATIONS: Two girls from the 10-14 age group were playing badminton. Approximately five children were observed sitting on stoops with adults.


CHARACTERISTICS: This is a nne way Residential street composed of four and five story multi-family dwellings.
ESTIMATED STREET WIDTH: 30 Feet
ESTIMATED STREET LENGTH: 120 Feet
NUMBER OF VEHICLES
PARKED ON STREET: None
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $75 \%$

TYPE OF BARRICADE: Two wooden Police Barriers

SIGN LEGEND: Standard Traffic
Engineering sign

NUMBER OF PERSONS OBSERVED USING THE STREET: One hundred persons
ACTIVITIES OBSERVED: Basketball, volleyball and street games.
ADDITIONAL OBSERVATIONS: Most of the children using the street were 5-10 years old. There were about 75 adults sitting on chairs or on stoops. The hydrant had a shower cap to control the water flow and no one was using it during the observation period. Street markings were present.

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CHARACTERISTICS: Tinis is a Residential street composed of two story attached single family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 15 Feet ESTIMATED STREET LENGTH: 90 Feet NUMBER OF VEHICLES PARKED ON STREET:

8 Cars
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 5\%

TYPE OF BARRICADE: String
SIGN LEGEND: Standard Model Cities sign

NUMBER OF PERSONS OBSERVED USING THE STREET: Twenty persons
ACTIVITIES OBSERVED: Most of the children were eating lunch on the sidewalk and stoops.

## ADDITIONAL OBSERVATIONS:



CHARACTERISTICS: This street is
Residential composed of four, five and six story multi-family dwellings with several small shops. This is a one way street. Both Amsterdam and Broadway are Commercial arterials.

ESTIMATED STREET WIDTH: 40 Fee
ESTIMATED STREET LENGTH: 350 Fee
NUMBER OF VEHICLES PARKED ON STREET:

5 Cars:

## PERCENT OF STREET BEING

 UTILIZED FOR ACTIVITIES:TYPE OF BARRICADE: Two wooden Police Barriers

SIGN LEGEND: Standard Police Athletic League sign and Standard Traffic Engineering sign.

NUMBER OF PERSONS OBSERVED USING THE STREET: Sixty-five persons
ACTIVITIES OBSERVED: Jump rope, drawing, volleyball, basketball, carroms, and nok-hockey.
ADDITIONAL OBSERVATIONS: There is a church located on this block. We spoke to the Block Association President who indicated that neighboring block associations hold social functions on this street and the Recreation Department mobile vehicles (bookmobile, puppet mobile, skate mobile, etc.) hold the area activities on this street. There were approximately twenty children of the 5-9 age group, fifteen of the $10-14$ age group, ten of the $15-19$ age group and thirty adults out in the street. There were extensive street markings for games. Garbage cans were used as the supports for table top games (nok-hockey, etc.) (see center of photo left side). The storage facility for the equipment was too small. The hours on the Department of Traffic Engineering sign are not correct for this year, since the hours of operation are from 1:00 P.M. to 8:00 P.M.


CHARACTERISTICS: This is a Residential street composed o two story attached single family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 16 Feet
ESTIMATED STREET LENGTH: 120 Feet
NUMBER OF VEHICLES
PARKED ON STREET: 15 Cars
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $1 \%$

TYPE OF BARRICADE: Wooden Police Barrier

SIGN LEGEND: No signs present

NUMBER OF PERSONS OBSERVED USING THE STREET: Two people
ACTIVITIES OBSERVED: Bicycling
ADDITIONAL OBSERVATIONS: We observed one child riding his bicycle on the street and one child running down the street. Most of the people on the street were sitting about on their porches.


CHARACTERISTICS: This block is primarily Residential composed of two and three story single and multi-family dwellings. There is a school located on this block. This street is a one way street.

ESTIMATED STREET WIDTH: 35 Feet
ESTIMATED STREET LENGTH: 200 Feet
NUMBER OF VEHICLES
PARKED ON STREET: 1 Car
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $20 \%$

TYPE OF BARRICADE: Police Barrier
SIGN LEGEND: Standard Traffic
Engineering Sign

NUMBER OF PERSONS OBSERVED USING THE STREET: Forty children
ACTIVITIES OBSERVED: Basketball, volleyball, carroms, checkers, bicycling, nok-hockey and kissing game
ADDITIONAL OBSERVATIONS: A movie was being shown to some one hundred children in the basement of the school (an off-street facility). The children on the street were playing or watching a group game. The street had markings.


CHARACTERISTICS: This street is located in a Residential area composed of three story attached multi-family dwellings. The street is a one way street.

ESTIMATED STREET WIDTH: 25 Feet
ESTIMATED STREET LENGTH: 150 Feet
NUMBER OF VEHICLES
PARKED ON STREET: 15 Cars
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $5 \%$

TYPE OF BARRICADE: Two Police Barriers plus two Traffic Cones

SIGN LEGEND: There were two Standard Model Cities Signs.

NUMBER OF PERSONS OBSERVED USING THE STREET: Five children playing ball.
ACTIVITIES OBSERVED: Children playing and adults talking
ADDITIONAL OBSERVATIONS: The children observed playing ball were about $5-8$ years old. There were also five or six adults on the street sitting about conversing. The barriers were set up so that the signs were backwards and could not be read by traffic.


CHARACTERISTICS: This is a Residential street composed of six story multi-family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 30 Feet
ESTIMATED STREET LENGTH: 150 Feet
NUMBER OF VEHICLES PARKED ON STREET: 7 Cars

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 30\%

TYPE OF BARRICADE: Wooden Police Barrier

SIGN LEGEND: Standard Police Athletic League sign plus Stnadard Traffic Engineering sign

## NUMBER OF PERSONS OBSERVED USING THE STREET: Fifty persons

ACTIVITIES OBSERVED: Volleyball, basketball and nok-hockey
ADDITIONAL OBSERVATIONS: There were approximately thirty children of various ages on the street and approximately twenty adults sitting about watching the activities. One of the adults indicated that adults use the street to play basketball and volleyball after dinner until 8:00 P.M. The surrounding blocks in this area are quite run down and garbage strewn. The basketball stanchion, the volleyball net and street markings can be seen in the photo.


CHARACTERISTICS: This street is located in a Residential area composed of three story attached single and multiple family dwellings.

## ESTIMATED STREET WIDTH: 20 Feet ESTIMATED STREET LENGTH: 125 Feet

 NUMBER OF VEHICLES PARKED ON STREET: 5 Cars
## PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 50\%

TYPE OF BARRICADE: String at both ends of the street

SIGN LEGEND: Standard Model Cities paper sign

NUMBER OF PERSONS OBSERVED USING THE STREET: Thirty persons
ACTIVITIES OBSERVED: Lunch distribution, singing, volleyball, board games including scrabble and monopoly, etc.

ADDITIONAL OBSERVATIONS: There were five children in the $0-4$ age group six in the 5-9 age group, ten in the $10-14$ age group, five in the 15-19 age group and two adults observed. The street was a clean street, lined with home-made planters. The street seemed very active. Adult supervision was present. Street markings were used in conjunction with games.


CHARACTERISTICS: This block is composed of three and four story multiple family attached dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 35 Feet
ESTIMATED STREET LENGTH: 200 Feet
NUMBER OF VEHICLES
PARKED ON STREET: 1 Car plus 1 Truck
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $35 \%$

TYPE OF BARRICADE: Two Police Barriers
SIGN LEGEND: Legends on signs facing wrong way

NUMBER OF PERSONS OBSERVED USING THE STREET: Eighty-five persons
ACTIVITIES OBSERVED: Basketball, lunch program, bicycling, board games and watching children.
ADDITIONAL OBSERVATIONS: There were thirty adults watching the children throughout the block. The ages of the children playing are quite varied. The barriers were set up with the signs facing into the block rather than towards traffic. Street markings for games are evident in the photo.


CHARACTERISTICS: This street is located in a Residential area composed of two and three story attached single and multiple family dwellings. The street is a one way street.

ESTIMATED STREET WIDTH: 35 Feet
ESTIMATED STREET LENGTH: 150 Feet
NUMBER OF VEHICLES PARKED ON STREET: 25

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $25 \%$

TYPE OF BARRICADE: A wooden Police Barrier is located at one end of the street and a string supporting a Standard Model Cities Sign is located at the other end.

SIGN LEGEND: Two standard Model Cities Paper Signs are displayed on this street. (One on each barrier at each end of the street.)

NUMBER OF PERSONS OBSERVED USING THE STREET: Thirty-six persons ( 20 from ages $5-9$ and 6 from ages 10 -15).
ACTIVITIES OBSERVED: Board games, street games, bicycling and street shower activities.
ADDITIONAL OBSERVATIONS: Ten adults were observed sitting on folding chairs, watching the children and talking. Several home made, painted rubber tire planters lined the street. Some children were finishing their lunches when we arrived on the street. There were Street Supervisory Personnel present - markings for street games.


CHARACTERISTICS: This is a one way Residential street composed of six story multi-family dwellings.

ESTIMATED STREET WIDTH: 35 Feet
ESTIMATED STREET LENGTH: 100 Feet
NUMBER OF VEHICLES PARKED ON STREET:

1 Truck
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 40\%

TYPE OF BARRICADE: Two wooden Police Barriers
SigN LEGEND: Standard Traffic Engineering Sign on stanchion

NUMBER OF PERSONS OBSERVED USING THE STREET: Fifty persons
ACTIVITIES OBSERVED: Basketball, hop scotch, jump rope, and street games
ADDITIONAL OBSERVATIONS: There was a large trash receptacle in the middle of the block. There were thirty children of various ages playing on the block while approximately twenty adults observed the activities. Street markings were not observed. Basketball hoop with backboard as opposed to portable non-backboard Police Athletic League basketball stanchion.


CHARACTERISTICS: This street is located in a Residential area composed of five to twelve story multi-family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 35 Feet
ESTIMATED STREET LENGTH: 80 Feet
NUMBER OF VEHICLES
PARKED ON STREET:
1 Car
PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: 50\%

TYPE OF BARRICADE: Two wooden
Police Barriers
SIGN LEGEND: Standard Traffic
Engineering sign on a roll out stanchion

## NUMBER OF PERSONS OBSERVED USING THE STREET: Fifty persons

ACTIVITIES OBSERVED: Ball games, street games and volleyball
ADDITIONAL OBSERVATIONS: Most of the people using this street were between 7 and 14 years of age. There were some adults sitting about the street watching the children. Street markings for games were present.


CHARACTERISTICS: This block is composed of three and four story multi-family attached dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 35 Feet ESTIMATED STREET LENGTH: 150 Feet NUMBER OF VEHICLES PARKED ON STREET: 20 Vehicles

PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: $25 \%$

TYPE OF BARRICADE: Two Police Barriers

SIGN LEGEND: Standard Police Athletic League sign plus Standard Traffic Engineering sign

NUMBER OF PERSONS OBSERVED USING THE STREET: Forty children
ACTIVITIES OBSERVED: Volleyball, basketball, street sweeping
ADDITIONAL OBSERVATIONS: Ten to twelve children were on the street itself while an additional thirty children were on the sidewalks. There were twenty adults sitting on stoops. The Police Athletic League Supervisor informed us that parking is a problem on this street. The opposite end of this street had two symbolic permanent traffic signs on posts signifying "Do Not Enter." The residents and Police Athletic League staff were cleaning the street and distributing lunches.


CHARACTERISTICS: This is a Residential street composed of four and five story multi-family dwellings. This is a one way street.

ESTIMATED STREET WIDTH: 35 Feet ESTIMATED STREET LENGTH: 75 Feet NUMBER OF VEHICLES PARKED ON STREET: None PERCENT OF STREET BEING UTILIZED FOR ACTIVITIES: None

TYPE OF BARRICADE: Two wooden barriers at one end of the street

SIGN LEGEND: Standard Traffic
Engineering sign on stanchion at both ends of the street

## NUMBER OF PERSONS ObSERVED USING THE STREET: One

## ACTIVITIES OBSERVED: Bicycling

ADDITIONAL OBSERVATIONS: This street was just closing as we got there. The Street Supervisor indicated that this street is run by the local community. Its hours of operation are 9:00 A.M. to 5:00 P.M., Monday thru Friday. The surrounding streets are Residential/Light Commercial streets.


[^0]:    *An average of 272 family dwelling units per street was found in New York City.
    ${ }^{* *}$ The average user is 11 years old, and $67 \%$ of the users live on the block, $95 \%$ living within 3 blocks.
    ****Approximately one-half mile.
    **** Bennett, G.T., \& Lane, R.
    ***** Bakker, J. et al.

[^1]:    *An additional twelve play streets funded by the Model Cities Program utilized some of the services of the PAL in the conduct of play street operations.

[^2]:    *Others 5 percent.

[^3]:    *The children's activities were observed alternating from the lot on the corner to the street itself.

