

# SAFETY VILLAGE—A TRAFFIC SAFETY PROJECT

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## INTRODUCTION

Submitted herewith is a report of a proposed "Safety Village" project for the city of Fort Wayne, Indiana. All factual data submitted in this report is the result of an intensive study involving primary age school children in the city of Fort Wayne that have been involved in pedestrian and bicycle accidents. The report will deal with principles to improve such accident experience. It will also serve as a median to encourage the interest for the expansion of a better traffic safety program for the thousands of children living in and near our community. The entire project has been developed as an expedient to formulate a sound approach to a critical problem. The problem is the need for expanded traffic safety education of school children as they go to and from school, to church, to play, or wherever, both as pedestrians and bicyclists. It is a problem about which the parent is most deeply concerned, particularly so if it happens to be the first child that is exposed to the hazards of everyday traffic.

Parents by and large have been found to be primarily concerned with the student's safety only during the time the child is going to and from school. After this particular period of day, child safety is often dismissed from their minds and acts of unsafe pedestrian or play habits go unnoticed. This moment of laxity has been common in many instances in Fort Wayne. It has been a contributing accident factor that must be overcome.

There is no traffic casualty that arouses greater public indignation and concern than the injury or death of a child going to and from school. No traffic issue provokes parents and civic leaders to plague highway officials with more persistent demands for better police enforcement, traffic signs, traffic signals, pavement markings and other means for protection of their children from the lethal potential of the automobile. It is our intention by the fabrication of a miniature village, constructed to one-third scale, with an exact replica of traffic condi-

tions that exist on our city streets, to communicate with the children of elementary school age so as to teach them the basic fundamentals of pedestrian and bicycle safety. The village will contain as many possible traffic conditions that a child would be exposed to in daily or weekly routine living. They will be taught to be alert to all traffic situations and obedience to official traffic control devices. The village will contain streets of residential, commercial and industrial design. There will be two-way streets, one-way streets, intersections controlled by traffic signals, stop signs and yield signs. There will be a railroad crossing, school zones, no parking areas and other routine traffic situations.

During 1975 there were 144 pedestrian accidents in the city of Fort Wayne. Two persons were killed. There was an estimated \$827,000 loss in death and injury. Ninety-one of these 144 pedestrian accidents, or about 63% involved children of ages five through 12. Eighty-three of these 144 accidents or about 58%, involved pedestrians that were crossing the street at a location other than an intersection. Bicycle statistics reveal there were 104 bicycle accidents during 1975. One person was killed. There was an estimated death and injury loss of about \$509,000. Forty-seven of these 105 bicycle accidents or about 45%, involved children of ages five through 12. During the twelve month period of 1975 there was an estimated death and injury loss totaling \$1,335,000 from pedestrian and bicycle accidents alone. 1976 is no exception; we are well on the way to another record-breaking year of injury and death involving young pedestrians and bicyclists.

It is our goal to start a chain reaction of safety with a proper training program. Our intent is simply to make traffic safety contagious. We will teach the basics of traffic safety such as pedestrian and bicycle rules and regulations, impressing on these young people the importance of being alert at all times and recognizing hazardous situations and the defense or the proper thing to do to protect themselves from harm. We are of the opinion that a definite decrease in the number of pedestrian and bicycle accidents can be realized in our city one year after the program is initiated.

The site location for the construction of the village has been approved by the present city administration. The area to be developed on the southeast corner of the intersection of Lafayette Street and Wallace Street is city-owned. The location at the present time is being used as an off-street parking site for city utilities employees. The existing parking lot will be relocated in another area in the immediate vicinity.

Once the village has been completed the entire program will be supervised by the Fort Wayne Police Department's Traffic Safety

Education Bureau. The village is only one part of a two part program. The present classroom facilities of the Police Training Center at the Police Academy will be utilized for classroom training and instruction. Students participating in the program will learn by use of visual aids their responsibilities and what to do when they participate in the village operation. The classroom facilities at the Police Training Center are located directly across the street from the village on the northeast corner of the intersection of Lafayette Street and Wallace Street. There is adequate parking for school buses and or parents' vehicles that will be transporting the students from the respective schools to the training site.

The Fort Wayne Community Schools have reviewed the proposed program and the Safety Village concept and have given their approval, support and complete cooperation in scheduling students for participation in the Traffic Safety Education program. The entire program is geared to accomodate from about 15 to 30 students in a group at one time. Both the classroom facilities and the training facilities within the village will operate very efficiently and effectively with a group limited to this size. Classroom instruction and participation in the operation of the village will be accomplished within an hour.

The village surface will be asphalt and the street will be outlined with an asphalt curb. A liquid type material (green in color) will be applied to the asphalt surface so as to designate parkway strips, sidewalks and other landscaped areas providing a turf-like effect. All traffic signs will be of uniform shape, color, and message, but will be reduced in size accordingly. Pavement markings such as center-lines, lane-lines, crosswalk, and stop-lines will be of permanent plastic to provide long life duration. Buildings will be constructed by the Co-operational Vocational Education Classes of the Fort Wayne Community School under the supervision of the director of the vocational program who has agreed to design and construct the buildings as a class project. The only cost involved will be materials used in the construction of the buildings. All labor will be donated by members of the class. The buildings will be constructed to scale and will resemble residential dwellings, commercial buildings, industrial buildings, a police station, fire station, and a school building. The school building will be built so as to accomodate storage of equipment that will be nonpermanent in nature in the village.

Landscaping will be under the supervision of the Park Department and will coincide with the decor of the entire village. Screening along Lafayette Street, which is a major highway through the city, will provide

adequate sound muffling and sight restriction to lessen the possibility of distraction of the students. The three intersections designed to be controlled by automatic traffic signals will provide the students an opportunity to see and understand how a traffic signal operates and the message it provides and why it is important to obey this message. They will also have an opportunity to operate the pedestrian WALK-WAIT signals that will tell them when to cross the street. The identification of the word message WALK and DON'T WALK and the colors of the pedestrian signal and what they mean will also be explained in detail. They will have an opportunity to identify various traffic signs. They will not only recognize these signs, but will understand more thoroughly what the signs mean and why they must be obeyed. They will learn why traffic signs alone will not protect them from possible danger and how they must rely on more than just a sign. Their own knowledge of the various hazards that exists in daily traffic situations will be their main weapon of protecting themselves from possible harm.

The entire parcel of ground that is approximately 165 ft. in width and 190 ft. in length will be protected by a chain length fence with adequate landscaping. Street lighting will be combined with security lighting to give the complex adequate protection as well as to provide a more realistic atmosphere. The village will be available for night time usage. As part of the training program miniature electric powered automobiles will be used. They will be powered by a dry cell battery that can be recharged with 110 current. It is a very durable piece of equipment constructed mainly of plastic that will provide a more realistic affect within the village. The vehicle can be operated by any child that is at least five years old and has ability and coordination. It will accomodate up to 100 lbs safely. By using students as automobile drivers a more realistic atmosphere can be created and also can be utilized as a means for conveying to the pedestrian and bicyclist the dangers that exist involving motor vehicle traffic.

The village will be in operation from the earliest possible time in the spring throughout the remaining school semester and periodically throughout the summer as scheduling will allow. It will remain in use as late in the fall as weather will permit. The Police Department's Traffic Safety Education Bureau will be assisted by volunteer parents and also school teachers whose classes are participating in the safety program.

A program of traffic safety education by parents, school officials and the police, must be carried forward to make it possible for children to accept responsibilities early in life and to give each child a better chance

of having an accident-free childhood. Responsibility is imperative to the success of any safety education program, especially with the steady increase of traffic volumes and traffic hazards. The materials contained herein are intended to serve as a means for explaining in detail the components that have been designed to serve as a sound educational program that will help reduce traffic accident experience involving children of the ages five through 12.

### SAFETY VILLAGE STATEMENT OF PROBLEM

School children are not normally aware of existing traffic dangers. The recognition of traffic hazards they encounter daily can not be self-taught but must be presented and explained to them in a method in which they will be able to comprehend and remember. With the proper physical structure and atmosphere the village will provide, training techniques will produce an improved attitude thus reducing considerably the problem. The proposed anticipated reduction in pedestrian accidents of those children ages five through 12 would be about 20% after the village program is initiated.

### PROJECT OBJECTIVES

Objectives of the project would be to work relentlessly toward the reduction of school children/motor vehicle accidents. This will be accomplished by the construction of the Safety Village and a traffic safety visual aid program as part of the classroom instruction. The village will physically show traffic hazards and how accidents can be avoided. The image of the police officer will be presented as one who is concerned with not only enforcement but education. Traffic safety education to the school children will be designed and delivered in conjunction with K-6 program the school system is presently evaluating for implementation. The program will be first offered to those students of the second and third grades of the Fort Wayne Community Schools. Realizing that the life of a child is sacred regardless of where they live, children of surrounding areas, as well as those of parochial schools will be invited to participate in the entire traffic safety program as scheduling permits.

### PROJECT EVALUATION-PERFORMANCE

Total commitment and dedication will be foremost to achieve and accomplish the project objectives. Upon receiving this grant the school safety division will prepare and complete all proposals for final concurrence of the chief of police. An indepth statistical report will be presented each quarter.

## ADEQUACY OF PERFORMANCE

Performance will primarily be evaluated by the reduction of motor vehicle-school children accidents and motor vehicle-bicycle accidents. In essence the statistical analysis does not always reflect the true results of this type of prevention program. However, we will try to validate other alternative factors.

## VILLAGE AND CLASSROOM OPERATION PROCEDURE

The Safety Village concept is a coordinated effort by the Fort Wayne Police Department, the school corporations in and around Fort Wayne, and the Department of Traffic Safety and Vehicle Inspection to help teach the youth of this community about pedestrian and bicycle safety in an attempt to make these habits.

The forementioned groups (referred to as educators) are hoping to reduce the pedestrian and bicycle accident rate by 20% with the aid of the Safety Village.

It has been pointed out by psychologists that a child's general attitudes and reactions to all life situations are formed between the ages of two and seven, and these tend to remain with him the rest of his life. The educators have accepted the task of introducing basic and safe pedestrian and bicycle driving habits through the Safety Village concept. The target area of major concern is in the school grades of kindergarden through the third grade. This does not say that younger or older individuals or groups cannot participate in the program.

The program is set up in phases, with each phase geared toward teaching the end results of proper pedestrian and driving safety habits. The phases are as follows:

1. Pre-visit
2. Classroom instruction
3. Laboratory (village)

The Safety Village concept is prepared for a one time visit, but a second visit can be conducted and a formal evaluation will be given to see the amount of retention of the safety habits of each individual. Each student will be required to walk and drive through the laboratory while the teacher and police officer evaluate the student's safety habits on an evaluation card. They then discuss his mistakes and allow the student to attempt the same situation correctly.

The pre-visit is designed to be conducted by the teacher prior to the students visit to the Safety Village. The classroom teacher should follow Level I of the "K-6 Elementary Traffic Safety Education"

curriculum which is published by the Indiana State Department of Public Instruction. The goals of the teacher is to provide the students the very basics of pedestrian and bicycle safety with major emphasis on the pedestrian aspect. The teacher should utilize the different teaching methods demonstrated in the K-6 guide. Major emphasis should be the following :

- I. Pedestrian Safety Habits
  - A. Correct use of traffic signs and crosswalk use
  - B. Pedestrian danger signals
  - C. Selecting proper clothing for pedestrian use
  - D. Judging car distance and safe gap time
- II. Bicycle Safety Habits
  - A. Ride one on a bike
  - B. Ride on the right side of the road
  - C. Ride single file
  - D. Keep both hands on handlebars
  - E. Obey traffic signs and car rules
  - F. Use a bicycle light and reflector after dark
- III. Basic Car Safety Habits
  - A. Precautions for entering and exiting a car
  - B. Purposes for lap belt and shoulder harness use
  - C. Causes of dangers that moving vehicle may cause
  - D. Car passenger safety habits
- IV. Bus and School Bus Safety Habits
  - A. Precautions for the bus stop
  - B. Precautions for entering and existing buses
  - C. Precautions for riding on a bus

The second phase of the Safety Village curriculum is the actual classroom instruction. This phase of the Safety Village concept is conducted in the Fort Wayne Police Department's Academy classroom which is equipped to hold up to 30 students.

When the students from a particular school arrive at the Fort Wayne Safety Village, they all go directly to the classroom for an introduction of the Safety Village concept. The introduction will familiarize students with the police officer conducting the Safety Village lessons. The students will be divided into two groups with one staying in the classroom while the other goes to the laboratory.

The classroom instruction is designed to last approximately one-half hour while the instructor presents the basic pedestrian and bicycle safety habits in four different short presentations. They are as follows:

1. Definitions—such as:

- A. Stop
- B. Pedestrian
- C. Go
- D. Yield
- E. R.R. Crossing
- F. Driver
- G. Caution
- H. Amber

2. Signs and other various traffic devices:

The instructor will show the students actual signs or pictures of signs and ask the students what they represent and their purpose.

3. Slide presentation for discussion by the student showing children performing correct and incorrect pedestrian safety habits.

4. A story of Carol and Tommy walking to the skating rink and the possible pedestrian and driving hazards they will encounter

The students will then have an opportunity for a question and answer period. The two groups will then rotate areas.

The third phase of the Safety Village concept is the laboratory. The class or group of children will walk through the Safety Village and at this time will familiarize themselves with the actual physical layout of the streets, traffic signals, vehicles, and other traffic control devices. The remaining students will again be divided into two groups—drivers and pedestrians. At this time the students will be shown a course to follow so that the instructors and his aides can constructively criticize the students' bad pedestrian and bicycle habits. The student will be told to begin at the starting point and walk (only on the sidewalks) to the school building, for example. The student will be given immediate help or praise. The bicycle group will be conducted in basically the same procedure as the pedestrian group. After the students have had the opportunity to be a pedestrian they will then proceed to the bicycle phase and *visa versa*.



## CONSTRUCTION COST ESTIMATES

Site preparation and drainage	\$ 1,690.00
Asphalt surface application and curbing	21,750.00
Security lighting and electrical service	6,190.00
Traffic signals and railroad flashers	11,000.00
Traffic signs	1,470.00
Pavement markings	1,100.00
Landscaping	2,500.00
Chain link fence and gates	5,500.00
Buildings and fixtures	8,700.00
Bicycles	350.00
Automobiles	800.00
Cosmicolor application	1,900.00
	<u>\$62,950.00</u>