

COMMUNITY SHELTER PLAN
CITY OF DALLAS - DALLAS COUNTY, TEXAS

FINAL REPORT

Prepared For

CITY PLAN DEPARTMENT
City of Dallas, Dallas, Texas

In Cooperation With

DALLAS CITY-COUNTY CIVIL DEFENSE

Prepared By

BREISCH ENGINEERING COMPANY, INC.
424 South Cheyenne
Tulsa, Oklahoma

TABLE OF CONTENTS

I.	<u>INTRODUCTION</u>	
	Responsibility	1
	Community Shelter Plan	1
	Contracting Procedure	4
	Description of Community	5
	Location Map	7
II.	<u>SUMMARY AND CONCLUSIONS</u>	
	Local Objectives	8
	Planning Factors, Policies and Assumptions	8
	Policies Adopted by the Committees	9
	Assumptions Made During the Development of the CSP	10
	Summary of the Shelter Situation	10
	Public Information Documents	12
	Need for Development of Shelter	12
	Continuing Program	14
	Emergency Plans	14
III.	<u>RECOMMENDATIONS</u>	
	Local Action	16
	State Action	17
	Federal Action	17
IV.	<u>PREPARATION OF THE COMMUNITY SHELTER PLAN</u>	
	Preliminary Analysis	19
	Planning Factors and Policies	20
	General Allocation	21
	Specific Allocation	24
	Movement Planning	24
	Operational Factors	27
V.	<u>SHELTER DEVELOPMENT</u>	
	Current Requirements	29
	Projected Requirements	30
	Methods of Developing Shelter	34

VI. IMPLEMENTATION

Informing the Public	37
CSP Information Brochure	37
Public Information Program	38
Distribution of the CSP Brochure	39
Reissuing the Brochure in Times of Interna- tional Tension	40
Marking Unmarked Shelters	40
Updating the CSP	41
Responsibility	41
Costs for Updating	42
Special Considerations for Updating	42
Updating Local Emergency Operating Plans	43

LIST OF TABLES

1. Shelter Facility List by Location, Capacity and Protection Factor
 - a. Facilities Allocated To
 - b. Surplus Shelter Facilities in CBD
 - c. Unmapped Facilities, Category 1 Located in Surplus Areas But Still in Space Inventory
2. Tabulation of Population by Standard Location - Step I
3. 1967 - Sheltered and Unsheltered Population by S. L. - Step III
4. 1970 - Sheltered and Unsheltered Population by S. L. - Step III
5. 1975 - Sheltered and Unsheltered Population by S. L. - Step III
6. Terminal Parking Areas and Shelter Facilities for Central District
7. Shelter Facilities and Travel Routes for Vehicular Movement Other Than CBD.

LIST OF PLATES

1. Standard Location Tabulation Map - Project Area
2. Shelter Allocation Plan (Step I-D) - 16 Sheets
3. Shelter Allocation Plan (Step III) - 14 Sheets

LIST OF APPENDICES

1. Public Information Piece
2. List of Sensitive Facilities Deleted From Shelter Inventory
3. Proposed Sample Ordinance
4. Recommended Directives
5. References and Bibliography
6. Base Maps
7. Participants
8. List of Terms Used in Community Shelter Planning

9. Techniques Used in Small Area Population Estimating.
10. Detailed Estimates and Methods Used in Planning for Development of Shelter.

PART I

INTRODUCTION

RESPONSIBILITY

The nuclear age is upon us and nuclear power offers us a new high level of well-being or the means of self destruction. The possibility of a nuclear attack from our enemies, fallout from nuclear blasts, etc. makes it obvious that we must have shelters to protect us if we are to survive. These factors created a need for a Federal program to assist local government in providing this much needed shelter space.

Local governments may still ignore the new dangers created by this nuclear age, but none-the-less, concepts of governmental responsibilities must be enlarged to compensate for new social responsibilities that have been thrust upon all levels of government.

The responsibility of Civil Defense is to prepare for the eventual attack, if and when it comes, and urge the nation to make preparation to survive. The Office of Civil Defense has undertaken a National Program to assist all communities in the United States to develop a "Community Shelter Plan".

COMMUNITY SHELTER PLAN

In 1961, the Department of Defense began to locate and identify the buildings throughout the country that offer protection against radiation fallout. The objective was and is to make use of any substantial shielding against radiation that already exists in buildings of all sizes.

A survey to pin-point the location of this fallout protection was con-

ducted by the Department of Defense through the U. S. Army Corps of Engineers, using local engineering and architectural firms. These facilities were then licensed, marked, and stocked with federally-furnished survival supplies. This was the first major step away from a do-it-yourself civil defense program and toward a community wide program. This survey resulted in the location of some 170,000 buildings throughout the United States with over 150 million shelter spaces.

The second phase, a logical outgrowth of the first, is for the City planning experts to prepare a plan for the use of these facilities. This second phase, also sponsored by the Department of Defense, is known as Community Shelter Planning.

The Community Shelter Plan is the foundation of local emergency readiness and consists of six major steps:

The first step is shelter analysis and allocation. The project area is broken down by Standard Locations or S. L. 's. These S. L. 's conform in general to census tracts and will follow political boundaries. From preliminary data some S. L. 's will be found to contain more shelter spaces than people, while other areas will contain more people than spaces. These are called surplus and deficit areas. A map is then prepared showing these areas so that a quick picture can be obtained of the project area. The next item is to map all existing shelters and determine what areas can be served. Here several planning factors come into play such as space per person, degree of protection available, traffic movement into the shelter area, etc.

The result of this step will be to allocate people to use the maximum number of existing available spaces.

The second step concerns Emergency Information Readiness. This means providing the public with the information they need, to know what to do and where to go in case of emergency. This will include maps and other handout material which will be provided every family in the project area.

The third step will cover the identification of shelter deficits. Some areas are going to be found deficit in shelter space. It may not be possible to move from deficit areas into surplus areas. These areas must be located and mapped and population data extended to determine present and future shelter requirements. Studies are made, in these areas, of all new and proposed construction so that the number of shelter spaces may also be extended to some future time.

Step four will take the present and future deficit areas and propose methods for development of the needed spaces. This may consist of ordinances for local governments setting up policies for inclusion of shelter areas in new public construction, or establishing procedures with local school boards whereby spaces will be provided in new school construction. It may involve supplying the information to those people who are responsible for major construction in the private sector of the economy.

Step five will be the preparation of plans and directives to provide for the updating of the CSP when required.

The formal report is the sixth and final step. This report will con-

tain all data gathered and all decisions reached throughout the project, as well as recommendations offered throughout the project. This report will be presented to each local government for approval and adoption.

To assist in the program, two committees are formed, the CSP Policy Council and the Technical Advisory Committee. Basically, the Policy Council will be involved in decisions concerning policies and planning factors to be used in succeeding steps of the plan. They will act as representatives of their particular geographical area or of their particular segment of the population. They will also help in taking the completed program back to their people for explanation and approval.

The Technical Advisory Committee will take the decisions, policies and planning factors determined by the Policy Council, and by using the specific talents and training they each possess, develop procedures to implement the ultimate plan. They, in effect, will be the technicians who develop the working portion of the program.

CONTRACTING PROCEDURE

In order to insure close coordination between all agencies involved in the Civil Defense work, it was decided that local personnel and agencies should be used to perform as much of the planning work as possible. The OCD set up a program whereby they would provide the necessary funds and local government would be responsible for carrying out the actual work.

For the Dallas-Dallas County plan, the City of Dallas was selected as the local contracting agent. The City, through its City Plan Department, selected Breisch Engineering Company, Inc. of Tulsa, Oklahoma, as the consultant to prepare the plan.

Negotiations were held with the Corps of Engineers on May 26, 1967, and the contracts were signed on June 15, 1967. Mr. Alden Deyo, Director of the Dallas City Plan Department, was named as Project Leader. The consultants staff was directed by Mr. Jack L. Spradling, Director of Operations for Breisch Engineering Company, Inc. Mr. Spradling and Mr. J. Carthal Cobb of the consultants staff completed the CSP training program for Urban Planners coordinated by the OCD staff College at Battle Creek, Michigan.

Assistance and review was provided by Mr. C. W. McCoy, City-County Civil Defense Director, and Mr. John Mayo, Chairman, Dallas County Civil Defense and Disaster Commission. The contract was monitored by Mr. Paul Savage and Mr. Tom Conners, of the Ft. Worth District, U. S. Army Corps of Engineers.

DESCRIPTION OF THE COMMUNITY

The project area for the Community Shelter Plan is Dallas County and municipalities included therein. This includes the City of Dallas, as well as some twenty-eight smaller communities which makes the County predominantly an urban area.

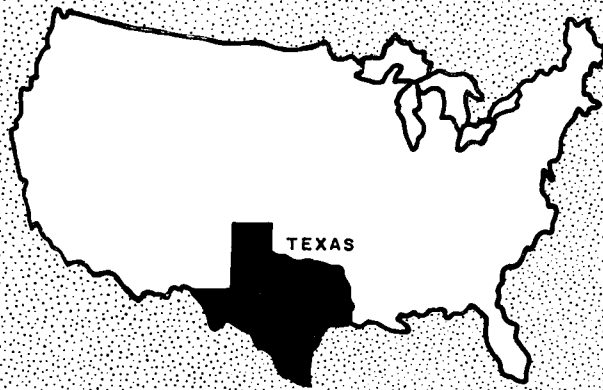
The City of Dallas has long been recognized as the Trade or Market Center of the Southwest and as a result, the City and surrounding areas have

shown a steady growth throughout the years. Within the past few years, the aerospace industries have experienced a tremendous growth and have expanded their operations within the County. The rate of new construction has increased in all areas, residential, commercial, and industrial.

The downtown area of Dallas has also experienced a steady growth, with several major multi-story structures being constructed recently. This includes a new City Hall presently under construction. Several of the smaller communities have experienced similar growth with the development of industrial districts, apartment complexes and new civic center facilities.

LOCATION MAP

Dallas County, Texas



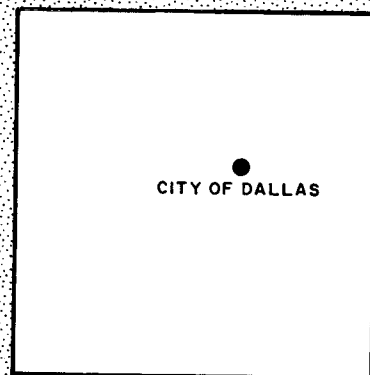
united states

state of texas



DALLAS COUNTY

dallas county



CITY OF DALLAS

PART II

SUMMARY AND CONCLUSIONS

LOCAL OBJECTIVES

The objective of the CSP in general is to develop a sound workable plan for saving the maximum number of lives in case of nuclear attack. This means that several items must be included.

- A. All existing available shelters must be located and mapped.
- B. Population data must be gathered and reviewed.
- C. A plan must be prepared for allocating and moving the population to the best available shelter spaces.
- D. The population must be informed of what to do and where to go in case of nuclear attack.
- E. Shelter deficits, both present and future, must be located by number and geographical location, so that plans for obtaining additional shelter spaces can be prepared.
- F. Plans must be prepared encouraging the incorporation of shelter spaces in new construction, both public and private, in areas of shelter deficits.
- G. Plans must be prepared for the updating of all shelter allocation plans to account for shifts in population and shelter inventories.
- H. Plans must be prepared for updating local civil defense emergency plans so that they relate to the allocation plans prepared.

It is also necessary to secure the approval and cooperation of all governmental and official bodies in the CSP area so that the final plan will be put into effect upon completion of the project.

PLANNING FACTORS, POLICIES AND ASSUMPTIONS

It was necessary to examine all applicable Civil Defense criteria re-

time population.

ASSUMPTIONS MADE DURING THE DEVELOPMENT OF THE CSP

- A. The Emergency Operating Center would be staffed and would function during an emergency. No allocation of the public would be made to this facility.
- B. Public utilities would continue to operate.
- C. Travel routes would be closed to all traffic except that moving to shelter and emergency vehicles.
- D. All shelter facilities would be available for use even though they are not licensed, marked, or stocked.
- E. News media would be available for informing the public prior to the emergency and the Emergency Broadcast System would be in operation during the in-shelter period.

SUMMARY OF THE SHELTER SITUATION

The goal of the CSP is to plan for the maximum utilization of all available shelter space. This plan must be workable and must be presented to the public in such a manner that it will be accepted and followed.

The current allocation plan is shown on Plates 2-1 through 2-16 and the allocation statistics are given in Table 2. This plan was prepared using all available space where required. Every effort was made to use shelter with a PF of 40 or over before spaces with less protection were used. This resulted in sheltering 527,147 persons in public shelters, leaving 723,836 persons without public shelter. The space inventory includes 1,770,012 Category 2-8 Spaces and 478,727 Category 1 spaces for a total of 2,248,739 spaces.

A separate allocation was made using only Category 2-8 spaces. A peak-peak population was also used which causes many people to be considered twice. With this allocation, the total population becomes 1,687,681 persons of which 643,401 can be sheltered in public shelters, and 1,044,280 which cannot. Going from peak nighttime to peak-peak population, and from all spaces to Category 2-8 spaces, causes the sheltered portion of the population to drop from 43.5 percent to 38 percent of the total population.

It was determined that a large portion of the population could be moved into the Central District and other shelter concentrations by utilizing the existing expressway systems. After an examination of the access routes and the areas where shelter was needed, it was determined that 39,811 persons could be moved by automobile to shelter.

Several shelter concentrations exist in addition to the Central District. These include hospitals, the Love Field area, the Trade Mart area, an industrial area and a University Campus. These were utilized by persons who could be moved to the shelter either by walking or by automobile. Almost all of the persons who are without public shelter are located in the suburban portions of the County.

Home basements were not considered in the allocation since few basements exist in Dallas County and no information is available on those that do exist.

PUBLIC INFORMATION DOCUMENTS

An information document has been prepared which includes maps and appropriate text to inform the public of the location of public shelters and to delineate those areas where public shelter is not available. This has been prepared in a brochure form with a size of $8\frac{1}{2}$ inches by $4\frac{1}{4}$ inches. Instructions will be contained on 12 inside pages and a set of maps will be included in a pocket at the back.

The publication schedule calls for printing 550,000 copies of the brochure with 390,000 families and 56,000 businesses receiving copies by mail. The remaining 104,000 copies would be stockpiled in fire stations throughout the project area and at Civil Defense Headquarters for distribution to new residents.

There would be three maps, printed on both sides showing all shelter locations and allocation areas. Also shown would be travel routes and parking areas for those persons moving by automobile.

NEED FOR DEVELOPMENT OF SHELTER

Because of the shortage of shelter spaces in the outlying areas, all identified space in those areas were used in the allocation. This means that some spaces with less than the desirable protection factor have been used. These, plus the number of persons without any public shelter, point to a large need for new spaces.

A study was made of all building construction permits issued since 1962, to determine the incidence of shelter spaces in new construction. Very few

spaces were found in structures costing less than \$ 100,000.00. Of those costing over \$ 100,000.00, only 12.34 percent of the buildings contained shelter space, and 87.66 percent contained no spaces.

A further point made in the study was that 72 percent of the spaces created were either in the Central District or on the North-Northwest edge of the Central District in an industrial area. Both of these areas now contain unused shelter spaces. The incidence of shelter in new construction outside the areas mentioned is very low.

As Dallas-Dallas County continues to grow, and if the present trend on shelter space development continues, the peak-peak population will increase from 1,687,681 in 1967 to 2,386,644 in 1975. During this same period, it is anticipated that the sheltered population will increase from 543,401 to 819,561 persons. At the same time, the population without public shelter will grow from 1,044,280 to 1,576,289 persons. This means that the percent of the population being sheltered in public shelter will drop from 38 percent to 34 percent. Of the increase of 674,742 shelter spaces, 457,369 spaces will be in two SL's, both of which now contain spaces not allocated to.

An investigation was made to determine the number of spaces which could be added to the inventory by the installation of Portable Ventilation Kits. These kits would allow allocation on the basis of 10 square feet per space rather than 500 cubic feet per space. However, it was found that only 21,099 spaces would be made available with 19,813 of these located within areas with surplus space. Therefore, only 1,286 spaces would be used in

the allocations. Due to this small number and the unavailability of the units, no further work was done in this area.

It is obvious from the above that something definite must be done if any progress is to be made in eliminating the shortage of shelter spaces. An ordinance has been prepared and is included as Appendix 3. It was approved by the Policy Council and would require all new construction to contain adequate spaces to shelter the population of the building. This would include single family residences and would eliminate any shortage of spaces in newly developed areas.

A second area would be to hold orientation meetings for architects and engineers and present to them information on shelter design and the assistance that is available through OCD.

CONTINUING PROGRAM

Because of uncertainties in growth and construction projections, it is necessary that this plan be updated from time to time. The local Civil Defense, in conjunction with the Building Inspectors Office should maintain accurate records on new construction and the number of spaces provided. The City Plan Department should maintain records as accurate as possible on population growth and in cooperation with Civil Defense make an annual review of the plan. If a major change is apparent in some area, City Plan should immediately update that portion of the plan.

EMERGENCY PLANS

In order for this plan to be effective, all law enforcement personnel, as

well as other governmental personnel must prepare new emergency operating procedures. These should conform to the program as outlined in the CSP. The procedures should include the assignment of responsibilities on warning, movement control, informing the public, damage control, medical care, shelter management, communications and clean up.

Suggested directives have been prepared and are included as Appendix 4 to this report. These directives should be implemented by the individual communities as soon as possible.

PART III

RECOMMENDATIONS

LOCAL ACTION

The City of Dallas and Dallas County are themselves subject to attack should an armed conflict occur, because of the manufacturing and aerospace industries in the vicinity. The area is also very vulnerable to the effects of fallout due to its geographical location and relationship to other potential target areas. For these reasons, local government must become more aware of the potential dangers and the action necessary to provide protection for the maximum number of citizens. Therefore, it is recommended that the governing bodies take the following action:

1. Approve this Community Shelter Plan and adopt the Shelter Allocation Plan as the official plan for emergency use in case of a nuclear attack.
2. Take immediate steps through the City-County Civil Defense Office to publish and distribute the information booklet as designed in Step II and included as Appendix 1 of this report.
3. Adopt an ordinance requiring all new construction to contain adequate shelter for the expected occupants of the building. A recommended ordinance is included as Appendix 3 of this report.
4. Utilize the full powers of the local government to encourage the development of public shelters in new private construction.
5. Encourage all School Boards in the County to recognize the need for additional shelters and to initiate a program of incorporating shelter in new construction whenever possible.
6. Issue a directive to all departments of emergency operating procedures as outlined in Appendix 4 of this report.
7. Authorize the City-County Civil Defense office and Dallas

City Plan Department to establish a continuing program for monitoring the growth of the area and the shelter inventory so that accurate data can be immediately available for updating the Allocation plan when required.

STATE ACTION

While the State of Texas does not own and occupy individual structures within the Dallas area, there are still certain activities that could be accomplished by the State to assist in the development of shelter for the citizens of Texas.

1. Require the incorporation of fallout shelter in the design of new state-owned buildings to be constructed.
2. Authorize all state departments, agencies and institutions to prepare emergency plans and to coordinate them with local CSP.
3. Encourage through the State Civil Defense, local efforts to establish and update emergency procedures and the CSP.
4. Encourage business and industry to cooperate with the local Civil Defense in developing shelter in new construction and in the licensing, marking and stocking of existing shelters.

FEDERAL ACTION

The ultimate responsibility for the safety and welfare of our people lies with the Federal Government. While Congress, through previous and current programs, has developed a strong national defense and has generated an awareness among the people of the potential dangers, there are still areas within which only the Federal Government can be effective. It is obvious,

from the results of the CSP, that Dallas-Dallas County cannot solve the severe deficit in the immediate future. It is, therefore, recommended that the following action be taken at the Federal level:

1. Require the incorporation of shelter space in all Federally owned buildings.
2. Expand existing programs to instruct and encourage architects and engineers in the methods of incorporating shelter design in new buildings.
3. Initiate research and review programs to discover new methods of providing shelter either through dual-use structures or special designs.
4. Expand the National Fallout Shelter Survey to include all shelters regardless of size or degree of protection.
5. Encourage local governments to update the CSP through funding and the provision of input data for the update.
6. Initiate new programs and expand existing ones to provide the maximum training opportunities for local Civil Defense personnel and others responsible for emergency work.

PART IV

PREPARATION OF THE COMMUNITY SHELTER PLAN

PRELIMINARY ANALYSIS

A preliminary analysis was made as a part of the Step I-A, I-B Report. This included the compilation of all available information about the community which would be applicable to the CSP program. Also included were base maps and studies of the area such as a transportation or Central District study. All shelter facilities which had been identified by the Corps of Engineers were mapped and all available population data was accumulated. The daytime and nighttime populations were determined for the project area and also for smaller areas within the cities.

A study was made of the transportation systems to determine how people could be moved from one area to another. Barriers to movement were investigated to locate paths for movement of people by walking. These barriers included the Trinity River, Love Field, Fenced expressways and many tributaries to the Trinity River. A survey was also made of possible parking areas in the Central District and other areas of shelter concentration.

Step I-C involved an allocation plan based on large planning areas, using the 1960 census data as given on the NFSS printouts. Using this material, an estimate was made of the number of persons who could be sheltered in public shelter and the number of persons who had no public shelter available. This study revealed that approximately 40 percent of the population did not have public shelter. It also indicated the areas which did not contain sufficient shelter spaces for the population.

PLANNING FACTORS AND POLICIES

As the first step in the planning process, it was necessary to establish certain factors and policies as guidelines for the planning work. The planners, with the assistance of local officials and the Policy Council, are responsible for setting these factors and policies. In all cases, they operated within the framework of limits as set out by the Office of Civil Defense.

- A. Population: The population of the project area varied considerably between daytime and nighttime. However, the increase during the day was mostly in the Central District or in industrial or commercial centers which contained shelter. Another consideration was that due to darkness and the confusion of being awakened, this would be the most difficult time for the population. A peak nighttime distribution would cover most of the people, most of the time, since people spend more time at home than any other place. It was agreed to use peak nighttime distribution.
- B. Movement Time: After a review of the general allocation it was apparent that it was necessary to use vehicular movement if a large portion of the population was to be sheltered in public facilities. It was also apparent that parking and walking to shelter from terminal areas would take at least 15 minutes. For this reason, the movement time was extended from 30 minutes, as recommended by OCD, to 60 minutes. This would allow 45 minutes for movement and 15 minutes for parking and queuing at the shelters.
- C. Mode of Travel: While the Policy Council recognized the desirability of using only walking as a means of travel, it was decided that vehicular movement would be required if the largest number of people were to be allocated to public shelter. The Council, therefore, instructed the planners to utilize walking wherever possible, but where other public shelter was available within the riding time distance, to consider vehicular movement.
- D. Rate of Travel: The Policy Council agreed that the proposed rate of travel should be set so that most people could attain it. Therefore, the following rates were established:

Walking	Central District	1/2 mile in 15 min.
	Urban	3/4 mile in 15 min.
Riding	Urban	5 miles in 15 min.
	Rural	10 miles in 15 min.

- E. Maximum Travel Distance: Although people may be able to travel at the rates set out above for short distances, they may be unable to continue at this rate for a longer period of time. For this reason, the following limits were set on the total distance to be traveled:

Walking	Urban	2 miles
	Central District	1 mile
Riding	Urban	15 miles
	Rural	30 miles

- F. Shelter Criteria: Because of the severe shortage in shelter space, the Council decided to use all available space. Priorities were established so that space with a protection factor of 40 or above would be allocated to first before those with a protection factor of less than 40. Facilities with a capacity of 50 or more were to be given priority over those with a capacity of less than 50. The Council did not agree to a reduction in space allowed per person in shelters, choosing to stay with the requirement of 10 square feet per person and 500 cubic feet per person in unventilated spaces. Basement shelter was not considered since no information is available on the number of basements in the area, nor on the quality of construction on those which are available. Those persons who do not have public shelter available will be given instructions on how to improvise shelter in the home.

GENERAL ALLOCATION

The primary purpose of the CSP is to provide for sheltering the maximum number of persons in the shelter space now available. It is to provide the people with instruction and guidelines on what to do, and where to go, in case of a nuclear attack. This plan, in its technical form, is shown on Plates 2 - 1 through 2 - 16. A tabulation of population by Standard Location, sheltered

and unsheltered, is given as Table 2. The plan, as it will be distributed to the public, is shown as Appendix I.

This plan is for use now and is based on the current population estimates and the use of the best shelter space available, including PF Category 0 spaces. Population has been allocated to shelter facilities by areas using the maximum population expected to be in that area at any time.

Before preparing a specific allocation plan, a general allocation was made to locate areas of shelter concentration and also areas where shelters were not available. The project area was divided into planning areas using physical features such as a river, railroad, or expressway as the divider between them. These dividers were selected if they prevented or hampered movement from one side to the other. Major streets that were not fenced were not assumed to be barriers unless they were potential travel routes. The shelter inventory and population for each area were tabulated and compared to determine the magnitude of the movement problem. The population figures used were from the 1960 Census and have not been updated.

This general allocation pointed up the large need for shelter spaces in the outlying areas and the heavy concentration of shelter spaces in the Central District. It also brought out the need for access routes into the Central District area and terminal parking facilities.

It was also found that some facilities do not have adequate space to shelter the occupants. This meant that not only was shelter not available for persons outside the building, but that some of the occupants must be allocated to other shelters if possible. The shift in population from daytime to nighttime

was very apparent with approximately 120,000 persons moving into the Central District during the day and an equivalent number moving into the County from surrounding areas.

The total population to be allocated was the peak nighttime or 1,250,983 persons. The resident population was estimated to be 1,216,974 persons. The difference in the two or 34,009 people is made up of people who come into the County at night to work or shop.

There were also several facilities which local Civil Defense believed should be deleted from the inventory and not used for allocation because of the type of activity which was carried on in the buildings. These included sub-emergency operating centers, Municipal pump, chemical and treatment plant buildings, and Southwestern Bell and General Telephone Company buildings. A complete list of buildings is given as Appendix 2. The deletion of these facilities resulted in removing 18,162 spaces from the inventory, however, the reduction in population sheltered was only 9,880. This is because some of the facilities are located in areas with a surplus of spaces and the population was allocated to other facilities. All of the facilities are still capable of sheltering the building occupants since these are persons normally assigned to work in the building.

Out of a total population of 1,250,983 persons, 527,147 can be sheltered in public shelter, 723,836 people cannot. Of the total sheltered, 472,950 are allocated to PF Category 2-8 spaces.

SPECIFIC ALLOCATION

In order to make the specific allocation all population data was updated to 1967, and broken down to small areas, usually city blocks. This was done using information from the 1960 census, from the 1964 transportation study and aerial photos of the total area flown in 1967. In each and every block, an analysis was made to determine if a drastic change had taken place since the census. This would include such projects as a multi-family structure, a major clearance project or construction of a major shopping center.

Using the location map of all shelters and the population data by block, shelter areas were drawn around each facility with the area boundary encompassing approximately the same number of persons as the shelter capacity. In all cases, first priority was given to the normal occupants of the building being allocated to. Excess spaces were then allocated to persons from the surrounding area. It was necessary in several cases to redraw the boundaries, in some instances several times, to arrive at the most reasonable division of the population. The distance and travel routes were always considered, realizing that all persons would have to walk to the shelter within a limited time. It was also necessary to place boundary lines on distinguishable features such as streets, railroads, rivers, etc. All spaces were used if needed; however, Cat. 2-8 spaces were allocated to first.

All allocations were made on the basis of shelter capacity and population without regard to race, color, or national origin.

MOVEMENT PLANNING

The Policy Council set out the requirement that walking be used to move

to shelter wherever and whenever possible. Because of the large concentrations of shelters that exist in various parts of the City and the number of persons who cannot reach public shelters by walking, it was imperative that vehicular movement be used as necessary. One of the first decisions that had to be made in movement planning affected the travel time into the CBD. It was found that terminal facilities were located on the edge of the Central District and that in some cases people could not walk to their shelter in 15 minutes. Because of this, the actual movement time had to be reduced, in some cases to 30 minutes, leaving the balance of the 60 minutes to walk to shelter.

Vehicular movement was not considered until all persons who could walk to shelter had been allocated. The selection of the final travel routes was made using the following criteria:

- A. Normal routes of travel were used whenever possible. This would allow the people to travel over familiar routes and reduce the need for traffic control.
- B. Travel routes were not to intersect at grade since traffic control would be difficult.
- C. Travel routes were not to cross or interfere with pedestrians walking to shelter.
- D. The practical capacity of all travel routes and terminal facilities was used to eliminate the possibility of overloading the route and stopping all movement.

Two methods were used to determine the capacity of the various travel routes. In some cases the routes were a part of the transportation study and the capacity was given in that report. In other cases, critical intersections were analyzed to determine the existing restraints and to then set the capacity. This was done by the Traffic Department of the City of Dallas. After

this work was complete, then the Traffic Engineer, the Director of City Planning and other officials determined the "practical capacity" which the routes could handle. In some cases, this was less than was anticipated due to existing circumstances on the site. In some cases the addition of traffic control increased the capacity. In others, the practical capacity had to be used for movement planning.

Because of the expressway system now existing, 9,045 vehicles, with 36,180 persons, were allocated to the CBD. The travel routes and terminal facilities for these persons are shown on Plates 2-14 & 2-15 and listed in Table 6. Several other facilities were used to shelter persons who were moved by automobile. These included the Texas Instruments plant in Richardson, Ling Temco Vought in Grand Prairie, the Apparel Mart and Trade Mart buildings and others. A complete list of these facilities and the travel routes are listed on Table 7.

Additional persons could be allocated to shelter in the Central District if parking areas were available closer to the shelter facilities. This would allow additional movement time and, therefore, increase the total number of vehicles that could move into the area. However, at the present time, there are no plans for major clearance which would create these spaces.

Several points have been identified as needing traffic control to assure the capacity assigned. These points are to be included in the emergency plans of the City Police Department to assure that personnel are available for this purpose. The Traffic Engineering Department has also been made aware of these points so that, if possible, improvements can be planned to increase the

capacity of the intersections.

The basic elements of vehicular movement are the expressways into the Central District. Traffic control will be necessary at the entrance and exit ramps to insure a smooth flow of traffic.

OPERATIONAL FACTORS

The Emergency Operating Center is located in Fair Park near the City-County Civil Defense Offices. The facility contains adequate space for the personnel assigned. A communications system is being established to connect the EOC with sub-centers. It is anticipated that local Civil Defense plus Dallas City and County officials will staff the center and provide direction for the in-shelter activities.

Police and Fire personnel of the County and the various cities will be scattered throughout the project area and will be sheltered locally. The City of Dallas has provided shelter in their fire stations which will house the on-duty crew. Off duty firemen will be sheltered in local facilities and perform duties there as assigned. All personnel would be available for duty as shelter managers of other in-shelter functions and also for movement control during movement to shelter and the emergence periods. Fire station shelters could be used as sub-EOC's and Shelter Complex Headquarters since they already are a part of the communications network.

National Guard and military reserve units are not considered as units in the CSP planning process. The possibility of them being mobilized at the time of attack is remote and, therefore, they are to find shelter locally. It is

possible that the members of these units could receive individual training as shelter managers, radiation monitors and other duties and be available for these assignments. The units could be used in the clean-up period after emergence from shelter.

It has been assumed, for planning purposes, that all utilities will continue to be functional. Several buildings housing telephone switching equipment have been listed as sensitive facilities and only occupants of the building allocated to that shelter. This would enable the employees to maintain the equipment and presumably keep them in service. This has also been done on various treatment plants and pump stations. Under proposed plans, all new construction would provide shelter for building occupants and would facilitate the maintenance of all utilities during the in-shelter period.

It has been assumed that some casualties would need treatment during the pre-shelter and in-shelter periods. For this reason, surplus spaces were left in each hospital. In most cases persons surrounding the facilities were sheltered in other shelters. An allowance of 30 square feet per person was made for the occupants of medical facilities. This would provide room for the patient, bed and medical staff. In all cases, shelters surrounding the medical facilities were filled before allocation was made to the hospitals.

PART V

SHELTER DEVELOPMENT

CURRENT REQUIREMENTS

The Shelter Allocation Plan discussed in previous sections of the report was prepared using all available shelter where it was needed including Category 0 and 1 spaces. A movement time of one hour was used which was more than that recommended by OCD. In order to determine the actual requirements, it was necessary to perform a specific allocation using only Category 2-8 space and a thirty minute travel time. It was also necessary to determine the peak daytime population for each area since the Step III allocation was to be made using peak-peak population.

It was found that when the travel time was reduced to 30 minutes and the peak-peak population was used, vehicular traffic into the Central District was eliminated. This was caused by two things: one with the daytime distribution of population, many of the buildings were filled with employees and shoppers and most of the terminal parking facilities were filled with cars. The second reason was that the expressways leading into the Central District were already partially filled with the normal traffic and, therefore, did not have additional capacity for persons moving to shelter.

It was also found that the shelter complexes which had been used for sheltering persons moving by vehicle outside the Central District could not be used in this allocation. This was due to several reasons. One, most of the spaces used were Category 0 or 1 spaces because of the type of buildings, and, therefore, were deleted from the inventory. Secondly, the Category 2-8 spaces

which were available, were used to shelter persons who could walk to the shelter but who had previously been sheltered in 0 or 1 space in other facilities. Thirdly, with the reduction in travel time from one hour to 30 minutes, the radius within which persons could travel to shelter was reduced.

Because of these reasons, vehicular traffic was eliminated entirely with all persons walking to shelter. The same rates of travel for walking were used, i. e. 1/2 mile in 15 minutes for the Central District and 3/4 mile in 15 minutes in the urban area. Maximum travel distances remain the same as before with one mile in the Central District and 2 miles in the urban area.

The peak-peak population for the project area for 1967, is 1,687,681 as compared to 1,250,983 peak nighttime which was used in Step I-D. This is due to people being counted both at home, in a peak-night situation, and at the office or school in a peak-day situation. This, however, fits the OCD criteria of providing shelter for everyone wherever they may be. The sheltered population rose from 542,022 to 643,401 persons. The unsheltered population also rose from 708,961 to 1,044,280. On a percentage basis, the sheltered population decreased from 43.3% to 38.2%.

PROJECTED REQUIREMENTS

A very important step in determining the needs of the community is the projection of population, and, therefore, shelter requirements, and shelter inventory to some future date. For the Dallas project, these dates were 1970 and 1975.

To project the population to 1970 and 1975, the projection was first

made for the County as a whole. Three methods were used: (1) A linear interpolation between the 1964 and the 1985 resident population from the Texas Highway Department's Traffic Study of 1964. This method gave a population of 1,459,063 in 1970 and 1,828,042 in 1975. (2) Using the known 1960 and 1964 populations, the 1970 and 1975 populations were extrapolated using a fixed percentage of 6.28% per year. This yielded a population of 1,464,625 for 1970 and 1,986,015 for 1975. (3) Using a fixed percentage increase from 1964 to 1985 and using the 1964 and 1985 populations from the Traffic Study, this gave a 1970 population of 1,327,984 and 1,586,426 in 1975.

A fourth curve was then drawn using methods 1 and 3 as the outer limits. From this curve the figures used were 1,450,000 for 1970 and 1,750,000 for 1975.

The indicated SL's were then projected linearly to 1970 and 1975. Each one was then individually studied to determine growth rates from 1960 to 1964 and then 1964 to present. Adjustments were then made as necessary to fit actual and projected growth. After this was done for each SL, the population was totaled and the figures used for subsequent work are 1,442,426 for 1970 and 1,743,324 for 1975, both resident population.

The next step was to determine the peak populations for both daytime and nighttime. This involved estimating the number of persons who would be entering and leaving each SL. The labor force leaving the SL's were determined by using the census tract reports of the 1960 census. The percentage of workers leaving the SL was found and was averaged to arrive at a figure which could be used county wide.

Since most elementary schools are neighborhood schools, no elementary students were assumed to be leaving the SL. Junior high and high school students were estimated at 12.8 percent of the population and were assumed to be leaving the SL.

To determine persons entering an SL, the school children were counted as the enrollment of junior high and high schools plus the faculty and staff for schools within a specific SL. Employment figures were obtained by using the Dallas Chamber of Commerce FACT series NOS. 10 and 11 and "Dallas Manpower Outlook of 1965". Each of these gave employment ranges for industries by geographic areas. To determine the number of shoppers at any shopping center, the centers were first classified by general types. Surveys were then made, by type of center, to determine the number of shoppers and employees that would be present at the center. These figures were then related to the square footage of the center and numbers then estimated for each center.

By totaling the resident population, less those persons leaving, plus those persons entering, the peak population of each SL was determined. These figures are 1,994,289 for 1970 and 2,386,644 for 1975.

In order to make an allocation for 1970, and 1975, it was also necessary to project the increase in shelter inventory to these dates. This involved a study of all building permits issued from 1962 through 1967. It was found that few spaces were created in buildings costing less than \$100,000.00. In checking the 470 buildings costing over \$100,000.00, it was found that only

12 percent contained Category 2-8 spaces but that the total yield was 393,510 spaces. It was also determined that 72 percent of the spaces, or 283,463, were located in the Central District. Another 19 percent were located on the near north and northwest side of Dallas in areas predominately sheltered. This means that approximately 34,400 spaces were created in deficit areas and could be used.

It was also found that neighborhood and community shopping centers seldom yielded Category 2-8 space. Only the regional centers were consistent in creating space. Churches will continue to be a source of spaces, however, the yield is small. The best source of spaces has been and will continue to be the high rise structure whether apartments or offices.

Schools have not been a source of shelter in recent construction. However, many Dallas schools do contain some shelter. For this reason, shelter spaces are projected in new construction. No spaces were projected in the proposed junior colleges. However, local Civil Defense and other officials are working with the Junior College Board to encourage the inclusion of shelter space.

No demolition of shelters was considered since there are no plans for an urban renewal project and all expressway right-of-way to be needed through 1975 has been purchased and cleared.

After the population and inventory projections were made, an allocation was made for 1970 and 1975. The statistics for these are shown on Tables 4 and 5.

METHODS OF DEVELOPING SHELTER

An analysis of recent construction indicates that, while the number of spaces created has been substantial, most have been located in the Central District or other areas where a surplus already exists. Little has been accomplished toward eliminating the need for shelter in the outlying areas. In fact, the shortage will continue to grow unless positive action is taken to reverse the trend.

One possible source of additional shelter spaces is the use of portable ventilation kits. These would be used in facilities where spaces allowances were based on 500 cubic feet of space rather than 10 square feet of area. The addition of the kits could, in effect, create additional spaces.

After a study of the project area, it was found that 21,099 additional spaces would be available with the use of the PVK units. However, the study also revealed that 19,813 of the spaces are in areas where adequate spaces already exist and, therefore, would not increase the number of persons sheltered. Because of the current unavailability of the ventilation units and the fact that only 1,286 spaces would be gained, this plan was not prepared.

The surest way to develop shelter would be to require the inclusion of shelter spaces in all new construction. The Policy Council spent considerable time discussing the possibility and recommended that an ordinance be prepared for submission to the cities that would require the construction of shelter in all new construction. Spaces would be provided for the expected occu-

pants of the building. This would include public; semi-public and private, residential, commercial and industrial.

It should be readily apparent that this ordinance, if adopted and enforced, would have a dramatic effect on the shelter inventory. First, all new residences, single or multi-family, would provide shelter for the occupants, therefore, no public shelter would be needed. All schools, churches and commercial buildings would provide shelter for the occupants so that no additional space would be needed. In effect, all newly developed areas would contain adequate shelter space which would not only shelter the new residents but would also relieve the current deficit in a short period of time.

As a practical matter, the ordinance will probably not be adopted by the communities in its present form. It is possible that it will be adopted with single family residences removed and a clause allowing exemptions under certain conditions. It is hoped that the requirements would remain for multi-family large commercial, industrial, public and semi-public buildings. This would have a tremendous effect on the inventory over a period of time.

In conjunction with the ordinance, the local civil defense staff has a very important role. They should perform the following services:

1. Begin immediately to acquaint every architect and engineer in the area with the Architect-Engineer Professional Development Services which are provided by OCD. This program will provide the professional advise on how to incorporate shelter space in new construction at little or no additional cost.
2. Develop a system of coordination with the officials charged with enforcing the ordinance to insure that space included meets standard criteria and that exemptions are not gran-

ted unless justified.

3. Set up a continuing program for updating the shelter inventory so that an updated shelter plan could be prepared as soon as it is needed and is justified.
4. Develop an information program to educate home builders on methods of construction which will provide shelter in single family residences and encourage home buyers to look for houses with shelter.

The local official charged with the responsibility of enforcing the ordinance should immediately establish methods of procedures to insure compliance by all owners of new construction. He should be prepared to recommend assistance in design through the Architect-Engineer Professional Development Services Program to any prospective builder who requests assistance. He should also establish criteria to be using in making a decision on requests for exemptions from the ordinance. These might include:

1. Extreme extra construction costs to provide shelter.
2. Availability of adequate space in the immediate vicinity.
3. Undesirability of shelter space due to special use of building.

PART VI

IMPLEMENTATION

INFORMING THE PUBLIC

The completion of the Community Shelter Plan is just the beginning of the total program of providing protection for the population. To be effective, the Plan must be explained to the public through newspapers, radio, television, and also through the brochure which is to be published and distributed throughout the project area. Local governments must take steps to incorporate the shelter plan in the emergency operations plans of each department under their jurisdiction. Some system must be set up to insure that the plan will be updated as necessary. These five steps are necessary if the plan is to be effective:

CSP Information Brochure

As a part of the CSP program, a method of publishing and distributing the allocation plan was developed. This document needed to contain all the essential elements of the plan, yet be clear enough so that it could be easily understood. All shelters had to be identified and mapped, boundaries of the shelter areas shown and instructions given on how to reach shelter if one was available or how to improvise shelter in the home if public shelter was not available.

In determining the format for the CSP booklet, it was felt that the size and shape was most important. It had to be compact, easy to handle and convenient to file for future reference. A size of $4\frac{1}{4}$ x $8\frac{1}{2}$ inches was determined to be the most convenient, with a pocket at the back for enclosing the necessary maps. This size is easy to carry in the glove compartment of a car, coat pocket or handbag and to file with other valuable papers in a desk drawer or file cabinet.

A photographic cover is prepared to provide a dramatic effect upon the recipients. This would encourage the housewife and other family members to open and read it. The brochure would be mailed to every household in Dallas County and therefore has been designed as a self-mailer with the back left open for address and postage permit.

A copy of the proposed brochure is included as Appendix I to this report. It is suggested that 550,000 copies be published. This would allow mail distribution to 390,000 families and 56,000 businesses with the balance to be stockpiled for future distribution.

Public Information Program

A detailed plan has been prepared for informing the public about the CSP work. The program covers a 31 day period prior to actual distribution and includes news releases, spot announcements on radio and television, billboard advertising and a speakers bureau. This program is designed to make the total population aware of the CSP and its importance to their welfare. It will describe the brochure and maps, and encourage every resident to study the material and be ready to follow the plan if necessary.

It is also proposed that several special events take place during this period. One would be a major address by an official of OCD or the Defense Department to a major Dallas organization. This would be covered by all news media and would provide excellent emphasis on Civil Defense preparedness.

The second event would be a special meeting of the local chapter of the American Institute of Architects with local city, county and school officials

as special guests. The subject would be on the availability of professional assistance for designing structures containing shelter and the techniques being used. The speaker would be an architect, well versed in designing buildings with shelter.

A third event could be a test of the warning system and a practice alert. This, coupled with the other information efforts should make every citizen aware of the program.

Distribution of the CSP Brochure

It was determined that the surest way to place a brochure in the largest number of homes within a concise period of time is by direct mail. Through this method all brochures would be delivered on the same day to the 390,000 households and 56,000 businesses. The brochures will be sealed and addressed using a local addressing service. This would meet all the postal requirements for bulk mailing. The photographic cover plus the publicity preceeding the actual distribution should distinguish the brochure from "junk mail" and insure that the booklet will be opened and read.

It is also planned to produce and stockpile an additional 104,000 copies of the brochure for distribution to those missed in the mailing and to new residents. These extra brochures could be placed in libraries, police and fire stations, and city halls throughout the county. Local civil defense should maintain a constant program, using posters and spot announcements to keep the people aware of the program and let them know where a copy of the brochure can be obtained.

Re-issuing the Brochure in Times of International Tension

Should a time of increased tension occur and it is desirable to reinform the public about the CSP, a decision must be made as to whether additional copies of the brochure should be printed. It is anticipated that at least four weeks would be required to republish and distribute the brochure. With the majority of the population of Dallas County without public shelter, it is considered desirable to do the following.

1. Stockpile a special reserve of the original brochure and maps for use during this period. They could be distributed through the fire stations, libraries and city halls as required for those persons interested. This would be in those areas where public shelter is available.
2. For those who live or work in areas which do not have sufficient public shelter, materials on how to improvise shelter would be stockpiled ready for distribution. The availability of this material would be publicized and distribution points identified.

Through the above actions, it would be unnecessary to reprint the entire booklet and would allow for the re-informing to take place in a minimum of time, with a minimum of cost.

Marking Unmarked Shelters

Many of the buildings which have been identified as containing shelter have not been marked so that the public will know where the shelters are. It is imperative that they be marked should an attack actually occur. This requires a system whereby all shelters would be marked should the need arise.

A current list of all unmarked shelters should be maintained and updated regularly. A shelter sign should be prepared for each unmarked facility

and identified by the name and address of the facility on the back of the sign. These should then be sorted geographically and stored in the fire station nearest the facility. Whenever a warning was received the signs would be installed.

UPDATING THE CSP

Responsibility

The basic premise of the Allocation Plan was to shelter the maximum number of persons with the available shelter. This means that as the population grows and shifts within the project area, the plan should be revised. It will also be necessary to revise the shelter inventory from time to time as buildings are constructed and others are demolished. If the proposed ordinance, or a similar one, is adopted, the new construction will soon begin to eliminate the shortage of space in the outlying areas. Because of these changes, it is necessary that provisions be made for updating the program.

The local planning agency should assume responsibility for the update of the plan. They should utilize their existing data - gathering resources and staff to maintain an estimate of population by areas. This would provide an indication of when an update was required.

The local civil defense, in cooperation with the U. S. Army Corps of Engineers, should be responsible for maintaining an inventory of all shelters including construction and demolition. They would also be responsible for any special updating surveys which might be required. A system should be established whereby data on new construction is made available to civil defense by

local building inspectors or other officials responsible for issuing building permits.

Costs for Updating

It has been assumed that updating would be performed on a periodic basis. The cost therefore would be determined by the prevailing wage scale at that time. However, the work effort has been estimated at 1720 hours. This would be work performed by the planning staff or by a consultant. No allowance is made for civil defense personnel since that effort could be absorbed as a part of the normal operations. This cost is for the preparation of the updated plan and does not include any allowance for publication or distribution of new maps or text to the public. This cost cannot be determined until the magnitude of the revisions has been set.

Special Considerations for Updating

The plan as prepared is for Dallas-Dallas County only. However, in the preparation of the plan, it was found that many areas just outside the project area could have a large effect on the present program. Some of the areas have a severe shortage of shelter space. Others have a surplus of space that could be used to shelter residents of Dallas County who do not otherwise have public shelter.

Because of this, we recommend consideration of a plan which would incorporate the North Central Texas Council of Governments area. This Nine County Plan could provide a much clearer picture of the overall situation

and would recognize the interdependency of the various areas. This could be performed after data from the 1970 census is available and would represent a new effort in some areas and an update in others. The NCTCOG has the necessary administrative machinery and technical staff to coordinate the project and could provide a good work product for the region.

Updating Local Emergency Operating Plans

The final step in the CSP program was the preparation of directives providing for the updating of all emergency operating plans incorporated in the CSP. Two sets of directives were prepared, one for the City of Dallas and a second for the other communities in the county. The directives also establish means of coordination between the City of Dallas and Dallas County officials.

The directives cover the four phases of Emergency Operations; warning, movement, shelter and shelter emergence. They also apply to all agencies of government. The directives have been prepared using the guide and instructions contained in the Federal Civil Defense Guide, Part D, Chapter 3, Appendix 1, Annex 9, December 1965. They were prepared by the local civil defense office in conjunction with the planning agency and consultant.

It is assumed that the chief executive of each governmental unit will issue the approximate directives as soon as the CSP is adopted.

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Cap'y. PF 40		Shelter Cap'y. 20-39	
				Over 50	Under 50	Over 50	Under 50
1	205	190	Deleted (Sensitive Fac.)				
2	206	190	1900 Josey	0	0	56	0
3	200	190	1709 Beltline	476	0	0	0
4	208	190	Broadway and 6th	50	0	0	10
5	207	190	1711 Broadway	252	0	0	0
6	204	190	Josey and Crosby	180	0	201	0
7	203	190	2601 Beltline Road	972	0	486	0
8	74	190	Deleted (Sensitive Fac.)				
9	71	157	Alpha Road near Hillcrest	1, 140	0	0	0
10	72	157	13131 Preston	920	0	0	0
11	73	157	13131 Preston	0	0	2, 538	0
12	10	191	12100 Webb Chapel	569	0	0	0
13	8154	117	3838 Crown Shore	93	0	0	0
14	8052	117	4505 Ridgeside	1, 448	0	0	0
15	38	153	6110 Churchill Way	100	0	0	0
16	37	117	11811 Preston	435	0	0	0
17	38	117	5929 Forest Lane	58	0	0	0
18	47	154	800 Preston Forest Shop. Ctr.	3, 360	0	0	0
19	46	155	11611 Preston	138	0	0	0
20	45	156	11600 Welch	113	0	134	0
21	46	156	11122 Midway	0	47	0	0
22	50	156	4300 Northaven	93	0	0	0
23	49	116	10066 Marsh Lane	560	0	0	0
24	734	116	10056 March Lane	1, 340	0	0	0
25	8040	116	4001 Walnut Hill Lane	80	0	0	0
26	9069	91	Preston Road & Walnut Hill	215	0	0	0
27	8010	152	9924 Hillcrest	330	0	0	0
28	36	93	400 North Park Center	3, 337	0	1, 038	0
29	37	93	1010 North Park Center	308	0	0	0
30	38	93	330 North Park Center	300	0	0	0
31	39	93	800 North Park Center	2, 440	0	0	0
32	40	93	1017 North Park Center	125	0	0	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter No. New	Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
33	41	93	100 North Park Center	4,640	0	0	0
34	42	93	8500 Hillcrest	99	0	0	0
35	101	92	6211 W. N. W. Highway	7,424	0	3,900	0
36	102	92	6201 W. N. W. Highway	20,339	0	5,080	0
37	85	237	8300 Preston	864	0	0	0
38	67	85	8335 Westchester	4,560	0	2,280	0
39	68	85	8215 Westchester	109	0	320	0
40	71	85	8226 Douglas	4,122	0	2,863	0
41	86	237	4024 Caruth	1,070	0	0	0
42	79	236	3505 Amherst	95	0	0	0
43	78	236	6801-6809 Hillcrest	259	0	0	0
44	81	238	3821 University Boulevard	599	0	0	0
45	9075	238	Preston Road & McFarland	77	0	0	0
46	80	238	4220 Emerson	812	0	206	0
47	9076	238	7007 Preston	2,420	0	980	0
48	4050	83	5002 West Lovers Lane	229	0	0	0
49	4055	7	7701 Lemmon	2,470	0	1,000	0
50	51	7	8001 Lemmon	0	0	480	0
51	4059	7	8321 Lemmon	180	0	1,270	0
52	2065	7	8000 Cedar Springs	13,870	0	0	0
53	4058	7	2122 Research Row	785	0	0	0
54	2059	7	Deleted (Sensitive Fac.)				
55	9071	271	University of Dallas	547	0	82	0
56	9072	271	University of Dallas	153	0	0	0
57	9066	196	3700 N. Mac Arthur Boulevard	1,084	0	210	0
58	9077	274	600 Plymouth Park Center	1,450	0	1,450	0
59	7	278	217 West 3rd	360	0	0	0
60	12	278	217 West 3rd	296	0	0	0
61	10	278	4th and Main	234	0	548	0
62	13	278	Main and Irving Boulevard	453	0	224	0
63	11	278	S. Jefferson & E. Second Street	0	0	225	0
64	6	278	100 South Delaware Street	0	0	118	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter No. New	Shelter No. Old	S. L. No.	Address	Shelter Cap'y. Over 50	PF 40 Under 50	Shelter Cap'y. Over 50	20-39 Under 50
65	3	278	2nd and Lucille	0	0	96	0
66	2028	121	8001 Stemmons Freeway	176	0	0	0
67	2015	121	1930 Proctor	300	0	0	0
68	4054	7	2626 West Mockingbird Lane	888	0	0	0
69	4048	7	3232 West Mockingbird Lane	300	0	0	0
70	9089	7	3300 West Mockingbird Lane	930	0	0	0
71	2062	7	Lemmon at Mockingbird Lane	2,872	0	3,350	0
72	136	241	56 Highland Park Shop. Village	3,408	0	0	0
73	119	240	3520 Normandy	132	0	0	0
74		235	Southern Methodist University				
			Cluster A - SMU				
	14		6405 Hilltop Lane	1,203	0	429	0
	15		3200 Dyer	236	0	1,280	0
	19		3300 Dyer	3,272	0	0	0
	21		6400 Boaz Lane	1,152	0	791	0
	22		6500 Athens	0	20	0	0
	23		3315 Daniels Avenue	905	0	0	0
	24		3115 Daniels	823	0	360	0
	25		6475 Hilltop Lane	146	0	0	0
	26		6474 Airline	1,866	0	2,074	0
	27		6480 Boaz Lane	668	0	0	0
			Cluster B - SMU				
	1		3325 Peyton Parkway	148	0	0	0
	2		6200 Hillcrest	61	0	216	0
	3		3305 Peyton Parkway	227	0	0	0
	4		3325 Dyer	424	0	0	0
	12		6211 Bishop	233	0	0	0
	13		3200 Binkley	214	0	0	0
	18		3305 Byer	652	0	652	0
	20		6206 Bishop	459	0	873	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter No. New	Old	S. L. No.	Address	Shelter Cap'y. PF 40 Over 50	Under 50	Shelter Cap'y. 20-39 Over 50	Under 50
74 Cont.		235 Cont.	Southern Methodist University Cont.				
			Cluster B - SMU - cont.				
	28		3145 Dyer	0	14	0	0
	29		3115 Binkley	0	0	186	0
	34		6101 Bishop	617	0	378	0
			Cluster C - SMU				
	5		5902 Hillcrest	136	0	172	0
	6		6000 Hillcrest	530	0	0	0
	7		6000 Bishop	0	0	124	0
	8		5900 Hillcrest	278	0	330	0
	9		6002 Hillcrest	279	0	0	0
	10		5900 Hillcrest	0	0	333	0
	11		6025 Bishop	430	0	0	0
	16		6060 Bishop	538	0	0	0
	17		5950 Bishop	52	0	0	0
	30		6005 Bishop	155	0	361	0
	31		6004 Bishop	137	0	341	0
	32		5904 Bishop	140	0	341	0
	33		5905 Bishop	138	0	351	0
75	32	4	5230 E. Mockingbird Lane	3,254	0	0	0
76	129	239	3300 Mockingbird Lane	554	0	0	0
77	118	240	3600 Cornell	57	0	0	0
78	9024	9	4711 Westside Drive	232	0	0	0
79	21	6	2708 Inwood	316	0	0	0
80	2063	7	Harry Hines and Mockingbird	1,256	0	0	0
81	2064	7	Harry Hines and Mockingbird	720	0	0	0
82	4045	7	Harry Hines and Mockingbird	2,300	0	7,315	0
83	4051	7	Harry Hines and Mockingbird	9,385	0	0	0
84	4053	7	6500 Harry Hines	1,230	0	0	0
85	9037	121	6011 Harry Hines	1,655	0	1,051	0
86	2005	121	Deleted (Sensitive Fac.)				

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Cap'y. Over 50	PF 40 Under 50	Shelter Cap'y. Over 50	20-39 Under 50
87	2017	121	2949 Stemmons Freeway	63	0	1,324	0
88	9039	121	5909 Harry Hines	5,591	0	9,872	0
89	2006	121	Harry Hines at Butler	709	0	438	0
90	2007	121	Harry Hines at Butler	885	0	0	0
91	9030	5	2306 Amelia	1,380	0	80	0
92	133	241	4242 Lomo Alto	2,956	0	2,762	0
93	123	10	4124 Oak Lawn	1,070	0	0	0
94	4042	12	4411 McKinney	532	0	0	0
95	8254	12	4200 McKinney	344	0	431	0
96	105	11	3966 McKinney	196	0	0	0
97	8025	11	3120 N. Haskell	2,627	0	0	0
98	9035	10	3883 Turtle Creek	23,926	0	0	0
99	127	10	3525 Turtle Creek	4,441	0	3,285	0
100	133	10	3505 Turtle Creek	2,520	0	0	0
101	131	10	3716 Rawlins	52	0	0	0
102	9033	10	3707 Rawlins	120	0	440	0
103	2034	8	3015 Oak Lawn	7,715	0	1,908	0
104	8541	8	2827 Throckmorton	723	0	147	0
105	9029	5	4600 Harry Hines	1,216	0	1,520	0
106	2027	121	2300 Stemmons Freeway	22,404	0	0	0
107	2016	121	2355 Stemmons Freeway	6,492	0	375	0
108	2014	121	2100 Stemmons Freeway	29,208	0	0	0
109	130	10	3303 Lee Parkway	2,482	0	384	0
110	2032	8	2929 Cedar Springs	680	0	428	0
111	2033	8	3015 Cedar Springs	1,914	0	909	0
112	2029	8	3500 Fairmont	114	0	963	0
113	2030	8	2727 Turtle Creek	1,260	0	0	0
114	2015	26	3200 Maple	415	0	504	0
115	2016	26	2818 Maple	805	0	576	0
116	2018	26	2911 Maple	5,126	0	1,486	0
117	2019	26	2911 Maple	560	0	0	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter New	No. Old.	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
118	2021	25	2300 McKinney	212	0	0	0
119	4030	29	2100 Thomas	118	0	0	0
120	8003	25	2501 Flora	0	48	0	0
121	2022	25	1800 Leonard	288	0	0	0
122	2042	27	2301 Akard	588	0	0	0
123	2053	27	2821 Alamo	4,692	0	1,114	0
124	2054	27	2819 Alamo	40	0	480	0
125	9038	121	899 Stemmons Freeway	630	0	2,550	0
126	8260	122	1952 Bayside	0	36	67	0
127	8017	125	2200 Dennison	432	0	0	0
128	10	125	2900 Singleton	82	0	0	0
129	100	262	Trinity River	0	0	134	0
130	9	258	Lower Tarrant Road	112	0	0	0
131	3016	125	2222 West Commerce	273	0	609	0
132	3017	125	2222 West Commerce	127	0	0	0
133	3018	125	2222 West Commerce	392	0	0	0
134	3019	125	2222 West Commerce	158	0	0	0
135	3020	125	2222 West Commerce	205	0	204	0
136	8549	55	1400 Walmsley	0	43	0	18
137	9040	55	1000 Singleton	588	0	0	0
138	2048	27	1971 North Houston	1,405	0	1,008	0
139	2049	27	703 McKinney	3,164	0	4,268	0
140	2044	27	2320 Griffin	1,361	0	572	0
141	2045	27	1306 River	845	0	360	0
142	4041	29	1807 Ross	13,125	0	6,340	0
143	8020	25	2214 Bryan	167	0	0	0
144	8061	25	2220 Bryan	1,751	0	2,329	0
145	4028	29	400 North Olive	76,935	0	8,810	0
146	5048	29	1507 Pacific	20,977	0	4,716	0
147	4038	41	1401 Elm	98,697	0	800	0
148	4044	41	Commerce and Houston	28,850	0	908	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
149	6044	41	2015 Commerce	6,284	0	2,960	0
150	6046	41	1926 Commerce	3,528	0	1,967	0
151	6049	41	1914 Commerce	9,625	0	8,042	0
152	6048	41	301 South Harwood	2,526	0	2,209	0
153	6053	41	1900 Wood	1,040	0	400	0
154	5015	43	500 South Ervay	27,544	0	0	0
155	5021	43	717 South Akard	6,379	0	0	0
156	5014	43	508 Young	3,364	0	3,355	0
157	8638	191	12701 Templeton Trail	0	0	0	17
158	4077	91	10600 Preston	0	20	0	0
159	8105	152	6920 Meadows	0	0	0	26
160	8514	91	6423 Walnut Hill Lane	62	0	0	0
161	4076	91	6315 Walnut Hill Lane	0	37	0	0
162	10	115	Deleted (Sensitive Fac.)				
163	4072	119	3500 W. N. W. Highway	0	13	0	0
164	4056	7	Deleted (Sensitive Fac.)				
165	4060	7	Deleted (Sensitive Fac.)				
166	2060	7	Deleted (Sensitive Fac.)				
167	8573	86	4518 Pomona	0	21	0	0
168	9025	85	4300 Colgate	82	0	0	0
169	69	85	4105 Colgate	82	0	0	0
170	70	85	4136 Colgate	67	0	0	0
171	83	237	3933 Northwest Parkway	929	0	147	0
172	84	237	3933 Northwest Parkway	616	0	0	0
173	1	236	University Boulevard & Haynie	0	13	0	0
174	131	241	Southern and Douglas	0	36	0	0
175	4049	83	4500 West Mockingbird	220	0	0	0
176	8500	7	2615 Anson Road	0	25	0	0
177	10	273	2520 West Irving Boulevard	81	0	0	0
178	650	279	900 South Senter Road	0	0	0	19
179	4	278	1008 East Irving Boulevard	108	0	0	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR
(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Cap'y. Over 50	PF 40 Under 50	Shelter Cap'y. Over 50	20-39 Under 50
180	4057	7	6814 Harry Hines	173	0	0	0
181	8155	7	2929 Inwood	108	0	0	0
182	8469	9	3120 Inwood	0	44	0	0
183	8561	10	3801 Herschel	0	16	0	6
184	739	12	4919 N. Central Expressway	425	0	0	0
185	10	11	4009 Central Expressway	0	40	0	0
186	128	10	3636 Turtle Creek	176	0	0	0
187	9034	10	3701 Turtle Creek	415	0	0	0
188	125	10	3811 Oak Lawn	350	0	0	0
189	126	10	3826 Gilbert	115	0	0	0
190	10	6	2525 Lucas	170	0	0	0
191	11	6	2531 Lucas	81	0	0	0
192	12	6	2531 Lucas	81	0	0	0
193	13	6	2531 Lucas	81	0	0	0
194	14	6	2531 Lucas	81	0	0	0
195	15	6	2531 Lucas	81	0	0	0
196	16	6	2531 Lucas	81	0	0	0
197	17	6	2531 Lucas	81	0	0	0
198	18	6	2531 Lucas	81	0	0	0
199	19	6	5200 Maple	403	0	0	0
200	2010	121	5201 Harry Hines	6,030	0	0	0
201	2011	121	5201 Harry Hines	409	0	0	0
202	9031	5	4708 Harry Hines	364	0	0	0
203	2012	121	4901 Harry Hines	152	0	530	0
204	2026	8	3819 Maple	730	0	2,736	0
205	2027	8	3819 Maple	975	0	0	0
206	2028	8	3819 Maple	288	0	0	0
207	2038	8	3631 Cedar Springs	84	0	0	0
208	129	10	3511 Hall	0	35	0	0
209	8634	26	3001 McKinney	0	41	0	0
210	2036	8	2306 Welborn	975	0	84	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
211	2035	8	2201 Welborn	149	0	126	0
212	2025	121	1949 Stemmons Freeway	374	0	0	0
213	9083	26	3131 Maple	11,641	0	2,644	0
214	2020	26	3001 Maple	734	0	1,360	0
215	4063	126	2815 North Westmoreland	0	12	0	0
216	9081	232	200 Main	164	0	0	0
217	501	232	Greenville and Phillips	317	0	1,125	0
218	500	232	751 S. Central Expwy.-Richardson	0	0	691	0
219	503	232	811 S. Central Expwy.-Richardson	210	0	1,120	0
220	57	173	13500 North Central Expwy.	1,116	0	0	0
221	58	173	13500 North Central Expwy.	0	0	900	0
222	59	173	13500 North Central Expwy.	16,800	0	0	0
223	60	173	13500 North Central Expwy.	12,000	0	0	0
224	61	173	13500 North Central	1,130	0	5,240	0
225	43	93	12222 North Central Expwy.	0	0	1,200	0
226	600	253	3466 Fairdale	0	0	500	0
227	620	253	111 South Garland Avenue	394	0	0	0
228	602	252	Deleted (Sensitive Fac.)				
229	605	252	214 South Ninth	435	0	0	0
230	700	253	2301 Forest	164	0	0	0
231	9090	250	Shiloh and Forest	732	0	0	0
232	601	249	2520 Forest	700	0	0	0
233	607	249	2802 West Miller Road	1,089	0	0	0
234	4079	249	3000 West Kingsley	0	42	0	0
235	609	246	Deleted (Sensitive Fac.)				
236	4080	248	100 West Kingsley	0	12	0	0
237	10	148	2519 Casta Mesa	780	0	0	0
238	10	149	11110 Garland Road	0	0	497	0
239	82	149	Garland and Jupiter	6,912	0	0	0
240	4067	149	10715 Garland Road	0	42	0	0
241	9056	150	848 Harter Road	401	0	162	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter No.	No.	S. L. No.	Address	Shelter Cap'y. PF 40	Shelter Cap'y. 20-39
New	Old			Over 50	Under 50
242	9055	150	642 Brookhurst	0	926
243	56	94	6121 E. Lovers Lane	370	0
244	49	94	5646 Milton	2,857	3,855
245	50	94	6116 N. Central Expwy.	4,477	3,480
246	53	94	5331 E. Mockingbird Lane	1,380	1,685
247	31	4	5342 E. Mockingbird Lane	1,113	1,113
248	30	4	5523 E. Mockingbird Lane	3,245	3,245
249	10	95	4316 Abrams	1,114	0
250	77	97	1130 Beachview Drive	161	1,062
251	35	98	Buckner and Garland	96	0
252	8521	98	10122 Losa Drive	0	22
253	11	148	2325 Gus Thomasson	184	0
254	8272	147	10910 Ferguson	72	0
255	11	188	4111 Barnes Bridge	0	45
256	8005	145	2101 Millmar	130	0
257	8212	97	8410 San Leandro	233	0
258	8445	96	3000 Hillbrook	0	105
259	34	96	2720 Hillside	109	0
260	11	1	6430 Gaston	0	114
261	9027	19	6220 Worth	190	0
262	11	21	6200 Gaston	0	28
263	10	21	6323 La Vista Drive	64	0
264	41	15	5626 Alta	388	0
265	8386	14	2617 North Henderson	0	45
266	45	14	4330 N. Central Expwy.	0	0
267	123	13	4040 N. Central Expwy.	980	0
268	122	13	3988 N. Central Expwy.	1,336	0
269	121	14	5003 Ross	770	0
270	9031	14	5217 Ross	714	352
271	42	15	5334 Ross	3,421	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
272	8624	19	5801 Worth	88	0	0	0
273	8055	19	100 South Glasgow	1,763	0	235	0
274	8120	19	6116 Reiger	0	20	208	0
275	105	18	6015 Lindsley	0	0	551	0
276	103	18	6211 East Grand	1,160	0	0	0
277	104	18	6211 East Grand	0	0	500	0
278	8489	18	6012 East Grand	105	0	0	0
279	65	22	4105 Live Oak	573	0	0	0
280	137	22	Deleted (Sensitive Fac.)				
281	8990	24	3700 Ross	391	0	0	0
282	98	30	3909 Live Oak	1,250	0	0	0
283	105	30	3800 Live Oak	768	0	0	0
284	108	30	3909 Swiss	543	0	0	0
285	114	31	4024 Gaston	1,180	0	0	0
286	8306	23	401 North Carroll	134	0	0	0
287	100	30	911 St. Joseph	2,565	0	2,892	0
288	76	24	Deleted (Bldg. Demolished)				
289	9026	30	3032 Bryan	844	0	0	0
290	106	30	3434 Swiss	2,617	0	0	10
291	107	30	3504 Swiss	720	0	624	0
292	8557	31	715 Washington	0	37	0	0
293	117	31	3600 Gaston	390	0	181	0
294	108	31	3500 Gaston	1,532	0	1,150	0
295	109	31	3500 Gaston	3,324	0	460	0
296	111	31	800 Hall	1,650	0	0	0
297	112	31	3405 Junius	928	0	160	0
298	113	31	3300 Junius	187	0	657	0
299	118	31	3616 Worth	586	0	0	0
300	115	31	3201 Worth	547	0	0	0
301	104	30	Texas & Pacific Railroad	1,840	0	0	0
302	4002	42	2301 Elm	172	0	540	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter No.		S. L. No.	Address	Shelter Cap'y. PF 40		Shelter Cap'y. 20-39	
New	Old			Over 50	Under 50	Over 50	Under 50
303	4001	42	100 North Central Expwy.	1,553	0	4,905	0
304	4006	42	2208 Main	1,819	0	315	0
305	4009	42	3230 Main	86	0	900	0
306	4010	42	3200 Main	1,220	0	1,815	0
307	99	38	4008 East Commerce	183	0	144	0
308	7001	40	429 Second	990	0	480	0
309	4043	40	3200 Canton	430	0	270	0
310	7004	40	2700 Canton	1,075	0	0	0
311	600	233	820 West Arapaho	0	27	0	0
312	4070	153	Deleted (Sensitive Fac.)				
313	35	93	8200 Walnut Hill Lane	3,986	0	2,304	0
314	9053	93	9300 N. Central Expwy.	147	0	0	0
315	8604	93	7006 Holly Hill Drive	0	10	0	0
316	51	93	5701 East NorthWest Highway	144	0	0	0
317	33	93	5801 East NorthWest Highway	84	0	404	0
318	766	247	Deleted (Sensitive Fac.)				
319	10	188	Deleted (Sensitive Fac.)				
320	4068	95	Deleted (Sensitive Fac.)				
321	8525	3	2911 Delmar	0	14	0	0
322	4066	146	9810 La Prada	0	11	0	0
323	702	293	Deleted (Sensitive Fac.)				
324	4078	294	4900 Barnes Bridge Rd. , Mesquite	0	21	0	0
325	4065	143	Deleted (Sensitive Fac.)				
326	8100	13	4001 Capitol	58	0	0	0
327	8628	13	4528 Rusk	0	18	0	0
328	8397	22	4800 Ross	0	42	0	0
329	66	22	1401 North Carroll	77	0	0	0
330	8242	24	3213 Cochran	93	0	204	0
331	4061	35	5430 East Grand	0	40	0	0
332	8197	33	4919 East Grand	238	0	0	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
333	10	34	5200 East Grand	3,600	0	0	0
334	11	34	4949 Beeman	1,820	0	200	0
335	704	291	Highway 67 and 80	2,820	0	0	0
336	4083	290	711 Municipal Way	0	0	0	24
337	660	226	Deleted (Sensitive Fac.)				
338	670	226	Deleted (Sensitive Fac.)				
339	680	226	Deleted (Sensitive Fac.)				
340	703	290	Deleted Sensitive Fac.)				
341	10	288	Lancaster and Main	0	17	0	0
342	803	288	917 Military Parkway	0	32	0	0
343	59	101	7525 Scyene	120	0	0	0
344	60	101	7525 Scyene	262	0	0	0
345	9091	101	7525 Scyene	502	0	536	0
346	730	101	Deleted (Sensitive Fac.)				
347	97	38	4327 South Fitzhugh	403	0	0	0
348	92	38	Fair Park	294	0	285	0
349	93	38	Grand Avenue in Fair Park	480	0	0	0
350	94	38	Fair Park	901	0	1,181	0
351	96	38	Fair Park	441	0	0	0
352	101	38	Deleted (Sensitive Fac.)				
353	9030	38	Fair Park	423	0	66	0
354	8014	47	3000 Forest	2,545	0	0	0
355	8422	46	2801 Park Row	110	0	0	0
356	5004	45	Sanger and Ervay	602	0	1,506	0
357	5008	44	1409 South Lamar	44,874	0	1,629	0
358	2083	28	1114 North Lancaster	407	0	53	0
359	2085	28	1503 North Zang	166	0	0	0
360	2084	28	1400 East Jefferson	1,041	0	0	0
361	2081	28	Zang and Colorado	551	0	1,394	0
362	2082	28	812 Marsalis	407	0	0	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
363	2080	28	834 North Marsalis	239	0	384	0
364	8382	28	301 North Lancaster	0	48	0	0
365	8491	53	1216 East 8th Street	60	0	0	0
366	2078	53	1515 East 8th Street	0	0	950	0
367	2079	53	1515 East 8th Street	178	0	0	0
368	5004	52	1226 Loomis	12,904	0	1,625	0
369	8018	50	5000 Oakland	290	0	0	0
370	8138	50	3400 Garden Lane	125	0	0	0
371	8050	111	8928 Palisade Drive	396	0	0	0
372	63	111	1520 South Buckner	490	0	0	0
373	8405	110	1515 N. Jim Miller Road	0	0	57	0
374	9086	102	Deleted (Sensitive Fac.)				
375	9087	102	Deleted (Sensitive Fac.)				
376	8007	106	525 Bonnie View Road	497	0	413	0
377	8045	60	201 East 9th Street	1,687	0	0	0
378	3012	60	300 East Jefferson	6,933	0	0	0
379	8530	61	1515 Lynnhaven	144	0	0	0
380	3006	67	1900 South Ewing	572	0	0	18
381	3005	67	1415 East Illinois	480	0	0	0
382	8630	105	3111 Bonnie View	54	0	0	0
383	58	138	Deleted (Sensitive Fac.)				
384	10	139	Deleted (Sensitive Fac.)				
385	8008	138	9733 Old Seagoville Road	599	0	0	0
386	2074	105	Lancaster and Kiest	1,881	0	0	0
387	2075	105	Lancaster and Kiest	1,182	0	0	0
388	2076	105	Lancaster and Kiest	840	0	0	0
389	2077	105	Lancaster and Kiest	630	0	0	0
390	8110	68	3000 Maryland	490	0	0	0
391	8288	72	3031 S. Beckley	141	0	0	0
392	2069	72	Beckley and Kiest	0	0	3,120	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR
(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. Under 50	PF 40	Shelter Over 50	Cap'y. Under 50	20-39
393	2070	72	Beckley and Kiest	1,050	0		0		0
394	2071	72	Beckley and Kiest	2,100	0		0		0
395	2072	72	Beckley and Kiest	788	0		0		0
396	2073	72	Beckley and Kiest	1,682	0		0		0
397	8030	71	3601 South Marsalis	1,463	0		1,500		0
398	8284	70	4010 Idaho	127	0		0		0
399	8465	69	4203 South Lancaster	153	0		0		0
400	2066	104	Deleted (Sensitive Fac.)						
401	2067	104	4500 South Lancaster	5,585	0		6,625		0
402	2068	104	4500 South Lancaster	660	0		203		0
403	8324	104	2914 Cummings Street	60	0		0		0
404	3007	71	330 East Ann Arbor	0	0		603		0
405	10	133	6000 South Beckley	66	0		140		0
406	8012	135	3722 Black Oak Drive	80	0		162		0
407	9042	135	3827 Simpson Stuart	795	0		0		0
408	9043	135	3827 Simpson Stuart	110	0		0		0
409	9044	135	3827 Simpson Stuart	119	0		0		0
410	9045	135	3827 Simpson Stuart	92	0		0		0
411	9046	135	3827 Simpson Stuart	186	0		0		0
412	801	219	Deleted (Sensitive Fac.)						
413	92	187	Deleted (Sensitive Fac.)						
414	200	100	6508 Military Parkway	0	0		0		17
415	8507	36	4200 Metropolitan	74	0		0		0
416	8510	48	2908 Metropolitan	0	15		0		0
417	5003	45	2927 South Lamar	4,658	0		0		0
418	4064	53	414 S. RL Thornton Freeway	0	10		0		0
419	2086	28	300 North Ewing	0	27		0		0
420	9082	60	410 South Beckley	0	27		0		0
421	8358	51	5700 Bexar	122	0		0		0
422	4082	109	7680 Blossom Lane	0	0		0		20

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter No. New Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50	
423	8117	140	1625 North Masters	0	0	60	0
424	4073	112	Seaford and Maddox	0	0	0	14
425	4075	138	Deleted (Sensitive Fac.)				
426	8537	114	6300 Elam	0	0	94	0
427	8135	105	2001 East Kiest	68	0	0	0
428	8424	105	2001 Deer Path Drive	75	0	0	0
429	4069	166	Deleted (Sensitive Fac.)				
430	803	219	Fed. Correctional Inst. Unit 4	71	0	0	0
431	804	219	Fed. Correctional Inst. Unit 5	71	0	0	0
432	805	219	Fed. Correctional Inst. Unit 6	71	0	0	0
433	806	219	Fed. Correctional Inst. Unit 7	71	0	0	0
434	807	219	Fed. Correctional Inst. Unit 10	71	0	0	0
435	808	219	Fed. Correctional Inst. Unit 11	71	0	0	0
436	809	219	Fed. Correctional Inst. Unit 9	654	0	0	0
437	9041	203	London and Sweden	68	0	0	0
438	311	259	Stadium and High School	0	31	0	0
439	69	259	Main and 8th	50	0	0	0
440	303	259	122 N. E. 2nd Street	566	0	0	37
441	4084	259	106 East Main	0	0	0	12
442	304	259	122 North Center	0	0	192	0
443	305	259	124 North Center	153	0	0	0
444	307	259	110 North Center	328	0	0	0
445	308	259	110 NorthWest 2nd	57	0	280	0
446	309	259	120 West Church	787	0	0	0
447	4085	259	202 West Main	0	45	0	0
448	312	259	500 West Church	0	0	216	0
449	303	265	530 South Carrier	450	0	0	0
450	301	264	201 West Jefferson	214	0	142	0
451	6054	160	9314 West Jefferson	0	0	22,977	0
452	6055	160	9314 West Jefferson	0	0	4,200	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. Under 50	PF 40	Shelter Over 50	Cap'y. Under 50	20-39
453	6056	160	9314 West Jefferson	4,830	0		2,625	0	
454	6057	160	9314 West Jefferson	0	0		1,250	0	
455	8565	81	2615 West Colorado	0	0		206	0	
456	3022	80	2511 Wedglea Drive	690	0		1,750	0	
457	3001	80	2100 West Colorado	791	0		467	0	
458	12	56	1215 Turner	52	0		0	0	
459	2085	54	301 West Colorado	6,694	0		2,625	0	
460	2086	54	301 West Colorado	61	0		0	0	
461	2087	54	214 West Colorado	0	0		1,400	0	
462	8393	54	1105 North Ballard	160	0		0	0	
463	8413	59	530 Melba	350	0		0	0	
464	3015	59	351 West Jefferson	745	0		594	0	
465	3014	59	611 West Jefferson	7,353	0		187	0	
466	3002	58	1005 West Jefferson	121	0		206	0	
467	3003	58	927 West 10th	0	0		601	0	
468	3009	64	1822 West 10th	60	0		0	0	
469	8035	64	2120 West Jefferson	1,107	0		0	0	
470	8347	57	3101 Raydell Place	0	43		0	0	
471	8461	65	2419 Gladstone Drive	60	0		0	0	
472	8160	64	625 South Edgefield	0	0		1,108	0	
473	8409	62	801 S. Llewellyn	86	0		0	0	
474	10	62	325 West 12th	1,320	0		0	0	
475	2084	62	318 West Jefferson	230	0		0	0	
476	4040	62	500 South Zang	5,075	0		5,349	0	
477	3004	74	1300 South Polk	1,035	0		350	0	
478	8648	63	1151 South Edgefield	0	34		0	0	
479	10	65	2854 Emmett	825	0		0	0	
480	60	128	6333 Mountain Lake Road	0	36		0	0	
481	9078	76	Hampton and Illinois	187	0		0	0	
482	9061	63	1315 Berkley	64	0		0	0	

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR
(Facilities Allocated To)

Shelter New	No. Old	S. L. No.	Address	Shelter Cap'y. Over 50	PF 40 Under 50	Shelter Cap'y. Over 50	20-39 Under 50
483	10	73	1222 West Kiest	102	0	0	0
484	11	73	3900 South Rugged Drive	0	0	176	0
485	8015	129	3606 South Westmoreland	297	0	0	0
486	10	163	3911 South Walton Walker Road	9,408	0	0	0
487	3007	163	3600 Duncanville Road	345	0	0	0
488	9085	214	3000 Florina	266	0	0	0
489	9086	214	3000 Florina	167	0	0	0
490	9087	214	3000 Florina	0	35	0	0
491	9088	214	3000 Florina	0	35	0	0
492	10	214	900 West Camp Wisdom	310	0	0	0
493	8170	131	1303 Reynoldston Lane	465	0	0	0
494	8006	132	1819 West Wheatland	779	0	0	0
495	901	214	Deleted (Sensitive Fac.)				
496	9047	259	333 North East 5th Street	0	37	0	0
497	314	264	410 Grand Prairie Road	0	45	0	0
498	10	79	4600 West Davis	0	39	0	0
499	11	56	1900 Fort Worth Avenue	0	40	0	0
500	10	56	1755 West Colorado	0	19	0	0
501	8533	56	719 North Monclair	0	23	0	0
502	440	57	2442 West Jefferson	0	37	0	0
503	10	57	Deleted (Sensitive Fac.)				
504	4074	63	Deleted (Sensitive Fac.)				
505	8443	78	1218 Phinney	0	0	0	40
506	4081	77	2415 South Westmoreland	0	31	0	0
507	400	74	2324 South Vernon	139	0	0	0
508	734	74	Zang and Illinois	0	40	0	0
509	3005	74	Zang and Illinois	243	0	0	0
510	4063	129	Deleted (Sensitive Fac.)				
511	8202	131	5505 South Polk Street	0	12	0	0
512	210	215	409 North Hampton, DeSoto	0	33	0	0
				874,933	1,828	263,039	327

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Surplus Shelter Facilities In CBD)

Shelter New	No. Old	S. L. No.	Address	Shelter Cap'y. PF 40		Shelter Cap'y. 20-39	
				Over 50	Under 50	Over 50	Under 50
513	2043	27	1401 Cedar Springs	2,178	0	0	0
513A	2041	27	1925 Cedar Springs	184	0	560	0
514	2025	25	2700 Flora	123	0	285	0
515	138	30	4005 Gaston	198	0	760	0
516	101	30	3707 Gaston	0	14	0	0
517	103	30	3607 Gaston	120	0	480	0
518	99	30	3505 Gaston	1,340	0	364	0
519	4024	29	2024 Ross	382	0	0	0
520	4016	29	2000 Ross	2,420	0	720	0
521	9059	29	1928 Ross	520	0	0	0
522	4029	29	1924 Ross	1,701	0	0	0
523	4020	29	1818 North Akard	134	0	762	0
524	4021	29	1900 North Akard	149	0	0	0
525	8060	29	1901 North Akard	104	0	0	0
526	5042	29	1600 Cochran	375	0	281	0
527	2055	27	1301 Broom	762	0	1,500	0
528	2046	27	2201 Laws	1,781	0	0	0
529	2050	27	915 McKinney	215	0	0	0
530	2056	27	2112 North Lamar	534	0	168	0
531	5006	29	2008 Laws	280	0	0	0
532	5035	29	1900 Griffin	480	0	2,320	0
533	9060	29	633 North Akard	2,285	0	1,734	0
534	4019	29	723 North St. Paul	63	0	790	0
535	4026	29	608 North St. Paul	7,931	0	2,049	0
536	4032	29	607 North St. Paul	4,962	0	0	0
537	4031	29	1710 North San Jacinto	1,184	0	1,012	0
538	5055	29	515 North St. Paul	3,178	0	0	0
539	5054	29	1706 North Patterson	653	0	2,694	0
540	5026	29	605 North Ervay	1,738	0	2,900	0
541	5040	29	703 North Ervay	724	0	1,239	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Surplus Shelter Facilities In CBD)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
542	5047	29	500 North Akard	648	0	1,166	0
543	5017	29	511 North Akard	2,910	0	3,213	0
544	5034	29	611 North Field	146	0	1,764	0
545	5036	29	2001 North Lamar	1,150	0	1,070	0
546	5005	29	1806-1812 North Lamar	455	0	364	0
547	5032	29	1801 North Lamar	8,624	0	0	0
548	5037	29	1713 North Market	446	0	0	0
549	5038	29	1709 North Market	2,400	0	0	0
550	5029	29	301 North Market .	4,543	0	0	0
551	4045	29	1101 Pacific	321	0	281	0
552	5018	29	1101 Pacific	4,909	0	3,280	0
553	5028	29	1307 Pacific	499	0	458	0
554	4037	29	Akard and Pacific	23,245	0	9,273	0
555	4039	29	411 North Akard	35,816	0	6,085	0
556	4023	29	400 North Akard	455	0	0	0
557	4044	29	1600 Patterson	4,310	0	1,555	0
558	4042	29	1606 Patterson	2,754	0	6,220	0
559	4018	29	1612 Federal	224	0	0	0
560	5039	29	1511 Bryan	23,982	0	1,075	0
561	4017	29	408 Bullington	4,247	0	3,078	0
562	9058	29	1614 Federal	219	0	372	0
563	5044	29	505 North Ervay	4,605	0	850	0
564	5043	29	400 North Ervay	6,518	0	0	0
565	4025	29	300 North Ervay	69,308	0	6,705	0
566	5045	29	1719 Pacific	12,681	0	2,921	0
567	4043	29	323 North St. Paul	136	0	0	0
568	4022	29	318 North St. Paul	236	0	511	0
569	5027	29	408 North St. Paul	4,861	0	2,240	0
570	4015	29	2006 Bryan	1,094	0	3,269	0
571	4014	29	2020 Live Oak	878	0	4,072	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Surplus Shelter Facilities In CBD)

Shelter No.				Shelter Cap'y. PF 40		Shelter Cap'y. 20-39	
New	Old	S. L. No.	Address	Over 50	Under 50	Over 50	Under 50
572	4005	42	2511 Elm	864	0	0	0
573	4012	42	2220 Pacific	202	0	0	0
574	4013	42	2214 Pacific Avenue	181	0	625	0
575	6035	41	1925 Elm	1,588	0	1,000	0
576	6036	41	1913 Elm	502	0	118	0
577	6037	41	1903 Elm	5,204	0	2,850	0
578	6038	41	212 North St. Paul	12,316	0	2,310	0
579	6052	41	209 North St. Paul	8,845	0	2,648	0
580	1017	41	211 North Ervay	167	0	0	0
581	9036	41	1521 Elm	26,469	0	4,084	0
582	1041	41	1511 Elm	12,792	0	0	0
583	1019	41	1505 Elm	3,132	0	3,400	0
584	1008	41	251 North Field	8,767	0	1,085	0
585	1027	41	1025 Elm	2,444	0	1,906	0
586	6001	41	205 North Austin	424	0	1,500	0
587	47	41	701 Elm	588	0	193	0
588	1007	41	601 Elm	192	0	1,000	0
589	1029	41	Elm and Houston	107	0	1,000	0
590	1005	41	501 Elm	4,014	0	456	0
591	1004	41	509-515 Elm	3,399	0	908	0
592	6015	41	Main and Lamar	10,844	0	1,080	0
593	1040	41	Elm and Griffin	55,026	0	2,564	0
594	1015	41	1217 Main	514	0	250	0
595	1039	41	1301 Main	1,090	0	500	0
596	6025	41	1309 Main	15,909	0	527	0
597	6021	41	1404 Elm	2,299	0	500	0
598	6017	41	1401 Main	23,278	0	570	0
599	6018	41	109 North Akard	3,675	0	636	0
600	6022	41	1414 Elm	1,103	0	0	0
601	6027	41	1509 Main	10,432	0	3,854	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Surplus Shelter Facilities In CBD)

Shelter No. New Old	S. L. No.	Address	Shelter Cap'y. PF 40 Over 50 Under 50	Shelter Cap'y. 20-39 Over 50 Under 50
602	6029	41	1516 Elm	885 0 500 0
603	6028	41	1513 Main	800 0 250 0
604	1037	41	1607 Main	5,788 0 1,960 0
605	1031	41	1616 Elm	5,590 0 0 0
606	1018	41	1621 Main	11,003 0 0 0
607	6032	41	1703 Main	997 0 400 0
608	6031	41	1700 Elm	708 0 250 0
609	6033	41	1806 Elm	1,514 0 542 0
610	6039	41	1905 Main	9,448 0 0 0
611	6040	41	1915 Main	6,246 0 1,760 0
612	6041	41	1935 Main	3,760 0 1,101 0
613	4004	42	Deleted (Sensitive Fac.)	
614	7008	42	3306 Main	0 38 0 0
615	6042	41	2030 Main	159 0 0 0
616	6043	41	2003 Commerce	4,938 0 689 0
617	6045	41	1910 Main	2,110 0 1,000 0
618	1035	41	1807 Commerce	10,197 0 3,935 0
619	4035	41	1802 Main	9,807 0 1,722 0
620	1024	41	106 South Ervay	14,939 0 3,495 0
621	1028	41	Commerce and Ervay	12,977 0 0 0
622	6030	41	1604 Main	2,901 0 0 0
623	1025	41	1521 Commerce	1,327 0 250 0
624	1030	41	1530 Main	4,671 0 0 0
625	5049	41	1506 A Main	8,319 0 738 0
626	1022	41	108 South Akard	17,510 0 588 0
627	6050	41	1412 Main	3,923 0 0 0
628	6023	41	1408 Main	7,663 0 158 0
628A	6024	41	1327 Commerce	9,271 0 428 0
628B	6051	41	1317 Commerce	6,785 0 420 0
628C	6026	41	1305 Commerce	4,650 0 1,000 0
629	1010	41	102 Murphy	6,097 0 1,275 0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Surplus Shelter Facilities In CBD)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
630	1013	41	1019 Commerce	887	0	382	0
631	1009	41	1000 Main	2,385	0	1,131	0
632	6009	41	915 Commerce	1,796	0	560	0
633	6011	41	Main and Lamar	1,415	0	2,624	0
634	6019	41	Market and Commerce	95	0	800	0
635	1006	41	Houston and Commerce	2,256	0	0	0
636	1001	41	207 South Houston	4,507	0	3,541	0
637	6013	41	912 Commerce	3,458	0	1,020	0
638	1011	41	1114 Commerce	22,152	0	1,553	0
639	1043	41	1222 Commerce	22,121	0	718	0
640	5050	41	1400 Commerce	17,459	0	3,779	0
641	5052	41	1416 Commerce	3,662	0	954	0
642	5051	41	209 Browder	2,053	0	424	0
643	5056	41	1506 Commerce	4,887	0	1,563	0
644	5053	41	1512 Commerce	3,250	0	1,674	0
645	1032	41	202 South Ervay	4,866	0	0	0
646	1036	41	1709 Jackson	919	0	775	0
647	1033	41	1712 Commerce	6,844	0	1,795	0
648	1034	41	1810 Commerce	23,331	0	1,757	0
649	1038	41	2002 Commerce	1,600	0	0	0
650	6034	41	210 South Harwood	400	0	250	0
651	6047	41	313 South Harwood	684	0	2,620	0
652	6059	41	1500 Jackson	1,795	0	2,161	0
653	4034	41	308 South Akard	23,269	0	3,817	0
654	2090	41	311 South Akard	11,021	0	874	0
655	1020	41	1200 Jackson	2,809	0	361	0
656	1021	41	1122 Jackson	14,988	0	1,785	0
657	6014	41	912 Jackson	13,730	0	0	0
658	6010	41	806 Jackson	6,435	0	625	0
659	6020	41	800 Jackson	1,400	0	0	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Surplus Shelter Facilities In CBD)

Shelter New	No. Old	S. L. No.	Address	Shelter Over 50	Cap'y. PF 40 Under 50	Shelter Over 50	Cap'y. 20-39 Under 50
660	6006	41	714 Jackson	591	0	3,500	0
661	1002	41	302 South Houston	450	0	1,000	0
662	1003	41	312 South Houston	875	0	1,400	0
663	6007	41	707 Young	122	0	2,000	0
664	1014	41	1033 Young	6,410	0	1,588	0
665	1023	41	1114 Wood	2,894	0	142	0
666	4033	41	1314 Wood	1,430	0	722	0
667	2091	41	423 South Akard	830	0	0	0
668	2089	41	Wood and Akard	6,689	0	1,417	0
669	4036	41	400 South Akard	10,832	0	0	0
670	7007	40	2220 Young	1,250	0	939	0
671	7002	40	2220 Canton	1,320	0	0	0
672	7005	40	611 Pearl Expressway	81	0	52	0
673	5016	43	1711 Canton	940	0	1,354	0
674	5019	43	916 Cadiz	316	0	0	0
675	5020	43	1100 Cadiz	152	0	1,155	0
676	5010	44	1621 Wall	250	0	500	0
677	8280	44	1738 Gano	358	0	0	0
678	5002	45	Deleted (Sensitive Fac.)				
679	8290	45	1824 Pennsylvania	267	0	35	0
				893,199	52	191,812	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Unmapped Facilities, Cat. 1 Located In Surplus Areas, But Still In Space Inventory)

Shelter New	No. Old	S. L. No.	Address	Shelter Cap'y. PF 40		Shelter Cap'y. 20-39	
				Over 50	Under 50	Over 50	Under 50
x	2031	8	2929 Cedar Springs	x	x	1,200	0
x	124	10	3721 Hall Street	x	x	1,020	0
x	107	12	4403 N. Central Expwy.	x	x	297	0
x	108	12	4713 N. Central Expwy.	x	x	480	0
x	43	15	1912 McMillan	x	x	140	0
x	67	22	5100 Ross	x	x	66	0
x	74	24	3208 San Jacinto	x	x	134	0
x	2039	27	2001 McKinney	x	x	935	0
x	2040	27	2222 North Harwood	x	x	450	0
x	2051	27	2114 Griffin	x	x	736	0
x	2052	27	2200 Griffin	x	x	412	0
x	2057	27	1001 Broom	x	x	1,728	0
x	5031	29	901 Ross	x	x	649	0
x	5033	29	1st Nat'l. Bank Auto Storage	x	x	338	0
x	5041	29	1714 Laws	x	x	1,208	0
x	116	31	712 North Washington	x	x	994	0
x	10	35	5144 Dolphin Road	x	x	96	0
x	98	38	3322 Parry	x	x	202	0
x	100	38	3809 Parry	x	x	540	0
x	8584	38	1605 Second Avenue	x	x	57	0
x	1012	41	501-507 Elm Street	x	x	308	0
x	6002	41	208 North Market	x	x	120	0
x	6003	41	211 North Austin	x	x	100	0
x	6005	41	714 Commerce	x	x	335	0
x	6008	41	400 South Austin	x	x	1,000	0
x	6012	41	909 Jackson	x	x	0	48
x	6016	41	Elm and Austin	x	x	138	0
x	4008	42	3306 Main	x	x	825	0
x	4011	42	2551 Elm	x	x	1,050	0
x	5011	43	1200 South Ervay	x	x	606	0

SHELTER FACILITY LIST BY LOCATION, CAPACITY, AND PROTECTION FACTOR

(Unmapped Facilities, Cat. 1 Located In Surplus Areas, But Still In Space Inventory)

Shelter New	No. Old	S. L. No.	Address	Shelter Cap'y. PF 40 Over 50	Under 50	Shelter Cap'y. 20-39 Over 50	Under 50
x	5022	43	1500 Canton	x	x	405	0
x	5023	43	507 South Harwood	x	x	1,805	0
x	5007	44	1601 South Lamar	x	x	299	0
x	5009	44	1325 South Lamar	x	x	2,248	0
x	8436	49	4401 2nd Avenue	x	x	112	0
x	4071	62	505 West 12th	x	x	0	10
x	106	92	6306 Diamond Head Circle	x	x	1,536	0
x	2009	121	7850 Brookhurst	x	x	884	0
x	134	241	4700 Drexel	x	x	0	38
						23,453	96
			Facilities Allocated To	874,933	1,828	263,039	327
			Surplus Facilities In C. B. D.	893,199	52	191,812	0
			Unmapped Facilities Cat. 1			23,453	96
			PROJECT TOTALS	1,768,132	1,880	478,304	423

TABULATION OF POPULATION BY STANDARD LOCATION

(Step I Sheltered and Unsheltered Population)

<u>S. L.</u>	<u>Res. Pop.</u>	<u>Peak Night Pop.</u>	<u>Cat. 1 Spaces</u>	<u>Cat. 2-8 Spaces</u>	<u>Total Spaces</u>	<u>Shel. Pop.</u>	<u>Unshel. Pop.</u>
001	3,895	3,895	114	0	114	114	3,781
002	3,503	3,783	0	0	0	3,783	0
003	4,310	4,310	0	14	14	4,310	0
004	4,109	4,443	4,358	7,612	11,970	4,443	0
005	2,980	2,980	1,600	2,960	4,560	2,980	0
006	6,144	6,186	0	1,537	1,537	6,186	0
007	4,830	4,830	13,415	37,492	50,907	4,502	328
008	4,111	4,246	8,501	15,607	24,108	4,246	0
009	4,041	4,041	0	276	276	4,041	0
010	8,323	8,634	5,135	35,718	40,853	8,634	0
011	3,679	3,779	0	2,863	2,863	3,779	0
012	3,395	3,395	1,208	1,301	2,509	3,395	0
013	4,881	5,265	3,990	2,392	6,382	5,265	0
014	2,772	2,995	684	1,529	2,213	2,995	0
015	4,338	4,679	4,964	3,809	8,773	4,679	0
016	4,242	4,242	0	0	0	4,242	0
017	2,648	2,648	0	0	0	1,202	1,446
018	4,911	5,301	1,051	1,265	2,316	3,568	1,733
019	3,305	3,559	443	2,061	2,504	3,559	0
020	5,247	5,247	0	0	0	5,247	0
021	3,845	3,845	105	92	197	3,845	0
022	6,894	7,439	66	692	758	7,439	0
023	4,799	4,799	0	134	134	4,799	0
024	8,551	9,225	338	484	822	9,225	0
025	4,990	5,001	2,614	2,589	5,203	5,001	0
026	3,552	3,565	6,570	19,322	25,892	3,565	0
027	2,167	2,167	14,291	17,749	32,040	2,167	0
028	5,980	6,000	1,831	2,886	4,717	6,000	0
029	493	493	98,384	363,038	461,422	493	0
030	1,530	1,750	5,130	12,819	17,949	1,750	0
031	2,247	3,564	3,602	10,361	13,963	3,564	0
032	2,769	2,769	0	0	0	2,769	0
033	2,535	2,535	0	238	238	2,535	0
034	5,762	5,762	200	5,420	5,620	5,102	660
035	1,868	1,868	96	40	136	1,868	0
036	7,839	8,455	0	74	74	462	7,993
037	5,682	5,682	0	0	0	1,600	4,082
038	3,857	4,155	2,475	3,125	5,600	4,155	0
039	2,735	2,735	0	0	0	2,735	0
040	737	737	1,741	5,146	6,887	737	0

<u>S. L.</u>	<u>Res. Pop.</u>	<u>Peak Night Pop.</u>	<u>Cat. 1 Spaces</u>	<u>Cat. 2-8 Spaces</u>	<u>Total Spaces</u>	<u>Shel. Pop.</u>	<u>Unshel. Pop.</u>
041	1,176	1,176	126,047	778,250	904,297	1,176	0
042	55	55	10,975	6,135	17,110	55	0
043	1,221	1,221	8,680	38,695	47,375	1,221	0
044	1,552	1,552	4,676	45,482	50,158	1,552	0
045	6,304	6,304	1,541	5,527	7,068	6,304	0
046	3,112	3,146	0	110	110	3,146	0
047	3,234	3,234	0	2,545	2,545	3,234	0
048	6,879	6,879	0	15	15	4,368	2,511
049	5,953	5,953	112	0	112	3,443	2,510
050	4,711	4,838	0	415	415	496	4,342
051	4,504	4,504	0	122	122	4,064	440
052	4,733	5,012	1,625	12,904	14,529	5,012	0
053	4,215	4,215	950	248	1,198	3,093	1,122
054	5,068	5,068	4,025	6,915	10,940	5,068	0
055	3,186	3,186	18	631	649	3,186	0
056	6,456	6,473	0	134	134	6,473	0
057	8,137	8,137	0	80	80	642	7,495
058	2,678	2,678	807	121	928	1,945	733
059	2,460	2,544	781	8,448	9,229	2,544	0
060	3,562	3,562	0	8,647	8,647	3,562	0
061	5,999	5,999	0	144	144	1,139	4,860
062	2,790	2,790	5,359	6,711	12,070	2,790	0
063	3,900	3,900	0	98	98	1,701	2,199
064	4,300	4,300	1,108	1,167	2,275	691	3,609
065	5,794	5,794	0	885	885	353	5,441
066	5,788	5,788	0	0	0	5,788	0
067	4,569	4,569	18	1,052	1,070	2,456	2,113
068	4,755	4,755	0	490	490	4,755	0
069	6,586	6,586	0	153	153	6,586	0
070	7,260	7,260	0	127	127	2,781	4,479
071	3,716	3,716	2,103	1,463	3,566	3,149	567
072	7,958	8,158	3,120	5,761	8,881	5,798	2,360
073	4,748	4,748	176	102	278	278	4,470
074	4,517	4,917	350	1,457	1,807	4,410	507
075	4,877	4,877	0	0	0	0	4,877
076	2,850	2,850	0	187	187	183	2,667
077	5,763	5,763	0	31	31	517	5,246
078	6,743	6,743	40	0	40	40	6,703
079	3,253	3,403	0	39	39	39	3,364
080	4,408	4,596	2,217	1,481	3,698	3,654	942

<u>S. L.</u>	<u>Res. Pop.</u>	<u>Peak Night Pop.</u>	<u>Cat. 1 Spaces</u>	<u>Cat. 2-8 Spaces</u>	<u>Total Spaces</u>	<u>Shel. Pop.</u>	<u>Unshel. Pop.</u>
081	1,160	1,160	206	0	206	1,160	0
082	4,257	4,557	0	0	0	4,557	0
083	7,316	7,683	0	449	499	7,683	0
084	5,054	5,104	0	0	0	3,740	1,364
085	3,314	3,758	5,463	9,022	14,485	3,758	0
086	3,612	3,899	0	21	21	3,899	0
087	1,575	1,575	0	0	0	257	1,318
088	1,290	1,290	0	0	0	1,290	0
089	1,901	1,901	0	0	0	638	1,263
090	1,330	1,430	0	0	0	1,430	0
091	4,026	4,692	0	334	334	4,692	0
092	5,974	6,024	10,516	27,763	38,279	6,024	0
093	10,853	12,253	4,946	15,476	20,566	10,651	1,602
094	4,113	4,447	9,020	9,228	18,100	4,447	0
095	6,689	6,689	0	1,114	1,114	3,721	2,968
096	5,697	5,697	105	109	214	2,832	2,865
097	7,722	7,974	1,062	394	1,456	1,456	6,518
098	4,257	4,601	76	118	194	189	4,412
099	2,016	2,106	0	0	0	0	2,016
100	6,955	6,955	17	0	17	17	6,938
101	3,769	4,067	536	884	1,420	1,328	2,739
102	3,268	3,318	0	0	0	0	3,318
103	2,087	2,087	0	0	0	0	2,087
104	10,208	10,208	6,828	6,305	13,133	4,210	5,998
105	9,094	9,179	0	4,730	4,730	4,844	4,335
106	7,143	7,143	413	497	910	1,806	5,337
107	1,343	1,343	0	0	0	503	840
108	4,014	4,314	0	0	0	0	4,314
109	7,447	7,477	20	0	20	20	7,457
110	8,571	9,021	57	0	57	57	8,964
111	5,894	6,378	0	886	886	871	5,507
112	5,013	5,193	14	0	14	280	4,913
113	4,293	4,393	0	0	0	0	4,393
114	6,788	6,838	94	0	94	94	6,744
115	8,330	8,330	0	0	0	0	8,330
116	3,043	3,293	0	1,980	1,980	1,975	1,318
117	16,096	17,376	0	2,034	2,034	4,005	13,371
118	8,044	8,044	0	0	0	0	8,044
119	7,338	7,645	0	13	13	13	7,632
120	4,235	4,935	0	0	0	4,560	375

<u>S. L.</u>	<u>Res. Pop.</u>	<u>Peak Night Pop.</u>	<u>Cat. 0 Spaces</u>	<u>Cat. 2-8 Spaces</u>	<u>Total Spaces</u>	<u>Shel. Pop.</u>	<u>Unshel. Pop.</u>
121	3,214	3,329	17,024	75,078	92,102	3,294	35
122	18,808	18,808	67	36	103	5,358	13,450
123	7,448	7,448	0	0	0	0	7,448
124	5,310	5,310	0	0	0	0	5,310
125	2,814	2,814	813	1,669	2,482	613	2,201
126	3,379	3,509	0	12	12	12	3,497
127	6,374	6,374	0	0	0	2,930	3,444
128	5,289	5,339	0	36	36	5,339	0
129	12,005	12,255	0	297	297	6,394	5,861
130	600	600	0	0	0	446	154
131	7,590	7,590	0	477	477	2,774	4,816
132	11,369	11,369	0	779	779	1,735	9,634
133	3,664	3,664	140	66	206	202	3,462
134	3,934	3,934	0	0	0	0	3,934
135	4,734	4,734	162	1,382	1,544	1,544	3,190
136	7,659	7,659	0	0	0	0	7,659
137	5,319	5,469	0	0	0	0	5,469
138	5,309	5,537	0	599	599	329	5,208
139	2,655	2,655	0	0	0	0	2,655
140	1,776	1,776	60	0	60	55	1,721
141	1,932	1,932	0	0	0	0	1,932
142	492	492	0	0	0	0	492
143	6,601	6,601	0	0	0	2,938	3,663
144	5,854	5,854	0	0	0	1,845	4,009
145	7,302	7,302	39	130	169	169	7,133
146	9,548	9,548	0	11	11	11	9,537
147	3,025	3,025	0	72	72	72	2,953
148	9,060	9,060	0	964	964	4,066	4,994
149	8,571	8,971	497	6,954	7,451	4,349	4,622
150	5,791	6,252	1,088	401	1,489	1,489	4,763
151	14,334	14,334	0	0	0	0	14,334
152	6,800	6,800	26	330	356	6,800	0
153	2,514	2,726	0	100	100	2,709	17
154	2,462	2,760	0	3,360	3,360	2,760	0
155	2,192	2,369	0	138	138	1,105	1,264
156	2,794	2,794	134	253	387	811	1,983
157	6,011	6,411	2,538	2,060	4,598	4,462	1,949
158	117	117	0	0	0	0	117
159	0	0	0	0	0	0	0
160	374	2,874	31,052	4,830	35,882	2,874	0

<u>S. L.</u>	<u>Res. Pop.</u>	<u>Peak Night Pop.</u>	<u>Cat. 1 Spaces</u>	<u>Cat. 2-8 Spaces</u>	<u>Total Spaces</u>	<u>Shel. Pop.</u>	<u>Unshel. Pop.</u>
161	0	0	0	0	0	0	0
162	24	24	0	0	0	1,002	24
163	1,032	1,032	0	9,753	9,753	0	30
164	2,795	2,885	0	0	0	0	2,885
165	3,492	3,492	0	0	0	0	3,492
166	2,479	2,479	0	0	0	0	2,479
167	226	226	0	0	0	0	226
168	0	0	0	0	0	0	0
169	221	221	0	0	0	0	221
170	184	184	0	0	0	0	184
171	0	0	0	0	0	0	0
172	96	96	0	0	0	0	96
173	126	3,651	6,140	31,046	37,186	3,525	126
174	2,049	2,049	0	0	0	2,049	0
175	4	4	0	0	0	0	4
176	31	31	0	0	0	0	31
177	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0
181	0	0	0	0	0	0	0
182	62	62	0	0	0	0	62
183	3,773	3,773	0	0	0	0	3,773
184	1,997	1,997	0	0	0	0	1,997
185	927	927	0	0	0	0	927
186	1,102	1,102	0	0	0	0	1,102
187	4,432	4,596	0	0	0	1,870	2,726
188	282	282	0	45	45	44	278
189	500	550	0	0	0	0	550
190	4,850	5,150	753	1,930	2,683	2,656	2,494
191	5,471	5,496	17	569	586	575	4,921
192	8,719	8,869	0	0	0	0	8,869
193	4,591	4,591	0	0	0	0	4,591
194	3,570	3,570	0	0	0	0	3,570
195	72	72	0	0	0	0	72
196	1,661	1,661	0	0	0	332	1,329
197	2,118	2,118	0	0	0	0	2,118
198	142	142	0	0	0	20	122
199	206	206	0	0	0	0	206
200	436	436	0	0	0		436

<u>S. L.</u>	<u>Res. Pop.</u>	<u>Peak Night Pop.</u>	<u>Cat. 1 Spaces</u>	<u>Cat. 2-8 Spaces</u>	<u>Total Spaces</u>	<u>Shel. Pop.</u>	<u>Unshel. Pop.</u>
201	107	107	0	0	0	0	107
202	1,956	1,956	0	0	0	0	1,956
203	288	288	0	68	68	62	226
204	326	326	0	0	0	326	0
205	0	0	0	0	0	0	0
206	0	0	0	0	0	0	0
207	135	135	134	0	134	135	0
208	0	0	0	0	0	0	0
209	11	11	0	0	0	11	0
210	4	4	0	0	0	0	4
211	40	40	0	0	0	0	40
212	1,904	1,904	0	0	0	1,904	0
213	2,013	2,013	0	0	0	354	1,659
214	14,701	14,701	0	813	813	1,931	12,770
215	4,921	4,921	0	33	33	33	4,888
216	5,473	5,473	0	0	0	0	5,473
217	5,854	5,854	0	0	0	0	5,854
218	5,305	5,305	0	0	0	0	5,305
219	9,149	9,149	0	1,080	1,080	515	8,634
220	7,071	7,071	0	0	0	0	7,071
221	4,771	4,771	0	0	0	0	4,771
222	4,338	4,338	0	0	0	0	4,338
223	0	0	0	0	0	0	0
224	37	37	0	0	0	0	37
225	434	434	0	0	0	0	434
226	6,029	6,029	0	0	0	0	6,029
227	103	103	0	0	0	0	103
228	4	4	0	0	0	0	4
229	22	22	0	0	0	0	22
230	23	23	0	0	0	0	23
231	5,112	8,162	0	0	0	735	7,427
232	5,916	5,916	2,936	691	3,627	5,916	0
233	27,257	27,317	0	27	27	12,606	14,711
234	2,160	2,160	0	0	0	2,160	0
235	7,570	8,014	9,592	16,153	25,745	8,014	0
236	3,602	3,894	0	367	367	3,894	0
237	6,251	6,749	147	3,479	3,626	6,749	0
238	4,927	5,311	1,186	3,908	5,094	5,311	0
239	2,922	3,161	0	554	554	3,161	0
240	2,651	2,651	0	189	189	2,651	0

<u>S. L.</u>	<u>Res. Pop.</u>	<u>Peak Night Pop.</u>	<u>Cat. 1 Spaces</u>	<u>Cat. 2-8 Spaces</u>	<u>Total Spaces</u>	<u>Shel. Pop.</u>	<u>Unshel. Pop.</u>
241	5,172	5,575	2,800	6,400	9,200	5,575	0
242	3,667	3,867	0	0	0	0	3,867
243	1,890	1,890	0	0	0	0	1,890
244	7	7	0	0	0	0	7
245	2,762	2,912	0	0	0	0	2,912
246	12,656	12,701	0	0	0	0	12,701
247	7,791	7,841	0	0	0	0	7,841
248	5,535	5,585	0	12	12	12	5,573
249	3,500	3,650	0	1,831	1,831	991	2,659
250	4,477	4,527	0	732	732	868	3,659
251	6,283	6,283	0	0	0	0	6,283
252	5,150	5,450	0	435	435	585	4,865
253	3,492	3,542	500	558	1,058	908	2,634
254	11,500	11,500	0	0	0	700	10,800
255	0	0	0	0	0	0	0
256	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0
258	6,021	6,021	0	112	112	432	5,589
259	1,986	2,061	737	2,054	2,791	2,061	0
260	4,428	4,428	0	0	0	4,428	0
261	3,401	3,651	0	0	0	3,651	0
262	2,279	2,279	0	0	0	2,279	0
263	2,285	2,285	0	0	0	2,285	0
264	5,962	5,962	142	259	401	1,597	4,365
265	2,225	2,264	0	450	450	285	1,979
266	4,484	4,484	0	0	0	0	4,484
267	1,541	1,541	0	0	0	0	1,541
268	921	921	0	0	0	600	321
269	0	0	0	0	0	0	0
270	11	11	0	0	0	0	11
271	5,500	5,500	82	700	782	771	4,729
272	17,430	17,080	210	1,084	1,294	962	16,118
273	8,092	8,092		81	81	81	8,011
274	7,363	7,363	1,450	1,450	2,900	3,470	3,893
275	6,376	6,376	0	0	0	199	6,177
276	7,628	7,628	0	0	0	3,150	4,478
277	3,038	3,038	0	0	0	163	2,875
278	3,126	3,226	1,211	1,451	2,662	2,811	415
279	6,029	6,029	0	0	0	2,907	3,122
280	7,096	7,096	19	0	19	770	6,326

<u>S. L.</u>	<u>Res. Pop.</u>	<u>Peak Night Pop.</u>	<u>Cat. 1 Spaces</u>	<u>Cat. 2-8 Spaces</u>	<u>Total Spaces</u>	<u>Shel. Pop.</u>	<u>Unshel. Pop</u>
281	8,872	8,872	0	0	0	0	8,872
282	3,987	3,987	0	0	0	0	3,987
283	4	4	0	0	0	4	0
284	6	6	0	0	0	0	6
285	0	0	0	0	0	0	0
286	1,985	1,985	0	0	0	0	1,985
287	3,938	4,038	0	0	0	10	4,028
288	3,251	3,301	0	49	49	55	3,246
289	8,374	8,374	0	0	0	0	8,374
290	10,317	10,457	24	0	24	8	10,449
291	7,992	8,392	0	2,820	2,820	2,820	5,572
292	4,790	4,790	0	0	0	0	4,790
293	6,845	6,845	0	0	0	40	6,805
294	3	3	0	21	21	3	0

TOTALS

1,216,974	1,250,983	478,727	1,770,012	2,248,739	527,147	723,836
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1967 - SHELTERED AND UNSHELTERED POPULATION BY S. L.

(Step III)

<u>S. L.</u>	<u>Max. Pop.</u>	<u>PF Cat. 2-8 Spaces</u>	<u>Spaces Used</u>	<u>Pop. Sheltered</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
001	3,895	0	0	0	3,895	0
002	3,783	0	0	2,340	1,443	0
003	4,310	14	14	2,774	1,836	0
004	5,251	7,612	7,612	5,251	0	0
005	6,049	2,960	1,380	6,049	0	1,580
006	6,186	1,537	1,537	6,186	0	0
007	36,578	37,492	37,492	36,468	110	0
008	6,638	15,607	12,031	6,638	0	3,576
009	4,041	276	276	4,041	0	0
010	8,634	35,718	19,782	8,634	0	15,936
011	5,442	2,863	2,863	5,442	0	0
012	3,395	1,301	1,301	3,395	0	0
013	5,877	2,392	2,392	2,692	3,185	0
014	3,343	1,529	1,529	1,329	2,014	0
015	5,223	3,809	3,809	4,161	1,062	0
016	4,242	0	0	342	3,900	0
017	2,648	0	0	0	2,648	0
018	5,301	1,265	1,265	1,265	4,036	0
019	4,489	2,061	2,061	2,061	2,428	0
020	5,247	0	0	551	4,696	0
021	3,845	92	92	3,282	563	0
022	7,439	692	692	5,237	2,202	0
023	4,799	134	134	2,448	2,351	0
024	9,225	484	484	9,225	0	0
025	8,891	2,589	1,362	8,891	0	1,227
026	5,832	19,322	7,362	5,832	0	11,960
027	5,987	17,749	8,562	5,987	0	9,187
028	6,000	2,886	2,886	6,000	0	0
029	16,786	363,038	34,838	16,786	0	328,200
030	4,882	12,819	11,428	4,882	0	1,391
031	7,215	10,361	10,361	7,215	0	0
032	2,769	0	0	0	2,769	0
033	2,535	238	238	238	2,297	0
034	5,762	5,420	5,420	4,902	860	0
035	1,868	40	40	558	1,310	0
036	8,455	74	74	462	7,993	0
037	5,682	0	0	0	5,682	0
038	4,640	3,125	3,125	4,640	0	0
039	3,057	0	0	3,057	0	0
040	7,069	5,146	4,576	7,069	0	570

<u>S. L.</u>	<u>Max. Pop.</u>	<u>PF Cat. 2-8 Spaces</u>	<u>Spaces Used</u>	<u>Pop. Sheltered</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
041	125,809	778,250	136,652	125,809	0	641,598
042	7,978	6,135	5,213	7,978	0	917
043	13,692	38,695	9,242	13,692	0	29,453
044	8,076	45,482	18,943	8,076	0	26,539
045	6,304	5,527	4,301	6,304	0	1,226
046	3,146	110	110	3,146	0	0
047	3,234	2,545	2,545	3,234	0	0
048	6,879	15	15	4,368	2,511	0
049	5,953	0	0	3,250	2,703	0
050	7,276	415	415	415	6,861	0
051	4,504	122	122	122	4,382	0
052	5,301	12,904	12,904	5,301	0	0
053	4,215	248	248	2,804	1,411	0
054	5,068	6,915	6,915	5,068	0	0
055	9,199	631	631	5,045	4,154	0
056	6,473	134	134	3,160	3,313	0
057	8,137	80	80	80	8,057	0
058	2,678	121	121	2,678	0	0
059	2,730	8,448	8,448	2,730	0	0
060	3,562	8,647	8,647	3,562	0	0
061	5,999	144	144	144	5,855	0
062	2,790	6,711	6,711	2,790	0	0
063	3,900	98	98	1,083	2,817	0
064	5,701	1,167	1,167	1,167	4,534	0
065	5,794	885	885	399	5,395	0
066	5,788	0	0	3,605	2,183	0
067	4,569	1,052	1,052	937	3,632	0
068	4,755	490	490	285	4,470	0
069	6,586	153	153	1,811	4,775	0
070	7,260	127	127	1,210	6,050	0
071	3,716	1,463	1,463	793	2,923	0
072	8,927	5,761	5,761	5,553	3,374	0
073	4,748	102	102	102	4,646	0
074	13,328	1,457	1,457	472	12,856	0
075	4,877	0	0	0	4,877	0
076	2,850	187	187	187	2,663	0
077	5,763	31	31	517	5,246	0
078	6,743	0	0	0	6,743	0
079	3,403	39	39	39	3,364	0
080	4,596	1,481	1,481	924	3,672	0
081	1,160	0	0	0	1,160	0
082	4,557	0	0	367	4,190	0
083	7,683	449	449	1,473	6,210	0

<u>S. L.</u>	<u>Max. Pop.</u>	<u>PF Cat. 2-8 Spaces</u>	<u>Spaces Used</u>	<u>Pop. Sheltered</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
084	5,104	0	0	0	5,104	0
085	10,507	9,022	9,022	10,289	218	0
086	3,899	21	21	171	3,728	0
087	1,575	0	0	207	1,368	0
088	1,290	0	0	1,290	0	0
089	1,901	0	0	0	1,901	0
090	1,705	0	0	952	753	0
091	4,592	334	334	3,061	1,531	0
092	6,024	27,763	19,284	6,024	0	8,479
093	22,423	15,476	15,476	16,628	5,795	0
094	7,477	9,228	8,928	4,186	3,291	300
095	6,689	1,114	1,114	3,274	3,415	0
096	5,697	109	109	600	5,097	0
097	7,974	394	394	394	7,580	0
098	6,172	118	118	118	6,054	0
099	2,016	0	0	0	2,016	0
100	6,955	0	0	0	6,955	0
101	4,067	884	884	604	3,463	0
102	3,761	0	0	0	3,761	0
103	2,087	0	0	0	2,087	0
104	10,208	6,305	6,305	3,091	7,117	0
105	15,219	4,730	4,730	4,730	10,489	0
106	7,143	497	497	497	6,646	0
107	1,772	0	0	0	1,772	0
108	4,314	0	0	0	4,314	0
109	7,477	0	0	0	7,477	0
110	9,021	0	0	412	8,609	0
111	7,532	886	886	474	7,058	0
112	5,193	0	0	0	5,193	0
113	4,393	0	0	0	4,393	0
114	6,838	0	0	0	6,838	0
115	8,330	0	0	0	8,330	0
116	5,477	1,980	1,980	1,980	3,497	0
117	24,315	2,034	2,034	2,034	22,281	0
118	8,044	0	0	0	8,044	0
119	7,645	13	13	13	7,632	0
120	4,935	0	0	0	4,935	0
121	45,689	75,078	39,812	27,880	17,809	35,266
122	18,808	36	36	1,927	16,881	0
123	7,448	0	0	0	7,448	0
124	5,310	0	0	0	5,310	0
125	8,571	1,669	1,669	1,280	7,291	0
126	3,509	12	12	12	3,497	0

<u>S. L.</u>	<u>Max. Pop.</u>	<u>PF Cat. 2-8 Spaces</u>	<u>Spaces Used</u>	<u>Pop. Sheltered</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
127	6,374	0	0	0	6,374	0
128	5,339	36	36	36	5,303	0
129	12,255	297	297	5,435	6,820	0
130	850	0	0	359	491	0
131	7,590	477	477	477	7,113	0
132	11,369	779	779	779	10,590	0
133	3,664	66	66	66	3,598	0
134	3,934	0	0	0	3,934	0
135	4,734	1,382	1,382	1,382	3,352	0
136	7,659	0	0	0	7,659	0
137	5,469	0	0	0	5,469	0
138	5,537	599	599	599	4,938	0
139	2,655	0	0	0	2,655	0
140	2,050	0	0	0	2,050	0
141	1,932	0	0	0	1,932	0
142	492	0	0	0	492	0
143	6,601	0	0	0	6,601	0
144	5,854	0	0	0	5,854	0
145	9,712	130	130	130	9,582	0
146	9,548	11	11	11	9,537	0
147	3,025	72	72	72	2,953	0
148	9,060	964	964	964	8,096	0
149	16,553	6,954	6,954	6,954	9,599	0
150	6,252	401	401	401	5,851	0
151	14,334	0	0	0	14,334	0
152	6,800	330	330	1,211	5,589	0
153	4,560	100	100	500	4,060	0
154	3,484	3,360	3,360	3,360	124	0
155	3,349	138	138	138	3,211	0
156	2,794	253	253	253	2,541	0
157	12,046	2,060	2,060	2,963	9,083	0
158	117	0	0	0	117	0
159	0	0	0	0	0	0
160	18,437	4,830	4,830	4,830	13,607	0
161	0	0	0	0	0	0
162	24	0	0	0	24	0
163	3,219	9,753	9,753	3,209	10	0
164	2,885	0	0	0	2,885	0
165	3,492	0	0	0	3,492	0
166	2,479	0	0	0	2,479	0
167	226	0	0	0	226	0
168	0	0	0	0	0	0
169	221	0	0	0	221	0

<u>S. L.</u>	<u>Max. Pop.</u>	<u>P F Cat. 2-8 Spaces</u>	<u>Spaces Used</u>	<u>Pop. Sheltered</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
170	184	0	0	0	184	0
171	0	0	0	0	0	0
172	198	0	0	0	198	0
173	15,063	31,046	31,046	15,000	63	0
174	2,049	0	0	2,049	0	0
175	4	0	0	0	4	0
176	31	0	0	0	31	0
177	0	0	0	0	0	0
178	0	0	0	0	0	0
179	0	0	0	0	0	0
180	0	0	0	0	0	0
181	0	0	0	0	0	0
182	62	0	0	0	62	0
183	3,773	0	0	0	3,773	0
184	1,997	0	0	0	1,997	0
185	927	0	0	0	927	0
186	1,102	0	0	0	1,102	0
187	4,596	0	0	0	4,596	0
188	282	45	45	5	277	0
189	598	0	0	0	598	0
190	18,003	1,930	1,930	1,930	16,073	0
191	5,496	569	569	413	5,083	0
192	8,869	0	0	0	8,869	0
193	4,591	0	0	0	4,591	0
194	3,570	0	0	0	3,570	0
195	212	0	0	0	212	0
196	3,252	1,084	1,084	1,084	2,168	0
197	2,118	0	0	0	2,118	0
198	142	0	0	0	142	0
199	206	0	0	0	206	0
200	436	0	0	0	436	0
201	107	0	0	0	107	0
202	1,956	0	0	0	1,956	0
203	897	68	68	68	829	0
204	326	0	0	0	326	0
205	0	0	0	0	0	0
206	0	0	0	0	0	0
207	135	0	0	0	135	0
208	0	0	0	0	0	0
209	11	0	0	0	11	0
210	4	0	0	0	4	0
211	40	0	0	0	40	0

<u>S. L.</u>	<u>Max. Pop.</u>	<u>PF Cat. 2-8 Spaces</u>	<u>Spaces Used</u>	<u>Pop. Sheltered</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
212	1,904	0	0	0	1,904	0
213	2,013	0	0	0	2,013	0
214	14,701	813	813	1,860	12,841	0
215	4,921	33	33	33	4,888	0
216	5,473	0	0	0	5,473	0
217	5,854	0	0	0	5,854	0
218	5,305	0	0	0	5,305	0
219	9,149	1,080	1,080	1,080	8,069	0
220	7,071	0	0	0	7,071	0
221	4,771	0	0	0	4,771	0
222	4,338	0	0	0	4,338	0
223	0	0	0	0	0	0
224	37	0	0	0	37	0
225	434	0	0	0	434	0
226	6,029	0	0	0	6,029	0
227	103	0	0	0	103	0
228	4	0	0	0	4	0
229	22	0	0	0	22	0
230	23	0	0	0	23	0
231	9,456	0	0	101	9,355	0
232	7,355	691	691	2,247	5,108	0
233	27,317	27	27	8,033	19,284	0
234	2,160	0	0	2,160	0	0
235	13,984	16,153	16,153	13,984	0	0
236	3,894	367	367	3,894	0	0
237	6,740	3,479	3,479	6,740	0	0
238	5,311	3,908	3,908	5,311	0	0
239	3,161	554	554	3,161	0	0
240	2,651	189	189	2,651	0	0
241	5,575	6,400	6,400	5,575	0	0
242	3,867	0	0	0	3,867	0
243	1,890	0	0	0	1,890	0
244	7	0	0	0	7	0
245	2,912	0	0	0	2,912	0
246	12,701	0	0	0	12,701	0
247	7,841	0	0	0	7,841	0
248	5,585	12	12	12	5,573	0
249	8,000	1,831	1,831	1,245	6,755	0
250	4,527	732	732	868	3,659	0
251	6,283	0	0	0	6,283	0
252	8,728	435	435	535	8,193	0
253	6,870	558	558	458	6,412	0
254	11,500	0	0	450	11,050	0

<u>S. L.</u>	<u>Max. Pop.</u>	<u>PF Cat. 2-8 Spaces</u>	<u>Spaces Used</u>	<u>Pop. Sheltered</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
255	0	0	0	0	0	0
256	0	0	0	0	0	0
257	0	0	0	0	0	0
258	6,021	112	112	703	5,318	0
259	2,301	2,054	2,054	1,393	908	0
260	4,428	0	0	0	4,428	0
261	3,651	0	0	0	3,651	0
262	2,279	0	0	0	2,279	0
263	2,285	0	0	0	2,285	0
264	5,962	259	259	492	5,470	0
265	2,264	450	450	287	1,977	0
266	4,484	0	0	0	4,484	0
267	1,541	0	0	0	1,541	0
268	921	0	0	0	921	0
269	0	0	0	0	0	0
270	11	0	0	0	11	0
271	5,500	700	700	700	4,800	0
272	17,430	0	0	0	17,430	0
273	12,390	81	81	81	12,309	0
274	7,363	1,450	1,450	1,512	5,851	0
275	6,376	0	0	305	6,071	0
276	7,628	0	0	0	7,628	0
277	3,038	0	0	0	3,038	0
278	4,113	1,451	1,451	990	3,123	0
279	6,029	0	0	45	5,984	0
280	7,096	0	0	49	7,047	0
281	8,872	0	0	0	8,872	0
282	3,987	0	0	0	3,987	0
283	4	0	0	0	4	0
284	206	0	0	0	206	0
285	0	0	0	0	0	0
286	1,985	0	0	0	1,985	0
287	5,540	0	0	0	5,540	0
288	3,301	49	49	49	3,252	0
289	8,374	0	0	0	8,374	0
290	10,457	0	0	0	10,457	0
291	13,146	2,820	2,820	2,820	10,326	0
292	4,790	0	0	0	4,790	0
293	6,845	0	0	40	6,805	0
294	261	21	21	21	240	0
Totals	1,687,681	1,770,012	652,607*	643,401	1,044,280	1,117,405

* The 4,603 hospital beds require 9,206 additional spaces.

1970 - SHELTERED AND UNSHELTERED POPULATION BY S. L.

(Step III)

S. L. No.	Max. Pop.	1967 PF Cat. 2-8 Sp.	New Spaces Added	1970 Tot. PF Cat. 2-8 Sp.	PF Cat. 2-8 Sp. Used	Pop. Sheltrd.	Shelter Needed	Shelter Surplus
001	4,521	0	0	0	0	0	4,521	0
002	4,003	0	0	0	0	2,340	1,663	0
003	4,420	14	0	14	14	2,474	1,946	0
004	5,257	7,612	0	7,612	7,612	5,251	6	0
005	8,918	2,960	730	3,690	3,690	8,918	0	0
006	6,379	1,537	0	1,537	1,537	6,379	0	0
007	38,367	37,492	2,718	40,210	40,210	38,367	0	0
008	6,657	15,607	89	15,696	12,050	6,657	0	3,646
009	4,334	276	0	276	276	4,334	0	0
010	9,831	35,718	3,001	38,719	24,039	9,831	0	14,680
011	8,023	2,863	118	2,981	2,981	8,023	0	0
012	3,431	1,301	319	1,620	1,620	3,431	0	0
013	5,990	2,392	588	2,980	2,980	3,280	2,710	0
014	4,447	1,529	0	1,529	1,529	1,329	3,118	0
015	5,209	3,809	0	3,809	3,809	4,161	1,048	0
016	4,382	0	0	0	0	342	4,040	0
017	2,651	0	0	0	0	0	2,651	0
018	5,544	1,265	0	1,265	1,265	1,265	4,279	0
019	4,581	2,061	0	2,061	2,061	2,061	2,520	0
020	5,309	0	0	0	0	33	5,276	0
021	3,859	92	0	92	92	3,282	577	0
022	7,308	692	0	692	692	7,308	0	0
023	5,344	134	0	134	134	2,707	2,637	0
024	9,745	484	0	484	484	9,745	0	0
025	13,519	2,589	0	2,589	1,362	13,519	0	1,227
026	5,429	19,322	0	19,322	6,959	5,429	0	12,363
027	6,269	17,749	0	17,749	8,844	6,269	0	8,905
028	6,160	2,886	16	2,902	2,902	6,160	0	0
029	20,253	363,038	57,559	420,597	43,453	20,253	0	377,144
030	4,976	12,819	1,689	14,508	13,593	4,976	0	915
031	8,596	10,361	863	11,224	11,224	8,596	0	0
032	3,057	0	0	0	0	0	3,057	0
033	2,719	238	0	238	238	238	2,481	0
034	6,055	5,420	0	5,420	5,420	4,902	1,153	0
035	1,967	40	0	40	40	558	1,409	0
036	10,243	74	0	74	74	462	9,781	0
037	5,853	0	0	0	0	0	5,853	0
038	4,692	3,125	0	3,125	3,125	4,692	0	0
039	3,026	0	0	0	0	3,026	0	0
040	15,660	5,146	0	5,146	5,146	15,660	0	0

<u>S. L.</u> <u>No.</u>	<u>Max.</u> <u>Pop.</u>	<u>1967</u> <u>PF Cat.</u> <u>2-8 Sp.</u>	<u>New</u> <u>Spaces</u> <u>Added</u>	<u>1970 Tot.</u> <u>PF Cat.</u> <u>2-8 Sp.</u>	<u>PF Cat.</u> <u>2-8 Sp.</u> <u>Used</u>	<u>Pop.</u> <u>Sheltrd.</u>	<u>Shelter</u> <u>Needed</u>	<u>Shelter</u> <u>Surplus</u>
041	131,809	778,250	110,500	888,750	149,565	131,809	0	739,185
042	7,252	6,135	0	6,135	6,135	7,252	0	0
043	15,178	38,695	2,018	40,713	10,728	15,178	0	29,985
044	13,866	45,482	0	45,482	24,433	13,866	0	21,049
045	6,509	5,527	0	5,527	4,663	6,509	0	864
046	3,251	110	0	110	110	3,251	0	0
047	3,391	2,545	0	2,545	2,545	3,391	0	0
048	7,022	15	0	15	15	4,368	2,654	0
049	6,048	0	0	0	0	3,250	2,798	0
050	6,996	415	0	415	415	415	6,581	0
051	4,590	122	0	122	122	122	4,468	0
052	5,457	12,904	0	12,904	12,904	5,301	156	0
053	4,224	248	0	248	248	2,660	1,564	0
054	5,733	6,915	37	6,952	6,952	5,733	0	0
055	15,019	631	0	631	631	4,417	10,602	0
056	7,222	134	31	165	165	3,191	4,031	0
057	9,477	80	0	80	80	80	9,397	0
058	3,103	121	0	121	121	2,678	425	0
059	3,136	8,448	0	8,448	8,448	2,730	406	0
060	4,316	8,647	0	8,647	8,647	3,562	754	0
061	6,610	144	0	144	144	144	6,466	0
062	3,338	6,711	0	6,711	6,711	2,790	548	0
063	4,366	98	0	98	98	1,083	3,283	0
064	6,508	1,167	0	1,167	1,167	1,167	5,341	0
065	6,115	885	0	885	885	399	5,716	0
066	5,954	0	0	0	0	3,605	2,349	0
067	5,254	1,052	0	1,052	1,052	937	4,317	0
068	4,774	490	72	562	562	357	4,417	0
069	6,764	153	0	153	153	153	6,611	0
070	7,370	127	0	127	127	1,210	6,160	0
071	3,935	1,463	0	1,463	1,463	3,935	0	0
072	10,949	5,761	11,150	16,911	16,911	10,949	0	0
073	5,374	102	0	102	102	2,714	2,660	0
074	18,989	1,457	83	1,540	1,540	555	18,434	0
075	4,877	0	0	0	0	0	4,877	0
076	2,851	187	0	187	187	187	2,664	0
077	5,937	31	19	50	50	536	5,401	0
078	7,015	0	0	0	0	0	7,015	0
079	3,285	39	0	39	39	39	3,246	0
080	5,349	1,481	414	1,895	1,895	1,338	4,011	0
081	1,974	0	0	0	0	0	1,974	0
082	4,562	0	0	0	0	367	4,195	0
083	7,768	449	0	449	449	2,292	5,476	0

S. L. No.	Max. Pop.	1967 PF Cat. 2-8 Sp.	New Spaces Added	1970 Tot. PF Cat. 2-8 Sp.	PF Cat. 2-8 Sp. Used	Pop. Sheltrd.	Shelter Needed	Shelter Surplus
084	4,822	0	0	0	0	0	4,822	0
085	10,733	9,022	0	9,022	9,022	10,289	444	0
086	5,408	21	0	21	21	171	5,237	0
087	1,706	0	0	0	0	207	1,499	0
088	1,392	0	0	0	0	1,392	0	0
089	2,050	0	0	0	0	0	2,050	0
090	1,841	0	0	0	0	952	889	0
091	4,593	334	0	334	334	3,061	1,532	0
092	6,210	27,763	16,658	44,421	19,810	6,210	0	24,611
093	35,844	15,476	9,170	24,646	24,646	25,798	10,046	0
094	13,975	9,228	2,908	12,136	12,136	7,394	6,581	0
095	7,061	1,114	668	1,782	1,782	3,942	3,119	0
096	6,854	109	0	109	109	600	6,254	0
097	8,255	394	0	394	394	394	7,861	0
098	6,704	118	0	118	118	118	6,586	0
099	1,965	0	0	0	0	0	1,965	0
100	6,984	0	0	0	0	0	6,984	0
101	4,198	884	0	884	884	604	3,594	0
102	6,408	0	274	274	274	274	6,134	0
103	3,135	0	0	0	0	0	3,135	0
104	10,594	6,305	83	6,388	6,388	4,832	5,762	0
105	15,692	4,730	135	4,865	4,865	4,865	10,827	0
106	8,094	497	14	511	511	511	7,583	0
107	2,247	0	0	0	0	0	2,247	0
108	4,699	0	0	0	0	0	4,699	0
109	8,623	0	0	0	0	0	8,623	0
110	9,347	0	0	0	0	412	8,935	0
111	7,797	886	0	886	886	474	7,323	0
112	5,396	0	0	0	0	0	5,396	0
113	4,650	0	0	0	0	0	4,650	0
114	7,842	0	0	0	0	0	7,842	0
115	8,454	0	0	0	0	0	8,454	0
116	6,128	1,980	1,140	3,120	3,120	3,120	3,008	0
117	26,657	2,034	135	2,169	2,169	2,169	24,488	0
118	8,303	0	0	0	0	0	8,303	0
119	9,822	13	0	13	13	13	9,809	0
120	5,048	0	0	0	0	0	5,048	0
121	48,828	75,078	17,763	92,841	42,785	30,101	18,727	50,056
122	19,764	36	0	36	36	1,927	17,837	0
123	9,059	0	0	0	0	0	9,059	0
124	5,106	0	0	0	0	0	5,106	0
125	9,229	1,669	0	1,669	1,669	1,280	7,949	0
126	3,742	12	0	12	12	12	3,730	0

<u>S. L. No.</u>	<u>Max. Pop.</u>	<u>1967 PF Cat. 2-8 Sp.</u>	<u>New Spaces Added</u>	<u>1970 Tot. PF Cat. 2-8 Sp.</u>	<u>PF Cat. 2-8 Sp. Used</u>	<u>Pop. Sheltrd.</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
127	7,004	0	0	0	0	0	7,004	0
128	9,136	36	100	136	136	136	9,000	0
129	15,024	297	28	325	325	7,837	7,187	0
130	3,591	0	11,000	11,000	11,000	3,591	0	0
131	8,360	477	0	477	477	477	7,883	0
132	12,584	779	100	879	879	8,288	4,296	0
133	6,001	66	0	66	66	66	5,935	0
134	6,108	0	0	0	0	0	6,108	0
135	8,676	1,382	0	1,382	1,382	1,382	7,294	0
136	8,150	0	0	0	0	0	8,150	0
137	6,716	0	0	0	0	0	6,716	0
138	5,985	599	0	599	599	599	5,386	0
139	2,839	0	0	0	0	0	2,839	0
140	2,332	0	100	100	100	100	2,232	0
141	2,218	0	0	0	0	0	2,218	0
142	1,502	0	0	0	0	0	1,502	0
143	7,637	0	0	0	0	0	7,637	0
144	6,228	0	0	0	0	0	6,228	0
145	9,940	130	0	130	130	130	9,810	0
146	9,550	11	0	11	11	11	9,539	0
147	4,065	72	0	72	72	72	3,993	0
148	9,137	964	0	964	964	964	8,173	0
149	17,640	6,954	0	6,954	6,954	6,954	10,686	0
150	6,446	401	241	642	642	642	5,804	0
151	15,716	0	0	0	0	0	15,716	0
152	8,721	330	0	330	330	1,211	7,510	0
153	5,451	100	60	160	160	160	5,291	0
154	3,579	3,360	0	3,360	3,360	3,360	219	0
155	3,467	138	0	138	138	138	3,329	0
156	2,957	253	56	309	309	309	2,648	0
157	22,022	2,060	552	2,612	2,612	2,612	19,410	0
158	135	0	0	0	0	0	135	0
159	0	0	0	0	0	0	0	0
160	18,976	4,830	0	4,830	4,830	4,830	14,146	0
161	0	0	0	0	0	0	0	0
162	34	0	0	0	0	0	34	0
163	3,713	9,753	5,852	15,605	15,605	3,713	0	0
164	4,093	0	0	0	0	0	4,093	0
165	6,492	0	0	0	0	0	6,492	0
166	4,958	0	0	0	0	0	4,958	0
167	292	0	0	0	0	0	292	0
168	0	0	0	0	0	0	0	0
169	231	0	0	0	0	0	231	0

<u>S. L. No.</u>	<u>Max. Pop.</u>	<u>1967 PF Cat. 2-8 Sp.</u>	<u>New Spaces Added</u>	<u>1970 Tot. PF Cat. 2-8 Sp.</u>	<u>PF Cat. 2-8 Sp. Used</u>	<u>Pop. Sheltrd.</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
170	201	0	0	0	0	0	201	0
171	0	0	0	0	0	0	0	0
172	208	0	0	0	0	0	208	0
173	21,637	31,046	0	31,046	31,046	21,000	637	0
174	5,337	0	0	0	0	2,049	3,288	0
175	4	0	0	0	0	0	4	0
176	30	0	0	0	0	0	30	0
177	152	0	0	0	0	0	152	0
178	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0
181	0	0	0	0	0	0	0	0
182	59	0	0	0	0	0	59	0
183	4,655	0	0	0	0	0	4,655	0
184	2,159	0	0	0	0	0	2,159	0
185	991	0	0	0	0	0	991	0
186	1,259	0	0	0	0	0	1,259	0
187	5,336	0	10	10	10	10	5,326	0
188	346	45	0	45	45	5	341	0
189	1,178	0	0	0	0	0	1,178	0
190	22,288	1,930	0	1,930	1,930	1,930	20,358	0
191	6,514	569	0	569	569	413	6,101	0
192	9,431	0	0	0	0	0	9,431	0
193	5,332	0	0	0	0	0	5,332	0
194	8,572	0	0	0	0	0	8,572	0
195	87	0	0	0	0	0	87	0
196	5,021	1,084	0	1,084	1,084	1,084	3,937	0
197	2,664	0	0	0	0	0	2,664	0
198	140	0	0	0	0	0	140	0
199	281	0	0	0	0	0	281	0
200	495	0	0	0	0	0	495	0
201	126	0	0	0	0	0	126	0
202	3,016	0	0	0	0	0	3,016	0
203	1,175	68	0	68	68	68	1,107	0
204	341	0	0	0	0	0	341	0
205	0	0	0	0	0	0	0	0
206	0	0	0	0	0	0	0	0
207	128	0	0	0	0	0	128	0
208	0	0	0	0	0	0	0	0
209	11	0	0	0	0	0	11	0
210	5	0	0	0	0	0	5	0
211	41	0	0	0	0	0	41	0

<u>S. L. No.</u>	<u>Max. Pop.</u>	<u>1967 PF Cat. 2-8 Sp.</u>	<u>New Spaces Added</u>	<u>1970 Tot. PF Cat. 2-8 Sp.</u>	<u>PF Cat. 2-8 Sp. Used</u>	<u>Pop. Sheltrd.</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
212	2,700	0	0	0	0	0	2,700	0
213	2,689	0	0	0	0	0	2,689	0
214	17,845	813	0	813	813	5,193	12,652	0
215	10,421	33	0	33	33	33	10,388	0
216	10,273	0	0	0	0	0	10,273	0
217	7,000	0	0	0	0	0	7,000	0
218	10,610	0	0	0	0	0	10,610	0
219	11,984	1,080	0	1,080	1,080	1,080	10,904	0
220	10,104	0	0	0	0	0	10,104	0
221	6,359	0	0	0	0	0	6,359	0
222	6,720	0	0	0	0	0	6,720	0
223	0	0	0	0	0	0	0	0
224	46	0	586	586	586	46	0	0
225	739	0	0	0	0	0	739	0
226	14,172	0	0	0	0	0	14,172	0
227	118	0	0	0	0	0	118	0
228	5	0	0	0	0	0	5	0
229	23	0	0	0	0	0	23	0
230	29	0	0	0	0	0	29	0
231	23,517	0	0	0	0	101	23,416	0
232	8,093	691	0	691	691	2,247	5,846	0
233	32,507	27	0	27	27	3,336	29,171	0
234	2,160	0	0	0	0	2,160	0	0
235	14,190	16,153	0	16,153	16,153	14,190	0	0
236	3,920	367	0	367	367	3,920	0	0
237	6,746	3,479	0	3,479	3,479	6,746	0	0
238	5,311	3,908	0	3,908	3,908	5,311	0	0
239	3,161	554	0	554	554	3,161	0	0
240	3,088	189	0	189	189	3,088	0	0
241	5,575	6,400	0	6,400	6,400	5,575	0	0
242	4,014	0	0	0	0	0	4,014	0
243	2,206	0	0	0	0	0	2,206	0
244	8	0	0	0	0	0	8	0
245	3,869	0	0	0	0	0	3,869	0
246	14,645	0	0	0	0	0	14,645	0
247	8,110	0	0	0	0	0	8,110	0
248	6,557	12	0	12	12	12	6,545	0
249	8,449	1,831	0	1,831	1,831	1,245	7,204	0
250	4,626	732	0	732	732	868	3,758	0
251	6,732	0	0	0	0	0	6,732	0
252	8,838	435	0	435	435	535	8,303	0
253	8,596	558	0	558	558	458	8,138	0
254	15,195	0	0	0	0	450	14,745	0

<u>S. L. No.</u>	<u>Max. Pop.</u>	<u>1967 PF Cat. 2-8 Sp.</u>	<u>New Spaces Added</u>	<u>1970 Tot. PF Cat. 2-8 Sp.</u>	<u>PF Cat. 2-8 Sp. Used</u>	<u>Pop. Sheltrd.</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
255	0	0	0	0	0	0	0	0
256	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0	0
258	8,368	112	0	112	112	703	7,665	0
259	2,379	2,054	0	2,054	2,054	1,393	986	0
260	4,200	0	0	0	0	0	4,200	0
261	3,711	0	0	0	0	0	3,711	0
262	2,159	0	0	0	0	0	2,159	0
263	2,343	0	0	0	0	0	2,343	0
264	5,966	259	0	259	259	492	5,474	0
265	3,381	450	0	450	450	287	3,094	0
266	4,832	0	0	0	0	0	4,832	0
267	2,341	0	0	0	0	0	2,341	0
268	1,051	0	0	0	0	0	1,051	0
269	0	0	0	0	0	0	0	0
270	2	0	0	0	0	0	2	0
271	6,643	700	0	700	700	700	5,943	0
272	19,542	0	0	0	0	0	19,542	0
273	15,573	81	0	81	81	81	15,492	0
274	8,437	1,450	0	1,450	1,450	1,512	6,925	0
275	7,281	0	0	0	0	305	6,976	0
276	8,296	0	0	0	0	0	8,296	0
277	2,978	0	0	0	0	0	2,978	0
278	4,478	1,451	0	1,451	1,451	990	3,488	0
279	7,265	0	586	586	586	631	6,634	0
280	8,068	0	0	0	0	49	8,019	0
281	10,453	0	0	0	0	0	10,453	0
282	6,024	0	0	0	0	0	6,024	0
283	3	0	0	0	0	0	3	0
284	6	0	0	0	0	0	6	0
285	0	0	0	0	0	0	0	0
286	3,075	0	0	0	0	0	3,075	0
287	6,265	0	0	0	0	0	6,265	0
288	3,849	49	0	49	49	49	3,800	0
289	12,541	0	0	0	0	0	12,541	0
290	12,787	0	0	0	0	540	12,247	0
291	22,599	2,820	0	2,820	2,820	2,820	19,779	0
292	4,990	0	0	0	0	0	4,990	0
293	7,506	0	0	0	0	40	7,466	0
294	261	21	0	21	21	21	240	0

Totals 1,994,289 1,770,012 260,233 2,030,245 745,615* 736,409 1,257,880 1,284,630

* The 4,603 hospital beds require 9,206 additional spaces.

1975 - SHELTERED AND UNSHELTERED POPULATION BY S. L.

(Step III)

S. L. No.	Max. Pop.	1967 PF Cat. 2-8 Sp.	New Spaces Added	1975 Tot. PF Cat. 2-8 Sp.	PF Cat. 2-8 Sp. Used	Pop. Sheltrd.	Shelter Needed	Shelter Surplus
001	5,042	0	0	0	0	0	5,042	0
002	4,187	0	0	0	0	2,340	1,847	0
003	4,511	14	0	14	14	2,474	2,037	0
004	5,289	7,612	0	7,612	7,612	5,251	38	0
005	11,336	2,960	1,946	4,906	4,906	11,336	0	0
006	6,539	1,537	0	1,537	1,537	6,539	0	0
007	42,469	37,492	6,981	44,473	44,473	42,469	0	0
008	6,683	15,607	664**	16,271	12,076	6,683	0	4,195
009	4,390	276	0	276	276	4,390	0	0
010	10,908	35,718	8,003	43,721	27,631	10,908	0	16,090
011	10,567	2,863	314	3,177	3,177	10,567	0	0
012	3,974	1,301	851	2,152	2,152	3,974	0	0
013	6,363	2,392	1,568	3,960	3,960	4,260	2,103	0
014	5,380	1,529	0	1,529	1,529	1,329	4,051	0
015	5,211	3,809	0	3,809	3,809	4,161	1,050	0
016	4,499	0	0	0	0	342	4,157	0
017	2,653	0	0	0	0	0	2,653	0
018	5,746	1,265	0	1,265	1,265	1,265	4,481	0
019	4,683	2,061	0	2,061	2,061	2,061	2,622	0
020	5,360	0	0	0	0	601	4,759	0
021	3,871	92	0	92	92	3,282	589	0
022	7,154	692	0	692	692	7,154	0	0
023	5,798	134	0	134	134	3,090	2,708	0
024	10,507	484	0	484	484	10,507	0	0
025	15,113	2,589	791**	3,380	1,362	15,113	0	2,018
026	5,635	19,322	0	19,322	7,165	5,635	0	12,157
027	6,448	17,749	1,296**	19,045	9,023	6,448	0	10,022
028	6,217	2,886	43	2,929	2,929	6,217	0	0
029	25,972	363,038	157,377**	520,415	51,528	25,972	0	468,887
030	5,126	12,819	4,504	17,323	13,589	5,126	0	3,734
031	7,870	10,361	3,002**	13,363	11,466	7,870	0	1,897
032	3,297	0	0	0	0	0	3,297	0
033	3,024	238	0	238	238	238	2,786	0
034	6,299	5,420	0	5,420	5,420	4,902	1,397	0
035	2,050	40	0	40	40	558	1,492	0
036	11,734	74	0	74	74	462	11,272	0
037	5,996	0	0	0	0	0	5,996	0
038	4,701	3,125	0	3,125	3,125	4,701	0	0
039	3,020	0	0	0	0	3,020	0	0
040	15,468	5,146	0	5,146	5,146	15,468	0	0

S. L. No.	Max. Pop.	1967 PF Cat. 2-8 Sp.	New Spaces Added	1975 Tot. PF Cat. 2-8 Sp.	PF Cat. 2-8 Sp. Used	Pop. Sheltrd.	Shelter Needed	Shelter Surplus
041	141,809	778,250	299,992**	1,078,242	158,348	141,809	0	919,894
042	6,527	6,135	2,733**	8,868	6,527	6,527	0	2,341
043	17,678	38,695	8,051**	46,746	13,228	17,678	0	33,518
044	13,643	45,482	150**	45,632	24,210	13,643	0	21,422
045	6,850	5,527	0	5,527	5,135	6,850	0	392
046	3,339	110	0	110	110	3,339	0	0
047	3,522	2,545	0	2,545	2,545	3,522	0	0
408	7,076	15	0	15	15	4,368	2,708	0
049	6,063	0	0	0	0	3,250	2,813	0
050	6,780	415	0	415	415	415	6,365	0
051	4,662	122	0	122	122	122	4,540	0
052	5,718	12,904	0	12,904	12,904	5,301	417	0
053	4,088	248	0	248	248	2,630	1,458	0
054	6,287	6,915	98	7,013	7,013	6,287	0	0
055	15,425	631	0	631	631	3,924	11,501	0
056	7,975	134	83	217	217	3,243	4,732	0
057	10,594	80	0	80	80	80	10,514	0
058	3,456	121	0	121	121	2,678	778	0
509	3,117	8,448	0	8,448	8,448	2,730	387	0
060	4,658	8,647	0	8,647	8,647	3,562	1,096	0
061	7,174	144	0	144	144	144	7,030	0
062	3,411	6,711	0	6,711	6,711	2,790	621	0
063	4,755	98	0	98	98	1,083	3,672	0
064	7,201	1,167	0	1,167	1,167	1,167	6,034	0
065	6,382	885	0	885	885	399	5,983	0
066	6,092	0	0	0	0	3,605	2,487	0
067	5,825	1,052	0	1,052	1,052	937	4,888	0
068	4,806	490	72	562	562	357	4,449	0
069	7,061	153	0	153	153	153	6,908	0
070	7,555	127	0	127	127	1,210	6,345	0
071	4,301	1,463	0	1,463	1,463	3,272	1,029	0
072	14,342	5,761	11,150	16,911	16,911	14,342	0	0
073	6,416	102	0	102	102	102	6,314	0
074	24,101	1,457	222	1,679	1,679	694	23,407	0
075	4,877	0	0	0	0	0	4,877	0
076	3,046	187	0	187	187	187	2,859	0
077	6,081	31	50	81	81	567	5,514	0
078	7,470	0	0	0	0	0	7,470	0
079	3,337	39	0	39	39	39	3,298	0
080	6,665	1,481	1,104	2,585	2,585	2,028	4,637	0
081	2,687	0	0	0	0	0	2,687	0
082	4,567	0	0	0	0	367	4,200	0
083	7,798	449	0	449	449	2,453	5,345	0

S. L. No.	Max. Pop.	1967 PF Cat. 2-8 Sp.	New Spaces Added	1975 Tot. PF Cat. 2-8 Sp.	PF Cat. 2-8 Sp. Used	Pop. Sheltrd.	Shelter Needed	Shelter Surplus
084	5,054	0	0	0	0	0	5,054	0
085	10,920	9,022	0	9,022	9,022	10,289	631	0
086	6,667	21	80**	101	101	251	6,416	0
087	1,815	0	0	0	0	207	1,608	0
088	1,477	0	0	0	0	1,477	0	0
089	2,297	0	0	0	0	0	2,297	0
090	2,072	0	0	0	0	952	1,120	0
091	4,593	334	0	334	334	3,061	1,532	0
092	6,363	27,763	44,421	72,184	19,853	6,363	0	52,331
093	49,672	15,476	24,663**	40,139	40,139	39,100	10,	0
094	20,029	9,228	8,478**	17,706	17,706	12,964	7,065	0
095	7,445	1,114	1,782	2,896	2,896	5,056	2,389	0
096	7,756	109	0	109	109	600	7,156	0
097	8,721	394	118**	512	512	512	8,209	0
098	7,662	118	480**	598	598	598	7,064	0
099	1,883	0	0	0	0	0	1,883	0
100	7,033	0	0	0	0	0	7,033	0
101	4,418	884	0	884	884	604	3,814	0
102	7,568	0	730	730	730	730	6,838	0
103	4,107	0	0	0	0	0	4,107	0
104	11,237	6,305	207**	6,512	6,512	4,956	6,281	0
105	16,533	4,730	135	4,865	4,865	4,865	11,668	0
106	8,952	497	14	511	511	511	8,441	0
107	3,061	0	0	0	0	0	3,061	0
108	5,318	0	0	0	0	0	5,318	0
109	10,532	0	0	0	0	0	10,532	0
110	9,890	0	0	0	0	412	9,478	0
111	8,319	886	0	886	886	474	7,845	0
112	5,733	0	0	0	0	0	5,733	0
113	5,077	0	0	0	0	0	5,077	0
114	9,514	0	0	0	0	0	9,514	0
115	8,558	0	0	0	0	0	8,558	0
116	7,262	1,980	3,040	5,020	5,020	5,020	2,242	0
117	30,577	2,034	193	2,227	2,227	2,227	28,350	0
118	8,735	0	0	0	0	0	8,735	0
119	11,637	13	0	13	13	13	11,624	0
120	5,235	0	0	0	0	0	5,235	0
121	52,727	75,078	47,492	122,570	46,759	32,713	20,014	75,811
122	20,150	36	0	36	36	1,927	18,223	0
123	10,224	0	0	0	0	0	10,224	0
124	5,106	0	0	0	0	0	5,106	0
125	8,752	1,669	0	1,669	1,669	1,280	7,472	0
126	4,128	12	0	12	12	12	4,116	0

<u>S. L. No.</u>	<u>Max. Pop.</u>	<u>1967 PF Cat. 2-8 Sp.</u>	<u>New Spaces Added</u>	<u>1975 Tot. PF Cat. 2-8 Sp.</u>	<u>PF Cat. 2-8 Sp. Used</u>	<u>Pop. Sheltrd.</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
127	8,055	0	0	0	0	0	8,055	0
128	13,015	36	100	136	136	136	12,879	0
129	19,639	297	74	371	371	7,883	11,756	0
130	6,690	0	11,000	11,000	11,000	6,690	0	0
131	9,645	477	0	477	477	477	9,168	0
132	14,610	779	100	879	879	5,189	9,421	0
133	8,324	66	0	66	66	66	8,258	0
134	8,299	0	0	0	0	0	8,299	0
135	10,840	1,382	0	1,382	1,382	1,382	9,458	0
136	8,317	0	0	0	0	0	8,317	0
137	8,813	0	0	0	0	0	8,813	0
138	6,734	599	0	599	599	599	6,135	0
139	3,105	0	0	0	0	0	3,105	0
140	2,817	0	100	100	100	100	2,717	0
141	2,695	0	0	0	0	0	2,695	0
142	2,532	0	0	0	0	0	2,532	0
143	9,380	0	0	0	0	0	9,380	0
144	6,851	0	0	0	0	0	6,851	0
145	10,322	130	0	130	130	130	10,192	0
146	9,555	11	0	11	11	11	9,544	0
147	5,343	72	0	72	72	72	5,271	0
148	9,264	964	0	964	964	964	8,300	0
149	19,473	6,954	0	6,954	6,954	6,954	12,519	0
150	6,770	401	642	1,043	1,043	1,043	5,727	0
151	18,020	0	0	0	0	0	18,020	0
152	11,924	330	0	330	330	1,211	10,713	0
153	6,952	100	160	260	260	260	6,692	0
154	3,757	3,360	0	3,360	3,360	3,360	397	0
155	3,692	138	0	138	138	138	3,554	0
156	3,229	253	149	402	402	402	2,827	0
157	38,688	2,060	1,472	3,532	3,532	3,532	35,156	0
158	167	0	0	0	0	0	167	0
159	0	0	0	0	0	0	0	0
160	19,913	4,830	0	4,830	4,830	4,830	15,083	0
161	0	0	0	0	0	0	0	0
162	51	0	0	0	0	0	51	0
163	4,553	9,753	15,605	25,358	25,358	4,553	0	0
164	6,256	0	0	0	0	0	6,256	0
165	11,492	0	0	0	0	0	11,492	0
166	9,073	0	0	0	0	0	9,073	0
167	402	0	0	0	0	0	402	0
168	0	0	0	0	0	0	0	0
169	247	0	0	0	0	0	247	0

S. L. No.	Max. Pop.	1967 PF Cat. 2-8 Sp.	New Spaces Added	1975 Tot. PF Cat. 2-8 Sp.	PF Cat. 2-8 Sp. Used	Pop. Sheltrd.	Shelter Needed	Shelter Surplus
170	230	0	0	0	0	0	230	0
171	0	0	0	0	0	0	0	0
172	226	0	0	0	0	0	226	0
173	27,640	31,046	0	31,046	31,046	26,500	1,140	0
174	5,697	0	0	0	0	2,049	3,648	0
175	3	0	0	0	0	0	3	0
176	30	0	0	0	0	0	30	0
177	142	0	0	0	0	0	142	0
178	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0
181	0	0	0	0	0	0	0	0
182	79	0	0	0	0	0	79	0
183	6,109	0	0	0	0	0	6,109	0
184	2,429	0	0	0	0	0	2,429	0
185	1,141	0	0	0	0	0	1,141	0
186	1,480	0	0	0	0	0	1,480	0
187	5,517	0	26	26	26	26	5,491	0
188	458	45	0	45	45	5	453	0
189	2,150	0	0	0	0	0	2,150	0
190	33,218	1,930	0	1,930	1,930	1,930	31,288	0
191	8,210	569	0	569	569	413	7,797	0
192	10,368	0	0	0	0	0	10,368	0
193	6,566	0	0	0	0	0	6,566	0
194	16,905	0	0	0	0	0	16,905	0
195	112	0	0	0	0	0	112	0
196	6,440	1,084	0	1,084	1,084	1,084	5,356	0
197	3,274	0	0	0	0	0	3,274	0
198	135	0	0	0	0	0	135	0
199	335	0	0	0	0	0	335	0
200	571	0	0	0	0	0	571	0
201	158	0	0	0	0	0	158	0
202	4,116	0	0	0	0	0	4,116	0
203	1,489	68	0	68	68	68	1,421	0
204	367	0	0	0	0	0	367	0
205	0	0	0	0	0	0	0	0
206	0	0	0	0	0	0	0	0
207	116	0	0	0	0	0	116	0
208	0	0	0	0	0	0	0	0
209	11	0	0	0	0	0	11	0
210	9	0	0	0	0	0	9	0
211	46	0	0	0	0	0	46	0

<u>S. L. No.</u>	<u>Max. Pop.</u>	<u>1967 PF Cat. 2-8 Sp.</u>	<u>New Spaces Added</u>	<u>1975 Tot. PF Cat. 2-8 Sp.</u>	<u>PF Cat. 2-8 Sp. Used</u>	<u>Pop. Sheltrd.</u>	<u>Shelter Needed</u>	<u>Shelter Surplus</u>
212	3,613	0	0	0	0	0	3,613	0
213	3,816	0	0	0	0	0	3,816	0
214	23,085	813	300**	1,113	1,113	14,406	8,679	0
215	19,588	33	0	33	33	33	19,555	0
216	18,273	0	0	0	0	0	18,273	0
217	8,908	0	0	0	0	0	8,908	0
218	19,416	0	0	0	0	0	19,416	0
219	16,707	1,080	0	1,080	1,080	1,080	15,627	0
220	15,157	0	0	0	0	0	15,157	0
221	9,006	0	0	0	0	0	9,006	0
222	10,689	0	0	0	0	0	10,689	0
223	0	0	0	0	0	0	0	0
224	54	0	586	586	586	54	0	0
225	1,451	0	0	0	0	0	1,451	0
226	26,104	0	0	0	0	0	26,104	0
227	144	0	0	0	0	0	144	0
228	7	0	0	0	0	0	7	0
229	25	0	0	0	0	0	25	0
230	45	0	0	0	0	0	45	0
231	40,687	0	0	0	0	101	40,586	0
232	9,355	691	0	691	691	2,247	7,108	0
233	34,699	27	0	27	27	27	34,672	0
234	2,160	0	0	0	0	2,160	0	0
235	14,410	16,153	910**	17,063	16,579	14,410	0	484
236	3,924	367	0	367	367	3,924	0	0
237	6,753	3,479	0	3,479	3,479	6,753	0	0
238	5,311	3,908	0	3,908	3,908	5,311	0	0
239	3,161	554	0	554	554	3,161	0	0
240	3,088	189	0	189	189	3,088	0	0
241	5,575	6,400	0	6,400	6,400	5,575	0	0
242	4,261	0	0	0	0	0	4,261	0
243	2,734	0	0	0	0	0	2,734	0
244	10	0	0	0	0	0	10	0
245	7,127	0	0	0	0	0	7,127	0
246	17,866	0	0	0	0	0	17,866	0
247	8,556	0	0	0	0	0	8,556	0
248	8,174	12	0	12	12	12	8,162	0
249	9,231	1,831	0	1,831	1,831	1,245	7,986	0
250	4,792	732	0	732	732	868	3,924	0
251	7,479	0	0	0	0	0	7,479	0
252	9,066	435	0	435	435	535	8,531	0
253	11,505	558	0	558	558	458	11,047	0
254	26,481	0	0	0	0	450	26,031	0

S. L. No.	Max. Pop.	1967 PF Cat. 2-8 Sp.	New Spaces Added	1975 Tot. PF Cat. 2-8 Sp.	PF Cat. 2-8 Sp. Used	Pop. Sheltrd.	Shelter Needed	Shelter Surplus
255	0	0	0	0	0	0	0	0
256	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0	0
258	11,160	112	0	112	112	703	10,457	0
259	2,567	2,054	0	2,054	2,054	1,373	1,174	0
260	3,821	0	0	0	0	0	3,821	0
261	3,812	0	0	0	0	0	3,812	0
262	1,959	0	0	0	0	0	1,959	0
263	2,465	0	0	0	0	0	2,465	0
264	5,970	259	0	259	259	492	5,478	0
265	4,647	450	0	450	450	287	4,360	0
266	5,413	0	0	0	0	0	5,413	0
267	3,674	0	0	0	0	0	3,674	0
268	1,271	0	0	0	0	0	1,271	0
269	0	0	0	0	0	0	0	0
270	3	0	0	0	0	0	3	0
271	8,549	700	0	700	700	700	7,849	0
272	25,062	0	0	0	0	0	25,062	0
273	20,893	81	0	81	81	81	20,812	0
274	10,227	1,450	0	1,450	1,450	1,512	8,715	0
275	8,789	0	0	0	0	305	8,484	0
276	9,410	0	0	0	0	0	9,410	0
277	2,842	0	0	0	0	0	2,842	0
278	5,119	1,451	0	1,451	1,451	990	4,129	0
279	9,395	0	586	586	586	631	8,764	0
280	9,711	0	0	0	0	49	9,662	0
281	13,089	0	0	0	0	0	13,089	0
282	8,221	0	0	0	0	0	8,221	0
283	2	0	0	0	0	0	2	0
284	5	0	0	0	0	0	5	0
285	0	0	0	0	0	0	0	0
286	4,892	0	0	0	0	0	4,892	0
287	7,519	0	0	0	0	0	7,519	0
288	4,762	49	0	49	49	49	4,713	0
289	17,263	0	0	0	0	0	17,263	0
290	16,677	0	0	0	0	532	16,145	0
291	44,370	2,820	54**	2,874	2,874	2,874	41,496	0
292	5,326	0	0	0	0	0	5,326	0
293	8,608	0	0	0	0	40	8,568	0
294	261	21	0	21	21	21	240	0
Totals	2,386,644	1,770,012	674,742**	2,444,754	819,561*	810,355	1,576,289	1,625,193

* The 4,603 hospital beds require 9,206 additional spaces.

** Includes PVK Spaces (21,099 Total).

TERMINAL PARKING AREAS AND SHELTER FACILITIES FOR CENTRAL DISTRICT

<u>Movement Routes</u>	<u>Vehicles</u>	<u>Persons (4/Vehicle)</u>	<u>Shel. Assgn. Number</u>	<u>NFSS Fac. No.</u>	<u>Step II New No.</u>	<u>Facility Name</u>	<u>Licensed Marked & Stocked Spaces</u>	<u>Persons Allocated</u>
Gaston Ave.	400	1,600	C	4028	145	Southland Building	5,791	1,600
Live Oak	281	1,124	C	4028	145	Southland Building	5,791	1,124
Thornton East	2,695	10,780	F	6049	151	Statler Hilton	5,119	3,751
			F	6046	150	Library	3,528	3,500
			G	6048	152	Lone Star Gas	1,800	1,800
			H	6053	153	1st Presb. Church	886	875
			E	6044	149	City Hall Annex	4,142	854
Second Street	400	1,600	E	6044	149	City Hall Annex	4,142	1,600
South Central	600	2,400	J	5015	154	Merchandise Mart	6,550	2,400
Forest Avenue	224	896	J	5015	154	Merchandise Mart	6,550	896
Corinth	250	1,000	J	5015	154	Merchandise Mart	6,550	1,000
Thornton South	1,510	6,040	K	5021	155	Municipal Aud.	1,920	1,900
			M	4044	148	Court House	28,850	4,140
Houston	343	1,372	L	5014	156	Dallas News	1,952	1,372
Ft. Worth Tpk.	700	2,800	M	4044	148	Court House	28,850	2,800
Commerce	622	2,488	M	4044	148	Court House	28,850	2,488
Continental	410	1,640	B	2049	139	Dal-Tex Building	3,164	1,640
Harry Hines	610	2,440	A	4041	142	Southwestern Life	5,000	2,440
TOTALS	9,045	36,180					68,702	36,180

SHELTER FACILITIES AND TRAVEL ROUTES
FOR VEHICULAR MOVEMENT OTHER THAN C B D

<u>Movement Routes</u>	<u>NFSS Fac. No.</u>	<u>Step II New No.</u>	<u>Facility Name</u>
N. Central Expressway	57	220	Texas Instruments
"	58	221	"
"	59	222	"
"	60	223	"
"	61	224	"
E. Mockingbird Ln.	30	248	Dr. Pepper Bottling Co.
Loop 12	10	486	Army & Air Force Exchange Service Headquarters
W. Jefferson	6054	451	Ling Temco Vought
"	6055	452	"
"	6056	453	"
"	6057	454	"
Hampton Rd.	9039	88	St. Paul Hospital
Irving Blvd. & Stemmons Frwy.	2027	106	Apparel Mart
	2016	107	Bright & Schiff Office Bldg.
Carpenter Frwy. & Mockingbird Ln.	2063	80	Baniff Building
"	2064	81	Exchange Bank & Trust Co.
"	4045	82	Frito Lay Building
"	4051	83	Exchange Park Shops
"	4053	84	Great National Life Bldg.
Harry Hines	2014	108	Trade Mart

MAP

SECTION
OMITTED

(NO WAY TO SCAN MAPS)

LIST OF SENSITIVE FACILITIES DELETED FROM THE SHELTER INVENTORY

<u>S. L.</u>	<u>Fac. No.</u>	<u>Name and Address</u>
0007	2059	BACHMAN PUMP STATION 2605 Shorecrest
0007	2060	S. W. BELL (FL-CENTRAL) 8618 Lemmon Avenue
0022	0137	S. W. BELL (TOLL-CENTRAL) 4100 Bryan
0030	0095	EMERGENCY OPERATING CENTER Fair Park
0038	0101	WRR RADIO STATION 3914 Forest Avenue
0045	5002	S. W. BELL (HA-CENTRAL) 2633 South Harwood
0057	0010	SUNSET PUMP STATION 303 Chalmers
0070	4056	FIRE STATION # 21 3210 Lovefield Drive
0070	4060	DALLAS POLICE ACADEMY 2828 Shorecrest
0101	0730	S. W. BELL (EV-CENTRAL) 7611 Military Parkway
0102	9086	BLOWER BLDG. ,SEWER PLANT 1020 Sargent Road
0102	9087	PUMP STATION, SEWER PLANT 1020 Sargent Road
0104	2066	S. W. BELL (FR-CENTRAL) 2007 Ann Arbor
0115	0010	PUMP STATION 3820 Walnut Hill
0121	2005	S. W. BELL (CE-CENTRAL) 5152 N. Westmoreland
0138	0058	S. W. BELL (EX-CENTRAL) 8120 Elam Road
0139	0010	LAKE JUNE PUMP STATION 1031 Algonquin
0187	0092	JIM MILLER PUMP STATION 5200 Jim Miller Road
0188	0010	CASA VIEW PUMP STATION 3505 Barnes Bridge Rd.
0190	0074	BELTWOOD PUMP STATION Beltline & Inwood Road
0190	0205	ELM FORK PLANT, CHEM. BLDG. 1500 Blk. Whitlock Lane
0214	0901	S. W. BELL (CY 9 CENTRAL) 801 Beltline Road
0219	0801	S. W. BELL (CH-CENTRAL) 110 Adkins
0226	0660	EASTSIDE PLANT, FILTER BLDG. Rt. 2, Box 64, Larkin Rd.
0226	0670	EASTSIDE PLANT, PUMP STATION Rt. 2, Box 64, Larkin Rd.
0226	0680	EASTSIDE PLANT, CHEM. BLDG. Rt. 2, Box 64, Larkin Rd.
0246	0609	GENERAL TELEPHONE 2718 First St. Garland
0252	0602	GENERAL TELEPHONE 816 West Garland
0290	0730	S. W. BELL (AT-5 CENTRAL) 321 West Kimbrough
0293	0702	S. W. BELL (BR-5 CENTRAL) 2943 Oates
0630	4074	FIRE STATION # 14 1005 W. 12th Street
0950	4068	FIRE STATION # 55 6600 Trammel Drive
1290	4063	FIRE STATION # 52 2504 Cockrell Hill
1380	4075	FIRE STATION # 51 200 S. St. Augustine
1430	4065	FIRE STATION # 53 1407 John West
1530	4070	FIRE STATION # 22 12200 Coit Road
1660	4069	FIRE STATION # 54 6238 Bonnieview Road
2470	0766	K R L D RADIO 2124 Saturn
4004	0420	CENTRAL FIRE STATION 2111 Main Street

PROPOSED SAMPLE ORDINANCE
FOR
INCORPORATING SHELTER SPACE IN NEW CONSTRUCTION

1. It has been established that the City of _____ does not have adequate fallout shelters to protect the population of the City in case of a nuclear attack or a natural disaster. It is deemed necessary for the health, welfare and safety of the citizens of _____ that adequate protection be provided as soon as possible.

It is the intent of this ordinance to establish provisions for creating shelter space in the City of _____ in new construction as normal development takes place. Therefore, as of the effective date of this ordinance, all structures and buildings to be constructed will contain adequate shelter space, as defined by the U. S. Office of Civil Defense, for the planned occupants of the building or structure to be constructed.

2. DEFINITION:

- A. New Structure: Any building or structure for which the present City ordinances now require a building permit to be issued, and includes single family residences. It shall also include additions to existing structures where the addition will cost in excess of \$ 100,000.00 or will contain an expected population of 50 or more persons. Modifications or additions to single family residences are not included under this ordinance.
- B. Shelter Space: Shelter space as defined by the Office of Civil Defense, U. S. Department of Defense.

"A protection factor of 40 or greater. A minimum of 10 sq. ft. of shelter floor space, and 65 cu. ft. of space per person. At least 3 cu. ft. of fresh air per minute per person when capacity is based upon minimum space requirements. The cubic feet of space per person is increased with decreased ventilation. In unventilated underground space, 500 cu. ft. of space per person is required. "

3. RESPONSIBILITIES:

- A. Issuance of Permits: As under present ordinance, the building inspector's office will be responsible for issuing building permits for all new construction. This office will not issue a permit for new construction as defined in Paragraph 2, A, without having on file certification as to the existence of shelter space in the proposed structure. This certificate shall be either:
- (1) A certificate from an architect or engineer, currently qualified by the Office of Civil Defense to perform shelter design in new structures, or
 - (2) A certificate from the local Civil Defense Office or State Civil Defense Office or the U. S. Army Corps of Engineers, Ft. Worth District Office, to the effect that adequate shelter does exist in the proposed structure.
- B. Determination of Shelter Capacities: The local Civil Defense Office shall take necessary steps to acquire the capability of evaluating the shelter capacity of proposed construction either by:
- (1) Maintaining a qualified analyst on the staff to perform the function.
 - (2) Establish a contractual agreement with a qualified person or persons to perform this service.
 - (3) Establish an agreement with either State or Federal Civil Defense to provide this service.

4. ENFORCEMENT:

Enforcement of this ordinance shall be vested in the building inspector who shall, by evaluation as set out in 3, A, and by inspection of construction, insure that shelter is incorporated as required. Violation of this ordinance shall be prosecuted in the same manner as any violation of the present City Building Codes.

5. EXEMPTION:

Any person or persons who feel that the construction of shelter space in their proposed building is either unnecessary because of its location adjacent to or in the immediate vicinity of a building or buildings

containing surplus shelter space deemed adequate to provide the necessary shelter space for the occupants of the proposed new construction, or too expensive because of peculiarities shall apply to the City Manager for a waiver of this ordinance.

The application for waiver shall be submitted to the local director of Civil Defense and to the City Planning Director for review. Upon concurrence of both of these departments, the City Manager may issue a waiver to these requirements.

6. This ordinance shall take effect thirty (30) days after enactment by the City Council.

RECOMMENDED DIRECTIVES

TABLE OF CONTENTS

<u>Introduction</u>	1
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Part I

Suggested Directive for Surrounding Communities	
General	2
Planning Assignments	2
Execution and Schedule	10

Part II

Suggested Directive for City of Dallas	
General	11
Section I City-County Civil Defense	14
Section II Police Department	17
Section III Fire Department	19
Section IV City Engineer	21
Section V Health Department	23
Section VI Transit System	25
Section VII Communications	27
Section VIII Water and Sewer Department	29
Section IX Personnel Department	31
Section X City Attorney	33
Section XI Purchasing Agent	34
Section XII Public Utilities Coordinator	36
Section XIII Parks & Recreation Department	38
Section XIV County Welfare Department	40

INTRODUCTION

This report covers the Planning Directives relating to the updating of local Civil Defense Plans. This includes the Emergency Operations Plans of all police, fire and other related agencies within the project area. Because of the extreme difference in size between the City of Dallas and other municipalities within the County, it was necessary to prepare two separate Planning Directives; one for the City of Dallas and the second which would be applicable to the smaller communities. It is anticipated that the Dallas County agencies will cooperate closely with the City of Dallas in all areas.

The suggested directive for the smaller communities has been included as Part I of this report. It covers the four phases of Emergency Operations, e. g. Warning, Movement, Shelter, and Shelter Emergence, and applies to the appropriate Civil Defense, Fire, Police, Public Works and Health Departments that may exist in the surrounding communities.

The suggested directive for the City of Dallas has been included as Part II of this report. It covers the four phases of Emergency Operations and applies to all agencies of the government including communications, public utilities coordination and others. Several of these agencies are combined City-County agencies and, therefore, can participate on behalf of both governments.

SUGGESTED DIRECTIVE FOR USE IN UPDATING
YOUR CIVIL DEFENSE EMERGENCY OPERATIONS PLAN

TO: All Departments, Bureaus, Divisions, and Agencies
in the City of _____.

SUBJECT: Updating Civil Defense Emergency Operations Plan

A. GENERAL

The shelter allocation portion of our community shelter plan (CSP) has now been completed. (See map(s) attached.) This(These) map(s) indicate(s) the best possible allocation of presently available fallout protection for the population in our community. It is now necessary for all elements of city government to develop plans to support the following four phases of emergency operations:

- Phase I Warning.
- Phase II Movement (of the population to fallout shelter protection indicated in the CSP.
- Phase III Shelter (support of the in-shelter population as radioactive fallout and other conditions permit).
- Phase IV Shelter Emergence (the period in which action is taken to receive, care, and provide for the immediate needs of the surviving population upon their emergence from shelters).

B. PLANNING ASSIGNMENTS

I. General

In addition to pre-emergency increased readiness actions prescribed in the Federal Civil Defense Guide, part G, chapter 5, Actions for Increased Civil Defense Readiness, all departments and organizations will prepare plans for:

- a. Issuing warnings to on-duty and off-duty personnel. (In the case of emergency services such as police and fire, warnings will be issued also to standby, reserve, or auxiliary

personnel.)

- b. Initial actions for personnel (such as assignments of police to prepare for movement and shelter periods).
- c. Re-establishing essential services upon emergence from shelters.
- d. Protection and security of vehicles, supplies, and equipment.

2. Civil Defense Agency¹

The Civil Defense Agency, in cooperation with appropriate government departments and agencies, will prepare the Basic Plan prescribing community government actions. Specific planning requirements are as indicated below:

- a. Phase I - Warning. This includes plans for:
 - 1. Phased increases in readiness as prescribed by the Federal Civil Defense Guide, part G, chapter 5, on Actions for Increased Civil Defense Readiness.
 - 2. Staffing and operating the emergency operating center (EOC) and shelter complex headquarters. Plans will include instructions for activation and operations of the EOC and shelter complex headquarters, including plans for phased activation of the EOC in a possible increased-readiness period. Shelter complex headquarters may be directed by fire department captains, police department officers, or other local officials, as appropriate.
 - 3. Receiving and disseminating warning signals.
 - 4. Reporting information to, between, among, and within the EOC, subordinate EOC's, shelter complex headquarters, EOC's of adjacent communities, higher level EOC's, and other locations as required.

¹

Use the proper designation for your civil defense agency; e. g., Civil Defense Office, etc.

5. Disseminating information and instructions to the public by means of emergency broadcasts and other media.
 6. Assuring complete warning and emergency broadcasting system coverage.
 7. Establishing and maintaining communications to and among EOC's, shelter complex headquarters, and selected installations.
 8. Deployment of mobile communications vehicles and equipment to assist control and direction of movement to shelter.
 9. Activation and assignment of shelter managers, radiological defense officers and monitors, and other personnel as required to monitoring teams and stations, EOC's, selected shelters, and other installations. This includes plans for disseminating radioactive fallout forecasts and advisories, and plans to assure a reliable and continuous radiological monitoring capability which will enable the EOC continually to evaluate fallout conditions.
 10. Disseminating survival information and instructions to the population.
- b. Phase II - Movement. This includes plans for:
1. Control and coordination of movement operations from the EOC.
 2. Assignment of personnel, equipment, and resources to assist traffic control operations.
- c. Phase III - Shelter. This includes plans for:
1. Direction and control of emergency operations by the EOC under radioactive fallout conditions.
 2. Supervision of operations within shelter complexes. For shelter management requirements, see the Federal Civil Defense Guide, part D, chapter 5, Shelter Management.
 3. Temporary repair and restoration of communication facilities.

4. Coordination of military support.
 5. Dissemination of radiation exposure criteria and guidance.
 6. Detecting, measuring, reporting, plotting, and analyzing radioactive fallout and other hazards.
 7. Establishing radiological monitoring and decontamination priorities.
- d. Phase V - Shelter Emergence. This includes plans for:
1. Postshelter use of shelters for immediate recovery operations.
 2. Determining the location and extent of radiation-free areas, and selection of routes leading to them.
 3. Deployment and assignment of personnel and equipment to locations which will assist movement of persons from shelters to their homes or to temporary housing sites.
 4. Movement to temporary housing as required, or to homes.
 5. Communications repair and restoration operations.
 6. Short-term rationing and other resource-management measures or controls.
 7. Determining the feasibility of and directing operations to decontaminate facilities, supplies, equipment, and areas.
 8. Supervision of radiological monitoring and decontamination operations.

3. Fire Department

The Fire Department will prepare narrative plans with supporting maps, overlays, and standing operating procedures (SOP's) as follows:

- a. Phase I - Warning. This includes plans for:

1. Activation of the siren warning system (if appropriate).
 2. Deployment of firefighting resources to assure maximum support of the sheltered population.
- b. Phase II - Movement. This includes plans for:
1. Containing or extinguishing fires, in, near, or threatening shelters, vital facilities, resources, and installations.
 2. Assisting the police department in manning traffic control points and in other movement-to - shelter operations.
 3. Organizing and conducting fire-rescue operations.
 4. Elimination or reduction of fire hazards.
 5. Maintaining fire-watch and reporting systems.
 6. Taking shelter from fallout, as necessary, in prescribed shelter facilities.
- c. Phase III - Shelter. This includes plans for:
1. Containing or extinguishing fires in, near, or threatening occupied shelters, as fallout conditions permit.
 2. Preparation and dissemination of fire information and advisories.
 3. Establishment of firebreaks to minimize fire vulnerability of shelter complexes.
 4. Inservice radiological monitoring and reporting.
- d. Phase IV - Shelter Emergence. This includes plans for:
1. Re-establishment and broadening of the community's firefighting capability.
 2. Decontamination assistance.
 3. Fire prevention and control, especially in temporary housing areas.

4. Police Department

The Police Department will prepare narrative plans with supporting maps, overlays, and standing operating procedures (SOP's) as follows:

- a. Phase I - Warning. This includes plans for:
 - 1. Activating siren warning signals (if appropriate).
 - 2. Establishing and maintaining traffic control points for controlling movement of pedestrian and vehicular traffic.
- b. Phase II - Movement. This includes plans for:
 - 1. Operating traffic control points.
 - 2. Establishing and operating security and other patrols.
 - 3. Assisting the movement of invalids, the institutionalized, and selected groups of people to shelter.
 - 4. Taking shelter from fallout, as necessary, in prescribed shelter facilities.
- c. Phase III - Shelter. This includes plans for:
 - 1. Coordination and control of essential intershelter emergency movements, as fallout conditions permit.
 - 2. Maintaining law and order.
 - 3. Inservice radiological monitoring and reporting.
- d. Phase IV - Shelter Emergence. This includes plans for:
 - 1. Operation of traffic control points to control movement of people back to their homes or to temporary housing sites, and to expedite movements of emergency services.
 - 2. Protecting essential surviving resources.
 - 3. Assisting in the relocation of invalids, the institutionalized, and others where and if appropriate.
 - 4. Enforcement of interim rationing and other rules and regulations.

5. Public Works Department

The Public Works (or Engineering) Department will prepare narrative plans with supporting maps, overlays, and standing operating procedures (SOP's) as follows:

- a. Phase I - Warning. This includes plans for:
 - 1. Deployment of equipment along or near movement routes for possible debris clearance operations.
 - 2. Emergency operation of municipal fuel, water, sewage, and other distribution systems and facilities.
- b. Phase II - Movement. This includes plans for:
 - 1. Establishing and posting emergency signs and other traffic-regulation devices in cooperation with the police department.
 - 2. Providing emergency lights and auxiliary power.
 - 3. Moving stalled vehicles or debris from movement routes.
 - 4. Emergency operation of fuel, water, sewage, and other distribution systems and facilities.
 - 5. Clearing access for the rescue of trapped persons, and clearing access to vital resources.
 - 6. Taking shelter from fallout, as necessary, in prescribed shelter facilities.
- c. Phase III - Shelter. This includes plans for:
 - 1. Cut off, temporary repair, and restoration of: electric power, fuel, water, and sewage distribution systems; roads, bridges, and transportation facilities, all as fallout conditions permit.
 - 2. Continuation of Phase II operations.
 - 3. In-service radiological monitoring and reporting.
- d. Phase IV - Shelter Emergence. This includes plans for:

1. Expansion of Phase III operations.
2. Salvage operations.
3. Temporary repair, restoration, and construction of temporary housing and facilities.

6. Health, Medical, and Sanitation

The Health Department will prepare narrative plans with supporting maps, overlays, and standing operating procedures (SOP's) as follows:

- a. Phase I - Warning. This includes plans for:
 1. Conducting lifesaving medical care and treatment operations in hospitals and other designated shelter facilities.
 2. Selection of and, where deemed necessary, assignment or reassignment of medical personnel and resources to shelters.
- b. Phase II - Movement. This includes plans for:
 1. Continuing Phase I operations and providing minimal medical treatment along movement routes.
 2. Movement of patients and medical personnel to shelter and release of previously assigned medical personnel to their emergency assignment locations.
 3. Taking shelter from fallout, as necessary, in prescribed shelter facilities.
- c. Phase III - Shelter. This includes plans for:
 1. Receipt and transportation of casualties to fallout-protected medical facilities, as fallout conditions permit.
 2. Preparation of medical, sanitation, and health instructions for dissemination to the sheltered population to reduce the danger of disease or epidemics.
 3. Redistributing medical personnel and resources to provide maximum medical care and health support, as fallout conditions permit.

4. Inservice radiological monitoring and reporting, as well as supervision of radiological monitoring and decontamination of persons, facilities, supplies, and equipment.

d. Phase IV - Shelter Emergence. This includes plans for:

1. Inspecting remaining food and water supplies and issuing instructions for its decontamination, distribution, and use.
2. Temporary mortuary services (if appropriate).
3. Insect and rodent control and other measures to reduce the threat of epidemics.
4. Consolidation and restoration of medical care and treatment services and facilities.

C. EXECUTION AND SCHEDULE

1. Each department head will designate a Civil Defense Planning Officer who will be responsible for the development of the department annex (plan) to support the local civil defense plan. Each annex (plan) will support the Shelter Allocation Plan prepared in Step I of the CSP process.

2. The Civil Defense Director will hold a planning coordination conference every _____ at _____ until the planning is completed. Details regarding the format of the plans and annexes will be presented at these conferences. He will insure that this plan is closely coordinated, all departments and all ANNEXES, with adjacent cities in Tulsa.

3. The initial draft of each department's annex (plan) will be completed for my review not later than January 1, 1970.

Annexes will be accompanied by implementing standing operating procedures (SOP's); inventory lists and staff assignments; manpower and equipment requirements; together with recruiting, training, and procurement schedules required to carry out assigned functions.

Mayor (or other executive official)

_____, 19_____
(Date)

OFFICIAL

Clerk

SUGGESTED PLANNING DIRECTIVE FOR UPDATING
THE DALLAS CITY-COUNTY EMERGENCY OPERATIONS PLAN

TO: Governmental Departments and Agencies of the City of Dallas
and of Dallas County

SUBJECT: Updating the City-County Civil Defense Emergency Operations
Plan

GENERAL

1. The Dallas City-County Civil Defense Community Shelter Plan (CSP) has been completed. The Plan attached constitutes one part of the total Emergency Operations Plan. It is the only part of the overall Plan which is to be distributed to the public. The maps contained in the Plan indicate the best possible allocation of presently available fallout protection for the population in all of Dallas County.

2. It now becomes necessary that a Dallas City-County Emergency Operations Plan be prepared to support all phases of emergency operations required to deal with disaster. Because some incorporated communities in Dallas County may not participate in the Dallas City-County Civil Defense program, this planning directive applies to only Dallas City-County government departments and agencies. In all cases, however, other communities of Dallas County will be afforded an opportunity to coordinate their emergency planning with that of the City and County of Dallas. The City-County Emergency Operations Plan will be designed to support the following four phases of Emergency Operations:

Phase I	Warning
Phase II	Movement of people to shelter
Phase III	Support of the in-shelter population
Phase IV	Shelter Emergence

3. Plans should include, in addition to increased readiness actions prescribed in the Federal Civil Defense Guide, Part G, Chapter 5 provisions for:

- a. Issuing warnings to on-duty and off-duty personnel. (This should include standby, reserve, or auxiliary personnel.)

RESPONSIBILITY FOR PLAN

The Dallas City-County Director of Civil Defense is designated as the Planning Coordinator for the preparation of the Dallas City-County Civil Defense Emergency Operations Plan. He will prepare a planning flow chart and will report bi-monthly the progress of planning to the Dallas City-County Civil Defense and Disaster Commission. The Planning Coordinator will be furnished on an as required basis, draftsman assistance during the full planning period by both the Public Works Department and the City Planning Department. He will include in the Civil Defense FY'69 budget, estimated costs of reproduction and printing of layout material used in drafting the overall preliminary Plan. Costs for printing the final and approved Emergency Operations Plan will be provided separately through the City Manager's Office when the Plan is approved and ready for final printing. It is anticipated that it will be printed in a quantity and will be given a selective distribution within the Dallas City and County government departments having emergency operations missions during disaster. Each department will prepare its own coordinated supporting ANNEX in accordance with the procedures outlined in this directive.

EXECUTION AND SCHEDULE

1. Each of the following City of Dallas and Dallas County department heads will, in accordance with this directive, designate a Planning Officer to be responsible for the development of respective department Annexes (see Tabs I thru XIV) to support the Dallas City-County Emergency Operations Base Plan. The Departmental planners will work directly, on a priority basis, with the Planning Coordinator during the full planning sequence (estimated time required: 3 months).

CITY OF DALLAS

DALLAS COUNTY

<u>Tab</u>	<u>Department</u>	<u>Tab</u>	<u>Department</u>
I	* Civil Defense		
II	Police - - - - - (coordinated annex) - -	II	Sheriff
III	Fire - - - - - (coordinated annex) - -	III	Fire Marshal
IV	Public Works - - - - (coordinated annex) - -	IV	Engineer
V	Health & Medical - - (coordinated annex) - -	V	Medical
VI	Dallas Transit System		
VII	Communications		
VIII	Water & Sewer		
IX	Personnel		
X	City Attorney		
XI	Purchasing		
XII	Public Utilities Supervisor		
XIII	Parks and Recreation		
XIV	Welfare		

* Planning Coordinator
(Director of Civil Defense)

2. Each ANNEX will support the Emergency Operations Base Plan to be prepared by the Civil Defense Office and approved by the Mayor of Dallas and the Dallas County Judge. ANNEXES will be written in accordance with the applicable Planning Outlines shown in TABS 1 through XIV, and will conform to the format of the base plan.

3. The Planning Coordinator will conduct planning coordination conferences as often as required to complete the Plan as scheduled. Details regarding format of the Base Plan and ANNEXES will be presented at these conferences.

4. The initial draft of each department's ANNEX (see Tabs I thru XIV) will be completed for review within four months subsequent to approval of the Emergency Operations Base Plan. The Dallas-City County Emergency Operations Plan with all prescribed ANNEXES will be completed within twelve months after the date of final approval of the CSP.

5. Department Head responsibilities for preparation and/or coordination in development of the Departmental ANNEX is delineated in the appropriate Planning Outline in the TABS.

County Judge, Dallas County

Mayor, City of Dallas

Attachments: TABS I thru XIV.

CITY-COUNTY CIVIL DEFENSE

The Director, City-County Civil Defense, in cooperation with appropriate City and County government departments and agencies, will prepare the Basic Plan prescribing community government actions. Specific planning requirements are as indicated below:

a. Pre-emergency

1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.

b. Phase I - Warning. This includes plans for:

1. Assuring complete warning and emergency broadcasting system coverage.
2. Receiving and disseminating warning signals.
3. Staffing and operating the emergency operating center (EOC) and shelter complex headquarters. Plans will include instructions for activation and operation of the EOC and shelter complex headquarters, including plans for phased activation of the EOC in a possible increased-readiness period.
4. Establishing and maintaining communication to and among EOC's shelter complex headquarters, and selected installations.
5. Reporting information to, between, among, and within the EOC, subordinate EOC's, shelter complex headquarters, EOC's of adjacent communities, higher level EOC's and other locations as required.
6. Disseminating information and instructions to the public by means of emergency broadcasts and other media.
7. Deployment of mobile communications vehicles and equipment to assist control and direction of movement to shelter.
8. Activation and assignment of shelter managers, radiological defense officers and monitors, and other personnel as required to monitoring teams and stations, EOC's, selected shelters, and other installations.

This includes plans for disseminating radioactive fallout forecasts advisories, and plans to assure a reliable and continuous radiological monitoring capability which will enable the EOC continually to evaluate fallout conditions.

9. Disseminating survival information and instructions to the population.
- c. Phase II - Movement. This includes plans for:
 1. Control and coordination of movement operations from the EOC.
 2. Assignment of personnel, equipment, and resources to assist traffic control operations.
 - d. Phase III - Shelter. This includes plans for:
 1. Direction and control of emergency operations by the EOC under radioactive fallout conditions.
 2. Supervision of operations within shelter complexes. For shelter management requirements, see the Federal Civil Defense Guide, Shelter Management.
 3. Temporary repair and restoration of communication facilities.
 4. Coordination of military support.
 5. Dissemination of radiation exposure criteria and guidance.
 6. Detecting, measuring, reporting, plotting, and analyzing radioactive fallout and other hazards.
 7. Establishing radiological monitoring and decontamination priorities.
 8. Reporting to State EOC.
 - e. Phase IV - Shelter Emergence. This includes plans for:
 1. Determining the location and extent of radiation - free areas, and selection of routes leading to them.
 2. Supervision of radiological monitoring and decontamination operations.

3. Determining the feasibility of and directing operations to decontaminate facilities, supplies, equipment, and areas.
4. Post shelter use of shelters for immediate recovery operations.
5. Communications repair and restoration operations.
6. Deployment and assignment of personnel and equipment to locations which will assist movement of persons from shelters to their homes or to temporary housing sites.
7. Movement to temporary housing as required, or to homes.
8. Short-term rationing and other resources-management measures to controls.

POLICE DEPARTMENT

The Chief of Police, in coordination with the County Sheriff, is responsible for the preparation of a single integrated narrative ANNEX with supporting maps, overlays, and standing operating procedures (SOP's) for both the County Sheriff's Department and the Police Department, as follows:

a. Pre-emergency

1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
2. Provisions for establishing, staffing, and operating a Police Department control center in a fallout protected facility having a PF of 100 or more.
3. Provisions for staffing the Police Department Section of the EOC.
4. Procedure for coordinating the Police Department and the County Sheriff's Department personnel and equipment to be employed during Civil Defense emergencies.

b. Phase I - Warning. This includes plans for:

1. Establishing and functioning of the Warning Point.
2. Establishing and maintaining traffic control points for controlling movement of pedestrian and vehicular traffic.

c. Phase II - Movement. This includes plans for:

1. Operating traffic control points.
2. Establishing and operating security and other patrols.
3. Assisting the movement of invalids, the institutionalized, and selected groups of people to shelter.
4. Taking shelter from fallout, as necessary, in prescribed shelter facilities.

d. Phase III - Shelter. This includes plans for:

1. Coordination and control of essential intershelter emergency movements, as fallout conditions permit.
2. Maintaining law and order, including those shelters in which law enforcement personnel take shelter.
3. In-service radiological monitoring and reporting.
4. Pre-designated placement of departmental mobile radio equipment to assure maximum effectiveness in serving departmental needs, and to assist in satisfying overall emergency communication needs.

e. Phase IV - Shelter Emergence. This includes plans for:

1. Operation to traffic control points to control movement of people back to their homes or to temporary housing sites, to expedite movements of emergency services.
2. Protecting essential surviving resources.
3. Assisting in the relocation of invalids, the institutionalized, and others where and if appropriate.
4. Enforcement of interim rationing and other rules and regulations.
5. In-service radiological monitoring and reporting.

FIRE DEPARTMENT

The Fire Chief, in coordination with the County Fire Marshal, is responsible, for the preparation of a single integrated narrative ANNEX with supporting maps, overlays, and standing operating procedures (SOP's) for both the County Fire Marshal's Department and the City Fire Department, as follows:

a. Pre-emergency

1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
2. Provisions for establishing, staffing, and operating a Fire Department Control Center in a fallout protected facility having a PF of 100 or more.
3. Provisions for staffing the Fire Department Section of the EOC.
4. Procedure for coordination of all City and County Government controlled fire services to be used during Civil Defense emergencies.

b. Phase I - Warning. This includes plans for:

1. Activation of the siren warning system as directed.
2. Deployment of fire department resources to assure maximum support of the sheltered population.

c. Phase II - Movement. This includes plans for:

1. Containing or extinguishing fires in, near, or threatening shelters, vital facilities, resources, and installations.
2. Assisting the police department in manning traffic control points and in other movement-to-shelter operations.
3. Organizing and conducting fire-rescue operations.
4. Elimination or reduction of fire hazards.
5. Maintaining fire-watch and reporting systems.

6. Taking shelter from fallout, as necessary, in prescribed shelter facilities.
- d. Phase III - Shelter. This includes plans for:
 1. Containing or extinguishing fires in, near, or threatening occupied shelters, as fallout conditions permit and as authorized by the EOC.
 2. Preparation and dissemination of fire information and advisories.
 3. Establishment of firebreaks to minimize fire vulnerability of shelter complexes.
 4. Pre-designated placement of departmental mobile radio equipment to assure maximum effectiveness in serving departmental needs, and to assist in satisfying overall emergency communication needs.
 5. In-service radiological monitoring and reporting.
 - e. Phase IV - Shelter Emergence. This includes plans for:
 1. Reestablishment and broadening of the community's firefighting capability.
 2. Decontamination assistance to Public Works.
 3. Fire prevention and control, especially, in temporary housing areas.
 4. In-service radiological monitoring and reporting.
 5. Assisting Public Works in salvage operations.

DALLAS PUBLIC WORKS DEPARTMENT

The Director, Public Works Department, in coordination with the County Engineer, is responsible for the preparation of a single integrated narrative ANNEX with supporting maps, overlays, and standing operating procedures (SOP's) for both the Dallas Public Works Department and the County Engineer, as follows:

a. Pre-emergency

1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
2. Provisions for establishing, staffing, and operating a Public Works Department Control Center in a fallout protected facility having a PF of 100 or more.
3. Provisions for staffing the Public Works Department Section of the EOC.
4. Procedure for coordinating the Dallas Public Works Department, the County Engineers' Department and private volunteer equipment and personnel to be employed in a Civil Defense emergency.
5. Operating and maintaining all mechanical equipment and utility services (less communication) in the EOC.

b. Phase I - Warning. This includes plans for:

1. Deployment of personnel, supplies and equipment required to maintain and operate mechanical equipment in EOC.
2. Emergency operation of municipal fuel, and other distribution systems and facilities under public works cognizance.
3. Deployment of equipment along or near movement routes for possible debris clearance operations.

c. Phase II - Movement. This includes plans for:

1. Maintaining and insuring operation of EOC mechanical equipment.
2. Establishing and posting emergency signs and other traffic regulation devices in cooperation with the police department.

3. Providing emergency lights and auxiliary power.
 4. Moving stalled vehicles or debris from movement routes.
 5. Emergency operation of fuel and other distribution systems and facilities (as appropriate).
 6. Clearing access for the rescue of trapped person, and clearing access to vital resources.
 7. Taking shelter from fallout, as necessary, in prescribed shelter facilities.
- d. Phase III - Shelter. This includes plans for:
1. Expansion of Phase II operations.
 2. In-service radiological monitoring and reporting.
 3. Pre-designated placement of departmental mobile radio equipment, to assure maximum effectiveness in serving the departmental needs, and to assist in satisfying overall emergency communication needs.
- e. Phase IV - Shelter Emergence. This includes plans for:
1. Expansion of Phase III operations.
 2. Salvage operations.
 3. Temporary repair, restoration, and construction of temporary housing and facilities.
 4. Conduct and coordination of decontamination operations.
 5. In-service radiological monitoring and reporting.
 6. Temporary repair, and restoration of, electric power, fuel, and other distribution systems; roads, bridges, and transportation facilities, all as fallout conditions permit.

HEALTH DEPARTMENT

The Director, Health Department, in coordination with the Medical Disaster Committee, is responsible for the preparation of a single integrated narrative ANNEX with supporting maps, overlays, and standing operating procedures (SOP's) for the City-County Health Department and the volunteer disaster medical units, as follows:

- a. Pre-emergency
 1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
 2. Provisions for establishing, staffing, and operating a Health Department control center in a fallout-protected facility having a PF of 100 or more.
 3. Provisions for staffing the Health Department Section in the EOC.
 4. Procedures for coordinating the City-County Health Department, and volunteer medical personnel and facilities to be used during a Civil Defense emergency.
 5. Procedures for establishing and operating a dispensary supporting the EOC.
- b. Phase I - Warning. This includes plans for:
 1. Selection of, and, where deemed necessary, assignment or reassignment of medical personnel and resources to shelters.
 2. Conducting lifesaving medical care and treatment operations in hospitals and other designated shelter facilities.
- c. Phase II - Movement. This includes plans for:
 1. Continuing Phase I operations and providing minimal medical treatment along movement routes.
 2. Movement of patients and medical personnel to shelter and release of previously assigned medical personnel to their emergency assignment locations.

3. Taking shelter from fallout, as necessary, in prescribed shelter facilities.
- d. Phase III - Shelter . This includes plans for:
1. Receipt and transportation of casualties to fallout-protected medical facilities, as fallout conditions permit.
 2. Preparation of medical, sanitation, and health instructions for dissemination to the sheltered population to reduce the danger of disease or epidemics.
 3. Redistributing medical personnel and resources to provide maximum medical care and health support, as fallout conditions permit.
 4. In-service radiological monitoring and reporting, as well as supervision of radiological monitoring and decontamination of persons, facilities, supplies, and equipment as appropriate.
- e. Phase IV - Shelter Emergence. This includes plans for:
1. Inspecting remaining food and water supplies and issuing instruction for its decontamination, distribution and use.
 2. Temporary mortuary services.
 3. Insect and rodent control and other measures to reduce the threat services and facilities.
 4. Consolidation and restoration of medical care and treatment services and facilities.
 5. Preparation and execution of plans for displacement, manning and operating Portable Hospitals.

DALLAS TRANSIT SYSTEM

The Manager, Dallas Transit System, in coordination with City and County Vehicle Departments and volunteer private enterprise, is responsible for the preparation of a single integrated narrative ANNEX with supporting maps, diagrams, equipment lists, overlays, and standing operating procedures (SOP's) for all transportation systems to be employed for the movement of people and cargo during Civil Defense emergencies, as follows:

a. Pre-emergency

1. Provisions for increased readiness in accordance with FCDG, Chapter 5.
2. Provisions for establishing, staffing, and operating a Transit System control center in a protected facility having a PF of at least 100.
3. Procedure for coordination of all privately owned (volunteer) large bulk cargo vehicles (van-type trucks), and City and County operated transport type vehicles, except those vehicles of all types pre-assigned to Departments and agencies.
4. Lists of equipment (by types) and personnel for use in emergency transportation of large numbers of people or cargo.

b. Phase I - Warning. This includes plans for:

1. Alerting volunteer and city and county transport vehicle operators.
2. Mobilization of assigned personnel and equipment in staging areas.
3. Deployment of equipment to areas requiring vehicular movement to shelter.

c. Phase II - Movement. This includes plans for:

1. Deployment, control and coordination of all equipment used in emergency transport of people and emergency CD supplies to fallout protected shelters.
2. Equipment operators taking shelter from fallout.
3. Resupply of motor vehicle fuel.

4. Movement of people to shelter; especially hospitalized.
- d. Phase III - In Shelter. This includes plans for:
1. Vehicle operators assisting the shelter manager of the facility in which they take shelter.
 2. Vehicle operators reporting their shelter location and location of their vehicle to the Transit System control center.
 3. Pre-designated placement of mobile radio equipment to assure maximum effectiveness in serving transportation needs, and to assist in satisfying overall emergency communication needs.
 4. In-service radiological monitoring and reporting.
- e. Phase IV - Shelter Emergence. This includes plans for:
1. Assisting in transporting people and supplies to emergency sites as directed by the EOC.
 2. Resupply of motor vehicle fuel.
 3. Movement of people to their homes; and patients to hospitals.
 4. In-service radiological monitoring and reporting.
 5. Providing support as requested by the Emergency Operating Center.

DALLAS MUNICIPAL RADIO

The Manager, Municipal Radio, in coordination with City and County departmental communication officers, selected leaders of volunteer amateur radio groups, and communication supervisors for participating private enterprise, is responsible for the preparation of a single integrated narrative ANNEX with supporting maps, diagrams, overlays and standing operating procedures (SOP's) for all communications, radio and telephone, to be employed during disaster operations in support of the Emergency Operations Base Plan, as follows:

- a. Pre-emergency
 1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
 2. Establishment, staffing, and operation of the Civil Defense communications control center.
 3. Procedures for coordinating all radio and telephone utilized in support of Base Plan Operations.
 4. Maintenance, repair, and location of sources of supply of spare parts for radios.
- b. Phase I - Warning. This includes plans for:
 1. Alerting, mobilizing, and deploying selected communications personnel and equipment, including volunteer.
 2. Insuring radio communications between the Civil Defense communications control center and all base stations.
 3. Monitoring communications to prevent overloading.
 4. Insuring that the local EBS participants, when activated, are properly programmed and are functional.
- c. Phase II - Movement. This includes plans for:
 1. Coordination of the total communication capability to assist in accomplishment of the total emergency operation.
 2. Provision for exercising net control as appropriate.

3. Assignment and deployment of volunteer radio personnel and equipment, both portable and vehicular mounted, to selected fallout shelters.
 4. Establishment of radio communications with higher levels and adjacent governments and with area military units.
- d. Phase III - Shelter. This includes plans for:
1. Expansion of Phase II operations.
- e. Phase IV - Shelter Emergence. This includes plans for:
1. Establishment of communications, best available, between the Civil Defense Emergency Operating Center and all temporary housing and feeding locations.
 2. Continue Phase III operations.
 3. Salvage operations and reestablishment of essential communications.

DALLAS WATER AND SEWER DEPARTMENT

The Director, Water and Sewer Department, in coordination with other water and sewer agencies in Dallas County as appropriate, is responsible for the preparation of a single integrated narrative ANNEX with supporting maps, overlays, and standing operating procedures (SOP's) for emergency water and sewer operation during disaster, as follows:

- a. Pre-emergency
 1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
 2. Provisions for establishing, staffing, and operating a Water and Sewer department control center in a fallout protected facility having a PF of 100 or more.
 3. Provisions for appropriate water department staff personnel for EOC.
 4. Procedures for coordinating emergency disaster operations of appropriate water and sewer agencies in Dallas.
- b. Phase I - Warning. This includes plans for:
 1. Alerting, mobilizing, and deploying emergency personnel and equipment to pre-selected areas.
 2. Emergency operations of water distribution systems and sewage facilities.
 3. Maintaining physical security of key facilities.
- c. Phase II - Movement. This includes plans for:
 1. Emergency operations of water distribution systems and sewage facilities.
 2. Taking shelter from fallout, as necessary, in prescribed shelters.
 3. In-service radiological monitoring and reporting.
- d. Phase II - Shelter. This includes plans for:
 1. Preparation and dissemination of water and sewage information and advisories.

2. Pre-designated placement of departmental mobile radio equipment to assure maximum effectiveness in serving departmental needs, and to assist in satisfying overall emergency communication needs.
 3. Assistance to respective shelter managers of shelters by water department personnel sheltered therein.
 4. In-service radiological monitoring and reporting.
- e. Phase IV - Shelter Emergence. This includes plans for:
1. Re-establishment of the communities water and sewage operations.
 2. Protecting essential surviving resources.
 3. Control of water distribution and priorities established by EOC.
 4. Salvage operations.
 5. In-service radiological monitoring and reporting.

DALLAS PERSONNEL DEPARTMENT

The Director, Personnel Department, in coordination with the appropriate personnel offices of the County government; the Dallas Office of the Texas State Employment Commission, and volunteer manpower sources, is responsible for the preparation of a single integrated ANNEX with supporting maps, diagrams, overlays, and standing operating procedures (SOP's), as follows:

a. Pre-emergency

1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
2. Provisions for assignment of City employees to the EOC and other control centers to function as clerical, plotters, security, and maintenance personnel as requested by the Director, Civil Defense.
3. Procedures for recruiting manpower and coordinating the allocation of available manpower and skills.
4. Provisions for establishing and operating a family locator organization.

b. Phase I - Warning. This includes plans for:

1. Alerting, mobilizing, and deploying selected manpower to preselected facilities.
2. Provisions for protection and/or movement to safe storage of City and County Government vital records.
3. Specific allocation of available skills as requested by the operating departments.
4. Movement of 14 days administrative and janitorial supplies to designated control centers, including the EOC.

c. Phase II - Movement. This includes plans for:

1. Expansion of Phase I operations.
2. Establishment and publication of a two 12 hour shift roster, for personnel under your cognizance functioning in the Emergency Operations Center.

- d. Phase III - Shelter. This includes plans for:
 - 1. Procedures for obtaining and recording the names of persons, including complete families, occupying the various shelters.
 - 2. Procedures for obtaining and recording the names, skills, and location of personnel to be utilized during Phase IV operations.
- e. Phase IV - Shelter Emergence. This includes plans for:
 - 1. Expansion of Phase III operations.
 - 2. Provide manpower and skills to departments operating in the field, as requested by the Emergency Operating Center.

DALLAS CITY ATTORNEY

The City Attorney, in coordination with the Dallas County District Attorney, is responsible for the preparation of a single integrated ANNEX with supporting documentation, as follows:

- a. Pre-emergency
 1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
 2. Legal assistance to the decision making group operating in the Emergency Operating Center.
 3. Procedures for coordinating all legal matters during all operational phases.
 4. Pre-selection of legal staff personnel for the EOC.
- b. Phase I - Warning. This includes plans for:
 1. Alerting and deploying selected legal staff personnel to the EOC.
- c. Phases II and III - Movement and Shelter. This includes plans for:
 1. Expansion of Phase I operations.
- d. Phase IV - Shelter Emergence. This includes plans for:
 1. Legal advice to the decision making group on such matters as:
 - (a) Release and use of prisoner labor.
 - (b) Requisitioning of hotels, motels, and other personal service facilities; food, fuels, medicines, and utility services.
 - (c) Condemnations.
 - (d) Deliberate destruction of single or multiple structures required for the preservation of life and property.

PURCHASING AGENT

The Purchasing Agent, in coordination with appropriate purchasing offices in County government, is responsible for the preparation of a single integrated ANNEX with supporting maps, diagrams, overlays, and standing operating procedures (SOP's) as follows:

a. Pre-emergency

1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
2. Development of separate lists including name, address, essential commodities (food-fuel-medicine-light construction materials) warehoused, and estimated quantity of commodity normally retained in storage.
3. Procedures for purchase or requisitioning, recording, and issuing of supplies and equipment as dictated by the disaster situation and environment.
4. The Purchasing Agent is not a direct source of supply.

b. Phase I - Warning. This includes plans for:

1. Alerting key supervisors of selected supply and equipment distribution warehouses.
2. Procurement of life sustaining supplies as requested by the Emergency Operations Center, in event time is available for emergency provisioning of fallout shelters.

c. Phase II - Movement. This includes plans for:

1. Expansion of Phase I operations.

d. Phase III - Shelter. This includes plans for:

1. Acquisition of resources required by the various chiefs of the operating departments.

e. Phase IV - Shelter Emergence. This includes plans for:

1. Provisions for obtaining, recording, and issue of supplies and equipment as requested by the Emergency Operating Center.
2. Procedures for requesting supplies, and equipment from neighboring cities and counties, the State and the Federal Government.

DALLAS PUBLIC UTILITIES SUPERVISOR

The Public Utilities Supervisor, in coordination with privately owned public utility companies, is responsible for the preparation of a single integrated narrative ANNEX with supporting maps, overlays, and standing operating procedures (SOP's), involving privately owned public utility support to be rendered during disaster, as follows:

a. Pre-emergency

1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5, and for informing public utility officials on a need-to-know basis, of the need for increased readiness actions.
2. Provisions for establishing, staffing, and operating a Public Utilities control center in a protected facility having a PF of at least 100.
3. Provisions for insuring the establishment of a control center by each public utility company. The control center should have a minimum PF of 100, and afford radio communications to key operational units.
4. Separate inventory lists for each utility company showing where various pieces of light to heavy vehicular and track laying equipment are dispatched from (identify radio equipped).

b. Phase I - Warning. This includes plans for:

1. Insuring adequate planning by utility companies for alerting, mobilizing and deploying emergency operations personnel and equipment to pre-selected shelter facilities.
2. Insuring adequate planning, by utility companies to provide physical security of key installations.
3. Insuring that provisions for continued priority services are planned.

c. Phase II - Movement. This includes plans for:

1. Insuring that expansion of Phase I operations is planned for.
2. Insuring that plans are adequate for taking shelter from fallout, as necessary, in prescribed facilities.

3. In-service radiological monitoring and reporting.
- d. Phase III - Shelter. This includes plans for:
1. Insuring that plans provide for maximum utilization of all radio communications to aid in providing radio links between the EOC and the various utility disaster control centers, and between disaster control centers and the various shelters housing public utility personnel.
 2. Assistance to shelter managers of respective shelters by public utility personnel sheltered therein.
 3. Preparation and dissemination of public utility service information and advisories.
 4. In-service radiological monitoring and reporting.
- e. Phase IV - Shelter Emergence. This includes plans for:
1. Insuring that plans are made for providing utility services to temporary housing sites - facilities, and feeding areas.
 2. Insuring adequacy of plans for rendering assistance as feasible, in salvage, decontamination, and general public welfare operations.
 3. Insuring the adequacy of plans for abrupt discontinuance of utility services to selected general areas as may be directed by the implementation on short notice of priority service to selected areas.
 4. Insuring adequacy of plans for protection of essential surviving resources.
 5. Insuring adequacy of plans for control and/or rationing of utility services as may be prescribed by the EOC.
 6. In-service radiological monitoring and reporting.

DALLAS PARKS AND RECREATION DEPARTMENT

The Director, Parks and Recreation Department, is responsible for preparation of a narrative ANNEX with supporting maps, overlays, and standing operating procedures (SOP's) , as follows:

- a. Pre-emergency
 1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
 2. Procedures for establishing, staffing, and operating a Parks and Recreation Department control center in the Aquarium, Fair Park, including radio communications with other Parks and Recreation Department units.
 3. Procedures for coordinating all regularly assigned units and equipment as well as those units volunteering their services.
 4. Providing support to emergency operating units as requested by the Emergency Operating Center.
 5. Maintaining current listings of all assigned equipment and personnel to be utilized during emergency disaster operations.
- b. Phase I - Warning. This includes plans for:
 1. Alerting, mobilizing, and deploying selected personnel and equipment to designated shelter areas.
 2. Supporting the Police Department in establishment of traffic control points.
- c. Phase II - Movement. This includes plans for:
 1. Expansion of Phase I operations.
 2. Taking shelter from fallout, as necessary, in prescribed shelter facilities.
- d. Phase III - Shelter. This includes plans for:
 1. Assistance to shelter managers of respective shelters by Parks and Recreation Department personnel sheltered therein.

2. Pre-designated placement of departmental mobile radio equipment to assure maximum effectiveness in serving departmental needs, and to assist in satisfying overall emergency communication needs.
 3. In-service radiological monitoring and reporting.
- e. Phase IV - Shelter Emergence. This includes plans for:
1. Establishing and operating recreational facilities as requested by the Emergency Operating Center.
 2. Assistance in decontamination operations coordinated by Public Works.
 3. Assistance in salvage and street clearing operations.
 4. Assistance in establishing, maintaining, and operating temporary housing and/or feeding sites.
 5. Assistance in relocating of invalids, the institutionalized, and others, if possible.
 6. In-service radiological monitoring and reporting.

COUNTY WELFARE DEPARTMENT

The Director, County Welfare Department, in coordination with all municipal and volunteer welfare organizations and units, is responsible for the preparation of a single integrated narrative ANNEX with supporting maps, overlays, and standing operating procedures (SOP's), for all participating welfare organizations, as follows:

a. Pre-emergency

1. Provisions for increased readiness in accordance with FCDG, Part G, Chapter 5.
2. Provisions for establishing, staffing, and operating a Welfare control center in a fallout protected facility having a PF of 100 or more.
3. Procedures for coordinating all welfare operations and participating organizations.
4. Provisions for selection and operation as requested by the Emergency Operating Center, of all temporary housing and feeding sites.

b. Phase I - Warning. This includes plans for:

1. Alerting, mobilizing, and deploying selected welfare personnel, equipment, and supplies to designated protected shelter areas.

c. Phase II - Movement. This includes plans for:

1. Expansion of Phase I operations.
2. Taking shelter from fallout, as necessary, in prescribed shelter facilities.

d. Phase III - Shelter. This includes plans for:

1. Assistance to shelter managers of respective shelters by welfare personnel sheltered therein.
2. Provisions for utilization of whatever radio communi-

cations as may be available to maintain communications with the welfare control center and the EOC.

3. In-service radiological monitoring.

e. Phase IV - Shelter Emergence. This includes plans for:

1. Establishing, staffing, and operating, as requested, temporary housing and feeding sites.
2. Assistance in care for invalids, sick and others as feasible.
3. In-service radiological monitoring.
4. Establishment of child care facilities for lost children.
5. Assistance to the family locator operations.

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3. Department of Defense, Office of Civil Defense, Shelter Design and Analysis, Fallout Protection (TR-20-(Vol. 1)). Washington, D. C., May, 1964.
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14. Urban Transportation - A master transit plan report. Prepared by Dallas Master Transit Plan Committee, 1963.

BASE MAPS

1. Central Business District Map, 1" = 200'. Delineates lot and block. Prepared by City Planning Department, 1962. Revised 1965.
2. Urban Area Map, 1" = 400'. Delineates lot and block. Prepared by City Planning Department, 1962. Revised 1965 and 1967.
3. Project Area Map, 1" = 4000'. Delineates physical features. Prepared by State of Texas (Highway Department), 1961. Revised 1967.
4. Aerial photographs of urban area, flown 1967.

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THE DALLAS CITY PLAN DEPARTMENT

H. Alden Deyo, Director (--1968)
James Schreoder, Acting Director (1968--)

DALLAS-DALLAS COUNTY CIVIL DEFENSE

C. W. McCoy, Director

DALLAS COUNTY CIVIL DEFENSE AND DISASTER COMMISSION

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ROBERT J. McINNISH Mayor, City of Carrollton	P. O. Box 535, Carrollton, Texas 75006
PHIL VINES Mayor, City of Cedar Hill	P. O. Box 96, Cedar Hill, Texas 75104
D. E. PENNINGTON Mayor, City of Cockrell Hill	4125 W. Clardon Drive, Dallas, Texas 75211
W. T. COZBY Mayor, City of Coppell	City Hall, Coppell, Texas 75019
DEWAYNE WHITE City Manager, DeSoto	City Hall, De Soto, Texas 75115
R. EDWIN WHITE City Manager, Duncanville	P. O. Box 280, Duncanville, Texas 76116
MELVIN ORMAN City Manager, Farmers Branch	City Hall, Farmers Branch, Texas 75234
LOYD TALLENT Personnel Director, Garland	P. O. Box 189, Garland, Texas 75041
W. S. BARNETT Civil Defense Director Grand Prairie	321 West Main Street, Grand Prairie, Texas 75050

CHIEF W. H. NAYLOR Civil Defense Director, Highland Park	4710 Drexel Drive, Dallas, Texas 75205
JACK W. COLLIER, JR. Alderman, City of Hutchins	303 Denton Street, Hutchins, Texas 75141
TED WHITE Civil Defense Director, Irving	City Hall, Irving, Texas 75061
CECIL R. RIDGELL Mayor, City of Kleberg	P. O. Box 457, Kleberg, Texas 75145
DON L. CLEVELAND City Manager, Lancaster	P. O. Box 548, Lancaster, Texas 75146
W. R. EWING Mayor Pro Team, Mesquite	P. O. Box 137, Mesquite, Texas 75149
CARL W. RIEHM City Manager, Mesquite	P. O. Box 137, Mesquite, Texas 75149
JOHN McCOOL Mayor, City of Renner	Renner, Texas 75079
JOHN NEIL Asst. City Manager, Richardson	P. O. Box 309, Richardson, Texas 75081
J. W. HERFURTH Mayor, City of Rowlett	P. O. Box 99, Rowlett, Texas 75088
BEN DAVIS Mayor, City of Sachse	Rt. 2, Box 158-A, Garland, Texas 75040
ROY LEE HEARD Mayor, City of Seagoville	110 W. Elm Street, Seagoville, Texas 75159
C. P. GIBSON Mayor, City of Sunnyvale	Rt. 3, Box 612, Mesquite, Texas 75149
CHIEF FORREST E. KEENE Civil Defense Director, University Park	P. O. Box 8005, Dallas, Texas 75205

HENRY J. DAVIDSON
Mayor, City of Wilmer

P. O. Box 248, Wilmer, Texas 75172

A. T. AVNSOE
Mayor, City of Woodland Hills

P. O. Box 971, Rt. 1, Dallas, Texas 75216

CITY OF DALLAS REPRESENTATIVES

ROSS I. RAMSAY	3400 Republic Bank Tower
HOWELL H. WATSON	Republic Bank Tower
JOHN W. "PREACHER" HAYS	Dallas Times Herald
DR. W. A. CRISWELL	First Baptist Church
SOPHUS THOMPSON	2936 Dyer Street
DR. BILL PRIEST	El Centro College
JOHN PLATH GREEN	First National Bank Building
DR. J. R. MAXFIELD	2711 Oak Lawn Avenue
DR. JAY SANFORD	Southwestern Medical School
ROY DULAK	311 South Akard Street
RALPH SHANNON	American Red Cross, 2300 McKinney
LT. COL. PAUL THORNBURG	Salvation Army, 500 North Ervay
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LLOYD BRAFF	Gulf States Building
JOE LOCKRIDGE	4510 South Oakland
DR. E. J. CONRAD	4432 South Oakland
JACK KRUGER	Dallas Morning News, Young & Houston
BOB HOLLINGSWORTH	Dallas Times Herald, Herald Square
TRAVIS LYNN	WFAA, Young & Houston
EDDIE BARKER	KRLD, 400 Griffin Street
JOHN W. MAYO	P. O. Box 9503
H. ALDEN DEYO	City Hall
MRS. AUDREY WAYNAND	4195 Lively Lane

CSP TECHNICAL COMMITTEE

City of Dallas

H. M. CLAY, Assistant City Manager, Finance	Ext.	281
H. H. STIRMAN, Director of Public Works	Ext.	231
CHIEF CHARLES BATCHELOR, Chief of Police	Ext.	527
CHIEF C. N. PENN, Fire Department	Ext.	394
DR. HAL J. DEWLETT, Director of Public Health	Ext.	1265
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JOE NALL, Director of Public Utilities	Ext.	204
WILSON DRIGGS, Director of Public Transit	TA	7-8242
H. ALDEN DEYO, Director of City Planning	Ext.	205
C. W. McCOY, Acting Director of Civil Defense	Ext.	639

Dallas County

BILL DECKER, Sheriff Dallas County Court House, Dallas, Texas	RI	9-8641
R. T. GREGORY, County Engineer Dallas County Court House, Dallas, Texas	RI	9-8151
HAL HOOD, Fire Marshall Dallas County Records Building, Dallas, Texas	RI	9-8301
G. R. COKER, Director of City-County Welfare, Dallas County 4917 Harry Hines Boulevard, Dallas, Texas	ME	1-4450
WENDEL HULSE, Director of Public Works, Grand Prairie 321 West Main, Grand Prairie, Texas	AN	2-3591
JACK W. COLLIER, JR., Councilman 101 Dallas Avenue, Hutchins, Texas	CA	5-1421
TED WHITE, Assistant Director of Civil Defense 835 West Irving Boulevard, Irving, Texas	Ext. BL	355 4-9151
DR. JACK GIBSON, Director, Auxiliary Services Richardson Independent School District, 400 South Greenville Richardson, Texas	Ext. AD	56 5-4501
T. C. LEWIS, Mayor Pro-Tem Director, Sunnyvale Route 2, Box 944, Mesquite, Texas 75149	AT	9-1883

HOLLIS ALLEN, Assistant Superintendent-Administration Dallas Independent School District, 3700 Ross Ave., Dallas, Texas	TA	4-1620
BILL NAYLOR, Chief Police and Fire, Highland Park 4710 Drexel Drive, Dallas, Texas	LA	1-2922
PAUL SAVAGE, Chief Civil Defense Support Branch U. S. Army Engineer District, P. O. Box 17300, Fort Worth, Texas	334	- 2145
H. R. REYNOLDS, Lee Way Motor Freight Inc. 1969 Record Crossing, Dallas, Texas	ME	7-0180
BRAD L. CHAMBERS, Fire Marshall, University Park 3800 University Boulevard, Dallas, Texas	EM	3-1644
RAY ZIGLER, Irving Public Schools, Box 637, Irving, Texas	BL	3-3555
PERRY V. TRAVIS, Seagoville P. O. Box 26223, Dallas, Texas		
RALPH FAGALA, Deputy Director, Civil Defense 4125 West Clarendon, Cockrell Hill, Texas	FE	9-9955
STAN PRICHARD, Dallas Junior College District		

CSP PLANNING CONSULTANT

Breisch Engineering Company, Inc.

Jack L. Spradling.	Project Planner
J. Carthal Cobb.	Assistant Project Planner
Carl K. Wiggins.	Chief Planning Technician

LIST OF TERMS USED IN COMMUNITY SHELTER PLANNING

Allocation, General

The process of allocating areas of population to areas of shelter concentration.

Allocation, Specific

The process of allocating geographically defined areas of population to a specific shelter facility or group of shelter facilities.

Annex

A supporting, amplifying statement attached to a plan, presenting detailed personnel and material requirements for the accomplishment of the plan.

Appendix (also Attachment or Tab)

Related or supporting statements attached to a plan or a plan annex.

Census Tract

A nonpolitical, geographical subdivision of no standard size, but within a city, town, county, or other political jurisdiction. It is used by the U. S. Bureau of the Census as a convenient and flexible unit for surveying and aggregating population, housing and other demographic or economics statistics. In most instances, a tract corresponds to a Standard Location Area.

Community Shelter Plan (CSP)

The document that describes the analysis of the relationship of population to existing and future fallout shelter capabilities; includes means to inform the public of emergency action, and to increase the local inventory of shelter; and is the basis for updating local CD emergency plans to base them on the use of the best existing protected space. The objective of a community shelter plan is to maximum the number of lives saved in the event of a nuclear attack.

Core

The interior portion of the middle floors of a multistory building that may represent specific shelter areas.

EFPH

Evaluation of fallout protection in homes - A system under development by OCD, through which citizens can fill out forms describing the size, shape, and construction of their houses, following which a computer determines the protection factor they afford against fallout radiation.

EIR

Emergency information readiness - The second step of the CSP process.

Emergency Operating Center (EOC)

The protected site from which civil government officials (municipal, county, State) exercise direction and control in a civil emergency.

Enumeration District (ED)

An arbitrary geographical subdivision of census tracts, used for the purpose of taking the U. S. Census, and generally representing a one-man-week enumeration effort.

FL

Designation for a building floor.

Group Quarters

Occupied quarters which do not qualify as housing units are considered group quarters. They are located most frequently in institutions, hospitals, nurses' homes, rooming and boarding houses, military and other types of barracks, college dormitories, fraternity and sorority houses, convents, and monasteries. Group quarters are also located in a house or apartment in which the living quarters are shared by the head and five or more persons unrelated to him. Group quarters are not included in the housing inventory. The 1960 concept of group quarters is similar to the 1950 concept of nondwelling-unit quarters.

Housing Unit

A house, an apartment or other group of rooms, or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters --- that is, when the occupants do not live and eat with any other persons in the structure and there is either (1) direct access from the outside or through a common hall, or (2) a kitchen or

cooking equipment for the exclusive use of the occupants of the unit. The occupants of a housing unit may be a family or other group of persons, or a person living alone.

Modification Improvements

Shelter modifications that improve the degree of fallout protection, increase the capacity (spaces), or improve habitability. These modifications include increased shielding and improved ventilation, access, lighting, or power.

Movement

The act of moving people to shelter before, during, or immediately after an attack, generally from areas of shelter deficiency or destruction.

National Fallout Shelter Survey (NFSS)

The analysis of large buildings and subsurface enclosures to identify potential public fallout shelter.

National Location Code (NLC)

A system for defining geographical locations in any part of the United States and its territories or possessions.

Natural Area

An area defined by topographical features (rivers, lakes, etc.) and man-made features (railroad tracks, freeways, industrial tracts, etc) --- not limited by political boundaries or jurisdictions.

OCD

Office of Civil Defense - The Federal agency responsible for civil defense.

OCD Fallout Shelter Criteria

A protection factor of 40 or greater. A minimum of 10 sq. ft. of shelter floor space, and 65 cu. ft. of space per person. At least 3 cu. ft. of fresh air per minute per person when capacity is based upon minimum space requirements. The cubic feet of space per person is increased with decreased ventilation. In unventilated underground space, 500 cu. ft.

of space per person is required.

Overload

The number of people allocated to a shelter facility beyond its capacity as defined by the National Fallout Shelter Survey.

Packaged Ventilation Kit (PVK)

A compact, portable ventilation device that can be electrically or pedal operated for stocking in belowground shelter areas for use in an emergency to increase the rated capacity and/or habitability of such shelter.

Peak Population

As used in the National Fallout Shelter Survey, the maximum population occupying a Standard Location Area at any given time on a normal weekday. The peak population of a city or other area that includes more than one Standard Location Area is a summation of the peak populations for each of the Standard Location Areas.

Daytime Peak

The maximum population occurring during the daylight hours (8:00 a. m. to 6:00 p. m.).

Nighttime Peak

The maximum population occurring during the nighttime hours (6:00 p. m. to 8:00 a. m.).

Peak-Peak Population (also 24-Hour Peak)

For a given Standard Location Area, the higher of the daytime and nighttime peaks. For a city or other area, the summation of 24-hour peak population of all Standard Location Areas therein.

Physical Vulnerability Code (PV)

Category and numerical code for the type of construction of a facility combined with the estimated pounds per square inch (psi) of overpressure the structure will withstand.

Planning Factors (also Policies)

Facts and assumptions upon which the CSP is based, including time

available for movement to shelter, shelter space criteria, population distribution for allocation, mode of travel to shelter, travel rate, and maximum distance to shelter. (Established in CSP Step IB).

Population Drainage Area (also Service Area)

The geographical area from which the population is allocated to a shelter or group of shelters. A population drainage area is determined by either the capacity of the shelter (s) or the established travel distance as modified by the barriers to movement and other local terrain features.

Preliminary Analysis

The first step in the community shelter planning process, which is a generalized investigation of the relationship of existing shelters and population. (CSP Step IA).

Printouts

Various listings of shelter space identified by the National Fallout Shelter Survey.

Protected Space

An area of a building or other enclosure which provides protection from fallout. Areas having a PF of less than 40, as well as those meeting OCD fallout shelter criteria, are included.

Protection Factor (PF)

A number used to express the relationship between the amount of fallout gamma radiation that would be received by an unprotected person and the amount that would be received by a person in shelter. An occupant of a shelter with a PF of 40 would be exposed to a dose rate $1/40$ th ($2\frac{1}{2}\%$) of the rate to which he would be exposed if his location were unprotected.

Protection Factor Categories

The National Fallout Shelter Survey places each shelter space in a category having the following minimum and maximum PF limits:

<u>CATEGORY</u>	<u>PF</u>	<u>CATEGORY</u>	<u>PF</u>
1	20-39	5	150-249
2	40-79	6	250-499
3	80-99	7	500-1000
4	100-149	8	Over 1000

Public Fallout Shelter

A shelter facility which contains fallout shelter meeting OCD criteria, for 50 or more persons, and which has been licensed for public use in an emergency.

Resident Population

In the National Fallout Shelter Survey, the population living in an area as tabulated by the 1960 Census.

Service Area

See Population Drainage Area.

Shelter Area

The portion(s) of a shelter facility which contains shelter meeting OCD fallout shelter criteria. In the case of a public fallout shelter, a shelter area must contain space for at least 10 persons.

Shelter Complex

A natural grouping of shelter facilities defined for planning, administration, and/or operational purposes. Normally a complex will include a maximum of 25 individual shelter facilities, within a diameter of about $\frac{1}{2}$ mile.

Shelter Deficit Area

A geographical area in which the population exceeds surveyed shelter spaces.

Shelter Development

Action taken to provide additional fallout shelter meeting OCD fallout shelter criteria by such means as use of design "slanting" techniques

in new construction and modification of existing structures, and the construction of single-purpose fallout shelters.

Shelter Development Planning

Planning for the elimination of existing shelter deficits and for future shelter needs in terms of shifts and growth in population and projected changes in existing shelter capability. Planning adheres to Federal criteria regarding appropriate shelter requirements.

Shelter, Expedient

Group fallout shelter constructed on a crash basis in a period of crises.

Shelter Facility

A building or subsurface enclosure, other than a single-family home, which contains fallout shelter meeting OCD criteria for 10 or more persons.

Shelter Improvement

Any action that improves the accessibility, habitability, or quality of shelter.

Shelter, Improvised

Any shelter constructed in an emergency or crisis period by individuals or single families, usually in or near their homes.

Shelter Limit Line

On a shelter utilization map, the borderline distinguishing sheltered areas from unsheltered areas.

Shelter Location Map

A map prepared in Step IA of the CSP process indicating all shelter facilities of PF Categories 2-8.

Shelter Management

The internal organization, administration, and operation of a shelter facility, by either pretrained or emergent leadership.

Shelter Occupancy Period

That period of time during which the radiation hazard is great enough to require persons to remain in shelter.

Shelter Space, Planned

A planned individual shelter space allotment that may be more or less than the NFSS shelter space requirement of 10 square feet per person.

Shelter Space, Surveyed

An identified fallout shelter space with a PF of 20 or greater but meeting OCD fallout shelter criteria in all other respects.

Shelter Utilization Planning

The process of allocating population to existing fallout shelter space, based on the planning factors and policies established in CSP Step IB.

Small Structures Survey (SSS)

The analysis of small structures, other than single-family homes, to identify shelter meeting OCD fallout shelter criteria, for 10 or more persons.

Standard Location Area (SLA or SL)

A small geographic area identified by an 8-digit serial number (SL No.) and represented by a pair of geographic coordinates. Generally, it is equal to a census tract.

Support System

Operating elements of civil defense, not directly a part of the shelter system (and capable of existing independently of it), but which either ensure or enhance the survival capability of the shelter system or replace it in the shelter-emergency (post-attack) period; such elements would include radiological monitoring, communications, traffic control, public order (police), firefighting, rescue, decontamination, medical care, public health, and emergency feeding.

Time Available for Movement

The maximum estimated time for travel to shelter. The recommended

travel time is 30 minutes in urban or suburban areas, and 60 minutes in rural areas.

Travel Distance

The maximum estimated distance the general public is anticipated to be able to travel to shelter within the established travel time. The travel distance is based upon the reasonable speed possible for the anticipated travel mode, multiplied by the travel time.

Travel Mode

The means of travel to shelter designated by the CSP, based upon the characteristics of the local community.

Updating

Actions that result in a current inventory of shelter space and/or population.

Upgrading

Any action that results in physical improvement of existing shelter spaces.

TECHNIQUES USED IN SMALL AREA POPULATION ESTIMATING

Several sources were used to obtain the basic population data. The first was the 1960 Census prepared by the U. S. Bureau of the Census. This data was available by census tract and had also been used by the U. S. Army Corps of Engineers in its NFSS work.

The NFSS printouts were made available to us by the Ft. Worth District of the Corps. The printouts included all Standard Locations where a shelter facility existed and listed the resident, peak daytime, and peak night-time populations for these Standard Locations. While this data cannot be relied on entirely, it was used as a basis for determining the peak nighttime population estimating work.

The census data also contained a considerable amount of information concerning the population breakdown and densities within the census tracts. This was used as a reference in determining population from a dwelling unit count in some areas of the County and City.

The second source was the "Transportation Study" prepared in 1964, by the Texas Highway Department for Dallas and Tarrant Counties. This study involved a complete and detailed land use study of the entire area. The population was then determined and density factors established by analysis zones. These zones were set up using rings and sectors and all work involving population densities for projections was done using these zones. These zones generally followed census tracts and could be correlated with the census data. In this report the population was projected to 1985, by using anticipated development of open space. This development was estimated by considering the topography of the area and the character of surrounding development.

The land use maps prepared in this study were used along with census tract "data sheets" to obtain the number of dwelling units, the family density factor, and the population.

The third source was 1967 aerial photography of the entire project area. Using these photos, an actual dwelling count could be made as needed to determine population or to determine the character of land use.

A fourth source was files of the Dallas City Building Inspectors office and Dallas County Home Builders Association. The building inspectors office records were obtained to cover the period 1960 to 1967. They record the number of structures built with a value of \$ 100,000.00 or more and indicate in the case of multi-family housing, the number of units constructed. The data provided by the Home Builders Association was similar but not as detailed.

The last source used was maps showing all streets and highways within the project area. These were prepared by the Texas Highway Department in 1959, and were updated in July of 1967. We were able to determine from these maps, areas where development had taken place.

The procedures followed are basically as outlined in the report for Step I-C. The different sources, as listed, were used with the Transportation Study and the aerial photos providing the basic data.

The first step taken was to establish an estimated 1967 population using the growth factors set up in the Transportation Study. This was done by linearly interpolating between the 1964 and 1985 population. It was felt that this would be higher than the actual count but would provide a set of data to work from.

Since the Transportation Study projections were based on open space development, it was determined to first look at all analysis zones with a growth factor of 1.25 or higher. These all fell in the outlying areas where development could normally be expected to occur. It was found by comparing the 1964 land use maps and the 1967 aerial photos that, in fact, development did not occur as predicted and, therefore, the growth rates for these areas were, generally, too high. It then became necessary to check all tracts in the outlying areas to determine if the projected development had taken place.

In some cases it was possible to adjust the growth factor by outlining the area of development. In other cases it was necessary to make a dwelling unit count and from this determine the population. In these instances, family density factors of 3.25 persons per family for single family residences and 2.5 persons per family for multi-family residences were used.

The next step was to establish the area where surplus shelters would exist or at least where most of the population could be sheltered. After reviewing the Shelter Location map after all new shelters were mapped, it was decided that this would involve an area bounded by White Rock Creek on the east, Walnut Hill Lane to the north, Illinois Avenue to the south and Elm Fork of the Trinity to the west, north of the Trinity River and Westmoreland to the west, south of the Trinity River.

Within this area a detailed study was made to determine the population. A comparison between the 1964 land use maps and the 1967 aerial photos was made to determine if the land use had changed. After this comparison, a dwelling unit count was made using the land use maps, aerial photos, and the construction records for the area. A study was then made of the family densities and these factors were used to determine the 1967 population.

In order to account for persons who might be in areas other than their residence during the nighttime period covered in the plan, it was necessary to determine a peak nighttime population by standard location for use in the allocation.

A list of industrial centers which operated a second and third shift was obtained and broken down by standard location. Allowances were also made for hotels, motels, and similar uses. This was also done for other types of areas including shopping centers and other commercial complexes.

Each hospital was checked to determine its average population and also to see if a shelter facility existed within the structure. Where a hospital did not contain shelter spaces, that hospital population was added to the peak population. Where shelter spaces existed but not in sufficient quantities to shelter the entire population, the facility was marked for occupants only and the excess population added to the peak population. Where a hospital contained more than enough spaces to shelter the occupants, that facility was reviewed as a special case. The population was not added to the peak population.

The resident population to peak population ratio thus determined was then compared with the resident-to-peak ratio which was established by the Corps of Engineers and reported on the NFSS printouts. Where a variation existed, checks were made to determine any change in land use or other factor which would affect the ratio. The peak population was then recorded by standard location and used in the allocation.

DETAILED ESTIMATES AND METHODS USED IN PLANNING FOR DEVELOPMENT OF SHELTER

To determine the expected increase in shelter space due to normal construction it was necessary to analyze what has happened in the past. After careful review of the Building Permits issued for New Construction within the City Limits of Dallas, Texas for 1962 through 1967, a comparison was made to determine actual construction cost versus shelter space yield. Our analysis indicated that very few if any spaces were found in construction, costing under \$ 100,000.00 excluding land value. There were approximately 470 Building Permits issued in the over \$ 100,000.00 category. By comparing these 470 Buildings with the NFSS printouts, we found 46 commercial and industrial structures or 9.79% of the total containing 361,430 PF Cat. 2-8 shelter spaces, 3 apartment buildings or .64% of the total containing 28,295 PF Cat. 2-8 shelter spaces, 9 semi-public buildings or 1.91% of the total containing 3,785 PF Cat. 2-8 shelter spaces. To further summarize our findings, 12.34% of the 470 buildings analyzed yielded 393,510 PF Cat. 2-8 shelter spaces and 87.66% had no PF Cat. 2-8 spaces at all.

Of the 58 buildings containing shelter space, 56 were listed as Masonry construction, 2 were Brick Veneer, and they ranged from one to 50 stories high. It must be emphasized here that with the small percentage of all types of new construction yielding shelter space, it definitely points up the need for a strong program to incorporate shelter space in new construction.

In order to analyze the distribution of shelter space produced by new construction, it was necessary to group the buildings according to the section of the City of Dallas in which they were located. The groupings were done by planning areas ---the same ones were used that had been established in Step I-C.

This distribution pattern revealed that 72.03 per cent of the 393,510 spaces (or 283,463) were located in the central business district. Of the remaining 27.97%, 19.23% were located within the area bounded by Woodall Rogers Freeway on the south, LBJ Freeway on the north, Central Expressway on the east, and Stemmons Freeway on the west, leaving 8.74% (or 34,393) of the spaces to be located in other sections of Dallas.

From this analysis, it is readily seen that essentially all of the construction between 1962 and 1967 which yielded shelter space was located in the CBD, north, and northwest sections of Dallas. This trend indicates that these areas will continue to grow until a point of saturation is reached, then the industry must locate in other areas.

There are several planned industrial districts located throughout Dallas County where the growth will shift as the older and more established areas are built up. It is only logical to assume that neighborhood development will be greater in those areas surrounding the City of Dallas along Loop 12 where land is available and topographic conditions permit. These assumptions are based on the shift of population from the heavily urbanized areas to suburban areas which has been occurring for the past 20 years. This new neighborhood development will continue to stimulate shopping center activity at all levels, neighborhood, community and regional centers will be built as the need arises. In our studies to date we have found that very few if any shelter spaces was located in neighborhood and community shopping centers, only the regional centers where department stores, large drug and discount stores are located have yielded shelter space in sufficient numbers to be of value to the shelter plan.

New churches will continue to be a source of additional shelter space and their construction will be automatic as the new neighborhoods develop. However, the shelter space yield is small in all but the larger ones with school affiliated activities.

High Rise Apartments seem to be the best source of new shelter space in the multi-family category of new construction, but with the large number of apartment houses that have been built in Dallas County only a very small percentage contain shelter space, but of those where space was located, the yield has been high and very significant to the total inventory.

As previously stated, only those buildings costing \$ 100,000.00 or over were considered in the building permit study. This naturally eliminated most residential construction except apartments. The results of the apartment construction are also reflected in the previous section.

An EFPH survey was not performed for Dallas County and since one is not anticipated because of the scarcity of residential homes with basements, a study of residential construction was not considered to be of benefit to this plan.

The various government agencies have several projects planned which include a new Dallas City Administration Building, an expansion of City Municipal Auditorium, Crossroads Community Center, Dallas Federal Center, and a regional post office. Most of these buildings, where the site was known, were found to be located in or near the central business district where surplus shelter space already exists. Therefore, the shelter spaces estimated from the building permit data were assumed to reflect the spaces contributed by these particular buildings.

Capital improvements for the smaller towns in Dallas County, if there were any plans, were treated individually and the spaces were estimated according to the data available.

A review of the public school system produced the following statistical information:

<u>Category</u>	<u>Ave. Attendance</u>	<u>Ave. No. 2-8 Spaces</u>
Elementary	723	100
Junior High	1,392	112
High School	1,626	586

New schools and additions to existing schools were assumed to produce PF Category 2-8 spaces in proportion to their expected enrollment, or anticipated increases in enrollments, so by applying the above rates, the number of shelter spaces were predicted. These new spaces were added to the 1970 or 1975 shelter inventory according to the scheduled date of completion.

Although the six junior colleges which are being planned for Dallas County are located in unsheltered areas of Dallas County, no spaces was estimated for them because of the unknowns involved. Since there are no comparable facilities with which to compare these schools, it was felt that an estimate could be very misleading. Since several of the junior colleges are in the initial planning stages, it would cost little or no more money to incorporate shelter space in the buildings where the spaces are needed so desperately. This again points up the need for a strong program to encourage the incorporation of shelter space in new construction.

A list of proposed shopping centers was obtained from the "Shopping Area Guide - Dallas County" and from a study being conducted by the Dallas Times Herald.

These shopping centers were then classified, i. e. regional, community, or neighborhood, on a square footage basis. Of the shopping centers proposed, two were considered regional; the rest were neighborhood.

An investigation of the present shopping centers revealed that neighborhood centers very seldom yield fallout shelter space, so no space was predicted to be available in this type of proposed center. However, regional shopping centers very often produce very large amounts of shelter space, so the number of spaces was established by comparison with existing centers of approximately the same size and character.

Since these centers were located in areas which had produced few shelter spaces from 1962 to 1967, the estimated spaces were in addition to those

predicted from the building permit data.

In order to determine those structures which would be removed by demolition, it was necessary to consider the following possibilities:

1. Urban Renewal

Such a project is not presently planned for the City of Dallas, so the shelter inventory would not be affected.

2. Highway Clearance

Although some rights-of-way have yet to be purchased and cleared for the interstate highway system, the Texas State Highway Department has indicated that present clearance plans have been completed to 1975, leaving the shelter inventory unaffected.

3. Other Demolition Plans

A search for other projects which would involve the razing of buildings which presently incorporate fallout shelter protection, was conducted, but nothing of consequence was revealed.

A possible method of increasing the number of shelter spaces is through the use of the Portable Ventilating Kit. A study was made of the shelter facilities where an increase could be realized by use of the kit. A total of 21,099 spaces could be gained in this manner, however, 19,813 of these spaces are located in areas that now have a surplus of shelter. Therefore only 1,286 spaces could be gained and this was not considered as a major source of new spaces.

Based on past experience the increase in shelter space will continue to fall below the increase in population unless some positive action is taken. This could take the form of an ordinance requiring the construction of shelter spaces in all new construction. Such an ordinance has been reviewed and adopted by the Policy Council and is being submitted to the various cities and towns for adoption.

It should be readily apparent that this ordinance, if adopted and enforced, would have a dramatic effect on the shelter inventory. First, all new residences, single or multi-family, would provide shelter for the occupants, therefore, no public shelter would be needed. All schools, churches, and commercial buildings would provide shelter for the occupants so that no additional space would be needed. In effect, all newly developed areas would con-

tain adequate shelter space which would not only shelter the new residents but would also relieve the current deficit in a short period of time.

As a practical matter, the ordinance will probably not be adopted by the communities in its present form. It is possible that it will be adopted with single family residences removed and a clause allowing exemptions under certain conditions. It is hoped that the requirements would remain for multi-family large commercial, industrial, public and semi-public buildings. This would have a tremendous effect on the inventory over a period of time.

In conjunction with the ordinance, the local civil defense staff has a very important role. They should perform the following services:

1. Begin immediately to acquaint every architect and engineer in the area with the Architect-Engineer Professional Development Services which are provided by OCD. This program will provide the professional advise on how to incorporate shelter space in new construction at little or no additional cost.
2. Develop a system of coordination with the officials charged with enforcing the ordinance to insure that space included meets standard criteria and that exemptions are not granted unless justified.
3. Set up a continuing program for updating the shelter inventory so that an updated shelter plan could be prepared as soon as it is needed and is justified.
4. Develop an information program to educate home builders on methods of construction which will provide shelter in single family residences and encourage home buyers to look for houses with shelter.

The local official charged with the responsibility of enforcing the ordinance should immediately establish methods of procedures to insure compliance by all owners of new construction. He should be prepared to recommend assistance in design through the Architect-Engineer Professional Development Services Program to any prospective builder who requests assistance. He should also establish criteria to be using in making a decision on requests for exemptions from the ordinance. These might include:

1. Extreme extra construction costs to provide shelter.
2. Availability of adequate space in the immediate vicinity.
3. Undesirability of shelter space due to special use of building.

NEW SPACES ADDED

(ASSUMING NORMAL CONSTRUCTION)

S. L.	Step III Existing Space 1967	Projected Space 1970	Projected Space 1975
005	2,960	3,690	4,906
007	37,492	40,210	44,473
008	15,607	15,696	16,271
010	35,718	38,719	43,721
011	2,863	2,981	3,177
012	1,301	1,620	2,152
013	2,392	2,980	3,960
025	2,589	2,589	3,380
027	17,749	17,749	19,045
028	2,886	2,902	2,929
029	363,038	420,597	520,415
030	12,819	14,508	17,323
031	10,361	11,224	13,363
041	778,250	888,750	1,078,242
042	6,135	6,135	8,868
043	38,695	40,713	46,746
044	45,482	45,482	45,632
054	6,915	6,952	7,013
056	134	165	217
068	490	562	562
072	5,761	16,911	16,911
074	1,457	1,540	1,679
077	31	50	81
080	1,481	1,895	2,585
086	21	21	101
092	27,763	44,421	72,184
093	15,476	24,646	40,139
094	9,228	12,136	17,706
095	1,114	1,782	2,896
097	394	394	512
098	118	118	598
102	0	274	730
104	6,305	6,388	6,512
105	4,730	4,865	4,865
106	497	511	511
116	1,980	3,120	5,020
117	2,034	2,169	2,227
121	75,078	92,841	122,570
128	36	136	136

<u>S. L.</u>	<u>Step III Existing Space 1967</u>	<u>Projected Space 1970</u>	<u>Projected Space 1975</u>
129	297	325	371
130	0	11,000	11,000
132	779	879	879
140	0	100	100
150	401	642	1,043
153	100	160	260
156	253	309	402
157	2,060	2,612	3,532
163	9,753	15,605	25,358
187	0	10	26
214	813	813	1,113
224	0	586	586
235	16,153	16,153	17,063
279	0	586	586
291	2,820	2,820	2,874

Spaces Added 1967 - 1970 260,233

Spaces Added 1970 - 1975 414,509