## NROE METROPOLITAN AREA

## TRANSPORTATION STUDY

COMPARATIVE ANALYSIS
MONROE STUDY
EXTERNAL ORIGIN-DESTINATION OCT, 1973

MHEWWAY LRBRARV mIGHIGAN DEPARTMENT OF STATE IIGHWAYS LANSMME. MnCuld P. O. DRAWER 'K" 48904


COMPARATIVE ANALYSIS<br>MONROE STUDY<br>EXTERNAL ORIGIN-DESTINATION OCT, 1973

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In Cooperation with:
U.S. Department of Transportation Federal Highway Administration

Comparative Analysis Monroe Study
External Origin-Destination 1962-1971

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## DEPARTMENT OF STATE HIGHWAYS

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JOHN P. WOODFORD, STATE HIGHWAY DIRECTOA
October 9; 1.973
Mr. Sam F. Cryderman
Engineer of Transportation Planning
Bureau of Transportation Planning
Dear Mr. Cryderman:
The Transportation Survey and Analysis Section of the Bureau of Transportation Planning is pleased to present this comparative analysis of the External Origin-Destination Studies taken in 1962 and 1971 for the Monroe Study Area. This publication fulfills a requirement of the Federal Highway Administration in regard to Phase $I$ of this study.

The enclosed report documents the study by comparing desire lines, through trips, classification of vehicles, station counts and high one, two and three hour periods.

We would like to extend our appreciation to the City of Monroe, Monroe County Planning Commission, and the Monroe County Road Commission for their cooperation during this study.

This report was prepared by David B. Houts, Highway Transportation Analyst of the Southeast Area Analysis Unit, which is supervised by Kenneth E. Underwood.

Sincerely,


Keith E. Bushnell
Engineer of Transportation Survey and Analysis Section

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The scheduling of an interstate business connection, from $I-75$, to downtown Monroe, in the Michigan Department of State Highways Second Five Year Construction Program, (1962-1967) resulted in the initiation of a major highway planning study, for the Monroe area in 1962.

The study culminated in 1965, with the publication of the "Monroe State Highway Plan". The plan recommended the realignment of M-50, with an interchange at $I-75$, to provide for improved eastw west state trunkline service, to the Monroe Area, and to serve as a more direct interstate business connection, to the Central Business District of Monroe.

Although the recommendations were developed on a co-operative basis, and approved by the City Planning Commission, the recommendations were not acceptable to the Monroe City Council: Since agreement with the City of Monroe could not be reached, additional study was considered necessary, and the project was re-scheduled for 1977.

Traffic has increased at a much more rapid rate than was anticipated in the original study, and in a number of instances, existing traffic has already exceeded the projected 1982 volumes. This factor, combined with the age of the original study, resulted in the Monroe City Council rejecting the use of the 1962 study as a basis for making a decision on M-50.

The purpose of this study is to re-evaluate the recommendations for $M-50$, presented in the "Monroe State Highway Plan" and "Engineering Report 1664 ".

In order to achieve the aforementioned goal, it was decided to conduct another External Origin Destination Study to determine whether the external travel patterns have changed from the 1962 Origin - Destination Study findings:

The following pages contain the results of this study, and attempts to analyze the results of the most recent study, along with those of the study conducted in 1962 .

## SUMMARY

The 1971 Origin-Destination Study, revealed that although there was some shifting in the travel patterns between 1962 and 1971 , the overall travel desires have remained basically the same as those observed in the study conducted in 1962 .

The shifts which were observed, occurred in areas where new traffic generators have developed since the original study. These are the K-Mart and Bargain City Shopping Centers on Monroe Street (US-25 North) and the Monroe County Community College, located on Raisinville Road, west of the cordon line.

Even though these changes have occurred, the basic desires of travel, in the Monroe Study Area, are predominately to zones south of the Raisin River.

Another point of interest revealed in this study, is that through north-south traffic has shown decreases at the following stations:
(1) Station 1, Telegraph Road (US- 24 North)
(2) Station 2, Monroe Street (US-25 North)
(3) Station 4, Monroe Street (US- 25 South)
(4) Station 5, Telegraph Road (US-24 North)

Through east-west traffic has shown increases at the following stations:
(1) Station 3, North Dixie Highway (M-50 Northeast)
(2) Station 6, South Custer Road (M-50 West)

All six trunkline stations exhibited dramatic increases in cordon trips, (trips originating or terminating within the cordon line) ranging from thirty-five to one hundred nine percent. This indicates a continued desire of trunkiine traffic to use the City of Monroe as a terminal.

It was felt by this analyst that one of the most revealing comparisons which could be made between the 1962 and 1971 External Origin-Destination Studies would be a comparison of the Desire Lines. It was felt that this would give some definite indications of the traffic desires in the Monroe area and would indicate to us if through traffic desires were increasing or declining.

This analysis was done on both a station by station basis and a total station basis. In compiling this information the 1962 study was used as a base and the 1971 information was assembled in the same format. This information was then comparatively analyzed in the text and through illustrations.

Information displayed in the Tables is as follows:
(1) Zones in order of rank contributing to the top $50 \%$ of total trips including non-trunkline trips through each trunkline station.
(2) Breakdown of top $50 \%$ located north and south of River Raisin, (3) 1962-1971 Cordon Trip Increases.

The results of this analysis are contained on the following pages.

## DESIRE LINE ANALYSIS

Station 1 (US-24 North)
Seven of the ten zones which ranked in the top 50.9 percent of the 1962 Origin-Destination Study were repeated in the eleven zones making up 50.2 percent of the External Origin-Destination Study, taken in 1971. These zones in order of their 1971 rank are; $77,56,76,25,75,34$ and 80 . (See Table 1).

The three zones which dropped out of the top 50.2 percent in the 1971 study are 36,38 and 79. Zone 36 increased from 70 trips to 87 trips and ranked twelveth out of the sixty nine zones. Zone 38 dropped from 114 trips to 61 trips and ranked twenty first while zone 79 dropped from 85 trips to 84 trips and ranked thirteenth.

The four zones ranking in the top 50.2 percent of the 1971 study which were not in the 50.9 percent of the 1962 study are zones 33, 55, 74 and 78. Zone 33 increased from 60 trips in 1962 to 135 trips in 1971 and ranked ninth out of the eleven zones comprising 50.2 percent of the cordon trips. Zone 55 increased from 50 trips in 1962 to 183 trips in 1971 to rank sixth; zone 74 increased from 49 trips to 126 trips to rank tenth and zone 78 increased from 40 trips to 102 trips to rank eleventh.

In the 1962 study 25.5 percent of the cordon trips occurring in the top 50.9 percent were related to zones south of the River Raisin and 25.4 percent were related to zones north of the river. In the 1971 study 22.6 percent of the cordon trips occurring in the top 50. 2 percent were related to zones south of the river and 27.6 percent were related to zones north of the river. (See Table 1)
$\square$

The overall increase in cordon trips from 1962 to 1971 was from 2,561 trips to 4,371 trips or 1,810 trips an increase of seventy one percent through station 1 .

TABLE 1
STATION 1 (US-24 NORTH)

1962

| RANK | ZONE | TRIPS | \% OF CORDON TRIPS | ZONE | TRIPS | \% | OF | CORDON | TRIPS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | *25 | 180 | 7.0 | 77 | 376 |  |  | 8.6 | + |
| 2 | 77 | 179 | 7.0 | * 56 | 298 |  |  | 6.8 |  |
| 3 | * 56 | 167 | 6.5 | 76 | 235 |  |  | 5.4 |  |
| 4 | 80 | 153 | 6.0 | *25 | 205 |  |  | 4.7 |  |
| 5 | 76 | 136 | 5.3 | 75 | 187 |  |  | 4.3 |  |
| 6 | * 34 | 123 | 4.8 | * 55 | 183 |  |  | 4.2 | $\because$ |
| 7 | *38 | 114 | 4.5 | 80 | 180 |  |  | 4.1 | + |
| 8 | 75 | 98 | 3.8 | *34 | 169 |  |  | 3.8 |  |
| 9 | 79 | 85 | 3.3 | *33 | 135 |  |  | 3.1 | + |
| 10 | * 36 | 70 | 2.7 | 74 | 126 |  |  | 2.9 |  |
| 11 |  |  |  | 78 | 102 |  |  | 2.3 | 1 |
|  |  | 1305 | 50.9 |  | 2196 |  |  | 50.2 | $\cdots$ |
|  | Sou | Of Rive | $r$ Raisin | 22. | South | f. | Rive | r Rais |  |
|  | Nor | of Rive | $r$ Raisin | 27. | North | f. | Rive | r Rais |  |

1971 8.6
6.8
5.4
4.7
4.3
4.2
4.1
3.8
3.1
2.9
2.3
50.2
$22.6 \%$ South of River Raisin
$27.6 \%$ North of River Raisin
$2561 \quad 71 \%$

Includes 303 Non-Trunkline
through trips

* Zones South of River Raisin 1962-1971 Cordon Trip Increase

4371
Includes 590 Non-Trunkline through trips

Station 5 (US-24 South)
Seven of the ten zones which ranked in the top 51.0 percent of the 1962 Origin-Destination $S t u d y$ were repeated in the thirteen zones making up 50.0 percent of the External origin-Destination Study taken in 1971. These zones in order of their rank are; 25, 77, 56, 53, 76,75 and 38 . (See Table 2). The three zones which dropped out of the top 50.0 percent in the 1971 study are 33 , 51 and 52 . Zone 33 decreased from 152 trips to 95 trips and ranked sixteenth, zone 51 dropped from 111 trips to 49 trips and ranked thirty-fifth while zone 52 dropped from 166 trips to 87 trips and ranked eighteenth.

The six zones ranking in the top 50.0 percent of the 1971 study which were not in the 51.0 percent of the 1962 study are; 34, 36, 54, 55, 81 and 82. Zone 34 increased from 152 trips in 1962 to 154 trips in 1971 and ranked ninth out of the thirteen zones comprising 50.0 percent of the cordon trips. Zone 36 increased from 45 trips to 123 trips to rank twelveth, zone 54 increased from 41 trips to 122. trips to rank thirteenth, zone 55 increased from 111 trips to 209 trips to rank fifth, zone 81 increased from 18 trips to 161 trips to rank eighth and zone 82 increased from 10 trips to 203 trips to rank sixth.

In the 1962 study 37.9 percent of the cordon trips occurring in the top 51.0 percent were related to zones south of the River Raisin and 13.1 percent related to zones north of the river. In the 1971 study 31.7 percent of the cordon trips occurring in the top 50.0 percent were related to zones south of the river and 18.3 percent were related to zones north of the river. (See Table 2). The total
increase in cordon trips which included non-trunkline through trips was from 2, 790 trips in 1962 to 5,328 trips in 1971 or an increase of 2,538 trips or of ninety one percent.

TABLE 2
STATION 5 (US-24 SOUTH)

1962


1971

1962-1971 Cordon Trip Increase
2790
91\%
5328

Includes 241 Non-Trunkline
through trips

* Zones South of River Raisin


# monroe area traffic study 1962 



# MONROE AREA TRAFFIC STUDY 

1971



Note: An error has been noted in the 1962 desire lines for Station 2. Zone 69 had 126 trips and should have been included in the top 51.6 percent. Zone 67 only had 70 trips and should not have appeared in the top 51.6 percent.

Nine of the ten zones which ranked in the top 51.6 percent of the 1962 Origin-Destination Study were repeated in the ten zones making up 57.7 percent of the External Origin-Destination Study taken in 1971. These zones in order of their 1971 rank are 81, 25, 82, $39,58,59,83,38$ and 69. (See Table 3).

The zone which dropped out of the top 57.7 percent in the 1971 study was zone 60. Zone 60 dropped from 157 trips and a rank of ninth to 77 trips and a rank of thirtieth.

The zone occurring in the top 57.7 percent of the 1971 study which was not in the 51.6 percent in 1962 is zone 30 . Zone 30 increased from 119 trips in 1962 to 193 trips in 1971 and ranked tenth. It should be noted that in 1971 only the top seven zones were required to accomplish 50.0 percent of the cordry trips.

In the 1962 study 27.7 percent of the cordon trips occurring in the top 51.6 percent were related to zones south of the River Raisin and 23.9 percent were related to zones north of the river. In the 1971 study 15.8 percent of the cordon trips occurring in the top 50.0 percent were related to zones south of the river and 34.2 percent were related to trips north of the river. (See Table 3). The overall increase in cordon trips from 1962 to 1971 was from 4,717 trips to 8,478 trips or 3,761 trips an increase of eighty percent through station 2 .

TABLE 3

STATION 2 (US-25 NORTH)

1962

RANK
1
2
2
3
4
5
5
6
7
7
8
9
70 NK

|  |  |
| :---: | :---: |
| $* 25$ | 806 |

*38 $\quad 341$
\% OF CORDON TRIJ'S
1.

1971

| 70 NE | 'rRTPS | $\%$ OE CORDON TRIPS |
| :---: | :---: | :---: |
| 81 | 1243 | 14.7 |
| * 25 | 1011 | 11.9 |
| 82 | 877 | 10.3 |
| * 39 | 331 | 3.9 |
| 58 | 268 | 3.2 |
| 59 | 260 | 3.1 |
| 83 | 247 | 2.950 .0 |
| *38 | 236 | 2.8 |
| 69 | 222 | 2.6 |
| * 30 | 193 | 2.3 |
|  | 4888 | 57.7 |

$27.7 \%$ South of River Raisin
$23.9 \%$ North of River Raisin
1962-1971 Cordon Trip Increase

4717
Includes 190 Non-Trunkline
through'trips

* Zones South of River Raisin
$20.9 \%$ South of River Raisin
$36.8 \%$ North of River Raisin
$80 \%$
8478

Includes 261 Non-Trunkilne
through trips

Six of the eight zones which ranked in the top 49.9 percent of the 1962 Origin-Destination Study were repeated in the eight zones making up 53.1 percent of the External Origin-Destination Study taken in 1971. These zones in order of their 1971 rank are $25,38,39,50$, 30, and 54. (See Table 4).

The two zones which dropped out of the 53.1 percent in the 1971 study are 37 and 43. Zone 37 increased from 142 trips in 1962 to 158 trips in 1971 but dropped from a rank of eighth in 1962 to twelveth in 1971. While zone 43 decreased from 142 trips in 1962 to 99 trips in 1971 and dropped in rank from seventh in 1962 to twenty-third in 1971. The two zones ranking in the top 53.1 percent in the 1971 study which were not ranked in the 49.9 percent in 1962 are 49 and 82. Zone 49 increased from 117 trips in 1962 to 398 trips in 1971 and ranked seventh out of the eight zones comprising 53.1 percent of the cordon trips, while zone 82 increased from 22 trips in 1962 to 242 trips in 1971 and ranked eighth. These increases would seem to be related to the new residential influence in zone 49 and K-Mart Shopping Center in zone 82 .

In 1962 all eight zones of the top 49.9 percent of cordon trips fell south of the River Raisin while in 1971 the first seven zones comprising 50.0 percent of the trips fell south of the river and the eighth ranked zone or 3.1 percent fell north of the river. (See Table 4). The overall increase in cordon trips from 1962 to 1971 including non-trunkline through trips was from 5,761 trips to 7,825 trips or 2,064 trips an increase of thirty-six percent through station 4.

TABLE 4
STATION 4 (US-25 SOUTH)

1962


All eight Zones South of River Raisin

## 1962-1971 Cordon Trip Increase

 5761 $36 \%$Includes 173 Non-Trunkiine through trips

* Zones South of River Raisin

1971
$50.0 \%$ South of River Raisin $3.1 \%$ North of River Raisin

7825
Includes 263 Non-Trunkline
through trips

MONROE AREA TRAFFIC STUDY


Station 3 (M-50 Northeast)
All nine zones which ranked in the top 50.0 percent of the 1962 Origin-Destination Study were repeated in the 51.3 percent (12 zones) of the External Origin-Destination Study taken in 1971 . (See Table 5).

It should be noted that in 1971 it took twelve zones to accomplish 51.3 percent of the total cordon trips which would seem to indicate a greater dispersion of trips in the 1971 study.

In the 1962 study 32.4 percent of the cordon trips occurring in the top 50.0 percent were related to zones south of the River Raisin and 17.6 percent were related to zones north of the river.

In the 1971 study 30.0 percent of the cordon trips occurring in the top 51.3 percent were related to zones south of the river and 21.3 percent were related to zones north of the river. (See Table 5).

The overall increase in cordon trips from 1962 to 1971 was from 4,792 trips to 7,557 trips or 2,765 trips an increase of fifty eight percent through station 3 .

TABLE 5

STATION 3 (M-50 NORTHEAST)


Station 6 (M-50 West)
Seven of the twelve zones which ranked in the top 49.0 percent of the 1962 origin-Destination Study were repeated in the fourteen zones making up 50.3 percent of the External origin-Destination Study taken in 1971. These zones in order of their 1971 rank are 25, 56, 39, 30, 38, 34 and 77. (See Table 6).

The five zones which dropped out of the top 50.3 percent in the 1971 study are; 33, 37, 58, 61 and 62. Zone 33 increased from 60 trips to 96 trips and twenty-fourth out of the sixty-nine zones. Zone 37 increased from 60 trips to 107 trips and ranked sixteenth, zone 58 increased from 60 trips to 107 trips and ranked fifteenth, zone 61 decreased from 93 trips to 62 trips and dropped in rank to thirtymsixth and zone 62 increased from 69 trips to 101 trips and ranked twenty second.

The seven zones ranking in the top 50.3 percent of the 1971 study which were not in the 49.0 percent in 1962 are zones $26,27,54$, 55, 67,81 and 82. Zone 26 increased from 41 trips in 1962 to 123 trips in 1971 and ranked twelveth out of fourteen zones comprising 50.3 percent of the cordon trips. Zone 27 increased from 54 trips in 1962 to 119 trips in 1971 to rank thirteenth; zone 54 increased from 34 trips to 124 trips to rank eleventh; zone 55 increased from 58 trips to 184 trips to rank seventh; zone 67 increased from 14 trips to 115 trips to rank fourteenth; zone 81 increased from 16 trips to 147 trips to rank ninth and zone 82 increased from 15 trips to 189 trips to rank sixth.

In the 1962 study 39.6 percent of the cordon trips through station 6 , occurring in the top 49.0 percent were related to zones south of the River Raisin and 9.4 percent were related to zones north of the river.

In the 1971 study 41.0 percent of the cordon trips occurring in the top 50.3 .percent were related to zones south of the river and 9. 3 percent were related to zones north of the river (Table 6). The total increase in cordon trips which included non-trunkline through trips was from 3,039 trips in 1962 to 6,371 trips in 1971 or an increase of 3,332 trips or of one hundred ten percent.

1962

| Rank | ZONE | TRIPS | \% OF | CORDON TRIPS | ZONE | TRIPS | \% OF | CORDON | TRIPS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | * 25 | 436 |  | 14.3 | * 25 | - 787 |  | 12.4 |  |
| 2 | * 56 | 225 |  | 7.4 | * 56 | 414 |  | 6.5 |  |
| 3 | * 38 | 174 |  | 5.7 | * 39 | 250 |  | 3.9 |  |
| 4 | *34 | 123 |  | 4.0 | * 30 | 246 |  | 3.9 |  |
| 1. 5 | 61 | 93 |  | 3.1 | *38 | 204 |  | 3.2 |  |
| 6 | 62 | 69 |  | 2.3 | 82 | 189 |  | 3.0 |  |
| T 7 | * 39 | 64 |  | 2.1 | * 55 | 184 |  | 2.9 |  |
| 8 | * 30 | 63 |  | 2.1 | *34 | 161 |  | 2.5 |  |
| 19 | 77 | 62 |  | 2.0 | 81 | 147 |  | 2.3 |  |
| 10 | * 33 | 60 |  | 2.0 | 77 | 142 |  | 2.2 |  |
| 11 | * 37 | 60 |  | 2.0 | * 54 | 124 |  | 1.9 |  |
| 12 | 58 | 60 |  | 2.0 | * 26 | 123 |  | 1.9 |  |
| 13 |  |  |  |  | * 27 | 119 |  | 1.9 |  |
| 114 |  |  |  |  | 67 | 115 |  | 1.8 |  |
| , TO |  | 1489 |  | 49.0 |  | 3205 |  | 50.3 |  |

$39.6 \%$ South of River Raisin
9.4\% North of River Raisin

1971
TRIPS \% OF CORDON TRIPS
6.5
3.9
3.9
3.2
3.0
2.9
2.5
2.3
2.2
1.9
1.9
1.9

1. 8
50.3
$41.0 \%$ South of River Raisin $9.3 \%$ North of River Raisin

1962-1971 Cordon Trip Increase

3039
$110 \%$
Includes $\underline{224}$ Non-Trunkline through trips

* Zones South of River Raisin

6371
Includes 548 Non-Trunkline through trips

P. O. DRAWER "K" 48904


## MONROE AREA TRAFFIC STUDY <br> 1971



Station $1-6$ (US-24, US-25, M-50)
Nine of the fourteen zones which ranked in the top 51.6 percent of the 1962 Origin-Destination study were repeated in the fourteen zones making up 50.1 percent of the External origin-Destination study taken in 1971. These zones in order of their rank are; 25, 39, 38, 56, 77, $30,50,58$ and 27. (See Table 7).

The five zones which dropped out of the top 50.1 percent in the 1971 study are; $34,43,59,61$ and 62 . Zone 34 increased from 585 trips to 681 trips and ranked sixteenth out of the sixtynine zones. Zone 43 dropped from 536 trips to 331 trips and ranked thirty-ninth, zone 59 increased from 497 trips to 708 trips and ranked fifteenth, zone 61 increased from 588 trips to 605 trips and ranked twenty-second, while zone 62 increased from 474 trips to 590 trips and a rank at twenty-sixth.

The five zones ranking in the top 50.1 percent of the 1971 study which were not in this 51.6 percent of the 1962 study are zones $49,54,55,81$ and 82. Zone 49 increased from 197 trips in 1962 to 759 trips in 1971 to rank fourteenth of the fourteen zones comprising 50.1 percent of the cordon trips. Zone 54 increased from 503 trips to 976 trips to rank tenth, zone 55 increased from 285 trips to 786 trips to rank thirteenth, zone 81 increased from 286 trips to 1,848 trips to rank second and zone 82 increased from 218 trips to 1,694 trips to rank third.

In the 1962 stidy, 39.9 percent of the cordon trips occurning in the top 51.6 percent were related to zones south of the River Raisin and 11.7 percent were related to zone north of the river.

In the 1971 study 36.2 percent of the cordon trips occurring in the top 50.1 percent were related to zones south of the river and 13.9 percent were related to zones north of the river. (See Table 7). The overall increase in cordon trips from 1962 to 1971 was from 23,660 trips to 39,929 trips or 16,269 trips, an increase of sixty-nine percent.

TABLE 7
ALL TRUNKLINE STATIONS (US-24, US-25, M-50)


Includes 1210 Non-Trunkline
through trips

* Zones Soutli of River Raisin

Includes 2348 Non-Trunkline through trips

The total through trips increased from 9, 266 trips in 1962, to 9,644 trips in 1971. (Table 8). This amounted to only 378 trips or 4.0 percent in nine years. This increase can be considered of 1 ittle consequence so far as the overall impact on the study area is concerned. However, when each station is examined and analyzed individually, the findings become much more significant and indicate not only changes which have occurred in the past nịne years, but also trends which may be expected in the future.

Station 1 and Station 3
Trips between these two stations increased from 7 trips in the 1962 study to 27 trips in the 1971 study. This increase is very insignificant and had very little influence on this analysis.

Station 1 and Station 4
Trips between these two stations increased from 42 trips in the 1962 study to 65 trips in the 1971 study and can also be considered to be of little significance in this analysis.

Station 1 and Station 5
These two stations exhibited a very dramatic decrease from 2,978 trips in the 1962 study to 1,576 trips in the 1971 study and would seem to reflect the influence of the $\mathrm{I}-75$ freeway on northsouth trips, which would tend to decrease through trips on this rorridor.

Station 1 and $8 t a t i o n ~ 6$
These two stations exhibited a very dramatic increase from 330 trips in the 1962 study to 1,357 trips in the 1971 study. This seems to reflect not only a normal growth of traffic between these stations but also reflects the effects of Monroe Community College which with a present enrollment of approximately 1700 students acts as a special generator for trips through station 6 .

Station 2 and Station 3
The trips between these two stations increased from 7 trips in 1962 to 49 trips in 1971 and can be considered of little significance in the course of this study.

Station 2 and Station 4
The trips between these two stations has decreased dramatically from 511 trips in the 1962 study to 245 trips in the 1971 study, once again reflecting the influence of the $I-75$ freeway on northsouth through traffic.

Station 2 and Station 5
The trips between these two stations increased from 49 trips in the 1962 study to 110 trips in the 1971 study and can be considered of little significance to this study.

Station 2 and Station 6
The interchange of through trips between these two stations has increased slightly faster than might be expected from 52 trips in the 1962 study to 145 trips in the 1971 study and can also
be assumed to be due to the influence of Monroe Community College.

Station 3 and Station 4
The interchange of through trips between these two stations decreased from 181 trips in the 1962 study to 148 trips in the 1971 study and can be considered to be of little significance to this study.

Station 3 anc Station 5
The interchange of through trips between these two stations increased from 60 trips in the 1962 study to 147 trips in the 1971 study and can also be considered to be of little significance to this study.

Station 3 and Station 6
The interchange of through trips between these two stations has increased dramatically from 113 trips in the 1962 study to 511 trips in the 1971 study and seems to reflect the increased desire of traffic to connect with the $1-75$ freeway.

Station 4 and Station 6
The interchange of through trips between these two stations increased from 62 trips in the 1962 study to 116 rrips in the 1971 study and can be considered to be of little significance to this study.

Station 5 and Station 6
The interchange of through trips between thest two stations has increased slightly faster than might be expected from 241 Lepps Lu the 1962 study to 326 trips in the 1971 study and can be attributed primarily to the influences of Monroe Community College.

In conclusion the summation of through trips when analyzed on an individual external station to external station basis seems to indicate the following:
(1) The north-south trips through the study area have decreased dramatically on the US-24, US-25 corridors from 1962 to 1971 and would seem to reflect the influence the $I-75$ freeway has had upon the study area.
(2) The continued growth of Monroe Community College acting as a special traffic generator has had a tremendous influence on the increase in traffic on $M-50$ to the west.
(3) The desire of traffic on $M-50$ to connect with the $I-75$ freeway has continued to grow since the original study of 1962 .

TABLE 8
1962 Volumes

| Station 1 (US-24 North) | 5918 | 3357 | 2561 |
| :--- | ---: | ---: | ---: |
| Station $2($ US-25 North $)$ | 5336 | 619 | 4717 |
| Station 3 (M-50 N-E) | 5160 | 368 | 4792 |
| Station 4 (US-25 South) | 6557 | 796 | 5761 |
| Station 5 (US-24 South) | 6118 | 3328 | 2790 |
| Station 6 (M-50 West) | 3837 | 798 | 3039 |

1971 Volumes

| TOTAL | THRU | CORDON |
| ---: | :---: | :---: |
| TRIPS | TRIPS | TRIPS* |
| 7396 | 3025 | 4371 |
| 9027 | 549 | 8478 |
| 8439 | 882 | 7557 |
| 8399 | 574 | 7825 |
| 7487 | 2159 | 5328 |
| 8826 | 2455 | 6371 |
| 49574 | 9644 | 39930 |

*cordon trips include thru trips from other than state trunklines

# MONROE AREA TRAPFIC STUDY 1962 



## MONROE AREA TRAFFIC STUDY



The following graphs show the total traffic at each external station in 1962 and 1971 respectively.

It is interesting to note that all the major trunkines changed their order of ranking while, with the exception of Station 11,12 and 13 , the minor rankings remained the same.

The major reason for Station 2 (US- 25 North) replacing Station 4 (US-25 South) would appear to be the influence of Bargain City and K-Mart Shopping Centers.

Station 6 (M-50 West) has had a significant increase in traffic as well as Station 1 (US-24 North) since the opening of Monroe Community College. Since its opening in 1966 the enrollment has grown from 350 to 1700 in 1972. Since this special generator did not exist in the 1962 study its effects are graphically illustrated by the increases in traffic at Station (US-24 North) and Station 6 (M-50 West) indicating the influence that it has had upon the traffic desires through the study area. Station 3 ( $M-50$ Northeast) moving up in rank from fifth in 1962 to third in 1971 would indicate the increased industrial activity in the vicinity of the station as well as the influence of the $I-75$ freeway being completed since the 1962 study.


Classification counts were taken at all thirteen external stations utilized in the External Origin-Destination Study conducted in 1971 . On the following pages this information has been compared with the classification counts taken in the external portion of the Origin-Destination Study conducted in 1962.

Un a scation by station analysis the ioliowiag ubsexvaltutas were made:

Station 1 (US-24 North)
Passenger Cars and Taxis increased from 74.1 percent to 76.9 percent of the total traffic through station lingle Unit and Three Axle Trucks increased from 14.0 percent to 1.7 .0 percent; a dramatic decrease was noted in Trailer Combinations from 11.5 percent to 5.7 percent; Buses remained the same at .4 percent. The count comparisons at this station are as follows: Passenger Cars and Taxis from 4252 to 5510 or a thirty percent increase; single unit and Three Axle Trucks from 802 to 1221 or a fifty-two percent increase; Trailer Combinations from 658 to 410 or a thirty-eight percent decrease; Buses from 22 to 30, a thirty-six percent increase. Total traffic through this station increased from 5734 to 7171 or approximately twentyfive percent.

Station 2 (US-25 North)
Passenger Cars and Taxis decreased from 86.1 percent to 86.0 percent; Single Unit and Three Axle Trucks increased from 9.5 percent to 12.0 percent; Trailer Combinations decreased from 3.1 percent to 1.2 percent; Buses decreased from 1.3 percent to . 8 percent.

The count comparisons at this station are as follows:
Passenger Cars and Taxis from 4608 to 7873 or a seventy-one percent increase; Single Unit and Three Axle Trucks from 510 to 1100 or a one-hundred and sixteen percent increase; Trailer Combinations from 168 to 106 or a thirtymine percent decrease; Buses from 68 to 71 a four percent increase. Total traffic through this station increased from 5354 to 9150 or approximately seventy-one percent.

Station 3 ( $M-50$ Northeast)
Passenger Cars and Taxis decreased from 89.1 percent to 85.1 percent; Single Unit and Three Axle Trucks increased from 8.2 percent to 11.9 percent; Trailer Combinations increased from 2.0 percent to 2.9 percent; Buses decreased from. 4 percent to . 1 percent.

The count comparisons at this station are as follows:
Passenger Cars and Taxis from 4626 to 7129 , or a fifty-four percent increase; Single Unit and Three Axle Trucks from 422 to 996, a one-hundred thirty-six percent increase;

Trailer Combinations from 146 to 247 , a sixty-nine percent increase; Buses from 23 to 9 , a seventy-one percent decrease. Total traffic through this station increased from 5177 to 8381 or approximately sixty-two percent.

Station 4 (US-25. South)
Passenger Cars and Taxis decreased from 88.3 percent to 83.4 percent; Single Unit and Three Axle Trucks increased from, 10.3 percent to 13.0 percent; Trailer Combinations increased
from . 4 percent to 1.0 percent; Buses incroascd from 1.0 percent to 2.6 percent.

The count comparisons at this station are as follows: Passenger Cars and Taxis went from 5774 to 7082 , an increase of twenty-three percent; Single Unit and Three Axle Trucks increased from 670 to 1100 , or sixty-four percent; Trailer Combinations increased from 28 to 86 , or two-hundred and seven percent, while Buses increased from 66 to 220 , or two-hundred thirty-three percent. Total traffic through this station increased from 6538 to 8488 or approximately thirty percent.

Station 5 (US-24 South)
Passenger Cars and Taxis increased from 77.0 percent to 77.9 percent; Single Unit and Three Axle Trucks increased from 11.6 percent to 15.9 percent; Trailer Combinations decreased from 10.9 percent to 4.5 percent; Buses increased from. 5 percent to 1.7 percent.

The count comparisons at this station are as follows: Passenger Cars and Taxis from 4684 to 5799 , an increase of twenty-four percent; Single Unit and Three Axle Trucks increased from 707 to 1182 , or sixty-seven percent; Trailer Combinations deereased from 666 to 340 , or a forty-nine percent decrease while Buses increased from 29 to 127 , or three hundred thirty-eight percent. Total traffic through this station increased from 6086 to 7448 , or approximately twenty-two percent.

|  |  |
| :---: | :---: |
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Station 6 (Mo50 West)
Passenger Cars and Taxis increased from 78.8 percent to 81.8 percent; Single Unit and Three Axle Trucks increased from 12.5 percent to 13.2 percent; Trailer Combinations decreased from 8.2 percent to 4.5 percent; and Buses remained at .5 percent.

The count comparisons at this station are as follows: Passenger Cars and Taxis increased from 3048 to 6975, an increase of one hundred twenty-nine percent; Single Unit and Three Axle Trucks increased from 482 to 1192, or one hundred and thirtymfour percent; Trailer Combinations increased from 317 to 383, or twenty-one percent; while Buses increased from 21 to 42 , or one hundred percent. Total traffic through this station increased from 3868 to 8529 or approximately one hundred twentymone percent.

Station 7 (Vivan Rd。North)
Passenger Cars and Taxis increased from 89.6 percent to 90.5 percent; Single Unit and Three Axle Trucks decreased from 8.4 percent to 8.3 percent; Trailer Combinations remained at . 1 percent while Buses decreased from 1.9 percent to 1.1 percent.

The count comparisons at this station are as fojlows: Passenger Cars and Taxis increased from 1063 to 1534 , an increase of forty-four percent; Single Unit and Three Axle Trucks increased from 99 to 140 , or fortymone percent; Trailer Combinations remained at one for no increase, and Buses
decreased from 23 to 19 , or an eighteen percent decrease. Total traffic through this station increased from 1186 to 1694 or approximately forty-three percent.

Station 8 (E1m St. East)
Passenger Cars and Taxis decreased from 87.8 percent to 83.7 percent; Single Unit and Three Axle Trucks increased from 7.5 percent to 13.4 percent; Trailer Combinations decreased from 4.6 percent to 2.8 percent, while Buses remained at . 1 percent.

The count comparisons at this station are as follows: Passenger Cars and Taxis increased from 2085 to 3020 , or forty-five percent; Single Unit and Three Axle Trucks increased from 178 to 485, or one hundred seventy-two percent; Trailer Combinations decreased from 110 to 100 , or a decrease of approximately eleven percent, and Buses remained at one for no change. Total traffic through this station increased from 2374 to 3606 , or approximately fifty-two percent.

Station 9 (Front St. East)
Passenger Cars and Taxis decreased from 76.7 percent to 76.1 percent; Singie Unit and Three Axle Trucks increased from 17. 1 percent $亡 0$ 19.7 percent; Trailer Combinations decreased from 6. 2 percent to 4.2 percent, while Buses remained at zero.

The count comparisons at this station are as follows: Passenger Cars and Taxis increased from 1216 to 1727 , or forty-
two percent; Single Unit and Three Axle Trucks jncreased from 271 to 448, or sixty-five percent; Trailer Combinations decreased from 98 to 95 , or approximately a three percent decrease while Buses remained at zero. Total traffic through this station increased from 1585 to 2270 or approximately forty-three percent.

Station 10 (LaPlaisance St. Southeast)
Passenger Cars and Taxis decreased from 84.0 percent to 81.5 percent; Single Unit and Three Axle Trucks decreased from 14.0 percent to 13.4 percent; Trailer Combinations increased from 1. 5 percent to 4.8 percent; while Buses decreased from . 5 percent to . 3 percent.

The count comparisons at this station are as follows:
Passenger Cars and Taxis increased from 2177 to 3211 , or fortyseven percent; Single Unit and Three Axle Trucks increased from 366 to 530 , or forty-five percent; Trailer Combinations increased from 38 to 191, or four hundred three percent, while Buses decreased from 12 to 10 or a seventeen percent decrease. Total traffic through this station increased from 2593 to 3942 , or approximately fifty-two percent.

Station 11 (Durbar St. West)
Passenger Cars and Taxis decreased from 87.5 percent to 84.3 percent; Single Unit and Three Axle Trucks increased from 12.3 percent to 14.7 percent; Trailer Combinations increased from . 1 percent to . 3 percent while Buses increased from. 1 percent to . 7 percent.

The count comparisons at this station are as follows: Passenger Cars and Taxis increased from 1862 to 2406 , or twenty-nine percent; Single Unit and Three Axle Trucks increased from 261 to 419 , or sixty-one percent; Trailer Combinations increased from 3 to 9 or two hundred percent, while Buses increased from 3 to 19 , or five hundred thirty-three percent. Total traffic through this station increased from 2129 to 2853 or thirty-five percent.

Station 12 (N. Custer Rd. West)
Passenger Cars and Taxis increased from 88.0 percent to 88.3 percent; Single Unit and Three Axle Trucks decreased from 10.6 percent to 10.5 percent; Trailer Combinations decreased from . 4 percent to. 1 percent while Buses increased from 1.0 percent to 1.1 percent.

The count comprisons at this station are as follows: Passenger Cars and Taxis increased from 1704 to 2722 , or sixty percent; Single Unit and Three Axle Trucks increased from 205 to 325 , or fiftymine percent; Trailer Combinations decreased from 7 to 3 or a decrease of approximately fiftyeight percent, while Buses increased from 20 to 33 , or eightytwo percent. Total traffic through this station increased from 1936 to 3083 , or approximately fifty-nine percent.

Station 13 (Stewart Rd. West)

Passenger Cars and Taxis decreased from 86.2 percent to 85.4 percent; Single Unit and Three Axle Trucks increased from 12.3
percent to 13.1 percent; Trailer Combinations decreased from . 1 percent to zero, while Buses increased from 1.4 percent to 1. 5 percent.

The count comparisons at this station are as follows:
Passenger Cars and Taxis increased from 1854 tc 2618 or forty-one percent; Single Unit and Three Axle Trucks increased from 265 to 402 , or fifty-two percent; Trailer Combinations decreased from 2 to zero, while Buses increased from 30 to 45, of fifty percent. Total traffic through this station increased from 2151 to 3065 , or approximately forty-three percent.

Station 1-13 Totals
Passenger Cars and Taxis decreased from 83.4 percent to 82.7 percent; Single Unit and Three Axle Trucks increased from 11. 2 percent to 13.6 percent; Trailer Combinations decreased from 4.6 percent to 2.8 percent while Buses increased from. 7 percent to . 9 percent.

The total count comparisons is as follows:
Passenger Cars and Taxis increased from 38,963 to 57,606 , or forty-eight percent; Single Unit and Three Axle Trucks increased from 5238 to 9477 , or eighty-one percent; Trailex Combinations decreased from 2202 to 1971 or a decrease of approximately eleven percent while Buses increased from 318 to 626 , or ninety-seven percent. Total traffic through these stations increased from 46,711 to 69,680 , or approximately forty-nine percent in nine years.

GLASSIFTED TWENTY-FOUR-HOUR TRAFFIC VOLUMES AT ALL EXTERNAL STATIONS-BY VEHICLE TYPE MONROE

1962


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CLASSIFIED TWENTY-FOUR-HOUR TRAFEIC VOLUMES
AT ALL EXTERNAL STATIONS-BY VEHTCLE TYPE
MONROE
1971
```

| $\begin{aligned} & \text { Ext } \\ & \text { Sta } \end{aligned}$ | Cars <br> Taxis | Pass <br> Per- <br> Cent | Singl <br> Ax1e | $\begin{aligned} & \text { Le Unit } \\ & \text { iree Per- } \\ & \text { Trucks Cent } \\ & \hline \end{aligned}$ | Trai Comb | $\begin{aligned} & \text { Per }- \\ & \text { Cent } \end{aligned}$ | Buss | $\begin{aligned} & \text { Per- } \\ & \text { Cent } \end{aligned}$ | $\begin{aligned} & 1971 \\ & \text { Total } \\ & \hline \end{aligned}$ | $\begin{aligned} & 1962 \\ & 1971 \\ & \text { Per- } \\ & \text { Cent } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5510 | 76.9 | 1221 | 17.0 | 410 | 5.7 | 30 | . 4 | 7171 | 25.1 |
| 2 | 7873 | 86.0 | 1100 | - 12.0 | 106 | 1.2 | 71 | . 8 | 9150 | 70.9 |
| 3 | 7129 | 85.1 | 996 | $11: 9$ | 247 | 2.9 | 9 | . 1 | 8381 | 61.9 |
| 4 | 7082 | 83.4 | 1100 | 13.0 | 86 | 1.0 | 220 | 2,6 | 8488 | 29.8 |
| 5 | 5799 | 77.9 | 1182 | 15.9 | 340 | 4.5 | 127 | 1.7 | 7448 | 22.4 |
| 6 | 6975 | 81.8 | 1129 | 13.2 | 383 | 4.5 | 42 | . 5 | 8529 | 120.5 |
| 7 | 1534 | 90.5 | 140 | 8.3 | 1 | . 1 | 19 | 1. 1 | 1694 | 42.8 |
| 8 | 3020 | 83.7 | 485 | 13.4 | 100 | 2.8 | 1 | . 1 | 3606 | 51.9 |
| 9 | 1727 | 76.1 | 448 | 19.7 | 95 | 4.2 | 0 | $\underline{-}$ | 2270 | 43.2 |
| 10 | 3211 | 81.5 | 530 | 13.4 | 191 | 4.8 | 10 | . 3 | 3942 | 52.0 |
| 11 | 2406 | 84.3 | 419 | 14.7 | 9 | . 3 | 19 | . 7 | 2853 | 34.0 |
| 12 | 2722 | 88.3 | 325 | 10.5 | 3 | . 1 | 33 | 1.1 | 3083 | 59.2 |
| 13 | 2618 | 85.4 | 402 | 13.1 | 0 |  | 45 | 1.5 | 3065 | 42.5 |
| otal | 57606 | 82.7 | 9477 | 13.6 | 1971 | 2.8 | 626 | . 9 | 69680 | 49.2 |

HIGF ONE, TWO AND THREE HOUR PERIODS

High One Hour Period

In 1962 , the highest one hour period was recorded at Station 5, (US-24 South) with 506 trips. In 1971 the highest one hour period was recorded at Station 2 , (US-25 North) with 778 trips, while Station 5 , (US-24 South) dropped to a rank of fourth.

The highest percentage increase was at Station 6 (M-50 West) with a one hundred eighteen percent increase in trips followed by Station 2 (US-25 North) with an eighty percent increase. This would seem to reflect the influence of Monroe Community College at Station 6, while the increase at Station 2 would seem to reflect the influence of Bargain City and K-Mart Shopping Centers none of which were there when the study was conducted in 1962.

High Two Hour Period
In 1962 the highest two hour period was recorded at Station 4 , (US-25 South) with 971 trips. In 1971 the highest two hour period was recorded at Station 2 , (US 25 North) with 1,420 trips.

The highest percentage increase was at Station $6, ~(M \sim 50$ West) with a one hundred thirtymtwo percent increase in trips followed by Station 2, (US 25 North) with a sixty-eight percent increase. Once again this would seem to reflect the influence of Monroe Community College at Station 6 and Bargain City and K - Mart Shopping Centers at Station 2 .

High Three Hour Period.

In 1962, the highest three hour period was recorded at Station 4 , (US-25 South) with 1,434 trips. In 1971 the highest three hour period was recorded at Station 2 , (US-25 North) with 2,073 trips.

The highest percentage increase was at Station 6, (M-50 West) with a one hundred twenty-six percent fncrease in trips followed by Station 2, (US-25 North) with a sixty-eight percent increase, The same influences seem to apply here as in the high one and two hour periods.

FOR HIGH ONE, TWO AND THREE-HOUR PERIODS

> At All External Stations MONROE 1962

| $\begin{aligned} & \text { Ext. } \\ & \text { Sta. } \end{aligned}$ | Time | Volume | Per- <br> Cent | Time | Volume | $\begin{aligned} & \text { Per- } \\ & \text { Cent } \end{aligned}$ | Time | Volume | Per- <br> Cent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $5-6 P$ | 454 | 7.9 | 4-6P | 894 | 15.6 | 3-6P | 1331 | 23.2 |
| 2 | $\frac{!}{5-6 P}$ | 432 | 8.1 | 4-6P | 844 | 15.7 | 3-6P | 1232 | 23.0 |
| 3 | 4-5p | 439 | 8.4 | 4-6P | 816 | 15.7 | 4-7P | 1190 | 22.9 |
| 4 | 4-5P | 493 | 7.5 | 4-6P | 971 | 14.8 | 3-6P | 1434 | 21.9 |
| 5 | 6-7P | 506 | 8.3 | 5-7P | 969 | 15.9 | 4-7P | 1414 | 23.2 |
| 6 | 4-5P | 314 | 8.1 | 3-5P | 586 | 15.4 | $3-6 P$ | 855 | 22.1 |
| 7 | 3-4P | 93 | 7.8 | 3-5P | 182 | 15.3 | $3-6 P$ | 266 | 22.4 |
| 8 | 3-4P | 341 | 14.3 | 3-5P | 593 | 24.9 | 3-6P | 737 | 31.0 |
| 9 | 3-4P | 169 | 10.6 | 3-5P | 282 | 17.7 | $2-5 P$ | 39.4 | 24.8 |
| 10 | 5-6P | 231 | 8.9 | 4-6P | 459 | 17.7 | 4-7P | 642 | 24.7 |
| 11 | 4-5P | 177 | 8.3 | 4-6P | 344 | 16.1 | $3-6 P$ | 494 | 23.2 |
| 12 | 4-5P | 153 | 7.9 | 4-6P | 290 | 14.9 | $3-6 \mathrm{P}$ | 427 | 22.1 |
| 13 | 4-5P | 179 | 8.3 | 3-5P | 332 | 15.4 | 3-6P | 483 | 22.4 |
| 14 | 3-4P | 39 | 8.4 | $3-5 \mathrm{P}$ | 76 | 16.4 | $2-5 P$ | 107 | 23.2 |
| 15 | 6-7P | 29 | 10.1 | 5-7P | 49 | 17.0 | 4-7P | 72 | 25.0 |
| 16 | 7-8A | 20 | 8.1 | $2-4 \mathrm{P}$ | 37 | 15.1 | $2-5 P$ | 54 | 22.1. |

TRAFFIC VOLUMES AND PERCENTAGES OF TOTAL TRAEFIC FOR HJGH ONE, TWO AND THREE-HOUR PERIODS

$$
\begin{gathered}
\text { AT ALL EXTERNAL STATIONS } \\
\text { MONROE } \\
1971
\end{gathered}
$$

| $\begin{aligned} & \text { Ext. } \\ & \text { Sta. } \end{aligned}$ | Time | Volume | PerCent | Time | Volume | $\begin{aligned} & \text { Per- } \\ & \text { Cent } \end{aligned}$ | Time | Volume | PerCent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | 4-5P | 649 | 9.1 | 3-5P | 1276 | 17.8 | 3-6P | 1805 | 25. |
| 2 | 4-5P | 778 | 8.5 | 4-6P | 1420 | 15.5 | 3-6P | 2073 | 22.7 |
| 3 | 4-5P | 596 | 7.1 | 3-5P | 1191 | 14.2 | 3-6P | 1712 | 20.\% |
| 4 | 5-6P | 670 | 7.9 | 4-6P | 1339 | 15.8 | 4-7P | 1914 | 22.5 |
| 5 | 4-5P | 665 | 8.9 | 3-5P | 1294 | 17.4 | 3-6P | 1836 | 24.7 |
| 6 | 3-4P | 683 | 8.0 | 3-5P | 1362 | 16.0 | 2-5P | 1936 | 22. |
| 7 | 3-4P | 148 | 8.7 | 3-5P | 293 | 17.3 | 3-6P | 420 | 24.8 |
| 8 | 4-5P | 333 | 9.2 | 3-5P | 657 | 18.2 | 2-5P | 946 | 26.1 |
| 9 | 4-5P | 450 | 19.8 | 3-5P | 651 | 28.7 | 3-6P | 780 | 34. |
| 10 | 4-5P | 300 | 7.6 | 3-5P | 591 | 15.0 | 3-6P | 847 | 21.5 |
| 11 | 4-5P | 270 | 9.5 | 3-5P | 520 | 18.2 | 3-6P | 743 | 26. |
| 12 | 3-4P | 313 | 10.2 | 3-5P | 605 | 19.6 | 3-6P | 833 | 27.0 |
| 13 | 5-6P | 252 | 8.2 | 4-6P | 494 | 16.1 | 3-6P | 705 | 23.4 |

## APPENDIX

MONROE AREA TRAEFIC STUDY
1962 External Trip Tables

| ORIGIN | 01. | 02 | 03 | 04 | 05 | 08 | 07 | ${ }^{08}$ | 09 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | 101 | 417 | 450 | 321 | 122 | 237 | 43 | 34 | 58 | 121 |
| 26 | 10 | 36 | 53 | 59 | 20 | 22 | 7 | 10 | 11 | 28 |
| 27 | 18 | 56 | 108 | 71 | 19 | 33 | 1 | 44 | 57 | 38 |
| 28 | 3 | 22 | 64 | 61 | 6 | 17 |  | 35 | 47 | 40 |
| 29 | 4 | 34 | 26 | 53 | 7 | 7 | 2 | 18 | 12 | 39 |
| 30 | 10 | 53 | 64 | 116 | 23 | 28 | 19 | [7 | 9 | 53 |
| 31 | 15 | 43 | 24 | 51 | 17 | 26 | 3 | 4 | 8 | 21 |
| 32 | 20 | 33 | 27 | 33 | 23 | 16 | 2 | 11 | 11 | 16 |
| 33 | 30 | 26 | 50 | 30 | 41 | 27 | 5 | 12 | 1 | 13 |
| 34 | 63 | 25 | 34 | 34 | 75 | 72 | 5 | 4 | 5 | 26 |
| 35 | 3 |  | 1 | 15. | 3 | 2 |  |  | 2 |  |
| 36 | 37 | 36 | 36 | 62 | 23 | 27 | 3 | 18 | 12 | 20 |
| 37 | 18 | 29 | 30 | 68 | 21 | 26 | 3 | 17 | 11 | 40 |
| 38 | 67 | 160 | 132 | 398 | 45 | 106 | 22 | 12 | 17 | 108 |
| 39 | 24 | 69 | 55 | 115 | 8 | 32 | 16 | 26 | 9 | 68 |
| 60 | 7 | 11 | 10 | 33 | 3 | 13 |  | 1 | 1 | 62 |
| 41 | 1 | 7 | 5 | 6 | 3 | 3 |  | 8 | 5 | 6 |
| 42 | 4 | 16 | 9 | 22 | 1 | 12 | 1 | 3 | 48 | 9 |
| 43 | 15 | 69 | 44 | 71 | 9 | 61 | 7 | ¢ | 283 | 23 |
| 44 | 1 | 17 | 3 | 5 | 4 | 7 |  | 5 | so | 4 |
| 45 |  |  |  |  |  |  |  |  |  | 4 |
| 46 | 3 | 7 | 2 | 10 |  | 2 | - |  |  | 21 |
| 47 |  | 1 | 1 | 3 | 1 | 1 |  |  | 1 | 6 |
| 48 |  |  |  | 1 |  |  |  |  | 2 | 3 |
| 49 | 6 | 12 | 15 | 50 |  | 6 |  | 9 | 1 | 39 |
| 50 | , 18 | 37. | 38 | 205 | 11 | 19 | 2 | 7 | 6 | 35 |
| 51 | 4 |  | 2 | 4 | 11 | 2 |  | 1 |  | 3 |
| 52 | 20 | 7 | 6 | 12 | 93 | 12 | 2 | 1 |  | 13 |
| 53 | 44 | 8 | 15 | 11 | 43 | 18 | 6 | 16 | 3 | 13 |
| 54 | 15 | 37 | 34 | 140 | 15 | 15 | 7 | 22 | 8 | 48 |
| 55 | 18 | 2 | 13 | 11 | 54 | 32 |  | 3 |  | 10 |
| 56 | 86 | 30 | 30 | 49 | 124 | 131 | 18 | 41 | 11 | 2B |
| 57 | 14 | 8 | 14 | 11 | 20 | 23 |  | 7 | 2 | 7 |
| 58 | 11 | 95 | 69 | 60 | 7 | 31 | 15 | $? 0$ | 1 | 18 |
| 59 | 17 | 89 | 48 | 49 | 17 | 24. | 6 | 13 | 8 | 8 |
| 6 6) | 15 | 11 | 33 | 69 | 14 | 26 | 11. | 27 | 2 | 14 |
| 61 | 16 | 61 | 81. | 64 | 19 | 40 | 15 | 56 | 12 | 14 |
| 62 | 7 | 32 | -78 | 5989 | 10 | 38 | 8 | 32 | 3 | 12 |
| 64 | 1 | 4 | -25 | ${ }_{6} 6$ | 2 | ${ }^{3}$ |  | 13 |  |  |
| 65 | 9 | 41 | 41 | 32. | 10 | 21 | 26 | 54 | 6 | 12 |
| 66 | 3 | 21 | 15 | 17. | 7 | 13 | 12 | 24 | 3 | 6 |
| 67 | 3 | 3. | 31 | 15 | 4 | 5 | 29 | ¢ | 3 | 11 |
| 68 | 1 | 11 | 7 | 26 | 4 | 12 | 14 | 12 |  | 2 |
| 69 | 8 | 59 | 9 | 40 | 7 | 23 | 12 | 19 | 7 | 21 |
| 70 | 3 | 25 | 15 | 11 | 6 | 10 | 2 | 11 | 1 | 5 |
| 71 |  | 3 | 2 | 2 | 2 | 3 | 2 | 1 |  |  |
| 72 | 20 | 15 | 23 | 22 | 12 | 9 | 1 | 9 | 1 | 3 |
| 73 | 13 | 11 | 13 | 6 | 11 | 3 | 2 | 1 |  | 3 |
| 74 | 33 | 8 | 18 | 2 | 17 | 18 | 2 | 4 | 1 | 9 |
| 75 | 58 | 14 | 20 | 18 | 38 | 14 | B | 13 | 3 | 7 |
| 76 | 83 | 18 | $\theta$ | 15 | 36 | 19 | 6 | 7 |  | 8 |
| 77 | 100 | 31 | 48 | 22 | 109 | 27 | 13 | 33 | 5 | 8 |
| 78 | 12 | 7 | 13 | 7 | 15 | 4 | 1 | 20 | $?$ | 3 |
| 79 | 42 | 1 | 8 | 5 | 19 | 15 | 3 | 4 | 2 | 3 |
| 80 | 71 | 2 | 2 | 3 | 17 | 1 | 6 | \% | . | 4 |
| 81 | 5 | - 92 | 7 | 7 | 5 | 8 | 7 | 6 |  | 4 |
| 82 | 7 | 64 | 9 | 7 | 2 | 11 | 27 | 16 | 2 | 8 |
| 83 | 5 | 81 | 11 | 29 | 8 | 18. | 101 | 14 | 4 | 12 |
| 84 | 2 | 5 | 1 | 14 | 5 | 9 | 61 | 11 |  |  |
| 85 |  |  |  | 3 |  | 3 |  | 3 |  |  |
| 86 | 1 | , | 22 | 4 | 6 | 1 |  | 16 |  |  |
| 87 |  | 1 | 3 |  | 1 | 1 |  | 5 |  | 1 |
| sub total | 1232 | 2265 | 2280 | 2784 | 1253 | 1466 | 568 | 940 | 738 | 118 ? |
| 01 |  |  | 3 | 19 | 1393 | 163 |  | 24 | 1 | 10 |
| 02 |  |  | 3 | 232 | 11 | 28 |  | 43 | 4 | 15 |
| 03 | 4 | 4 |  | 87 | 28 | 55 | 1 | 9 |  | 7 |
| 04 | 23 | 279 | 94 |  |  | 22 | 5 | $3 ?$ | 5 | 7 |
| 05 | 1585 | 38 | 32 |  |  | 129 | 2 | 15 | 3 | 3 |
| 06 | 167 | 24 | 58 | 40 | 112 |  | 4 | so | 4 | 31 |
| 07 | 1 |  | 1 | 4 | 2 | 3 |  | 1 | 1 | 2 |
| 08 | 23 | 46 | 9 | 32 | 22 | 69 | 3 |  | 1 | 3 |
| 09 | 5 | 4 | 2 | 4 | 2 | 10 | , | 1 |  |  |
| 10 | 9 | 15 | 6 | 3 | 2 | 24 | 2 | 2 | 1 |  |
| $1 \mathrm{~m}^{\text {m }}$ | 38 | 4 |  |  | 29 |  | 3 | 21 | 2 |  |
| 12 | 27 | 8 | 21 | 11 | 24 | 2 | 1 | 44 | 4 | 5 |
| 13 t | 42 | 12 | 13 | 9 | 46 | 7 | 15 | 47 | 2 | 5 |
| 14 |  | 1 |  | 1 |  | 1 | 2 |  |  | 1 |
| 15 | 1 | 1 | 1 | 6 | 2 | 2 |  |  |  | 16 |
| 16 |  | 2 |  | 1 |  |  | 1 | 1 | 1 |  |
| sub total | 1925 | 438 | 253 | 463 | 1673 | 515 | 40 | 296 | 29 | 130 |
| TOTAL | 3157 | 2703 | 2533 | 3247 | 2926 | 2982 | 608 | 1236 | 767 | 1312 |



DESTINATIOAS IAYERAAL ZONES


DESIINATIGAS THYERMAL ZONES

| ORIG14 | 35 | 36 | 37 | 38 | 30 | 40 | 41 | 42 | 43 | 44 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 |  | 135 | 283 | 391 | $21 \%$ | 21. | 76 | 79 | 9 | is |
| 26 |  | 11 | 37 | 94 | 7 |  |  | 7 |  | 7 |
| 27 |  | 26 | 90 | 50 | 44 | 15 | 18 | 76 | B5 | 123 |
| 28 |  | 48 | 45 | 104 | 51 |  | 14 | 51 | 119 | 36 |
| 29 |  | 37 | 60 | 51 | 1 | 11 |  | 16 | 45 |  |
| 30 | 7 | 54 | 55 | 101 | 58 |  | 7 |  | 22 |  |
| 31 |  | 14 | 95 | 141 | 70 |  |  |  |  |  |
| 32 |  | 36 | 42 | 92 | 40 | 1 | 11 | 1 | 36 | 30 |
| 39 |  | 29 | 22 | 54 | 29 | 22 |  | 53 | 32 | 7 |
| 44 | 6 | 70 | 8 | 17 | 0 |  | 7 | 39 | 23 |  |
| 95 |  | 14 |  |  |  |  | 7 |  |  |  |
| 36 | 3 | 114 | 47 | 63 | 36 |  |  | 19 | 35 |  |
| 31 |  | 3) | 54 | 180 | 31 | 19 |  | 1 | 14 |  |
| 38 | 26 | 91 | 166 | 120 | 126 | 7 | 7 | 29 |  | 21 |
| 39 |  | 15 | 44 | 93 | 132 |  |  | 1 | 6. | 14 |
| 40 |  |  |  | 7 |  |  |  |  |  |  |
| 41 | 7 |  |  | 18 |  |  | 7 |  |  |  |
| 42 |  | 7 |  | 14 | 12 |  |  | 118 | 14 | 133 |
| 43 |  | 49 | 14 | 14 | 30 |  |  | 40 | 1 | 71 |
| 44 |  |  | 3 | 28 | 12 |  |  | 82 | 63 | 74 |
| 45 |  |  |  | 7 | 14 |  |  |  |  |  |
| 46 |  | 19 |  |  |  |  |  |  |  |  |
| 47 |  |  |  |  |  |  |  |  |  |  |
| 48 |  |  |  | 7 | 7 |  |  |  |  |  |
| 49 |  |  | 44 | 50 |  |  |  | 5 | 5 |  |
| 50 |  | 7 | 49 | 174 | 53 | 15 |  | 1 | 31 |  |
| 51 52 |  |  |  |  |  |  |  |  |  |  |
| 52 53 | 8 | 14 |  | 21 | 47 |  |  |  |  | 7 |
| 54 |  | 15 | 132 | 197 | 33 | 15 |  | 28 | 82 |  |
| 55 |  | 32 | 7 |  | 30 |  |  |  |  |  |
| 56 | 29 | 40 | 39 | 134 | 43 |  |  |  | 53 |  |
| 57 | 7 | 8 |  | 49 | 7 |  |  |  | 33 |  |
| 58 | 7 | 23 | 68 | 110 | 22. |  |  | 1 | 39 | 28 |
| 59 | 7 | 14 | 7 | 57 | 34 |  |  |  | 24 |  |
| . - |  |  | - |  |  |  |  |  |  |  |
| 60 |  | 7 | 60 | 42 | 85 |  |  | 22 | 42 |  |
| 61 |  | 11 | 24 | 71 | 78 |  |  |  | 28 | 21 |
| 62 |  | 11 | 39 | 7 | 20 |  | 7 |  | 158 |  |
| 63 |  | 21 | 36 | 36 | 22 |  | 7 | 7 | 33 | 12 |
| 64 |  |  | 11 |  |  |  |  |  |  |  |
| 65 |  | 26 | 8 | 116 | ' | 7 | 17 |  | 118 | 11 |
| 66 | 8 | 33 | 7 | 75 | ${ }^{8}$ |  |  |  | 134 |  |
| 67 |  |  | 15 | 7 | 30 |  |  | 25 | 67 |  |
| 68 |  | 7 |  | 56 | 14 |  |  | 32 | 48 |  |
| 69 |  | 30 |  | 113 | 25 |  |  |  | 61 | 15 |
| 70 |  | 11 | 7 | 7 | 18 |  |  |  | 28 |  |
| 71 |  |  |  |  |  |  |  |  |  | . |
| 72 |  |  | 7 | 39 |  |  |  |  | 14 |  |
| 73 |  | 29 | 7 | 14 | 1 |  |  |  |  |  |
| 74 |  | 36 | 43 | 7 | 29 |  |  |  |  |  |
| 75 |  | 37 | 7 | 95 | 42 |  | 22 |  | 7 | 14 |
| 76 |  |  | 21 | 93 | 1 |  | 11 |  | 10 |  |
| 77 | 8 | 15 | A | 107 | 31 |  |  |  | 19 |  |
| 78 |  | 19 | 36 | 48 |  |  |  |  |  |  |
| 79 |  |  | 7 |  | 15 |  |  |  | 7 |  |
| 80 |  | 8 | 7 | 17 |  |  |  |  |  | 11 |
| 81 |  | 19 |  | 14 | 7 | 7 |  | 7 |  |  |
| 82 | 8 |  | 8 | 35 |  |  |  | 0 | 7 |  |
| 83 |  | 38 | 7 | 64 | 43 |  |  |  | 48 |  |
| 84 | 7 |  |  | 19 | 22 |  |  |  | 20 |  |
| 85 |  | 7 | 11 |  |  |  |  |  | 5 |  |
| 86 67 |  |  |  |  |  |  |  |  | 5 |  |
| SUB total | 142 | 1308 | 1848 | 3556 | 1809 | 142 | 216 | 735 | 1793 | 651 |
| 01 | 2 | 33 | 17 | 47 | 13 | 7 | 1 |  | 19 | 1 |
| 02 | 5 | 42 | 36 | 181 | 90 | 6 | 6 | 14 | 51 | 7 |
| 03 | 2 | 42 | 37 | 181 | 67 | 3 | 5 | 5 | 33 | 4 |
| 04 | 7 | 60 | 74. | 349 | 129 | 46 | 8 | 24 | 81 | 9 |
| 05 | 5 | 22 | 28 | 46 | 19 |  | 1 | 4 | 15 |  |
| 06 | 5 | 23 | 34 | 68 | 32 | 10 | 3 | 10 | 67 | 8 |
| 07 |  | 2 | 2 | 33. | 9 | 2 | 1 | 2 | 6 |  |
| 08 |  | 8 | 12 | 23 | 18 |  | 5 | 1 | 6 | 3 |
| 09 | 1 | 12 | 8 | 18 | 14 | 1 | 6 | 45 | 283 | 37 |
| 10 | 5 | 23 | 35 | 104 | 66 | 88 | 6 | 6 | 12 | 3 |
| 11 |  | 13 | 10 | 95 | 23 | 11 | 1 | 7 | 35 | 1 |
| 12 | 3 | 9 | 10 | 75 | 13 | 7 |  | 3 | 15 | 2 |
| 13 | 2 | 14 | 9 | 69 | 14 | 2 | 2 | 7 | 15 | 2 |
| $\cdots$ |  | 3 | 2 | 11 |  |  |  |  |  |  |
| 15 |  | 1 | 3 | 15 | $\checkmark$ | 3 | 1 |  | -4 |  |
| 16 |  |  |  | 6 | 1 | 6 | 5 | 5 | - 5 |  |
| SUB topal | 37 | 306 | 325 | 1319 | 514 | 192 | 51 | 139 | 647 | 77 |
| rotal | 179 | 1614 | 2173 | 4875 | 2323 | 333 | 269 | 868 | 2440 | 726 |




DESTINATIONS INTERNAL ZORES

| ORIGIN | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 12 | 73 | 74 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | 345 | 135 | 72 | 162 | 340 | 66 |  | 160 | 36 | 25 |
| 26 | 46 | 7 | 15 | 11 | 15 |  |  |  | 10 | 0 |
| 27 | 128 | 23 | 19 | 66 | 8 | 15 |  | 7 | 11 |  |
| 28 | 67 |  | 21 | 11 | 37 |  |  | 21 | 7 |  |
| 29 |  | 50 |  | 26 | 35 |  |  | 14 |  | 32 |
| 30 | 35 | 44 |  | 15 | 62 | 36 |  | 21 | 37 |  |
| 31 | 39 | 7 |  | 14 | 52 | 6 |  | 25 | 25 |  |
| 32 | 24 |  |  | ${ }^{6}$ | 6 | 7 |  | 11 | 29 | 41 |
| 33 |  | 7 | 22 | 7 | 5 | 15 |  | 33 |  | 10 |
| 34 | 25 | 7 | 15 |  | 54 | 52 |  | 43 |  |  |
| 35 l |  | 0 |  |  |  |  |  |  |  |  |
| 36 | 7 | 33 |  | 7 | 21 |  |  | 7 | 11 | 22 |
| 37 |  | 7 | 50 | 11 | 8 | 7 |  | 7 |  | 22 |
| 38 | 105 | 133 | 18 | 73 | 96 | 18 |  | 69 | 15 |  |
| 39 | 18 | 30 | 26 | 14 | 11 | 18 |  |  | 11 | 27 |
| $\triangle 0$ | 7 |  |  |  |  |  |  |  |  |  |
| 4 1 | 18 |  |  |  |  |  |  |  |  |  |
| 42 | 1 |  | 7 | 26 |  |  |  |  |  |  |
| 43 | 128 | 120 | 87 | 40 | 40 | 28 |  | 7 |  |  |
| 44 | 38. |  |  |  | 22 |  |  | 7 |  |  |
| 45 |  |  |  |  |  |  |  |  |  |  |
| 46 |  |  |  | 1 |  |  |  |  |  |  |
| 47 |  |  |  |  |  |  |  |  |  |  |
| 48 |  |  |  |  |  |  |  |  |  |  |
| 49 |  |  | 26 |  | 14 |  |  |  | 7 |  |
| 50 | 8 | 30 | 7 |  |  | 11 |  | 15 | 118 | 24 |
| 51 |  | 7 |  |  |  |  |  |  |  |  |
| 52. | 33 |  | 7 |  |  |  |  |  |  |  |
| 53 | 14 |  | 5 |  | 14 |  |  | 7 |  |  |
| . 54 | 41 | 28 | 24 | 21 | 53 | 32 |  | 29 | 15 |  |
| 55 |  |  | 5 |  |  |  |  |  |  |  |
| 56 | 47 | , |  | 33 | 102 | 15 | 14 | 14 | 32 | 38 |
| 57 | 28 | 13 |  |  | 1 |  |  | 8 | 7 | 12 |
| 58 | 80 | 69 | 25 | 46 | 111 | 18 |  | 24 | 8 |  |
| 59 | 66 | 15 |  | 58 | 86 | . |  | 60 | 32 | 15 |
| 60 | 71 | 43 | 7 | 36 | 97 | 18 |  | 31 | 68 |  |
| 61 | 136 | 57 | 33 | 26 | 47 |  |  | 36 | 46 |  |
| 62 | ${ }_{28}^{12}$ |  |  |  |  |  |  |  |  |  |
| 6: |  | 7 |  | 23 | $\begin{aligned} & 15 \\ & 2 i \end{aligned}$ |  |  | 13 | 15 |  |
| 65 | 70 | 14 | 15 | 116 | 80 | 7 |  | 18 | 15 | 33 |
| 66 | 14 | 7 | 7 | 8 | 17 | 17 |  | 10 | 7 |  |
| 67 |  | 7 | 58 | 31 | 42 | 29 |  |  |  |  |
| 88 | 103 | 15 | 38 |  | 35 | 7 |  | 18 | 15 |  |
| 69 | 110 | 26 | 43 | 47 | 97. |  |  | 22 | 14 | 29 |
| 70 | 7 | 11 | 29 | 15 |  | 22 |  | 21 | 43 | 14 |
| 71 |  |  |  |  |  |  |  |  |  |  |
| 72 | 15 | 35 |  | 7 | 14 | 14 |  | - 56 | 15 |  |
| 73 | 17 | 7 |  | 15 |  |  |  | 56 |  |  |
| 74 | 36 |  |  |  | 37 | 36 |  |  |  |  |
| 75 | 28 | 15 |  | 7 | 15 | 31 |  | 57 | 14 |  |
| 76 | 46 | 7 |  | 7 | 7 |  |  | 45 | 40 | 3 |
| 77 | 25 | 25 | 15 | 31 | 50 |  |  | 35 | 14 |  |
| 78 |  |  | - | 12 | 15 | 19 |  | 22 | 7 | 5 |
| 79 |  |  |  |  | 45 |  |  | 14 |  | 7 |
| 80 | 22 |  |  |  | - |  |  |  |  |  |
| 81. | 7 | 17 |  | 7 | 25 |  |  |  |  | 12 |
| 82 | 22 |  |  | 15 | 21 | 14 |  | 7 |  | 7 |
| 83 | 102 | 25 | 15 | 29 | 45 |  |  | 24 | 7 | 18 |
| 84 | 15 |  | 19 |  | 30 |  |  |  | 0 |  |
| ${ }^{85}$ | 5 |  |  |  |  | $\cdot$ |  |  |  |  |
| $\begin{aligned} & 86 \\ & 87 \end{aligned}$ |  |  |  |  |  |  |  | 7 |  |  |
| sub rotal | 2229 | 1102 | 730 | 1088 | 1977 | 589 | 14. | 1141 | 749 | 406 |
| 01 | 2 | 4 |  | 1 | 10 | 6 | 4 | 18 | 7 | 16 |
| 02 | 40 | 10 | 40 | 14 | 67 | 21 | 7 | 16 | 5 | 4 |
| 03 | 41 | 12 | 28 | 8 | 26 | 11 | 2 | 21 | 10 | 20 |
| 04 | 36 | 21 | 20 | 16 | 43 | 7 | 3 | 23 | 9 | 4 |
| 05 | 10 | 3 | 5 | 5 | 10 | 4 | 1 | 10 | 9 | 13 |
| 06 | 8 | 6 | 9 | 41 | 22 | 6 | 1 | 7 |  | 13 |
| 07 | 16 | 8 | 33. | 22 | 27. | 1 | 1 |  | 2 | 2 |
| 08 | 43 | 19 | 7 | 11 | 13 | 8 |  | 8 |  | 3 |
| 09 | 3 |  | 9 |  | 9 |  |  | 2 |  | 1 |
| 10 | 12 | 3 | 13 | 5 | 20 | 6 |  | 2 | 2 | 7 |
| 11 | 9 | 2. | 10 | 10 | 19 | 1 | 2 | 3 | 2 | 3 |
| 12 | 3 | 9 | 5 | 8 | 9 | 1 | 1 | 27 | 12 | 9 |
| 13 | 11 | 5 | 9 | 3 | 18 | 2 |  | 17 | 5 | 35 |
| 14 | 11 |  | 9 | 4 | 2 | 1 | 1 |  |  | 2 |
| 15 | 2 |  | 1 |  |  |  |  |  |  | 1 |
| 16 |  | 1 |  |  |  | . |  |  |  |  |
| Sus total. | 247 | 113 | 198 | 118 | 285 | 75 | 23 | 199 | 63 | 193 |
| total | 2476 | 1215 | 928 | 1206 | 2262 | 664 | 37 | 2296 | 812 | 539 |

DESTINAIIOSS INTERAAL ZONES



MONROE AREA TRAFFIC STUDY
1971 External Trip Tables

| New \# | 01d \# | New 非 | 01d 非 | New \# | 01 d |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 25 | 31 | 55 | 61 | 85 |
| 2 | 26 | 32 | 56 | 62 | 86 |
| 3 | 27 | 33 | 57 | 63 | 87 |
| 4 | 28 | 34 | 58 | 64 | 1 |
| 5 | 29 | 35 | 59 | 65 | 2 |
| 6 | 30 | 36 | 60 | 66 | 7 |
| 7 | 31 | 37 | 61 | 67 | 14 |
| 8 | 32. | 38 | 62 | 68 | 3 |
| 9 | 33 | 39 | 63 | 69 | 8 |
| 10 | 34 | 40 | 64 | 70 | 9 |
| 11 | 35 | 41 | 65 | 71 | 15 |
| 12 | 36 | 42 | 66 | 72 | 10 |
| 13 | 37 | 43 | 67 | 73 | 16 |
| 14 | 38 | 44 | 68 | 74 | 4 |
| 15 | 39 | 45 | 69 | 75 | 5 |
| 16 | 40 | 46 | 70 | 76 | 11 |
| 17 | 4.1 | 47 | 71 | 77 | 6 |
| 18 | 42 | 48 | 72 | 78 | 12 |
| 19 | 43 | 49 | 73 | 79 | 13 |
| 20 | 44 | 50 | 74 |  |  |
| 21 | 45 | 51 | 75 |  |  |
| 22 | 46 | 52 | 76 |  |  |
| 23 | 47 | 53 | 77 |  |  |
| 24 | 48 | 54 | 78 |  |  |
| 25 | 49 | 55 | 79 |  |  |
| 26 | 50 | 56 | 80 |  |  |
| 27 | 51 | 57 | 81. |  |  |
| 28 | 52 | 58 | 82 |  |  |
| 29 | 53 | 59 | 83 |  |  |
| 30 | 54 | 60 | 84 |  |  |

## AETROPOLITAN AREA TRAFFIr STUOY

TAALE SOM
TMTA. TAIPS E, DASSEAGER CAR, TRUCK $A N A$ TAXI DRIVFQS FOR A 2ADHDUR WEEKTAY IS IOT?
?ESTINAYIONS



35

# mMnROE 

METROPDLITAN AREA TRAFFIC STUOY
TARLE $5-1$


## DESTINATIONS



GETYOPOLITAN MONROF
AREA YRAFSIC STUUY
PARLE SOI
TOTAL TRIOS BY PASSEAGER CAK, TRUCK ANO TAXI DRIVERS FOR A $24 m H O U R$ WEESOAY IV I 971
DESTINATION:S



594

## 6

$\square$ आम आ


METRUPOLITAN AREA TRAFFIE STUOY
TABLE S=1
TOYAE TRTPS BY PASSENGER CAK, TRUCK AND TAXI DRIVERS FOR A $24 m H U Q$ WEEKOAY IN IQTI
DESTINATIDNS

$S I I R=T O T$


METROPOLITAN AREA TRAFFIC STUOY
TABLE $S=1$
TOTAF. TRIPS BY PASSENGER CARF TRUCK AND TAXI ORIVERS FOR A 24 OHOUR WEEXIAY IV 1071

70
79
40
46
47
48
49
50
5,1
5,7
57
54
55
56
57
58
58
40
6
61
67
62

SHA-TOT


## 8




## METROPOLITAN AREA T <br> AREA TRAFFIC STUDN

TARLE 5-1
TOTAL TRIPS RY PASSENGER CAR, YRUCK ANA. TAXI DRIVERS FOR A $24-4 O U R$ WEEXOAY IV IOTI
OESTINATIONS


 OESTINATIONS



## METROPULITAN AREA TRAFFIC STUD*

TABLE S-1
TOTAL TRIPS BY PASSENGER CAK, TRUCK ANM. TAXI DRIVERS GDR A $24=H O U R$ WEEKTAY IN 1971

SUR=TOT
SUROTDT

| 2811 | 2819 |  |
| ---: | ---: | ---: |
| 415 | 495 |  |
| 641 | 641 |  |
| 456 | 456 |  |
| 272 |  | 272 |


| 774 | 774 |
| :--- | :--- |
| 434 | 434 |
| 331 | 330 |
| 378 | 378 |

494

348
417
401 1093
1266

269
46
219
436
154


| 507 | 507 |
| :--- | :--- |
| 856 | 856 |
| 182 | 182 |
| 602 | 602 |
| 505 | 505 |



IAS 00000 INT OOOODO
INVAIIT $70 N E$ ERRORS 00000

INTERNAI. NUNGIRIVER TRIPS 00000

TRUCK RECOROS WITH NO TRTPS 00000

