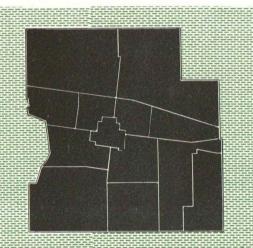


State of Iowa

Mt. Pleasant Urban Area Origin And Destination Traffic Study July 1962



N

PREPARED BY TRAFFIC AND HIGHWAY PLANNING DEPARTMENT DIVISION OF PLANNING IOWA STATE HIGHWAY COMMISSION IN COOPERATION WITH THE UNITED STATES BUREAU OF PUBLIC ROADS

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DEFINITIONS OF TECHNICAL TERMS

Central Business District (C.B.D.)

Cordon Line

Desire Line

Destination

External Trip

Internal Trip

Origin

Through Trip

Tract

Trip

Urban Area

The major business district of a city.

The boundry of the area being studied.

A straight line between the point of origin and point of destination without regard to routes of travel.

The place where a trip ends.

A movement having origin, destination, or both outside the study area.

A movement having both origin and destination within the area under study.

The location from which the driver started the trip.

A movement with neither origin nor destination within the area under study.

An area containing one or more city blocks and usually consisting of a more or less homogeneous development.

The one-way travel between origin and destination.

The area included within and adjacent to a municipality or other urban place of 5,000 or more in population.

FOREWORD

The purpose of this report is to present data relative to the origin, destination, and number of trips per day passing through the five primary road entrances to the Mount Pleasant urban area. It is not within the scope of this report to make recommendations concerning the revision or construction of routes, but rather to organize and present the findings of the survey in a manner which will be helpful to local officials in determining traffic needs.

A detailed study of individual trips was undertaken to determine the actual travel desires of the public. To obtain this information, it was necessary to interview vehicle drivers.

Interview stations were established on each of the five primary highways entering Mount Pleasant. (U.S. 34 east, U.S. 218 south, Iowa 133 southwest, U.S. 34 west, and U.S. 218 north). The city was divided into thirteen internal tracts, using major streets and highways, in most cases, as the dividing lines between tracts.

Vehicles passing through the interview stations were stopped and drivers were asked the origin, destination, and purpose of their trip. In addition, the interviewer also noted and recorded the type of vehicle, number of occupants, registration of vehicle and direction of travel.

The Mount Pleasant origin-destination survey was conducted on the first four days of August, 1960. Interviews were taken at each station for a sixteen hour period from 6 A.M. to 10 P.M. In addition to the information gathered by means of interviews, portable recorders were in operation at each station for a period of five weekdays. Manual vehicle classification counts were taken at a later date to supplement the information already gathered.

The data obtained from interviews was later coded and punched on tabulating cards. The information gathered by means of manual vehicle classification counts and portable recorders was used to derive expansion factors which were then applied to each card. The resultant data was then tabulated to show traffic movements and volumes for August average weekday traffic 1960.

For this study, traffic movements are divided into two basic groups or types. These groups are as follows:

 External station to external station movements or through trips. The vehicles comprising this group enter through one station, pass through the urban area, and leave by way of another external station. In Mount Pleasant, 37.17 percent of all trips came under this category. (2) External station to tract movements or external trips. The vehicles making these trips have one terminus within the urban area and the other outside the urban area. These trips pass through only one station in the external cordon line while enroute to their destination. In Mount Pleasant, trips of this type comprised 41.08 percent of the total traffic.

Traffic flow charts illustrating the movements of traffic between points of origin and destination are included in this report along with a series of desire line charts showing travel desires in straight lines between trip termini.

It is hoped that this report will be of significant value in determining the location and type of street or highway improvement needed to alleviate local traffic problems.

HISTORY

Late in 1834, Presley Saunders, Joseph Moore, and Bartlett Williams along with a Mr. Walters and his son came to Iowa from Springfield, Illinois. When they reached the area where Mount Pleasant is now located, Saunders was so impressed by the beauty of the area that he decided to remain here and establish a city. The next spring, in 1835, he began developing his claim and planning for the city which he named Mount Pleasant.

Shortly after Saunders had completed his home, the Rev. John H. Ruble, a Methodist Episcopal minister, arrived and preached the first sermon in this area in Saunders' home. The first marriage in this area was that of Presley Saunders to Diana C. Bowen, and the first birth was that of Mary Saunders. The first store in Mount Pleasant was opened by Joseph Moore in 1835. In 1836, Alvin Saunders was appointed as the first postmaster.

In 1836 Mount Pleasant became the county seat of Henry County. The following year, on February 3, 1837, the city was surveyed and platted to contain an area of forty blocks. Six years later, on January 25, 1842, Mount Pleasant became incorporated, but this incorporation was dissolved in 1844. On February 5, 1851, the city was again incorporated and in 1857 Mount Pleasant became a city of the second class.

The first school was built in Mount Pleasant in 1836 on property owned by a Mr. Van Allen. John P. Grantham was the first school master. In 1851 a larger school was built southwest of the city square to replace the first school building.

During its early days, Mount Pleasant was sometimes called the "Athens of Iowa" due to its extensive educational interests. On March 8, 1842, the Rev. Artistides J. Heustis established the Mount Pleasant Collegiate Institute by authority given him by the trustees and representatives of the Methodist Episcopal Church. It was officially chartered on February 15, 1844, and is today the oldest college west of the Mississippi River to remain in continuous operation since its establishment. The name was changed to Iowa Conference University in 1850, Iowa Wesleyan University in 1854, and to its present name, Iowa Wesleyan College in 1912.

The first liberal arts degree ever granted to a woman in the United States was given to Lucy Byrkit by Iowa Wesleyan in 1859. Many schools permitted women to take courses and attend classes, but Iowa Wesleyan was the first to actually award the liberal arts degree. Mrs. M. J. Kelley, a staff member of the college was the first woman in the United States ever to receive a doctorate degree. The first state hospital for the insane was authorized in 1858 to be located at Mount Pleasant. The first patient was admitted on February 27, 1861, althrough the hospital was not fully completed and furnished until 1864. This institution now controls 1500 acres of land and has approximately 1500 patients. Much of the food for the patients is raised on the land controlled by the institution.

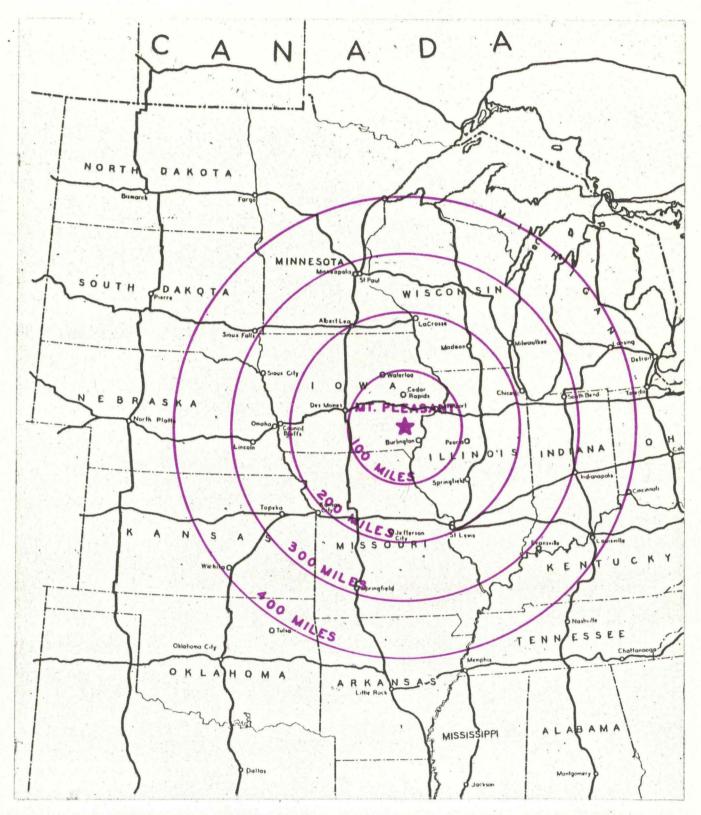
The first county court house in Iowa was built in Mount Pleasant in 1839 and the city acquired its first jail in that same year. The present court house was completed in 1914. The first city hall in Mount Pleasant was built in 1873 and was replaced in 1936.

The early roads in Henry County tended to follow the tops of ridges and indian trails. Later, as improved road building equipment became available, roads were built straight across the plains. Many of the present roads in Henry County still retain their original locations.

In 1847, the Burlington, Mount Pleasant Plank Road Company was organized. This road was completed in 1851 and ran parallel to the old Territorial Road and present Burlington Railroad. The plank road was abandoned in 1858.

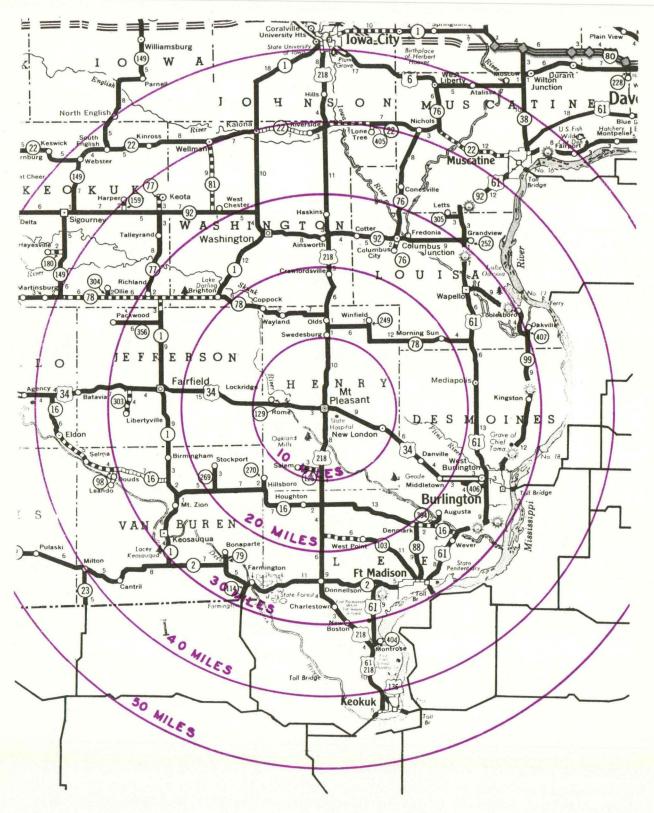
Today Mount Pleasant is a growing community with numerous factories and businesses. A municipally owned airport provides modern facilities for air travel and the main line of the Burlington Railroad provides rail transportation facilities forfreight and passenger service. Mount Pleasant is located in southeast Iowa at the junction of U.S. Highway 34 and 218 approximately mid-way between Chicago and Omaha. Iowa 133 connects Mount Pleasant to Oakland Mills State Park four miles southwest of the city.

STUDY AREA POSITION IN THE MIDWEST



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STUDY AREA IN SOUTHEAST IOWA



-8-

Mount Pleasant Population By Census Year Since 1860

| Census Year | Population | Percent Increase |
|----------------|------------|---------------------|
| 1860 | 3530 | |
| 1870 | 4245 | 20.25 |
| 1880 | 4410 | 3.89 |
| 1890 | 3907 | -11.41 |
| 1900 | 4100 | 4.94 |
| 1910 | 3874 | - 5.51 |
| 1920 | 3987 | 2.92 |
| 1930 | 3743 | - 6.12 |
| 1940 | 4610 | 23.16 |
| 1950 | 5843 | 26.75 |
| 1960 | 7339 | 25.60 |

The above table illustrates population trends for the city of Mount Pleasant from 1860 to 1960. The greatest increase on a percentage basis occured between 1940 and 1950.

| Census Year | Population | Percent Increase |
|----------------|------------|---------------------|
| 1840 | 3772 | |
| 1850 | 8707 | 130.83 |
| 1860 | 18701 | 114.78 |
| 1870 | 21453 | 14.72 |
| 1880 | 20896 | -2.60 |
| 1890 | 18895 | -9.58 |
| 1900 | 20020 | 5.95 |
| 1910 | 18645 | -6.87 |
| 1920 | 18298 | -1.86 |
| 1930 | 17660 | -3.49 |
| 1940 | 17994 | 1.89 |
| 1950 | 18708 | 3.97 |
| 1960 | 18187 | -2.78 |
| 1960 | 18187 | -2.78 |

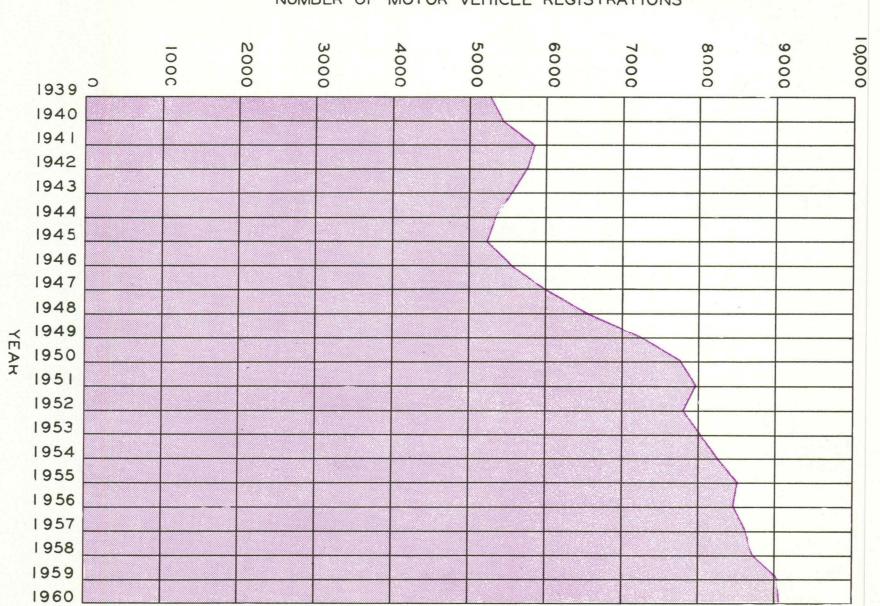
Henry County Population by Census Year Since 1840

Percent Year Autos Trucks Motorcycles Total Increase 3.56 7.34 -1.89 -3.49-3.67 -2.09 5.52 8.58 8.77 11.63 6.64 2.42 -2.002.67 3.32 2.72 - .33 1.68 1.02 4.22 .04

Motor Vehicle Registration in Henry County From 1939 to 1960

The above table shows motor vehicle registration for Henry County as a whole and does not necessarily reflect registration for Mount Pleasant.

MOTOR VEHICLE FROM 1939-1960 REGISTRATIONS Ī HENRY COUNTY



NUMBER OF MOTOR VEHICLE REGISTRATIONS

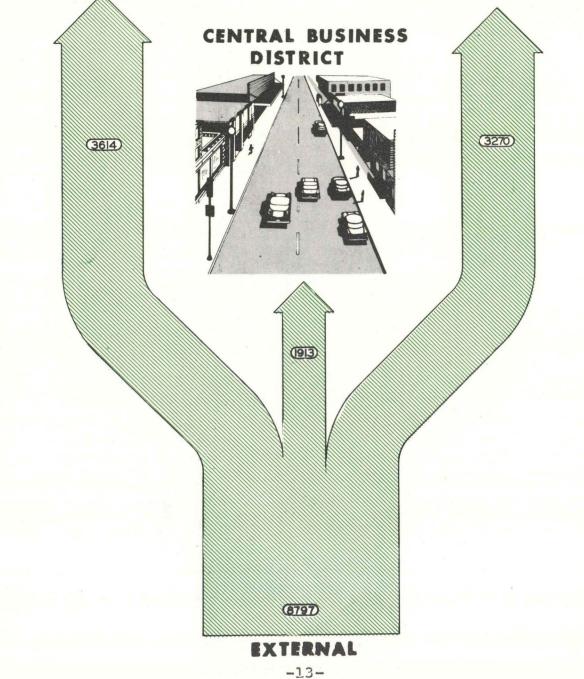
-12-

DISTRIBUTION OF TRIPS

THROUGH TRIPS







SUMMARY OF TRIP DISTRIBUTION

The chart at left graphically illustrates some of the more significant traffic volumes derived from the Mount Pleasant origin-destination survey. An average of 8797 trips per day passed through the five primary road entrances of Mount Pleasant during an average August weekday in 1960.

1913 trips or 21.75 percent of the total number of trips were between external areas and the C.B.D.

3614 trips or 41.08 percent of the total number of trips were between external and internal areas exclusive of the C.B.D.

3270 trips or 37.17 percent of the total number of trips were through trips which passed through Mount Pleasant enroute to another destination.

TEXT TABLE 1 VEHICLE TYPE AND TOTAL NUMBER OF TRIPS PASSING THROUGH ALL PRIMARY ROAD ENTRANCES OF THE MOUNT PLEASANT URBAN AREA

| External | Passenger | Single | Truck | Total | No. of | Per Cent |
|----------------------|-----------|--------|---------|-------|--------|----------|
| Station ⁶ | Cars and | Unit | Combi- | | Inter- | Inter- |
| Location | Pick-ups | Trucks | nations | | views | viewed |
| U.S. 34 E. | 2925 | 186 | 239 | 3350 | 2810 | 83.88 |
| U.S. 218 S. | 1583 | 134 | 205 | 1922 | 1676 | 87.20 |
| Ia. 133 S.W. | 588 | 17 | 4 | 609 | 583 | 95.73 |
| U.S. 34 W. | 2650 | 184 | 286 | 3120 | 2758 | 88.39 |
| U.S. 218 N. | 2669 | 182 | 215 | 3066 | 2534 | 82.65 |
| Total | . 10415 | 703 | 949 | 12067 | 10361 | 85.86 |

August Average Weekday Traffic 1960

Text table 1 above shows the total traffic passing through the five primary road entrances to the Mount Pleasant urban area along with the total number and type of vehicles passing through each primary road entrance. Text Table 2

212

TRIP PURPOSE OF VEHICLE DRIVERS PASSING THROUGH THE EAST ENTRANCE, U.S. 34, TO THE MOUNT PLEASANT URBAN AREA (August Average Weekday Traffic 1960)

TRIP PURPOSE - DESTINATION

| Trip Purpose Origin | W <mark>or</mark> k | Transact Business | During Work | Medical or Dental | School | Recreation Social or Cultural | Eat | Shop | Serve Passen- gers | Home | Total | Percent |
|-------------------------------------|---------------------|----------------------|----------------|-------------------------|--------|-------------------------------------|-----|------|--------------------------|-------|--------|---------|
| Work | 7 | 6 | 6 | | | 3 | 5 | 3 | 2 | 265 | 297 | 8.87 |
| Transact Business | 3 | 186 | 3 | | 1 | 2 | | | | 277 | 472 | 14.09 |
| During Work | 3 | l | 634 | | | 1 | 1 | | 1 | 26 | 667 | 19.91 |
| Medical or Dental | | | • | . 1 | | | | | | 42 | 43 | 1.28 |
| School | | | | | | | | | | 21 | 21 | .63 |
| Recreation Social or Cultural | | | · 1 | 2 | 1 | 211 | 2 | | | 297 | 515 | 15.37 |
| Eat | | 2 | | | | | | | | 3 | 5 | .15 |
| Shop | | | | | | | | 2 | | 131 | 133 | 3.97 |
| Serve Passengers | | | | | | 2 | | 1 | 3 | . 3 | 9 | .27 |
| Home | 313 | 237 | 55 | 52 | 28 | 391 | 11 | 87 | 14 | | 1188 | 35.46 |
| Total | 327 | 432 | 699 | 55 | 30 | 610 | 19 | 93 | 20 | 1065 | 3350 | 100.00 |
| Percent | 9.76 | 12.89 | 20.86 | 1.64 | .90 | 18.21 | .57 | 2.78 | .60 | 31.79 | 100.00 | |

TRIP PURPOSE OF VEHICLE DRIVERS PASSING THROUGH THE SOUTH ENTRANCE, U.S. 218, TO THE MOUNT PLEASANT URBAN AREA (August Average Weekday Traffic 1960)

TRIP PURPOSE - DESTINATION

| Trip Purpose Origin | Work | Transact Business | Work | Medical or Dental | | Recreation Social or Cultural | | Shop | Serve Passen- gers | Home | Total | Percent |
|-------------------------|------|----------------------|-------|-------------------------|--------|-------------------------------------|-----|------|--------------------------|-------|--------|---------|
| Work | 6 | 10 | 103 | | | 4 | 2 | | | 87 | 212 | 11.03 |
| Transact | | | | 1963 | 135 84 | | | | | | | |
| Business | 2 | 67 | 3 | | | 2 | | | 1 | 163 | 238 | 12.38 |
| During Work | 5 | l | 346 | | | | | | | 3 | 355 | 18.47 |
| Medical or Dental | | | | | 1 | | | | | 36 | 37 | 1.93 |
| School | | | | | 1 | 1 | | | | 14 | 16 | .83 |
| Recreation Social or | | | | | | | | | | | | |
| Cultural | | 2 | | 122.02 | 1.225 | 51 | | | | 198 | 251 | 13.06 |
| Eat | l | | | | | | | | | 1 | 2 | .10 |
| Shop | | | | | | | | | | 18 | 18 | .94 |
| Serve Passengers | | | | | | | | | 1 | 8 | 9 | .47 |
| Home | 130 | 215 | 7 | 39 | 13 | 334 | 4 | 32 | 10 | | 784 | 40.79 |
| Total | 144 | 295 | 459 | 39 | 15 | 392 | 6 | 32 | 12 | 528 | 1922 | 100.00 |
| Percent | 7.49 | 15.35 | 23.88 | 2.03 | .78 | 20.40 | .31 | 1.67 | .62 | 27.47 | 100.00 | |

Text Table 3

1

TRIP PURPOSE OF VEHICLE DRIVERS PASSING THROUGH THE SOUTHWEST ENTRANCE, IOWA 133, TO THE MOUNT PLEASANT URBAN AREA (August Average Weekday Traffic 1960)

TRIP PURPOSE - DESTINATION

| Trip Purpose Origin | Work | Transact Business | During Work | Medical or Dental | School | Recreation Social or Cultural | Eat | Shop | Serve Passen- gers | Home | Total | Percent |
|-------------------------------------|-------|----------------------|----------------|-------------------------|--------|-------------------------------------|-----|------|--------------------------|-------|--------|----------------|
| Work | | 5 | l | | | 5 | 2 | | | 96 | 109 | 17.90 |
| Transact Business | 11 | 4 | | | | 2 | | | | 49 | 56 | 9.20 |
| During Work | 2 | l | 38 | | | | | | | | 41 | 6.73 |
| Medical or Dental | | | | | | | | | | 9 | 9 | 1.48 |
| School | | | | | | | | | | 3 | 3 | .49 |
| Recreation Social or Cultural | 2 | | | | | 13 | | | | 90 | 105 | 17.24 |
| Eat | 2 | | | | | | | | | | 2 | .33 |
| Shop | | | | | | 1 | | | | 24 | 25 | 4.10 |
| Serve Passengers | | | | | | | | | | 2 | 2 | .33 |
| Home | 84 | 43 | 1 | 9 | 3 | 85 | 1 | 25 | 6 | | 257 | 4 2. 20 |
| Total | 91 | 53 | 40 | 9 | 3 | 106 | 3 | 25 | 6 | 273 | 609 | 100.00 |
| Percent | 14.94 | 8.70 | 6.57 | 1.48 | .49 | 17.41 | .49 | 4.10 | .99 | 44.83 | 100.00 | |

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Text Table 4

Text Table 5

-19-

TRIP PURPOSE OF VEHICLE DRIVERS PASSING THROUGH THE WEST ENTRANCE, U.S. 34, TO THE MOUNT PLEASANT URBAN AREA (August Average Weekday Traffic 1960)

TRIP PURPOSE - DESTINATION

| a series of the series of the | | | | Medical | | Recreation | | | Serve | T | | |
|-------------------------------|---------------|----------|--------|-------------|------------|--------------|-----------|------------|-------------------------------------------|-------|--------|---------|
| Trip Purpose | | Transact | During | or | School | | Eat | Shop | Passen- | TTomo | m-1-1 | Design |
| Origin | Work | Business | Work | Dental | SCHOOT | Cultural | Edt | Shop | gers | Home | Total | Percent |
| | | | | | | curcurar | | | 902.0 | | | |
| Work | 42 | 10 | 96 | 1. 1. 1. 1. | Sugar. | 7 | 4 | 1.4.92 | . 53 8 17 | 240 | 399 | 12.79 |
| | | 안 이 지않는 | | | 0.5722 | | 140 | a start | 2.2 | | | 12.75 |
| Transact | | | | | | 74. Frazilia | | | Sec. 2 | | | |
| Business | 2 | 121 | 2 | | | 5 | | | Carlos Carlos | 157 | 287 | 9.20 |
| | | | | | | | | | | | | |
| During Work | 8 | 1 | 637 | | | 1 | | | | 4 | 651 | 20.86 |
| | | | | | | | | | | 1.19 | | |
| Medical or | | | | | | | | | 1988 | | | |
| Dental | | | | | Carl Print | | | | | 20 | 20 | .64 |
| School | | | | 1.846 | | | | | | 13 | 13 | 10 |
| 501001 | 12.25 | | 1.000 | S. Salar | . 57 S. C. | | | 1.00 | | 13 | 13 | .42 |
| Recreation | | | | a start and | | S and an E | | | 1. S. | | | |
| Social or | | A. 1924 | 233.5 | | | | | 14.00 | | | | |
| Cultural | 3 | 3 | | | 1226 | 82 | ÷ | 1.5 | 1842 3 | 407 | 495 | 15.87 |
| | | | 1.200 | N POL | | | | - <u>1</u> | | 4 | | |
| Eat | 2 | 1 | 1.18 | | 1. 5. 2. 1 | | | | | 1 | 4 | .13 |
| | N Walt | | | | 1. S. 1964 | | | | 236.00 | | | |
| Shop | | 2 | | | | 2 | | | Sec. 14 | 44 | 48 | 1.54 |
| | in the second | | | | | | | | 1.8.2.9 | | | |
| Serve | | | | | | 11. 영양화 2 | Street of | 1.220 | | | | |
| Passengers | 1 | 1 | | | | | | | 1 | 8 | 11 | .35 |
| Home | 238 | 186 | 8 | 20 | 12 | 659 | 2 | 51 | 16 | | 1192 | 38.20 |
| HOME | 230 | 100 | 0 | 20 | 12 | 039 | 2 | 51 | 10 | | 1192 | 30.20 |
| Total | 296 | 325 | 743 | 20 | 12 | 756 | 6 | 51 | 17 | 894 | 3120 | 100.00 |
| Percent | 9.49 | 10.42 | 23.81 | .64 | .39 | 24.23 | .19 | 1.63 | .55 | 28.65 | 100.00 | |

TRIP PURPOSE OF VEHICLE DRIVERS PASSING THROUGH THE NORTH ENTRANCE, U.S. 218, TO THE MOUNT PLEASANT URBAN AREA (August Average Weekday Traffic 1960)

Recreation Serve Medical Schools Social or Trip Purpose Transact During Passenor Percent Home Total Shop Eat Work Business Work Origin Cultural gers Dental 163 152 5.32 1 4 1 2 3 Work Transact 15.26 234 468 8 3 215 1 1 Business 6 12 18.82 577 1 1 558 4 1 During Work Medical or 2.09 64 60 1 3 Dental 28 .91 28 School Recreation Social or 14.91 297 457 3 1 150 5 Cultural 1 .46 8 14 1 2 3 Eat 3.78 116 116 Shop Serve 10 13 .42 1 1 1 Passengers 38.03 1166 7 119 5 58 470 44 266 22 175 Home 100.00 .917 3066 124 6 12 45 634 63 488 581 196 Total

2.05

18.95

6.39

Percent

15.92

1.47

20.68

29.91 100.00

.20

4.04

39

TRIP PURPOSE - DESTINATION

Text Table 6

-20

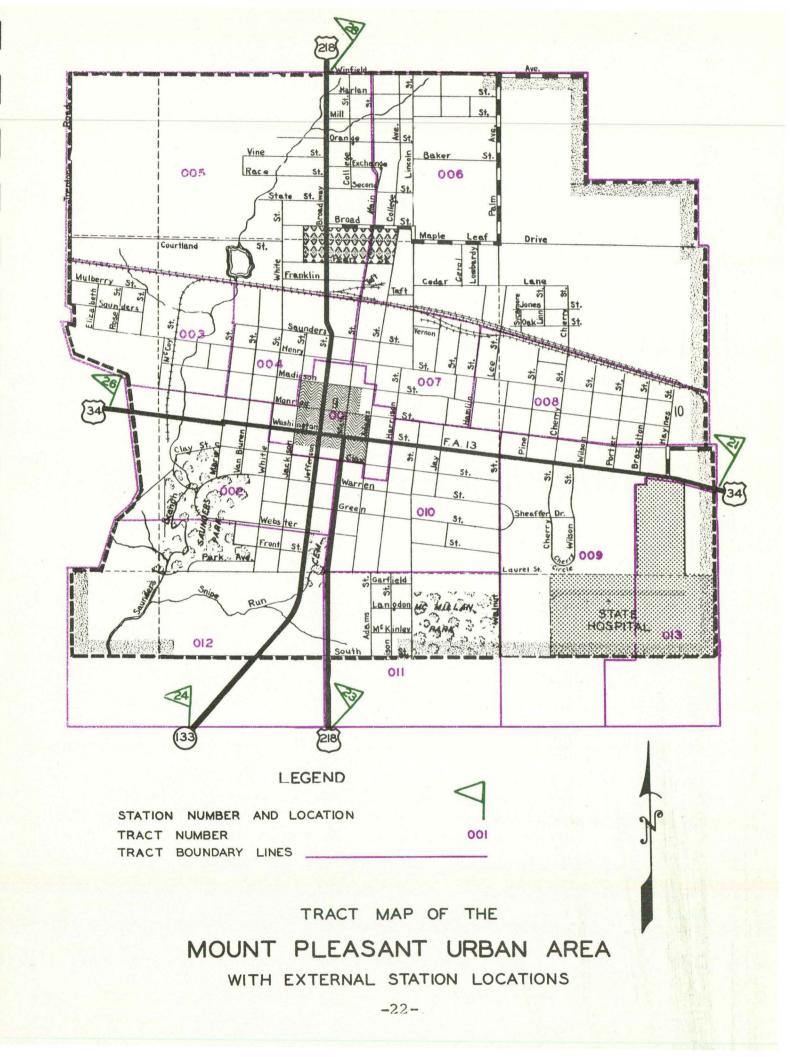
TRIP PURPOSE OF VEHICLE DRIVERS PASSING THROUGH ALL PRIMARY ROAD ENTRANCES TO THE MOUNT PLEASANT URBAN AREA (Duplicate Through Trips Removed) (August Average Weekday Traffic 1960)

Text Table 7

-21-

TRIP PURPOSE - DESTINATION

| Trip Purpose Origin | Work | Transact Business | During Work | Modical | School | Recreation Social or Cultural | And the state of t | Shop | Serve Passen- gers | Home | Total | Percent |
|-------------------------------------|------|----------------------|----------------|---------|--------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------|-------|--------|---------|
| Work | 38 | 26 | 129 | l | | 20 | 13 | 2 | 1 | 621 | 851 | 9.67 |
| Transact | | | | | | | | | | | | |
| Business | 12 | 392 | 6 | 1 | 1 | 15 | 2 | | 1 | 696 | 1126 | 12.80 |
| During Work | 21 | 4 | 1437 | | | 2 | 2 | 1 | | 30 | 1497 | 17.02 |
| Medical or Dental | | | | . 3 | | | | 1 | | 132 | 136 | 1.55 |
| School | | | | | l | 1 | | | | 73 | 75 | .85 |
| Recreation Social or Cultural | 10 | 5 | · 1 | 2 | 1 | 308 | 1 | 3 | | 863 | 1194 | 13.57 |
| Eat | 6 | 4 | | | | 1 | | | | 12 | 23 | .26 |
| Shop | | 2 | | | | 3 | | | 2 | 319 | 326 | 3.71 |
| Serve Passengers | 2 | 1 | | | | 3 | | 1 | 2 | 23 | 32 | .36 |
| Home | 788 | 735 | 62 | 151 | 89 | 1349 | 19 | 303 | 41 | | 3537 | 40.21 |
| Total | 877 | 1169 | 1635 | 158 | 92 | 1702 | 37 | 311 | 47 | 2769 | 8797 | 100.00 |
| Percent | 9.97 | 13.29 | 18.58 | 1.79 | 1.05 | 19.35 | .42 | 3.54 | . 53 | 31.48 | 100.00 | |

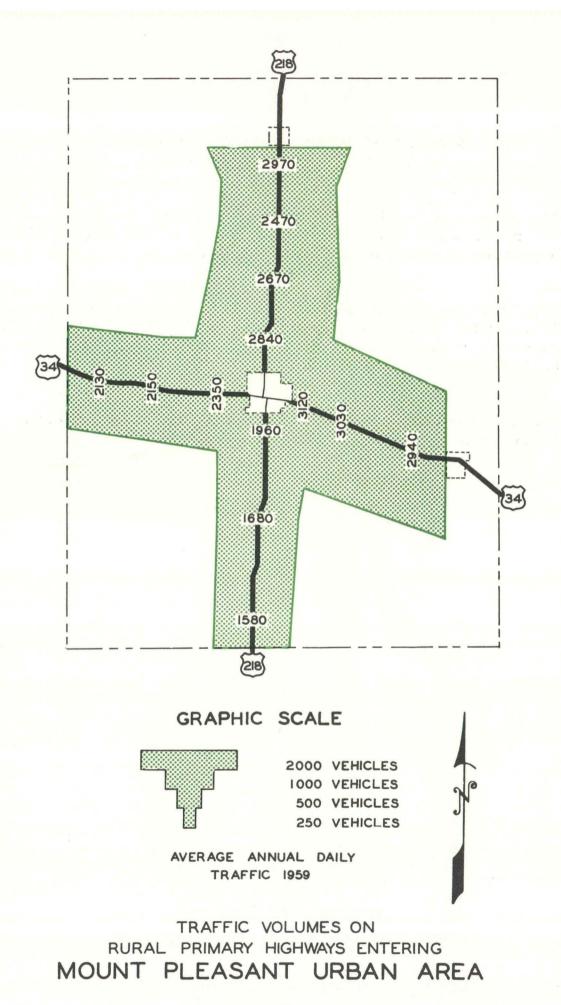


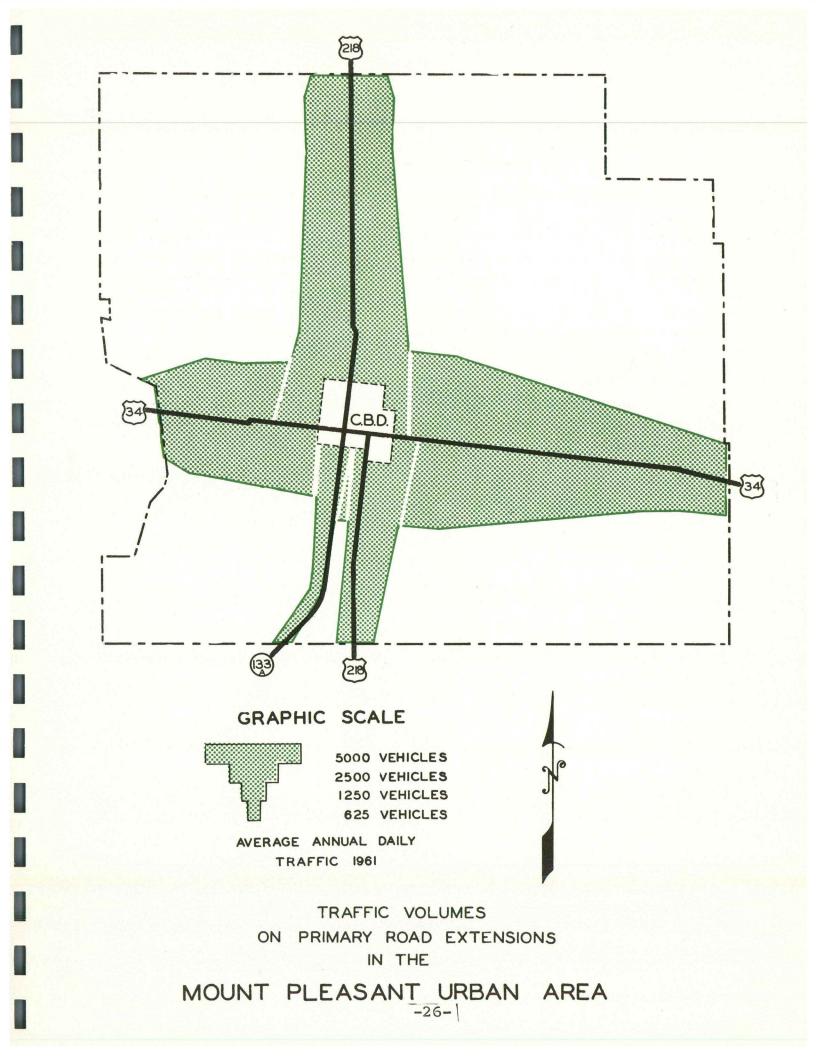
TRAFFIC VOLUMES ON PRIMARY HIGHWAYS IN AND NEAR MOUNT PLEASANT

The following charts illustrate the average annual daily traffic on rural primary highways entering or leaving Mt. Pleasant and on primary extensions within the urban area.

The chart on page 25 illustrates the 1960 average annual daily traffic on rural primary highways entering or leaving Mount Pleasant. U.S. 34 east carried the highest volume of traffic, while Iowa 133 southwest carried the least.

The chart on page 26 shows the 1961 average annual daily traffic on primary extensions within Mount Pleasant.



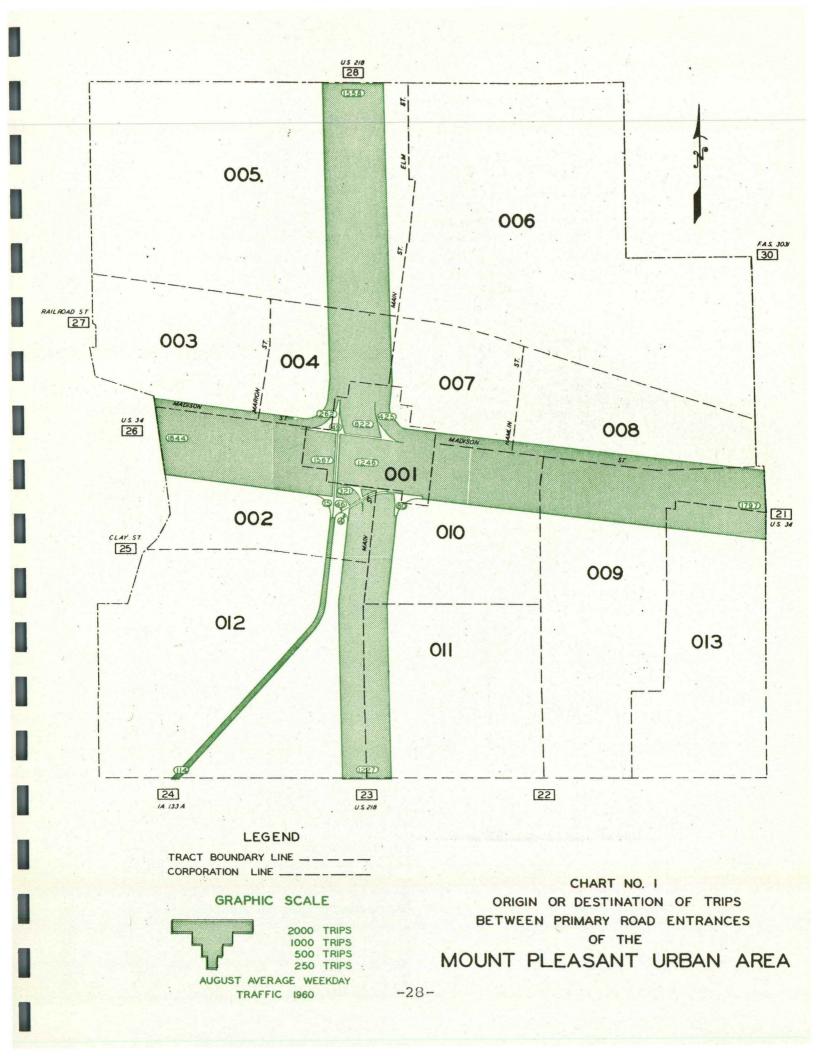


TRAFFIC FLOW CHARTS

The following traffic flow charts illustrate the dispersion of traffic between points of origin and/or destination through the stations indicated. These charts are not intended to show exact routes, but rather to show approximate routes and the cumulative volume of traffic as it approaches or leaves the station location. Trip origins and destinations are not differentiated and the tract or station totals shown may be considered as either origin or destination.

Chart number 1 illustrates the movement of through trips between all primary road entrances, whereas charts 2 through 6 illustrate the external and internal dispersion of traffic through individual stations.

The adjoining page of statistics across them charts 2 through 6 shows the number of external trips to or from each primary road entrance and tracts within the urban area along with the percent of the total number of trips to each area.



DISPERSION OF TRAFFIC TO OR FROM U.S. 34 EAST

| | VEHICLES | PERCENT |
|---------------------------------------------|----------|---------|
| Trips with internal origin or destination | 1553 | 46.36 |
| Trips with external origin and destination | 1797 | 53.64 |
| Grand total of all trips through station 21 | 3350 | 100.00 |
| Trips with origin or destination in C.B.D. | 523 | 15.61 |
| Number of interviews (16 hours) | 2810 | 83.88 |
| | | |

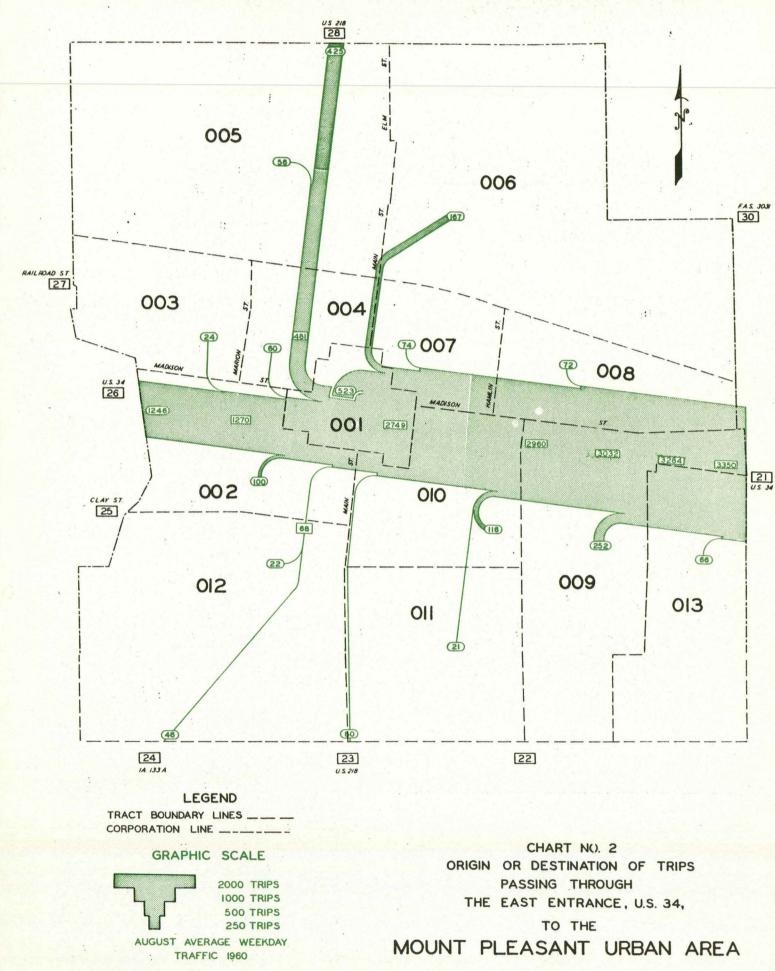
Percent of total traffic through all primary road entrances 27.76

INTERNAL DISPERSION

| TRACT | VOLUME | PERCENT | TRACT | VOLUME | PERCENT |
|-------|--------|---------|-------|--------|---------|
| 001 | 523 | 15.61 | 008 | 72 | 2.15 |
| 002 | 100 | 2.99 | 009 | 252 | 7.52 |
| 003 | 24 | .72 | 010 | 116 | 3.46 |
| 004 | 60 | 1.79 | 011 | 21 | .63 |
| 005 | 56 | 1.67 | 012 | 22 | .66 |
| 006 | 167 | 4.98 | 013 | 66 | 1.97 |
| 007 | 74 | 2.21 | | | |
| | | | TOTAL | 1553 | 46.36 |

EXTERNAL DISPERSION

| STATION | VOLUME | PERCENT | STATION | VOLUME | PERCENT |
|---------|--------|---------|---------|--------|---------|
| 21 | | | 26 | 1246 | 37.19 |
| 23 | 80 | 2.39 | 28 | 425 | 12.69 |
| 24 | 46 | 1.37 | | | |
| | | | TOTAL | 1797 | 53.64 |



DISPERSION OF TRAFFIC TO OR FROM U.S. 218 SOUTH

| | VEHICLES | PERCENT |
|----------------------------------------------|----------|---------|
| Trips with internal origin or destination | 695 | 36.16 |
| Trips with external origin and destination | 1227 | 63.84 |
| Grand total of all trips through station 23 | 1922 | 100.00 |
| Trips with origin or destination in C.B.D. | 220 | 11.44 |
| Number of interviews (16 hours) | 1676 | 87.20 |
| Percent of total traffic through all primary | | |

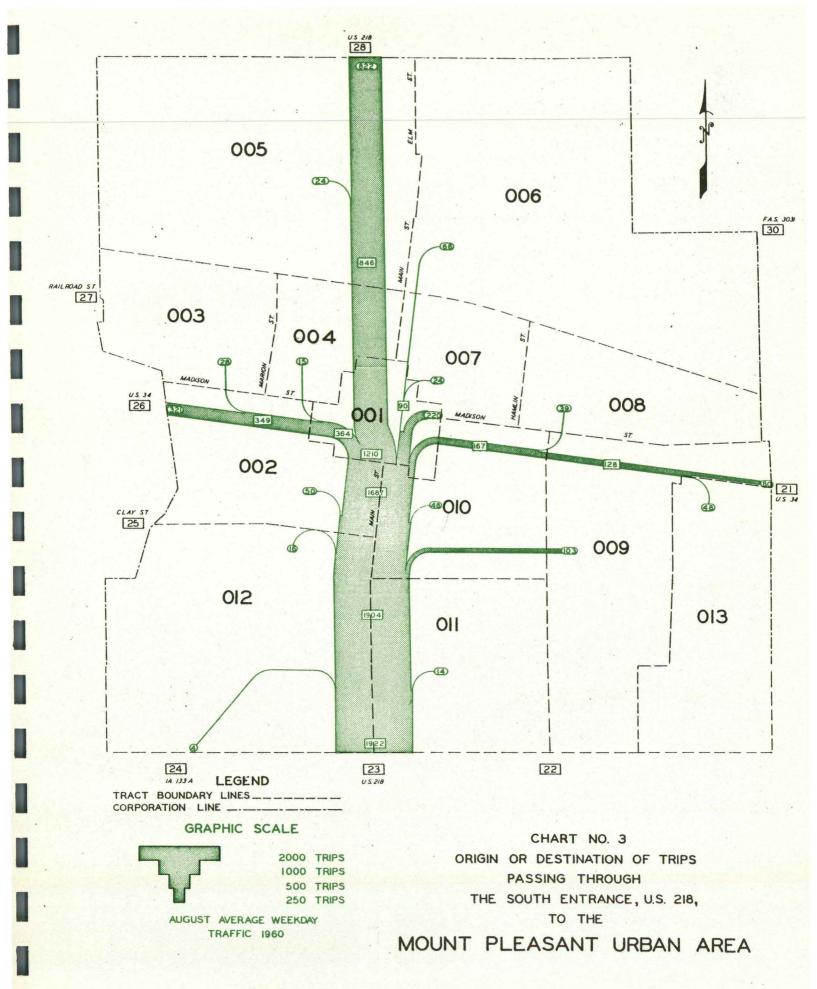
road entrances 15.93

INTERNAL DISPERSION

| TRACT | VOLUME | PERCENT | TRACT | VOLUME | PERCENT | |
|-------|--------|---------|-------|--------|---------|--|
| 001 | 220 | 11.44 | 008 | 39 | 2.03 | |
| 002 | 50 | 2.60 | 009 | 103 | 5.36 | |
| 003 | 28 | 1.46 | 010 | 48 | 2.50 | |
| 004 | 15 | .78 | 011 | 14 | .73 | |
| 005 | 24 | 1.25 | 012 | 16 | .83 | |
| 006 | 66 | 3.43 | 013 | 48 | 2.50 | |
| 007 | 24 | 1.25 | | | | |
| | | | TOTAL | 695 | 36.16 | |
| | | | | | | |

EXTERNAL DISPERSION

| STATION | VOLUME | PERCENT | STATION | VOLUME | PERCENT |
|----------|--------|---------|----------|------------|----------------|
| 21 23 | 80 | 4.16 | 26 28 | 321 822 | 16.70 42.77 |
| 24 | 4 | .21 | TOTAL | 1227 | 63.84 |



DISPERSION OF TRAFFIC TO OR FROM IOWA 133 SOUTHWEST

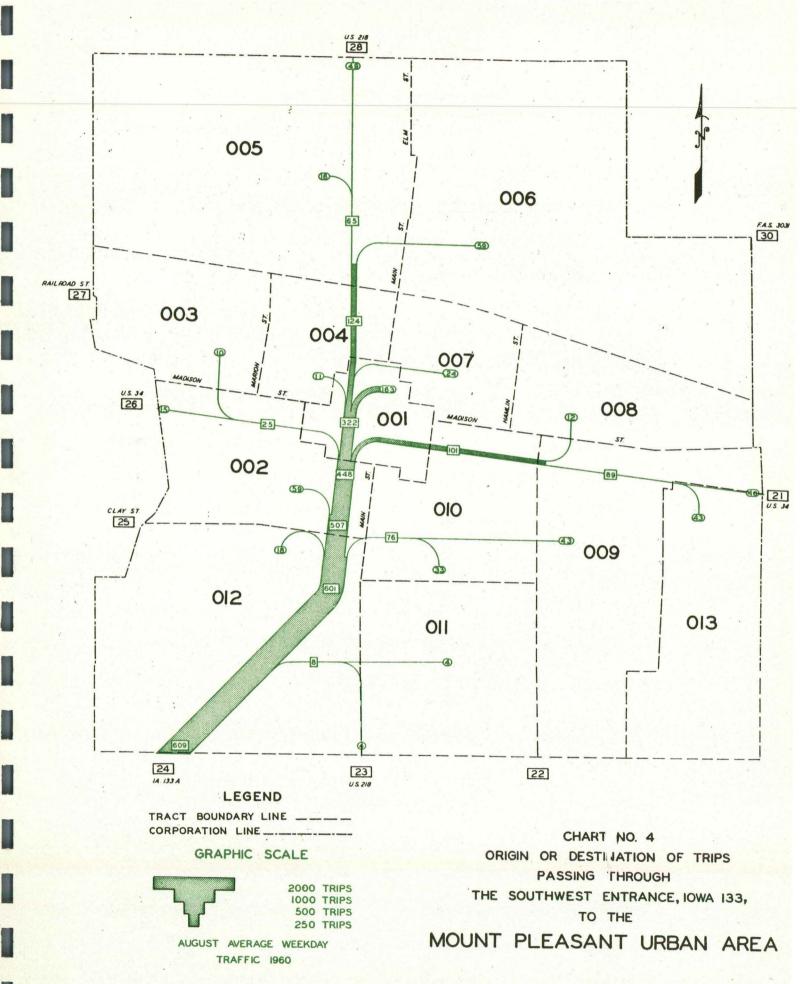
| | VEHICLES | PERCENT |
|-------------------------------------------------------------|----------|---------|
| Trips with internal origin or destination | 495 | 81.28 |
| Trips with external origin and destination | 114 | 18.72 |
| Grand total of all trips through station 24 | 609 | 100.00 |
| Trips with origin or destination in C.B.D. | 163 | 26.76 |
| Number of interviews (16 hours) | 583 | 95.73 |
| Percent of total traffic through all primary road entrances | | 5.05 |

INTERNAL DISPERSION

| TRACT | VOLUME | PERCENT | TRACT | VOLUME | PERCENT |
|-------|--------|---------|-------|--------|---------|
| 001 | 163 | 26.76 | 008 | 12 | 1.97 |
| 002 | 59 | 9.69 | 009 | 43 | 7.06 |
| 003 | 10 | 1.64 | 010 | 33 | 5.42 |
| 004 | 11 | 1.81 | 011 | 4 | .66 |
| 005 | 16 | 2.63 | 012 | 18 | 2.95 |
| 006 | 59 | 9.69 | 013 | 43 | 7.06 |
| 007 | 24 | 3.94 | | | |
| | | | TOTAL | 495 | 81.28 |

EXTERNAL DISPERSION

| STATION | VOLUME | PERCENT | STATION | VOLUME | PERCENT |
|----------|---------|---------|----------|----------|--------------|
| 21 23 | 46 4 | 7.55 | 26 28 | 15 49 | 2.46 8.05 |
| 24 | | | TOTAL | 114 | 18.72 |



DISPERSION OF TRAFFIC TO OR FROM U.S. 34 WEST

| | VEHICLES | PERCENT |
|-------------------------------------------------------------|----------|---------|
| Trips with internal origin or destination | 1276 | 40.90 |
| Trips with external origin and destination | 1844 | 59.10 |
| Grand total of all trips through station 26 | 3120 | 100.00 |
| Trips with origin or destination in C.B.D. | 453 | 14.52 |
| Number of Interviews (16 Hours) | 2758 | 88.39 |
| Percent of total traffic through all primary road entrances | | 25.85 |

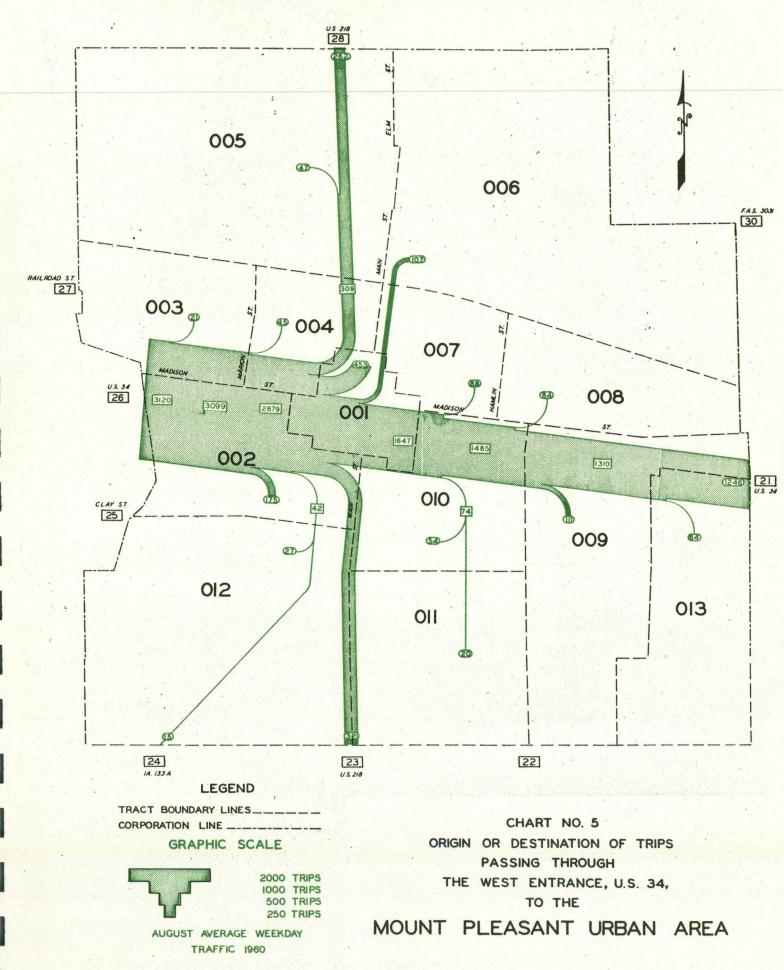
INTERNAL DISPERSION

ł

| TRACT | VOLUME | PERCENT | TRACT | VOLUME | PERCENT |
|-------|--------|---------|-------|--------|---------|
| 001 | 453 | 14.52 | 008 | 64 | 2.05 |
| 002 | 175 | 5.61 | 009 | 111: | 3.56 |
| 003 | 21 | .67 | 010 | 54 | 1.73 |
| 004 | 45 | 1.44 | 011 | 20 | .64 |
| 005 | 47 | 1.51 | 012 | 27 | .87 |
| 006 | 107 | 3.43 | 013 | 64 | 2.05 |
| 007 | 88 | 2.82 | | | |
| | | | TOTAL | 1276 | 40.90 |

EXTERNAL DISPERSION

| STATION | VOLUME | PERCENT | STATION | VOLUME | PERCENT |
|---------|--------|---------|---------|--------|---------|
| 21 | 1246 | 39.93 | 26 | | |
| 23 | 321 | 10.29 | 28 | 262 | 8.40 |
| 24 | 15 | .48 | | | |
| | | | TOTAL | 1844 | 59.10 |



DISPERSION OF TRAFFIC TO OR FROM U.S. 218 NORTH

| | | VEHICLES | PERCENT |
|---|----------------------------------------------------|----------|---------|
| Т | rips with internal origin or destination | 1508 | 49.18 |
| Т | rips with exter n al origin and destination | 1558 | 50.82 |
| G | rand total of all trips through station 28 | 3066 | 100.00 |
| Т | rips with origin or destination in C.B.D. | 554 | 18.07 |
| N | umber of interviews (16 hours) | 2534 | 82.65 |
| D | ercent of total traffic through all primary | | |

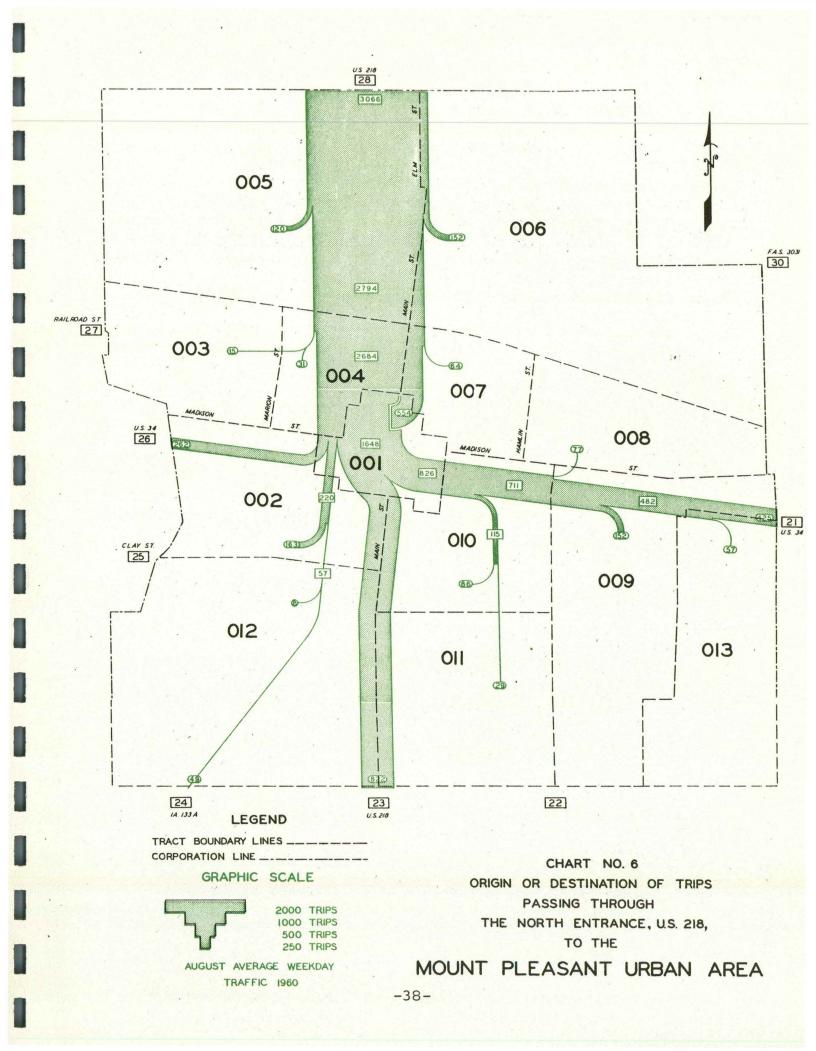
Percent of total traffic through all primary road entrances 25.41

INTERNAL DISPERSION

| TRACT | VOLUME | PERCENT | TRACT | VOLUME | PERCENT | | | |
|-------|--------|---------|-------|--------|---------|--|--|--|
| 001 | 554 | 18.07 | 008 | 77 | 2.51 | | | |
| 002 | 163 | 5.32 | 009 | 152 | 4.96 | | | |
| 003 | 15 | .49 | 010 | 86 | 2.80 | | | |
| 004 | 31 | 1.01 | 011 | 29 | .94 | | | |
| 005 | 120 | 3.91 | 012 | 8 | .26 | | | |
| 006 | 152 | 4.96 | 013 | 57 | 1.86 | | | |
| 007 | 64 | 2.09 | | | | | | |
| | | | TOTAL | 1508 | 49.18 | | | |

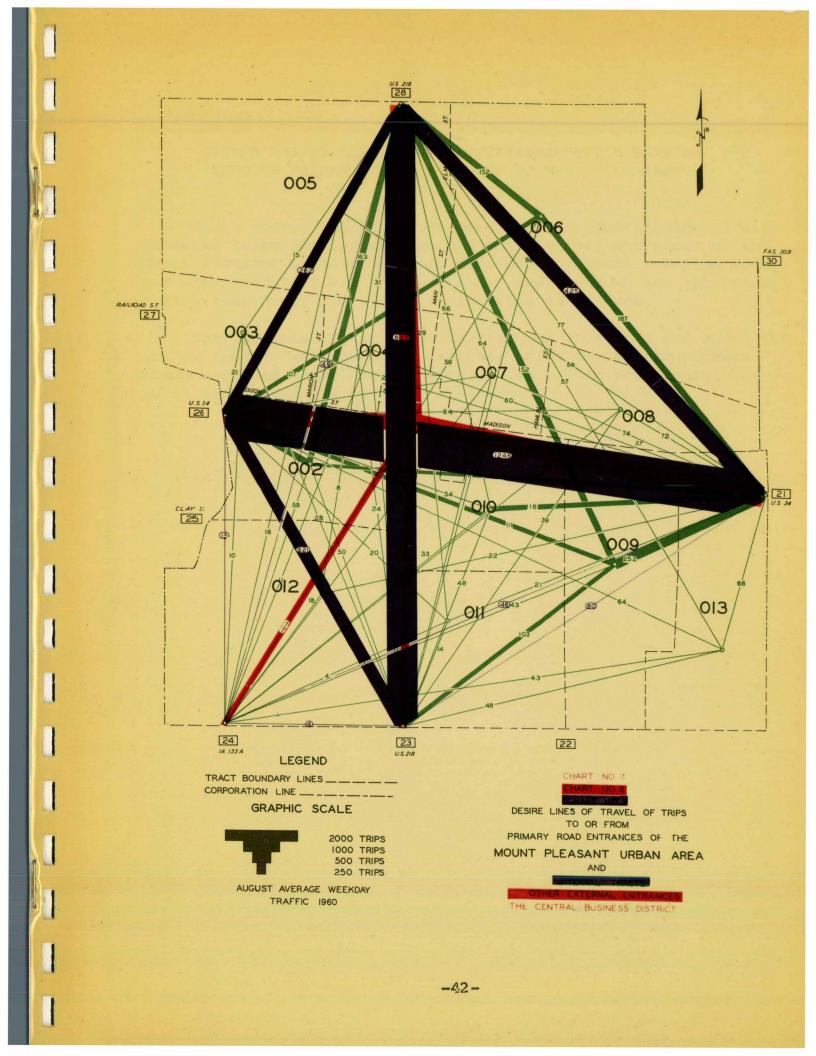
EXTERNAL DISPERSION

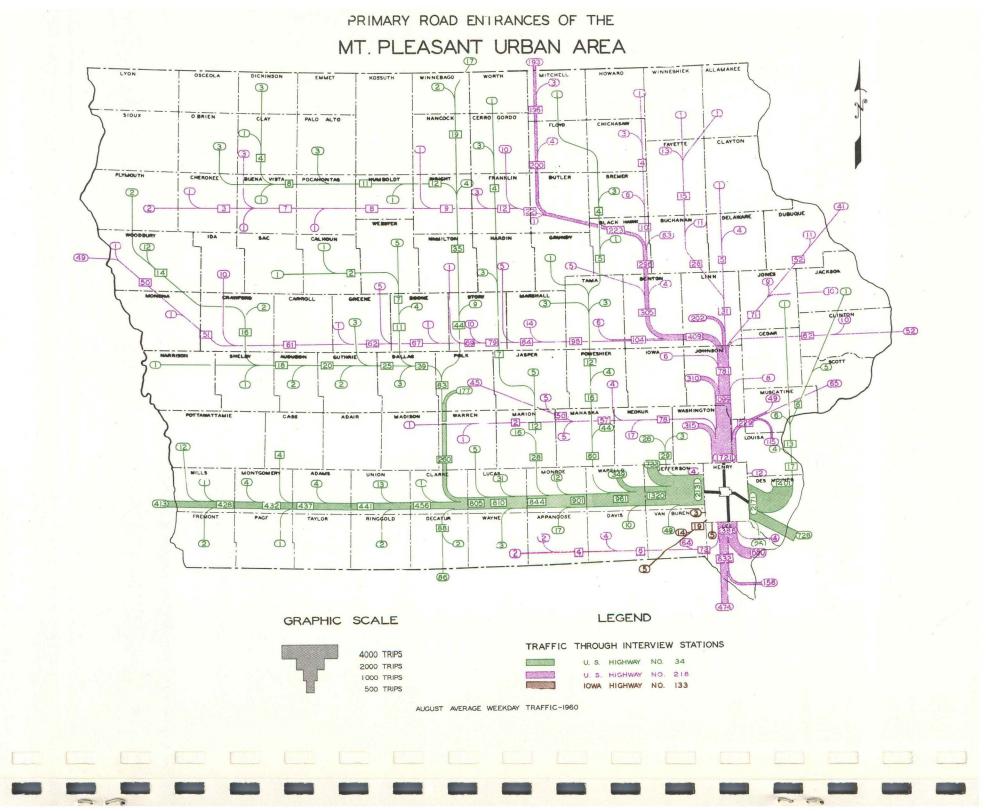
| STATION | VOLUME | PERCENT | STATION | VOLUME | PERCENT |
|---------|--------|---------|---------|--------|---------|
| 21 | 425 | 13.86 | 26 | 262 | 8.55 |
| 23 | 822 | 26.81 | 28 | | |
| 24 | 49 | 1.60 | | | |
| | | | TOTAL | 1558 | 50.82 |



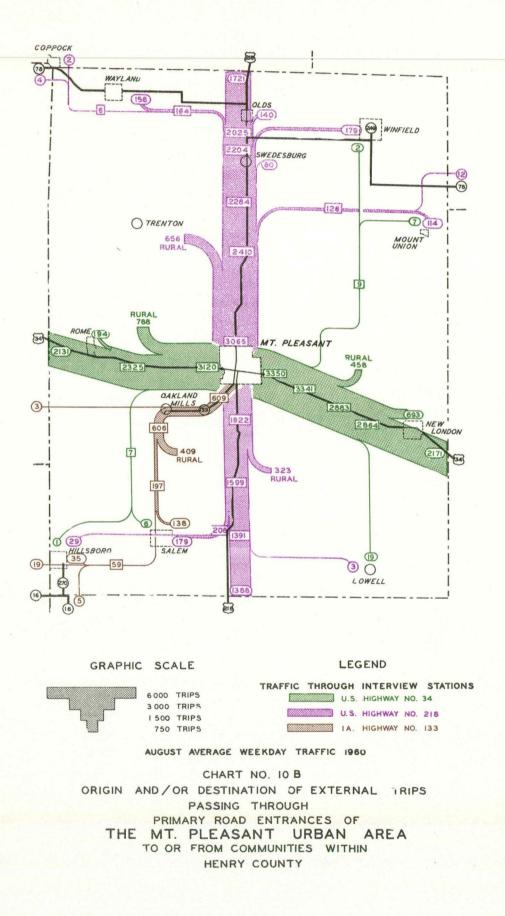
DESIRE LINE CHARTS

The following desire line charts illustrate desired routes of travel between external stations, and between external stations and internal tracts without regard to existing streets or highways. These charts graphically illustrate the travel desires of motorists and frequently point out the need for improvement of existing routes or construction of new ones to satisfy the demands of traffic.





-4.5-



| | Origin or | U.S. 34 East | | | . 218 uth | | a 133 thwest | U.S We | . 34 st | U.S. 218 North | | | |
|---|-----------------|-----------------|--------|------------|-----------------------------------------|-----|-----------------|-----------|------------|-------------------|---------|--|--|
| | Destination | NO. | % | NO. | % | NO. | % | NO. | % | NO. | % | | |
| | Coppock | | | | | | | | | 2 | .06 | | |
| | Hillsboro | | ÷ .1 | 29 | 1.51 | 35 | 5.75 | l | .03 | | | | |
| | Lowell | 19 | .57 | 3 | .16 | | in the | | | | 2 1 2 2 | | |
| | Mt. Union | 7 | .21 | | | | | | | 114 | 3.72 | | |
| | New London | 693 | 20.68 | | | | | | | | | | |
| | Olds | | | | | | | | | 140 | 4.57 | | |
| | Rome | | | | | | | 194 | 6.22 | | | | |
| | Salem | | | 179 | 9.31 | 138 | 22.66 | 6 | .19 | | | | |
| | Swedesburg | | 6 | T 1 | • • • · · · · · · · · · · · · · · · · · | - 3 | | | | 80 | 2.61 | | |
| | Wayland | | ės, | | , ÷ , ¥ | | | | | 158 | 5.15 | | |
| | Winfield | 2 | .06 | | | | | | | 179 | 5.84 | | |
| | Total to towns | 721 | 21.52 | 211 | 10.98 | 173 | 28.41 | 201 | 6.44 | 673 | 21.95 | | |
| | Rural Henry Co. | 458 | 13.67 | 323 | 16.81 | 409 | 67.16 | 788 | 25.26 | 656 | 21.39 | | |
| 1 | Other Counties | 1443 | 43.08 | 756 | 39.33 | 22 | 3.61 | 1615 | 51.76 | 1402 | 45.73 | | |
| | Out-of-state | 728 | 21.73 | 632 | 32.88 | 5 | .82 | 516 | 16.54 | 335 | 10.93 | | |
| | Grand Total | 3350 | 100.00 | 1922 | 100.00 | 609 | 100.00 | 3120 | 100.00 | 3066 | 100.00 | | |

DISPERSION OF EXTERNAL TRIPS PASSING THROUGH PRIMARY ROAD ENTRANCES OF MOUNT PLEASANT

The above chart shows the dispersion of 1960 August average weekday traffic which passed through the five primary road entrances of Mount Pleasant.

INTERPRETATION OF APPENDIX TABLE 1

The following table shows a compilation of 1960 August average weekday traffic for Mount Pleasant.

Appendix Table 1 shows the directional movement of external trips to, from, and through Mount Pleasant. Tract or station origin may be found in the vertical columns along either side of the sheet. Tract or station destination may be found in the horizontal columns across the top or bottom of the sheet. In table 1, it will be necessary to add origins to destinations in order to determine the number of trips between two points. Appendix Table 1

Origin and Destination of Trips Entering or Leaving The Mount Pleasant Urban Area (August Average Weekday Traffic 1960)

| | | <u> </u> | | | | | | | | | DF | STI | NA- | TIO | N | | | | | | - | | |
|---|--------------------------------|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------------------------|-----------------------|-----------------------|-----------------------|---------------------------|----------------------|-----------------------|-------------------|----------------|------------|
| | | | | | 1 | | | | | | | | | | | | | | | | | | |
| | TRACT | O Central Business District | 002 | 003 | 004 | 005 | 006 | 007 | 003 | 009 | 010 | 011 | 012 | C Mèntal Health © Institute | Mt. Pleasant Total | 22 U.S. 34 17 East | 2 U.S. 218 6 South | 2 Iowa 133 6 Southwest | 22 U.S. 34 0 West | 4 U.S. 218 8 North | External Total | Grand Total | Tract |
| | 001 C.B.D. | | | | | | | | | | | | _ | | | 271 | 107 | 80 | 227 | 261 | 946 | 946 | 001 |
| | 002 | | | | | | | | | | | | | | | 56 | 22 | 33 | 86 | 78 | 275 | 275 | 002 |
| | 003 | | | | | | | | | | | | | | | 13 | 11 | 5 | 15 | 10 | 54 | 54 | 003 |
| | 004 | | | | | | | | | | | | | | | 26 | 8 | 3 | 24 | 13 | 74 | 74 | 004 |
| | 005 | | | | | | | | | | | | | | | 25 | 14 | 8 | 29 | 60 | 136 | 136 | 005 |
| | 006 | | | | | | | | | | | | | | | 86 | 28 | 34 | 53 | 74 | 275 | 275 | 006 |
| | 007 | | | | | | | | | | | | | | | 38 | 8 | 10 | 49 | 33 | 138 | 138 | 007 |
| | 008 | | | | | | | | | | | | | | | 38 | 19 | 7 | 37 | 41 | 142 | 142 | 008 |
| | 009 | | | | | | | | | | | | | | | 117 | 41 | 13 | 51 | 75 | 297 | 297 | 009 |
| Z | 010 | | | | | | | | | | | | | | | 59 | 25 | 17 | 33 | 43 | 177 | 177 | 010 |
| 5 | 010 011 012 | | | | | | | | | | | | | | | 7 | 7 | 1 | 5 | 12 | 32 | 32 | 011 |
| a | 012 | | | | | | | | | | | | | | | 12 | 10 | 14 | 18 | 6 | 60 | 60 | 012 |
| 0 | 013 Mental Health Institute | | - | | | | | | | | | | | | | 29 | 26 | 25 | 33 | 31 | 144 | 144 | 013 |
| | Mt. Pleasant Total | 1.000 | | | | | | | | | | | | | | 777 | 326 | 250 | 660 | 737 | 2750 | 2750 | Tot. |
| | 721-U.S. 34 E. | 252 | 44 | 11 | 34 | 31 | 81 | 36 | 34 | 135 | 57 | 14 | 10 | 37 | 776 | | 34 | 24 | 612 | 203 | 878 | 1654 | 721 |
| | 723-U.S. 281 S. | 113 | 28 | 17 | 7 | 10 | 38 | 16 | 20 | 62 | 23 | 7 | 6 | 22 | 369 | 46 | | 2 | 150 | 452 | 650 | 1019 | 723 |
| | 724-Iowa 133 S.W. | 83 | 26 | 5 | 8 | 8 | 25 | 14 | 5 | 30 | 16 | 3 | 4 | 18 | 245 | 22 | 2 | | 8 | 23 | 55 | 300 | 724 |
| | 726-U.S. 34 W. | 226 | 89 | 6 | 21 | 18 | 54 | 39 | 27 | 60 | 21 | 15 | 9 | 31 | 616 | 634 | 171 | 7 | | 133 | 945 | 1561 | 726 |
| | 728-U.S. 218 N. | 293 | 85 | 5 | 18 | 60 | 78 | 31 | 36 | 77 | 43 | 17 | 2 | 26 | 771 | 217 | 370 | 26 | 129 | | 742 | 1513 | 728 |
| | External Total | 967 | 272 | 44 | 88 | 127 | 276 | 136 | 122 | 364 | 160 | 56 | 31 | 134 | 2777 | 919 | 577 | 59 | 899 | 816 | 3270 | 6047 | Ext |
| | Grand Total | 967 | 272 | 44 | 88 | 127 | 276 | 136 | 122 | 364 | 160 | 56 | 31 | 134 | 2777 | 1696 | 903 | 309 | | 1553 | 6020 | 8797 | Grd Tot |
| | Tract | 001 | 002 | 003 | 004 | 005 | 006 | 007 | 008 | 009 | 010 | 011 | 012 | 013 | Total | 721 | 723 | 724 | 726 | 728 | Ext. Tot. | Grd. Tot. | |

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