

REPORT OF DEPARTMENT OF TRAFFIC AND TRANSPORTATION
CITY OF MIAMI, FLORIDA
FOR FISCAL YEAR 1946-1947

ORGANIZATION

At the start of the last fiscal year we had been operating as a Division of Traffic Engineering in the Department of Public Safety for a period of six months. At that time we had a staff of four persons, handling only the traffic planning functions.

On February 14, 1947, our status was changed by ordinance to the Department of Traffic and Transportation. This change was made necessary by the increase in the scope of our activities which had been expanded to include general supervision of the mass transportation program and the installation of traffic signs and pavement markings. This latter function had been formerly handled by the Police Division of the Department of Public Safety.

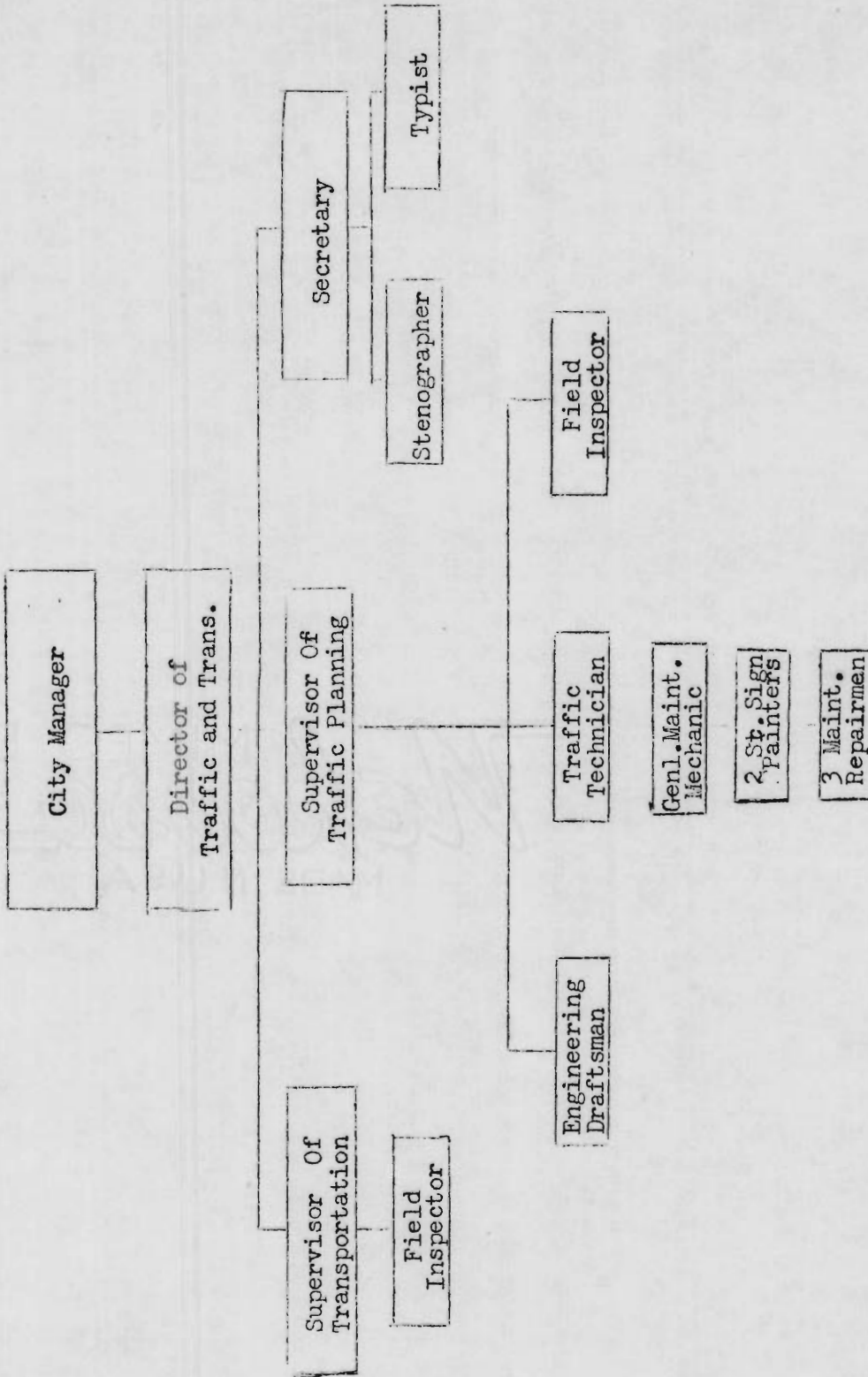
The organization of this Department is shown in the organization diagram that is included as a part of this report. To handle the expanded functions, the Department personnel had been increased to thirteen at the end of the year, including five who were transferred to the Department with the signing and marking functions.

ACTIVITIES

Although the activities of the two Divisions of the Department are at times quite closely related, they will be discussed separately here to show the functions independently.

DIVISION OF TRAFFIC PLANNING

The functions of this Division are to investigate traffic conditions, problems, and trends, to plan measures for improving trends, to plan measures



for improving traffic movements and access to destinations, to plan parking regulations and off-street facilities, to determine the need for control devices and specify the equipment and operation, to analyze accidents and develop preventive measures, to review street plans for determining their adequacies for traffic safety and capacity, and to anticipate the needs for future traffic facilities of various kinds. In addition, all of the labor of installing and maintaining traffic signs, pavement markings, and parking meters is performed by this Division or under its direction. The following are the more outstanding accomplishments of this Division during the fiscal year 1946-47.

1. During the fiscal year a total of 1,180 complaints and requests were investigated and handled. These included treatments of many types of traffic problems, some affecting the movement or accommodation of many thousands of vehicles and pedestrians daily in street intersections or blocks. At the other extreme were many requests for treatment of problems affecting access to local properties by a very limited number of vehicles. In dealing with these requests and complaints a policy of careful investigation was followed to determine the exact character of each problem and the most practical solution for each. Measures for preventing accidents and reducing congestion were given highest priority in the handling of these requests and complaints. Consequently, when there was competition for the attention of our personnel and the use of our facilities, between the larger projects involving safe and convenient movement of thousands of vehicles and minor ones involving access to individual properties, we had to give the first attention to the former. That was especially true during the seasons of heaviest traffic when streets were filled to capacity and measures for getting the greatest number of vehicles or pedestrians to their destinations safely and efficiently were imperative.
2. When serious congestion dictated the need, one way restrictions were established west-bound on S.W. 1st Street between 1st and 2nd Avenues, north-bound on S.E. and N.E. 2nd Avenue between S.E. 2nd Street and

N.E. 5th Street, and south-bound on N.W. 1st Avenue between 1st Street and Flagler Street. All of these restrictions contributed materially in reducing congestion in the Central Business District.

3. In cooperation with the Little River Businessmen's Association a survey was made of parking needs in that business district. As a result seven off-street parking lots with a total capacity of 700 vehicles were made available to the public for free parking. Left turns were prohibited at N.E. 2nd Avenue and 79th Street during the winter season. Business houses reported substantial increases in business as a result of the easier access to their properties made possible by these measures.
4. Similar studies were made of off-street parking requirements in the Allapattah Business District in cooperation with the Allapattah Businessmen's Association. That organization made arrangements for four acres of off-street parking facilities.
5. Somewhat more limited assistance was rendered to the Coconut Grove business district, but the business houses of that area took similar steps in getting off-street parking facilities available and used by the parkers in that vicinity.
6. A comprehensive street parking survey was made of the downtown business district and substantial changes were made in the character and distribution of parking regulations to reduce interference with moving traffic in the most constricted areas and to provide more rapid turnover in the use of parking spaces in other downtown sections where parking could be permitted. In conjunction with this, traffic lanes were marked on all of the major streets in the Central Business District to show drivers how to make best use of these streets for accommodating maximum traffic.
7. After the State Legislature enacted legislation enabling the City to own and operate off-street parking lots, a comprehensive survey of the application of this legislation to the conditions in Miami was started. This survey resulted in a comprehensive plan for operating such off-street

facilities, with recommendations concerning their distribution, type, and method of financing, completed early in the fiscal year 1947-1948. At the time that this report is released, the plan is being studied by the Parking and Traffic Improvement Committee of Miami, with special reference to financing.

8. A survey of off-street parking requirements for city owned vehicles was made and arrangements were completed with a parking lot operator near the Court House for the parking of such vehicles in his lot. This has resulted in releasing considerable on-street parking space for other vehicles.
9. Considerable assistance was given in the planning of off-street parking facilities for Jackson Memorial Hospital.
10. A study was made of traffic and parking conditions around Burdine Stadium in connection with events held there. Taxicab and bus loadings were revised and parking was prohibited on certain streets. At the time of the release of this report a complete reconditioning of the parking signs in this area is being done, owing to the necessary cancellation of an order for new signs.
11. Plans were made for new parking meters to be installed to permit two hour parking on Biscayne Boulevard between S.E. 2nd Street and N.E. 5th Street. These meters have since been installed.
12. A general survey of traffic signal operation was made and steps were taken for retiming and synchronizing these. Several new timing devices were ordered in March, 1947 to establish such synchronization, but delivery had not yet been made at the time of release of this report.
13. Studies were made of the need for traffic signals and the appropriate types of installation and operation at N.E. 2nd Avenue and 36th Street, N.W. 1st Avenue and 5th Street, N.W. 7th Avenue and 5th Street, W. Flagler Street and 17th Avenue and S.W. 1st Street and 17th Avenue. Signals were ordered for all of these locations in March but deliveries have not yet been made. These installations will be of the

most modern type of post mounted signals to provide better visibility to both drivers and pedestrians and to reduce the dangers of storm damage that are presented by the cable suspended signals that have been used elsewhere in the City.

14. A comprehensive plan for channelizing and signalizing the new intersection of 26th Road and Brickell Avenue, forming the gateway to the new Rickenbacker Causeway, was prepared, ready for the ordering of the necessary signals and construction of the channelization upon approval in the 1947-48 budget.
15. Observations were made of interruption of street traffic by unnecessary openings of bridges over the Miami River for the passage of small craft with outriggers and other projecting parts which could be hinged. Recommendations were made for legislation to prohibit demands for such unnecessary openings and enforcement has been applied.
16. Through cooperation of the F.E.C. Railroad the schedule of a train that stopped daily for express at 79th Street Depot, was changed to avoid interference with the heavy winter traffic on that street at peak hours.
17. Several observations were made of the blocking of street traffic by trains at railway crossings, preliminary to discussions with railroad officials concerning the reduction of such delays. These had not yet been completed at the end of the fiscal year. However, various steps for correcting these practices have from time to time been arranged with F.E.C. officials through conference.
18. To determine the winter traffic trend, the second of a series of annual 24-hour traffic counts at the S.E. 2nd Avenue bridge was conducted on February 17, showing 16% more traffic than during the corresponding period a year before. In addition, a quarterly count has been inaugurated at E. Flagler Street and 1st Avenue, the first of these being made in May, 1947.

19. Preliminary to a complete survey of stop signs and markings, a tentative through street plan was prepared. However, owing to the inability to obtain stop signs for post mounting, the adoption of this plan by the City Commission has not yet been recommended by this Department. After this action is taken the remainder of the stop sign survey will be conducted, basing the need for such signs on observations of view obstructions. The purpose of this survey is to reduce to a minimum the number of such locations so that they may be adequately marked with post mounted stop signs for permanent and unmistakable warning to stop.
20. Extensive use is made of accident records in studying traffic problems. An accident spot map is maintained to show the distribution of accidents over the city and collision diagrams are prepared for visualizing the accident experience at individual locations.

DIVISION OF TRANSPORTATION

The recognized functions of the Division of Transportation are the checking of the adequacy of bus, taxicab, and for-hire vehicle service, the development of measures for operating improvements, the determination of best routings and terminal, zone, and stand locations, and the coordination of transportation with other traffic, the investigation of complaints concerning quality and quantity of service, determination of the need for expanded service, and the checking of conformance with franchises and permits.

The staff of this Division, consisting of the Supervisor of Transportation and a field inspector, has engaged in a comprehensive program of observing conditions and practices, determining the need for and location of various facilities, and working with various operating companies rendering such service to improve their practices in the interest of better service. The following are the major activities of this Division during the fiscal year.

1. A report entitled "Mass Transportation Survey, Part I" was published, dealing with improvement that could be made in the service of the Miami Transit Company without affecting the routing or control of other traffic. This dealt mainly with operating practices outside of the Central Business District.
2. A comprehensive study was made of transportation problems in the downtown area resulting in measures that reduced bus left turns 51% and total bus-blocks of operation in the downtown area 31%. This effected a substantial reduction in congestion on downtown streets.
3. A common terminal for inter-city bus operations was established on S.E. 3rd Avenue between Flagler and 2nd Streets. This change reduced the number of complaints from persons having to walk great distances to board other inter-city busses. This new terminal was within 100 feet of a Miami Transit terminal from which seven bus routes operated.
4. Arrangements were made for the last sight-seeing bus stand to be removed from the city streets. The Florida Transportation Company removed its terminal where tickets were sold from the bus standing in a special zone that had been provided for it, to an off-street location. The Red Adams Bus Line which had an off-street ticket office was instructed to find suitable quarters when N.E. 2nd Avenue was restricted to north bound traffic. This operation has been moved to E. Flagler Street and 3rd Avenue with an off-street ticket office and only sufficient loading zone space for immediate and continuous loading or unloading of busses.
5. Through a conference with representatives of Negro organizations, complete agreement was reached on shifting the downtown terminal for bus routes 20, 21, and 24 to a location on the west side of the F.E.C. tracks, to reduce the extreme delays that had resulted from two crossings of the tracks one block apart. The results have been extremely satisfactory since these routes which formerly had the most serious delays are now among the best in their performance records, according to Miami Transit Company officials.

6. A comprehensive plan for the rerouting of busses during parades in the downtown area was developed. Formerly a great deal of confusion existed in rerouting busses upon short notice of parades, but this new plan can be put into effect on a notice as short as one hour.
7. The Supervisor of Transportation visited six western cities to study their mass transportation problems and operating practices. The result of these studies was published in a report entitled "A Brief Review of Mass Transportation in Dallas, San Diego, Los Angeles, Portland, Seattle, and Denver".
8. A questionnaire survey was made of bus purchases and deliveries in 24 cities in all parts of the country to compare them with bus deliveries in Miami. The survey indicated that the deliveries in Miami have been better than the average of the 24 cities.
9. A series of weekly conferences with Miami Transit Company officials and of semi-monthly conferences with taxicab fleet operators was initiated during the fiscal year. As a result of these cooperative relations, many major improvements were inaugurated.
10. Following the reestablishment of skip-stop bus operations on recommendation of this Department, a complete survey was made of stop locations, resulting in many revisions to space the stops between 400 and 800 feet apart and to stagger them in both directions for better distribution of service to all passengers.
11. Simultaneously with the reinauguration of the skip-stop plan, express service was established on Biscayne Boulevard between the downtown area and 36th Street and on W. Flagler Street between the downtown area and 27th Avenue. This express service on routes 6, 11, 14, and 16 operates during rush hour periods and provides an improved service for those persons living beyond 36th Street to the north and 27th Avenue to the west. Plans are being made for estension of this service to other routes, particularly on S.W. 8th Street to 27th Avenue and possibly on N.W. 7th Avenue to 36th Street.

12. This Division participated in the planning or review of proposals for revision or extension of 10 Miami Transit Company bus routes outside of the downtown area, to serve areas where population changes have occurred.
13. A study was made of the feasibility of permitting double deck busses on the Miami Beach Railway Company's lines, but it was found that the cost of raising several traffic signals would be substantial and it was felt that such change would not be justified in view of the need to change from substandard center suspended to standard corner post mounted signals later.
14. Periodic observations of bus conformance with schedules were inaugurated at four key points. These checks, taken in February, May, August, and November of each year, are made for evaluating bus service. Reports are made to the City Manager on these observations, for decision on appropriate measures by the City Commission.
15. A plan for evaluating service performance was worked out with Miami Transit Company officials. This entails short period observations of all bus routes in the City during morning and evening rush hour periods. Each route is given a grade based on on-time performance, to point out to the Miami Transit Company schedule discrepancies, need for reprimands, and need for augmented supervision.
16. A new method of identifying "Don't Park" bus stops to differentiate them from ordinary loading zone or other "Don't Park" areas was instituted. Many truck drivers who were receiving summons for parking in bus zones claimed that they thought these bus zones were truck zones due to the curbing being painted yellow, the same color as regular loading zones. Each "Don't Park" bus zone in the entire city is being painted orange to identify it more clearly.
17. Based on observations in the Parking and Transportation Survey a complete revision and reconditioning of taxicab stands in the downtown area

was made. This was done to decentralize taxicab operations and place stands in areas where there was greatest demand for such modes of transportation.

18. Through mutual agreement of all taxicab operators in this city a policy for cab stand use in the downtown area was established. In stands having four spaces or less, not more than one cab from one company is permitted at one time. On stands having more than four spaces not more than two cabs from one company are permitted at one time. Cab operators agree that these regulations have done much to solve their problems in this area.
19. Through the efforts of the Division 17 individual Negro cab owners are now formed into one association. This association disciplines members or their drivers for violation of the association's regulations or of traffic rules. It has improved the operation of Negro taxicabs materially.
20. Formerly, the Florida Railroad Commission issued "Certificates of Public Convenience and Necessity" for the operation of sight-seeing and race track busses in and around the Miami area without reference to the City of Miami for consideration of the effect on other traffic. Through the efforts of this Division arrangements have been made with the Commission whereby all applications for "Certificates of Public Convenience and Necessity" for services on the streets of Miami must be submitted to the Division of Transportation for recommendations as to routings before action is taken.

DEPARTMENTAL BUDGET

Owing to the expansion of this Department and the broadening of its functions in mid-year, the budget expenditures for 1946-47 and the anticipated requirements for 1947-48 are not directly comparable.

The expenditures of \$44,491.56 for the former fiscal year included \$3,816.54 of commitments for equipment and supplies that had not yet been delivered. They included,

also, sign and paint purchases for the last 4½ months of the year, after these functions were transferred to this Department.

For the full year 1947-48 a budget of \$81,569 has been approved. This does not include the cost of new traffic signal equipment and the maintenance and servicing of present signal equipment, because these functions are under another Department. However, all installations are made in conformance with specifications by the Department of Traffic and Transportation and details of operations are likewise specified by us,

TRAFFIC AND TRANSPORTATION PROBLEMS AHEAD

During the year and a half that this agency of traffic and transportation planning has been in operation, first as the Division of Traffic Engineering of the Department of Public Safety and then as the Department of Traffic and Transportation, many current problems have been handled. Many of these have been necessary for immediate relief from the acute problems of congestion and accidents. Some of the measures have been recognized to be temporary, designed to meet the immediate requirements with the facilities at hand until more comprehensive plans can be made and measures applied.

However, this Department recognizes some outstanding problems of traffic and transportation on which comprehensive long period planning is necessary. Some deal with regulations. Others will involve substantial physical improvement. Still others must come from commercial or private sources under public stimulation and promotion.

The following are some of the more outstanding problems that are recognized by this Department now. Some are susceptible to attack during the fiscal year 1947-48 and others will require consideration and study over longer periods. The solution must be based on past and predictable growth in area and population, changes in the commercial pattern, developments in local and long distance travel and transportation, and other developments that are now less predictable.

1. The present favorable trend in providing off-street parking and loading facilities for new business buildings should be accelerated by requiring all new buildings to be provided with adequate facilities. This should be extended to residential as well as commercial buildings outside of the very congested Central Business District where the problem is already so acute that relief must be obtained through application of the City's recently acquired authority to own and operate property for off-street parking.
2. To avoid the serious obstruction of traffic movement that now occurs when trucks stand at an angle with the curb for loading and unloading, particularly on narrow streets in congested locations, legislation is needed to require all new trucks purchased after some specified date to be equipped for side loading. Any exceptions to this type of loading should then be permitted only on special permit for each load.
3. As traffic becomes denser in the Central and other Business districts, agreements will become necessary with truck operating companies to confine all loading and unloading in such districts to the times when traffic is not at peak. This will reduce the interference with moving traffic at peak hours.
4. A central truck terminal will need eventually to be established to serve as a shipping and receiving point for loads that are shipped from or to various locations within the city. From there distribution can be made on trucking equipment better adapted to load and unload at eventual destinations.
5. The Department of Traffic and Transportation offers to the commercial vehicle fleets of Greater Miami its facilities for identifying most satisfactory routes for vehicle movement. This assistance deals with the avoidance of high accident locations and centers of congestion. It is felt that this can become an increasingly valuable service.
6. The use of stop signs and stop pavement markings should be materially reduced. It is proposed to establish a system of through streets along which all intersections will be protected by stop signs, these streets to be designated by ordinance. Then,

some individual intersections with such serious view obstructions that stops are required from one or more directions for safety will also be protected. A program of substituting post mounted stop signs for stop markings painted on the pavement is desirable because of easier and cheaper maintenance. Eventually, stop markings should be used only where they are needed to supplement post mounted signs.

7. Starting with the installation of only post mounted traffic signals when new locations are signallized or replacements are made and later changing from center suspended to post mounted signals at all locations that are now signallized, a complete transition should eventually be made. The present type of signals is difficult to see under many circumstances but the new type will be more readily visible in all locations and will be less susceptible to damage in severe storms. The complete change may extend over a period of years.
8. The installation of new traffic signals on a priority basis, involving traffic volumes, accident experience, and pedestrian volumes, should result in considerable expansion of the present signal system now totaling 147 locations. The application of these warrants may result in the removal of signals from certain locations where they may not only be causing delays because of inadequate traffic to warrant them but they may also be unsuccessful in preventing accidents.
9. The present so called limited progressive system of approximately 35 inter-connected traffic signals in the Central Business District can be made considerably more efficient by installing controllers that will add materially to the flexibility of operation. This change is needed for further improvement in the movement of traffic through this District, particularly at the peak hours and during the winter seasons.
10. Street lighting in many sections of Miami is seriously inadequate for night traffic safety. A substantial program of traffic safety lighting is needed on important streets having considerable numbers of pedestrians. This should be applied as rapidly as possible on a priority basis, starting first with

those streets having the highest pedestrian accident experience, since pedestrians are the greatest beneficiaries from improved street lighting.

11. More exits west bound from the Central Business District are needed. These can be made possible only by removal of the F.E.C. Railroad Depot from its present location or through elevation of the tracks and depot above street level, and through the provision of more bridges across the Miami River.
12. Until the F.E.C. Station is removed from or elevated at its present location and N.W. 2nd, 3rd, and 4th Streets can be extended through the present railroad property, studies will be continued to determine the character and cause of traffic delays resulting from long passenger trains blocking N.W. 1st and 5th Streets. Discussions have already been held with local F.E.C. representatives concerning operating problems and practices which it is felt can be corrected to reduce delays.
13. When a system of through streets has been established with stop sign or traffic signal protection at all intersections, a revision of the City's speed regulations will be desirable. It is possible that the present 30 mile speed limit can be increased at certain locations when comprehensive studies of speed practices can be made and adequate protection is provided, but it is obvious that a lower speed limit, probably 25 M.P.H., should be the maximum in all residential streets that are not a part of the through street system. The relatively short distances between points where stops will be required for the preferred streets and the danger of colliding with pedestrians and/or other vehicles on these intermediate streets, makes this desirable. The city cannot be expected to provide protection for such high speeds on these streets as on the protected through streets.
14. The present legal restrictions on view obstructions at street intersections are inadequate to combat this common cause of accidents at speeds that are now common on Miami streets. The restrictions need to be considerable more rigid concerning view obstructions by hedges, shrubs, and trees, especially on vacant lots.

15. To provide another north-south cross town thoroughfare, 12th Avenue should be made continuous from S.W. 22nd Street to the north City limits. This should provide substantial relief from traffic on N.W. 7th and 17th Avenues and easier access from the north to the area around Burdine stadium.
16. To provide relief from the extremely heavy traffic on 79th Street, particularly during the winter season, 76th Street should be opened across the F.E.C. Railroad as soon as arrangements can be completed. Later, this street should be developed farther west, as conditions warrant.
17. For more uniform capacity, 17th Avenue should be widened at the critical points, particularly between Flagler Street and the Miami River. This will become particularly important when traffic signals are installed at the intersections of 17th Avenue with W. Flagler Street and S.W. 1st Street and when the use of these intersections by through traffic on 17th Avenue is thus encouraged.
18. To reduce the high concentration of traffic on N.E. 13th, 15th, and 79th Streets, an additional causeway in the vicinity of 36th Street, connecting Miami and Miami Beach, would be highly desirable. The present causeways and their connections with streets in Miami are now loaded to capacity at times of peak traffic.
19. Owing to the capacity loads that streets crossing the Miami River are now required to carry during the hours of peak traffic, the opening of the bridges across the river should be restricted during such times.
20. A bus belt line along 27th Avenue and 54th Street between S. Bayshore Drive and Biscayne Boulevard should be established. This is needed to provide some local service that is not now available and some express transfer service between lines now having transfer points only in the Central Business District. When this plan was initially recommended by this Department in 1946, our study indicated that at least 6,000 transfers could be shifted from the downtown area to this belt line, many with shorter distances between transfer points.

21. More and improved express service should be provided on Miami Transit Lines radiating from the Central Business District. All busses on these lines that are now affected by express service should provide local service from the outer terminals to the point where express service starts and then express on into the Central Business District. The local service in the express portions should be furnished by tripper busses between the downtown and the outer express terminals.
22. A through bus line should be established between the four major negro residential districts, to provide direct service between these population centers. This should reduce the amount of transferring in the Central Business District between the existing lines serving these areas and should facilitate travel between them and other parts of the city. Express service should be provided between these centers, stopping only at transfer points en route.
23. More definite controls of Miami Transit Company bus load factors should be established to avoid excessive loads, particularly at the peak hours. These controls are essential to safe and comfortable riding. They can be facilitated by closer conformance with schedules through better supervision of operations and through the application of more busses when they are available.
24. This Department is promoting the co-operation of all interurban bus lines in the establishment of an off-street terminal in a proper location to be easily accessible to passengers and to be easily reached by busses from streets that are adapted to such traffic.
25. A complete review of the jitney operations is proposed, to improve the service and the operating practices for reducing congestion and increasing safety. This study will also include the propriety of the locations of the present terminals.
26. A complete review of the possibilities of connecting certain lines of the Miami Transit Company that operate in different directions from the

Central Business District, will be made for reducing the number of transfers between lines, and, likewise, for reducing the number of bus turns that are necessary in the Central Business District. This study will include comparison of the operating characteristics of the different lines that may be so considered, including sizes of busses used, headways on which they are operated, and the origins and destinations of passengers.

27. Efforts are being made toward decentralization of taxicab operation, with more cabs using outlying stands and fewer using those that are located in the downtown area.