CHAPTER 7:

Route planning, scheduling and general observations:

There is some amount of truth even in the exaggerated statement that if a bus service is run anywhere and at any time, a few passengers can be easily and certainly picked up. However, the bus services in various cities have not come up as happenings by chance. The various routes on which bus service is rendered are the product of much planning and deliberate calculation as to the prospects of profitable operations or at least the possibility of covering the cost of operations involved.

Planning of route is never precise and the only one reliable method of ascertaining whether a proposed route is economically viable or not, is to experiment with the route. Habits of population cannot be generalised and easily tabulated and the element of chance enters into the experiment with a new route. In some cases available statistical and other information on the density and distribution of population, areas having a "pull" may be available so that inferences as to the probable demand for bus service can be drawn. However, the broad approach to the subject of route planning is always empirical. One can justify or otherwise the operation of bus service on a particular route only on the basis of available evidence and experience.
Deliberate and systematic planning of route is facilitated if the available information enables in advance determining of commercial success of the proposed bus operation on a particular route. However, when town planning authorities fail to consult transport interests at the earliest stage and every stage of town planning any planning regarding provision of transport facilities on various routes is difficult.

Route planning in Poona City:

In Poona City, which is passing through a phase of rapid urbanisation in industrialisation there has been a considerable shift in occupations and job locations. The absence of a comprehensive outlook towards regional planning has greatly hampered balance territorial development. Rational decisions in respect of locations of population and job centres, services, amenities and utilities etc. in a well thoughtout manner are immediately necessary to prevent sporadic, adhoc and mutually inconsistent developments. Haphazard development of a town or City is an main obstacle to systematic planning of routes, for bus service.

In the absence of development plans and town planning schemes planning of routes for providing prompt bus service is impossible, as the shape and general lay out of a new or rebuilt town is a matter of vital consequence to the bus operator. Directions and volume of passenger movement are to be determined by the locations of shops, offices
and factories in relation to the residential areas. Adequacy of roads properly maintained, availability of suitable turning points and pull-in for stopping and parking vehicles are of vital importance and should be given a sufficient forethought. Sites for passenger shelters, bridges, which facilitate sufficient clearance must also be considered.

The above points arise in surveying and planning of routes for providing bus service in Poona City. For route planning and preparation of approximate schedule of stage points and timings a large scale map generally would suffice. The average speed has to be fixed in relation to vehicular traffic on the route, estimated volume of bus traffic and the nature of the route—whether it is hilly, wide, fortuous or flat and straight and whether it is properly repaired and maintained.

On the basis of approximate schedules, detailed test of the route has to be conducted. Sites have to be chosen for the erection of bus stops, and shelters. Places where gathering of passengers does not create nuisance and danger are suitable for locating the picking up and getting down point. Positions which are too near the road junction have to be avoided so as not to interfere with the main traffic flow. At the far end of the route a convenient turn-round must be decided upon.
Until operations on a particular route are actually started it is not possible to judge the places where occupancy rate increases or declines or where many people alight. It is only by observing the operations on various routes that a shrewd guess can be made about the propriety of particular route.

The above principles should have been borne in mind while planning of different routes in Poona but it appears from the facts as they are that such a systematic and scientific approach was not adopted in planning of routes in Poona. From the beginning some routes were started, operated, continued when they were found profitable, and discontinued when at a loss. Further, new routes were introduced as and when the need arose. Thus route planning in the true sense of the term had been totally absent. Emergence of different routes was sporadic. The main reason perhaps for the absence of systematic efforts towards route planning was that the town planning itself was not undertaken systematically. A systematic plan for development of town provides a basic framework for systematic planning of routes. In the absence of such a plan methodical planning of routes has not taken place. Systematic route planning is difficult also when such complementary development as new roads, maintenance of roads, facilities for acquiring land for the construction of depots or control points etc. do not take place.
The general administration reports give account of how different new routes were started and how diversions or extensions of the routes were made from year to year. This implies that routes on which the Undertaking has started operating have emerged on the basis of personal guess work. The routes have been introduced to meet the increasing demand for mass transportation and to suit the convenience of the people.

Such a consumer oriented approach to route planning is of course desirable because the Poona Municipal Transport Undertaking is a public utility concern. Frequent diversions in the routes introduced from time to time is the result of inadequate route planning. Such a pragmatic approach towards route planning definitely serves the purpose for a short period and consequently the Undertaking is required often to make experiments with the new route. There is one more difficulty—once a route is started retreat is difficult. Inevitably the Undertaking is compelled to operate unprofitable routes because abandonment of a route entails public criticism.

*Project Report on "Schedules of Poona Municipal Transport and suggested remedies" contains a suggestion that proper surveys will help in determining the traffic potential

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of each route. The loading curves and waiting time surveys indicate load at a particular point and the waiting time of the passengers during different times of the day and schedules based on the information available from such surveys will be consumer oriented and hence most effective. They will not only fulfill the requirements of the travelling public but will also result in good earnings to the Undertaking. If the surveys reveal that at a certain time the passenger load on a certain route is low and the waiting time of passengers on some other routes is high, it is certainly be more profitable to switch some buses from the former type of route to the latter bringing thereby additional revenue.

On realising importance of such consumer oriented route surveys a *questionnaire for noting down observations on the working of different routes was prepared. The observations were made by my guide Dr.P.C.Shejwalkar and by me, after travelling on different routes. These observations are supplemented by suggestions from the people received in the form of answers to the questionnaire issued to them. These observations and suggestions pertain to introduction of new routes, starting of express bus service, possible and convenient diversions of some routes, construction of new bus stops, shelters, distance between the stops, conductors' behaviour, etc. The route-wise observations are as indicated below:

* A copy of the questionnaire prepared for Route observation, and that of the questionnaire issued to the people is attached at the end of the Chapter.
Observations on Routes:

Route No.1: Swar Gate to Tanaji Wadi
(Distance: 5.80 Kms.)

This route is crowded at both the starting point and terminus. The speed of the bus is reasonable and time required for the completion of the trip is 20 minutes. Bus with a seating capacity of 33 and eight standees operates on this route. Specific observation on this route are:

i) Buses on this route should ply every five minutes in the morning from 6.00 a.m. to 14.00 p.m. Thereafter at an interval of every 15 minutes.

ii) Sometimes the interval between the buses is too large and therefore it is suggested that the number of buses on this route should be increased. Four to six extra buses at the disposal of the starter are necessary at the Shivajinagar Station.

iii) Distances between the following stops is not reasonable:

a) Vasant Talkies and Mandai Stop (too long distance)
b) Shahu Chowk to Mandi---(---do---)
c) Swar Gate to Panch Howd (---do---)
d) Swar Gate corner to Swar Gate Stop (Short distance)

iv) A new stop should be constructed between Budhwar Chowk and Phule Market.

v) Bus stops on this route are not properly cleaned.

vi) Road is not sufficiently wide and sometimes undue time is required for the completion of the trip.
vii) Frequency of buses is irregular. Sometimes three to four buses immediately follow each other resulting into the number of empty trips and loss of revenue. This also increases waiting time.

viii) Following suggestions are received from some of the passengers: The management of the Undertaking is requested to examine the feasibility of implementing the suggestions:

a) Some trips from Swargate to Kirkee should be introduced on this route.

b) The bus from Swargate to Mukund Galli should ply via Mahadev temple.

ix) This route is used mostly by vegetable merchants, farmers, milk-men and workers.

The route is crowded and therefore, if frequency of buses is increased along this route, revenue prospects will definitely be bettered. The route passes through the crowded parts of the City and hence larger capacity buses cannot be used. This deficiency should be made good by introducing extra buses.

The people using the route are greatly inconvenienced because the timing of arrival and departure of the Poona Lonavla Local and those of the buses are not properly synchronised. It is suggested by the vegetable merchants in the Phule market that a direct express bus service from Shivajinagar Station to Budhwar Chowk is essential. It is observed that the passengers are required to alight from the bus at Shivajinagar Bus Stop whereas the bus is parked
at Shivajinagar Railway Station. People catching locals would be greatly conveinedced if allowed to alight from the bus at Shivajinagar Railway Station.

x) There is no light on the bus stop at Shivaji-nagar Railway Station.

Swargate to Dapodi:
(Distance : 11 Kms.)

This is a long route which covers important places like Shahu Chowk, Premier garage, Commissioner's Office, Marasi gate, Factory Hospital, Airkee Railway Station, Bopodi and Dapodi. The speed of the bus is reasonable and time taken for completion of the trip is 35 minutes. The present frequency of the buses is satisfactory.

Route No.2 : Vishrambag Wada to Dattawadi:
(Distance : 3.70 Kms.)

A bus which can accommodate 50 passengers in the peak hours plies on this route. The route is very much crowded. There is rush at all the stops. The speed of the bus is moderate. Other observations on the route are:

1) Frequency of the buses on this route is very low and therefore passengers are denied accommodation. There is rush at the stops at Vishrambag Wada (Starting point), Chitrashala Press, Alka Talkies, Dattawadi corner and Housing Society.

ii) Most of the stops on this route are not provided with shelters e.g. bus stop at Chitrashala Press and at Alka Talkies.
iii) Speed of the bus is reasonable. Speed is low when the bus plies through Sadashiv Peth whereas speed is more from Alka Talkies to Housing Society.

iv) There is need for introducing new stops between Housing Society and Dattawadi.

v) The distance between the stops indicated below is not reasonable:

   a) Chitrashala Press and Alka Talkies (short distance)
   b) Alka Talkies, Housing Society and Dattawadi stops are at long distance.
   c) As this route is crowded and used by women and school-going children, in the morning and evening the frequency of the buses should be increased. The buses should ply every ten minutes.

Route No. 3: Parvati Gaon to N.Tanaji Wadi
(Distance: 9 Kms.)

This is a moderately crowded route. Speed of the bus is satisfactory and time taken for completion of the trip is 20 minutes. Following suggestions are made in respect of this route:

i) Frequency of the bus is not satisfactory. It is suggested that buses should ply at an interval of 15 minutes.

ii) As the frequency is irregular, three to four buses follow each other and as a result some of them ply empty. Passengers have therefore unnecessarily to wait for the remaining trips.
iii) On this route, there is a rush at some stops like Parvati paitha, Laxminagar corner, State Bank colony, Parvati Darshan and Peshwe Udyan. It is suggested that the route should come through Sahakar Nagar No.2 near Dashabhuja Ganapati Temple. As a number of housing societies are coming up an attempt should be made to contact these societies.

iv) Some of the stops appear to be superfluous as they are situated near each other e.g. Ambil Udha Colony, Sanas Bungalow, Phikardas Maruti and Shanipar.

v) The distance between stops at Shanipar and Appa Balwant chowk is too long.

vi) Some of the passengers have complained that speed of the bus is low. However in view of the fact that the bus passes through the crowded parts of the City, and that road is not smooth, slow speed is inevitable.

vii) For the present a frequency of one bus half an hour appears to be reasonable. However in view of various housing societies coming up, occupancy rate on this route is bound to increase in future and as such frequency will have to be gradually increased, especially from 10.00 a.m. to 11.30 a.m. and in evening from 17.00p.m. to 19.00 p.m. It would facilitate school-going children and office goers.

viii) It is observed by some passengers that the conductors are not inclined to accommodate persons in spite of sufficient accommodation available in the bus in case of some trips in which occupancy rate is low.
Route No. 4: Swargate to Poona Station
(Distance : 19 Kms.)

This is one of the important, widely used and
profitable routes. Its coverage is also very wide. It
is a highly crowded route at all times. The speed of
the bus is reasonable and the time required for completion
of the trip is 30 minutes. The road is sufficiently wide
and smooth for maintaining the normal speed of 20 kilometers
per hour. The route starts and ends at strategic points.
The bus plying on the route has a capacity to accommodate
56 passengers including standees. Following are the
other important observations:

1) Taking into consideration the rush at peak and
off peak hours frequency of the bus should be increased.

2) Frequency of the bus is inadequate as well as
irregular. Three to four buses consecutively follow each
other when not necessary and this increases the frequency
of empty trips and people have unnecessarily to wait for
longer time. This is bound to happen. The timings in
respect of arrival and departure of the first bus on the
schedule, when not properly maintained, for the unexpected
reasons, must result into clustering of subsequent buses
at a particular point on a certain route. No route is an
exception to this kind of phenomenon. This crazy race of
buses with time, causes a discrepancy between the time at
which the bus is required by the passengers and the time
at which the bus is actually operating. Such superfluous
buses naturally run empty. The management should find out ways and means for remedying the situation.

iii) Extra buses should be provided on this route, from 10.00 a.m. to 11.00 a.m. and also in the evening. During the rush hours buses should be provided after every five minutes.

iv) On Sundays an express bus service should be started on this route.

v) Distances between the stops mentioned below were found unreasonable:

   a) Alka Talkies to Natraj Theatre (long distance) - a possibility of introducing an additional stop at the Central Bank corner or at Swarna Sahakari Bank at Deccan Gymkhana or Deccan Gymkhana Post Office should be examined.

   b) Distance between stops at Maharashtra Mandal and Sahitya Parishad, Sambhaji Park and Ghole Road, Sambhaji Park and Modern High School, Mira Bag, Swargate corner and Madiwale colony is commented by many as short. It is also suggested by many that the number of stops between Swargate and Alka Talkies should be reduced. However, in view of the fact that the route contacts important Petas this suggestion does not appear to be worth giving serious thought.

vi) It is suggested by many people that a double decker bus should be introduced on this route. Introduction of a double decker bus would certainly be a profitable proposition.

vii) Similar locations of stops on route No.4 and 35 create some confusion in the mind of the people. Arrangement may be made to segregate passengers travelling by these two different routes by slightly altering the locations of the stops on these routes.
The route is a profitable one and has tremendous revenue prospects and therefore every effort should be made to clear traffic load at rush hours. The shuttle service at peak hours from the S.P. College to Deccan Gymkhana should also be introduced. There is a need to have a bus-stop near the Cafe Good Luck in the Gokhale Chowk in the Deccan Gymkhana area.

The newly introduced route No. 42 to the Poona Railway Station from Swar Gate via Fergusson College Road will also act as a good supplementary feeder service to this route No. 4.

**Route No. 5 : Swargate to Poona Station via Padmavati :**
(Distance : 9.8 Kms.)

The route starts from Swar Gate and contacts places like Padmavati, Collector Office, Pragati Classes, Parvati Darshan School, Rasta Peth Education Society's High School, Ghorpuri Peth, Kasture Chowk and ends at Poona Station. It is a crowded route in the evening and time required for completion of the trip is 25 minutes. Other observations are:

1) Distance between stop at Gadikhana and Kasture Chowk appears short.

2) As the roads of this route are not sufficiently wide the speed of the bus is slow.

3) Buses from Padmavati to Poona Railway Station should be introduced at an interval of 20 minutes each for the convenience of people residing in the vicinity of Padmavati.
iv) It has been complained by some passengers that stops on this route are unclean and dirty.

**Route No.6 : Swargate to Poona Station :**
*(Distance : 7 Kms.)*

The route covers important places like Mukundnagar, P.&T.Colony, Power House, State Bank, Apsara Talkies. It goes to Mukundnagar Colony via Kirloskar Press. The time required for the completion of the trip is 25 minutes. A bus with seating capacity of 33 passengers and standees 8 is used on this route. Other observations on the route are as under:

i) Sheds are required on the stops at Zopadpatti, Apsara Talkies, Sonavane Hospital, Ramoshie Gate, Nana Peth and Rasta Peth Power House.

ii) Distance between stops at Karmaveer Bhaurao Corner and Mukundnagar, Mukundnagar and Maharshinagar, Maharshinagar and Culekdi appears to be short. The distance between Zopadpatti and Apsara Talkies appears to be long.

iii) Sometimes buses on this route ply one after the other without being useful to the passengers and at times they come very late.

iv) The speed of the bus on this route is more when it plies from Zopadpatti to Apsara Talkies and Culekdi to Zopadpatti. It is slow when it plies from Mukundnagar to Maharshinagar and Maharshi School.

v) There is no shed on Poona Station for bus route No.6.
Route No. 7: Swargate to Poona Station:
(Distance: 6.5 Kms.)

The route starts and ends at strategic points. The route contacts Railway Dock Yard, Mangalwar Peth, Kasba Peth, Pawale Chowk, Shanwar Wada, Ahilyadevi High School, Bhamu Vilas Talkies, Perugate, Anand Press, S.P. College and Gharpure Hospital. It is a crowded route and the speed of the bus is satisfactory. Other observations are:

i) Buses on this route ply irregularly.

ii) In peak hours the number of buses should be increased.

iii) As the roads of this route are not sufficiently wide the speed of the bus is slow.

iv) Distance between stop at Barne and Parge appears to be short.

v) It has been complained that passengers who are waiting on the stops on this route do not follow the line and stand in Que.

Route No. 8: Swargate Bus Stand to Shivajinagar Station:
(Distance: 10.7 Kms.)

The route starts from Swargate Bus stand contacting Sahakar Nagar No.2, Parvati Darshan School, Natu Bag, Appa Balwant Chowk, Saras Bag and reaches Shivajinagar Station. The bus used on this route has a capacity to accommodate 45 people including standees. As the route is crowded a bus with larger capacity will be required for clearing the traffic load. 35 minutes are required for the completion of the trip. Other observations are:
1) The route is crowded and the total number of buses allotted on this route falls short of the requirement.

ii) The bus on this route should ply along the approach road to Dashabhuja Ganapati temple and housing Societies in Sahakarnagar No.2

iii) Many people alight from the bus at Appa Balwant Chowk in the central part of the City.

iv) There is more rush at the stop on the curve at Sahakar Nagar No.2 where buses for route No.3 and 8 halt.

v) Stops on this route are located near each other.

vi) As the route is crowded extra buses should be provided on the route between 10.00 a.m. and 11.30 a.m.

vii) Frequency of buses on this route is not satisfactory and interval between two buses is uneven. Two or three buses follow each other and for the remaining hours the passengers have to wait for a long time. Moreover, buses which would ply from Deccan Gymkhana to Padmavati should be introduced on this route.

viii) As the new housing societies in Sahakar Nagar No.1 and 2 and Sahajeevan Society are coming up more people would need accommodation in the buses plying on this route and for the convenience of the passengers the conductors should be considerate in stopping buses at places other than those where the request stops are provided.
Route No. 9: Swargate to Katraj Gaon (Distance: 6 Kms.)
Swargate to Bibavewadi (Distance: 10 Kms.)

The route contacts such places as Daulatnagar, Natubag, Padmavati Temple, Kalubai Temple and the other route contacts Swargate and Bibavewadi. The time required for completion of the trip is 10 and 15 minutes for the two routes. The bus with a seating accommodation of 55 people plies on the route. The other observations are:

i) Very few buses ply on this route.

ii) There is rush at the following stops:
- Bhawkar Petrol Pump, Padmavati, Kalubai Stop and Katraj Gaon.

iii) Distance between Kalubai Stop and Padmavati is long.

iv) It is necessary to equip bus stops on this route with sheds.

v) The road from Kalubai stop to Katraj Gaon is not in good condition.

vi) The bus plying on the route should be further diverted to Ambegaon Road upto the point where Corporation limit ends.

vii) There are other villages nearby and the new housing societies are springing up in the Katraj area. It is suggested that conductors should make it a point to accommodate direct passengers to and fro. These passengers do not necessarily wait for the bus at the request stop which may be far away from the place of their residence. The conductors should collect passengers from places wherever they meet with passengers requesting for the bus to stop.
However, this facility should be given not as a general rule but as an exception in certain parts of the city or the suburbs where full fledged development of roads and housing has not taken place.

viii) Farmers, workers and labourers who travel on this route do not get good treatment from the conductors.

Route No.10 : Deccan Gymkhana to Hadapsar :
(Distance : 12.8 Kms.)

The route contacts Lokamanyanagar, Meera Housing Society, Municipal Colony, Sports Club, Turf Club, Magarpatta Dawakhana, Cantonment Hospital, Swargate S.T. Stand, Mahatma Gandhi Bus Stand and Hadapsar. It has a wide coverage and is a crowded route. Speed of the bus is reasonable and the time required for the completion of the trip is 40 minutes. The bus plying on the route accommodates 52 people (including 10 standees). The other observations are:

1) The number of buses allotted on this route is short of the requirement. Frequency should be increased and buses should ply within an interval of 10 to 15 minutes.

ii) The distance between stops at Alka Talkies and Ganjve Wadi and between Ganjvewadi and Lokamanyanagar stop is short.

iii) The distance between Deccan Gymkhana stop and Alka Talkies stop is too long.
iv) The distance between Dhobi ghat stop and M.G. Bus Stand is also short.

v) The bus stops at Kalubai, Magarpatta, Pahiroba Shala and Vaiduvadi, Kirloskar Co., Chorpuri Peth, Meera Colony and S.T. Depot should be equipped with sheds.

vi) There is more rush of passengers at the bus stops at Hadapsar Gaon, Kirloskar Co., Ramtekdi, Pool gate, Meera colony and Sarasbag.

vii) Some trips on this route between 12.00 a.m. and 14.30 p.m. are not required, instead frequency of trips should be increased after 15.00 p.m. when the occupancy rate increases. At 23.00 p.m. a bus should ply from Hadapsar to Deccan Gymkhana. It is also suggested by the passengers that an extra bus should ply at 5.30 a.m. from Deccan Gymkhana to Hadapsar to suit the convenience of vegetable sellers.

viii) Road between Dhobi Ghat and Mahatma Gandhi Bus Stand requires maintenance.

ix) Bus on Route No.10 should ply along Tilak Road.

Route No.11: Deccan Gymkhana to Poona Station:
(Distance: 6 Kms.)

This route starts from Deccan Gymkhana and contacts such places as Collector's Office, Gujrathi High School, Raste Wada, Sasoon Hospital. Speed of the bus has to be slow as the route passes through the crowded parts of the City and there are a number of curves on the route and the road is not sufficiently wide. The time required for completion of the trip is 15 minutes during peak hours. Other observations on the route are:
1) This is a crowded route used by merchants, office goers, school children, and teachers. As there is rush of passengers at all hours most of the passengers have expressed their desire to increase the frequency of buses on this route. The specific suggestions are:

   a) An express bus service be started on the route at 11.00 a.m. and between 17.00 p.m. and 19.00 p.m.

   b) Extra buses should ply from Income Tax Office in the evening.

   c) Frequency of buses is not satisfactorily maintained as the schedule is not properly adhered to. Sometimes two or three buses immediately follow each other and passengers have to wait for a pretty long time for the other trips. People have to wait especially at stops at Jijamata Bag, Phadake Howd, Zilha Parishad Office and Collector's Office.

ii) Distance between following bus stops appears to be short:

   (a) Kesari Office and Kanyashala.
   (b) Kanyashala and Appa Balwant Chowk.
   (c) Apollo Talkies and Daruwala Pool.
   (d) Narayan Path and Nighojkar Karyalaya.

iii) The bus stops at Appa Balwant chowk, Nighojkar Karyalaya, Kesari Office and Phadke Howd are not equipped with sheds. However it is not possible to add new bus sheds on this route because the road is not sufficiently wide.

iv) It is suggested by some passengers that a double decker should be introduced on this route. However, this suggestion need not be considered as the road is not wide.
and the route consists of curves and lanes. Therefore profitable operation of the double decker cannot be exploited on this route.

v) This is a crowded and a would be profitable route and therefore regularity and provision of additional buses during peak hours is of utmost importance.

**Route No. 12: Deccan Gymkhana to Poona Station**
(Distance : 6 Kms.)

The route plies via Laxmi Road, City Post Office, Raste Wada, Sasoon Hospital and contacts Collector's Office, Gujrathi High School, Apollo Talkies and Vijay Chitra Mandir. This is a crowded route and as the route passes through the central parts of the City the speed of the bus is bound to be slow. The road is not sufficiently wide to increase the speed. The time required for completing a trip is 15 minutes. The other observations are:

i) Because of the heavy rush the route has been diverted at the City Post Office in respect of certain trips from Poona Station.

ii) At the City Post Office there is tremendous rush of merchants, office goers, shoppers and school children, in morning and evening peak hours. More buses are needed to clear the traffic load as much as and as early as possible. The occupancy rate is very high at all the stops but the management is compelled to use a bus with a limited seating capacity. Buses with larger seating capacity cannot be used in view of the existence of many curves and lanes on the route.
iii) The bus stops at 15th August Lodge, Zilha Parishad, Seva Sadan stop, Co-operative Central Bank, Vijay Talkies and Gokhale Hall are situated at long distances. It is suggested by some passengers that the bus on this route should stop at Ganpati Chowk.

iv) Interval between two buses on this route should be reduced from 20 minutes to 10 minutes. Extra buses should be provided between 10.00 a.m. and 12.00 a.m.

v) The number of trips from City Post to Deccan Gymkhana be increased.

vi) It is suggested by passengers that an express bus service should be started on this route.

vii) It is complained by some passengers that conductors do not wait for the passengers to board on the bus and many passengers are unnecessarily denied accommodation.

viii) The bus from Deccan Gymkhana to Poona Station should ply early in the morning.

ix) Suggestions made by some passengers regarding introduction of double decker on this route is not worth giving serious thought as the road is not sufficiently wide and straight.

x) Some passengers have complained about the non existence of sheds at certain stops e.g. at Phadke Howd but sheds cannot be provided in view of the limited width of the road.
xi) Conductors are sometimes not vigilant in issuing tickets to the passengers. One cannot understand why routes like this belong to the category of "losing routes." The same remark applies to the Route No.11 also. Integrity of the passengers using this route is also questionable. Evasion of the payment of fare is facilitated by the heavy rush.

Route No.13: Deccan Gymkhana, Mahatma Gandhi Bus Stand and to Poona Station and Deccan Gymkhana to Pool gate (Distance: 6 Kms.)

The route plies via Training College, Phule Market, Bhawani Peth, Pool gate, West End Cinema and General Post Office. It contacts Bombay Swadeshi, Chitrashala Press, Timber market, Mithganj Police Chowky and Vishrambagwada. The speed of the bus is moderate and time taken for completion of the trip is 15 minutes and 20 minutes on the two routes. The bus has a capacity of carrying 45 passengers. The other observations are:

1) It is a crowded route and there is rush at all times and at almost all stops. The occupancy rate increases at the Phule Market stop.

2) The route is crowded and the interval between two buses should be reduced and regularity should be maintained in respect of arrival and departure with a view to avoiding the possibility of two or three buses following immediately each other and reducing empty running of subsequent buses.
iii) The bus stops at Jain Mandir and Phule Market, Phule Market and Budhwar Chowk are situated at long distances. The bus stops at Lakdi Pool and Chitrashala Press and Sadashiv Peth Howd are located at short distances. However, locations of these stops are appropriate in view of the fact that the route passes through important residential areas. The practice followed by many conductors in skipping over unimportant stops in the crowded residential areas has resulted into the increasing tendency of passengers, not to wait for the bus at these stops and this has created a vicious circle. Propriety of locations of different stops on certain routes cannot be determined on the basis of the discretion used by the conductors in either stopping or not stopping a bus at the particular point but by the requirement of the passengers. The various request stops on different crowded routes are meant for the people using bus service and their necessity or superfluous nature cannot be determined by the subjective opinion or personal convenience of the conductors.

iv) All the bus stops on the crowded routes like this one, cannot be equipped with sheds as these sheds would encroach upon the width of roads which is proverbially low.

v) In spite of the importance of strictly adhering to the schedules for the convenience of passengers, it appears that personal discretion of the starters will
play an important role in reshuffling the schedules, for clearing heavy traffic in peak hours. The route has been used by all people belonging to the various categories and carrying on different occupations.

**Route No.14 : Deccan Gymkhana to Poona Station**
(Distance : 7 kms.)

The route plies via Laxmi Road, City Post Office, Nana Peth, Sarbatwala Chowk, West End Cinema and General Post Office. The route is very crowded and its coverage is also very large. It passes through the central parts of the City. Speed of the bus is bound to be moderate as the route operates in the congested parts of the City consisting of marketing area, and business localities. The other observations are:

1) Frequency of buses is not satisfactory and regular. The total number of buses is not adequate. The interval between two buses should be reduced and additional buses should be provided in the evening peak hours.

ii) The bus stops at Vaibhav Dresses, City Post, Kunte Chowk, Ganapati Chowk, Sonya Maruti are located at longer distances. The bus stop at Quarter Gate, Modern Bakery, Nana Peth and Alpana Talkies are located at short distances.

iii) The passengers have suggested that the bus plying on this route should stop at Ganpati Chowk and City Post Office.
iv) Some passengers have complained that conductors do not wait for the passengers to board on and alight from the buses.

v) It is desired by the passengers that the bus plying from Nana Peth to Deccan Gymkhana should be arranged at 10.45 a.m. and an additional bus should ply from West End Cinema to Deccan Gymkhana.

vi) It is suggested by the people that bus stops at Sonya Maruti should be equipped with a shed. However, such a shed would encroach on the foot path and the narrow width of the road makes the construction of the bus shed difficult.

**Route No.15 : Poona Station to Hadapsar :**

(Distance : 14 Kms.)

This is a long route contacting industrial estates at Mundhwa and Hadapsar. It is a crowded route and speed of the bus is moderate and 25 minutes are taken for the completion of a trip. The other observations are :

i) At Ghorpuri many people alight from the bus and the occupancy rate declines.

ii) The present timing is satisfactory.

iii) This route is used by workers in Bharat Forge Co., Siporex and such other companies in the Hadapsar Industrial Estate.

iv) As it is a profitable route frequency of buses should be increased in the morning and in the afternoon.
Route No.16: Poona Station to Dapodi, Nigadi
Via Kirkee (Distance: 21 Kms.)

This route plies via Wadia College, Yeravda, Sappers Post Office, Kirkee Bazar, Dapodi, Fugewadi, Hindustan Antibiotics, Pimpri, Chinchwad Railway Station, S.K.F. Factory, and Chinchwad village. It is a crowded route having a long coverage along the Bombay Poona Road and useful to the workers working in the Industrial Estates situated on the two sides of the Bombay Poona Road. A bus with a seating capacity of 56 passengers plies on this route and the time required for completion of the trip is 30 minutes. The other observations are:

i) At Sangamwadi there is more rush and the route is diverted.

ii) Speed of the bus plying from Poona Station to Kirkee Bazar is fast and 20 minutes are taken to complete the trip.

iii) Buses should increased on this route and at the discretion of the starter they should be diverted from the Kirkee Bazar stop for the people who have to go to Yervada, Sangamwadi or Kasarwadi.

iv) The distance between stops at Dapodi and Bopodi, Fugewadi and Dapodi is long.

v) The request stop at the poultry farm is not visible. At peak hours, accommodation is denied to the passengers at this stop. Moreover passengers are not entertained by the other buses which ply on other analogous routes viz. 1 and 37. Passengers occupying the bus
at strategic points of this route are direct passengers travelling long distances and as a result it becomes very difficult for the passengers to get accommodation at the poultry farm stop and such other stops in the middle of the way especially after 16.00 p.m. in the evening.

**Route No.17 : Poona Station to Kirkee Bazar**

*(Distance : 12 Kms.)*

The route plies via Wadia College, Bund Garden, Yerwada and Sappers Post Office. It contacts Ammunition Factory Kirkee, Holkar Water Works, Yerwada Gaon, Home Guard Centre and Kirkee Bazar. There is keen rush at the starting points at both the ends. The time required for completing the trip is 46 minutes. Buses of lesser capacity would be sufficient for plying on this route. The present timing and frequency is satisfactory. The bus stop at Inspection bungalow is not equipped with a shed.

**Route No.18 : Poona Station to Dighi**

*(Distance : 12.5 Kms.)*

The route covers important places like Yerwada Gaon, Sathe Biscuit Factory, Wadia College etc. and reaches Dighi. A bus with seating accommodation of 50 plies on this route.

The observations on this route are as under:

1) This route is moderately crowded at both ends and is useful for school-going children staying in suburban areas.
ii) Road is sufficiently wide and smooth to maintain the normal speed and total time required for completion of the trip is 20 minutes.

iii) The scheduled timings of buses on this route are not strictly adhered to and frequency is irregular.

iv) In view of moderate rush on the route the number of buses allotted on this route is reasonable. However in view of the fact that the route is used by school children and college students timings of the buses should be changed. Frequency of the bus should be increased from 15.00 p.m. to 18.00 p.m. and be reduced from 12.00 a.m. to 14.00 p.m.

V) There is relatively more rush at the stops at Wadia College, Mahatma Gandhi Udyán, Yervada Gaon, Vishrant Wadi, Parade ground, Kalas Gaon and Walki mal.

vi) The distance between stops at Wadia College and Mahatma Gandhi Udyán and Yervada Gaon to Central Jail appears to be short. The distance between the stops at Central Jail and Vishrant Wadi, Kalas gaon and Mhaske Wadi and Parade ground appears to be long.

vii) Bus stops at Wadia college, Mahatma Gandhi Udyán, South Lane Road, Vishrant Wadi and especially stops at Kalas Gaon require sheds and shelters.

viii) There is more rush on the route from Dighi to Poona Station. It is desired by the people travelling on this route that express bus service should be provided on this route.
ix) This is a profitable route and the present timing is convenient to the passengers but if occasion demands the starter concerned and the conductor be allowed to use their discretion in allocating buses, changing the schedule of one or the other trips if necessary and in accommodating passengers travelling long distances.

Route No.19: Poona Station to Lohogaon:
(Distance: 11 Kms.)

The route covers important sites and places like Air Force Praveshnagar, Culverts, Yerwada Gaon, and reaches Lohogaon via New Diamond Hotel, Koyaji Hospital and Subhash Bose Vidyalaya.

Other observations on the route are as under:
1) Present timing of the buses plying on this route appears to be satisfactory. Frequency and regularity is also satisfactory.

2) The speed of the bus is reasonable and time taken for the completion of the trip is 25 minutes.

3) At Lohogaon there is relatively more rush and on the stops at Wadia College, Bund Bridge, Yerwada gaon, Central School, Air Force also crowd is relatively more. The route is relatively more crowded on the return trips from Lohogaon to Poona Station.

4) The distance between stops at Poona Station and Bund Bridge, Stops at Lane road and Nagpur chawl and Central School is long, whereas the stops at A.G.E.Office and Air Force Praveshnagar are situated at short distance. The stop at culvert appears to be superfluous.
v) Most of the stops on this route are not equipped with sheds or shelters. Stops at which there is relatively more rush should be equipped with sheds. The observer came across a bus stop equipped with satisfactory shed only at Yerwada Gaon stop.

vi) It is desired by many passengers that an express bus service should be provided on this route.

vii) It is a profitable route and profit potential should be increased by providing extra buses if the situation demands. The matter as to why such a crowded route is not run at a profit be investigated.

viii) Roads on this route are not properly maintained.

Route No.20: Poona Station to Wagholi:
(Distance: 14.60 Kms.)

This route contacts important places like Wadia College, Mahatma Gandhi Udyan, Air Force Station, Viman-nagar via I.C.L. It was observed that:

i) A bus with an accommodation capacity of 56 passengers is used on this route. Speed of the bus is reasonable and 15 minutes are required for the completion of the trip.

ii) The frequency of the buses and the scheduled timings on this route are not satisfactory. Irregularity of arrival and departure of buses on this route is proverbial. The number of buses provided on this route falls short of the requirement. The interval between the two buses viz. one hour is too long. It should be reduced to half an hour.
iii) Stops at Wadia College, Mahatma Gandhi Udyan, Yerwada gaon, Agakhan Palace, W.N.C., Tata Guard room are relatively more crowded.

iv) All the stops on this route are located at reasonable distance.

v) Stops at Mahatma Gandhi Udyan, W.N.C., Tata Guard Room, Wagholi must be equipped with sheds in view of the rush at these stops.

vi) If, more buses ply on this route, the requirements of the passengers will be met and revenue potential of the route can also be increased.

vii) Care should be taken to see that the route at least covers the cost of operation.

viii) At the end of the route road is not satisfactory and requires maintenance.

**Route No.21 : Poona Station to Wadgaon Sheri :**

(Distance : 9 Kms.)

The route contacts important places like Wadia College, Matchwell Factory, Bund Garden, Yerwada Gaon etc. Bus with a seating capacity of 56 passengers is used on this route and time taken for completing a trip is 15 minutes. Other observations are as under:

i) A bus of a lesser capacity would suffice on this route as it is moderately crowded.

ii) Regularity is maintained in respect of arrival and departure of buses viz. half an hour each and the interval between two buses is also satisfactory.
iii) From the other end of the route, at Yerwada bus stop there is more rush.

iv) The route is used by labourers and workers and in the evening trip from Wadgaon to Poona there is more rush on this route.

v) There is more rush also at stops at Wadia College, Yerwada Gaon, Agakhan Palace, Sane Guruji Wadi, and Matchwell Factory.

vi) Bus stops at Wadia College, Yerwada Gaon, Matchwell Factory should be equipped with sheds.

vii) Distance between stops at Poona Station and Wadia College and Bund Garden and Yerwada Gaon is short.

viii) It is suggested that express bus service should be provided on this route.

ix) Roads on this route require maintenance.

Route No.22: Poona Station to S.R.P.Camp via General Post Office and Camp Market.
(Distance 9 Kms.)

The route contacts important places like Municipal School, State Reserve Police, M.T.Depot Terminus etc. There is moderate rush at the starting point. However, on other stops the rush is significant. Other observations are:

i) The number of buses on this route fall short of the requirement of passengers.

ii) The interval between buses viz. one hour each is too long and therefore it should be reduced by providing extra buses.
iii) Speed of the bus is reasonable and 30 minutes are required for completing the trip. There is more rush also at stops at General Post Office, Sharbatwala Chowk, Babajan Chowk, Kohinoor Hotel, Pool Gate, Ramtekdi, S.R.P. stop and Lashkar Mutton Market.

iv) Stops at General Post Office and Sharbatwala Chowk and Lashkar Mutton Market are situated at longer distances. Distance between stops at Babajan Chowk and Kohinoor Hotel, Mahiruba Gate and Ramtekdi, Kohinoor Hotel and Pool Gate is short.

v) Most of the stops on this route are not equipped with sheds. Only the Mahatma Gandhi Bus stop is equipped with a shed.

vi) The road is sufficiently wide and smooth to maintain a normal speed.

vii) It is suggested that during peak hours and on Sundays extra buses should be provided on this route.

viii) Care should be taken to see that the route operates at a loss less than at present.

Route No.23 : Poona Station to Kondhwa via M.G.Bus stand : (Distance : 9 Kms.)

This route contacts G.P.O., O.P.D., Gun Turf Bazar. The extent of the rush is moderate at Poona Station. The speed of the bus is reasonable and 25 minutes are required for the completion of the trip. Other observations pertain to following:

1) The roadway on this route needs proper maintenance.
ii) The number of buses allotted on this route is reasonable.

iii) Interval between two buses should be changed. The time of arrival and departure is irregular.

iv) Stops at General Post Office, Panhale Building, Mahatma Gandhi Bus Stand, and O.P.D. are crowded.

v) Most of the stops are equipped with sheds. However, stops at O.P.D. and Gun Turf Bazar are not equipped with sheds.

vi) Distance between the stops on this route viz. one kilometer between the two stops is reasonable.

vii) Frequency of buses in the morning and evening should be increased to some extent.

viii) The route operates at a loss and it is necessary to have some flexibility in respect of cancelling unprofitable trips and diverting some of the buses during the non-peak hours on this route to some other crowded routes. Frequency of buses should be increased only during the rush hours.

Route No. 24: Mahatma Gandhi Bus Stand to Theur:
(Distance: 22 Kms.)

Mahatma Gandhi Bus Stand to Wadki Nala:
(Distance: 16.10 Kms.)

This is a long route covering a number of places and colonies like Turf Club, Municipal School, Basic Training Centre, Hadapsar Gadi Tal, Magarpatta Vasati Griha, Phursungi Power House, Dada Nagar, Phule Nagar etc. Most of the passengers use this route for longer distances and a bus with larger seating capacity is not necessary in view of moderate rush on the route. Other observations are as under:
i) Rush at the starting point viz. Pool Gate is moderate.

ii) Bus stop at Bhai Gulistan is not equipped with shed.

iii) At Loni many people alight from bus.

iv) Road after Panhale Park, which joins Wadki Nala Phata and Theur Phata is not in a satisfactory condition.

v) This route is analogous to route No.25 and 10. On this route it is not the time element which is important but it is the service to the people because almost all the passengers are farmers, milkmen and not office going people who want to run with time. Moreover, full capacity of the bus is not used by passengers.

vi) Frequency of buses on this route is satisfactory.

vii) The return trips from Theur during non peak hours are almost empty and therefore frequency should be modified to suit the convenience and requirements of the passengers.

viii) Buses on this route contact industrial estates at Hadpsar and Loni and therefore if the frequency of buses is increased in the early morning and in the afternoon from 16.00 p.m. to 18.00 p.m. profitability of the route will be increased. On such longer routes contacting important industrial centres, uniform interval between two buses is not as important as modification in the frequency depending upon requirements of passengers.
ix) This is a profitable route because of availability of direct passengers.

Route No.26 : Mahatma Gandhi Bus Stand to Manjri Gaon :
(Distance : 13 Kms.)

The route which is a long one contacts places like Turf Club, Agarwal Colony, Municipal School, Basic Training College, Hadapsar Gadi Tal and Poona Stud Farm. It also joins Manjri Gaon Rasta and Manjri Railway Crossing. The following are the observations on this route:

i) Time taken for the completion of the trip is 30 minutes and speed of the bus is moderate.

ii) Buses on this route ply regularly and scheduled time is strictly adhered to by the drivers and the conductors.

iii) Taking into account rush on this route, the number of buses allocated on this route is small.

iv) Interval between two buses is too long e.g. one bus plies in the morning at 10.00 a.m. and then another at 14.30 p.m. This causes inconvenience to the passengers. There is relatively more rush in the morning and evening and therefore extra buses should be provided during this period.

v) Roadway on this route from Hadapsar to Agarwal Colony and Manjri Gaon Rasta is not in good condition.

vi) There is relatively more rush at the stops at Ram Tekdi, Magarpatta, Hadapsar Gadi Tal and Turf Club.
vii) The stops at Mahatma Gandhi Bus Terminus, Turf Club, Municipal School, Ram Tekdi, Vaidu Wadi are situated at short distances, whereas distance between stops at Dhere Bungalow and Belhekar Vasti is relatively more.

viii) Bus stops at the Turf Club, Municipal School, Ram Tekdi, Magarpatta, Agarwal Colony are not equipped with sheds.

ix) As suggested in case of route No.24 there is no necessity of either increasing or reducing the frequency but only of adjusting the frequency according to the needs of the passengers. Such modification in the frequency as desired by the passengers would certainly reduce losses incurred on this route.

Route No.26 : Swar Gate to Kirkee Bazar :
(Distance : 20.50 Kms.)

It is an important route contacting several important places and sites like Post & Telegraph Colony, Military Quarters, Nurses Mess, Botanic Survey Office, Phule Nagar, Ammunition Factory Society, General Post Office, Wadia College, Golf Club, Sholapur Bazar, Yerwada Gaon and Kirkee Bazar. This is a very long route and speed of the bus is fast and time required for completion of this long trip is 45 minutes. There is thin rush at the starting point. A bus with a seating capacity of 56 passengers plies on this route. Frequency of the bus is satisfactory. The route operates at a loss because a bus with a larger capacity is used but traffic load on
the route is not heavy. Attempts should be made to introduce suitable diversion on this route in order to fetch more passengers.

Route No.27 : Vishrambagwada to Wadgaon Khurd :
(Distance : 8.60 Kms.)

This route starts from a central place in the Poona City and contacts such places as Maharashtra Vidyut Station, Pumping Station, Jawahar Hotel and Wadgaon Budruk. The other observations are :

i) Taking into account the traffic load the total number of buses on this route fall short of the requirement.

ii) This route is used mostly by people who want to contact suburban places. Rush in the morning is very heavy however buses do not ply regularly according to the scheduled timing.

iii) Interval between two buses viz. 30 minutes each is satisfactory.

iv) Speed of the bus appears to be more than reasonable though roadway on this route is tortuous and not properly maintained. However road development in the rural areas is in progress.

v) It is necessary to increase frequency of buses in the morning and evening. In particular bus which plies in the evening from Wadgaon Khurd to Vishrambag Wada is more crowded and therefore should be supplemented by an extra bus.
vi) Stops at Vishrambag Wada, Jawahar Hotel, Peshwe Park, Maharashtra Vidyut Station, Vithalwadi, are relatively more crowded.

vii) Distance between Vishrambag Wada and Shani Par is short whereas the distance between Shanipar Stop and Jawahar Hotel Stop is too long. A stop at Saraswati Mandir High School should be introduced.

viii) Bus stops at Jawahar Hotel, Peshwe Udyan, Pumping Station and Vithalwadi are not equipped with sheds.

ix) It is reported by most of the illiterate passengers that they are not given fair treatment by the conductors.

Route No.28 : Deccan Gymkhana to Poona University via Model Colony & Mhasoba Gate :

(Distance : 6 Kms.)

This is a crowded and most useful route for students and office-goers. Speed of the bus is moderate and 15 minutes are required for completing a trip. The road leading to the Poona University is smooth and sufficiently wide to maintain normal speed. The route contacts important educational and other institutions like Fergusson College, Agricultural College, Poona University, Government Polytechnic etc. Other observations on the route are as under :

1) The total number of buses provided on this route is short of the requirements of passengers.

2) The buses on this route ply regularly and the scheduled timings are strictly adhered to by the drivers and conductors.
iii) Bus stops at Deccan Gymkhana, Fergusson College, Mhasoba Gate and Vidya Peeth Gate are relatively more crowded.

iv) Almost all the bus stops on this route are equipped with suitable sheds. They are also properly situated.

v) The present frequency is satisfactory. However, it is necessary to provide extra buses in morning and in evening, at 10.00 a.m. and 11.30 a.m. and from 16.00 p.m. to 18.00 p.m. There is more rush of students and teachers for the bus plying from Poona University to Deccan Gymkhana in the evening. Extra buses should be provided during these rush hours.

vi) It is suggested by many people that as the roadway on this route is sufficiently wide and smooth and has heavy occupancy by passengers, a double decker bus should be provided on this route.

vii) Express bus service, if provided on this route, the office-goers, students and teachers would be greatly conmienced.

Route No.29 : Deccan Gymkhana to Sangavi Gaon - Aundh Post :
(Distance : 12 Kms.)

The route starts from Deccan Gymkhana and contacts places like Simla Office, Government Polytechnic, Shivaji-nagar Bus Stand, Aundh Road Junction, Aundh Gaon and Sangvi Gaon. The time required for the completion of the trip is 35 minutes. Other observations are as under:
1) The number of buses allotted on this route is short of the requirements.

ii) Frequency of buses is not adequate. Two or three buses follow each other immediately and this causes great inconvenience to the passengers.

iii) Interval between two buses is too long. It should be reduced to 30 minutes each.

iv) Bus stops at Deccan Gymkhana, Shivajinagar Bus Stand, Simla Office, Aundh Road Junction, Rajbhavan, Adarsha Vidya Bhavan and Hanuman Mandir are relatively more crowded. Many people alight from the bus at Aundh village stop. The occupancy rate declines from All India Radio Station stop.

v) Almost all the stops on this route are located at reasonable distance.

vi) Many trips in the afternoon are required to be cancelled because there is no rush.

vii) Extra buses should be provided for trips in the evening from Aundh Gaon to Deccan Gymkhana. Similarly more trips should be provided in the office hours.

viii) Roadway on this route is satisfactory for maintaining normal speed.

Route No.30 : Deccan Gymkhana to Pashan :
(Distance : 13 Kms.)

The route contacts such places as Shirole Vasti, N.C.L.Co-operative Society, Laboratory Quarters, Simla Office, R.D.Mess Pashan, M.E.S.Water Pump, Shivajinagar Bus Stand, Government Polytechnic, Modern High School etc. Other observations are :
i) Speed of the bus is fast and 15 minutes are taken for completing a trip.

ii) The number of buses on this route is reasonable and regularity is maintained by strictly adhering to the scheduled timings.

iii) Interval between two buses is satisfactory.

iv) Bus stops at Deccan Gymkhana, Shivajinagar Bus Stand, Simla Office, Government Polytechnic, Modern High School, Pashan Tank Road, Laboratory quarters are relatively more crowded. Rush at the starting point is thin. Many people alight from the bus at All India Radio Station and Pashan.

v) Bus stops at Rang Mandir, Simla Office, Government Polytechnic, Shirole Vasti are not equipped with sheds.

vi) It is necessary to provide a direct bus service from Bavadhan to Poona Station.

vii) It is necessary to provide extra buses on the trips from A.R.D.L.Colony to Shivajinagar in the evening in view of rush of passengers.

viii) For the convenience of some passengers it is necessary to have 'Request Stop' at Sambhaji Park because the distance between the stop near 'Navapool and Simla Office is too long.

ix) Extra buses should be provided between 7.00 a.m. and 8.30 a.m. and 15.30 p.m. to 18.30 p.m.

x) Modification in the frequency according to the changing requirements of the passengers is necessary.
Route No.31 : Deccan Gymkhana to Pooogaon :
(Distance : 11.70 Kms.)
Deccan Gymkhana to Shivane Gaon :
(Karvenagar or Gandhi Bhawan)
(Distance : 10.6 Kms.)

The route contacts important places like Ayurved Rasashala, S.N.D.T.College, Kirloskar Cummins, Kothrud Gaon, Karve Nagar and Dattanagar. Another route contacts Peacock Bay, National Defence Academy, Uttamnagar and Shivane. Other observations are as under:

i) The total number of buses on this route is reasonable.

ii) The buses on this route are regularly irregular and late by five minutes or ten minutes of the scheduled time. This has caused great inconvenience to the passengers.

iii) Interval between two buses should be reduced to 25 minutes each bus.

iv) Roadway on this route upto Ayurved Rasashala is satisfactory but the road ahead is tortuous and jerky.

v) Most of the bus stops on this route are not equipped with sheds e.g. stops at S.N.D.T.College, Dattanagar, Shinde Farm, Mairy Temple, Pooogaon etc.

vi) Bus stops at Deccan Gymkhana, Ayurved Rasashala, Dattanagar, Shinde Farm, Bhagwat Vasti are crowded. An important suggestion in respect of halting buses is that in suburban areas 'Request Stop' should be created and on the return journey more and more passengers should be accommodated from the 'Request Stop' apart from the regular bus stop. For the convenience in suburban areas
buses should be stopped when requested by the passengers wherever necessary instead of plying the buses empty, and running trips at a loss. This stop gap arrangement is needed till the time various housing societies come up and road development takes place.

vii) The buses scheduled to run in the afternoon appear to be unnecessary but frequency of the trips of the buses should be increased in the evening.

**Route No. 32: Deccan Gymkhana to Ganeshnagar via Law College** (Distance: 4.6 Kms.)

This route contacts places like Suvarnarekha, Law College, Prabhat Studio, Mehendale Garage etc. The route is moderately crowded, speed of the bus is reasonable and time taken for completion of the trip is 15 minutes to 20 minutes. Other observations are:

i) The total number of buses on this route is reasonable.

ii) Frequency of buses viz. 20 minutes each is satisfactory but the interval between two buses is not even. Two or three buses immediately follow each other causing inconvenience to passengers for other trips. This also increases the frequency of empty trips and accommodation is unnecessarily denied to passengers waiting for other trips.

iii) Bus stops at Deccan Gymkhana, Prabhat Film Co., Date Engineering have little rush. Similarly there is more rush for the trip in the evening from Ganeshnagar to Deccan Gymkhana therefore the afternoon trips which are relatively
less crowded should be cancelled and trips in the evening be increased. The return trips go empty in the afternoon.

iv) The distance between stops at Deccan Gymkhana and Suvarna Rekha is long.

v) Bus stops at Suvarna Rekha and Manochandra Bungalow should be equipped with sheds.

vi) The roadway between Suvarna Rekha and Prabhat Film Co. and Manochandra Bungalow is not maintained properly.

vii) New Housing colonies and hutments are coming up in the area ahead of the Nal stop and therefore buses should not only be stopped at the 'Request Stop' but also at any place on the way on the request from passengers. This would reduce losses on this route. This practice be continued till the Housing Societies in the area fully come up and roads developed.

Route No. 33: Deccan Gymkhana to Deccan Gymkhana:
(via Shandarkar Road) (Distance: 4 Kms.)

The route starts from Deccan Gymkhana and by contacting Suvarna Rekha, Pawar Quarters and Law College reaches Deccan Gymkhana. The route is moderately crowded and speed of the bus is fast as the road is relatively less crowded and 11 to 12 minutes are taken for completion of the trip. Other observations are:

i) The number of buses on this route is reasonable.

ii) As the route is not crowded buses of lower seating capacity would be sufficient.
iii) Frequency of buses should be reduced except in peak hours. In morning at 11.30 there is rush at Deccan Gymkhana, Suvarna Rekha and Pawar Quarters. Similarly, there is rush of passengers for this route after 17.00 p.m. in the evening. Therefore some of the unprofitable and empty trips in the noon should be cancelled and trips in the evening and morning should be increased.

iv) The scheduled timing of the buses are strictly adhered to and regularity is maintained in plying buses.

v) Almost all the stops on this route have remained unequipped with sheds. Bus stops at Suvarna Rekha, Law College, should be equipped with sheds.

vi) Distance between stops at Deccan Gymkhana and Suvarna Rekha and Law College stop is long. Whereas distance between Law College stop and Pawar Quarters is short.

vii) Speed of the bus should not be unnecessarily increased as this is not a very long route.

**Route No.24 : Deccan Gymkhana to Gokhalenagar :**
(Distance : 4 Kms.)

This is an important route contacting Model Colony, Sai Baba Samadhi, Gokhalenagar, Janawadi, Shivaji Housing Society etc. The speed of the bus is reasonable and the frequency of the bus is satisfactory. The time required for completion of the trip is 15 minutes. Other observations are :
1) This route is crowded at all times. It is used mostly by people in the Gokhalenagar and workers in Vadawadi.

ii) The occupancy rate of passengers on this route is bound to increase in future as new housing colonies are coming up along the roadway joining Law College and Poona University Road. As a result of various construction projects carried on in the suburban parts of the City traffic load on this route would certainly increase and it would be advisable to increase the frequency of buses on this route in morning at 7.30 a.m. and in the evening from 18.00 p.m. to 19.30 p.m. Frequency of buses in the late hours at night from 21.30 p.m. to 22.30 p.m. should be increased.

iii) It is complained by some passengers that the fare rates for a distance between Gymkhana and Model Colony is very high.

iv) Road leading to Janawadi and Gokhalenagar is not properly maintained.

v) This route has tremendous profit potential if heavy traffic load in the morning and in the evening is cleared by providing extra buses. Frequency for the afternoon trips may be reduced for avoiding empty plying of buses.

vi) Bus stop at Ramoshi Wadi is not equipped with shed. Many people alight from the bus at Janawadi and Vadawadi.
Route No. 35: Deccan Gymkhana to Deccan Gymkhana
(Circular route) (Distance: 15 Kms.)

It is an important route analogous to route No. 4 and 48 at some places. The route is crowded, speed of the bus is reasonable and 30 minutes are taken to cover the distance. The road is sufficiently wide and smooth to maintain the normal speed. The route contacts places like Mira Housing Society, Madivale Colony, Simla Office, Civil Court, Cantonment Hospital Burma Shell Depot, Bombay Garage, Swargate, State Bank, Rangamandir and again Deccan Gymkhana.

The other observations are:

1) Buses on this route are abruptly cancelled and never ply regularly according to the schedule time.

2) Bus stops for route No. 4 and 35 and Ques therefore are mixed with each other causing inconvenience to the passengers and creating confusion.

3) On this route it is necessary to introduce new stop at Lucky Restaurant. It is also necessary to introduce an additional bus stop between Alaka Talkies and Deccan Gymkhana Say at the Deccan Gymkhana Post Office or the Central Bank. The introduction of the bus stop was not allowed by the police authorities. But most of the passengers find this stop an absolute must. The bus-stop at least near Cafe Good Luck is necessary.

4) Trips on route No. 35 are run via Poona Station. Since buses on route No. 4 ply from Poona Station it is not necessary to ply buses on this route via Poona Station. As this unnecessarily causes inconvenience to passengers using this route.
v) It is suggested by some passengers that there should be a direct bus service from Aundh-Pashan to Poona Camp.

Route No.36 : Kirkee Bazar to Aundh Post Office
(Distance 8 Kms.)

The route contacts such places as Spicer College, Aundh Road Junction, Aundh Post Office, Marial Gate and Hanuman Mandir. Time taken for completion of the trip is 20 minutes. Other observations are:

i) Frequency of the bus is not satisfactory. More buses are allotted for the afternoon trips which go empty and accommodation is denied to passengers in the morning and in the evening. Extra buses should be provided in the morning and evening hours.

ii) Buses on this route ply regularly according to the time scheduled.

iii) It is desired by some passengers that the interval between two buses should be reduced to 15 minutes each.

iv) Bus stop at Kirkee Bazar, Aundh Road Junction, Spicer College are more crowded.

v) All the stops are located at reasonable distance.

vi) Bus stops at Red Cross, Bopodi Gaon, Spicer College, Patil Wasti Rasta, Hanuman Mandir should be equipped with sheds.

vii) Extra buses should be provided for the trips in the evening from Aundh Gaon to Kirkee Bazar.
viii) A bus of lesser seating capacity would be adequate on this route.

Route No. 37: Shivajinagar Bus Stand to Bhosari:
(Distance: 16.3 Kms.)
Shivajinagar Bus Stand to Nigadi/Chinchwad/
Pimpri: (Distance 19.3 Kms.)

This is an important route contacting an important industrial place and industrial estate along the Bombay Poona Road. There are three long routes operating and contacting a number of places like Engineering College, Labour Commissioner Office, Transport Training Centre, Factory Hospital, Khadki, Dapodi, Chinchwad Station, D.F.Factory, Vulcan Laval, Pimpri Terminus, Pimpri Railway Gate and Nigadi. A bus with seating capacity of 56 passengers plies on this route. The road is sufficiently wide to maintain good speed and the time required for the completion of the trip is 40 minutes. The other observations on this route are as under:

1) It is necessary to explore the possibility of running a double decker bus as the route is always crowded. It is used by most of the workers working in various industries along the Bombay Poona Road.

2) On 1st August, 1971 the bus for Chinchwad Gaon was introduced. This had facilitated many passengers, going to Pimpri and Chinchwad. This bus was abruptly cancelled in the month of December. The passengers going to Chinchwad and Pimpri are greatly inconvenienced by the cancellation of this bus.
iii) There is no discipline on the bus stop at Chinchwad Gaon and the Pimpri bus stop, and conductors also do not help passengers in maintaining discipline. Passengers standing in a queue are denied accommodation which is not justifiable. Separate arrangements should be made in case of passengers for Route No.16 and Route No.37.

iv) Many school children use the bus on this route and it is suggested that there should be an additional bus stop introduced at Shri Fattechand Jain Vidyalaya.

v) It is suggested by many passengers that an express bus service should be started on this route.

vi) Distance between stops at Dapodi and Bopodi and between those at Swargate and Shivajinagar is long.

vii) This route is profitable and would off set losses incurred on other routes.

viii) It is necessary to extend the route to S.T. Workshop, Dapodi.

ix) It is suggested by passengers that a new route from Dapodi to Pashan should be introduced.

x) It is also suggested by some passengers that a long route from Chinchwad to Katraj via Tilak Road should be introduced.

Route No.33 : Deccan Gymkhana to Kirkee Bazar:
(Distance : 8 Kms.)

The route contacts Engineering College Hostel, Factory Hospital, Shivajinagar Bus Stand, Rangamandir, Marial Gate and Kirkee Bazar. The bus plies on this route
at an interval of 20 minutes and 30 minutes. The road is sufficiently wide to maintain the normal speed and 40 minutes are required for completing the trip. Other observations are as under:

i) The route is moderately crowded at the starting point viz. Deccan Gymkhana. There is more rush on the stops at Natraj Theatre, Rangamandir, Modern High School, Shivajinagar Bus Stand, Marial Gate and Factory Hospital.

ii) Almost all the bus stops are equipped with sheds.

iii) The stops at Natraj Talkies, Rangamandir and Shivajinagar Bus stand are located at longer distances. The distance between stops at Good Luck hotel and Natraj theatre is short.

iv) Regularity is maintained in plying buses on this route but the total number of buses is short of the requirements. Extra buses should be provided in the morning and on Sundays. Some trips in the noon are not necessary.

v) Sometimes two or three buses immediately follow one another resulting into empty trips and lack of accommodation for the passengers in the rush hours.

vi) The evening trip from Kirkee Bazar to Deccan Gymkhana is heavily crowded. The bus stop at Kirkee Bazar is flooded with passengers and there is lack of discipline among the passengers probably because of the fact that the stop is not equipped with good shed.

vii) It is complained by some of the passengers that conductors are not careful to stop the bus at the request stops in the middle of the route. The bus should also
stop at Sambhaji Park. While coming from Kirkee the bus should collect passengers from the stops at Poultry Farm where the stop indicator does not exist.

Route No. 39 : Shivajinagar Bus Stand to Kirkee Bazar
(Distance : 9 Kms.)

The route plies via Mhasobagate, Range Hills, Military Hospital, Bombay Poona Road, Gun Shed Road, J.Type Quarters, Shirole Vasti, Ashoknagar etc. The time taken for the completion of the trip is 25 minutes. The other observations are :

i) There is moderate crowd at Shivajinagar Bus Stand.

ii) Frequency of buses is not satisfactory and sufficient buses are not available during peak hours. In the peak hours this route should not be diverted from H and J Type quarters but should run straight from Kirkee Bazar to Shivajinagar Bus Stand to suit the convenience of the office-goers.

iii) It is suggested by some passengers that the bus on this route should also contact Deccan Gymkhana Bus Stand and additional buses should ply along the Range Hill Road.

iv) The interval between two buses is very long and the schedule timings are properly adhered to.

v) The distance between stops at Rahul Cinema and Simla office appears to be short.

vi) The management should consider the possibility of introducing a double decker on this route as the road is sufficiently wide and traffic load is heavy. Most of the passengers using this route travel for long distance. Such direct passengers will give sufficient revenues to the undertaking.
Route No.40 : Deccan Gymkhana to Poona Station :
via Laxmi Road (Distance : 8 Kms.)

The route contacts City Post, Council Hall, Bombay Swadeshi, Pool Gate, Nana Peth and reaches Poona Station. It is a crowded route and buses of small seating capacity are used. The route has many curves and therefore speed of the bus is bound to be slow and the time required for completing a trip is 30 minutes. It is a profitable route. Other observations are:

1) Stops on this route are located at reasonable distance. However, the distance between the stops at Ganapati Chowk and Sonyamaruti appears to be long.

2) The route is very lengthy and therefore adjustment in timings are difficult for the passengers in contacting other buses on different routes.

3) The bus stops around the Nishat Talkies are located at short distances.

Route No.41 : Poona Railway Station to Aundh Gaon :
(Distance : 11.10 Kms.)

The route contacts Civil Court, Mhasoba Gate, Range Hills, University Gate, Government Polytechnic, Government House and Aundh Road Junction. The observations on this route are:

1) This is a crowded route.

2) Speed of the bus is fast as the road is sufficiently wide and smooth for maintaining good speed. Time taken for completion of the trip is 35 minutes.

3) It is suggested by some passengers that a trip in the early morning is so arranged as to reach the Poona Station at 6.00 a.m. to enable the passengers to catch Poona Lonavla Local.
iv) The interval between two buses is too long and the management should provide extra buses on this route.

**Route No. 42 : Shivajinagar Bus Stand to Vishrantwadi :**  
(Distance : 9 Kms.)

The route plies via Bombay Pocna Road, Mula Road and contacts Holkar Water Works, Sappers P. Road, Phule-nagar, Labour Commissioner's Office and Mental Hospital. The observations on this route are:

i) A bus with accommodation capacity of 56 passengers is used. There is a thin crowd at the starting point.

ii) Though the interval between two buses is long it is not necessary to reduce the interval and a bus with a lesser capacity could be sufficient on this route.

iii) Road is sufficiently wide to maintain the normal speed and 16 minutes are required to complete the trip.

iv) It is suggested by some passengers that an additional bus be provided on this route. However, this suggestion cannot be considered seriously as the route is already operating at a loss and there are remote chances of this route showing profit in future.

v) Road near Vishrantwadi is not satisfactory and requires maintenance.

**Route No. 43 : Phule Market to Pashan :**  
(Distance : 16 Kms.)

The route contacts Laboratory Quarters, Pashan Officers Mess, Bhandarkar Institute, Modern Housing Society, Chitrashala Press, M.E.S. Water Pump, Municipal Vedarwadi, and Pashan Tank Rasta. The observations relating to this route are:
i) Buses ply every 50 minutes on the route.

ii) There is moderate rush at the Phule Market Stop.

iii) 25 minutes are taken to complete the trip.

iv) The bus plying on this route has two seat rows on each side and quite a wide gangway in between. These buses with a seating capacity of 48 people appear to be ideal for those routes on which there is thin crowd.

v) It is suggested by the passengers that -

   a) The bus should ply as before from Vidyapeeth Gate.

   b) The bus should ply from Ashoknagar to Phule Market.

   c) Buses on this route should ply at 16.30 p.m. in the evening.

   d) A trip from Poona Station at 17.30 p.m. and one trip from Bawdhan to Poona Station in the evening is necessary on this route.

   e) It is complained by passengers that frequency of buses is not satisfactory. The buses are always irregular and passengers have to wait for a considerable time.

   f) Extra buses should be provided on this route.

**Route No. 44 and 45:**

These routes are not in operation.

**Route No. 46: Pattawadi to Shivajinagar Railway Station:**

(Distance: 5 Kms.)

The route plies via Alka Talkies, Natraj Theatre, Observatory and ends at Shivajinagar Station. The other observations on the route are:

1) The timings of the buses and the frequency should be adjusted to the timing of the Poona Lonsala Locals and other trains.
ii) Most of the passengers do not get accommodation in buses plying from Shivajinagar, Dattawadi. Residents at Lokmanyanagar, Dattawadi and Rambag are greatly inconvenienced.

iii) As the bus route No.1, 46, and 47 start from Shivajinagar Station, one or two additional buses should be at the disposal of the starter so as to clear heavy traffic load in the early morning and evening hours. The timings of these additional buses should coincide with the arrival and departure of Railway trains.

iv) There is no light on the bus stop at Shivajinagar Railway Station.

Route No.47 : M.G.Bus Stand to Shivajinagar Railway Station :
(Distance : 6.6 Kms.)

The route contacts Poolgate, Sant Kabeer Chowk, Bhawani Mata Mandir vai Navapool, Jijamat Bag, Apollo Talkies, Rasta Peth, Ramoshigate, Sathe Biscuit Co. and Mahatma Gandhi Bus Stand. The other observations on the route are :

i) At the starting point i.e. M.G.Bus Stand the route is crowded.

ii) Time taken for completion of the trip is 25 minutes. As the traffic from Shivajinagar Railway Station is more and as the occupancy rate is high more buses should be provided to clear the heavy traffic load.

iii) Some passengers have complained that bus stop situated is away from Shivajinagar Railway Station and hence passengers cannot catch on time the trains.
iv) Interval between two buses is too long and should be reduced by providing additional buses on the route.

**Route No. 48**: Poona Station to Swargate

(Distance: 10 Kms.)

This is a long route plying via Alankar Talkies, Central Railway bridge, Navin Hind High School, R.T.O. Office, Sudarshan Chemicals, Sangam Bridge, Engineering College, Jangli Maharaj Road, Deccan Gymkhana, Lokmanya-nagar and Sarasbag reaching Swargate. The other observations on the route are:

i) This is a moderately crowded route and there is relatively more rush of passengers at Modern High School.

ii) As the route is long the total time required for completing the trip is 50 minutes. Recently double decker was introduced on this route and because of the typical model of the double decker the time consumed for completing the trip was very long. As the operation of the double decker on this route proved uneconomical, the double decker bus was discontinued on the route and started plying on route No. 44.

iii) The bus stops on the route are located at short distances. The distance between stops at Alka Talkies and Deccan Gymkhana is too long and one more bus stop should be introduced either near the Lucky Restaurant or Central Bank.
iv) It is complained by some passengers that speed of the bus is very slow. However, introduction of single decker on the route would solve the problem.

v) This would be a profitable route because it goes through important localities of the City.

Recently, a slight diversion has been made in this route. This diversion is a welcome step and will suit the convenience of passengers on Fergusson College Road and its adjacent areas.

Route No. 42 : Swargate to Khadakvasla :
(Distance : 9 Kms.)

The route reaches Khadakvasla via Sarasbag, Dandekar Pool, Vithalwadi, Sanas Vidyalaya etc. Special buses also run on this route. It is suggested that one or two buses should run from Vishrampur Wada or Phule Market to Khadakvasla at 7.00 a.m. and 9.00 a.m. Speed of the bus is reasonable, time taken for completion of the trip is 30 minutes and frequency of the bus is satisfactory. As the new housing colonies are coming up along Vithalwadi road the management can think of increasing frequency of buses in the near future.

Difficulties in the route planning :

As the Poona Municipal Transport Administration Reports reveal, the management of the Undertaking has been conscious enough to the needs and convenience of the Poona people. From time to time the management has been experi-
menting with the new routes though they are unprofitable, and the old routes have also been either modified or diverted or extended to suit the convenience of the people.

However, problems involved in route planning are complex and some of them beyond the control of the management. Such problems are:

(a) The absence of systematic town planning and road development which provides the basic frame work for route planning. Haphazard and sporadic growth of the City, lack of highways, prevalence of lanes with narrow width, lack of proper maintenance of roads, scarcity of sufficient space for introducing depots at new control points are the major difficulties in the way of systematic route planning.

(b) There are certain legal complications involved in acquiring new sites for depots, for extending the routes to certain places e.g. the plan of the Undertaking in respect of purchasing the open space available near M.E.S. College could not materialise because of legal complications. Similarly the matter relating to acquiring of the space available in the Central part of the City near the Bhikardas Maruti temple is also pending because of legal conflict. If that space is made available to the Poona Municipal Transport all the other places in the central part of the City can be easily and timely contacted thereby
increasing the convenience of the passengers. High dead mileage resulting from empty plying of buses to the Swargate depot will also be sufficiently reduced. Therefore the management should seriously consider the matter and snap the opportunity at the right moment.

Legal matters have also come in the way of introducing or extending some routes to certain places e.g. the management of the Poona Municipal Transport Undertaking is unable to think of the possibility of introducing a route leading to B.M. College of Commerce, Poona 4 unless the road nearby is sufficiently widened. The Poona Municipal Corporation is also helpless in respect of acquiring land for widening the road, because of the legal complications involved. This is an outstanding example of how route planning is difficult in absence of complementary road development.

(c) When a new route is to be introduced or the existing route is to be extended the conflicts of vested interests put a hindrance to the route expansion programme envisaged by the Undertaking e.g. the Poona Municipal Corporation envisaged introduction of extra bus service to the Race Course during the race season but the taxi union filed a suit in the High Court with the intention of bringing injunction on such a proposal. The
plea for such a suit was that introduction of such an occasional bus service could be harmful to the interests of taxi drivers and rikshaw drivers. The Union however did not object to introduction of regular bus service to the race course.

Similarly there are a number of private passenger services operating on the important industrial roadways in the suburbs. When a decision was taken by the Poona Municipal Corporation* to abolish such private vehicles engaged in transporting to and fro the labourers working in different industrial estates at Bhosari, Hadapsar, Pimpri etc; some representatives of the private operators expressed the desire to meet Mr. B.K. Chaugule, Commissioner of Poona on the plea that the changing working hours for the labourers could not be synchronised with the Poona Municipal Transport schedule and that private vehicles were more convenient than the Poona Municipal Transport service and therefore should not be abolished. The Poona Municipal Transport Undertaking can envisage taking over such services as were previously being operated by the private operators only if the Undertaking

has the capacity to make a substantial addition of buses to the existing fleet. The total number of employees and labourers taking resort to such private passenger transport service is about 6500. Accordingly the fleet expansion programme will have to be undertaken. The Poona Municipal Transport Undertaking is already enjoying a monopoly position in respect of passenger transport service in and around Poona City, and there is no effective competition from the private operators. Considering that only a small portion of passenger traffic load is borne by the private operators and that the Undertaking is faced with financial difficulty in making additions to the fleet, the action of taking over the passenger transport provided by private operators is not timely. However, management can think of introducing a new dimension to its activity, in future provided it has the necessary capacity to bear the heavy traffic load.

Operations on longer routes by introducing buses with a larger seating capacity are profitable and would also serve the purpose of satisfying demand made by the people residing in the suburbs, for public transport. However in respect of long routes the financial interest of the Maharashtra State Road Transport Corporation conflict with the route expansion programme of
the Poona Municipal Transport Undertaking.
Longer routes cannot be operated by the Poona Municipal Transport Undertaking (e.g. a route leading to Theur) in absence of permission from the Maharashtra State Road Transport Corporation.

(d) The traffic control rules implemented by the Regional Transport Officer have also come in the way of rationalising the existing route structure, e.g. the R.T.O. cannot permit plying of buses with larger seating capacity in the crowded central part of the City and therefore these buses have to run in the outskirts of the City, on unprofitable thin routes.

The basic problem therefore is availability of open space, wide roads and their proper maintenance and unless the frame work of roads is provided by systematic town planning rationalisation or expansion of the existing route structure is impossible.

Under the given circumstances route programming by the Poona Municipal Transport Undertaking would continue to be as it has been worked out so far.

**Scheduling:**

The timings tests made at different times a day are necessary to ensure that the timings decided upon can be
maintained even in peak hours. The volume of traffic is
not static. There are variations in the day to day totals,
in weekly totals or monthly totals of occupants. Regular-
ity of frequency should be favoured to the greatest
possible degree but possibility of cutting out a journey
which is not justifiable as a revenue producer should be
given consideration and weightage. Excess traffic above
minimum should be catered for by means of duplicate
vehicles. Better service to the public can be rendered
when regular frequency supplemented by duplicates is
maintained during the morning and evening peak hours. An
irregular frequency supplemented by unscheduled duplicates
is of course not desirable.

It is easy to set out the places to and from which
people wish to travel and determine the direction of
passenger movement. Casual travel of the well-to-do class
in limited to odd shopping and amusement journeys. Whereas
workmen, school children, college students frequently
depend on public transport. This observation is supported
by the following table relating to the break-up of people
using bus service:

<table>
<thead>
<tr>
<th>The break-up of people answering questionnaires</th>
<th>issued to them and using bus service in Poona.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government employees and other: in various orga-</td>
<td>Number</td>
</tr>
<tr>
<td>nisations.</td>
<td></td>
</tr>
<tr>
<td>..</td>
<td>365</td>
</tr>
<tr>
<td>Businessmen</td>
<td>153</td>
</tr>
<tr>
<td>Teachers..</td>
<td>144</td>
</tr>
<tr>
<td>Students.</td>
<td>265</td>
</tr>
<tr>
<td>Workers..</td>
<td>166</td>
</tr>
<tr>
<td></td>
<td>1113</td>
</tr>
</tbody>
</table>
There is usually a tendency to use public conveyance for longer distances. There is also a good deal of movement for some obvious reasons and for some reasons quite unknown, between one suburban area and another and this casual traffic remains an unknown quantity.

It should be possible to operate a service of one vehicle every quarter hour from 6.30 a.m. to 7.30 p.m. and one vehicle every half-hour thereafter, with buses for workers and students as extras. The basic service is to be quarter-hourly and then half-hourly. This covers the requirements of the first five days in a week. Around 4.30 p.m. and 6.30 p.m. the number of passengers in one direction varies from 50 to 60, but in all the cases two vehicles are required. On Saturdays some factory trips and office trips may be cancelled or the timings of passenger loadings are changed. On Sundays the factory trips and office trips, and student trips are cancelled but shopping and workers' midday travel, traffic from suburban areas, amusement journeys are frequent. But in all these cases (Sunday trips) two vehicles are required.

Sunday service justifies one bus every half an hour for relatively longer distances (routes) in the city. Such a frequency will of course cause more standing time for short routes and therefore on crowded routes quarter-hourly frequency is needed. Because of shorter route lengths, lay over time at the terminus may be lowered. The ratio of operating time to the total running time
scheduled should be lowered by strict supervisory controls. It is assumed in all these calculations that the traffic is drawn from suburban areas and it depends on its parent town viz. Central City area, for shopping, working, schooling and amusement. It is also assumed that the time taken for completing journey on a route with a distance of 5 - 6 kilometers is fifteen minutes, with the average speed of 20 Kms. per hour. It may also be taken for granted for the sake of simplicity that no layover is allowed at terminals after each journey. However, a reasonable allowance of 50% of the running time should be made for layover.

Layover, however desirable it may be for drivers and conductors, represents an unproductive expenditure and should be kept within reasonable limits. At least, the management should consider the possibility of reducing or total cancellation of layover in Sunday service.

On other days in a week than Sunday, vehicle utilisation can be increased if lay over time is avoided in case of short routes with less than 20 minutes running time. However as reported in the Project Report on 'Schedules of Poona Municipal Transport and suggested remedies' : the legal provisions of the M.T.W.Act come in the way of improving vehicle utilisation by avoiding lay over time at one of the termini. The Study Group which has prepared this report on scheduling has suggested that:
"after four hours of operation half an hour rest has to be provided to the crew. Hence the vehicle remains idle for 1/2 hour during the break hour when demand for bus is maximum. The study team further recommends that: 'this can be solved by entering into an agreement with the Union to extract only 7\(\frac{1}{2}\) hours service instead of eight hours' service, in the event they (drivers) are prepared to forego the 1/2 hour rest. About ten minutes' rest can be given after about three or four hours of work. This result in improving the utilisation of vehicles.'"

The Committee suggested a system of split duties viz.

First Shift : 6.00 a.m. to 10.00 a.m.
Second Shift : 14.00 p.m. to 18.00 p.m.

The appropriate timings and duration of the working hours should be as/in view of the heavy demand for buses in peak hours.

The shifts and the lay over are to be arranged according to the following schedule:

<table>
<thead>
<tr>
<th>Working hours of the shift</th>
<th>Layover</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 4.30 a.m. to 8.30 a.m.</td>
<td>15 minutes</td>
</tr>
<tr>
<td>2. 8.30 a.m. to 12.30 p.m.</td>
<td>15 minutes</td>
</tr>
<tr>
<td>3. 12.30 p.m. to 16.30 p.m.</td>
<td>15 minutes</td>
</tr>
<tr>
<td>4. 16.30 p.m. to 20.30 p.m.</td>
<td>15 minutes</td>
</tr>
<tr>
<td>5. 8.30 p.m. to 12.30 p.m.</td>
<td>15 minutes</td>
</tr>
</tbody>
</table>

The above schedule has to implemented under the following assumptions:
(a) A steering duty for seven and half hours is to be performed by the drivers.

(b) The vehicle should not lie idle during the peak hours.

(c) Time scheduled for completing a trip is more than the actual time taken for completing a trip as the drivers are inclined to increase the lay over time by shortening the duration of the trip.

(d) The practice of giving rest pauses at both ends of the route has to be given up for all the routes during peak hours; for increasing vehicle utilisation and clearing up the traffic. The layover time may be adjusted according to the distribution of peak and non peak hours indicated below:

<table>
<thead>
<tr>
<th>Category of the person using the bus service</th>
<th>Time of using the bus service</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Workers</td>
<td>6.30 a.m. to 9.30 a.m. (Monday to Saturday)</td>
</tr>
<tr>
<td></td>
<td>4.30 p.m. to 7.30 p.m. (Monday to Friday)</td>
</tr>
<tr>
<td></td>
<td>12.00 noon to 2.00 p.m. (Saturday only)</td>
</tr>
<tr>
<td>2. Students (College students &amp; School children) (For school children) (For College students)</td>
<td>7.30 a.m. to 10.30 a.m. (Monday to Friday)</td>
</tr>
<tr>
<td></td>
<td>17.00 p.m. to 18.00 p.m. (Monday to Friday)</td>
</tr>
<tr>
<td></td>
<td>15.00 p.m. to 18.00 p.m. (Monday to Saturday)</td>
</tr>
<tr>
<td>Category of the person using the bus service</td>
<td>Time of using the bus service</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>3. Shoppers etc.</td>
<td>9:30 a.m. to 11:00 a.m. Monday to Saturday &amp; especially on Sundays.</td>
</tr>
<tr>
<td></td>
<td>9:00 a.m. to 12:00 a.m. on Sundays.</td>
</tr>
<tr>
<td></td>
<td>16:00 p.m. to 21:00 p.m. on Sundays.</td>
</tr>
<tr>
<td></td>
<td>18:00 p.m. to 21:00 p.m. on Sundays.</td>
</tr>
<tr>
<td>4. Casuals</td>
<td>6:00 a.m. to 11:30 a.m. Monday to Saturday</td>
</tr>
<tr>
<td></td>
<td>10:00 a.m. to 12:00 noon Sunday only.</td>
</tr>
<tr>
<td></td>
<td>17:00 p.m. to 21:00 p.m. Sunday only.</td>
</tr>
<tr>
<td>5. Government servants, Bank employees etc.</td>
<td>9:00 a.m. to 10:30 a.m.</td>
</tr>
<tr>
<td></td>
<td>17:00 p.m. to 19:00 p.m.</td>
</tr>
<tr>
<td>6. Pleasure seekers</td>
<td>18:00 p.m. to 23:30 p.m. Monday to Saturday.</td>
</tr>
<tr>
<td></td>
<td>20:00 p.m. to 24:00 p.m. especially on Saturdays and Sundays - late nights.</td>
</tr>
</tbody>
</table>

(e) The basis for scheduling should be that the drivers are given only split duties or broken duties. This will certainly increase efficiency in driving and would reduce accident frequency.

(f) A uniform layover of 15 minutes will not adversely effect vehicle utilisation.

(g) The important control points at Deccan Gymkhana, Poona Station, Swargate, Mahatma Gandhi Bus Stand, Shivajinagar Bus Stand and Kirkee Bazar should be supplemented by two more additional control points,
one at Bhikardas Maruti Temple and the other one at M.E.S. College by acquiring the open space available near these places. The present control points at Deccan Gymkhana, Swargate, and Poona Railway Station termini are congested and it is necessary that some services from these points should be diverted to the above mentioned new control points. Buses leaving the Swargate depot and returning to that depot do not carry passengers. As a result the dead mileage has increased. If the two new depots are added dead mileage can be reduced. If the new depots are equipped with diesel filling pump and other facilities for checking up air pressure and minor repairs, parking of buses at these points will be facilitated and dead mileage can be reduced. Operating of buses in the city and in the suburban areas will also be easy on introduction of the above additional control points. If the routes are classified regionwise and grouped according to the number of control points losses on some routes will also be reduced.
General Observations:

1) Depreciation: The Undertaking has not been following a systematic method of calculating depreciation and obsolescence allowances. As a result the values of the assets of the Undertaking appear inflated. The method so far followed is: when an asset such as the bus is purchased the market-value of that asset is shown in the year in which it is purchased and when the asset is used for a number of years and sold in a particular year the sale proceeds are shown as an item of income in the statement of Income and Expenditure on Capital Account e.g. in the statement of Income and Expenditure on Capital Account for 1970-71 Rs.1,13,618.00 are shown as an amount accruing from the sale of old buses vide Budget Estimates of Poona Municipal Transport for 1971-72 and 1972-73. The depreciated value of buses is not calculated. This method is however not scientific. The three methods of making provision for depreciation are:

(a) To set aside an equal amount each year so that at the end of the vehicle's life its residual value plus the accumulated provision is sufficient to buy a new vehicle.

(b) To set aside gradually decreasing amounts each year because the market value of the vehicles does in fact fall most in the first year, somewhat less in the second, less still in the third and so on. The figures for respective years continue on a declining scale.
(c) To set aside each year a fixed percentage of the declining value of the vehicle and a fixed depreciation figure of the first year's allocation to depreciation reserve (after deducting the cost of a set of tyres). The allocation to depreciation reserve for the subsequent years would decline.

Methods (b) and (c) are more logical than (a) but they cannot be applied to a very small fleet because they produce fairly wide fluctuation in costs as between one year and another, especially in the first year of a new vehicle's life, the cost might, on paper be made prohibitively high. In the case of P.M.T. Undertaking where the traditional method of providing new rolling stock is to borrow the necessary money and repay it with interest, over the life of the vehicle the depreciation allowance is replaced by payment to the Sinking Fund and interest accounts. This redemption of debt is effected in accordance with condition relating to vehicle life. However, the financial statements do not reveal the state of over capitalisation resulting from the depreciated value of the assets being lower than the capital expenditure involved in the purchase of assets. The inflated assets in the balance sheet do not reveal the true financial position of the Undertaking. According to the Study Group's recommendation the depreciated value of the asset should not be allowed to go below 75% of the capital in hand. In
absence of a scientific method of calculating depreciation and obsolescence the value of assets would be inflated and the true position cannot be verified.

2. **Inventory** - It is necessary for the P.M.T. Undertaking to adopt scientific inventory control procedure for minimizing inventory held. The Study Group has recommended that inventory held should not at any time exceed nine month's consumption except imported items and special items which are hard to procure. The Undertaking is holding a large superfluous inventory and this has adversely affected the working capital position of the Undertaking. Attempt should be made therefore to dispose of the obsolete stock accumulated by devising simple procedure, at regular intervals.

3. **Fleet Expansion** : On the assumption of one crore of passengers requiring bus accommodation every year, in the near future the Undertaking will have to make a 'net' addition of 40 buses to the fleet, apart from the buses to be purchased as a part of replacement programme. Such addition is necessary in view of increasing demand for public transportation on almost all routes. If the existing route structure is rationalised and buses plying on some uncrowded routes during the non peak hours are diverted to the crowded routes during the peak hours, the fleet expansion programme can be undertaken gradually as the financial position does not permit purchase of buses in a lot.
4. Training Programme: In view of the fact that accident frequency has been increasing and most of the default cases relate to the traffic department, it is necessary to evolve a systematic programme of training of drivers and conductors on the lines of class instruction and demonstration followed by practice on a quiet route under vigilant supervision. The object of the training programme is not merely to equip men with an adequate knowledge of their jobs but also to decide whether they have the right character and temperament for the kind of work they are expected to do. Drivers and conductors are public servants in a very special sense. They have to bear heavy responsibilities and must be able to display considerable tact, tolerance and patience even in the adverse circumstances. Such a programme would enable the Undertaking to eliminate misfits in the earliest possible stage and to minimise the cause of public grievance.

Many complaints have been received, regarding defective driving and breach of the traffic rules by the P.M.T. drivers, e.g. halting the vehicle in the middle of the road, overtaking on the bridge and on the narrow roads, defective declutching resulting into jerks, ignoring the conductor's signals, turning the vehicle in full speed, improper parking of buses on bus stops, defective signalling etc. Perhaps the complaints might have been overstated by the passengers without knowing the difficulties experienced by the drivers in plying buses on the crowded...
routes. When the roads are not adequately wide and properly maintained and are not straight, smooth but tortuous driving a heavy vehicle is very difficult. (Traffic congestion is also the frequent cause of bad time keeping on the bus service. Over crowding of vehicles is also another cause of lost time.)

Many complaints have also been received from the passengers about the conductor's behaviour with the passengers, e.g. ill treatment to the illiterate passengers, allowing the luggage unauthorisedly, wasting time in conversation or petty enjoyments at the terminals and then to hurry along the other end of the route so as to arrive early and have more leisure for tea and talk, skipping over bus stops on the route, in spite of coming across passengers waiting for the bus, not allowing sufficient time for the passengers to board on and to alight from the bus.

In spite of these complaints one should understand the adverse circumstances in which the drivers and conductors are rendering their services. Punctuality, smooth running of the bus and cordial relations between the conductors and the people depend on a number of factors which may be beyond the control of the Undertaking and its staff. Punctuality cannot be maintained because of traffic congestion and over crowding. Smooth running of vehicles is impossible in the absence of systematic town planning.
and road development, and when public is not well disciplined and cooperative the above mentioned lacunae in the provision of transport services are bound to occur and no one party can be held solely responsible for the phenomenon.

5. **Revision of the fare rates inevitable**

Mr. R.N. Asthana has estimated in the new Budget for 1972-73 that the Undertaking will have to bear a loss of Rs. 31,60,000 in 1972-73. The deficit has to be recouped by increasing the rates of fare, and by taking grants from the Poona Municipal Corporation. The estimated income in the year estimated is Rs. 2,55,30,592 whereas the total expenditure would be to the extent of Rs. 2,37,02,592. In 1972-73, 265 scheduled buses will ply covering a daily distance of 56,000 Kms. Traffic receipts per kilometer and cost of operation per kilometer would Rs. 1.18 and Rs. 1.27 respectively.

The P.M.T. envisages public borrowing to the extent of Rs. 26 lakhs for the purchase of 30 new buses. Increasing cost of operation unaccompanied by increase in revenues has resulted in the deficit and the undertaking has to sustain the deficit position. Under the circumstances, increase in the fare rate is inevitable. It is not known when sanction would be obtained for such an increase and therefore the 15 bus routes which are running at loss will also have to be diverted to profitable channels.

The deficit of the P.M.T. Undertaking was

<table>
<thead>
<tr>
<th>Year</th>
<th>Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-71</td>
<td>Rs. 15,62,810</td>
</tr>
<tr>
<td>1971-72</td>
<td>Rs. 19,76,000</td>
</tr>
</tbody>
</table>

The above revision of the fare rates appears to be inevitable and justifiable. The Undertaking has so far earned sufficient revenue to maintain the surplus financial position. In absence of any financial aid forth-coming from either the Government or the Poona Municipal Corporation the Undertaking is required to bear heavy debt charges on account of public borrowing. The fleet expansion programme of the Undertaking cannot materialise in the absence of sufficient revenue. The cost of operation has been increasing consistently and the upward revision of the fare would enable the Undertaking not only to make both ends meet but also to provide for the amount necessary for incurring heavy capital expenditure in future. Such a revision will not necessarily entail public criticism provided increased incidence of the fares is accompanied by increased adequacy of service and improvement in operational efficiency.

6. The Present financial crisis:

The financial crisis with which the P.M.T.Undertaking is confronted has culminated into the Poona Municipal Corporation taking over the transport administration from the P.M.T.Undertaking which was so far working as an autonomous body. The ever increasing labour cost, cost of maintenance, spares and repairs did not permit the Undertaking to make adequate provision for depreciation. As a result the budget for 1972-73 indicates a financial strain on the
Undertaking to the extent of 90 lakhs of rupees. In absence of adequate provision for depreciation the surplus position indicated by the budget for previous years was unsatisfactory. The loss in operating various buses on different routes has amounted to six paise per kilometer. The fleet utilisation has not been kept up to the desirable level of 90%. Fleet utilisation in the case of new buses has been 81% only. In the case of old buses the fleet utilisation has been only 66%. The average fleet utilisation only comes to 74%. The Undertaking can get over the financial crisis only by revising the fare rates and increasing fleet utilisation. The Standing Committee has expressed anxiety over the critical financial position of the Undertaking and has rejected the demand for Rs.25 lakhs made in the budget for purchasing new buses. Under the circumstances the fleet expansion programme of the Undertaking cannot materialise. The P.M.T. authorities have expressed their concern about administration of public transport in Poona being taken over by the Poona Municipal Corporation.

7. Some irregularities in route planning:

So far the practice of management in either introducing or cancelling a particular route has been that changes in various routes or their cancellation is envisaged and implemented by the management without taking into consideration the convenience or the inconvenience of the people using a particular route. There is a
lack of communication between the management and the people. It is utmost desirable that decisions relating to changes in the routes or their cancellation should not be taken by the management abrupt. Due regard should be given to the public opinion and final decision should be taken in consultation with the people using bus service. Such instances of abrupt cancellation of different routes are many and people have been expressing their dissatisfaction with the decision of the management, through the local newspapers e.g. Decision was taken to cancel route No.33 merely because it was an unprofitable route and the alternative arrangement suggested caused great inconvenience to the people residing in the Deccan Gymkhana locality. Instead of total cancellation of unprofitable routes an experiment may be made with the introduction of mini buses on unprofitable routes. Similar is the case with route No.3 cancellation of which would result into great inconvenience and hardship to the passengers, school children coming from Laxminagar, Parvati gaon, Sarasbag and Shivajinagar. Cancellation of such a crowded and long route would certainly not be desirable. Route No.42 also belongs to the category of the five routes proposed to be cancelled by the Undertaking. Cancellation of this route is not justifiable as workers, students and office goers would be seriously handicapped.Cancellation of an unprofitable route, though desirable from the point of view of the management, cannot be justified from the point of view of the people. On almost all these
routes which are proposed to be cancelled people have expressed their difficulty regarding the lack of accommodation during peak hours. It would, therefore, be desirable to strike the golden mean between total cancellation and total continuation, by reducing the number of trips in the off peak hours and providing extra trips in the peak hours. e.g. extra buses may be provided in the evening on route No.3 and 8 which are used by school goers.

8. Default cases and public complaints:

On going through the statistical information relating to default cases and public complaints, one can safely conclude that the number of default cases, public complaints had been consistently increasing. Most of the default cases relate to the traffic department and the increasing number of cases of negligence and indiscipline indicate gross carelessness on the part of people in the traffic department of the Undertaking:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of default cases</th>
<th>No. of public complaints</th>
<th>Complaints relating to Traffic Department</th>
<th>Cases of indiscipline and negligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957-58</td>
<td>637</td>
<td>174</td>
<td>571</td>
<td>271</td>
</tr>
<tr>
<td>1958-59</td>
<td>717</td>
<td>214</td>
<td>632</td>
<td>333</td>
</tr>
<tr>
<td>1959-60</td>
<td>954</td>
<td>265</td>
<td>821</td>
<td>398</td>
</tr>
<tr>
<td>1960-61</td>
<td>1107</td>
<td>229</td>
<td>952</td>
<td>387</td>
</tr>
<tr>
<td>1961-62</td>
<td>1240</td>
<td>135</td>
<td>1032</td>
<td>527</td>
</tr>
<tr>
<td>1962-63</td>
<td>2039</td>
<td>185</td>
<td>1823</td>
<td>875</td>
</tr>
<tr>
<td>1963-64</td>
<td>2560</td>
<td>393</td>
<td>2238</td>
<td>855</td>
</tr>
<tr>
<td>1964-65</td>
<td>2110</td>
<td>569</td>
<td>1883</td>
<td>938</td>
</tr>
<tr>
<td>1965-66</td>
<td>2755</td>
<td>N.A.</td>
<td>2555</td>
<td>N.A.</td>
</tr>
<tr>
<td>1966-67</td>
<td>3538</td>
<td>427</td>
<td>3243</td>
<td>2568</td>
</tr>
<tr>
<td>1967-68</td>
<td>4580</td>
<td>N.A.</td>
<td>4313</td>
<td>2149</td>
</tr>
<tr>
<td>1968-69</td>
<td>4212</td>
<td>N.A.</td>
<td>3995</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

N.A. = Not available.
9. Training Programme:

The rate at which the cases of indiscipline and negligence has been increasing is alarming and therefore measures must be taken to reduce the number of these cases by providing training to drivers and conductors. The three important contents of the training programme would be -

(a) Training should be provided to the conductors in respect of public relations.

(b) Training should be provided to the drivers in respect of traffic control rules and traffic administration. The instruction in traffic control measures and traffic administration should be imparted by inviting instructors from the police department and the office of the Regional Transport Officer. The drivers should also be well acquainted with the various provisions of the Motor Vehicle Act.

(c) The conductors and drivers should also be acquainted with the procedures and working of the Public Transport Undertakings.

Instead of there being an adhoc and occasional programme for training of drivers and conductors, a training programme should be chalked out in advance and a formal test should also be taken on the lines on which departmental examinations are conducted in Government Offices.

10. Express bus service:

Express bus service has to be provided on route Nos. 3, 5, 7, 8, 10, 11, 13, 14, 18, 19, 21, 28, 33, 37, 41 in response to the demands made by the people.
11. **Provision of extra bus service:**

1. On route No. 37 from Pimpri at 5.30 a.m. and 5.30 p.m.

2. On route No. 38 on Sundays.

3. On route No. 41 at Collector office stop, Burmah shell depot, Shirole Vasti, Chavan-nagar, Rajbhawan, Polytechnic and Engineering College stop.

4. On route No. 42 at Vishrantwadi in the morning and evening from 16.00 p.m. onwards.

5. On route No. 47 at 5.30 a.m.

6. On route No. 10 from Hadapsar to Mahatma Gandhi Bus Stand at 5.30 a.m. and 11.00 p.m.

7. On route No. 15 and 16 between 15.00 p.m. and 21.00 p.m. and at 17.00 p.m. from Poona Station to Hadapsar.

8. On route No. 17 from Kirkee Bazar to Poona Station in the evening.

9. On route No. 21 from Vadgaon to Poona Station in the evening.

10. On route No. 22 on Sundays.

11. On route No. 3 and 8 from Appa Balwant Chowk to Padmavati in the evening.

12. **Suggestions regarding new routes:**

The suggestions regarding new routes mentioned below are made by the people to suit their own convenience. It is for the management to decide their worthwhileness and feasibility of implementation. The Administration Reports of the Undertaking reveal consciousness on the part of management, in introducing new routes, in response to various demands made by the people. However, as mentioned earlier there are a number of difficulties in introducing new routes, and diverting them at certain places. Subject
to these limitations the management may consider the possibility of introducing the new routes mentioned below:

1. From Pashan to Camp - a direct route.
2. From Padmavati to Karve Road.
3. From Swargate to Karve Road.
4. Extension of route No.37 to Pimpri gaon.
5. Extension of route No.31 to Paud Phata.
7. Direct buses contacting all industrial areas from Poona Station, Deccan Gymkhana and Shivajinagar Railway Station.
8. Bishop High School to City Post.
9. Karve Road to Appa Balwant Chowk.
10. Deccan Gymkhana to Kirloskar Pneumatic.
11. Hadapsar to Phule Market.
12. Direct bus service from Bavdhan to Poona Station on route No.30.
13. Direct bus service from Mukundnagar to Deccan Gymkhana.
14. Deccan Gymkhana to Poolgate (direct) (suggestion already carried out)
15. Jain Mandir to Tilak Road.
16. Dapodi route to be extended upto S.T.Stand Dapodi.
17. Padmavati to Deccan Gymkhana.
18. Range hill corner to Phule Market.
19. Dapodi to Pashan.
20. Dapodi to A.R.D.L.
21. Chinchwad to Katraj via Tilak Road.
22. Route No.43 to be started from Poona University.
23. Ashoknagar to Phule Market.

25. Pashan to Poona Station.


28. Route No.40 to be extended to E.M.College of Commerce.

29. From Poona Station to Karve Road.

30. Swargate to Hadapsar, Loni.

31. Swargate to Chinchwad Gaon.

32. Chinchwad to Kirkee.

33. Shivajinagar Station to Karve Road.

34. Kasarwadi to Deccan Gymkhana.

35. Chatushringi to Swargate via Shivaji Road.

36. Shivajinagar to M.E.S.College, and onwards to Kothrud.

37. From City Post to M.E.S.College, and onwards to Kothrud.

38. Route from Deccan Gymkhana to Gokhalenagar via Ehandarkar Road.

39. Route No.4 - some trips to be operated via Apte Road.
Questionnaire No. 1:

OBSERVATIONS ON ROUTE NO:

Time of Travelling:

From _______________ To _______________

1. Does the route start from a strategic or a key point?  Yes/No.

2. Suggest the new point from which the route should start.

3. Extent of rush at the starting point ...  Thin/Moderate/Crowded

4. Are sufficient buses available at rush hours?  Yes/No.

   Is the frequency satisfactory?  Yes/No.

5. Name of the stops at which there is more rush and where accommodation is denied.

6. Are the existing bus stops located at proper distances and strategic places?  

7. Name the stops whose locations should be changed.

8. Name the important places or locations where new bus stops should be built.

9. (a) Do you want to suggest extension and/or diversion of the route?  Yes/No.


10. Nature of the speed of the bus  Fast/Reasonable/Slow (moderate)

11. Is the road sufficiently wide, smooth and straight for maintaining normal speed?

12. Name the stops from which occupancy rate declines.

13. Name the stops at which many people alight from the bus.

14. Name the stops not equipped with sheds.

15. Time required for the completion of the trip.
**Questionnaire No. 2**

POONA MUNICIPAL TRANSPORT: 'A PASSENGER OPINION SURVEY'

1. Name, Address & Occupation:

2. Information regarding route frequently used: Route No. From _________ To _________

3. Are you a regular user or an occasional user of the bus service?

4. The purpose for which the bus service is used:
   (a) for attending office, (b) attending college,
   (c) for attending school, (d) attending factory,
   (e) for shopping.

5. State your experiences in respect of following:
   (a) Speed of the Bus: high/low/reasonable
   (b) Timings of buses: regular/irregular
   (c) Required to wait for a long time/not required to wait.
   (d) Interval between two buses: Satisfactory/not Satisfactory.
   (e) Facility in respect of standees: Satisfactory/Not satisfactory.
   (f) Are the passengers disciplined?
   (g) State the names of stops which are not properly situated.
   (h) Behaviour of the conductors: Satisfactory/Not satisfactory.
   (i) Name the bus stops which are not equipped with sheds.
   (j) Is the procedure adopted for entertaining complaints from passengers satisfactory?
   (k) Opinion regarding beggar-nuisance.

6. State your suggestions in respect of:
   (a) New bus-routes to be introduced.
   (b) New bus-shelters to be constructed.
   (c) Express bus service: Whether needed and where.
   (d) Special facilities to women.
   (e) Concession passes to students and workers.
   (f) Introduction of double decker.
   (g) Cleanliness of bus stops and inside the buses.
   (h) Specific suggestions regarding suburban traffic
   (i) Fare rates: whether reasonable or unreasonable.

7. Other suggestions:
Break up of the questionnaires answered by the people, tabulated and analysed with reference to specific criteria:

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Particulars</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed of the bus</td>
<td>(a) People who have expressed satisfaction with the speed of buses on different routes.</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>(b) People expressing dissatisfaction with the speed</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>(c) People expressing no opinion regarding speed of the bus</td>
<td>18</td>
</tr>
<tr>
<td>Timings of buses</td>
<td>(a) People expressing dissatisfaction</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>(b) People expressing satisfaction</td>
<td>24</td>
</tr>
<tr>
<td>Waiting &amp; Over-crowding</td>
<td>(a) People required to wait for a long time.</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>(b) People expressing satisfaction</td>
<td>11</td>
</tr>
<tr>
<td>Frequency of buses on different routes.</td>
<td>(a) People expressing favourable opinion</td>
<td>34.2</td>
</tr>
<tr>
<td></td>
<td>(b) People dissatisfied with the frequency</td>
<td>65.8</td>
</tr>
<tr>
<td>Nature of using bus service</td>
<td>(a) Regular travellers</td>
<td>73.9</td>
</tr>
<tr>
<td></td>
<td>(b) Occasional travellers</td>
<td>21.1</td>
</tr>
<tr>
<td>Conductors' Behaviour</td>
<td>(a) People complaining about conductors' Behaviour</td>
<td>67</td>
</tr>
<tr>
<td>Machinery dealing with passenger complaints</td>
<td>(a) People satisfied with the machinery</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(b) People expressing dissatisfaction</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>(c) People expressing no opinion regarding the machinery</td>
<td>42</td>
</tr>
<tr>
<td>General Complaints</td>
<td>(a) People complaining about beggars</td>
<td>14.1</td>
</tr>
<tr>
<td></td>
<td>(b) People complaining about coinage Problem</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>(c) People favouring special facilities to women passengers</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>(d) People expressing dissatisfaction with the indicator boards</td>
<td>18.2</td>
</tr>
<tr>
<td></td>
<td>(e) People complaining about confusion at the bus stops resulting from the lack of arrangement for separate queues for different routes.</td>
<td>23</td>
</tr>
<tr>
<td>Criterion</td>
<td>Particulars</td>
<td>Percentage</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>General Opinion regarding the service</td>
<td>(a) People expressing general satisfaction</td>
<td>27.8</td>
</tr>
<tr>
<td></td>
<td>(b) People expressing dissatisfaction</td>
<td>62.1</td>
</tr>
<tr>
<td></td>
<td>(c) Passive</td>
<td>10.1</td>
</tr>
</tbody>
</table>

As the above information reveals, people do not seem to be satisfied with the service. Their major complaints are about low frequency irregular timings overcrowding and a long period of waiting. Reliance on public transport has been to the extent of 89%. People are not very much conscious about lodging complaints with the Management as 42% of the people have not expressed their opinion about the complaints machinery. This consciousness can be increased if a complaint box is kept in the bus.

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