



CHAPTER 7.0

VIJAYAWADA CITY BUS SYSTEM

The bus services in Vijayawada was nationalized w.e.f 01/01/1990 and Andhra Pradesh State Road Transport Corporation (APSRTC) is running the system through its Vijayawada City Division. The fleet size has continuously increased and presently about 400 city buses and 175 long distance buses are operating. Daily, on an average, about 3 lakh passengers are being carried by the system. About 60,000 passes to various categories like students, NGOs etc. are issued.



In addition to city operations, the services extend to mofussil areas like Mylavaram, G Konduru, Tenneru, Predduturu, Kunderu and Valluripalem. Hi-tech services are also run to Hyderabad City.

The Division operates night out services from the near by villages in the early hours to connect to K R Market, Bus Station and Railway Station.

The Division Operates from 5 depots.

Physical Performance

Table 7.1 presents the comparative physical performance of the City Division. An interesting and favourable feature is the high vehicle utilization at 277 km. Compared to other urban operations this is a commendable achievement. However it may also be due to combing with mofussil operations. The earnings per bus have regularly increased. Surprisingly the Occupancy Ratio is low. Energy consumption is very good at 5.21 KMPL. However a disconnecting feature is the trend in its decline.

Table 7.1 Vijayawada City Bus Services Performance Characteristics

Sl. No.	Parameters	Upto December 2003	Upto December 2004	Upto December 2005
1	No. of Schedules	378	391	419
2	Fleet Held	321	420	445
3	No. of Routes	120	112	110
4	Average Operated Kms (in lakhs)	1.08	1.17	1.19
5	Average Earning (in lakhs)	13.41	14.70	15.42
6	Average E.P.K.	12.42	12.58	13.00
7	Average V. U.	270	278	277
8	Earning per Bus	3350	3499	3595
9	Occupancy Ratio	56	56	59
10	Break Down Rate	0.13	0.08	0.12
11	Average HSD kmpl	5.32	5.27	5.21
12	Lub. oil kmpl	811	8.07	848



- Note:
1. The Total no. of routes are reduced duly eliminating most of the Suffixes to streamline the operations for the convenience of the public
 2. After the widening of the roads many representations received from the public regarding survey of the route lengths. As per the representations routes surveyed and reduced 1163 kms per day in Vijayawada city. This is the one of the points for reduction of KMPL.

Source: Brief Note on Vijayawada City Division (Glance), APSRTC, Vijayawada

Route Network

The bus route network within the city extends over 65 km. The routes radiate from the City Bus Terminal located along NH-5 near Rajeev Park. A large extent of city area is not well served by the route network. This is due to non availability of good link roads with adequate capacity to enable efficient movement of buses.

Bandar road, Eluru road, G S Raju road, C K Reddy road, Ajit singh-Payakapuram road, Vidyadharapuram road and Root No 5 road are the major bus route roads.

There is a need to rationalize and organize the route network such that any location in the city is within a distance of 500 to 600 metres from a bus route. This calls for extensive improvement to and development of the road network system.

Traffic on Route Corridors

Traffic surveys provide extensive data on traffic volumes on road links by modes and occupancy. The data are presented in **Figures 7.1**.

Generally the total traffic volumes, in terms of vehicles, range between 1219 and 70,829 vehicles per day (16 hours). However by PCUs, the range is between 1839 and 78,551. Weighed against the road capacity, it indicates that most of the links are saturated. This is reflected in terms of low speeds. There is a need to improve the road capacity by widening and other measures.

Of the traffic by vehicle numbers, buses account for 0.2 to 14.5%. However, by PCUs, buses account for 0.7 to 26.9% of the traffic.

The passenger volumes by modes present a contrast and highlight the importance of bus system. The share ranges between 3.9 and 83.9. The bus passenger volumes range between 1680 and 2,92,762.

While assignment of future travel demand as part of travel demand modeling will provide future PMT traffic volumes on different corridors, at this stage a tentative estimate is made based on the growth in bus passenger demand from about 3 lakhs passenger per day to about 16 to 18 lakh passengers per day. This would mean a potential increase of bus passenger volumes on road links by about 4 to 5 times. **Table 7.2** presents the estimated peak hour per direction bus passenger volumes on different links of the major road corridors. **Figure 7.2** depicts the potential bus passenger volumes on road network.



Table 7.2: Estimated peak hour bus passenger volumes

Direction	Bus Passengers Peak hour Peak direction (2006)	Estimated Bus Passengers Peak hour Peak direction (2021)
Police Control Room- Governerpet Jn	12802	51208*
Governerpet Jn - Ranga Statue Jn	8097	32388
Ranga Statue Jn - Stadium Jn.	6933	27732
Stadium Jn - Benz Circle	8997	35988
Benz Circle - NTR Statue Jn	12788	51152
NTR StatueJn - Auto Nagar Jn	11807	47228
Auto Nagar jn - Siri Labs	5375	21500
Governerpet Jn - Root no-5	7530	30120
Root No5 - Swarna palace hotel jn	6348	25392
Swarna palace hotel jn - Vijaya takies	3865	15460
Vijaya Takies jn - Chuttugunta Jn	3080	12320
Chuttugunta - Gunadala	3177	12708
Gunadal- Ramavarapupadu Jn	3565	14260
Varadhi Road (NH-5)	7547	30188
Benz circle - Vardhi jn	6593	26372
Benz Circle - Executive Club Jn	4825	19300
Executive Club jn - Ramavarapupadu jn	4785	19140
Ibrahimpnam - Gollapudi	9411	37644
Gollapudi - kummaripalem Jn	10350	41400
Kummaripalem - Ashok pillar jn	8231	32924
Ashok Pillar - Pottisreeramulu Jn	3545	14180
Potti Sreeramulu jn - Barrage	2302	9208
Bus stand-VMC-barrage	3207	12828
Fire Station jn - Bus stand jn	17559	70236
Varadhi - Fire Station Jn	17566	70264
Prajasakti nagar road (root no-5)	666	2664
Madhu Kalyana Mandapam Road	692	2768
Nuzvedu - Pipula road Jn	2522	10088
Pipula Road Jn - Devinagar Jn	2575	10300
Ajit Singh Nagar Road	2318	9272
C K reddy Road	2119	8476
Cement Factory - G S Raju road	1215	4860
Lakulu Road	1832	7328
Narayanaswami hotel road	943	3772
Sitara junction - Gollapudi	673	2692
Sitara junction - Milk Project	711	2844
Sitara Junction - Kummaripalem	1527	6108
Sitara junction - Chittinagar	1388	5552
Gandhi Hill road	1843	7372
Nainavaram -Milk Project Road	182	728
Ashok Pillar - Brahmin Street	1522	6088
Canal road	2745	10980
Nirmal Convent Road	101	404
Sambamurthy Road	850	3400
Gandhi center-alankar jn	1613	6452
Alankar jn - Lenin center	3460	13840
swarna palace - Hanuman pet	1554	6216
Swarna palace hotel jn - Lenin center	3236	12944
Police Control Room- Goods shed Jn	11006	44024

* includes traffic of Bandar road and Eluru road

Source: CES Surveys, 2006