

## **STUDIES FOR RISE IN BMTC BUS PASS RATES**

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**BMTC** with its efficient operation earned its own distinction to reach as one of the best public transportation system in India. Various passenger friendly measures are implemented on a continuous basis with increased popularity among children, ladies, elders and physically challenged passengers alike. At the same time to balance the cost of operation to revenue earnings, separate exercise to be made, this could be watched and viewed seriously among passengers.

It is very difficult to put operators & passengers on a common base scale as their priorities will be different in a similar way that of supply and demand phenomenon. The equilibrium point can be achieved when the operator & passengers are satisfied fairly. Generally passengers want high frequency, more comfort, less cost for ticket, less travel time, ensured seat occupancy to mention a few, whereas on the other hand, operators point of view, revenue earnings should be more, less cost of operation, large area coverage, less dead kilometerage, etc.,. In this given scenario, **BMTC** earned very good status from the passenger point of view satisfying most of their perceived requirements. Many times, it becomes imminent to increase the fare and due to frequent fuel hike, tire tube costs, maintenance cost, employees welfare schemes related costs etc.,. The balanced act has been looked and on many occasions the ticket cost has not increased keeping in mind the passengers view point. The supportive document will clearly reflect the passenger's friendly attitude of **BMTC**.

The last revision of monthly pass rate was in OCTOBER 2005, where the city bus pass rate was increased by Rs.30/- from Rs.310/- to Rs.340/-. Similarly Sub-Urban service has increased its pass rate by Rs.30/- in October 2005, followed by Rs.30/- for pushpak service. All these changes are effective since October 2005. In spite of several times increase in fuel cost, the rate had not seen upward increase. At present due to imminent reasons, **BMTC** proposed to increase the rate. To carry out the scientific study with reasoning, it was referred to traffic engineering expert and advisor, Prof. M.N. SREEHARI to suggest the new structure and its effect.

Accordingly a well planned commuter response survey was conducted covering entire areas which were operated by **BMTC** buses in form of city, suburban and pushpak services.

The study encompasses to cover even daily passes where the last revision was in the august of 2004. More than about 2000 passengers using the passes were interviewed which in turn facilitated for the analysis. This includes women pass holders also. These analysis are self explanatory from the various charts presented below.

### **1. Variation in monthly pass rates over the years – (CITY)**

PERIOD	Rs	VARIATION	%VARIATION	AVERAGE INCREASE PER YEAR
OCT 97 - JAN 99	170	-	-	
FEB 99 – NOV 99	140	-30	-17.64	
DEC 99-SEP00	170	+30	+21.43	
OCT00-JUN02	190	+20	+11.76	Rs 21.25
JUL02-SEP02	200	+10	+5.26	
OCT02-APR03	240	+40	+20.0	
MAY03-AUG04	260	+20	+8.33	
SEP04-APR05	280	+20	+7.69	
MAY05-SEP05	310	+30	+10.71	
OCT 05	340	+30	+9.67	

**NOTE:** It is reasonable to increase the fare by Rs.20/- i.e. to **Rs.360/-**

## 2. Variation in monthly pass rates over the years - (Sub-Urban)

PERIOD	Rs	VARIATION	%VARIATION	AVERAGE INCREASE PER YEAR
OCT 97 - JAN 99	240	-	-	
FEB 99 – NOV 99	240	0	0.0	
DEC 99-SEP00	290	+50	+20.83	
OCT00-JUN02	320	+30	+10.34	Rs 29.37
JUL02-SEP02	340	+20	+6.25	
OCT02-APR03	370	+30	+8.82	
MAY03-AUG04	385	+15	+4.05	
SEP04-APR05	405	+20	+5.19	
MAY05-SEP05	445	+40	+9.87	
OCT 05	475	+30	+6.74	

**NOTE:** It is reasonable to increase the fare by Rs.30/- i.e. to **Rs.505/-**

## 3. Variation in monthly pass rates over the years - (Pushpak)

PERIOD	Rs	VARIATION	%VARIATION	AVERAGE INCREASE PER YEAR
OCT 97 - JAN 99	300	-	-	
FEB 99 – NOV 99	300	0	0.0	
DEC 99-SEP00	340	+40	+13.33	
OCT00-JUN02	380	+40	+1.76	Rs 25
JUL02-SEP02	395	+15	+3.95	
OCT02-APR03	410	+15	+3.79	
MAY03-AUG04	425	+15	+3.66	
SEP04-APR05	440	+15	+3.53	
MAY05-SEP05	470	+30	+6.82	
OCT 05	500	+30	+6.38	

**NOTE:** It is reasonable to increase the fare by Rs.25/- i.e. to **Rs.525/-**

#### 4. DAILY PASS RATE

Since it is not hiked since august 2004 (from 2 years) and with a moderate of Rs.5/- per year, the daily pass can be increased from the present Rs.25/- to Rs.28/- (During the same period more than 4 times the fuel prices are revised) as increase of Rs.5/- suddenly will be retrograde (It will be more ideal to increase the daily pass rate yearly once).

### ECONOMIC ANALYSIS FOR CITY BUSES

#### 1. FOR CITY BUSES:

Keeping an average number of passes to be 40350, with the increase of Rs.20/- to the existing Rs.340/- , the additional revenue yield will be Rs.8, 07,000/- per month and Rs. 96, 84,000/- per year.

#### 2. FOR SUB-URBAN BUSES:

Keeping an average number of passes to be 1, 27,517, with the increase of Rs.30/- to the existing Rs.475/- , the additional revenue yield will be Rs.38,25,510/- per month and Rs.4,59,06,120/- per year.

#### 3. FOR PUSHPAK BUSES:

Keeping an average number of passes to be 43,567, with the increase of Rs.25/- to the existing Rs.500/- , the additional revenue yield will be Rs.10, 89,175/- per month and Rs. 1, 30, 70,100/- per year.

### DAILY PASS

Due to its increased popularity and area coverage with improved service and other facilities, the number of passes sold is increasing month after month which is reflected by the passes sold. Hence an average of 50,000 passes can be taken to be sold per day for the year 2006-07. With the increase of daily pass rate from the present rate of Rs.25/- to Rs. 28/- , the revenue earned will increase from the present Rs.1250000/- to Rs.1400000/-(An increase of Rs.150000/- per day). Annual revenue or profit earned will be Rs.54750000/- (five crores forty seven lakhs fifty thousand per year).

**\* The following table will present the findings of revenue yield in monthly passes:**

	<b>City service</b>		<b>Sub-urban service</b>		<b>Pushpak service</b>	
	Existing at Rs.340/-	Proposed revision at Rs.20/- (Rs360/-)	Existing at Rs.475/-	Proposed revision at Rs.30/- (Rs505/-)	Existing at Rs.500/-	Proposed revision at Rs.25/- (Rs525/-)
Monthly yield(average)	13720247	14527247	60570733	64396243	96074480	97163655
Annual yield(average)	164642964	174326964	726848796	772754916	1152893760	1165963860
Profit per year	Rs. 9684000		Rs. 45906120		Rs. 13070100	
Total estimated profit from monthly passes	<b>Rs. 68660220</b>					

The total estimated profit from monthly passes is **Rs.6, 86, 60,220**(Rs. Six Crores eighty six lakhs sixty thousand two hundred and twenty only)

**\* The following table will present the findings of revenue yield in daily passes:**

Total estimated profit from daily passes	<b>Rs.54750000/-</b>
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**The total estimated profit from daily passes is Rs. 54750000/- (Rs. Five crores forty seven lakh fifty thousand only)**

## RECOMMENDATIONS AND SUGGESTIONS

1. BMTC is operating to the best of satisfaction to passengers as it enjoys the monopoly of being one and only one efficient public transportation in Bangalore.
2. Various measures for serving passengers to its best were practiced and as such due to its large attraction to passengers, could make the corporation as one of the profit making service operator.
3. Due to frequent rise in fuel and other accessories, and to balance the expenditure, BMTC will have to work out the new tariff for monthly and daily pass holders.
4. A detailed scientific & technical study was carried out by traffic expert team for this revision.
5. The outcome of the studies suggests that the monthly pass rate for city passengers can be raised to Rs.360/- from the present Rs.340/- , for suburban service to Rs. 505/- from the existing Rs.475/- and for pushpak service to Rs.525/- from the present Rs.500/-.
6. Similarly the daily pass can be raised to Rs.28/- from the present of Rs.25/-.
7. The earlier revision for monthly passes was in October 2005 and daily passes in August 2004.
8. The additional revenue collection will work out to 6.866 crores per year from monthly passes and 5.475 crores per year from daily passes.
9. This revision will not affect the commuters and will have very little effect as the rise is marginal and imminent.
10. The over all additional revenue improvement will be Rs. 12.341 crores.
11. The sensitivity analysis ensures that passengers that passengers will not change the mode with this increase and also will continue to use the bus transport.
12. Passengers are satisfied with the BMTC and they continue the patronage in future also as this rise cannot be taken as a burden as they only perceived and concurred to this which was found from the survey.