

PRESENTATION ON

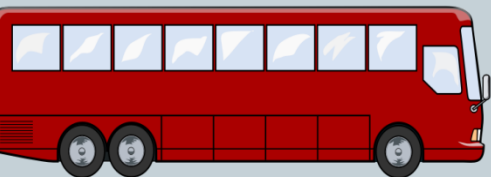
Planning City Bus Service in Small/ Medium Towns

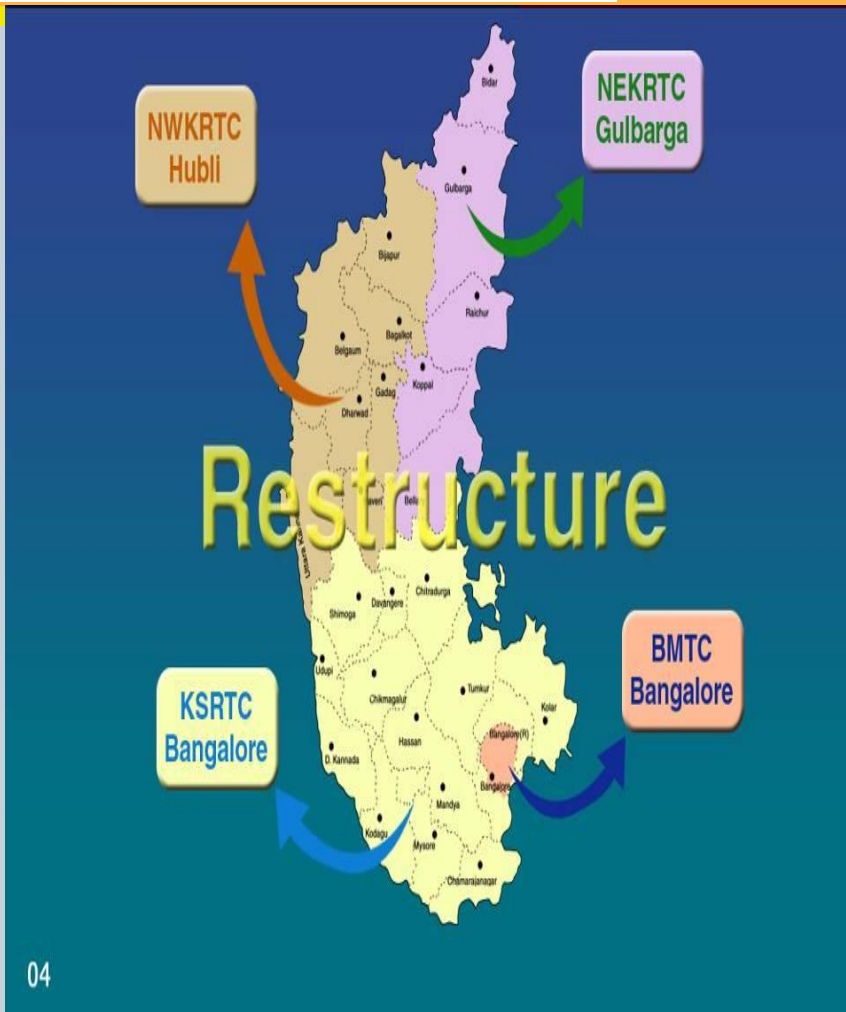
BY

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MANAGING DIRECTOR

NEKRTC, KALABURAGI, KARNATAKA





- Established in **2000**
- Districts **7** operating Divisions-**9**
- Depots-**49.**, workshop-**9** & RWS-**1**
- Schedules- **4175**
- Schedule Kms- **14.00 lakhs**
- Fleet - **4425**
- Population of cities range from **0.32** to **6.00** lakhs
- Apart from city inter city and interstate service also operated.



Cities -	3
services -	72
Trips-	576
Routes-	32
Route Kms	92.90
Vehicle utilisation-	129Kms
Occupancy ratio (%) -	55%
Revenue per bus-	Rs 2239
EPKM(RS)-	21.53
CPKM(RS) -	26.50
MPKM(RS)	-4.97

THE PROJECT IMPLEMENTED IN TWO PHASES

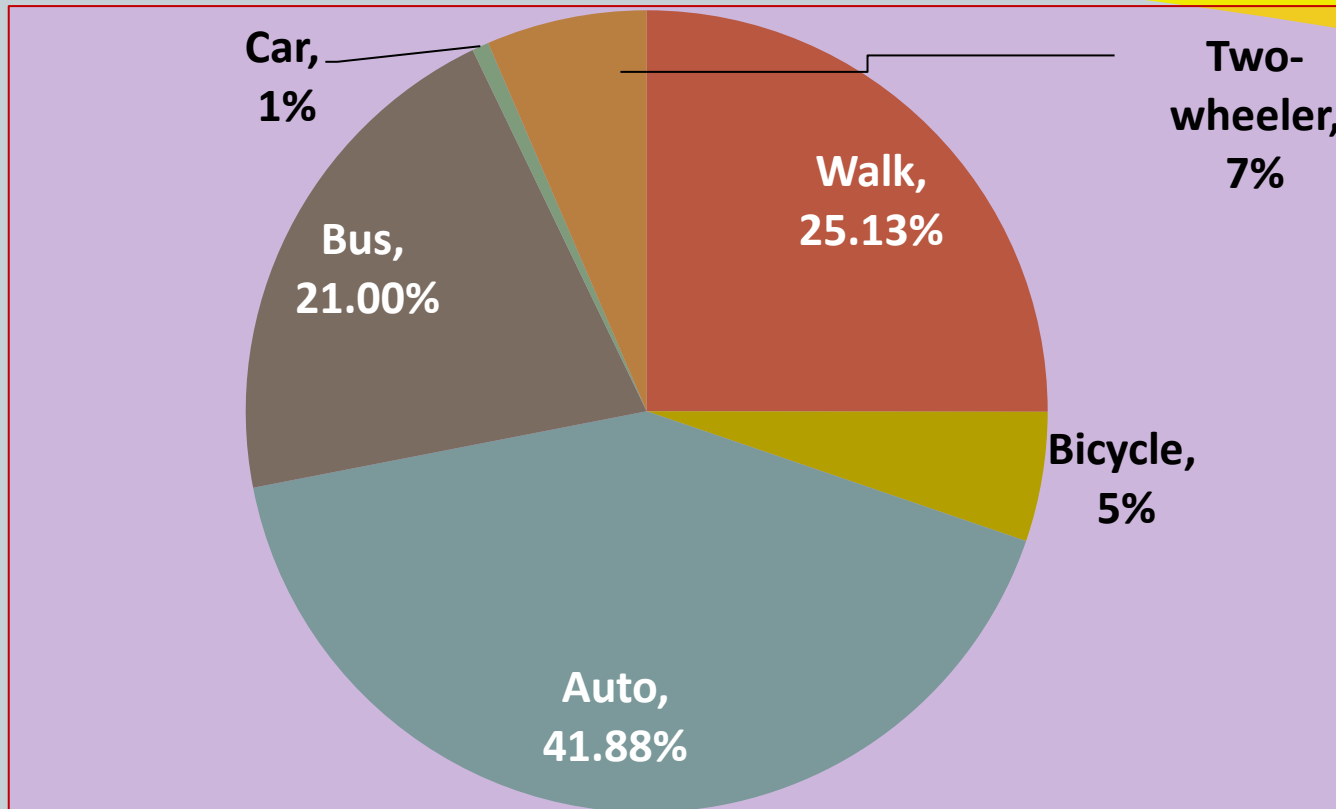
PHASE -1 (October 2012-May 2013)

- CITIES COVERED : **9**
- BUSES: **250**
- FINANCIAL ASSISTANCE: **DULT GoK Rs. 27.07 Crores (50%) NEKT Rs. 27.07 Crores (50%)**
- TOTAL COST: **Rs.5415.00 lakhs.**

PHASE -2 ((April-May 2015)

- CITIES COVERED : **9+2**
- BUSES: **229**
- FINANCIAL ASSISTANCE: **JNnURM, GoI Rs. 47.83 Crores (80%), GoK Rs. 5.98 Crores 10% & NEKT 5.98 Crores (10%)**
- TOTAL COST: **Rs.5979.00 lakhs.**
- TYPE OF BUSES: **MIDI**

Sl. No.	PARTICULARS	2011-12	Present
1	Buses	72	479
2	Routes	32	137
3	Trips	576	4635
4	Route length (In Kms)	113	597
5	Vehicle utilisation(In Kms)	129	168
6	Occupancy ratio	55%	82%
7	Ridership per bus	353	715
8	Rev per bus (In Rs.)	2239	4809
9	EPKM (In Rs.)	21.53	30.32
10	CPKM (In Rs.)	26.50	36.71
11	MPKM (In Rs.)	-4.97	-6.39



➤ Overall **42%** Shift from Autos

➤ Overall **25 %** Shift from Walk



"Viaypur" - Bijapur



"Nrupatunga" - Kalaburagi



"Rastrakuta" - Sedam



"Kalayan karnatak" - Bidar



"Kiskinda" - Koppal



"Girinagar" - Yadgir



"Anjanadri" - Gangavati



"Sindhur city service"



"Bhuvana Vijaya" - Bellary

"Vijaya Ratha" - Hospet



"Rayarath" - Raichur

Sl. No.	City	Pop	LPA Sq.km	Fleet	Route	Avg route length	EPKM	CPKM	MPKM
1	Kalaburagi	5.32	253	88	26	18.50	34.15	38.19	-4.04
2	Ballari	4.09	82	63	22	7.75	29.14	35.16	-6.02
3	Vijayapur	3.26	97	89	18	9.25	33.25	38.41	-5.16
4	Raichur	2.33	60	55	22	6.50	32.08	36.69	-4.61
5	Bidar	2.12	43	33	8	6.25	30.66	37.46	-6.80
6	Hosapete	2.06	50.92	48	18	15.50	32.78	37.12	-4.34
7	Gangavati	1.15	16.53	25	4	4.00	29.05	36.46	-7.41
8	Yadgir	0.91	5.63	24	5	4.12	29.32	37.01	-7.69
9	Sindhur	0.76	69	20	4	3.00	28.31	36.16	-7.85
10	Koppal	0.71	28.78	28	8	3.15	27.91	36.04	-8.13
11	Seram	0.32	5.5	6	2	3.40	26.91	35.16	-8.25
TOTAL				479	137				
Avg						7.40	30.32	36.71	-6.39

1. Viability constraints:

- Restriction of operation to city limits
- Shorter route length
- Low vehicle utilisation
- Reduced occupancy
- Non-viability
- Non traffic revenue is less in small cities/towns
- Higher cost of operation

2. Infrastructure issues

- Inadequate road network (Absence of *sub-arterial*, collector's and local streets posing problem for last mile connectivity)
- inadequate passenger amenities (Shelters, time tables , route maps)

3. Institutional issues

- Inter institutional coordination
- Enforcement issues (For free movement of buses at junctions and circles)
- Absence of Appropriate land use policies

Parameter	KLB	BLR	VJP	RCH	BDR	HSP	GVT	YDG	SND	KPL	SRM
Route Length	18.50	7.75	9.25	6.50	6.25	15.50	4.00	4.12	3.00	3.15	3.40
Occupancy ratio	88%	76%	84%	85%	68%	85%	68%	69%	62%	67%	66%

Route length

- The reasons for longer route length in case of Kalaburagi Ballari, Vijaypur, Raichur, Bidar, and Hosapete have more — i) population. ii). Commercial activities iii). Tourism iv). Educational institutions v). Hospitals. Vi). Mining and Agro based industries. Vii). Employment Viii) Opportunities
- Yadgir and Koppal are the cities which have been developing as District centres recently which have a moderate route length. Sindhnur, Gangavati and Seram cities are not much developed cities hence they have least route length.
- Kalaburagi has the highest vehicle utilisation

Occupancy Ratio

- It is high in cities because of the reasons mentioned against them
- Kalaburagi**- Well developed city net work, **Vijaypur, Ballari, Hosapete and Raichur**- Tourism and mining industry It is moderate in Bidar, Gangavati, Yadgir, Sindnur, Koppal and Sedam as such activities are seen there.

Parameter	KLB	BLR	VJP	RCH	BDR	HSP	GVT	YDG	SND	KPL	SRM
Population	5.32	4.09	3.26	2.33	2.62	2.06	1.15	0.91	0.76	0.71	0.32
Daily Ridership	92488	52605	90246	53790	31020	47136	18475	20448	13740	26992	2760

Ridership

- Ridership is more in Kalaburagi and Vijayapur Population and presence of activity centres where as Ballari having similar population has less riders because of higher personal vehicles and reduction in mining activities after 2012-13.
- Raichur and Hosapet though have same population ridership is more in Hosapete because of tourism development.
- Bidar Koppal and Yadgir have moderate ridership.
- Other small cities have lower ridership.

Parameter	KLB	BLR	VJP	RCH	BDR	HSP	GVT	YDG	SND	KPL	SRM
EPKM (In Rs.)	34.15	29.14	33.25	32.08	30.66	32.78	29.05	29.32	28.31	27.91	26.91
CPKM (In Rs.)	38.19	35.16	38.41	36.69	37.46	37.12	36.46	37.01	36.16	36.04	35.16
MPKM (In Rs.)	-4.04	-6.02	-5.16	-6.61	-6.8	-4.34	-7.41	-7.69	-7.85	-8.13	-8.25

Viability

- Losses are lowest in Kalaburagi, Hosapete and Vijayapur because of the prosperity and Tourism development.
- Little higher in Ballari because of the reduction in mining activities in the recent past.
- It is moderate Raichur, Bidar and Gangavati as these cities are underdeveloped .
- The lowest in other smaller cities.

KALABURAGI CITY

Sl. No	Parameters	Before	After	Variation
1	Buses	88	88	
2	Routes	26	34	8.00
3	Trips	1056	976	-80.00
4	Avg. Route length (In Kms)	11.63	18.50	6.87
5	Route Kms	302	629	327.00
6	Vehicle utilisation(In Kms)	168	192	24.00
7	Occupancy ratio	102%	89%	-13%
8	Ridership per bus	1021	987	-34.00
9	Rev per bus (In Rs.)	4724	6557	1833.00
10	EPKM (In Rs.)	29.12	34.15	5.03
11	CPKM (In Rs.)	40.10	38.19	-191
12	MPKM (In Rs.)	-10.98	-4.04	6.94

HOSAPETE CITY

Sl. No	Parameters	Before	After	Variation
1	Buses	48	48	
2	Routes	6	8	2
3	Trips	528	284	-244
4	Avg. Route length (In Kms)	6.22	15.50	9.28
5	Route Kms	37.32	124	86.68
6	Vehicle utilisation(In Kms)	146	190	44
7	Occupancy ratio	98%	85%	-13%
8	Ridership per bus	1080	982	-98
9	Rev per bus (In Rs.)	4203	6064	1861
10	EPKM (In Rs.)	28.79	32.78	3.99
11	CPKM (In Rs.)	38.14	37.12	-1.02
12	MPKM (In Rs.)	-9.35	-4.34	5.01

Fare hike experiment in Kalaburagi city

Kms	Old fare (Rs)	New fare (Rs)	Ridership @old fare	Ridership @New fare	Variation	% Var
2	3.00	5.00	369902	304386	-65516	17.71
4	5.00	6.00	660383	582675	-77708	11.76
Total			1030285	887061	-143224	13.90

Leanings :

- A small hike in the fares results in considerable reduction in ridership.
- A small slash in fare leads to considerable increase in the ridership.
- Hence it is difficult in increase fares to catch up the increasing cost of operations.

Parameters	City	Moffusil
Route Length	Short	Long
Vehicle utilisation	192 Kms (avg)	375 Kms (Avg)
Crew Utilisation	Low	High
Fuel efficiency	Low	Moderate
Cost of operation	Very High	Moderate
Requirement of crew	Double shift	Normal

- 1. Extension of operations beyond city limit Catering to cluster city operations**
- 2. To attract the non traffic revenue like advertisement revenue tax holiday from municipal authority.**
- 3. Government of India(GoI) should reintroduce finance schemes for**
 - For replacement and augmentation of buses.
 - To upgrade ancillary transport infrastructure
 - For updating technical standards & implementing ITS
 - Viability gap funding for operations
- 4. To address the institutional and infrastructure issues a unified authority to regulate the activities of all stake holders shall be established.**

THANK YOU

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