

Problems for Small & Medium Towns and Introduction of Public Transport System

Small Town Characteristics



- Defined with the population less than 20,000.
- Small town is neither a village, nor a city.
- Neither traditional in their structure, nor do they represent modern settlement milieu.
- Unique way of life governed by size, site, demography, social ecology and economy.

Medium Town Characteristics



- Population ranging from 20,000 to less than 100,000
- Growth is distinctly fast in areas with comparatively low population density
- More akin to cities than to small towns in respect of growth pattern

MODE SHARE IN SMALL & MEDIUM TOWNS

Mode share in Various Indian Cities (%)

Population	Walk	Cycle	Rickshaw	Auto Rickshaw	Public Transport	Cars	2 Wheelers
50000 to 1 Lakhs	38	17	13	4	11	1	16
1 Lakhs to 5 Lakhs	38	15	12	3	13	1	18
5 Lakhs to 10 Lakhs	32	20	—	3	9	12	24

*Source: Chapter 5 of Handbook of Urban Statistics MoUHA - year 2017

TRIP LENGTH IN SMALL & MEDIUM TOWNS

Trip length (in KMs) by city category

City Category	Population	Average Trip Length (Km)
Category-1 a	<5 lakhs with plain terrain	2.4
Category-1 b	<5 lakhs with hilly terrain	2.5
Category-2	5-10 lakhs	3.5

*Source: Ministry of Urban Affairs (Study) – 2013 & 2017

Challenges of Small & Medium Towns

Lack of Organised Para - Transit Mobility.

No or limited intracity options.

Public Transit usage is low.

Increase in the 2 wheeler usage.

Lack of walkways, footpaths, flyovers, bus stops.

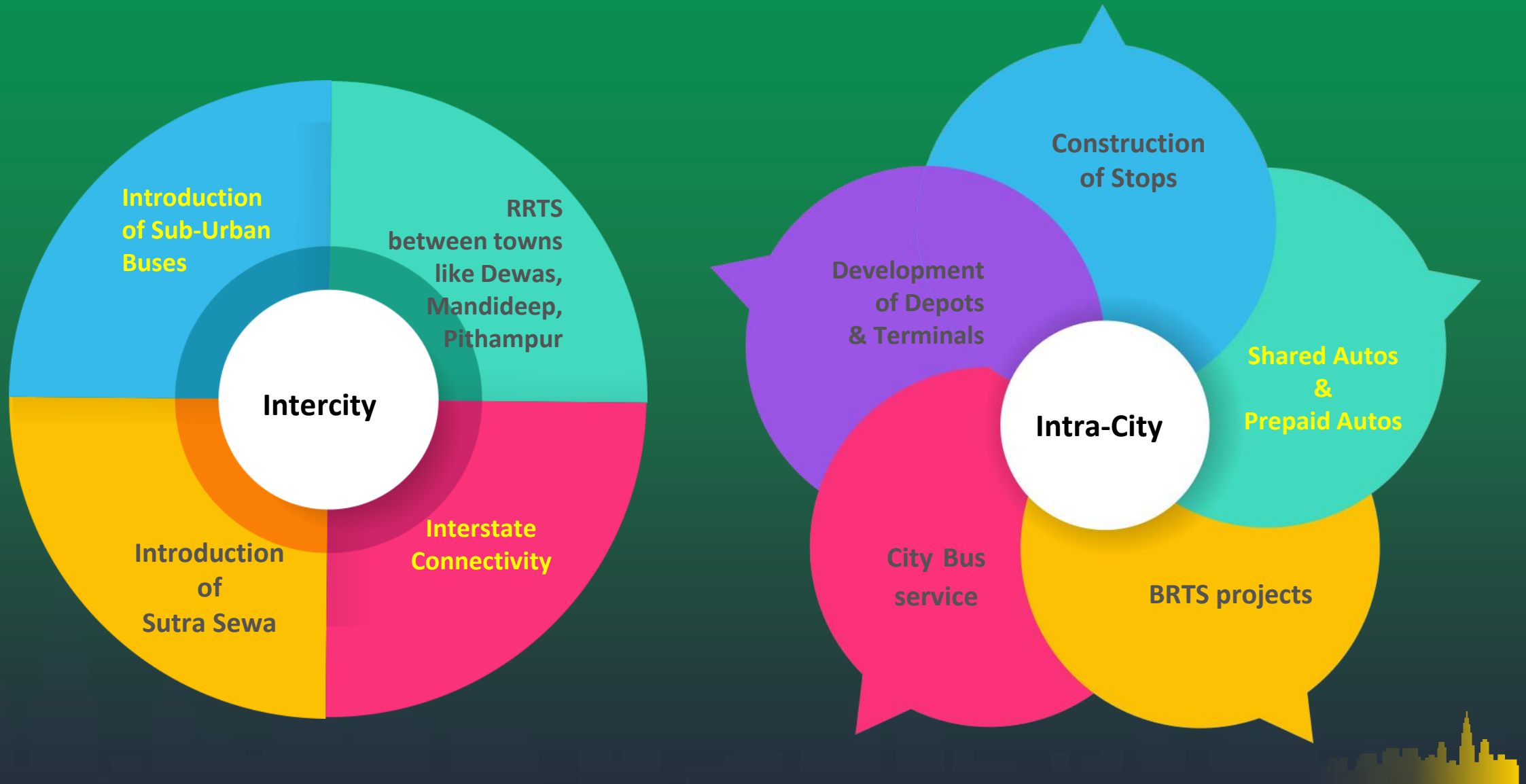
Focus is always on cities & metro towns.



An aerial photograph of a wide, multi-lane road in an urban setting. A red bus is traveling towards the viewer in the center lane, and a black car is in the right lane. The road is flanked by trees and buildings. A dark semi-transparent layer is overlaid on the image, with the text 'INITIATIVES IN MADHYA PRADESH TO DEVELOP MOBILITY OPTIONS' centered on it. The words 'MADHYA PRADESH' are highlighted in yellow, while the rest of the text is white.

INITIATIVES IN MADHYA PRADESH TO DEVELOP MOBILITY OPTIONS

Solution adopted by Madhya Pradesh





Madhya Pradesh Real Estate Policy 2019

MP Transit Oriented Development Policy 2018

IBUS BRTS INDORE

Ibus Aerial View



Ibus Median Station &
Bus Docking

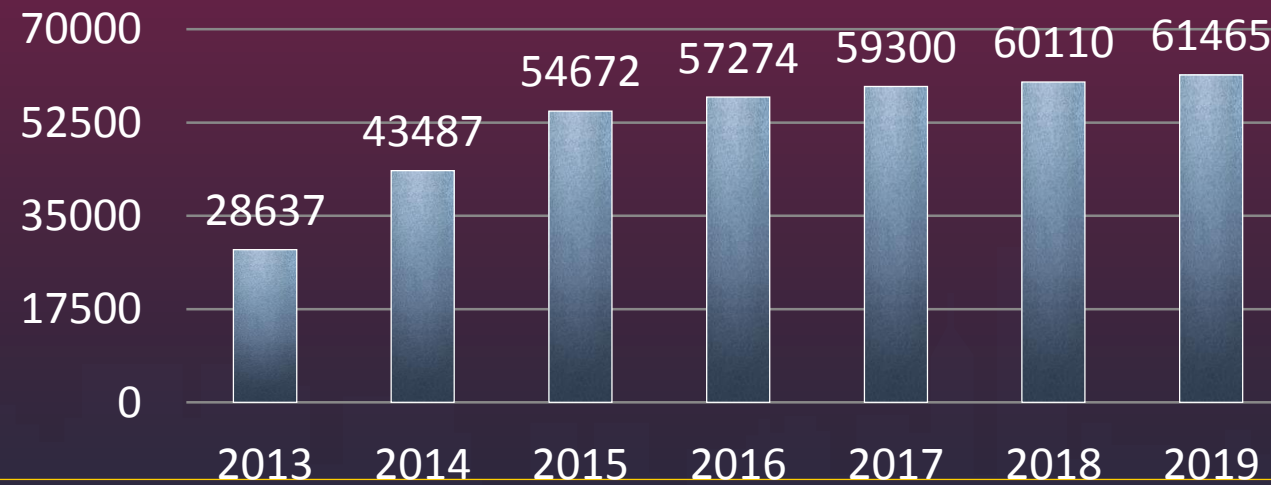
About Indore BRTS

Initiated	<ul style="list-style-type: none">• 2007
Route Length	<ul style="list-style-type: none">• 11.46 km AND 12 kms feeder.
Road section	<ul style="list-style-type: none">• 31.6 / 60 metres
Stations	<ul style="list-style-type: none">• 21
Buses	<ul style="list-style-type: none">• 42
Ridership	<ul style="list-style-type: none">• 60,110 pax/day (avg)

IBUS BRTS INDORE



IBUS BRTS Indore – Ridership



BHOPAL BRTS - MYBUS

Aerial View



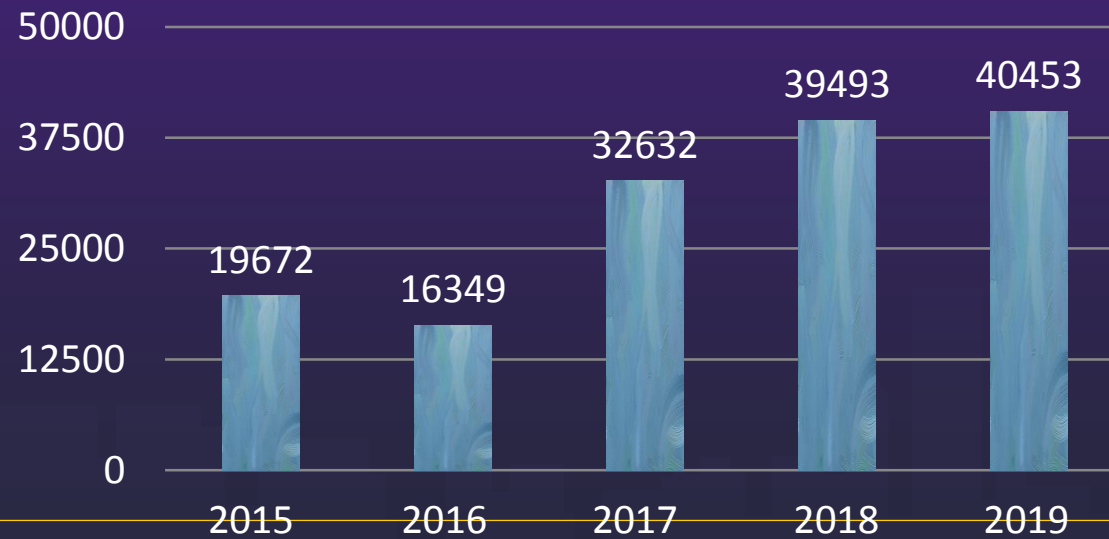
Segregated bus Lane



About Bhopal BRTS

Initiated	<ul style="list-style-type: none">• 2008
Route Length	<ul style="list-style-type: none">• 22 km
Road section	<ul style="list-style-type: none">• 31.6 / 60 metres
Buses	<ul style="list-style-type: none">• 50
Ridership	<ul style="list-style-type: none">• 39,500 pax/day (avg)

MYBUS BRTS - BHOPAL



RIDERSHIP

CITY BUS SERVICES



About City bus system Before Sutra Sewa

Indore

160 buses

Bhopal

120 buses

Jabalpur

65 buses

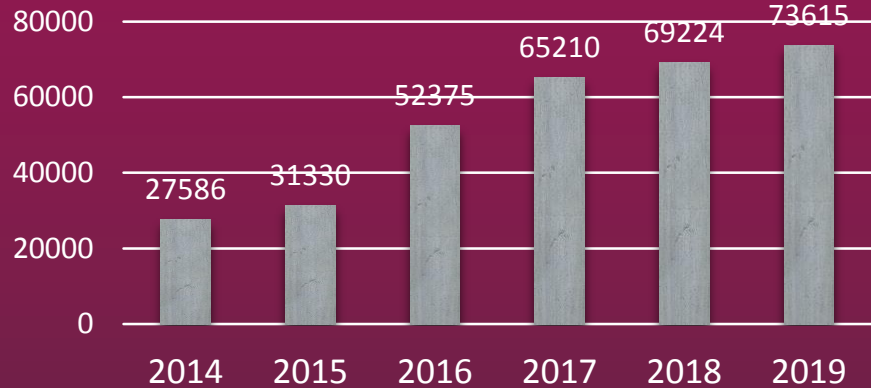
Total Ridership

More then 5 Lacs passengers per day

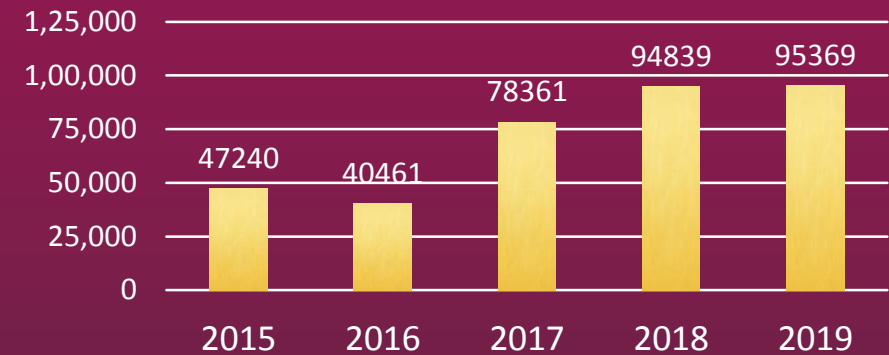
Operating models

Net Cost, VGF.

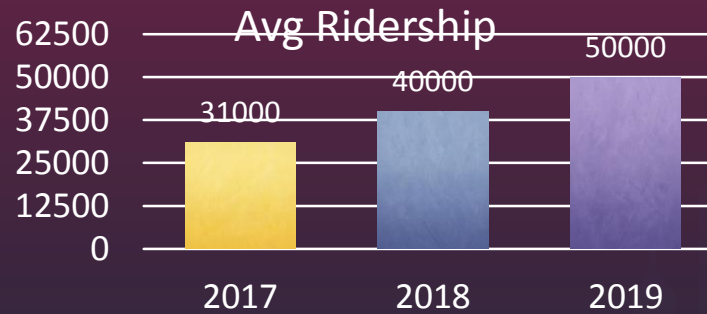
AVERAGE DAILY RIDERSHIP OF CITY BUS



Indore City Bus



Bhopal City Bus

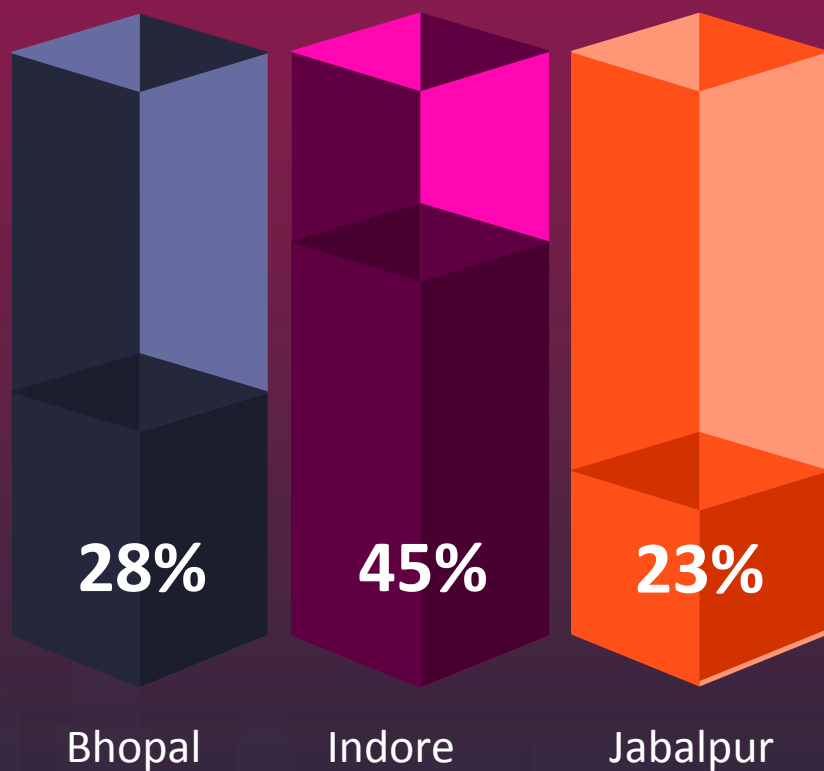


Jabalpur City Bus

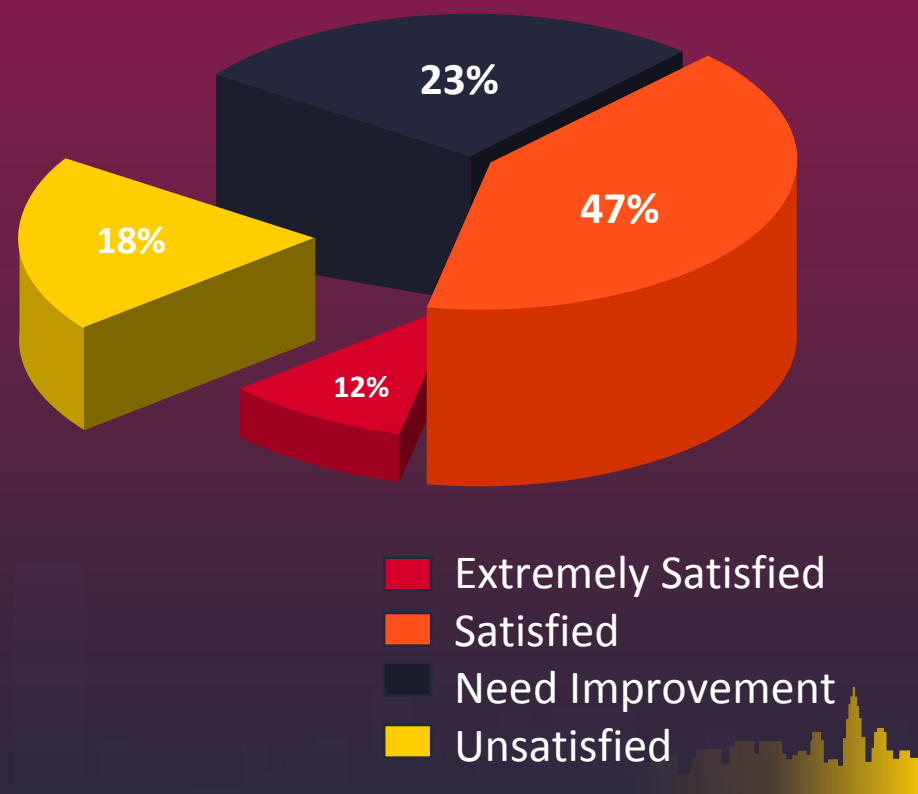


Other Impact and User Survey

Modal Shift from Private Vehicles



User Satisfaction Survey



Intercity and Interstate Services

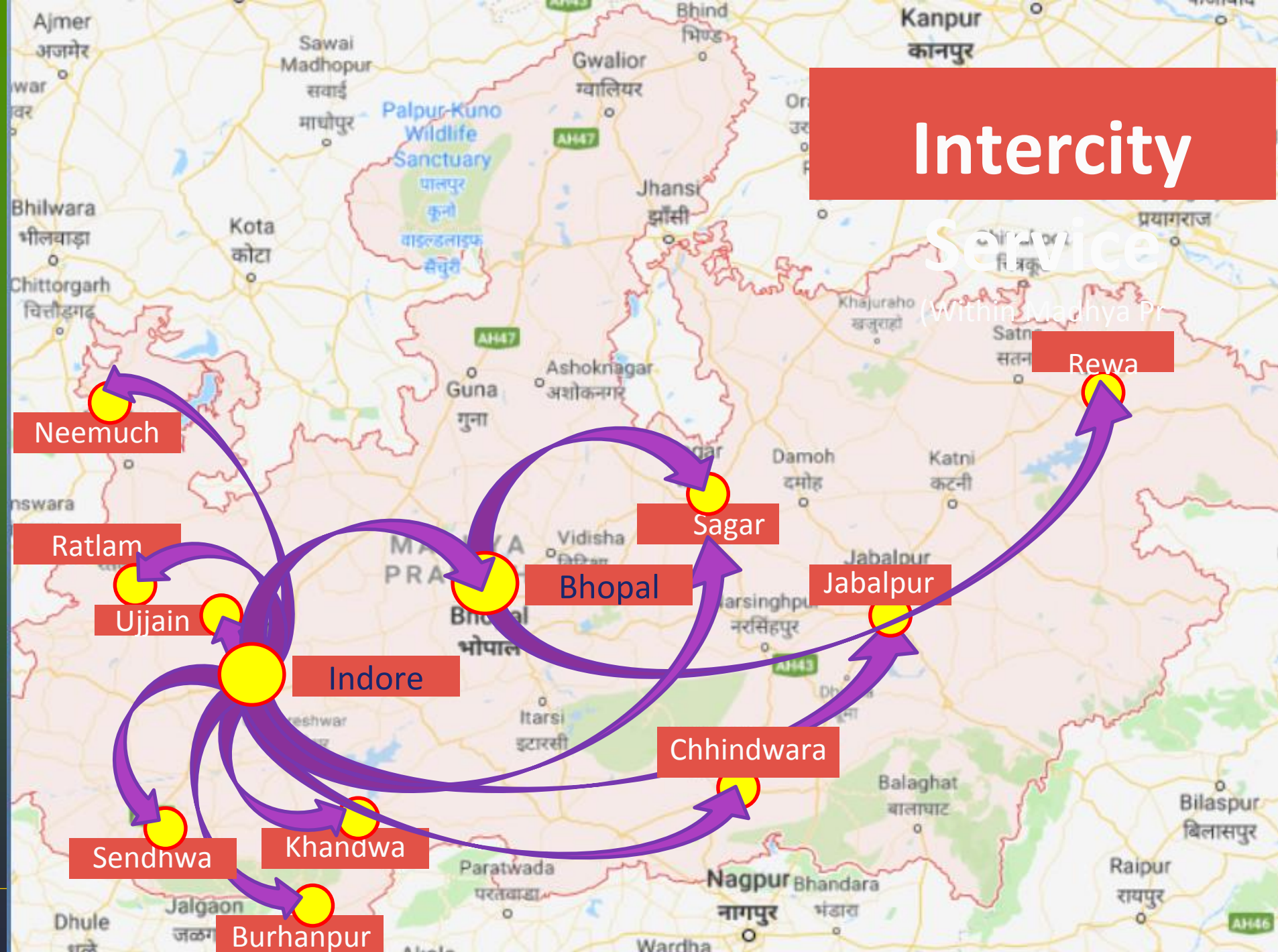


About Intercity & Interstate Services

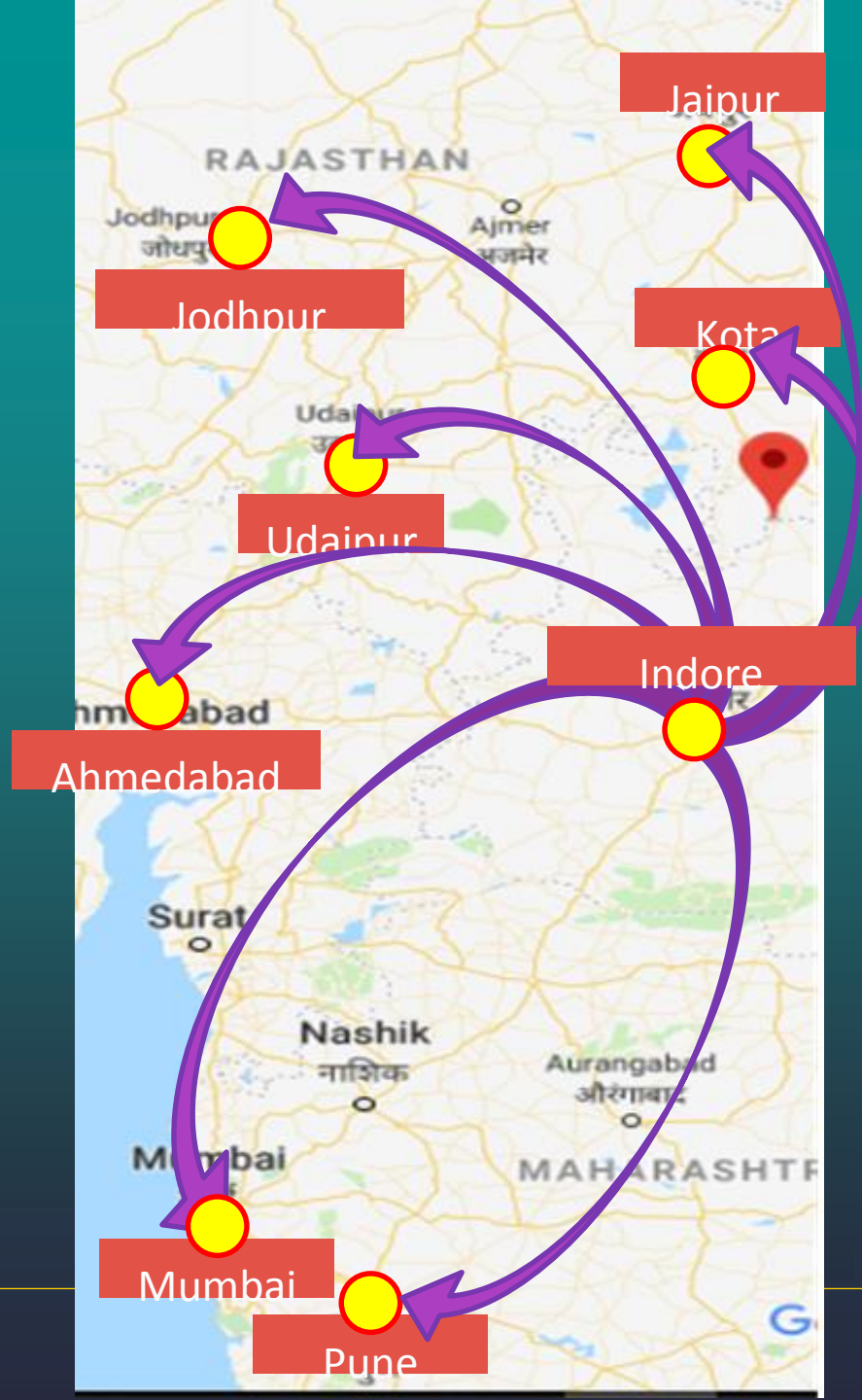
Initiated	2012
Operating model	Net Cost
No. of buses	More than 80.
Bus Type	AC & Luxury buses.
Small & Medium Towns connected	More than 50 towns.

Intercity Service

(Within Madhya Pradesh)



Interstate



PBS Projects in MP

INDORE

Public Bicycle sharing scheme has been initiated in Indore with 10 Stations & 100 Bicycles

BHOPAL

PBS system ensures the last mile connectivity to the Public Transit in Bhopal integrated with BRTS.

SUTRA SEWA

(Initiative to cater the Mobility challenge of Small & Medium Town)

Plan is:-

To Combine Intercity Profit & Intracity Non Profit Services

Formation of :-

Cluster Based Model – Hub & Spoke Model.

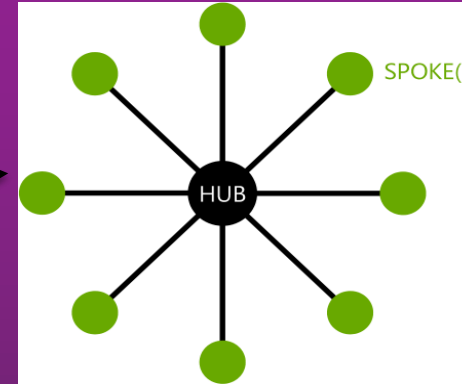
The operational Model is the **Cluster** based with Govt. Subsidy as VGF to the operator.



Hub and Spoke Model



Wire
Wheel



Hub and Spoke
Model

**More than 20
SPVs formed.**
Connected
untouched small &
Medium towns



Funding:
40 % subsidy
under AMRUT



Strengthening :
Intra-city bus
Services
&
Intercity bus
services



Features of Sutra Sewa in Madhya Pradesh



Advanced
Software
based
Ticketing.

Comfortable &
bus body code
compliance buses.

CCTV Surveillance.



Centralized
monitoring.



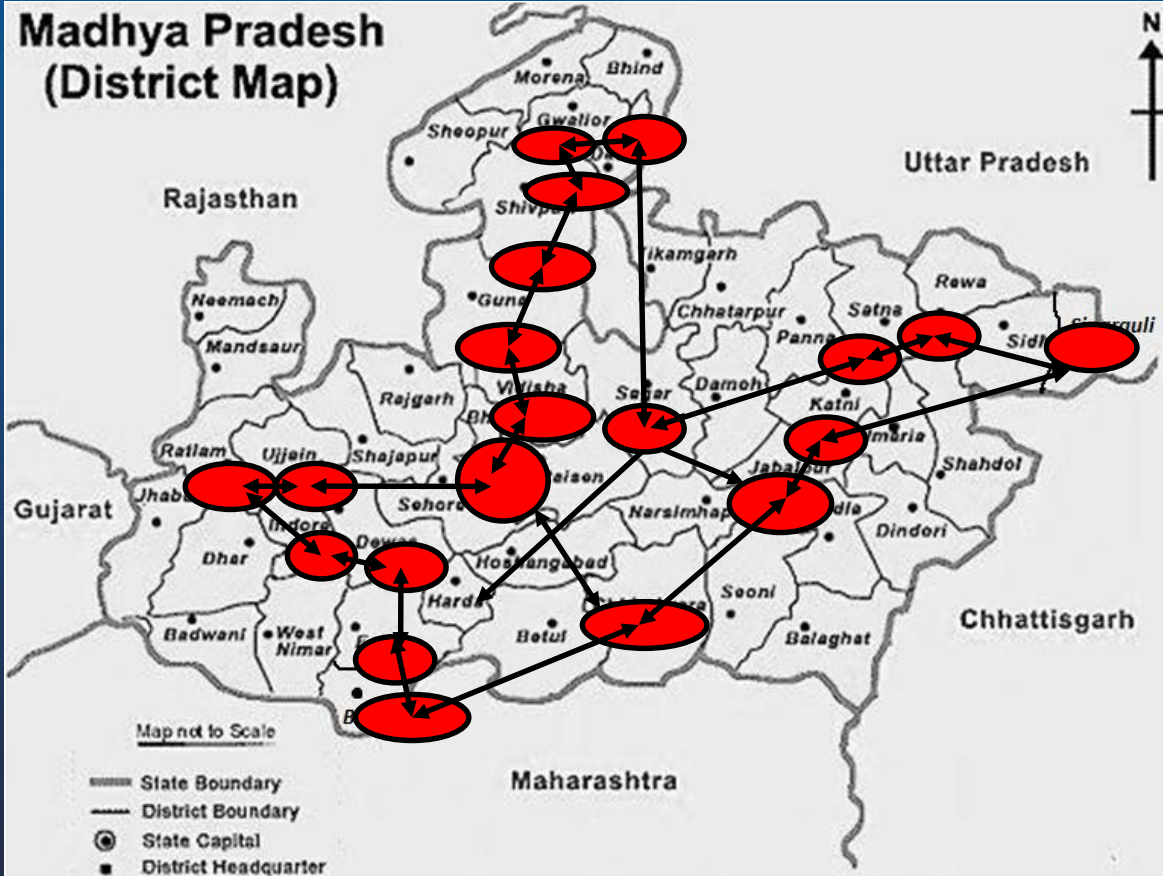
24 * 7 call
center
operations.



GPS & SOS
system.



Sutra Sewa Connecting Small and Medium Towns



<u>Description</u>	<u>IMPACT</u>
ULBs Connected	More than 310
No. of Small Town Connected	More than 300
No. of Medium Town Connected	More than 1000
No. of buses	More than 1000 buses added
No. of passengers	More then 5 Lacs per day



सूत्र सेवा के तहत 10 और बसें सड़क पर उतरीं, जीपीएस सिस्टम से की जा रही हैं 52 बसों की निगरानी

अमृत योजना के तहत प्रदेश के 20 शहरों से 1600 बसों की शुरुआत होना है। इनमें इंटरसिटी और इंद्रा सिटी बसें शामिल हैं।

Dainik Bhaskar
Jun 23, 2023, 11:44 AM IST



अमृत योजना के तहत 62 बसें सिटी बसें

इंटर-सिटी: हरियाणा के 42 बसें सिटी बसें के शुरू होने के बाद सोमवार को भी 10 बसें सड़क पर उतरीं। 14 साल से बंद इस सेवा को पनबैने सरकार ने चढ़ा बरफाव के साथ फिर से शुरू किया है। सूत्र सेवा के नाम से इस सोलाह को पीएन नोट भेटी है हरियाणा को प्रेसवाहियों को लैबी थी। यह सेवा रोज़ेड के रह रहे हैं, लेकिन मोल में कुछ बरफाव किया गया है। रोज़ेड के साथ सरकार के साथ में था, लेकिन इसका संभावित ऑपरेटिंग के साथ में होगा। इसकी निगरानी



आखन लोग सिटी ट्रांसपोर्ट - आज से आम यात्री सिटी बस से इंटरगेंज चौकाल से दीनदयाल नगर रूट पर सफर कर सकेंगे पहली बार सिटी बस में सवारी की चाहत, 39 की बजाय 50 लोग चढ़े, मेयर को भी नहीं मिली जगह



छह रूट को मिलेगी 28 और बसों की सौगात



Aggregator of Shared Mobility



Aggregator of Shared Mobility



a. Indore has initiated pre-paid Auto Services like Mango Taxi.

b. Indore also initiated on call auto Tele-rickshaw services.

c. Could be adopted for organizing the E-Rickshaw, Shared Auto, Taxi in Small & Medium Towns.

d. Madhya Pradesh has already initiated Mahila Swarojgaar Yojna for E-Rickshaw/ Shared E-Auto.

Regional Rapid Transit System

About

- Reduce dependence of commuters on road based transportation.
- Provision for is there in RRTS made for facilities including road network enhancements.

Difference

- RRTS is different from metro as it caters to passengers looking to travel relatively longer distance with fewer stops and at higher speed.

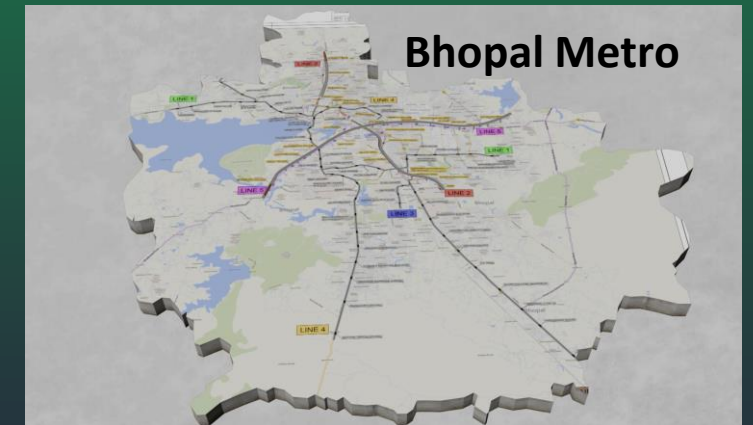
Benefit

- The small & Medium Towns shall be benefited with the RRTS.
- This has been done in NCR region via developing corridors.
- This will connect the major Towns with nearby small & medium Towns.



Madhya Pradesh Metro

- Indore and Bhopal headings towards metro projects.
- Stations would be Commuter friendly accessibility with public transport integration.
- Common mobility card.
- Integration with ISBT, intracity and shared e rickshaw would be done to ensure the last mile connectivity.



Current Scenario of e-vehicles

Madhya Pradesh Govt. has implemented the Electric Vehicle (EV) Policy 2019, dedicated to accelerating the deployment of EV's.



Indore Electric bus E-go

- To promote sustainable electric mobility & improvement in Madhya Pradesh air quality.
- To create an eco-system to support charging infrastructure and manufacturing of e-vehicles.
- To put in place measures to support the creation of jobs in living, selling, financing, servicing, charging and manufacturing of EVs.
- **Indore has implemented 40 no. of Electric buses under FAME I.**



Further Planning



Solution – (Infrastructure with Mobility)

SMALL TOWN



- Creating necessary Infrastructure Like roads, walk ways, bus stops.
- Providing intercity connectivity.
- Initiation of Para Transit Mobility.

MEDIUM TOWN



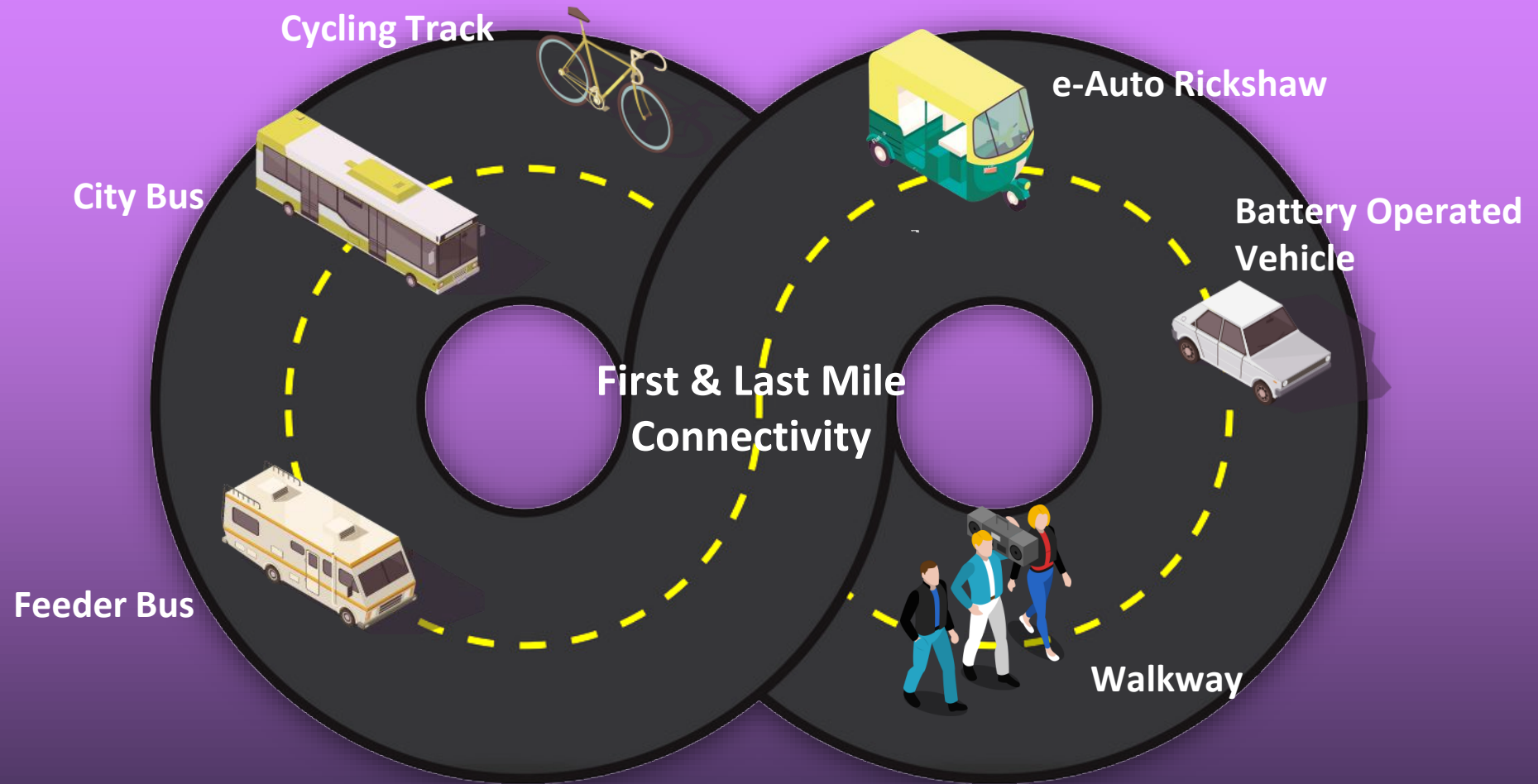
- Construction of bus depots & stops.
- Introduction of shared organized Para-Transit solutions via aggregator.

TOWN WITH MORE THAN 1 LAKH POPULATION



- Road widening, Construction of foot paths & cycle tracks.
- Introduction of organized intracity bus services.
- Projects like, RRTS & E mobility to be introduced.

FOCUS ON LAST MILE CONNECTIVITY



Conclusion

**Systematic
Approach is
required.**

**De-Centralized
Approach to be
taken by Creating
SPVs in medium
Towns.**

**Route rationalization
to be done taking small
& medium towns in
consideration**

**Adoption of cluster
model for better
sustainability with
minimum Funds.**



THANK YOU

