

UPSRTC is set to strengthen ITS in Public Transportation System with a vision to provide safe, reliable & secured services with SugamYatra harnessing the power of technology for public good.









## The Department

Uttar Pradesh State Road Transport Corporation (UPSRTC), established in the year 1947, has been serving to almost 65Cr+ passengers annually. The Department has laid down an objective of providing safe, reliable & secured travel services to the citizen.

## Industry

Public Transport

## Region

Uttar Pradesh

## Employees

48,000+ Employees

## Requirement

UPSRTC is looking for undertaking a data-led transformation across all the processes at the Depot (Administration & Operational) to bring transparency & accountability with an objective to provide better services to the public and improve efficiency in the system.







300+ Bus Station



# Challenges

01 Team at UPSRTC across multiple Depot prepares their own set of time table and schedules in their own silos which are not synchronized with other Depot members leading to bunching of buses at various junctures.

02 Crew & vehicle mapping and duty charts are not readily accessible to the Crew resulting in delays and on-the-fly changes in the schedule creating a chaos at the time of dispatch of the buses.

03 The team at OneTouch Direct struggled to meet various client requests using a basic spreadsheet-based reporting system. This affected client satisfaction and the ability of the team to analyze data effectively

- 04 Manual registers are being maintained for reporting the issues in the buses which often are not addressed timely leading to failures during the journey creating dissatisfaction amongst the passengers.
- 05 Centralized monitoring dashboard is missing at the Depot level to obtain a single window information about the complete operations at the Depot and further at the Head Office.





# Solution

- With the implementation of SugamYatra System, UPSRTC will have a centralized Depot Fleet Operations System enabling the Depot to maintain and manage their respective vehicle lifecycle, time-table and schedules along with a comprehensive bunching report to pre-plan the system accordingly
- The system shall optimize the overall planning of the Depots to reduce the bunching with the help of efficient route rationalization practices so that the services are available to the citizen in periodic intervals as per the demands.
- Sugam Yatra Inspection & Workshop system will ensure that all the requisite inspections of the vehicles are undertaken and any issues that are being reported by the Driver/Conductor is being addressed within a defined SLA ensuring net zero tolerance to any mishaps arising due to bus non-functioning.
- With the implementation of Sugam Yatra, the critical parameters are being made available on the powerful Sugam dashboard ensuring that the adequate decisions can be taken for the critical areas requiring immediate attention.
- From manual processes to automated insights with boundless capabilities of the cloud environment, UPSRTC shall redefine its data landscape.
- With a comprehensive Sugam System comprising of Depot Fleet Operations, Route Rationalization, Asset & Inventory, Workshop & Maintenance, HRMS, Accounts & Finance, Passenger Information System, SugamRADAR, Passenger Loyalty System -UPSRTC is set it transform and strengthen its public transportation services for public good.

## Impact

Availability of online timetable along with any bunching information





Efficient Dispatch mechanism to ensure on-time, every-time performance

Enhanced data accessibility with powerful dashboards customized at every levels





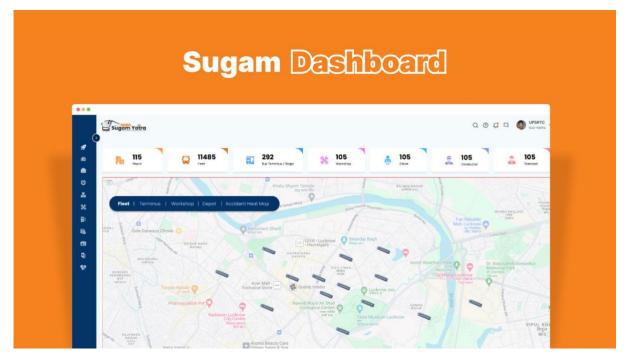
Adherence to the regulations for Driver & Vehicle inspections and on-time maintenance

Integrated comprehensive system leading to better data-led transformation -Fleet Operations, Lifecycle Management, Asset & Inventory, Workshop & Maintenance, HRMS, Accounts & Finance, Passenger Loyalty & Feedback Mechanism, Passenger Information System

SugamRADAR to enable passengers to check the services at anytime

## **SUGAM YATRA Project Images**

#### 1. Sugam Dashboard -



A dynamic dashboard that consolidates complex data from multiple sources into a single interface, providing real-time bus locations and customized views tailored for each user.

#### 2. Vehicle Overview

		<b>Vehicle</b> (	DVARVE	ew/	
•••				_	
2 2 8	(*) Current Motor Re			Chack-In	Super Admin
*	Identification		Open Defects	View All	+ Add Issue
	Name	UP78KT2789	Overdue 0	Open O	
Fe (C	Registration Number Chassis/Body Type	UP78KT2789 Check by VAHAN Bus		defects in the vehicle as of now.	
	Category	Bus	Critical Defects	View All	+ Add Issue
л. В	Fuel type	Diesel	Critical		
11 D 88	Fuel type Manufacturing Year	Diesel Jan 2025	Criticol O		

All details related to a vehicle at one place

3. Bunching Setting

						0-	<u></u>			
		В	und	eni	ng	Se	Gâ	<u>í</u>		
								U		
uP DN Route Rou	te. Kolserbogh	to Bain Kocht-of via Bat	- <b>x</b>	1			Terra inclusion			يويدون كيب
	te Name									
		ettings								
	erbagh to 1	hese settings will	apply optimizatio	on on the timete	able that are s	howing bunchi	ng.			
		<b>Routes Inf</b>	ormation							
	Vehicle	Routes Code	3672-UP, 4128	-UP Servi	ces Ordino	Direction	OUTBOUND			
	UP78Hest	Trip Head	way							
		Define the maxin		minutes) betv	veen trips for t	he selected cor	trol point.			
	UP78JM	Timebands		2 Min -	Max Headway	Intervel				
	UP78HT		0 2000		3	N				
		Stages Kaiserbagh X	Bahraich X Bela Ka	chhar X				x	-	
	UP33AT4									
								Cancel	ave	

Build schedules that factor in even the most complicated preferences — from break times to pull releases and changeovers — to increase efficiency, while meeting all your regulatory requirements.

#### 4. Bunching identification View

			B	un	ch	in	g Vík	<b>A</b> /				
											UPSRTC	
38	Bunching									Check-In	Super Admin	
, (·	1	Kaiserbagh to Oute Kaiserbagh to	Bahraich X Bela Kachhar via Bahr :	•	Ordinary X		v 📋 13 Feb :	025	A	Settings	d <sup>⊄</sup> Optimize	
	1 A A A A A A A A A A A A A A A A A A A	oute Name										
	4128-UP K	aiserbagh to Bahrai aiserbagh to Bela Ki		s								
89	в	ahraich		and a state of the	and a second							
*	Route	Vehicle	Service Type									
•	3672-UP	UP78HN3593	Ordinary	07:30	11:00	-						
8												
2.	3672-UP	UP78JNI043	Ordinary	11:47	15:17	-						
	3672-UP	UP78HT4144	Ordinary	11:51	15:21							
9	3672-UP	UP33AT4546	Ordinary	12:45	16:15	-						
•	3672-UP	UP78FNI750	Ordinary	12:57	16:27	-						
8	3672-UP	UP78HT4144	Ordinary	13:00	16:30	-						

Our powerful and rapid optimization algorithms make it easy to create multiple scheduling scenarios, fast, and compare different outcomes until you find the ideal solution.

Defect	s Kanban
eee Ng Defects	Check-in 😻 UPSRTC
af Search C. Depot → Region → All Open Resolved Closed Overdue	👪 💷 🔸 Add Defect \cdots
Open 7 Resolved	Closed 2 Overdue 24
UP33AT2996     Interior     WellBody     WellBody     were the And enset	UP33AT2996  UP78FN1755   · · · · · · · · · · · · · · · · · ·
	tow → O Critical → O
UP33A12996 	UP33AT2996 UP78KT1491 Bus Body Bus Body
	A Helum • B
ि Interior Bus Body को कई राज्य हरना होनेक जग वे	UP78/T1491 Bottery Terminal Bottery -
	ro tow - 🔕

#### 5. Defect View

The Sugam Yatra Kanban view streamlines defect management by providing a visual workflow, ensuring real-time tracking, prioritization, and faster resolution of vehicle issues.

#### 6. Defect List view

						п А_л				
				Jefe	ects	ЦЭЗ	Vier	N .		
<b>1</b>	Defects							c	heck-In UPSRTC	nin
<i>#</i> 📀	Search	٩	Depot 🗸	Region ~					Hand Defect	••
2	All Open	Resolved Clo	osed Overdue							_
•	set Type	Depot	Region	Category	Sub Category	Description	Audio Clip	Status	Feedback	
8	hicles	Kaiserbagh	Lucknow	Diesel leak		गाही में डीजल लीक हो रहा है	▶ [0]0]0]00000	OVERDUE		
*	hicles	Kaiserbagh	Lucknow	Oil Filter		ऑयल फिल्टर में दिक्कत आ रही है	▶ illeliellieleli	OVERDUE		
•	hicles	Kaiserbagh	Lucknow	Not Taking Load		गाही लोड नहीं ले रही है	▶ 0.400[[0][0][0]]0]	OVERDUE		
<b>e</b>	hicles	Kaiserbagh	Lucknow	Bus is just smoking		गाही से धुआं निकल रहा है	► diilijdijin	OVERDUE		
<i>.</i>	hicles	Kaiserbagh	Lucknow	Bus is just smoking		गाही धुआं दे रही है		OVERDUE		
<i>.</i>	hicles	Kaiserbagh	Lucknow	Engine	Fuel Injector	गाड़ी के इंजेक्टर में दिक्कत आ	▶ 1010[01-[001]]-]	OVERDUE		
9	hicles	Kaiserbagh	Lucknow	Engine	Flywheel	गाड़ी के फ्लाईव्हील में दिक्कत घडी की पिछली कमानी में	▶ 04000000	OVERDUE		ł.
en l	hicles	Kaiserbagh	Lucknow	Suspension	Rear Suspension	घड़ा का पछला कमाना म दिक्कत गाडी के इंजन से आवाज आ	▶ duildion du	OVERDUE		
33	hicles	Kaiserbagh	Lucknow	Irritating Sound		गाड़ा क इजन स आवाज आ रही है		OVERDUE		

The defect list view in Sugam Yatra provides a comprehensive snapshot of all reported issues, including voice recordings from drivers, enabling quick review and resolution without the need to open full details

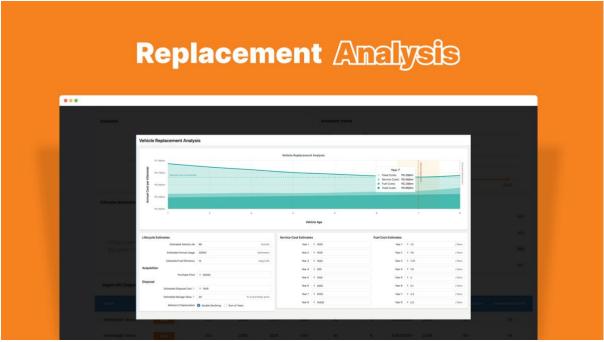
			Time	Та	ble ₹	7îev	ש
•••							
312	Timetable						Check-In OPSRTC
(> _#	Add Timetable						Reset Cancel Save
2	Select Route *						
	Alambagh to Gorakhpur via Ayo	odhya					
•	Timetable Type *		Service *		Depot Time *		Bus Station Date Time *
81	Normal	~	Search	~	🛗 Select Depot Time		🗎 Select Bus Station Date Time
	End Date *		Vehicle *		Driver 1 *		Driver 2
*	🗎 Select End Date		Search	~	Search	~	Search V
	Conductor *		Alternate Day		Select Days		Trip Count
	Search	~	Alternate Day		M T W 🚺 F S	8	- 2 •
ම	Trip 1 Halt *						
	00:30						
æ	Alambagh to Gord	akhpur via Ay	/odhya				
9	UP - Shatabdi				DN - Shatabdi		
	Service Name	Total Distance 0 km	Total Run Time 00:00		Service Name Shatabdi	Total Distance km	Total Run Time
60	Type Inter Region	Category A	Number of Stops		Type Inter Region	Category A	Number of Stops

#### 7. Timetable View

#### 8. Sugam Slip (Duty Slip)

	SUG	AM SI	ၜ	
Kaiserbagh to Delhi via Gah	100n - UP78JN7798			C Previous Next
0	2 Vehicle Inspection SUGAM SIP (roteman) (Timeteeper)	Departure Checklist (Conductor)	5 Trip Complete ETIM Deposit (Conductor) (Conductor)	C Submit SUGAM Sip (Tirnekseper)
Dispato	ched from Depot			Print
	SUGAM SLIP   UPSRTC SUGAM YATRA PORTAL		अपकी सुपर सपर का अपका अपन साथी	
	Sugam Yatra Polytion: 17 Jul 2025 Filmess: 19 Oct 2025	4	KSB → N/A	
	SS026081 UP78 JN 7798 \$30000 1 SUGAM SEp No Bus Number Torget Income 1	12:00 05:15 2 SCH Out Time SCH In Time SCH Trip	1006 KM Kaiserbagh Lucknew SCH KM Depot Region	
	Driver Dr. Lunwol0077 Name Anar Singh (contractual) Mobile No: M19001977 License No: N/A License Vol1017; N/A Forther Name Eakle Rem	Driver 10: UP2M064455 Norme: Mahendra Kumur 2 (contractual) Mobile No: Sp6422164 Licence Violatty: N/A Licence Violatty: N/A	Conductor D: Charge Conductor D: Charge Conductor Contractual Mobile No: MSD48027 Lionne No: MSD48027 Lionne Volidity N/A Lione Volidity N/A	
	Alcohol X Dress √ Shoes √ Mask √	Alcohol ¥ Dress √ Shoes √ Mask √	Alcohol ¥ Dress ✓ Shoes ✓ Mask ✓	
	OUT-SHEDDING DATE & TIME: 18 Jan 2025 11:08	2 N/A	Kaiserbagh to Delhi via Gahdon	
	Actual Out Time Actual In Time 2004239522 51 2	n NA Actual Trip Issue Diesel 71 45 Passengers Load Factor	NA         23.62           ETM Number         Income Per KM           1005Km         425895           Actual Distance         Actual Income	
	. Schedule Out Time Actual Out Tim	e Out Station Schedule In Tin	ne Actual in Time In Station	

The **Sugam Slip** acts as a **consolidated trip report**, summarizing waybill details, trip metrics, crew information, and financial insights. It visually presents key data such as scheduled vs. actual trip timings, revenue, passenger count, and compliance checks, aiding in efficient trip monitoring and decision-making.



#### 9. Replacement Analysis

The Replacement Analysis module in Sugam helps optimize vehicle lifecycle management by

analyzing costs, efficiency, and replacement timelines for improved operational decisionmaking.

						~			
	Die	NA		he	er V	Mar	1.17		
•••								-	Manish Tiwari
Dispatcher								Check-In	ABM
13:08	All In-Shedding/DN Out-Shedding/UP THR (	(N-Route) Dispoto	hed / Running (Run)				Dast	board Beach	0
22 C 13 Feb 2025	Route	Time (DEP-ARR)	Day (Trip/Total)	Status	Driver 1	Driver 2	Conductor	W 980992-1   Koiser	bogh Depot ×
Today ( >	Kaiserbagh to Gola Bazar via Gorakhpur (3674-UP)	13:24 - 23:09	Day 1 1/2	Assigned	Rajesh Kumar Shu		Dharmendra Kuma	UI 2 zarvia Goraitgur I	
	Kaiserbagh to Bela Kachhar via Bahraich (4128-UP)	13:30 - 23:20	Day1) 1/2	Assigned	Niraj		VIRENDRA KUMAR.	Li 1324   Kaiserbagh 23091 Gola Razar	
×	Kaiserbagh to Bela Kachhar via Bahraich (4128-UP)	13:30 - 23:20	Day 1 1/2	Assigned	Pramod Kumar Pat	Mohd Raseed	Surendra Kumar	U Duty Attributes	
	Kaiserbagh to Bela Kachhar via Raebareli (UP701	13:45 - 19:20	Day 1) 1/2	Assigned	Irfan Ahamad		Kaushlendra Prata		52
	Kaiserbagh to Bela Kachhar via Raebareli (UP701	13:45 - 19:20	041 1/2	Assigned	Muktesh Kumar Si		Pankaj Kumar Ver	Ul Sa Definer 1 7279770	
U	Kaiserbagh to Kaushambi via Barelly (KSB2501-UP)		0.071 1/2	Assigned	Mohit Kumar	Vilay Kumar	BALRAM VERMA	20 Driver2 -	
~	Kaiserbach to Haridwar via Moradabad (KSB2497		(07D) 1/2	Assigned	Prem Shankar Pal	Jogendra Kumar	Sandeep Shukla	L Conductor B440212	ndro 1 11
4	Kaiserbagh to Bela Kachhar via Bahraich (4128-UP)				Ashok Bajpai		Japdishwar Giri	Concession of Concession	
			04/1 1/2	Assigned				U Events	(MORENCE)
	Kaiserbagh to Bela Kachhar via Bahraich (4128-UP)		DH/1 1/2	Assigned	Pradeep Kumar		Monu Kumar	(3) Vahicle Inspection	-
œ	Kaiserbagh to Bela Kachhar via Bahraich (4128-UP)	13:59 - 23:49	Day1 1/2	Assigned	Bhoopendra Singh		Pankaj Kumar Ver	(1) show sib	(100000)
								Deporture Checkle	- (100000)
								Stoges Type turne	073 AT2 073 AT2

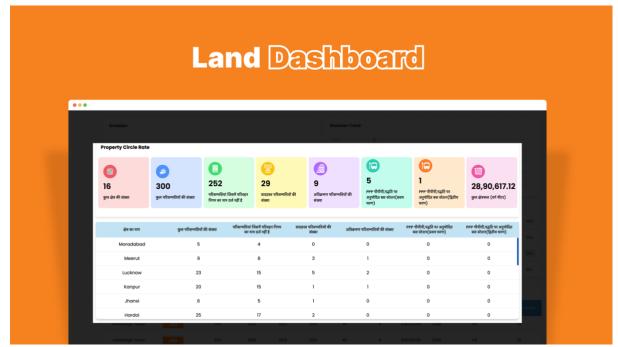
#### 10. Dispatcher View

The **Advanced Dispatcher View** in **Sugam** provides real-time monitoring and management of trips, enabling seamless assignment, tracking, and operational efficiency for better fleet coordination.

#### 11. Route view

Delhi to Kaiserbagh via Gahdon Route Code: 3432-04   Service Types: Ordinary	View DN Route 🔵 🥒 Edit
← Route Delhi to Kaiserbagh via Gahdon Route Code: 3432-DN   Service Types: Ordinary	View DN Route / Edit
Delhi to Kaiserbagh via Gahdon Rouse Code: 3422-DN   Service Types: Ordinary	View DN Route 🥒 Edit
Delhi to Kaiserbagh via Gahdon Route Code: 3432-DN   Service Types: Ordinary	
Freedoment Contract Contract	
	Run Distance
Kaiserbagh Workshop Deihi Kaiserbagh Gahdon 4 km	1
	urs Distance: 503 km
साधाल Type: Inter Stot Stops: 7	te Category: C
	Phoksundo
Stoge Holl Time Duration Dilatance appant Name (hours) (hours) (km) (km) (km) (km) (km) (km) (km) (km	National Park
Delhi 1615 00:00 0 HARYANA Tes Moradabad	Anr
Etah 00.05 05:00 211 New Delhi Barelly (2)	1000
Bewar 00:05 01:45 78	Ne
Sikar Alwar B PRADESH Sitapur Bahraic	
Mallawan 0005 0230 100 effer wrent Apra effer wrent Apra of the second and the se	Balrampur

The **Detailed Route View** page in **Sugam** provides a comprehensive breakdown of the journey, including origin, destination, via points, total distance, and estimated run time. It also features an interactive map, scheduled halts, and stop-wise travel durations to enhance route planning and operational efficiency.



#### 12. UPSRTC Land Details

The Land Dashboard provides a structured view of property-related data, featuring a dashboard widget summarizing key statistics and a list view for detailed insights. The

dashboard displays total land zones, registered properties, pending approvals, and PPPbased development stages, while the list view organizes data by region, showing property counts, compliance status, and land utilization metrics.



#### **13.** Vehicle and Crew Roster Graphical View

The **Roster View** provides a structured schedule for vehicle operations, ensuring efficient fleet management. It features a **timeline-based dashboard** where each vehicle's availability, assignment, and duty hours are visually represented. Each row corresponds to a vehicle, and colored bars indicate different trips, durations, and statuses. The system allows users to filter schedules by date and time intervals, ensuring smooth coordination. Additionally, the **check-in feature** helps administrators track real-time vehicle status, enabling better planning and operational efficiency.