

# IUDX Deployments & Use cases

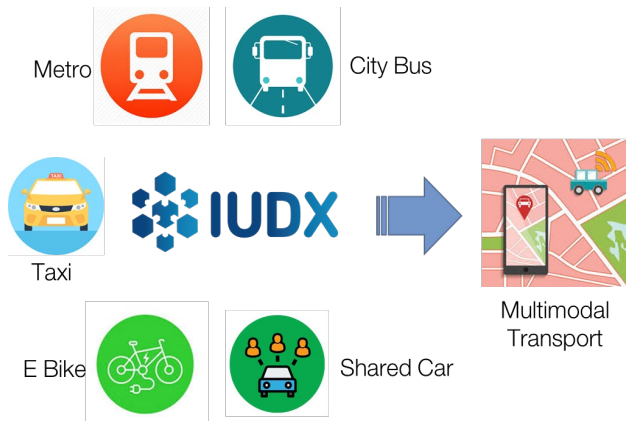
Date – Aug 2021



# IUDX, Datasets, Use cases – The Process

## 1. Deploy IUDX and onboard the Datasets :

- City will prioritize the use cases and datasets which are important for the city administration and the citizens.
- IUDX and City team will jointly evaluate the use cases and quality of the datasets and decide what to be onboarded on to IUDX.
- IUDX will develop the city data specific ingestion modules and deploy the city instance with the targeted datasets.



## 2. Develop and Deploy the use case applications :

- Up on commissioning the IUDX platform, the city will identify and engage with the industry partners, share the required datasets to them and get the targeted use cases deployed in pilot/commercial mode.

# Cities and Datasets

1. Pune

2. Varanasi

3. Surat

4. Agartala

5. Vadodara

6. Bhubaneswar

7. Bhopal

8. Bengaluru

9. Chennai

10. Faridabad

SI No	Dataset	Description
1	Environmental information	Pollutants, Air Quality, Rain
2	Smart sensor locations	WiFi, PA, ECB, Messaging boards, Digital Kiosks,
3	Road information	Road quality, Road Assets, Signs
4	E Bike Sharing	Stations, Availability, Fare
5	Bus Transit	Routes, Trips, Stops, Bus location, ETA, Occupancy, Fare collection
6	Metro Rail	Stations, Routes, Trips, Fare
7	Smart Parking	Parling lots, occupancy, availability, Fare
8	Adaptive Traffic	Traffic junctions, Traffic density
9	Flood data	Water level, Reivers, Canals, Drains, Elevation maps
10	Metrological information	Rain fall (history, forecast)
11	Safety index	Safety index of streets, places
12	Video samples and feeds	Survelliance, Traffic junction/Special purpose monitoring,
13	Revenue collection	Taxes, Other revenues, Trade licenses, Utility bills
14	Solid Waste Management	Pick up locations, Vehicle location, Weight of waste, Employee attendance
15	Citizen grievances	Clealiness
16	Streetlights	Locations, Energy consumption,
17	Traffic Violations	Location and Type of violation, Payment status
18	Water Distribution	Tank capacity, Supply/day, Water level, Pressure, Quality
19	Fire and Ambulance	Live location, on call status
20	GIS	City assets on maps

# Use Cases



1. **Bus occupancy with ETA** : [Surat \(NEC\)](#), Bhopal (Chalo)
2. **Safe routes and places** : [Pune \(Safetipin\)](#), Surat (Safetipin)
3. **Multimodal transport app** : [Surat \(Citility\)](#), Bengaluru (NEC), Bhubaneswar (TBD)
4. **Efficient Solid waste pick** : [Varanasi \(Hitachi\)](#)
5. **Integrate conventional traffic lights and Adaptive traffic lights** : [Agartala \(Vehant, Onyx\)](#)
6. **Health Care Management** – Pune (Hitachi, Oasis)
7. **Green corridor for emergency vehicles** : Vadodhara (Arya Omni, CMS), Bengaluru (TBD)
8. **Flood Warning** : Pune (Brigosha), Agartala (Vehant), Chennai (TBD)

# SWM Optimizations - Varanasi

## 4.4.1 Stoppage priority recommendation (Method) HITACHI Inspire the Next



Recommendation effect: **↑**30% collection/time

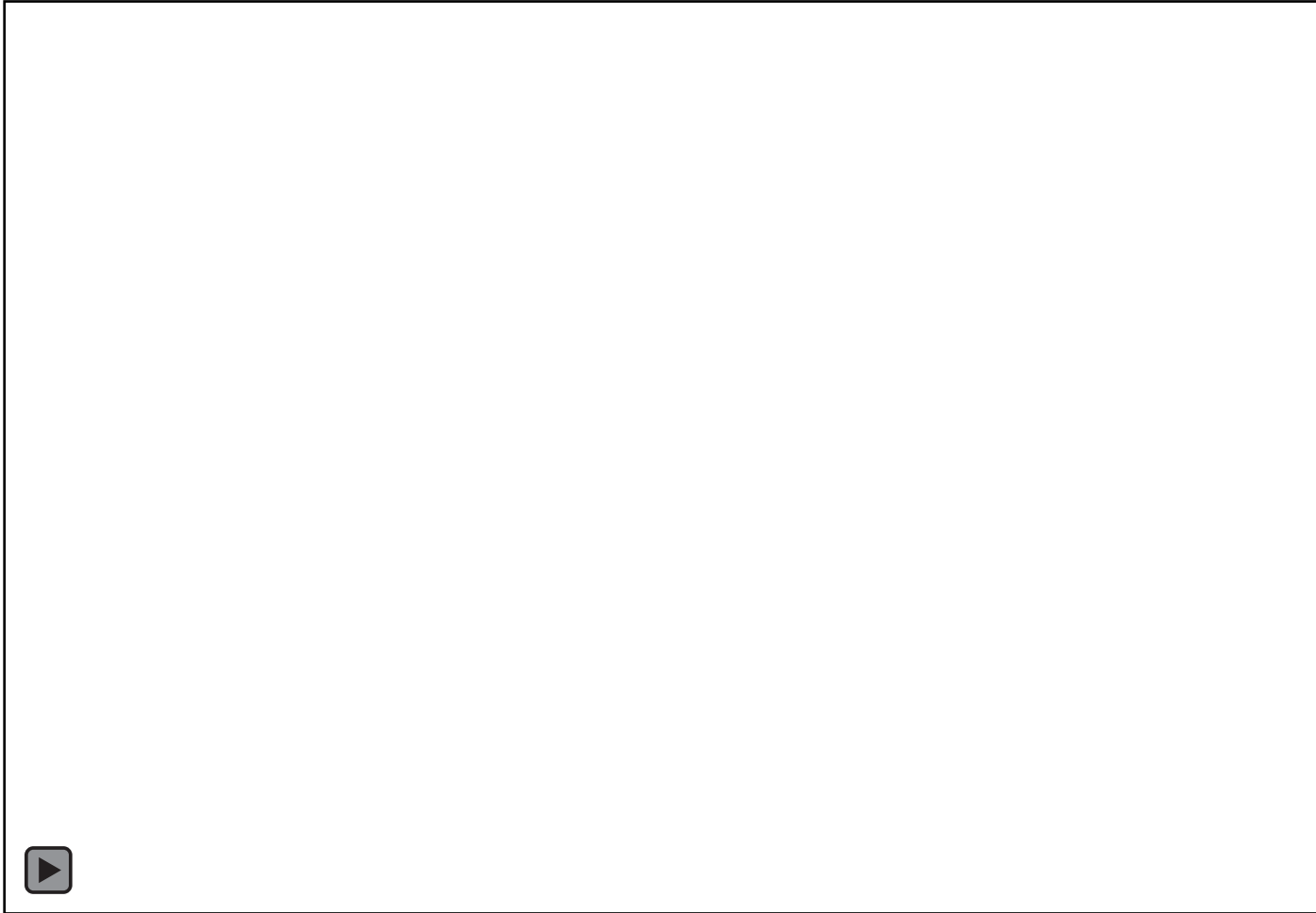
Recommendation effect: **↓**22% distance travel

Recommendation effect: **↓**30% missed stoppage(affected by **↑**30% collection/time )

Recommendation effect: **↑**30% utilization (affected by **↑**30% collection/time )

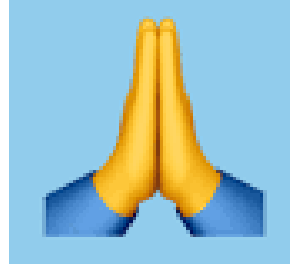
- Varanasi SWM is ~ 650 Tons/day means 26 Cr/year at 4 Lakhs/Ton/year
- 30% cost savings is 7.8 Cr/year.

# Agartala Adaptive Traffic



- Agartala has Adaptive traffic signal (Onyx) for 22 Jns and conventional systems(Keltron) for 7 Jns.
- IUDX shared the existing traffic violation evidence camera feed from the Orient Chowmuhani Jn to the partner(Venaht ) for traffic density analytics.
- The traffic density is fed to the adaptive traffic signal platform which converted the Orient Chowmuhani Jn into adaptive at the cost of video analytics.
- The same could be replicated to all other 6 junctions to make Agartala all adaptive traffic with minimal cost.

धन्यवाद



Thank You