



GOVERNMENT OF INDIA  
MINISTRY OF HOUSING AND URBAN AFFAIRS

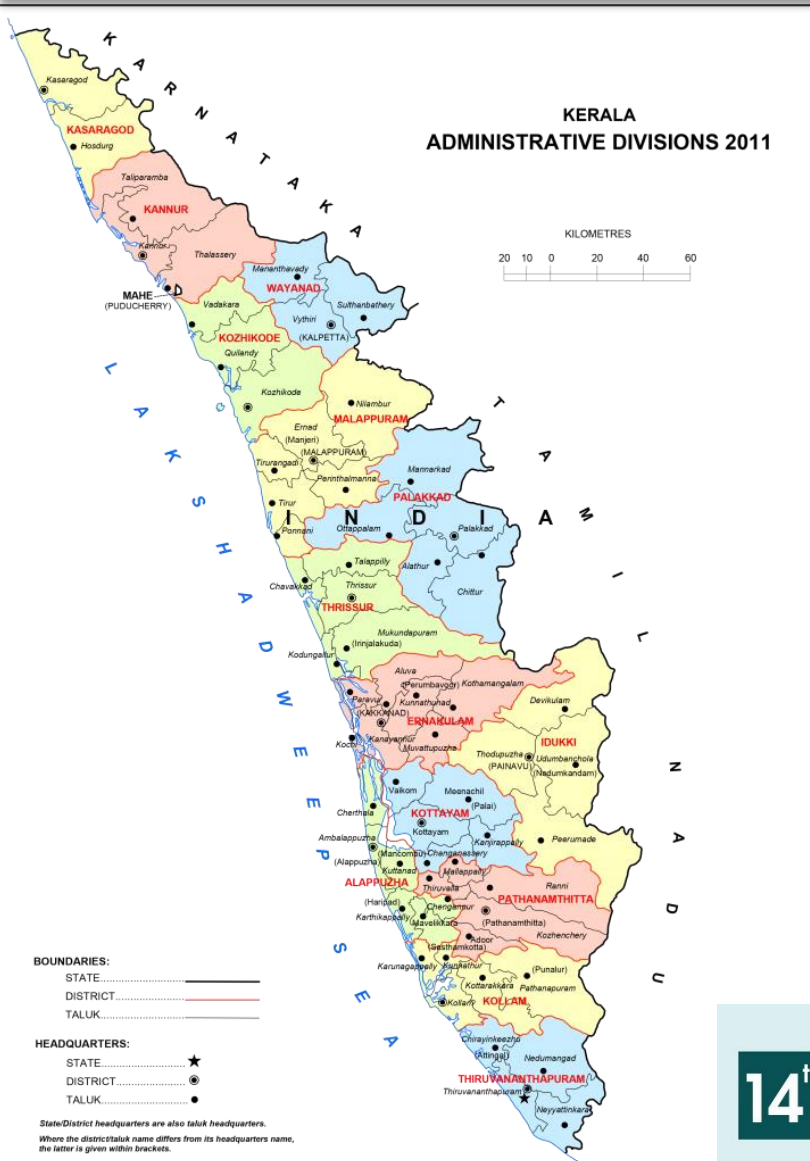


# BEST PRACTICES IN INTEGRATED PUBLIC TRANSPORT

**K.R. JYOTHILAL, I.A.S**  
**PRINCIPAL SECRETARY- TRANSPORT**  
**GOVT OF KERALA**



# BEST PRACTICES IN INTEGRATED PUBLIC TRANSPORT



- Transport for Kerala(TFK)
- Mobility as a Service (MaaS)
- God's own Travel Card(GOT)
- Mobile to Mobility

14<sup>th</sup>

Urban Mobility India  
Conference 2021

# VISION ZERO

- ZERO CASH
- ZERO EMISSION
- ZERO CONGESTION
- ZERO ACCIDENTS
- ZERO WASTE

# ZERO CASH

- Vahan Sarathi (digital service delivery)
- Digital enforcement
- E court
- Safe Kerala control rooms(CDAC)
- NCMC card/QR code/ Yatri app (Open Source)
- God's Own Travel card (DL+RC+Travel+Debit-ATM & Shopping)
- NFC compliant mobile to mobile payment
- GPS tracking of all transport vehicles and OCC

**NO MORE**

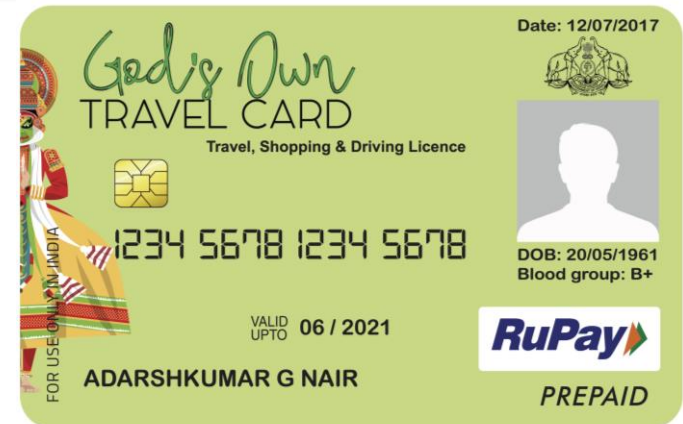
- Waiting in queue
- Time consuming manual auction

- Login to PARIVAHAN website  
- Book your Favourite Number  
- Participate in Online Auction

[Click here to Know](#)

**Vahan**  
dEd

Facility now available in selected offices, to be extended to all other offices soon



Customer service/Emergency Contact Number: 1800 419 4477. ELECTRONIC USE ONLY

**INDIAN UNION**  
**KERALA STATE**  
**DRIVING LICENCE FORM7**

Licence No: 7/950/1991

He is licensed to drive throughout India, vehicles of the following description

Class of Vehicle	With effect from	Testing authority
M/C with gr	22/03/1991	LA, EKM
LMV	22/03/1991	LA, EKM
A/R	22/03/1991	LA, EKM
HPMV	22/03/1991	LA, EKM
HGMV	22/03/1991	LA, EKM
EXVTR	22/03/1991	LA, EKM
CRANE	22/03/1991	LA, EKM

Category Valid from Valid To  
Non-Transport 17/06/2017 16/06/2022  
Transport 17/06/2017 16/06/2022

Date of First Issue : 22/03/1991  
Badge No. & Date : 4/962/1996 28/11/1996

Signature  
Vinod  
LA, EKM

Authorised Signature: [Signature] 123

S/W/D of: P K GOPALAKRISHNAN  
Address: Anugrah, Infort, Tripunithura, PIN 682301

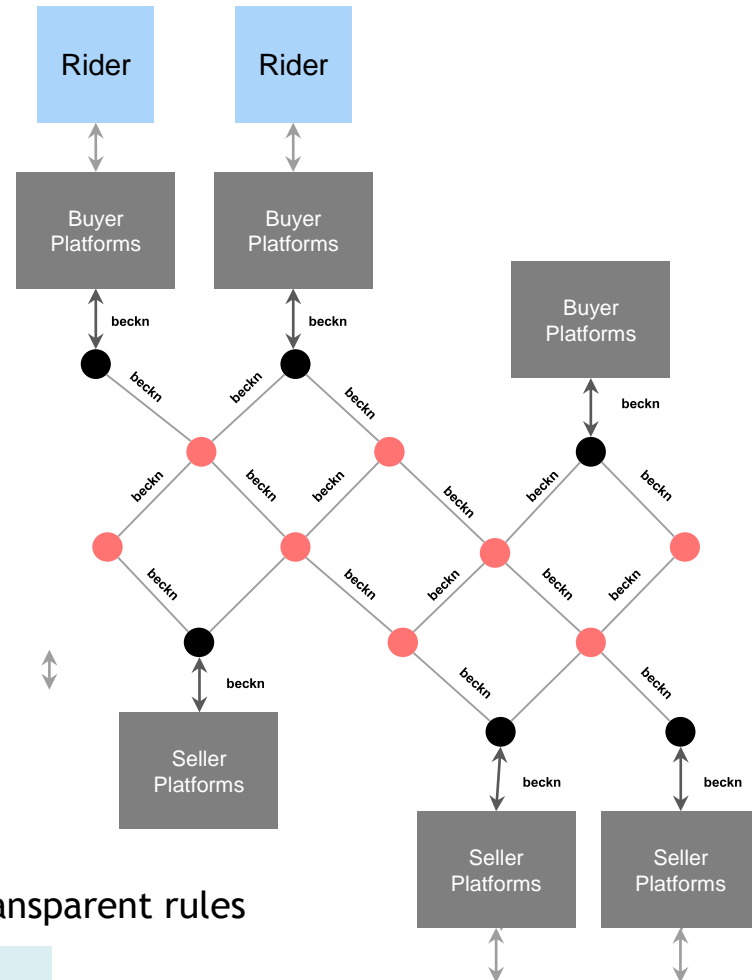
Email id : transit.cards@axisbank.com

# KERALA OPEN MOBILITY NETWORK

## Digitising Mobility & Enabling MaaS



- Open Specifications (like 26 letters in English)
- Multiple Apps, written in one language & thus interoperable
- No central platform between rider and providers
- No need for central aggregator
- Each provider can operate autonomously, follow open and transparent rules



# ZERO EMISSION

- E mobility 1 million EV by 2025
- Solar boats
- Hydrogen fuel cell bus/ car/train/boat
- Green hydrogen and CIAL model of floating solar
- Public transport and scrapping policy
- Ban on diesel autos
- Government order to hire only electric vehicles
- Building rules amendment - promote charging infra
- Free Charging /swapping infrastructure
- LTO/ TOSA charging business models and Second generation EVs

**10,256**

*EVs registered  
as of Oct, 2021*

# ZERO CONGESTION

- TFK (Productivity and Money Value of Time)
- KMTA (Integration vs Coordination), Planning is the Key
- Parking policy + Smart App on Kerala Open Mobility Network
- State CMP integration with Urban planning
- Silver line - Semi High Speed Rail + Economic Corridor
- TOD and VCF - State Mobility Fund
- DFI/ Green bonds/Green banks for public transport infra funding

# VYTTILA MOBILITY HUB

## Integration of Physical Infrastructure



**Vyttila Mobility Hub (VMH)** is being envisioned as a **world class multimodal hub**, integrating Bus, Indian Railways, Metro, Boat, Taxi, Auto, bicycle & walkways



NH 66



Cochin  
International  
Airport



Cochin Port



Ernakulam Junction



Urban  
Transport



Vyttila  
Ernakulam



INR 571 Cr  
USD 81 Mn



# ZERO ACCIDENTS



- 39 % reduction in accidents till now
- Safe Kerala
- Digital enforcement and e courts
- VTS in all transport vehicles
- Parking policy
- AI cameras/ Dash board cameras
- Borderless , cashless and digital checkpoints.
- Third eye of citizens (whats app and social media)

14<sup>th</sup>



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# ZERO WASTE

- Waste to energy
- Bio methanation
- Carbon to hydrogen economy
- Hydrogen PODs/ Train/Water metro/Buses/Trucks



# MaaS and TFK

## Polluter to pay (Decarbonisation and Digitisation)

- Kuber - demand driven model mobility service
- Bus port/Logistic ports/vertical landing and take off/Hover craft/Sea planes
- K-SWIFT as SPV for public transport, Aggregation of private buses, Taxis & Autos
- AIF/ DFI/ Green bonds for funding
- Self contained cities
- Open data to information to knowledge to wisdom - Kerala Open Mobility Network using Beckn Open Specification & protocol
- Mobility for all