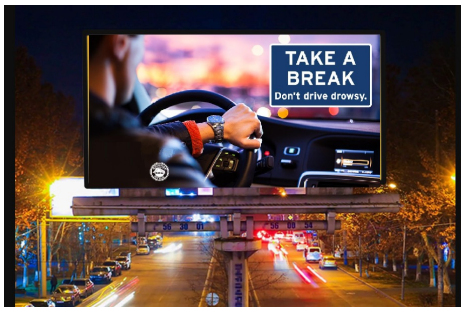
National LED Screens network on 550+ Toll Plazas

Executive Summary

- The objective of this presentation is to propose building a national infrastructure of mass communication, provisioned via network of LED-wall based point of displays (POD), installed across pan-India roadway toll station.
- Through the course of this presentation, we aspire to demonstrate how the best in class & multi-purpose visual media displays would provide a variety of flexible benefits to NHAI and our project detail for successful execution.
- We are experienced in pan-India communication programs with proficiency in brand planning, creative development, media & even planning and digital integration.

Body of Work

- Installation of 18x12ft LED Point of Displays (POD) at Toll stations on national roads, including expressways, national & state highways and intra-city roadways.
- All existing 550+ Toll stations to be equipped with the PODs, with additional flexibility to promptly install screens on new/under-development toll stations.
- This concept is seamlessly extensible to urban corporate & commercial promotion infrastructure setup & management too.



- POD will be designed to play video streams, motion pictures, still images & scrolling text and will be installed on top of 18-20 feet high platform, for clear visibility upto 150 meters.
- All PODs will be centrally managed from a control room, with recovery systems for business continuity during any unplanned outages.

Details of Hardware

- Bigger column diameter - 200 mm, Smaller column diameter - 150 mm
- Both columns will be connected by flanges
- Final column will be mounted on concrete base by anchor bolts
- Column will be supported by two C-channel from opposite sides to cater for wind load
- C- channel frame will be mounted on top of column to support digital board
- 3 column supports are required for 12ft x 18ft advertising board
- Oil & Radium painted surface finish (All seasons + night vision + lifespan 10 years)

Artefact	Period
Fabrication	2 Days
Installation	1 Day
Foundation	4 Days
Phase 1 implementation (150 locations)	< 100 Days

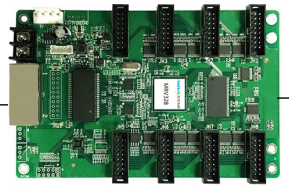
Installation of Hardware and Software

- LED Grid display will be integrated with a controller which will be attached to a processor which will run the software for the content of desired choice.
- Processor will have a internet connectivity which will upload the content to the desired location, content will be software driven.
- Software will have the ability to change the content from the control room. It will have flexibility to dynamically display the content automatically, during required timings.
- Content will be designed in such a way that the commuter will be able to view it from a distance of about 150 meters.
- Power backup can be provided by diesel generator & surpassed with UPS of correct wattage.
- Bespoke software to run on all stand alone systems powered through a powerful quad core processor to play media.
- Software WILL be remotely operated on for individual machines or mobile applications and will be broadcasted to all PODs across India through internet connectivity.

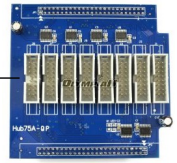
End to End Infrastructure

Control System

Video Processor &
Application Software



Receiving
Card



Sending
Card

POD

Power Distribution

Value Proposition

Mass communication

Instrument, with daily reach to over 10 crore travelers

Emergency communications

can be displayed for public awareness in extreme incidents like natural disaster, fire, accidents etc.

Broadcast in local language,

allowing communication to reach wide range of audience

Location specific broadcast

allowing most relevant communication to reach local residents

10% time allotment to NHAI

of the transmission time for dedicated road safety & traffic management

Immediate broadcast

of message across media channels like video, image, text etc.

Value added features

The idea behind the installation of the large screen at at every toll plaza will to be to create a visual awareness for the commuter in different facets of life and allow us many opportunities as:

- Sponsored advertisements
- Government advertisements & campaigns
- Dedicated support to NHAI communications
- Safety standards & alerts
- Traffic & congestion updates
- Public messages & crisis communications
- Various aspects of road safety & precautions
- Health tips & watch items
- Expedited information sharing & disaster communications e.g. floods, road closures etc.
- Utilities & service stops with facilities, exit points
- Software will be bespoke and smartly designed to centrally manage media content to be broadcasted on pan-India screens & monitored from same central hub
- All changes will be centrally managed & communicated remotely via the hub

LED Tech Specs:

S. NO.	Artefact	Description	Configuration
1	Model	FS 10/12	10-12mm Pixel Pitch
2	Physical Density	10-12k dot/m2	
3	LED Config	1R1G1B	SMD3535
4	Module Size	320x160	32x16 pixels
5	Drive Mode	1/4 Constant Current Drive	
6	Viewing Angle (Deg)	H140/V140	Brightness 5500
7	Grey Scale	16 bits	Refresh rate 1920
8	Cabinet Resolution	96x96 Pixels	Weight 50 KG
9	Power Consumption (W/m2)	Max: 750 / AvG : 250	
10	Cabinet Material	Iron / Aluminium	Color >16.7
11	Input Voltage	110-220V AC (+/- 10%)	IP65 Protection
12	Refresh Frequency	60HZ	
13	Humidity Support	10-95%	Temp: -30 to +60
14	Certificates	CCC, CE, R0HS	

Project Plan & Duration

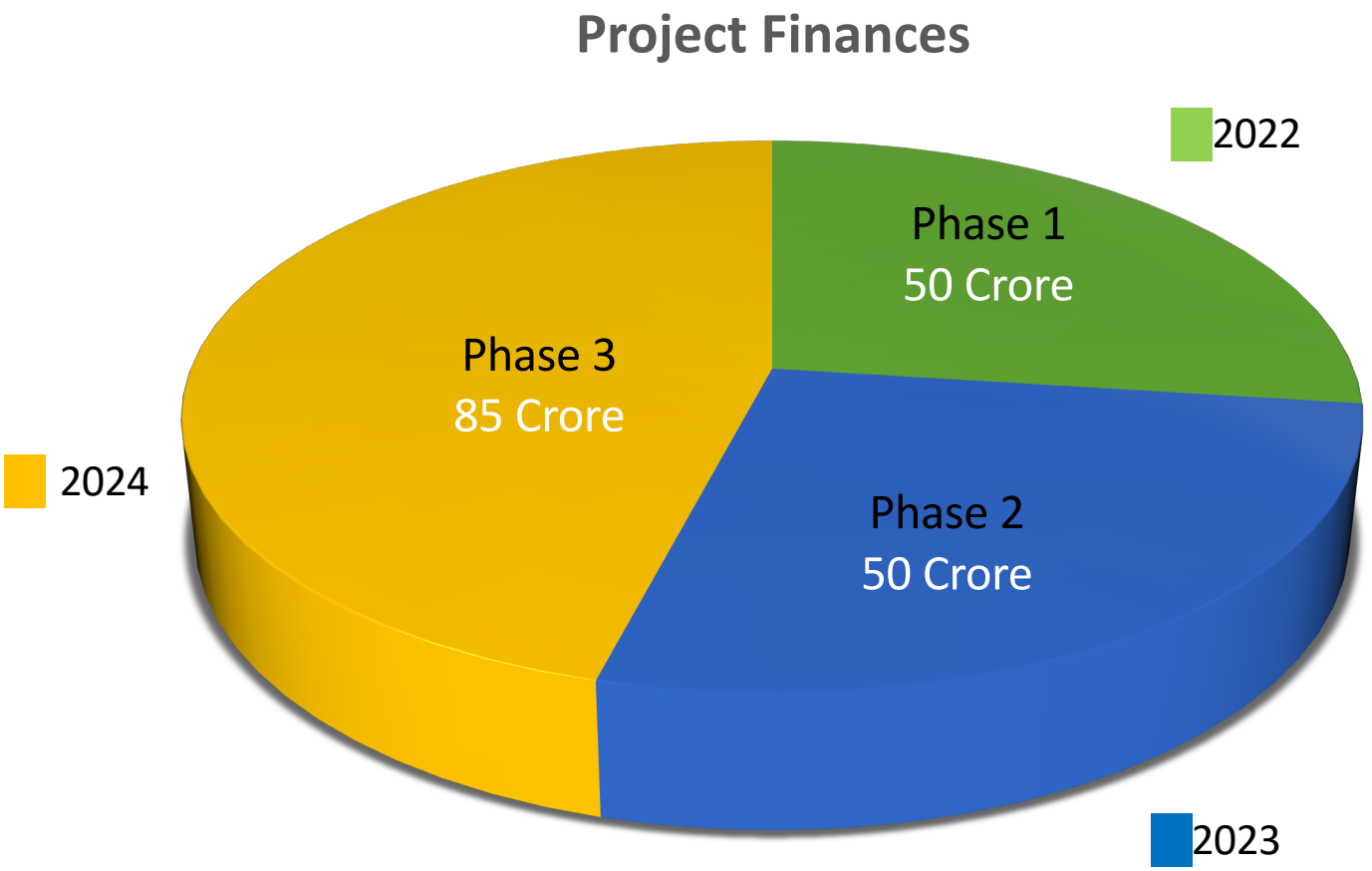
4 Phase 3: 12 months
POD installation on final 200 locations
Beta Testing & Handover – Q2 2025
AMC commencement

3 Phase 2: 12 months
POD installation at 150 locations
Beta Testing – Q1 2024

2 Phase 1: 12 months
POD installation at 150 locations
Beta Testing – Q1 2023

1 Project Approval and Commencement
Q1 2022

Project Phase Financials



Return Of Investment 2024-25

AMC for the entire project will be 25% of the total project cost & will remain with founding company post lease completion

NHAI Support

To accelerate implementation of this program, a support model is also requested NHAI, as:

- POD installation space at all national Toll Plazas
- POD installation space next to Toll Ahead sign boards
- Space on over-bridges, for possible future extension of PODs
- 20KVA electricity supply line (to be paid for & maintained by project team)
- POD & electricity line access to AMC contract vendor for maintenance purposes
- Lease term of 9 years

Q & A