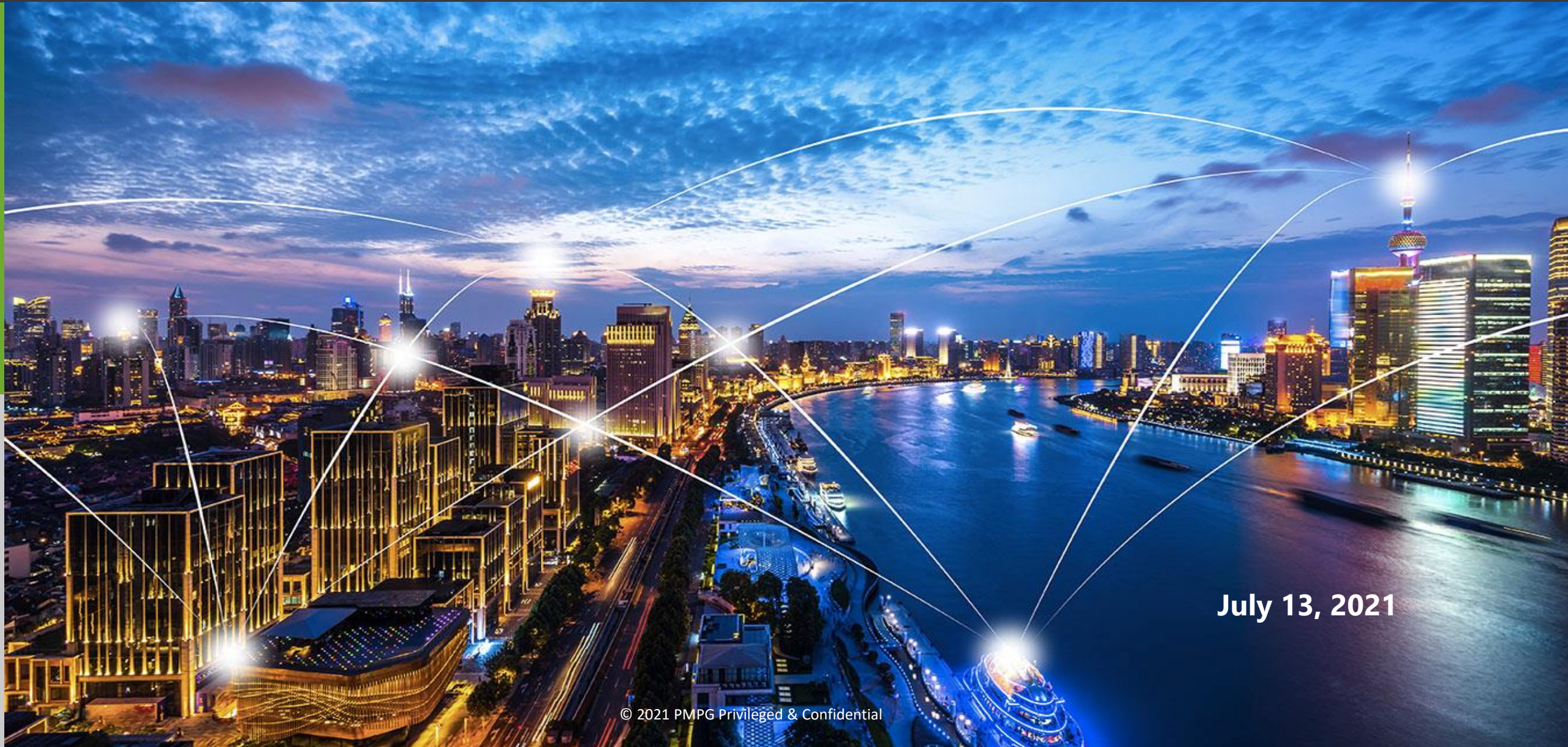


Premier Product Group, Inc. (PMPG)

SmartRoad & Smart Infrastructure Presentation for the City of Miami



July 13, 2021

Purpose of Today's Session

- **Showcase the Broad Product, Software, Patented Solutions Portfolio**
 - **Review PMPG's Solutions Framework & Technology Stack Ability to Address Needs of Smart Roads & Cities --NOW & in the Future**
 - **Gain Input and Understanding from City of Miami's Leadership on the Challenge & Opportunities Facing the City of Miami to Improve Road & City Services**
-
- **Defining Next Steps Timeline for City of Miami Proof of Concept Trial**

It Begins with PMPG | SRT iRPM Breakthrough Technologies- Intelligent Road Pavement Marker & Controller



THE FUTURE IS NOW

PMPG SRT

Intelligent Road Pavement Marker

iRPM

THE PAST

Reflective Marker



THE FUTURE IS NOW

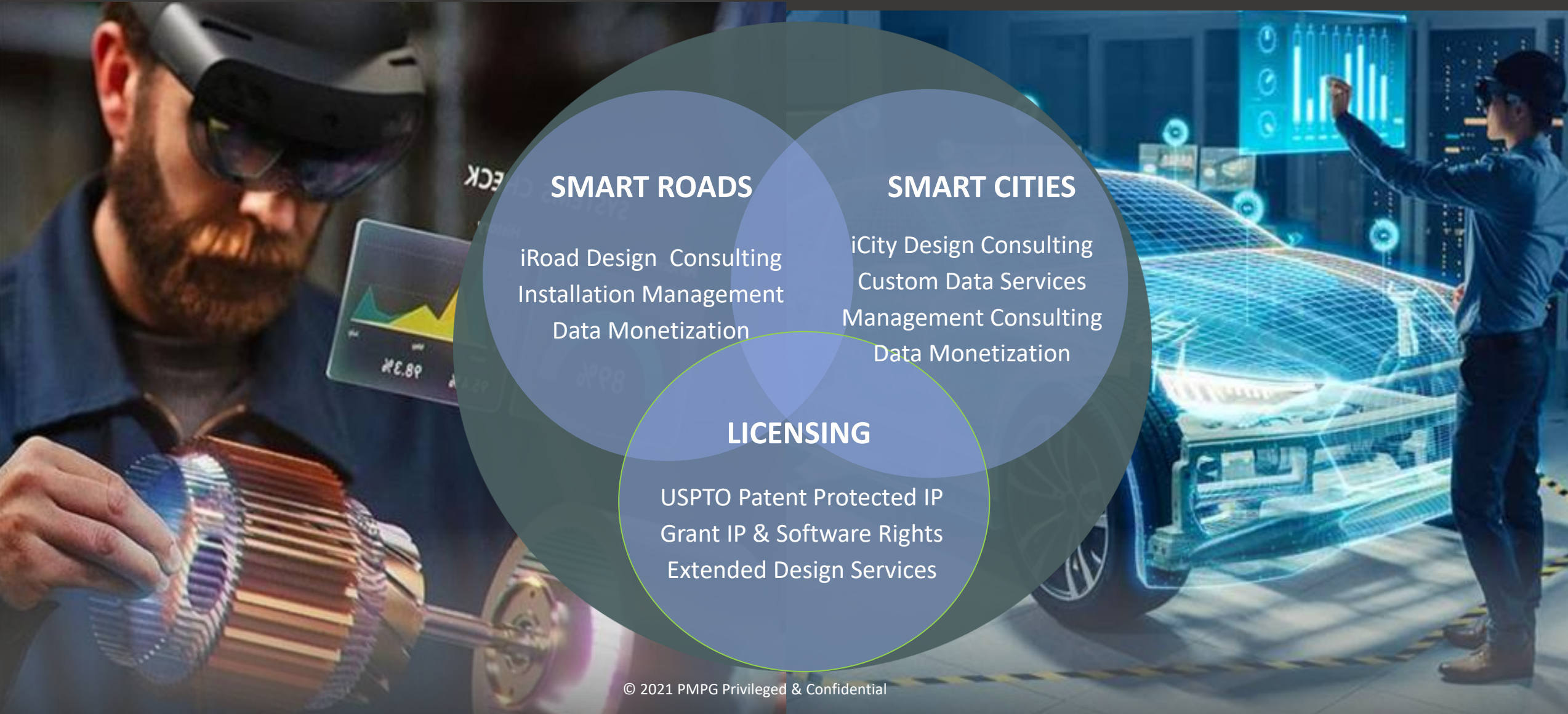
PMPG SRT Controller

Real Time Data

Compute & Communications

PMPG Business Model

Designing, Consulting, Licensing and Monetizing Smart Road & City Solutions



NOW & in the Future Data is at the Heart of Smart Road & Cities

*“Information is the oil of the 21st century,
and analytics is the combustion engine.”*

Peter Sondergaard, SVP Gartner

“Data is the new oil.”

Qi Lu, Microsoft Chief Applications and Services

“Just like oil was a natural resource powering the last industrial revolution, data is going to be the natural resource for this industrial revolution. Data is the core asset, and the core lubricant, for not just the entire economic models built around every single industry vertical but also the socioeconomic models.”

Abhishek Mehta, CEO Tresata

PMPG | SRT - A Significant Patent Portfolio

PMPG & its strategic partner NPI is the designer & holder of 22 smart road, paved surface, data & communications patents, registered in 32 countries.

Our patent & software gives the City of Miami the secure advantage for deploying smart road & city solutions **now** and in the future.

PMPG Patents, Sensors & Data Services are “the gateway” required to transform every road & paved surface to a “Smart Road, and Smart City”



PMPG Seeks to Partner with the City of Miami Under a Revenue Share Model in Selling Data

PMPG Manages the Sales of SRT Data to Leading Government, Automotive, Delivery and Advertising Users, who turns this Data into Insights to Better Manage their Business.

PMPG will Structure a Revenue Share Model with the City of Miami



MUNICIPAL ROAD CONSTRUCTION & MAINTENANCE



TRUCKING, PACKAGE & POSTAL SERVICE DELIVERY



AUTO INSURANCE CLAIMS ADJUSTMENT



COMMERCIAL REAL ESTATE DEVELOPMENT



DOT, DHS, DOE, FEMA



3rd PARTY DELIVERY AND RIDESHARE SERVICES



DIGITAL OUT OF HOME & VEHICLE ADVERTISING



OUTDOOR INDUSTRIAL POWER SUPPLY



GIS & GEOSPATIAL ANALYTICS SERVICES



DRIVERLESS VEHICLES & DATA SOLUTION PROVIDERS

PMPG | SRT Solutions Framework Built for Today & Tomorrow

Real Time Data

Artificial Intelligence

Services Solutions



Sense

- Motion
- Ambient Conditions
- Sound
- Light
- Pressure
- Date Time

Monitor

- Environmental
- Vehicle Type
- Counts by Time
- Lighting
- Road Conditions
- Date Time

Measure

- SRT- Date
- 3rd Party Sources
- DOT
- NSTB
- Weather Conditions

Analyze

- Real –Time Dashboard
- Web Portal
- Regression
- Multi Factor

Apply Ai

- Cloud Agnostic
- Google Cloud Machine Learning
- Azure Machine Learning Studio
- 20 platform

Solve

- Vehicle
- Fleet Owners
- DOT | NTSB Transportation
- EMT / Safety
- City Planning
- Brands | Business
- Media Services
- Auto Industry

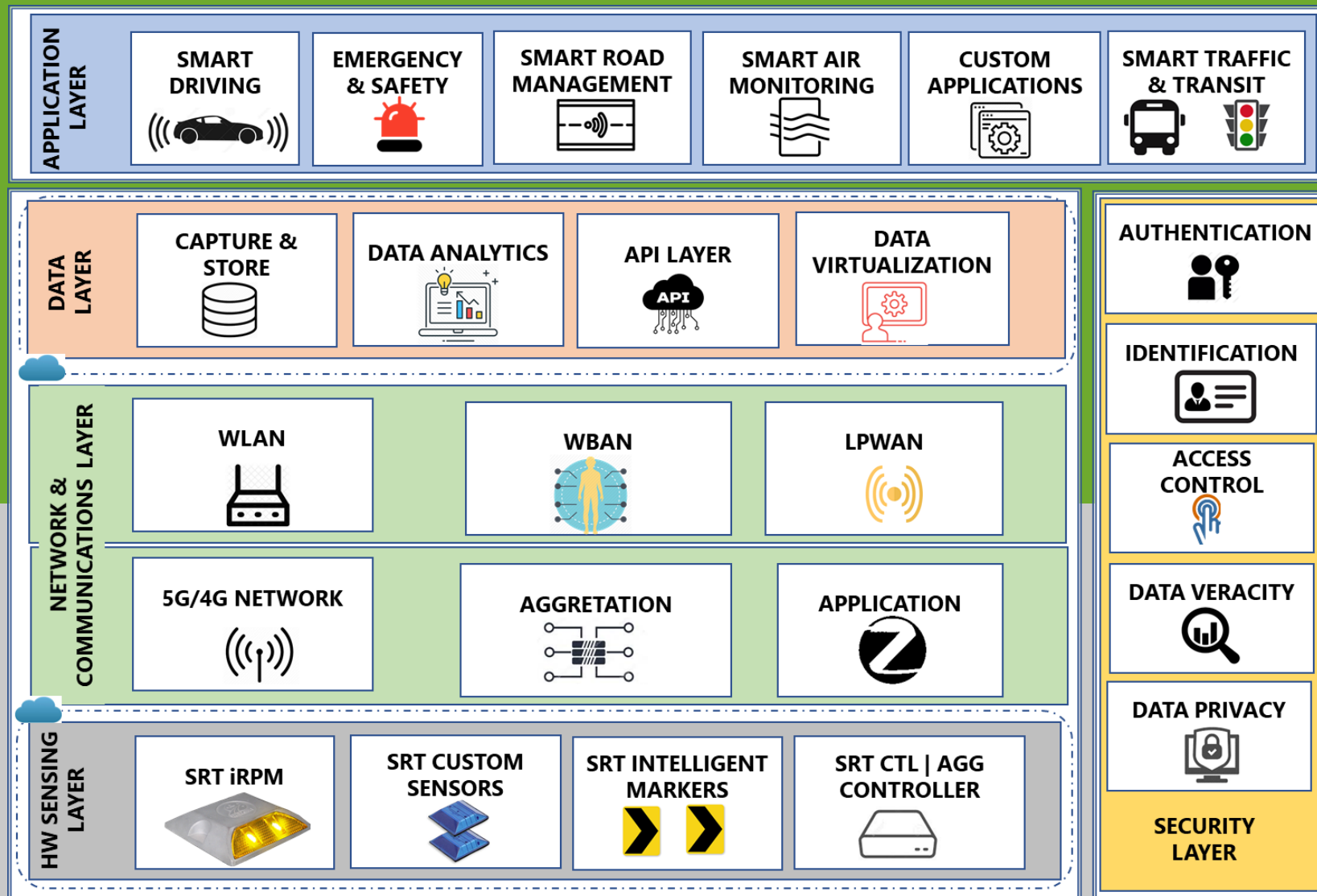
Partner

- Commercial
- Government
- Brands
- Developers
- Law Enforcement
- Technology

Monetize

- Data Warehouse
- AI Abstracted Data
- 3rd party API Integrations
- Programmatic Data

PMPG | SRT Technology Stack - Open & Future Proof



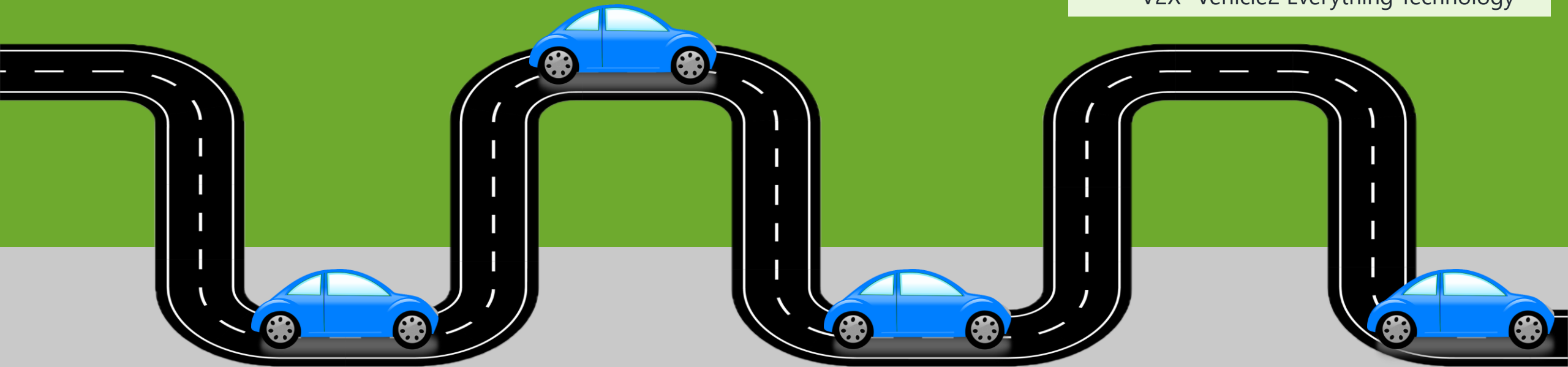
Today's PMPG Smart Road & City Monitoring Framework

Traffic Monitoring

- Passenger | Commercial Vehicle
- Traffic Counts, Direction, ToD
- Safety – Speed, Lane, Proximity

Automated Driving Platforms

- GPS & Assisted Navigation
- Semi & Autonomous Driving Assist
 - Roadway Tax Collection
- V2X- Vehicle2 Everything Technology



Citizen Emergency & Safety Management

- Advanced Traffic Condition Alert
- SRT Alerts -Crash, EMT & Amber
- Advanced Traffic & Adaptive Lighting

Road Management

- Road Temperature Detection
- Advance Motion Detection
 - Crash Notification
- Road Condition Alert

PMPG Solutions Roadmap for the Intelligent Roadway



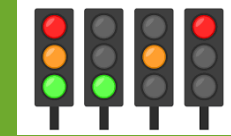
**Air Quality
CO2 Emissions
Monitoring**



**Road Status iRPM
LED Indicators**



**Bi-Directional
Traffic Monitoring
Vehicle Counts**



**Smart Traffic Light
Controlled
Switching**



**Road Condition
Monitoring**



Object Detection



Speed Monitoring



**Road Service Alert
Notification**

PMPG | SRT – CO2 Emissions Monitoring Dashboard Prototype

[CO2 Emissions](#) [LED Signal Indicators](#) [Road Condition](#) [Speed Detection](#)

07-13-2021

Day Part Range

Now

Morning Rush Hour

Morning Standard

Afternoon Standard

Evening Rush Hour

Evening Standard

Evening Standard

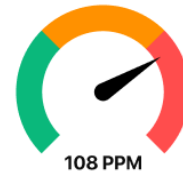
Nighttime

Top CO2 Environmental Impact Road | Hwys

- 1 NE Second Avenue and 36th Street
- 2 SW 117th Avenue and Kendall Drive
- 3 So Dixie Hwy every intersection south of I-95
- 4 SW 117th Avenue and 152nd Street
- 5 A1A
- 6 Alton Road and Dade Boulevard
- 7 NW 87th and 36th Streets
- 8 The Brickell Avenue Bridge
- 9 NE First Avenue and NE Sixth Street
- 10 Pines Boulevard and South Flamingo Road

CO2 ppm

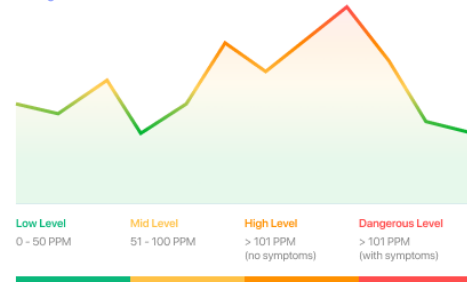
Location: NE Second Avenue and 36th Street



Last YTD
98.6m

Change
2.74%

Rolling 12 Months



Vehicle Type

Commercial
500
18.80%

Passenger
2000
18.56%

Govt Issued
250
18.80%

Top Emitting Vehicles

Year	Make	Model	Type	Lic. Plate	Registered Owner
2020	Lexus	ES 320	Passenger	FL-123	John Doe
2015	Oti Fleet	E 7000	Commercial	FL-601	Fed Ex
2016	Audi	A6	Passenger	FL-223	Sara Smith
2015	IH	3000	Commercial	FL-665	UPS
2019	Cadillac	DeVille	Passenger	FL-801	B. Smart
2018	Ford	Taurus SE	Govt	MIA 112	City of Miami
2021	Kenworth	Transit	Commercial	SC 334	Amazon
2021	Dodge	RAM	Govt	MIA 663	Miami Police
2014	BMW	320i	Passenger	Go 123	Sam Smith
2020	Volvo	6000	Commercial	MA 122	Amazon
2021	MB	SL550	Passenger	NY FRDM	I. M. Large
2009	KIA	Elantra	Passenger	TENN 1	S. Master

PMPG | SRT – Switchable LED Road Light Indicator Dashboard Prototype

CO2 Emissions LED Signal Indicators Road Condition Speed Detection

07-13-2021

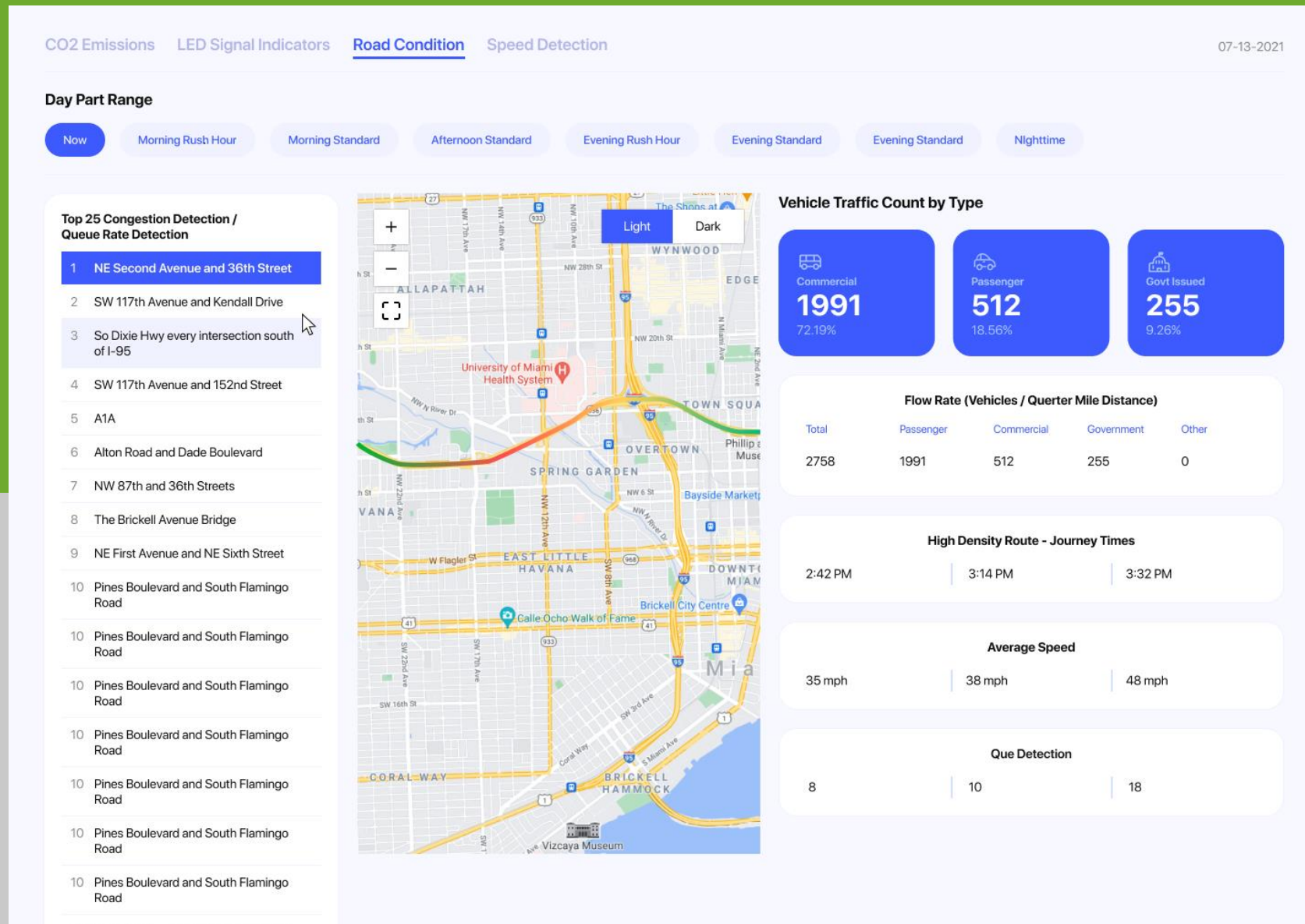
Road Condition Monitoring

Red Light Indicated Roads

	Initial GPS/GIS Position Location	End GPS/GIS Position Location	AI Assisted Root Cause Analysis	Est Time to Resolution	First Responder Assigned	First Responder Report # / Link	Actual Time of Resolution	Road Condition Assessment
101 strett to fifth street collin boulevard	33.3562997 -91.6453647	33.3562997 -91.6453647	Crash	32 min	John Doe	Link	1h 30min	Clear
NE Second Avenue and 36th Street	33.3562997 -91.6453647	33.3562997 -91.6453647	Fire	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
SW 117th Avenue and 152nd Street	33.3562997 -91.6453647	33.3562997 -91.6453647	Disabled	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear
So Dixie Hwy every intersection south of I-95	33.3562997 -91.6453647	33.3562997 -91.6453647	Medical	32 min	John Doe	Link	1h 30min	Clear



PMPG | SRT – Road Condition Monitoring Dashboard Prototype



PMPG | SRT – Speed Detection Monitoring Dashboard Prototype

CO2 Emissions LED Signal Indicators Road Condition Speed Detection

07-13-2021

Day Part Range

Now

Morning Rush Hour

Morning Standard

Afternoon Standard

Evening Rush Hour

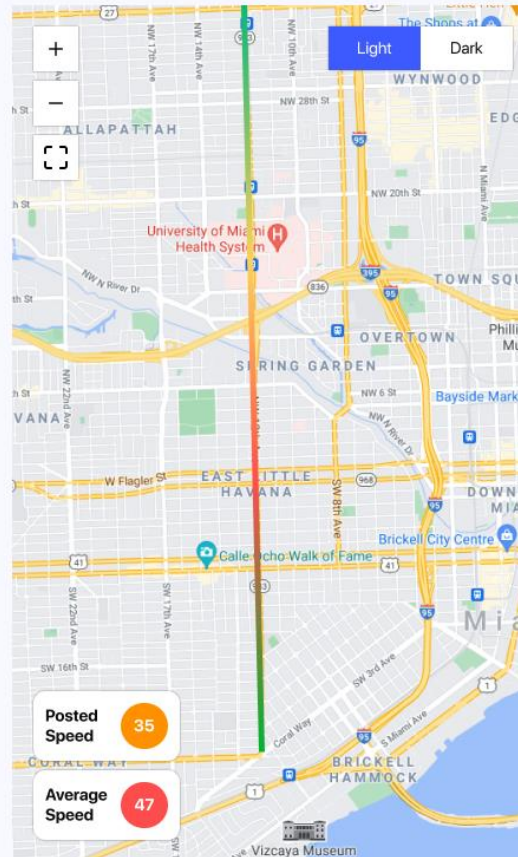
Evening Standard

Evening Standard

Nighttime

Top 10 Speed Detected Road / Highways

- 1 NE Second Avenue and 36th Street
- 2 SW 117th Avenue and Kendall Drive
- 3 So Dixie Hwy every intersection south of I-95
- 4 SW 117th Avenue and 152nd Street
- 5 A1A
- 6 Alton Road and Dade Boulevard
- 7 NW 87th and 36th Streets
- 8 The Brickell Avenue Bridge
- 9 NE First Avenue and NE Sixth Street
- 10 Pines Boulevard and South Flamingo Road



Top Over the Speed Limit Vehicles by Road / Hwy Location

Year	Make	Model	Type	Lic. Plate	Registered Owner
2020	Lexus	ES 320	Passenger	FL-123	John Doe
2015	Oti Fleet	E 7000	Commercial	FL-601	Fed Ex
2016	Audi	A6	Passenger	FL-223	Sara Smith
2015	IH	3000	Commercial	FL-665	UPS
2019	Cadillac	DeVille	Passenger	FL-801	B. Smart
2018	Ford	Taurus SE	Govt	MIA 112	City of Miami
2021	Kenworth	Transit	Commercial	SC 334	Amazon
2021	Dodge	RAM	Govt	MIA 663	Miami Police
2014	BMW	320i	Passenger	Go 123	Sam Smith
2020	Volvo	6000	Commercial	MA 122	Amazon
2021	MB	SL550	Passenger	NY FRDM	I. M. Large
2009	KIA	Elantra	Passenger	TENN 1	S. Master

Solutions are Architected to Integrate & Support the Businesses You Serve



Benefits PMPG Delivers the City of Miami Stakeholders

**Transformative
New City Services**

**Improved Services
Quality at a
Reduced Cost**

**Innovative Smart
Road Intelligent
Services-
Weather & Flooding**

**Accelerated Path
to Safe L4 & 5
Autonomous
Driving**

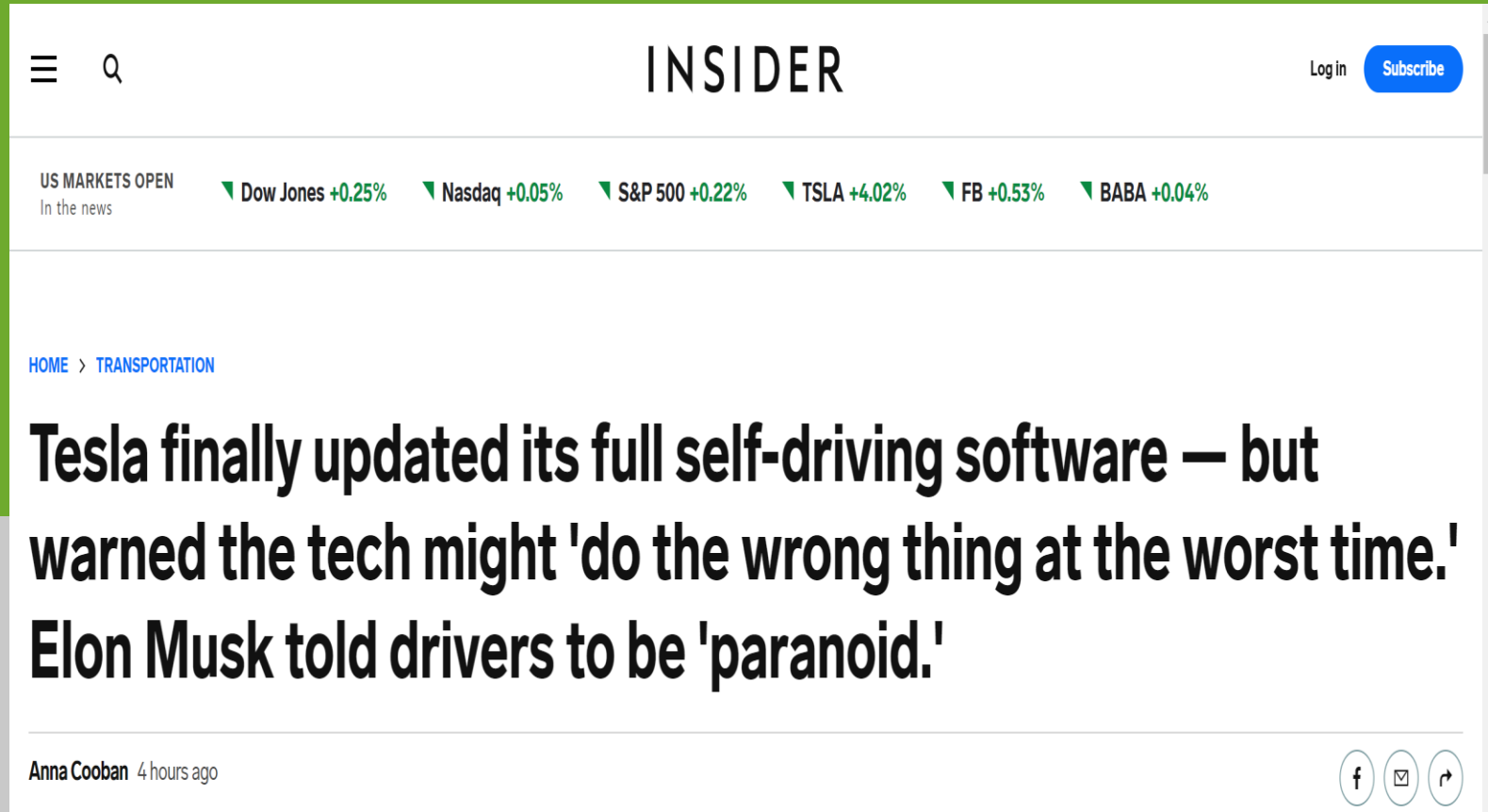
**Managed Traffic
Flow, Congestion
& Routing**

**Improved Logistics
of Ports &
Refineries**

**Enhanced Vehicle
& Pedestrian
Safety**

**Improved
Police, Fire, EMT
Response Times &
Services**

PMPG Is Ready Today to Address Future Autonomous Driving Challenges



The image is a screenshot of a web browser displaying an article on the Insider website. The page has a white background with a green header bar at the top. The Insider logo is centered in the header. To the left of the logo are a menu icon and a search icon. To the right are 'Log in' and 'Subscribe' buttons. Below the header is a section for 'US MARKETS OPEN' with a list of market indices and their percentage changes. The main article title is 'Tesla finally updated its full self-driving software — but warned the tech might 'do the wrong thing at the worst time.' Elon Musk told drivers to be 'paranoid.''. The author's name 'Anna Cooban' and the time '4 hours ago' are at the bottom left. Social media sharing icons for Facebook, Email, and a general share icon are at the bottom right.

INSIDER

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US MARKETS OPEN
In the news

▼ Dow Jones +0.25% ▼ Nasdaq +0.05% ▼ S&P 500 +0.22% ▼ TSLA +4.02% ▼ FB +0.53% ▼ BABA +0.04%

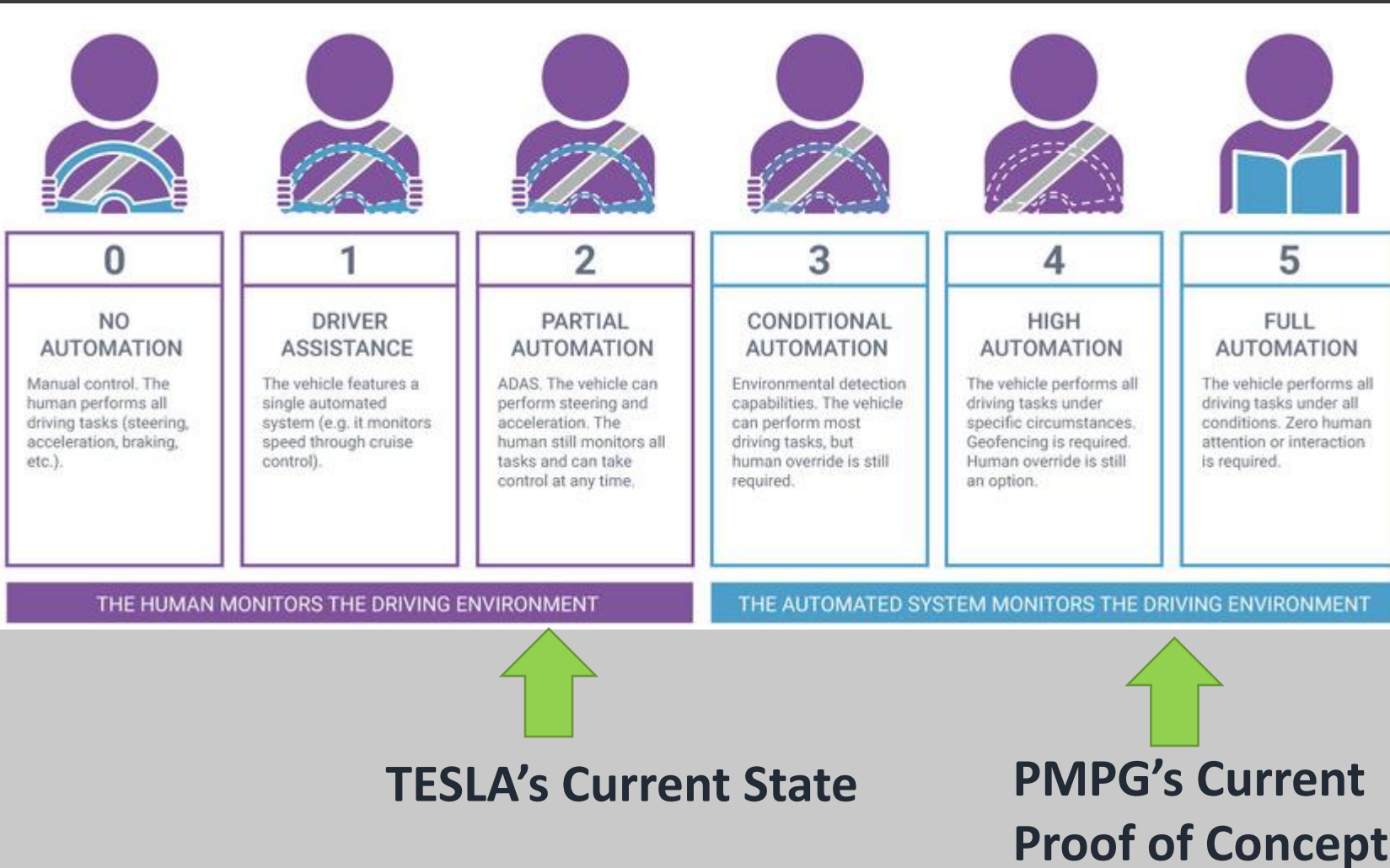
HOME > TRANSPORTATION

Tesla finally updated its full self-driving software — but warned the tech might 'do the wrong thing at the worst time.' Elon Musk told drivers to be 'paranoid.'

Anna Cooban 4 hours ago

f e ↻

Where PMPG “Stacks Up” to Enable Full Autonomous Driving



For PMPG & SRT the Future Is NOW

- **Real Time vs Time Delayed**
- **Bringing A Preview of the Drive miles in front of the vehicle using LIDAR technology**
- **Planned Proof of Concept will be Level 4/5 integration ready**
- **Presently Tesla Autonomous Vehicles are Level 2**

PMPG Stands Ready to Support Infrastructure Investment

The New York Times

Infrastructure Plan

[What's in the \\$2 Trillion Plan](#)

[Where the Money Will Go](#)

[7 Problems in Need of Fixin](#)

Biden Details \$2 Trillion Plan to Rebuild Infrastructure and Reshape the Economy

The president began selling his proposal on Wednesday, saying it would fix 20,000 miles of roads and 10,000 bridges, while also addressing climate change and racial inequities and raising corporate taxes.

PMPG | City of Miami - Engagement Process

PMPG | City of Miami Planning Phase

Join Design
SmartRoad/Smart City
Solutions of a POC

**OBTAIN LOI
FROM CITY OF
MIAMI'S TO
PROCEED WITH
PROOF-OF-
CONCEPT TRIAL**

**PLAN POC
DEPLOYMENT &
SUCCESS
MEASURES w
CITY OF MIAMI
6-8 MONTHS TO
TRIAL**

**JOINTLY ASSESS
POC RESULTS
AND EXPAND TO
PROGRAM
ROLLOUT**

LICENSING PHASE

**IP PROTECTION
FOR DATA
SERVICES &
REVENUE SHARE**

CONSTRUCTION PHASE

**DETERMINE
DESIGN & BUILD
SERVICES TO
DEPLOY**

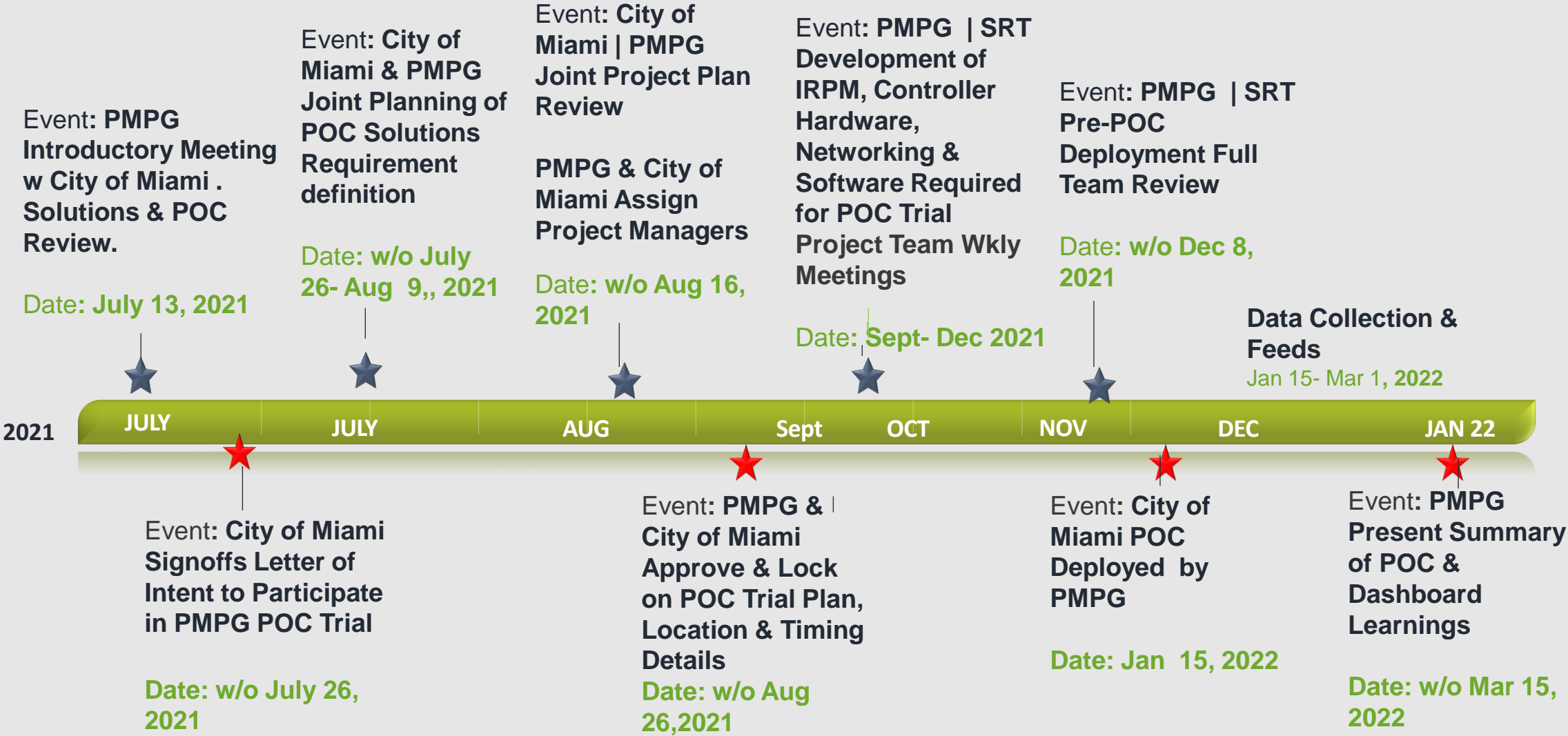
OPERATIONS PHASE

**AGREE ON
PMPG & CITY
MANAGEMENT
ROLES**

SOFTWARE PHASE

**COMMENCE
MARKETING OF
DATA SERVICES
& ANALYTICS**

City of Miami Smart Road POC- Timeline



Next Steps for City of Miami POC Smart Road | City Trial

- **Understand the Priorities of the City of Miami**
 - **Establish working session between both City of Miami & PMPG teams**
- **Issue of Letter of Intent for Proof of Concept Participation**
 - ✓ **No Cost to the City of Miami**
 - ✓ **Deployment of POC in January 2022**
 - ✓ **Projected \$ Reductions in the City Operating Budget**
 - ✓ **Projected New \$ Revenue Streams for the City of Miami**
- **Position the City of Miami as a Smart Road Innovator in a Rollout Commencing 2022**