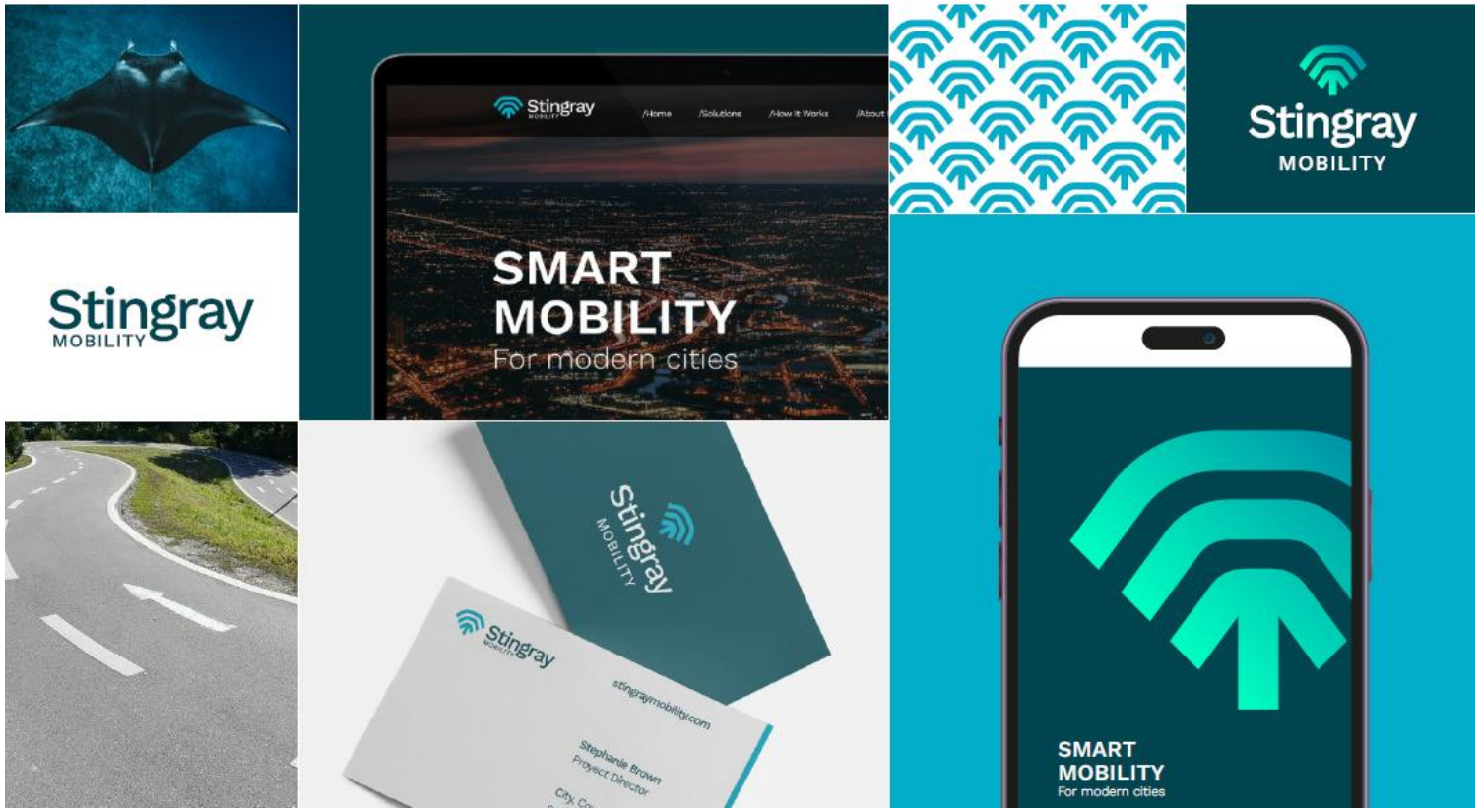
Stingray MOBILITY

Bridging the urban infrastructure gap through private investment and innovation

July 2025

Content

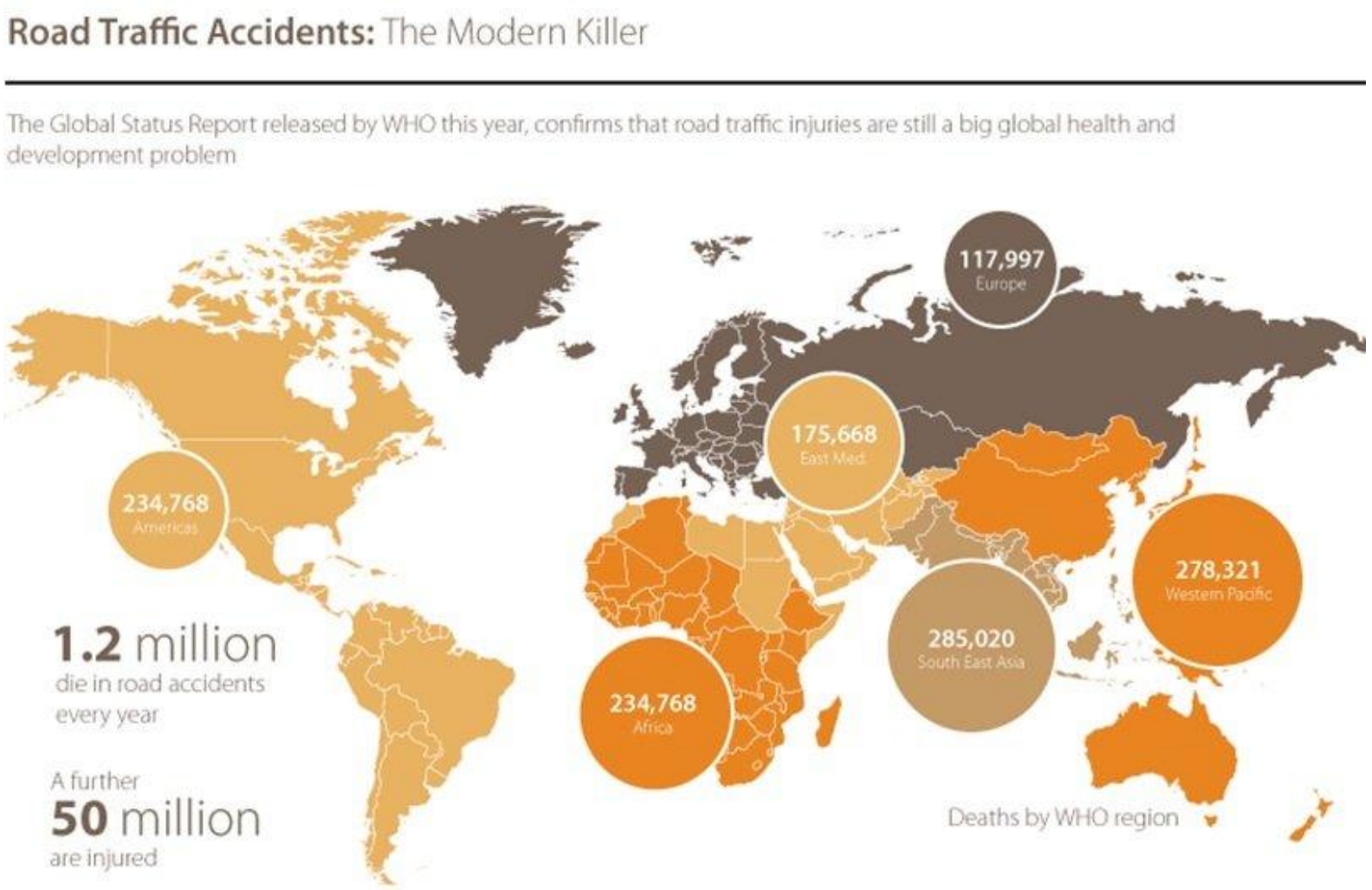
1. Introducing Stingray Mobility – PPPs for safer, smarter urban mobility



Bridging the urban infrastructure gap through private investment and innovation

- **Stingray Mobility is a joint venture between Sweroad and Aninver**, bringing together global expertise in traffic engineering, PPP structuring, and investment advisory.
- **Our vision:** Scale modular PPPs to address traffic inefficiencies, safety, and emissions in underserved urban markets.
- **Our approach:** Leverage data-driven tools and strategic partnerships to accelerate implementation and maximize social impact.

2. Why now? The urban mobility crisis



Traffic congestion and road fatalities are rising faster than urban investment:

- Urban population to reach 6.7B by 2050 (UN)
- **1.35 million deaths/year due to road crashes** (WHO)
- **Global congestion costs ~$1.4 trillion/year** (INRIX & World Bank)

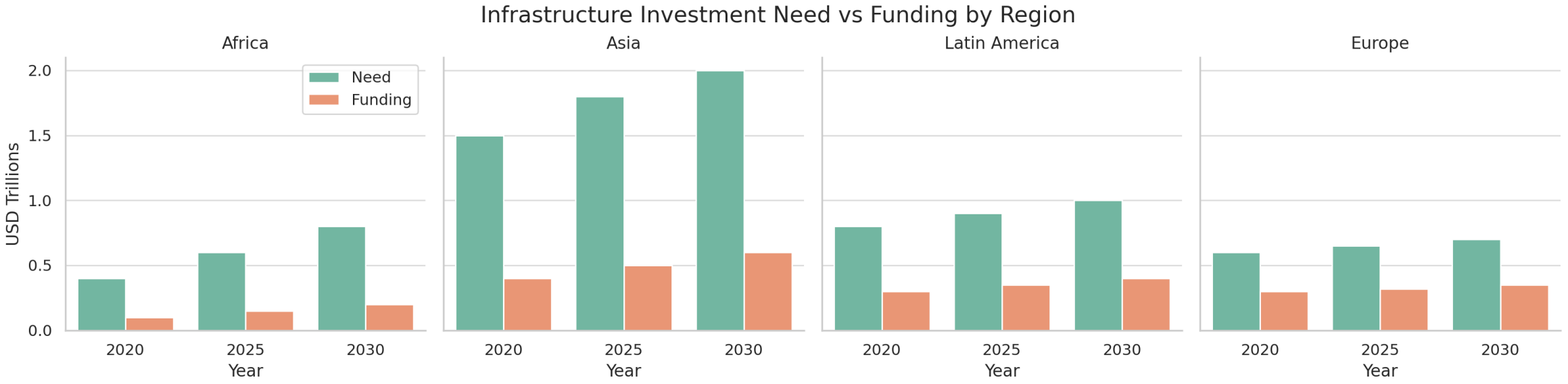
Source: WHO

3. The cost of inaction: time, money and lives

- Citizens in major cities lose 100–150 hours/year in traffic
- Indirect costs: pollution, lost productivity, fuel
- Traffic congestion costs the global economy over $600 billion annually, draining productivity and growth in both developed and developing cities
- **Congestion alone costs cities over 2% of GDP**

Source: The Economist; Forves; Statista

4. Underfunded public infrastructure: a PPP opportunity



Infrastructure needs are rising while public budgets fall short:

- Multibillion-dollar urban mobility investment gap across regions (World Bank, ADB)
- Governments need private sector efficiency, capital, and innovation
- PPPs can unlock scalable, affordable mobility improvements in cities >1M population
- Strong potential for PPP solutions that are: scalable, replicable, modular.

Source: The World Bank

5. Modular urban mobility PPPs: what Stingray offers

Stingray MOBILITY

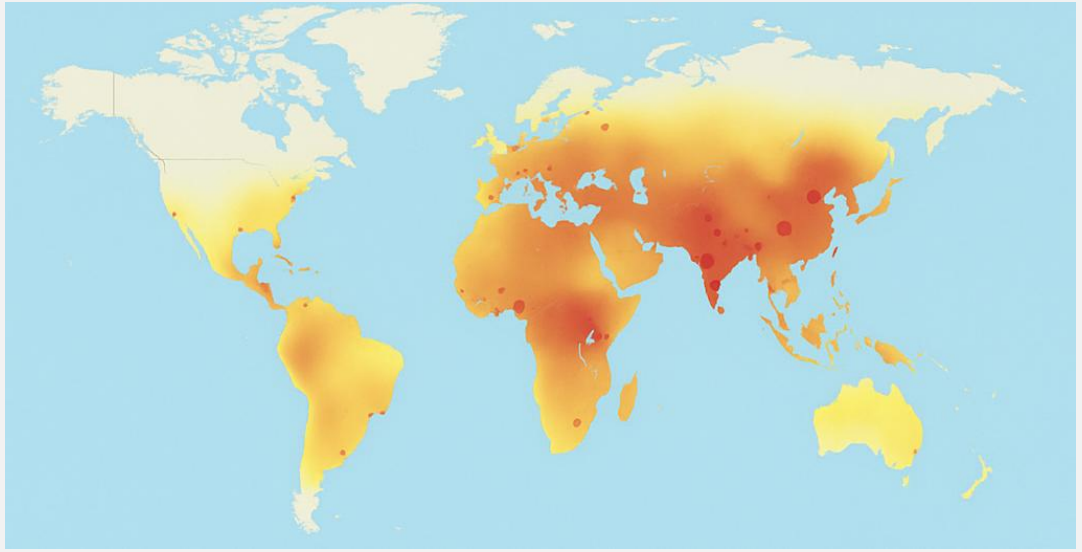
Smart infrastructure, faster delivery, measurable impact.

Stingray Mobility offers turnkey PPP packages for:

- Traffic enforcement (ITS, fines)
- Road safety (smart crossings, speed control)
- Congestion management (signal systems, trafic flow optimization)
- Services: project design, investment, operations

6. Impact potential: cities ready for action

High need, high-growth urban centers are ready for private mobility solutions in both developed and developing economies



- Over **1,750 cities** in the world with +500k inhabitants
- Approx. 1,000 in Asia, 400 in the Americas, 200 in African and 100 in Europe

Stingray Mobility targets especially **fast-growing cities** with populations exceeding 0.5 million across Europe, Africa, Asia, and North & Latin America—regions where **urbanization outpaces infrastructure capacity** and where governments are increasingly turning to the private sector for solutions.

These cities will be **prioritized** based on:

- Readiness and **track record in Public-Private Partnerships**
- High **traffic fatalities and safety risks**
- Strong **engagement from institutional investors, development banks and other partners** supporting sustainable mobility.

"Stingray Mobility bridges the urgent need for safer, smarter cities with actionable PPP models, ensuring that high-growth urban centers can rapidly adopt cost-effective ITS solutions while attracting private capital and delivering measurable social impact."

7. Ideal scenario for Stingray Mobility

Enabling regulatory framework

- National PPP legislation is in place and allows for USPs or streamlined procurement mechanisms.
- Municipalities have some autonomy to contract and enforce traffic management responsibilities
- Institutional or legal support exists to ensure payment of fines for violations

Greenfield technology context

- The target city has not yet deployed advanced ITS systems (e.g. ANPR, adaptive signals, digital parking).
- There's a clean slate opportunity to leapfrog with cost-effective, scalable technology.

Reform-oriented local leadership

- The city leadership is committed to tackling congestion or parking inefficiencies.
- There's strong political will and community support to enforce traffic rules.

Strategic market gaps

- Global players (e.g. Siemens, IBM) have limited or no operations in the city, creating white space for mid-sized developers.
- No dominant local ITS provider (i.e., no local champion), yet the city still faces visible traffic or parking problems.

8. Potential PPP project types for Stingray Mobility (Part 1)

1. Urban traffic enforcement systems

Deployment and operation of speed cameras, red-light cameras, and ANPR systems in city areas.

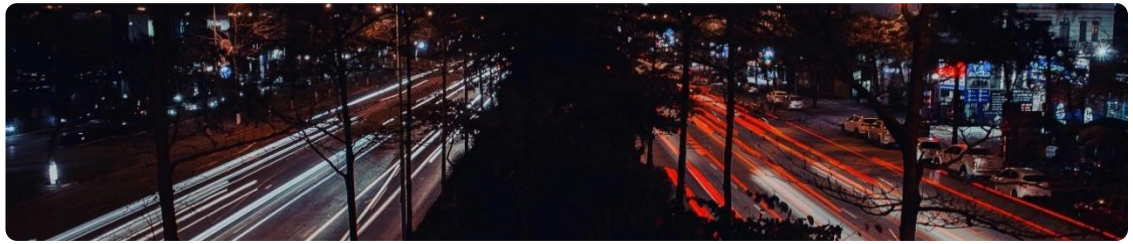
PPP Model: Design-Build-Operate-Maintain (DBOM) or Concession with revenue-sharing from fines or availability payments.

Technologies:

- Automated Number Plate Recognition (ANPR)
- Speed detection radar
- Violation processing software

Value Proposition:

- Improves road safety and driver compliance
- Increases municipal enforcement capacity without CAPEX
- Generates sustainable revenue stream



2. Traffic control & operations centers

Creation of an integrated urban traffic management center, with real-time monitoring and data integration across transport modes.

PPP Model: Technology PPP (Design & Operate) or co-financed BOT.

Technologies:

- CCTV and traffic data feeds
- Data fusion and analytics platforms
- Adaptive traffic signal control

Value Proposition:

- Enhances responsiveness to incidents and congestion
- Supports multimodal transport integration and planning
- Reduces emissions and idling

8. Potential PPP project types for Stingray Mobility (Part 2)

3. Smart street parking systems

Digitization and management of on-street parking through meters, mobile apps, enforcement, and payment integration.

PPP Model: Concession with fee collection and revenue sharing.

Technologies:

- Smart parking meters
- Mobile payment and permit apps
- ANPR-based enforcement

Value Proposition:

- Optimizes urban parking space usage
- Enhances city revenue without infrastructure burden
- Reduces traffic from cruising-for-parking

4. Interurban speed & traffic enforcement

Monitoring and enforcement of speed and vehicle compliance (e.g. weight, emissions) on national or regional highways.

PPP Model: Availability-based DBFOM, or BOT with penalty processing concession.

Technologies:

- Section speed enforcement (average speed)
- Weigh-in-motion systems
- Data backhaul to national transport authority

Value Proposition:

- Improves road safety and vehicle compliance
- Lowers crash rates and road maintenance costs
- Scalable across corridors or border points

9. Key lessons learnt from global ITS PPPs

1. Big players dominate in advanced economies: Most large-scale ITS PPPs (Singapore, London, Ann Arbor, Rio) were delivered by multinationals like Siemens, IBM, or Cubic. Stingray focuses on underserved mid-size cities or secondary capitals where global giants are absent or less agile.

2. Modularity enables phased growth: Singapore and Seoul succeeded by scaling systems through modular components: ERP, CCTV, analytics. Stingray's "plug-and-play" PPP model fits well in cities that need quick wins before scaling.

3. Public sector oversight is crucial: Transport for London and Seoul maintained strong oversight, ensuring policy alignment and public trust. Stingray Approach: Emphasize transparency, co-governance models, and digital monitoring tools.

4. Smart integration > High-tech complexity: Projects like Ann Arbor in Michigan show that results come from real-time signal tuning, not just cutting-edge tech. Lesson: Focus on reliability, local integration, and measurable KPIs — not just sophistication.

5. Strong local partnerships are non-negotiable: Every successful project had deep collaboration with city agencies and local vendors. Stingray Strategy: Build alliances with local operators, civil works firms, and enforcement bodies.

10. Our business model

Stingray Mobility bridges public needs and private capital by developing performance-based PPP transport solutions tailored to the needs of cities and regions.

We operate as a **full-cycle PPP developer**—initiating, structuring, and implementing sustainable mobility projects—while ensuring long-term alignment with authorities, users, and investors.

Our business model enables us to:

- Align public service objectives with private sector efficiency
- Bundle innovative, tech-enabled transport solutions into viable PPPs

What we do:

We identify, structure, and deliver small to mid-scale Public-Private Partnership (PPP) projects in the fields of urban mobility, road safety, and intelligent transport systems (ITS).

Value proposition:

We reduce risk and accelerate implementation for public authorities by packaging proven digital transport solutions into performance-based PPP models attractive to private investors and DFIs.

Revenue model:

Blended model aligned with our role as a developer and long-term partner in sustainable transport infrastructure projects. Our model reflects the nature of Availability-based PPPs, while also allowing for flexibility in user-facing or investor-facing revenue streams when permitted:

1. Availability payments from public authorities
2. User charges where permitted / in some projects
3. Development & management fees from investors

11. Our Go-To-Market plan

Primary targets	• Cities >0,5 M population in Europe, LATAM, Africa, MENA, Southeast Asia • Regions with reform momentum and digital transport programs
Client segments	• City / region transport authorities • Ministries of transport / digital transformation • PPP units and infrastructure agencies • Development banks / donors
Approach	• Inbound channel: create database and market intelligence to track opportunities + InfraPPP • Outbound strategy: targeted pitch decks to selected cities + donor programs • Partnerships: co-develop with ITS tech vendors, DFIs, and local PPP advisors

12. Why Stingray?

Stingray Mobility Unique Selling Proposition

Stingray Mobility uniquely combines the **engineering excellence** of **Sweroad** with the **strategic PPP** and advisory capabilities of **Aninver**, offering cities an end-to-end pathway to modernize their traffic systems.

The joint venture focuses on **low-capex**, **high-impact** interventions, such as intelligent traffic enforcement, adaptive signaling, and smart parking, delivered through **modular Public-Private Partnerships**. This approach allows **Stingray** to implement cutting-edge mobility infrastructure that is affordable, scalable, and rapidly deployable

With a deep understanding of both institutional reform and technical execution, Stingray **is not just a vendor**. but a trusted partner for governments seeking **sustainable, data-driven,** and **financially viable urban mobility transformations**.

13. Leadership team

João Pimentel

Civil engineer with 20+ years in global infrastructure, João blends technical and financial expertise. He has led high-impact projects, created investment vehicles, and held executive and board roles, excelling in PPPs, project finance, and strategic leadership.

Sweroad

José de la Maza

Experienced leader in PPPs and business development with a background in civil engineering and business administration. Leading international consul-ting teams on advisory projects for multi-lateral institutions and public and private clients.

aninver
DEVELOPMENT PARTNERS

Anders Frisk

Seasoned executive and advisor with two decades of leadership in clean energy, sustainable technology, and finance. He has led innovative firms, held multiple CEO and board roles, and co-founded international ventures.

Sweroad

Álvaro de la Maza

Civil engineer and expert in PPPs with a solid background in infra-structure management and project finance. Álvaro has worked on multiple large-scale pro-jects across various sectors, including transportation, energy, and urban development

aninver
DEVELOPMENT PARTNERS

14. Contact information

How Stingray Mobility can support your goals:

- We help transport authorities and governments design and implement smart, efficient, and inclusive mobility solutions.
- We co-create with our partners: you bring the challenge, we bring the tools and know-how to address it.

We'd love to hear from you:

*What **mobility problems** are you tackling? How can we help? Let's talk.*

Contact information

Joao Pimentel

- Email: joao.Pimentel@sweroads.se
- Phone: +46 72 5047396

Jose de la Maza

- E-mail: jm@aninver.com
- Phone: +34 639906348