Redefining Urban Traffic Management

The most advanced & intuitive turnkey Al-based solution



OPTIMIZE ALL MODES OF TRANSPORTATION

Reduce congestion, improve pedestrian safety with the most advanced & intuitive all-in-one AI-based solution



AI BASED SIGNAL TIMING

Fully automated smart planning & deployment of traffic signals across a city



SCALABLE

SaaS solutions that incorporate distributed algorithms into any urban network, regardless of size & complexity



UTILIZE EXISTING TRAFFIC INFRASTRUCTURES

Transform traffic signals & sensors into intelligent networks



HARDWARE AGNOSTIC

Seamless integration across multi-jurisdictions with different hardware vendors



REAL-TIME ADAPTIVE CONTROL

Continuous optimization based on actual traffic flow at any given moment



EFFORTLESS TRAFFIC SIMULATION

Take the guesswork out of adaptive signal planning with a cutting-edge embedded simulation model



Giving smart mobility the green light

With every passing year, everything is moving faster. Technology and digital transformations are continuously accelerating our daily lives. Yet in an increasingly fast-paced world, it takes us longer and longer to get to where we need to go. What was once viewed as thriving city streets, is nothing more than clogged veins that strangle our city and hold our residents hostage on a daily basis.

Axilion Smart Mobility enables cities around the globe to reclaim their traffic-congested streets by harnessing advanced AI technology that transforms traffic signals into a dynamic and adaptive traffic network. Once implemented, travelers instantly experience smoother travel with more greenwaves, resulting in up to 40% reduced commute time and substantial reduction of emissions.

The company's advanced solution is a key component for cities who wish to take the first step towards a true smart city; real-time adaptive traffic signal response for smoother traffic flow, with more greenwaves, less toxic emissions, safer pedestrian conditions, drops in congestion related costs for cities, and most importantly, improving the quality of life for millions of people around the globe.

The new language of traffic

Axilion is the only solution that applies innovative Al technology through a city-wide hardware agnostic abstraction layer. This powerful algorithm enables cities to maximize their current infrastructure's effectiveness via a universal language that is seamlessly integrated throughout multiple networks with a click of a button, for unified communication and smart optimization.



As cities struggle with increased congestion from single occupancy vehicles and inefficient forms of passenger ground transportation, mass transit is the solution that should lead the way in transforming cities. But, to lead the way, Bus and Rail systems need to greatly improve the userexperience - by significantly reducing travel time and increasing operating efficiency. Axilion is the proven technology to help mass transit get our cities moving again!"

Mark Joseph, Former CEO, Transdev Americas

Three powerful game-changers that redefine urban traffic management

TransEm

Innovative traffic signal design, validation & deployment solution that is diligent of pedestrian safety



ACCELERATE design time with automated design & verification capabilities



✓ ELIMINATE costly on-site correction cycles through accurate design & remote validation



DESIGN complex grids effectively with 100% traffic signal priority



CONTROL with fully customizable software that adheres to each city's requirements & regulations

TransEm Al

Automate signal planning with advanced technology that allows cities to instantly know the effects of time plans & TSP strategies under various conditions



RUN simulations of long corridors with multiple crossing bus lines in less than a second



IDENTIFY optimal cycle length, splits, offset and TSP parameters by running hundreds of network simulations concurrently



COMPARE different scenarios relative to existing time plans according to HCM standards



LEVERAGE Axilion's powerful data analytics UI for a deep dive into the behavior of private vehicles and public transit

TrafficStream

Scalable AI-based smart traffic control center that enable cities to effortlessly revolutionize & maintain its entire mobility management system as a dynamic urban space



TRANSFORM current infrastructure upgrades by combining next gen web & communication tech alongside AI, deep learning, and more



CONSOLIDATE disjointed sources of data in a single source to accurately streamline transit in a multijurisdiction environment



OBTAIN best-in-class technology with a proven track record

Reshaping the future of traffic, one city grid at a time.

City Bus Travel Metamorphosis

Haifa, Israel

30%

increase in average speed

After a failed attempt to optimize bus transit travel times by Controllerbased TSP with basic truncation, the city called on Axilion to deploy it's Al-based TSP solution throughout the city's traffic signals network in order to improve bus transit travel time and arrival accuracy along its route. As a result, 11% of passengers opted for public transportation rather than private cars for their daily commute.

Setting a New Standard for Light Rail Transportation

Jerusalem, Israel

reduction in

66% 450%

Axilion's Al-based software was deployed across hundreds of signalized intersections in a city looking to alleviate inner city traffic congestion and streamline public transit with dynamic green waves. They are currently the only LRT in the world that stops only at stations, not lights.

Maximizing the Virginia **Metroway City Bus Effectiveness**

Northern Virginia, US

less stops due to greenwaves

improvement

Transportation Commission tapped Axilion when charged with conducting a simulation pilot across five critical intersections along the Metroway for a more frequent, faster, and reliable bus service.

Axilion's powerful technology speeds surface transit through traffic that pays real-world dividends resulting in increased ridership and less capital."

John Casesa, Former Group VP, Global Strategy, Ford

FAST TIME TO VALUE

Experience dramatic improvement within a few months after implementation

About Axilion

Axilion Smart Mobility enables cities around the globe to reclaim their traffic-congested streets by harnessing advanced AI technology that transforms traffic signals into a dynamic and adaptive traffic network. The company allows cities to maximize their current infrastructure's effectiveness via a universal traffic language that closes the gap between multiple hardware networks for unified communication and smart optimization. By leveraging their current infrastructure, Axilion helps cities to remain cost efficient while optimizing their traffic flow. Once implemented, travelers instantly experience smoother travel with more green waves, resulting in up to 40% reduced commute time and substantial reduction of emissions. With seamless integration, Axilion's green and innovative solution is a key component for cities who wish to take the first step towards a true smart city. Recently, New York City DOT chose Axilion to revolutionize New Yorkers daily commute by streamlining MTA buses in critical corridors.