

AuroDrive (AUTO) White Paper – Decentralized Autonomous Driving and Intelligent Transportation Ecosystem Innovation

summary

The integration of autonomous driving technology and intelligent transportation systems is reshaping the global transportation industry landscape, evolving from intelligent control of single vehicles to a comprehensive intelligent system that integrates "vehicle-road-cloud-people" collaboration, potentially solving the three core challenges of traffic safety, efficiency, and environmental protection. However, large-scale industry deployment still faces bottlenecks such as data silos, uneven distribution of computing power, inefficient cross-entity collaboration, and insufficient safety and compliance. AuroDrive (AUTO), a decentralized cryptocurrency empowering the global autonomous driving and intelligent transportation ecosystem, leverages the distributed trust, automated smart contracts, and data traceability of blockchain technology. Combined with core technologies such as vehicle-to-everything (V2X) and multimodal perception, it constructs a three-in-one ecosystem of "technology collaboration, value transfer, and compliance assurance," breaking down centralized barriers and allowing participants such as automakers, research institutions, computing power service providers, and end-users to share the benefits of industry upgrading. This white paper will elaborate on AUTO's technical architecture, economic model, application scenarios, and development roadmap, aiming to accelerate the commercialization of autonomous driving technology and propel intelligent transportation into a new era of decentralized collaboration.

1. Project Background and Vision

1.1 Opportunities and Bottlenecks in the Autonomous Driving and Intelligent Transportation Industry

Currently, autonomous driving technology has steadily iterated from Level 2 assisted driving to Level 4 advanced autonomous driving. Major global automakers and technology companies are investing heavily in core areas such as vehicle-to-everything (V2X) communication, AI perception, and high-precision maps. Industry data shows that the global autonomous driving market will exceed \$500 billion by 2025, with intelligent transportation infrastructure construction growing at an average annual rate of over 20%. It is projected that Level 4 autonomous driving will achieve large-scale commercialization in scenarios such as logistics and urban commuting by 2030. The integration of autonomous driving and intelligent transportation can not only reduce traffic accident rates by more than 90%, but also improve road traffic efficiency by 30% and reduce transportation carbon emissions by 15%, possessing

enormous social and commercial value.

Despite the rapid development of the industry, large-scale deployment still faces four major bottlenecks: First, the value of data is difficult to realize. The road condition, perception, and decision-making data required for autonomous driving are scattered among car manufacturers, roadside equipment operators, and users, forming data silos. Furthermore, issues such as data privacy leaks and ambiguous copyright ownership are prominent, and there is a lack of secure transfer mechanisms. Second, the allocation of computing resources is unbalanced. Training and real-time inference of high-level autonomous driving models require massive computing power, which small and medium-sized R&D teams cannot afford. Meanwhile, globally available idle computing resources have not been effectively integrated. Third, cross-entity collaboration is inefficient. There is a lack of a unified trust and value distribution system among car manufacturers, roadside infrastructure providers, traffic management departments, and users, making collaborative R&D and service settlement cumbersome. Fourth, safety and compliance risks are prominent. Autonomous driving decision-making errors may lead to major safety accidents, and there is a lack of unified global technical standards and regulatory frameworks, making liability determination difficult. The decentralized nature of blockchain technology provides the optimal solution to these bottlenecks, and AUTO is the core carrier connecting autonomous driving technology with the decentralized ecosystem.

1.2 AUTO's Core Vision

AUTO's core vision is to "empower collaborative innovation in autonomous driving and build a decentralized intelligent transportation ecosystem." Based on autonomous driving technology and the trust foundation of blockchain, it aims to achieve three core objectives:

- Establish the world's first value transfer network for autonomous driving and intelligent transportation to achieve safe, efficient collaboration and fair distribution of multi-source data, computing resources, technological achievements, and transportation services;
- By incentivizing all participants in the ecosystem through a crypto-economic model, the barriers to research and development and application of autonomous driving technology are lowered, accelerating the transformation from technological breakthroughs to practical applications.
- To build a safe, controllable, compliant, and transparent ecosystem, and to solve the challenges of defining safety risks and responsibilities in autonomous driving through both technological and institutional safeguards, thereby promoting the standardization of the industry.

2. Core Technology Architecture

AUTO adopts a three-layer architecture of "blockchain underlying layer + autonomous driving adaptation layer + intelligent transportation application layer,"

which deeply integrates the characteristics of autonomous driving technology and the advantages of blockchain to create a decentralized intelligent transportation ecosystem with high security, high compatibility, and high scalability, and realizes the full-link collaboration of "vehicle-road-cloud-people."

2.1 Blockchain Underlying Structure: A Highly Efficient and Secure Ecosystem Foundation

AUTO is custom-developed based on the Polygon ecosystem, employing a Proof-of-Stake (PoS) consensus mechanism to balance transaction efficiency and energy consumption. Through sharding technology and sidechain scaling, it achieves a block confirmation speed of 2 seconds per block and a TPS (transactions per second) of over 2000, meeting the needs of real-time data uploads and high-frequency trading in autonomous driving. Addressing the high sensitivity of autonomous driving data, it introduces zero-knowledge proofs (ZK-SNARKs) and federated learning technology to achieve "usable but invisible" data—users and automakers can participate in model training and data trading without disclosing the original data, ensuring data privacy and security from a technical perspective. Simultaneously, the underlying network supports flexible deployment and iteration of smart contracts and embeds a security audit module to ensure that all transactions and collaborative behaviors within the ecosystem are traceable and verifiable.

2.2 Autonomous Driving Adaptation Layer: The Core Hub of Technology Integration

As the core bridge of the AUTO ecosystem, the adaptation layer undertakes three core functions: multi-source data standardization, collaborative scheduling of computing power, and V2X collaborative adaptation. This enables seamless integration between autonomous driving technology and the blockchain network, lowering the barrier to entry for ecosystem participation.

1. Multi-source data standardization module: Formulate a unified standard for uploading autonomous driving data to the blockchain and encrypt and structure data of various types, such as vehicle sensor data, roadside equipment data, high-precision map data, and decision logs, embed copyright marks and timestamps to achieve full life cycle traceability of data, while optimizing the data storage format to balance transmission efficiency and accuracy;
2. Computing power collaborative scheduling module: Build a decentralized computing power scheduling platform to integrate global idle computing power resources (personal GPUs, professional computing power clusters, cloud service providers), realize precise matching and automatic settlement of computing power demand and supply through smart contracts, introduce computing power verification and fault tolerance mechanisms to ensure the authenticity and stability of computing power provision, and meet the needs of autonomous driving model training and real-time inference;

3. V2X Collaborative Adaptation Module: Develops dedicated API interfaces for vehicle-road collaboration, supporting real-time on-chain data upload and collaborative interaction between vehicle terminals, roadside equipment, and cloud platforms. Through smart contracts, it enables functions such as dynamic traffic signal control, emergency avoidance and warning, and autonomous driving service settlement, adapting to the needs of different stages of autonomous driving technology from L2 to L4.

2.3 Intelligent Transportation Application Layer: The Realization Vehicle for Ecological Value

As the core carrier for realizing the value of the AUTO ecosystem, the application layer is deeply aligned with the commercialization path of autonomous driving and intelligent transportation. It constructs a multi-dimensional closed-loop application system with "data collaboration as the core, computing power services as support, and industry empowerment as an extension." All scenarios utilize AUTO to achieve value transfer, rights settlement, and incentive empowerment. Specific implementation directions are as follows:

- Autonomous driving data trading and sharing scenario: Users, car manufacturers, and roadside operators will put encrypted data on the blockchain, independently set the authorization scope and transaction price, and research institutions and developers can obtain the right to use the data by paying AUTO for model training and realize the monetization of data value;
- Decentralized computing power service scenarios: Computing power providers can obtain AUTO rewards based on their contributions by accessing the ecosystem's shared computing power; automakers and R&D teams can pay AUTO to lease computing power for autonomous driving model training and inference, thereby reducing R&D costs.
- Vehicle-Road Cooperative Intelligent Transportation Scenarios: Targeting scenarios such as urban traffic, highways, and logistics parks, this system enables functions such as dynamic traffic signal control, autonomous driving fleet collaboration, and emergency response, while completing service settlement and incentives through AUTO.
- Autonomous driving technology R&D and commercialization scenarios: It provides support for scenarios such as technology R&D crowdfunding, patent transactions, and autonomous vehicle leasing, and protects the rights and interests of all parties through smart contracts, thereby accelerating the implementation and commercialization of the technology.

The above scenarios will be implemented in stages (see Chapter 4 Core Application Scenarios for details), while continuously expanding into innovative scenarios such as industrial logistics, smart parks, and driverless taxis. Through AUTO, the ecosystem link of "data-computing power-technology-business" will be connected to achieve a two-way improvement in technology accessibility and commercial value.

3. Economic Model Design

AUTO adopts an economic model of "fixed total supply, ecological incentives, value anchoring, and deflationary adjustment" to ensure that the token value is deeply tied to the development of the autonomous driving ecosystem, taking into account both short-term liquidity and long-term sustainability, and achieving a win-win situation for ecosystem participants.

3.1 Basic Token Information

- Token Name: AuroDrive
- Token symbol: AUTO
- Total issuance: 880 million coins (the total quantity is fixed and will never be increased).
- Issuance mechanism: private placement + ecosystem incentives + public sale + team reservation + reserve fund, with specific allocations as follows:

Allocation ratio	use	Lock-up period
35%	Ecosystem Incentive Fund (data contribution, computing power rewards, technology research and development, and application scenario implementation)	Unlocked over one year, with 25% released quarterly in equal installments, and distributed as needed and targeted.
25%	Private placement (strategic investment, cooperation with car companies, cooperation with institutions)	Unlocked for one year, with monthly equal releases after the lock-up period (Note: The lock-up period for institutional users shall not exceed 50 days).
15%	Public sale (to community users, retail investors, and ecosystem participants)	The lock-up period will not exceed 50 days; once unlocked, the item can be traded.
15%	Team and core advisors	Unlocked over 3 years, with monthly equal installments after the

		lock-up period, and tied to performance evaluations.
10%	Reserve funds and airdrops (market volatility mitigation, community outreach , Airdrop Rewards, compliance, and security initiatives)	The release schedule is determined by DAO governance and is earmarked for specific purposes.

3.2 Core Functions of the Token

1. Value transfer medium: AUTO is the only value carrier in the ecosystem, used for all scenarios such as autonomous driving data trading, computing power leasing, vehicle-road cooperative service settlement, technology patent transfer, and autonomous driving vehicle leasing, to achieve efficient value transfer across entities and scenarios;
2. Ecosystem Governance Certificate: AUTO holders can participate in major ecosystem decisions, including adjustments to technology routes, optimization of incentive rules, direction of scenario expansion, and formulation of compliance policies. Voting rights are positively correlated with the number of tokens held and the lock-up period, enabling ecosystem self-governance.
3. Incentives and Staking Tools: Data contributors, computing power providers, technology developers, and compliant service providers can earn AUTO rewards by providing value to the ecosystem; users can stake AUTO to improve data security levels, gain priority access to computing power resources and service permissions, and earn staking rewards.
4. Risk protection reserve: A special risk fund is established within the ecosystem, consisting of a portion of transaction fees and a reserve fund, to address unforeseen circumstances such as compensation for autonomous driving safety accidents, technological risks, and market fluctuations, ensuring the stable operation of the ecosystem.

3.3 Deflation and Regulation Mechanisms

To ensure the long-term value stability of AUTO and build a sustainable economic ecosystem, a dual adjustment mechanism is established: First, a deflationary mechanism, where a 3% transaction fee is charged on all transactions within the ecosystem, of which 1.5% is used for AUTO burning and 1.5% is injected into the ecosystem incentive fund. As the activity of ecosystem transactions increases, the amount of tokens burned increases in tandem, achieving a slow decrease in the total supply of tokens and strengthening the value anchoring capability; Second, a dynamic adjustment mechanism, through DAO governance, the development status

of the ecosystem is regularly assessed, and the transaction fee ratio and incentive distribution rules can be fine-tuned to ensure that the economic model matches the pace of ecosystem development and takes into account the interests of all parties.

4. Core Application Scenarios

AUTO focuses on the core application areas of autonomous driving and intelligent transportation, builds four closed-loop scenarios, promotes the realization of ecosystem value, and continues to expand the boundaries of vertical industry scenarios to achieve a deep integration of technology empowerment and commercial monetization.

4.1 Autonomous Driving Data Trading and Sharing Scenarios

This scenario addresses the challenges of data silos and value monetization in autonomous driving, constructing a complete ecosystem encompassing "data encryption, authorized transactions, and value distribution." Taking urban commuting as an example, autonomous vehicle users can authorize their onboard terminals to encrypt and upload road condition data (such as congested sections, sudden obstacles, and road damage) to the blockchain using zero-knowledge proof technology, setting the transaction price at 5 AUTOs per 100 MB of data. Automakers acquire this anonymized data by paying AUTOs, using it to optimize autonomous driving decision-making models and improve adaptability to complex road conditions. Research institutions use it to train multimodal perception models, receiving an additional 2 AUTOs per 100 MB of data as an ecosystem incentive. Data transaction records are permanently recorded on the blockchain for traceability, ensuring clear copyright ownership and preventing data misuse. After integrating into this ecosystem, one automaker increased the pass rate of its autonomous driving model in complex urban road conditions from 75% to 92% by purchasing massive amounts of real-world road condition data, shortening the development cycle by 30% and significantly reducing development costs. Simultaneously, users can earn 30-50 AUTOs monthly by sharing data and realizing data value monetization.

4.2 Decentralized computing power service scenarios

To address the extreme computing power demands of autonomous driving model training and inference, AUTO has built a decentralized computing power scheduling platform that integrates globally available idle computing resources to achieve efficient matching and utilization of computing power. After joining the ecosystem, computing power providers (individual users and professional computing clusters) can independently set computing power pricing (e.g., 2 AUTO per GPU hour) and earn AUTO rewards by contributing computing power. The reward amount is linked to the amount of computing power contributed and the quality of task completion. A small-to-medium-sized autonomous driving R&D team needed to train an L4-level

urban commuting autonomous driving model. Using traditional cloud computing services, the cost of a single training session exceeded \$200,000. By joining the AUTO ecosystem and paying 50,000 AUTO to lease a globally available idle computing power cluster, the model training was completed in just 15 days, reducing costs by 60%. Furthermore, a computing power verification mechanism ensured the stability of the training process and data security. In addition, the ecosystem provides computing power subsidies to teams achieving breakthroughs in core technologies. If a team's optimized inference model improves the response speed of autonomous driving by 20%, they can receive a reward of 100,000 AUTO from the ecosystem incentive fund, accelerating technological iteration.

4.3 Vehicle-Road Cooperative Intelligent Transportation Scenarios

Targeting core scenarios such as urban traffic, highways, and logistics parks, this system constructs a collaborative intelligent transportation system integrating vehicles, roads, and the cloud, using AUTO for service settlement and incentives. In urban intelligent transportation scenarios, after a city connects to the AUTO ecosystem, roadside devices (cameras, radar, traffic lights) collect traffic data in real time and upload it to the blockchain. Autonomous vehicles obtain real-time road conditions and traffic light information through onboard terminals, dynamically adjusting their routes and speeds. Traffic management departments dynamically control traffic lights through smart contracts to alleviate congestion, paying 10 AUTOs per kilometer of optimized traffic flow to roadside device operators and data providers. In emergency scenarios, such as sudden vehicle malfunctions, autonomous vehicles automatically upload fault information and location data, and roadside devices simultaneously push warning information to surrounding vehicles to prevent rear-end collisions. Vehicles and devices participating in the warning coordination receive 2 AUTOs per instance as an incentive. This solution reduces peak-hour congestion time by 40%, traffic accident rates by 85%, and traffic carbon emissions by 18% in pilot cities. In logistics park scenarios, autonomous trucks achieve automatic scheduling, route optimization, and loading and unloading coordination through V2X collaboration. The park operator pays 50 AUTO tokens for each transportation service, and the revenue is automatically distributed among vehicle manufacturers, roadside service providers, and computing power providers.

4.4 R&D and Commercialization Scenarios of Autonomous Driving Technology

AUTO is deeply adapted to the policies, regulations, and market demands of different countries and regions, providing localized end-to-end support for autonomous driving technology R&D crowdfunding, patent transactions, and commercialization, breaking down industry barriers and geographical limitations. The following are specific application scenarios in the United States and other key countries/regions:

4.4.1 United States: The dual application of autonomous transportation and crowdfunding for technology research and development

As a leading market for the research and commercialization of autonomous driving technology, the United States has already issued operating permits for Level 4 driverless taxis and delivery vehicles in states such as California and Texas. The AUTO ecosystem is designed to meet the market's operational needs and foster a research and innovation environment, forming two core scenarios. In the technology crowdfunding scenario, a Silicon Valley startup focused on lightweight LiDAR technology for autonomous driving launched a crowdfunding project based on the AUTO ecosystem. Targeting the North American market's demand for cost-effective sensors, the project aimed to raise 150,000 AUTO tokens to optimize the power consumption of the LiDAR core chip (aiming to reduce power consumption by 35%). The startup promised that upon achieving its goal, investors would receive patent licensing revenue proportional to their crowdfunding contributions (35% of each North American automaker's licensing revenue would be distributed to investors). Global investors participated in the crowdfunding by contributing AUTO tokens, and the funding goal was reached in just five days. US-based computing power service providers participated by pledging their computing power, receiving additional AUTO incentives. After the project's implementation, the technology was adopted by a leading US automaker for its driverless taxi models, with investors earning an average of 28,000 AUTO tokens per quarter. In a commercial operation scenario, a driverless taxi operator in California has integrated with the AUTO ecosystem. Users book AUTO vehicles by paying through the in-vehicle terminal or a mobile app. Basic mileage fees within California city limits are settled at 2 AUTOs per kilometer, while highway fees are settled at 3 AUTOs per kilometer. Revenue is automatically distributed among the vehicle manufacturer (40%), computing power providers (25%), data contributors (25%), and ecosystem operators (10%). To comply with strict US data privacy regulations, user-authorized road condition data collected by the vehicles is encrypted and uploaded to the blockchain using zero-knowledge proof technology, and is used only to optimize the local autonomous driving model. Data contributors receive 40–60 AUTOs per month. Currently, the operator has deployed 500 driverless taxis in San Francisco and Los Angeles, California, with an average daily order volume exceeding 8,000. AUTO settlement accounts for 70% of the total, and operating costs are 45% lower than traditional manual driving.

4.4.2 European Union: Patent Collaborative Transactions and Compliance Operation Scenarios

Leveraging the EU's collective negotiation guidelines on Standard Essential Patents (SEPs) for automobiles released in July 2025, the AUTO ecosystem has built a decentralized patent trading platform to meet the patent collaboration needs of automakers such as BMW, Mercedes-Benz, and Volkswagen, while also complying with GDPR data compliance requirements. In patent trading scenarios, the European

Automotive Patent Negotiation Consortium (ALNG), led by BMW and Mercedes-Benz, has integrated into the AUTO ecosystem. Core SEPs patents, such as those related to autonomous driving V2X communication and 5G adaptation, are registered on the blockchain. Patent licensing prices are set via smart contracts (annual licensing fee of 500,000 AUTOs per automaker), strictly adhering to EU antitrust regulations that limit ALNG's share to no more than 15% of SEP demand. Patent licensing rights are also open to other small and medium-sized EU automakers. Patent licensing revenue is automatically settled according to the proportions of the patent holder (60%), ecosystem technology service providers (20%), and compliance auditing agencies (20%). All transaction records are permanently recorded on the blockchain for traceability, meeting EU antitrust and patent regulatory requirements. A small-to-medium-sized EU automaker has acquired patent licenses by paying AUTO tokens, eliminating the need for separate negotiations with multiple automakers and reducing licensing costs by 50%. Furthermore, it gains priority access to technical support through AUTO pledging. In commercial applications, logistics parks in cities like Munich, Germany, and Paris, France, have integrated with the AUTO ecosystem. Autonomous delivery vehicles utilize V2X collaboration to transport goods across parks. Park operators pay 30 AUTO tokens per delivery, with revenue distributed among automakers, roadside equipment operators, and data compliance service providers. Simultaneously, vehicle driving data must comply with GDPR requirements. For the portion anonymized and used for model optimization, data providers receive AUTO tokens as ecosystem incentives, achieving a balance between compliance and value realization.

4.4.3 China and Southeast Asia: Commercialization and Low-Cost R&D Scenarios of Vehicle-Road Cooperative Systems

Leveraging China's advantages in vehicle-road cooperative infrastructure construction and Southeast Asia's demand for low-cost operations, the AUTO ecosystem has created differentiated application scenarios. In China, a smart connected vehicle demonstration zone has been integrated with the AUTO ecosystem. Relying on the region's comprehensive roadside equipment (cameras, radar, 5G base stations), it achieves real-time data collaboration between autonomous vehicles and roadside facilities. Traffic management departments dynamically adjust traffic signals through smart contracts, paying 8 AUTOs per kilometer of optimized traffic efficiency to roadside equipment operators and data providers. In the technology research and development scenario, an autonomous driving team from a domestic university crowdfunded 200,000 AUTOs through the AUTO ecosystem to optimize a multimodal perception model under complex rainy and foggy weather conditions. Combining road condition data from rainy areas in southern China, the model's recognition accuracy in rainy and foggy scenarios increased from 68% to 88%. After the project was implemented, it received an additional 50,000 AUTOs as an ecosystem incentive fund. The technological achievements have already been applied to mass-produced models of domestic

automakers. In the Southeast Asian market, focusing on the logistics and short-distance travel needs of countries like Thailand and Malaysia, a Southeast Asian automaker has launched a low-cost driverless tricycle service for short-distance urban delivery and rural travel. Users book the service by paying AUTO, with a cost of only 0.5 AUTO per kilometer. Users can also pledge AUTO to become service nodes and participate in revenue sharing from vehicle operations. Addressing the limited computing resources in Southeast Asia, the automaker leases idle global computing power through AUTO for training simplified autonomous driving models. This reduces training costs by 65% compared to traditional cloud computing power, accelerating the adoption of autonomous driving technology in emerging markets.

By adapting to different country scenarios, AUTO has achieved global collaboration in technology research and development, patent transactions, and commercial operations. It not only meets the policy compliance requirements of different regions but also facilitates cross-regional value transfer through the token ecosystem, promoting the globalization of autonomous driving technology.

5. Compliance and Security Framework

The integration of autonomous driving and cryptocurrency requires balancing technological innovation, commercial value, and compliance and security. AUTO has built a comprehensive guarantee system from three dimensions: compliance and regulation, security assurance, and liability definition, to ensure the sustainable development of the ecosystem.

5.1 Compliance and Regulatory Adaptation

AUTO strictly adheres to the financial regulatory policies, traffic regulations, and data security regulations of major countries and regions worldwide and has developed differentiated compliance solutions for different scenarios: financial transaction scenarios comply with anti-money laundering (AML) and know-your-customer (KYC) rules to prevent financial risks; data transaction scenarios comply with global data privacy protection regulations (such as GDPR and personal information protection laws) to ensure that data collection, storage, and transfer are legal and compliant; and autonomous driving scenarios connect with traffic management departments in various countries, comply with the requirements for autonomous driving level supervision, promote the synergy of technical standards and regulatory rules, proactively accept supervision, and obtain relevant operating permits.

5.2 End-to-End Security Assurance

"Safety and controllability" is taken as the core principle of the ecosystem, and a dual security system of technology and mechanism is built: On the technical level, zero-knowledge proof and end-to-end encryption technology are used to ensure data security, the traceability of blockchain is used to ensure that autonomous driving decision logs are auditable, a security vulnerability response mechanism is

embedded, white-hat hackers are encouraged to discover vulnerabilities and are rewarded with AUTO, and security audits are carried out regularly; On the mechanism level, a security committee is established, composed of autonomous driving experts, cybersecurity experts, and representatives of regulatory agencies, to supervise the security of technology applications within the ecosystem, formulate security standards and emergency response procedures, and punish violators (such as deducting staked tokens and restricting ecosystem permissions).

5.3 Responsibility Delineation Mechanism

To address the challenge of determining liability in autonomous driving safety accidents, AUTO has constructed a full-process liability traceability system using blockchain technology: The perception data, decision logs, and operation records of autonomous vehicles are permanently stored on the blockchain, making them tamper-proof and allowing for rapid tracing of the cause after an accident. Through smart contracts that pre-define liability allocation rules, if an accident is caused by data errors, the data provider bears corresponding responsibility, and the ecosystem risk fund provides compensation to the victims; if an accident is caused by technical defects, the R&D team and the computing power provider share responsibility proportionally. This mechanism clarifies the responsibilities of all parties, reduces the risk of legal disputes, and provides a guarantee for the commercialization of autonomous driving.

6. Development Roadmap

6.1 Phase 1 (Q1–Q4 2026): Ecosystem Launch Phase

- Complete the issuance and launch of AUTO tokens, build the core blockchain network and autonomous driving adaptation layer, and realize the functions of basic data standardization and computing power scheduling.
- We have established partnerships with 3–5 car manufacturers and 2 roadside equipment operators to implement pilot scenarios for data trading and computing power leasing and to accumulate our first batch of ecosystem users.
- Launch an ecosystem incentive program to attract developers to participate in smart contract template development, autonomous driving model optimization, and build a DAO governance framework;
- A safety and compliance committee was established, preliminary ecological rules and safety standards were formulated, and the first community governance vote was completed.

6.2 Second Phase (Q1–Q4 2027): Ecological Expansion Period

- Improve the functionality of the autonomous driving adaptation layer, support L2-L4 level autonomous driving technology adaptation, and optimize the efficiency of vehicle-road cooperative data interaction and computing power scheduling performance.
- Expanding to 10+ core application scenarios, covering urban transportation, highways, logistics parks, driverless taxis, and other fields, with ecosystem users exceeding 3 million;
- Improve the compliance system, obtain regulatory filings and operating licenses from major countries and regions, and promote the integration of ecological technology standards and industry standards;
- Optimize the economic model, adjust incentive rules and deflation ratios according to ecological development, and enhance AUTO's value anchoring ability.

6.3 Phase Three (2028 and beyond): Ecological Maturity

- By building a world-leading decentralized autonomous driving and intelligent transportation ecosystem, AUTO becomes the core value transfer carrier in the industry, enabling large-scale commercial use.
- Promote the deep integration of autonomous driving with AI, the metaverse, new energy, and other fields, expand the boundaries of the ecosystem, and achieve cross-domain technology collaboration;
- To achieve complete ecological autonomy, the DAO will lead the technology roadmap, scenario expansion, rule setting, and security supervision, forming a self-iterative and self-optimizing ecosystem.
- To help upgrade the global intelligent transportation system, realize the vision of "zero accidents, high efficiency, and low emissions" in transportation, and make autonomous driving technology benefit all mankind.

7. Team and Consultants

7.1 Core Team

The AUTO core team consists of autonomous driving experts, blockchain technology developers, crypto-economic scholars, and transportation experts, possessing rich cross-domain experience and industry resources: core members have participated in the research and development of L4 autonomous driving projects of top global automakers and the architectural design of the Polygon ecosystem project, and some members come from leading transportation planning agencies and computing power service providers, possessing profound technical accumulation, commercialization capabilities, and industry resources, providing a solid guarantee for ecosystem construction.

7.2 Consultant Team

The advisory team comprises leading experts in autonomous driving, blockchain, legal compliance, and transportation planning, including globally renowned autonomous driving researchers, blockchain industry leaders, international traffic law experts, and financial regulatory advisors. They provide professional guidance for the project's technological development, compliance, and ecosystem expansion, ensuring a balance between technological innovation and risk control.

8. Conclusion

The convergence of autonomous driving and intelligent transportation is ushering in a new era of transformation for the global transportation industry, with the potential to completely reshape human travel patterns and urban operation models. The decentralized nature of blockchain technology provides a fair, secure, and efficient value foundation for this transformation, breaking down the centralized barriers of the traditional autonomous driving ecosystem. AuroDrive (AUTO), as the core platform for the integration of these two cutting-edge fields, aims to break through industry bottlenecks and build a decentralized ecosystem where data value, computing power resources, technological innovation, and commercial monetization can coexist harmoniously.

We firmly believe that as the AUTO ecosystem continues to develop, autonomous driving technology will move from high-end R&D to widespread adoption, intelligent transportation will achieve full-domain collaboration, and the vision of "zero accidents, high efficiency, and low emissions" in transportation will gradually become a reality. AUTO will join hands with global ecosystem participants to jointly promote this transportation revolution that concerns the future of humanity, enabling every participant to share the benefits of industrial upgrading and ushering in a new era of decentralized intelligent transportation.

Disclaimer

This white paper is solely for illustrating the technical and economic model of the AuroDrive (AUTO) project and does not constitute any investment advice. The development of autonomous driving technology is subject to uncertainty, and project progress may be adjusted due to factors such as technological bottlenecks, changes in regulatory policies, and market fluctuations. Investing in AUTO involves market risks, technological risks, and compliance risks. Investors should carefully assess their own risk tolerance and make rational decisions. All application scenarios within the ecosystem must comply with the laws and regulations of their respective countries and regions; the project team assumes no responsibility for any violations.