



# **AV Partner Safety Evaluation Framework**

# Lyft’s Autonomous Vehicle Partner Safety Evaluation Framework

## Table of Contents

- Introduction: Safety at the Core of Lyft’s Autonomous Vision** ..... 2
  - Lyft’s Vision for Autonomous Transportation ..... 2
  - Partnership Approach & Responsibilities ..... 3
  - Core Safety Principles ..... 5
- Our Safety Framework** ..... 7
  - 1. Safety Culture & Organizational Commitment** ..... 10
    - 1.1 Leadership, Governance, & Policy ..... 11
    - 1.2 Safety Risk Management ..... 11
    - 1.3 Safety Assurance ..... 12
    - 1.4 Safety Promotion ..... 12
  - 2. AV System Evaluation & Readiness** ..... 13
    - 2.1 Testing & Validation ..... 13
    - 2.2 Safety Performance & Metrics ..... 14
    - 2.3 Operational Design Domain Selection ..... 15
  - 3. Operational Readiness** ..... 15
    - 3.1 Regulatory Compliance ..... 16
    - 3.2 Monitoring & Assistance ..... 16
    - 3.3 Incident Response & Management ..... 17
    - 3.4 Fleet Management & Maintenance ..... 18
  - 4. Rider & Public Safety Experience** ..... 19
    - 4.1 Rider Experience & Comfort ..... 19
    - 4.2 Rider Security & Support ..... 20
    - 4.3 Community Safety Integration ..... 20
    - 4.4 Emergency Response Readiness ..... 21
- Conclusion: Moving Forward, Safely & Together** ..... 22

## Introduction

# Safety at the Core of Lyft's Autonomous Vision



## Lyft's Vision for Autonomous Transportation

We are at the beginning of another transportation revolution. Autonomous Vehicles (AVs) promise to reshape how we spend our time, how we get around, and even how we build our cities. At Lyft, we believe that AVs and human drivers can co-exist on public roads, offering road users and travelers more choice, personalization, and comfort at scale based on their preferences. Autonomous vehicles will also transform transportation by redefining safety expectations, and helping to make transportation more accessible and sustainable. By supporting and expanding Lyft's autonomous vehicle fleet, we are helping to build a safer, more accessible, and sustainable future.

But the success of autonomous vehicle deployments depends on a commitment to safety across the entire value chain. That's why we are committed to a safety framework that is designed to evaluate each AV deployment on the Lyft platform holistically, thoroughly reviewing deployments along four key verticals which cover organization, technology, operations, and rider experience. We know that trust must be built gradually—one ride at a time, one positive experience at a time.

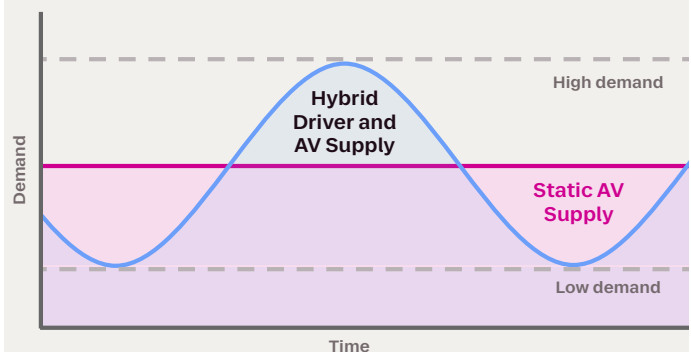
Lyft's vision is a hybrid approach to the rideshare network, ensuring that AVs will supplement our existing rideshare fleet by providing additional vehicles, and helping us to balance vehicle availability for peaks of demand. Our hybrid network of human drivers and autonomous vehicles will match supply to demand dynamically in order to maximize market balance and utilization, ensuring a reliable and prompt service for all riders. This

### ● AVs Only

An AV-only network is almost always under- or over-supplied, leading to high cost and low utilization—or riders not having rides at critical times.

### ● Hybrid Network

Lyft's hybrid network of human drivers and AVs will match supply to demand dynamically in order to maximize market balance and utilization, ensuring riders always have a fast and reliable ride



ensures that Lyft can consistently meet riders’ evolving needs and expectations—ensuring rides even during congested or unexpected events, rough weather, and for riders who require assistance. This kind of dynamic demand can only be served by a hybrid network like Lyft’s.

Over time, AVs will change the dynamics of the rideshare marketplace. But there will still be plenty of opportunity for drivers, and we are committed to helping them continue to thrive on and off our platform. We believe that adding supply to our platform—whether driven by humans or automated systems—improves arrival times and creates a better rider experience. That gets people to take more rides, creating more opportunities for drivers too.

## Partnership Approach & Responsibilities



The autonomous industry is evolving at a rapid pace, with dozens of players already on the field and many more yet to come. The full process of building safe autonomous technology requires tremendous engineering effort, and deploying it successfully to millions of consumers is another challenge. Bringing AVs to market depends on a number of distinct components working together in one value chain.

At Lyft, we believe that our sophisticated marketplace engine, large-scale demand, and industry-leading fleet management services through our independently managed subsidiary, Flexdrive, represent the best way for autonomous companies, original equipment manufacturers, and fleet owners to take part in the AV ecosystem. We bring our experience running a world-class rideshare program to our partnerships, collaborating with other leading AV players to deliver exceptional autonomous transportation experiences to riders at scale.



### A Vision for the Future of AV Fleet Management: Flexdrive

Fleet management is critical for the success and safety of autonomous vehicles. For every trip, riders want vehicles that are clean, in good repair, safe, and with plenty of fuel or charge to complete a trip. That’s why our independently managed subsidiary [Flexdrive](#) has become an industry leader in rideshare fleet management. As the cost of AV technology comes down and the availability broadens, we want every self-driving car to be “Lyft-ready,” with turnkey access to our platform. That will make it possible for small and medium-sized fleet owners to invest in AV fleets that can be integrated into our supply the same way black car and livery fleets are today. A little further down the road, when “Lyft-ready” AV features come standard in every car, [Lyft and Flexdrive will be able to leverage this experience to manage the entire end-to-end AV experience](#), including vehicle prep each day, demand generation, ongoing tracking and analysis, charging, cleaning, repairs, and more.



Before finalizing an AV partnership, Lyft assesses a company's overall approach to safety, and we continue that evaluation throughout the relationship. Consistent with Lyft's safety principles, our partners must take credible, comprehensive safety approaches that align with rider and community safety, industry standards and best practices, and regulatory requirements.

We also recognize that our partners have deep expertise and access to detailed operational data that informs their safety decisions, and we are mindful that thoughtful safety approaches will vary based on each partner's technology and operational domain. That's why we created our AV Partner Safety Evaluation Framework to complement our partners' own comprehensive safety programs. This collaborative approach is designed to build confidence with riders, communities, and regulators—while respecting the distinct safety methodologies of each partner.

Every AV deployment on the Lyft platform will be unique, so each deployment will be supported by a deployment-specific safety plan. A safety plan will, at a minimum, define the conditions where the vehicles can operate, outline applicable testing and validation methods, and detail incident response protocols, in addition to outlining plans for operator training, vehicle maintenance, cybersecurity, and regulatory compliance.

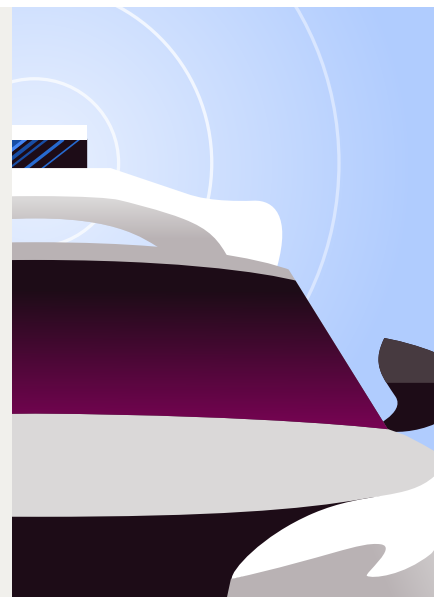
Both the overarching safety approach and the deployment-specific safety plans are reviewed through Lyft's AV Partner Safety Evaluation Framework, resulting in a rigorous and collaborative evaluation process.

### **Safety is our priority, and that applies to our partners.**

Any autonomous vehicle operating on the Lyft platform must incorporate a multi-modal redundant perception system with sensor diversity.

Multi-modal sensor fusion delivers something no single sensor type can: independent, complementary views of the driving environment that fail under different conditions. When one modality is degraded—by glare, fog, heavy rain, or dust—another can continue to provide reliable perception. This architecture underlies every certified L4 deployment operating safely in public today, and is reflected in established safety standards including ISO 26262 and UL 4600.

This is not a position against any particular technology. It is a commitment to the engineering principle that L4 autonomy—where no human is available to intervene—requires perception systems with no single point of failure. As the technology and evidence base evolve, our platform standards will evolve with them, and we will continue to publish those updates to our Framework openly.





# Core Safety Principles



**Building trust**



**Fostering safety**



**Providing support**



**Ensuring accountability**

Our aspiration is for Lyft to become the safest way to get around. Lyft's safety teams are continuously working to help make the platform safer by introducing new safety features, often based on feedback and lived experiences from our drivers and riders. That's why we also review the partner's safety approach and each deployment safety plan for alignment with our core safety principles:

- **Building trust**  
We are committed to prioritizing public confidence through safety transparency and accountability.
- **Fostering safe experiences and managing unsafe situations**  
We believe in demonstrating commitment to safety by design by embedding safety considerations into the product development processes, and proactively enabling safety and risk mitigations for riders, pedestrians, cyclists, and other drivers.
- **Providing support when things go wrong**  
We practice having exemplary, compassionate care and support in the case that a safety incident takes place.
- **Ensuring accountability**  
We prioritize maintaining high expectations for safety across our work and partnerships, and striving for continuous progress.

## Lyft's safety features



### **Robust background checks**

Before drivers are approved to drive, they must pass a background check. We then continuously monitor for criminal convictions and driving record violations, and perform additional background checks at least annually.



### **Real-time ride tracking**

We monitor rides for unusual activity, like long stops or route deviations. If we notice anything off about your ride, we'll contact you to see if you need help with Smart Trip Check-In.



### **Share your location**

Riders and drivers can share their exact location and route with family and friends.



### **See who you're riding with**

Once you're matched with your rider or driver, you'll see their first name, profile photo, and ratings. Contact information is hidden before, during and after a ride.



### **Emergency Help with ADT**

If riders or drivers ever feel unsafe, they can connect with an ADT security professional. ADT provides life support in uncomfortable situations, and if necessary, can alert authorities and share important ride details.



### **Driver education**

Community safety education, developed in partnership with national safety organizations, is mandatory for drivers.



### **Two-way rating and feedback**

If a user rates their rider or driver three stars or fewer, we'll make sure they aren't matched together again. Feedback to riders or drivers is anonymous and lets up take appropriate action to help keep the community safe.



### **Real help from real humans**

We're here for you—our specialized safety team is available via phone or chat 24/7. Additionally, you can reach ADT emergency professionals through the app for live support.\* They can alert authorities and share important details like your location and vehicle info.



### **Schedule check-in**

Schedule a check-in from Lyft to confirm you got to your destination safely. We'll reach out after your ride and make sure you're alright.



Every year, we work hard to help make the Lyft platform safer by implementing new safety features—including real-time ride tracking for unusual activity, safety teams for live support, ride location sharing for trusted contacts, scheduled check-ins, PIN verification, verified rider, and more—to help keep our community safe. These features are available on the Lyft platform for human-driven and autonomous rides alike. More information about Lyft's safety programs and features is available at [www.lyft.com/safety](https://www.lyft.com/safety).

## Lyft's safety features (continued)



### Verified Rider

Rider verification helps drivers confirm that the person they're riding with is who they say they are. Our process includes cross-checking a rider's personal information, like their legal name and phone number, using trusted, third-party databases. If their information can't be validated, riders may be asked to upload an ID.



### PIN Verification

Riders can share a unique code for each ride with their driver to make sure they're getting in the right car.



### Audio recording

Allows riders or drivers to record audio of a ride for added peace of mind in case they need to report an incident. Recordings are encrypted and saved to the device, and may be shared with Lyft if submitting a report.



### Blocking

If a rider ever feels uncomfortable in a ride, they can block the driver so they never match with them again. Drivers won't know they're blocked, and it won't affect their rating.

# Our Safety Framework



Lyft's goal is to ensure that each AV partner's approach to safety is rigorous, comprehensive, and aligned with our core safety principles. This Framework is not a substitute for the partner's own obligations to certify that their AVs are safe to be deployed or comply with applicable safety regulations and requirements, for which our partners hold both legal and practical responsibility. Our partners are uniquely positioned to manage their safety programs and compliance responsibilities, given their extensive expertise and access to detailed operational data. Our focus is on evaluating whether a partner's safety approach and each deployment safety plan demonstrates sufficient safety diligence to warrant inclusion on the Lyft platform and connection with our rider community.

To achieve this goal, our four-part AV Partner Safety Evaluation Framework outlines the areas we expect to see addressed across our partners' overall safety approach and each deployment safety plan. Our role is to utilize this framework to review the relevant elements of a partner's safety methodology through the lens of Lyft riders and our platform requirements, using industry standards and best practices as a common foundation.







This collaborative approach allows us to build confidence with our stakeholders while respecting the unique safety methodologies of each partner. We expect our partners to demonstrate their safety readiness and regulatory compliance in ways that reflect their specific technology, Operational Design Domain (ODD), and testing history.

The AV Safety Framework is designed to evaluate each AV partnership on the Lyft platform holistically, recognizing that different partners may be responsible for distinct components of a given deployment, and that this will vary by program. As the AV landscape continues to evolve, this Framework will serve as the foundation for Lyft to assess our partners' approach to safety, so that Lyft may better support and confidently deliver AV rides on its platform.

This Framework is structured into four complementary pillars covering organization, technology, operations, and rider experience. Utilizing the framework, we evaluate whether an AV partner prioritizes safety at every level of the organization, from leadership decisions to engineering processes. Our approach is built on industry best practices, including a Safety Management System (SMS), which is utilized in aviation, railway, and nuclear industries to support organizational safety in a systematic and integrated way. This approach has been adapted by the Automated Vehicle Safety Consortium (AVSC) to assist AV companies with managing the operational safety risks of autonomous vehicles.

Most existing motor vehicle and autonomous vehicle safety regulations were developed with traditional models in mind—either human-driven cars or autonomous companies that manage their own ride services end-to-end. Today, a growing number of AV developers are partnering with platforms like Lyft to offer rides to the public. Because this model is relatively new, much of the regulatory landscape wasn't specifically designed with it in mind. This Framework is designed to reflect how Lyft has adapted to operate safely and responsibly within this evolving environment.

# Framework Overview

## 1. Safety Culture & Organizational Commitment

A strong safety culture is critical to the responsible development and deployment of AVs. This section evaluates whether our autonomous vehicle partner prioritizes safety at every level of the organization, from leadership decisions to engineering processes. It assesses whether a partner has:

- Leadership commitment to safety as a core value.
- Safety risk management and assurance programs such as those that evaluate risks, track safety metrics, and audit performance, and support continuous improvement.
- Safety training, transparency, regulatory and standards engagement, and continuous learning.

## 2. AV System Evaluation & Readiness

The partner's vehicle and automated driving system must be road-ready, as a product of rigorous testing and validation. This section evaluates our partners' use of approaches such as:

- Multi-phased testing methodologies including simulation, closed-course, and real-world validation, supporting safe operation within the designated ODD.
- Performance benchmarking, including against human drivers in critical scenarios and edge cases, and continuous improvement processes that incorporate real-world learning and operational feedback.
- ODD selection that mitigates risk and is supported by up-to-date mapping.
- Robustness against system failures, sensor degradations, and unexpected road conditions.

## 3. Operational Readiness

Safe AV deployment requires rigorous oversight, regulatory compliance, and robust fleet management systems. This section assesses whether an AV partner has programs to:

- Adhere to federal, state, and local regulations, including safety requirements and data security and privacy laws.
- Document and implement monitoring and incident response standard operating procedures and reporting systems.
- Maintain fleet health, predictive maintenance, and failure response mechanisms.

## 4. Rider & Public Safety Experience

An autonomous ride should be as safe, comfortable, and reliable as a human-driven rideshare trip—if not better. It should also contribute positively to overall road safety and community trust. This section evaluates whether a partner has plans in place to address:

- Ride quality, comfort, and predictability to ensure a smooth passenger experience.
- In-vehicle safety & security.
- Emergency response capabilities for law enforcement, first responders, and unexpected incidents.
- Interactions with pedestrians, cyclists, and other vulnerable road users that improve overall public safety.
- Minimization of community disruptions, such as improper stopping, blocking bike lanes, or causing congestion.



## 1. Safety Culture & Organizational Commitment



The first pillar of our framework is that safety should be embedded in an AV partner’s culture, reflected in their decisions, and prioritized at every level of their organization. When evaluating a potential AV partner’s approach to safety, we consider four key areas:

- **Safety Leadership, Governance, and Policy:** Is safety a core value that guides executive decisions, with documented safety policies with clear roles and responsibilities? Does the partner organization have dedicated safety leadership with authority to make critical decisions independent from business pressures?
- **Safety Risk Management:** Does the partner employ formalized risk assessment methodologies? Are all system changes evaluated for safety impacts before deployment?
- **Safety Assurance:** Does the partner organization utilize data-driven safety metrics that are regularly reviewed at leadership levels? Are independent safety audits conducted, and is there a robust system for incorporating learnings from real-world incidents?
- **Safety Promotion:** Does the partner organization provide comprehensive safety training and foster a culture where incidents are shared openly to drive continuous improvement? Does the partner actively collaborate with industry leading bodies and maintain open communication with the public?

We assess each partner’s commitment to safety for these key areas through interviews with safety leads and evaluation of policies and methodologies, recognizing that every company operates differently. The questions detailed here will enable deeper, more nuanced discussions about a partner’s safety culture. We recognize that safety culture manifests differently across organizations, with each partner having unique approaches and strengths.

Our goal is to understand not just what safety processes exist on paper, but how they function in practice—how deeply they’re embedded in daily operations, how they influence decision-making at all levels, and how they evolve based on experience and new information. We aim to dig beneath surface-level answers to comprehend the real-world effectiveness of safety systems, the genuine commitment of leadership, and the actual empowerment of employees to prioritize safety.

## 1.1 Leadership, Governance, & Policy

A strong safety culture starts at the executive level of a company, and influences the way safety is perceived, valued, and prioritized in an organization. Some examples of how a partner may demonstrate commitment to this pillar include:

- **Safety Governance & Decision-Making:** A structure with clear roles, and responsibilities, and documented safety policies—including a safety function that is independent from business and product pressures, such as a Chief Safety Officer or equivalent role with direct executive access.
- **Organizational Commitment:** Executive commitment to safety as a core value, stated in the partner's mission and strategy.
- **Independent Safety Review:** Utilization of independent mechanisms such as safety reviews, audits, incident debriefs, or a Safety Review Board that independently evaluates major safety risks and decisions.
- **Ethical Decision-Making in Safety-Critical Situations:** A formal ethical framework for decision-making that addresses how trade-offs between safety, efficiency, and economic factors are made.
- **Safety Reporting:** Clear internal safety reporting pathways which employees are trained on and empowered to use.
- **Use of Industry Standards and Best Practices:** Utilization of existing best practices and standards to guide safety practices, including relevant standards such as UL 4600, ISO 26262, SAE J3016, and AVSC best practices, to guide safety governance and decision-making frameworks.

## 1.2 Safety Risk Management

Operating on a public roadway in any vehicle involves inherent risk. Managing and mitigating this risk is crucial for successful autonomous vehicle deployment. A Safety Risk Management program is a structured approach for operators to proactively identify, assess, and mitigate risks using safety risk assessments. Lyft reviews both how the AV partner's safety plan assesses aggregate risk, as well as how the AV system performs in specific driving scenarios. Some examples of how a partner may demonstrate the existence of a Safety Risk Management program include documented approaches to:

- **Risk Assessment & Hazard Analysis Frameworks:** Utilization of frameworks such as those that follow formalized risk assessment methodologies and evaluate all new features and system changes for safety risks before deployment.
- **Human Benchmark Comparison:** Analyses of vehicle performance compared to a human driver benchmark in a similar ODD.



- **Quantitative and Qualitative Metrics:** Balanced utilization of both quantitative and qualitative metrics to evaluate aggregate safety performance.
- **Scenario Identification and Analysis:** Efforts to identify and address high-risk scenarios and behaviors required within the defined ODD.
- **Consistent Performance and Risk Evaluation:** Reviews of how the AV system's behavior is measured against safety metrics and risk thresholds.

### 1.3 Safety Assurance

A Safety Assurance program is a commitment to monitor, analyze, and measure overall safety performance, including effectiveness of safety risk controls and safety management. A partner may demonstrate a safety assurance program through programs such as:

- **Data Driven Safety Metrics:** Utilization of Safety Performance Indicators that are used to support Key Performance Indicators, and are regularly tracked, addressed, and reviewed at leadership levels.
- **Independent Safety Audits:** Participation in independent safety audits and transparency of associated safety findings, incident reports, and mitigation strategies.
- **Continuous Improvement:** A commitment to continuous improvement, ensuring safety learnings from public reports, crashes, and near-misses are incorporated into software updates and safety programs.

### 1.4 Safety Promotion

AV companies can demonstrate a commitment to safety promotion by regularly conducting activities that inform, educate, and heighten the safety awareness of employees—encouraging employees to actively participate in a Safety Management System. A partner may demonstrate the existence of efforts to conduct safety promotion in a number of ways, including:

- **Safety Training:** Comprehensive safety training programs that are mandatory for all employees.
- **Ongoing Development:** Frequent updating of safety policies and processes.
- **Incident Response Training Exercises:** Preparation exercises for potential safety incidents, such as drills, table top exercises, and simulation-based programs.
- **Collaboration with Industry Standards Bodies and Regulators:** Participation in efforts to shape safety standards, best practices, and regulations for the AV industry.

Clear, consistent, and accurate communication is also key to autonomous vehicle safety—whether it is internal safety reporting inside a company, or external communication to stakeholders. A partner may demonstrate the existence of efforts to conduct safety promotion in a number of ways, including:



- **Public Engagement:** A process for rider and external safety reports, including how those are received, root caused, mapped, prioritized, addressed, and/or monitored.
- **Transparency & Public Communication:** Public-facing communication of company's safety approach and key safety developments, such as a Vehicle Safety Self Assessment and regular safety reports.

## 2. AV System Evaluation & Readiness

Testing &  
Validation

Safety Performance  
& Metrics

Operational Design  
Domain Selection

Utilizing the second pillar of the Framework, Lyft reviews each partner's deployment safety plan to understand whether the AV partner has implemented a rigorous and comprehensive approach to testing, validation, and risk assessment to ensure the safety, reliability, and performance of the AV system within its defined ODD.

We review applicable parts of the partner's validation and testing strategy, risk assessment methodologies, ODD selection processes, and safety performance metrics—spanning the base vehicle, perception system, in-vehicle hardware, and automated driving system (ADS) software. We look for a structured, phased approach that becomes progressively more rigorous as the system matures.

This section of the Framework is not intended to replace or duplicate the AV partner's own comprehensive testing program—AV partners are independently responsible for the safety of their technology. We recognize that our partners have deep expertise and access to detailed operational data that informs their safety decisions. Rather, the Framework serves to guide our assessment of the partner's testing methodologies and safety validation processes for the purposes of deploying AVs on the Lyft platform. Our role is to review their safety approach through the lens of our platform requirements, using industry standards such as UL 4600, ISO 26262, ISO 21448 (SOTIF), SAE J3018, ISO/TR 4804, and AVSC best practices as a common framework for discussion.

This section outlines the key areas of focus for assessing whether the AV partner has established a robust and comprehensive technical validation framework.

### 2.1 Testing & Validation

A thorough and documented validation and risk assessment approach is critical for determining the readiness of an AV system for deployment. A partner may demonstrate the existence of a robust testing and validation approach through efforts such as:

- **Comprehensive Testing Strategy:** A multi-phased testing methodology that may include closed course testing, simulation, supervised on-road testing, and fully driverless operations.
- **Decision-Making Based On Test Outputs:** Incorporating outputs from testing phases to inform deployment decisions, including analyzing performance metrics, incident reports, and other test results to validate safety and reliability.
- **Continuous Improvement & Scenario Expansion:** A validation methodology that demonstrates a commitment to continuous improvement.
- **Aggregate & Scenario-Specific Validation:** A validation plan that evaluates both aggregate system performance and behavior in specific high-risk scenarios, to support safety and reliability across a broad range of driving conditions.
- **Human Benchmark Comparison:** Performance benchmarking against human drivers in critical scenarios and edge cases.

## 2.2 Safety Performance & Metrics

While our AV partners are responsible for building and operating the ADS, Lyft conducts baseline reviews to help protect the safety of our riders. We work with our partners to understand how their system performs on the road before deploying their vehicles on our platform. We also conduct user experience research focused on riders' perceptions of safety and their confidence when riding in the vehicle. Areas that we may review to understand AV system performance could include:

- **Performance Indicators and Metrics:** Development and tracking of both aggregate and scenario-specific metrics used to validate performance and behavioral competencies that allow partner's technology to successfully operate within the intended ODD, such as collision rates and system interventions.
- **Continuous Monitoring and Reporting:** Use of a robust monitoring system to continuously track safety performance and provide transparent reporting of safety metrics and incidents.
- **Iterative Improvement and Feedback Loop:** Utilization of a safety performance framework that supports a feedback loop where real-world learnings are integrated into simulation scenarios and system updates, driving continuous improvement.
- **Baseline Scenario Competence Demonstrations:** Demonstrated competence executing critical baseline scenarios, such as navigating traffic lights, changing lanes, responding to emergency medical vehicles, and navigating obstacles in the road.
- **Redundancy & Fail-Safe Mechanisms:** Implementation of safety-critical engineering processes and procedures including fail-safe redundancies and safe fallback modes.
- **AV System Validation & Readiness:** Rigorous testing and validation of perception, prediction, and planning systems.

- **Safety Standards and Best Practices:** Utilization of relevant safety-critical engineering processes and standards.

## 2.3 Operational Design Domain Selection

Clear and rigorous methodology for ODD selection and mapping can help ensure safe AV deployment within well-defined operational boundaries. A partner may demonstrate careful ODD selection & mapping that mitigates risk through approaches such as:

- **Risk Mitigation through ODD Selection:** Utilizing ODD selection as a risk mitigation strategy, ensuring that the AV system operates within environments where it can safely handle all required scenarios and conditions.
- **Mapping Accuracy and Robustness:** Maintaining an accurate, reliable, and robust mapping system that is frequently updated, manages discrepancies, includes robust localization technologies, and includes a clear strategy for expanding the ODD as system capabilities grow.
- **Successful Behaviors & Maneuvers:** Ensuring an AV system's ability to perform necessary driving behaviors and maneuvers within an ODD, safely and in compliance with local traffic laws and social driving norms.

## 3. Operational Readiness

Regulatory  
Compliance

Monitoring &  
Assistance

Incidence Response  
& Management

Fleet Management  
& Maintenance

Safe, reliable, and scalable AV deployments go beyond a partner's technical capabilities—they require robust systems for fleet management, remote monitoring, and proactive maintenance. A partner's Operational program may address the ability to oversee its vehicles in real-time, respond to unexpected situations, and maintain a high level of system reliability while meeting customer expectations and regulatory requirements.

Within each program, different partners will have different levels of responsibility for each area. Lyft will consider whether ownership for each area is clearly defined, and review whether the processes and tools are in place to ensure robust operational readiness.

This pillar reviews partners' management of four critical areas:

- **Regulatory Compliance & Safety Assurance:** Adherence to legal and regulatory frameworks, including safety reporting, data security, and transparency in AV operations.

- **Monitoring & Incident Response:** Provision of real-time oversight, human intervention when necessary, and coordinated responses to unexpected events by establishing clear protocols for managing incidents, engaging with emergency responders, documenting events, and implementing corrective actions.
- **Fleet Management & Maintenance:** Tracking of vehicle deployment, including ensuring servicing schedules and utilizing predictive maintenance to prevent failures.

### 3.1 Regulatory Compliance

We expect that our AV partners will ensure their compliance with applicable federal, state and local regulatory requirements prior to any commercial deployment. Compliance-related responsibilities may include vehicle certification, safety incident reporting operating procedures, vehicle recall obligations, operational transparency, and data security.

Partners should demonstrate a commitment to regulatory compliance, data security and privacy considerations through:

- **Reporting Compliance:** Programs for compliance with federal, state, and local reporting requirements for AV safety incidents and safety performance metrics that include standard operating procedures for ensuring timely reporting.
- **Vehicle Safety Compliance:** Programs and processes for ensuring compliance with federal motor vehicle safety standards and safety defect reporting and remediation.
- **Regulatory Engagement:** Proactive engagement with regulators and local governments to provide visibility into AV safety advancements and ongoing risk assessments.
- **Data Security:** Robust cybersecurity protocols to protect vehicle data, remote operation centers, and rider's personal identifying information.
- **Data Privacy:** Adherence to privacy regulations and best practices regarding in-vehicle monitoring, facial recognition, rider data collection, and data confidentiality.
- **Record Maintenance:** Protocols for maintaining operational records to support regulatory audits and public safety reviews.

### 3.2 Monitoring & Assistance

Real-time oversight and response capabilities should be utilized by partners for handling unexpected events, responding to technical issues, and supporting public interactions with AVs. Lyft will review partners' methods for implementing these programs such as the existence of:

- **Human-in-the-Loop Remote Assistance:** Remote operation centers for human oversight and intervention in complex or ambiguous scenarios, with available remote operators who

can provide guidance or control when necessary, utilize real-time data, and support the AV in emergency situations to ensure rider and public safety.

- **Training & Preparedness:** Training, accountability, and onboarding requirements for any remote operators or in-vehicle AV safety standby operators.
- **Regulatory Compliance:** Compliance with regulatory requirements for remote assistance, including privacy and cybersecurity requirements.
- **Escalation Protocols:** Clear protocols to help navigate challenging situations or incidents.

### 3.3 Incident Response & Management

Proper incident response management is critical to ensuring rider and public safety in the case of an AV incident. We expect partners to demonstrate commitment to incident response and management before, during, and after an incident.

During the critical moments around an incident, partners should have protocols in place that focus on incident response and handling, navigating any public interference, notifying appropriate parties, and documenting critical information, such as:

- **Public Interaction & Interference Protocols:** Established protocols for interacting with and responding to members of the community in the case of an incident, including first responders and regulatory authorities.
- **Stakeholder Notification Protocols:** Established protocols for notifying relevant authorities and stakeholders in compliance with reporting requirements.
- **Internal Escalation Protocols:** Established, clear protocols for escalating incidents to internal teams.
- **Customer Support:** Trauma-informed responses for customers who have experienced a physical or psychological safety incident.
- **Incident Documentation:** Systematic documentation of all incidents, with records securely stored and available for review if required.

A successful response to an autonomous vehicle incident extends beyond the moment of an incident, including both training and preparedness before an incident occurs, and analysis and corrective actions after incidents. To demonstrate commitment to preparing for such incidents, partners should demonstrate programs focused on:

- **Training & Preparedness:** Training of in-vehicle standby safety operators, if applicable, and remote monitoring personnel on standardized incident response protocols, and regular drills and simulations to ensure all personnel are prepared to handle emergency situations.



- **Incident Analysis:** Implementation of a structured process for analyzing incidents, identifying root causes, and determining necessary safety improvements.
- **Corrective Action:** Feedback loops to integrate lessons learned into system updates, operational protocols, and training programs.

### 3.4 Fleet Management & Maintenance

Fleet management will be a critical function for a successful, scaled autonomous vehicle service. Through our Flexdrive subsidiary, Lyft knows the importance of structuring fleet operations to help minimize safety risks, support a good customer experience, and ensure compliance with regulatory and safety standards. Partners may demonstrate a focus on successful fleet management and maintenance through efforts such as:

- **Vehicle Health Metrics Monitoring:** Implementation of ongoing diagnostics monitoring and, early warning systems for system degradation or other potential failures.
- **Vehicle Servicing Schedules:** Utilization of predictive maintenance algorithms and monitoring for manufacturer recalls.
- **Predictive Maintenance & Diagnostics:** Utilization of sensor calibration systems and verification calibration checks for sensors such as LiDAR, radar, cameras, and Inertial Measurement Units to ensure consistent data fusion, including following component replacement or major system updates.
- **Self-Diagnosis & Fault Detection:** Evaluation of self-diagnostic systems for continuous monitoring of critical components, and verification of fail-safe mechanisms for transitioning to a minimal-risk condition when faults are detected.
- **Automated Maintenance Workflows:** Integration with fleet management systems for streamlined repairs and compliance with maintenance and inspection standards set by regulatory authorities.
- **On-the-Ground Personnel:** Validation of the qualifications, certifications, and training required for personnel managing the vehicles.
- **Positive General Vehicle Condition:** Development and sharing of a process to maintain a positive vehicle condition, such as through inspections, vehicle hygiene checks, and customer feedback.

## 4. Rider & Public Safety Experience

Rider Experience  
& Comfort

Rider Security  
& Support

Community Safety  
Integration

Emergency  
Response Readiness

For many people, their first autonomous vehicle experience will be on a rideshare platform like Lyft. We strive to make that introduction as comfortable and confidence-building as possible. An AV ride should be as safe, comfortable, and reliable as—if not perceived as better than—a traditional rideshare experience with a human driver. The safety of riders, pedestrians, and other road users is fundamental to public trust and the widespread adoption of autonomous vehicles. In addition to meeting technical safety standards, an AV should provide a superior experience by ensuring smooth, predictable driving, and robust incident response capabilities. A truly successful AV deployment will enhance safety, security, and reliability for both riders and the broader community while building trust in autonomous mobility. This section evaluates whether the autonomous vehicle experience matches or surpasses today's rideshare rides when it comes to:

- **Rider Experience & Comfort:** AV rides should match or exceed the quality of traditional Lyft ride experience.
- **Rider Security & Incident Support:** Partners should implement in-vehicle systems to safeguard riders, address in-ride safety concerns, and provide passenger safety features and emergency support.
- **Public & Community Safety:** AVs should operate responsibly in shared spaces, minimize disruption, and contribute positively to road safety.
- **Emergency Preparedness & Law Enforcement Interaction:** Partners should establish clear protocols for AV response in emergencies, interactions with law enforcement, and handling unforeseen situations.

### 4.1 Rider Experience & Comfort

We strive for autonomous rides on the Lyft platform to be as smooth, predictable, and accessible as possible. We expect partners to demonstrate their commitment to ride comfort and predictability, rider support, and accessibility through efforts to prioritize:

- **Ride Comfort:** Smooth driving, minimizing harsh acceleration, sudden braking, and sharp turns.
- **Ride Predictability:** Adherence to natural driving norms, balancing caution with efficiency to avoid unpredictable behavior.
- **Vehicle Hygiene:** Processes to ensure AVs are well-maintained and provide customers with pleasant experiences.

- **Rider Support:** Intuitive interfaces for requesting stops, adjusting vehicle settings, and receiving real-time ride updates for riders during route changes, delays, or unexpected events.
- **Emergency Stop:** A physical emergency stop mechanism that is accessible to riders.
- **Accessibility Features:** Features to support access and use for riders with disabilities.

## 4.2 Rider Security & Support

Autonomous rides must provide built-in safety measures to help protect riders and offer support when needed. We expect partners to demonstrate commitment to providing in-vehicle safety features and handling unsafe situations through features such as:

- **In-Vehicle Safety Features:** Providing riders with emergency access controls that connect to real-time assistance, along with privacy-respecting options for interior monitoring to detect medical emergencies, unsafe rider behavior, or distress signals.
- **Handling of Unsafe Situations:** Rerouting capabilities to avoid known road hazards or to provide safe drop-off locations.

## 4.3 Community Safety Integration

AVs should not only be safe for their riders but should also improve overall road safety, reduce congestion, and foster public trust. Beyond technical capabilities, Lyft expects AVs operating on its platform to be responsible road users, understanding how to safely and courteously share the road with everyone. This includes navigating interactions with pedestrians, cyclists, scooter riders, and human-driven vehicles with caution and predictability. Our commitment to safety extends to the entire transportation ecosystem—not just vehicle riders, but also bikeshare users, scooter riders, pedestrians, and drivers who share the same public spaces. We expect partners to demonstrate a commitment to their AVs contributing positively to overall road safety and minimizing disruptions for all, through efforts such as:

- **Responsible Interactions with Vulnerable Road Users:** Proactive detection and response to pedestrians, cyclists, scooter riders, and those using wheelchairs or mobility devices.
- **Communication of Vehicle Intentions:** Appropriate communication of AV intentions to pedestrians through external displays or auditory signals.
- **Minimizing Community Disruption:** Protocols to respect local traffic flow rules, bike and bus lanes during rides, pick-ups and drop-offs.
- **Public Education and Communication:** Public education and awareness programs, including opportunities for riders and members of the public to submit safety and vehicle handling reporting concerns, and protocols for investigating and responding to those reports.

## 4.4 Emergency Response Readiness

A critical part of AV safety is the vehicle's ability to interact safely with first responders with whom they share the roadways. We expect that our AV partners will be able to respond effectively to emergencies and interact with law enforcement when necessary, including through programs such as:

- **Safe Emergency Maneuvers:** Demonstrated ability to execute safe emergency maneuvers and fail-safe modes.
- **Human-Directed Traffic Instructions:** Clear protocols for AVs to recognize and respond to human-directed traffic instructions, police vehicles, fire trucks, and ambulances and avoid blocking emergency scenes.
- **First Responder & Law Enforcement Interaction:** Capability to pull over safely when signaled by law enforcement, and allow access to inside the vehicle.
- **First Responder & Law Enforcement Preparation:** Training programs and public Law Enforcement Interaction Plans that guide law enforcement on how to interact with AVs in emergency scenarios.
- **Safe Fallback Operations:** Presence of fail-operational capabilities or redundancies in place for hardware or software failures.

## Conclusion

# Moving Forward, Safely & Together



The journey toward a future transformed by autonomous vehicles is a collaborative one. At Lyft, we believe that realizing the full potential of autonomous vehicles hinges on an uncompromising commitment to safety, built on trust, transparency, and a robust framework for partner evaluation. We recognize that for many, their first AV ride won't be in a car they buy—it will be with Lyft, a service they already trust. We're committed to making that first experience safe, smooth, and confidence-inspiring.

This AV Partner Safety Evaluation Framework serves as our guiding star, helping to ensure that every AV deployment on the Lyft platform meets rigorous standards across four critical pillars, encompassing safety culture and organizational commitment, AV system evaluation and readiness, operational readiness, and rider and public safety experience.

As the autonomous industry continues to evolve, Lyft remains dedicated to adapting and refining this framework. We are committed to fostering innovation while prioritizing safety above all else, ensuring that the promise of autonomous transportation is realized safely, one ride at a time. Together with our partners, we are paving the way for a future where getting around is not just convenient, but safer and more reliable for everyone.