AMG ADVANCED MOBILITY GROUP

Pioneering Autonomous Shuttle Deployments

Leading the way in autonomous mobility, Advanced Mobility Group (AMG) is your strategic partner in planning, design, operations, and data analytics, driving the future of mobility services. Focusing on innovative transportation solutions, AMG redefines mobility by assisting public and private sector clients in navigating, planning, programming, and building a sustainable future, ultimately creating more livable communities.

SHARED AUTONOMOUS VEHICLE PROGRAM

GOMENTUM STATION PROGRAM

PRESTO MARTINEZ– COUNTY HOSPITAL ACCESSIBLE TRANSPORTATION

CONNECTED AUTONOMOUS VEHICLE SIGNAL LAB

OUR VISION

Leading the way in autonomous mobility, we are your strategic partner in planning, design, operations, and data analytics, driving the future of mobility services.

AV LANDSCAPE

Automated vehicle technologies are gaining attention for their transformative potential. Companies showcase new concepts, test prototypes on public roads, and introduce advanced driver assistance features. Automation spans personal vehicles, taxis, commercial trucks, and transit buses. However, despite media enthusiasm, stakeholders may struggle to distinguish between concepts, prototypes, and available products.

YOUR STRATEGIC PARTNER

Advanced Mobility Group (AMG) offers comprehensive solutions in planning, design, managing operations, and data analysis for autonomous vehicle services. Our team has years of experience developing, deploying, and managing autonomous transportation systems for cities and organizations looking to enhance mobility options.
As a trusted partner of public agencies and organizations we bring strategic insights into first-mile and last-mile transportation, helping clients achieve their mobility goals. From business parks to public transit connections, we ensure that autonomous mobility solutions are both safe and efficient.

BENEFITS OF SHARED AUTONOMOUS VEHICLES

Shared Autonomous Vehicles (SAVs) revolutionize mobility, benefiting cities, businesses, and transit agencies. They complement public transit by providing first-mile and last-mile solutions, connecting commuters from transit hubs to their final destinations. These shuttles have the potential to enhance the transit system by increasing passenger numbers and feeding into existing mass transit systems. They also offer cost-effective public transportation, particularly for low-volume transit routes and paratransit services.

KEY SAV BENEFITS:

- **Reduced congestion and emissions.**
- **Enhanced safety with AI navigation and real-time monitoring.**
- **Cost-effective for any fleet size.**
- **Flexible, on-demand mobility.**
- **Seamless integration with existing infrastructure.**

Manufacturers like Navya, May Mobility, and Beep make SAV technology reliable and accessible, paving the way for smarter, more efficient transportation.

PIONEERING CALIFORNIA'S AUTONOMOUS SHUTTLE DEPLOYMENTS

In 2016, AMG partnered with the Contra Costa Transportation Authority (CCTA), Easymile, and First Transit to launch California's first low-speed automated shuttle demonstration on public roadways at Bishop Ranch.

Building on this success, CCTA, with support from AMG, introduced the Navya vehicle serviced by Beep Incorporated (Beep) for the next phase at Bishop Ranch, reinforcing AMG's leadership in autonomous vehicle integration.

Currently, AMG supports CCTA's PRESTO-branded SAV services in Contra Costa County, including a recent deployment with Olli 2.0 and the Oxa navigation system in Rossmoor, Walnut Creek, managed by Beep.

As Contra Costa County expands its SAV fleet across BART stations and key locations, AMG is committed to helping cities and transit agencies unlock autonomous mobility's full potential, ensuring a smooth transition to future transportation

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AMG ADVANCED MOBILITY GROUP

CORE AUTONOMOUS VEHICLE SERVICES

PLANNING AND CONSULTING

Strategic Mobility Planning: Tailored solutions for first-mile/last-mile transportation using SAV.

Stakeholder Engagement: Collaboration with public agencies, transportation authorities, and community stakeholders.

Feasibility Studies: Comprehensive analysis for the deployment of autonomous shuttles, evaluating route feasibility, infrastructure needs, and regulatory requirements.

DESIGN AND IMPLEMENTATION

Operational Design: Route mapping, stop placement, and integration with existing public transit systems.

Vehicle Procurement: Expertise in selecting and deploying suitable SAVs, including electric, zero-emission vehicles.

Infrastructure Support: Guidance on charging infrastructure, fleet management, and safety requirements for SAV deployments.

OPERATIONS MANAGEMENT

SAV Fleet Management: Real-time monitoring, operation scheduling, and system integration for efficient fleet operations.

Safety Oversight: Supervision of onboard safety attendants and remote operation systems to ensure passenger security.

Compliance and Regulation: Navigating local, state, and federal regulations for autonomous vehicle deployments.

DATA ANALYSIS AND REPORTING

Operational Data Collection: Real-time data capture on vehicle performance, ridership, and operational efficiency.

Performance Analysis: Insights into service reliability, passenger satisfaction, and environmental impact.

Reporting for Agencies: Detailed reports to meet the requirements of transportation agencies and regulatory bodies.

SUSTAINABILITY AND FUTURE VISION

Zero-Emission Mobility: Promoting the use of electric, sustainable vehicles in autonomous mobility.

Autonomous Tech Leadership: Partnering with manufacturers to advance SAE Level 4 autonomy in public transportation.

PARTNER WITH AMG TO REVOLUTIONIZE MOBILITY IN YOUR CITY.

AUTOMATED VEHICLE PORTFOLIO OF PROJECTS

AMG ADVANCED MOBILITY GROUP

SAV SOLUTION– THE LOW-SPEED ELECTRIC AUTOMATED SHUTTLE

SAV service with low-speed automated shuttles aims to address transportation challenges by enhancing first- and last-mile connectivity, exposing users to new technology, and improving safety. It also focuses on gathering data, fostering long-term economic development, signaling openness to innovation, and building internal capacity to integrate cutting-edge mobility technologies.

Low-speed automated shuttles are small vehicles for 4-15 passengers, ideal for short-distance, first/last-mile transport. They operate at 10-12 mph, with a top speed of 25-35 mph. These SAE Level 4 automated shuttles use cameras, radar, lidar, ultrasonic sensors, and GPS for navigation and safety. Early deployments often include an onboard attendant for emergencies. Typically electric, they have a range of 30-60 miles and run 5-10 hours per charge. They are perfect for campuses, business parks, city centers, and similar areas to reduce traffic and emissions.

PRESTO INITIATIVE

Contra Costa Transportation Authority (CCTA) leads the deployment of SAVs through the PRESTO initiative. AMG provides project management and systems engineering support. This program integrates SAVs into public transportation to enhance first-mile/last-mile connectivity, especially for underserved communities.

PRESTO PROJECTS – AUTOMATED DRIVING SYSTEMS (ADS)

- **Rossmoor:** Operates in Walnut Creek's Rossmoor senior community with two zero-emission autonomous vehicles on a one-mile loop. Onboard attendants ensure safety and comfort.
- **Martinez:** Provides free, on-demand autonomous vehicle service to healthcare patients and residents around Contra Costa County hospital. Features wheelchair-accessible shuttles.
- **San Ramon:** Tests connected autonomous vehicles along the I-680 corridor to improve traffic flow and safety using advanced monitoring technology.

These initiatives are part of a broader strategy by CCTA to enhance sustainability, accessibility, and efficiency through zero-emission, autonomous mobility solutions. The program benefits local residents and gathers valuable data to advance the development of Automated Driving Systems (ADS) on a national scale.

EARLIER PROJECTS

Earlier projects also managed by AMG were instrumental in laying the foundation for CCTA's current PRESTO program and other SAV deployments across Contra Costa County. These projects include:

- **Bishop Ranch (2016):** First low-speed autonomous shuttle demonstration in California, using EasyMile EZ10 at Bishop Ranch business park.
- **Bishop Ranch Phase 2 (2018):** Continued testing with Navya shuttle, expanding SAV capabilities.
- **GoMentum Station:** Early platform for autonomous vehicle testing, hosting projects for companies like Honda and Lyft.

TECHNOLOGY FACILITATION

PROGRAM MANAGEMENT

MOBILITY OPTIONS

INNOVATIVE TRANPORTATION SOLUTIONS

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