411 West Ocean Boulevard 7th Floor Long Beach, CA 90802 (562) 570-6455

C-15

September 15, 2020

HONORABLE MAYOR AND CITY COUNCIL City of Long Beach California

RECOMMENDATION:

Adopt a Resolution authorizing the City Manager, or designee, to execute all necessary documents to enter into a Memorandum of Understanding, including any subsequent amendments, with Daimler Urban Mobility Solutions, of Long Beach, CA, and Xtelligent, of Los Angeles, CA, to develop, deploy, and test Connected and Automated Vehicles (CAV) and a Cooperative Intelligent Transportation System (C-ITS), at no cost to the City of Long Beach, for a period of 10 months, unless extended at the discretion of the City Manager for 8 additional months, for a total period not to exceed 18 months. (Citywide)

DISCUSSION

City Council approval is requested to enter into a Memorandum of Understanding (MOU) with Daimler Urban Mobility Solutions (Daimler) and Xtelligent, to develop and deploy intelligent transportation system technology with the City of Long Beach (City), for a period of ten months, at no cost to the City. The project encompassed by the MOU is an innovative public-private partnership between Daimler, Xtelligent, and the City.

The key functions of the partnership, as outlined in the MOU, include:

- Xtelligent's intelligent intersection control system, which may safely adapt traffic signal timing at select intersections based on City-approved priorities.
- Vehicle location data collected for, and supplied to, Xtelligent's system, from Daimler's connected test vehicle fleet, traditional physical sensors, and any other data sources available. Daimler and Xtelligent will analyze collected data and provide the City with this information to inform transportation policy and traffic engineering decisions.
- Community benefits for the City, including hiring a local data scientist to assist with project data analysis and hosting a community youth workshop for Long Beach residents and students at Daimler's local research and development facility.

As the mobility landscape continues to evolve, the City must be proactive in preparing for emerging technology, so the City may leverage these technologies to benefit the community when they become industry-standard. This partnership provides the City with an opportunity to safely test adaptive signal infrastructure while also collecting data to support improved traffic flows and inform traffic engineering decisions. This project complements cutting-edge work

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previously directed by City leadership, such as rider enhancements to the Metro A Line and the launch of the Long Beach Accelerator. This partnership will further cement the City's investment in a local technology ecosystem, reinforce local commitments to science, technology, engineering and mathematics (STEM) learning, and showcase our commitment to building a skilled future-ready workforce that can adapt to new modes of transportation.

This partnership also aligns with Citywide policy priorities, including traffic safety and sustainability. On July 14, 2020, the City Council passed the Safe Streets Long Beach Action Plan, which aims to eliminate all traffic fatalities by 2026. The technology system and data provided to the City from this proposed partnership with Daimler and Xtelligent will support our efforts to improve traffic safety citywide. This partnership also advances our sustainability goals by reducing the amount of vehicle-based emissions generated by traffic congestion.

Finally, this work is consistent with our Smart City Initiative, directed by the Mayor and City Council on October 22, 2019. Staff from the Technology and Innovation Department (TI) are currently developing the Smart City Initiative in collaboration with key stakeholders in other City Departments. TI has convened Long Beach community members, the City's Technology and Innovation Commission, and Long Beach technology industry partners to co-create a strategy to use emerging technologies that will be deployed responsibly to meet community-sourced needs. This partnership with Daimler and Xtelligent reflects our smart city vision and will build on our progress to advance digital inclusion to ensure opportunities gained from emerging technologies are accessible to all.

City Charter Section 1801 requires that contracts for City purchases be awarded to the lowest responsible bidder after a competitive bid process but allows for awards without a competitive bid process if accompanied by a Resolution adopted by the City Council. This partnership with Daimler and Xtelligent to pilot the integration of connected vehicles to City traffic signal infrastructure exists only as proposed in the MOU and represents a first-of-its kind program that no other solution provider currently offers. No other entity can rapidly provide a connected vehicle fleet, integrate those vehicles with City infrastructure and C-ITS technology, and provide direct benefits to the Long Beach community (including a CSULB data scientist to analyze the effectiveness of this project, and a youth workshop to promote STEM learning and education in our underserved communities).

This matter was reviewed by Deputy City Attorney Erin Weesner-McKinley on August 31, 2020, Deputy Finance Director Sandy Tsang-Palmer on August 31, 2020, and by Budget Management Officer Rhutu Amin Gharib on August 27, 2020.

TIMING CONSIDERATIONS

City Council action is requested on September 15, 2020, to ensure an MOU is in place expeditiously so City staff may begin testing this emerging technology in a real-world environment.

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FISCAL IMPACT

There is no fiscal or local job impact associated with this recommendation. Daimler and Xtelligent will provide their systems and services at no cost to the City for the ten-month project period. At the end of the project, Daimler and Xtelligent may extend the use of their systems and services at their exclusive option for an additional eight-month period. At the conclusion of the program, City staff will evaluate the benefits and gaps of the program, and should the City determine there is value in continuing access to this technology, a regular procurement process will commence, and any potential program and/or costs will be brought back to the City Council at a later date. The recommendation has no staffing impact beyond the normal budgeted scope of duties and is consistent with existing City Council priorities.

SUGGESTED ACTION

Approve recommendation.

Respectfully submitted,

LEA D. ERIKSEN

DIRECTOR OF TECHNOLOGY AND INNOVATION

JOHN KEISĽER

DIRECTOR OF ECONOMIC DEVELOPMENT

ERIC LOPEZ

DIRECTOR OF PUBLIC WORKS

Attachment: Resolution

APPROVED:

THOMAS B. MODICA CITY MANAGER

OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 West Ocean Boulevard, 9th Floor Long Beach, CA 90802

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RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LONG BEACH AUTHORIZING THE TO EXECUTE MANAGER Α MEMORANDUM UNDERSTANDING, AND ANY AMENDMENTS THERETO, WITH DAIMLER URBAN MOBILITY SOLUTIONS AND XTELLIGENT, WITHOUT ADVERTISING FOR BIDS, TO DEVELOP, DEPLOY, AND TEST CONNECTED AND **AUTOMATED VEHICLES AND** COOPERATIVE INTELLIGENT TRANSPORTATION SYSTEM, AT NO COST TO THE CITY, FOR A PERIOD OF TEN MONTHS

WHEREAS, Xtelligent has an intelligent intersection control system; and WHEREAS, vehicle location data collected for and supplied to Xtelligent's system from Daimler Urban Mobility Solutions' can connect test vehicle fleet, traditional physical sensors, and any other data sources available; and

WHEREAS, as the mobility landscape continues to evolve, the City must be proactive in preparing for emerging technologies; and

WHEREAS, working this Xtelligent and Daimler provides an opportunity to safely test adaptive signal infrastructure while also collecting data to support improved traffic flows and inform traffic engineering decisions; and

WHEREAS, this project will cement the City's investment in a local technology ecosystem, reinforce local commitments to science, technology, engineering and mathematics (STEM) learning, and showcase the City's commitment to building a skilled future ready workforce that can adapt to new modes of transportation; and

WHEREAS, this project also aligns with the Citywide policy priorities, including traffic safety and sustainability, will support the City's efforts to improve traffic

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safety Citywide, and advances the City's sustainability goals by reducing the amount of vehicle-based emissions generated by traffic congestion; and

WHEREAS, this project is consistent with the City's Smart City Initiative; and

WHEREAS, no other one entity can rapidly provide a connected vehicle fleet, integrate those vehicles with City infrastructure and C-ITS technology, and provide direct benefits to the Long Beach community (including a CSULB data scientist to analyze this effectiveness of this project, and a youth workshop to promote STEM learning and education in our underserved communities); and

WHEREAS, the partnership with Xtelligent and Daimler represents a first of its kind program that no other solution provider currently offers and as a result, no useful purpose would be served by advertising for bids and to do so would constitute an idle and useless act and an unnecessary expenditure of public funds:

NOW, THEREFORE, the City Council of the City of Long Beach resolves as follows:

Section 1. The above recitals are true and correct and are incorporated herein.

The City Manager is hereby authorized to execute all Section 2. documents, and any amendments thereto, with Daimler Urban Mobility Solutions and Xtelligent, to develop, deploy, and test Connected and Automated Vehicles and a Cooperative Intelligent Transportation System, at no cost to the City, for a period of ten (10) months, unless extended at the discretion of the City Manager for eight (8) additional months for a total period of time not to exceed eighteen (18) months.

Section 3. This resolution shall take effect immediately upon its adoption by the City Council, and the City Clerk shall certify the vote adopting this resolution.

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Council of the City of Long Beach at its meeting of ______, 2020 by the following vote: Ayes: Councilmembers: Councilmembers: Noes: Absent: Councilmembers: OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 West Ocean Boulevard, 9th Floor Long Beach, CA 90802 Recusal(s): Councilmembers: City Clerk

I hereby certify that the foregoing resolution was adopted by the City