AGENDA REPORT

Meeting Date: April 5, 2016

Item Number:

To: Honorable Mayor & City Council

From: David Schirmer, Chief Information Officer

Subject: RESOLUTION OF THE COUNCIL OF THE CITY OF BEVERLY HILLS DECLARING THE CITY'S SUPPORT FOR THE DEVELOPMENT OF AN AUTONOMOUS VEHICLE PROGRAM

Attachments: 1. Resolution

RECOMMENDATION

Staff recommends that the City Council consider the Resolution forwarded by Mayor Mirisch that declares support for the City developing an autonomous vehicle program within Beverly Hills.

INTRODUCTION

At the April 5, 2016 City Council Study Session, staff presented a high-level work plan with the long-term goal of expanding the City's autonomous vehicle (AV) program with the goal of addressing 'first and last mile' issues as it relates to the extension of the Purple Line to Beverly Hills, increasing mobility within the City, relieving traffic congestion, and creating options for transporting senior citizens. As initially envisioned, the program would include a fleet of City-owned AVs that would transport members of the public via these AVs in an attempt to reduce traffic and improve parking.

Phase I of the plan calls for education on the current state of the regulatory environment for AVs, exploration of grant opportunities for the program, outreach to AV manufacturers for a potential partnership, and the hosting of an AV-focused forum in Beverly Hills. The proposed forum would include panel discussions by experts and potentially demonstrations of AVs.

DISCUSSION

Current Conditions
Advances in autonomous vehicle technology are coming at a rapid rate. Most prominent automobile manufacturers have made significant investments in autonomous vehicle programs, additionally, technology companies like Google and Apple also have well-established AV initiatives underway.

While the timelines vary, autonomous vehicle technology is likely to become a reality in two to five years. Google, Tesla, and Audi are forecasting that they will have AVs to market within this timeframe.

The advanced technology that makes up an autonomous vehicle appears to be the most straightforward component within the larger AV landscape. Issues surrounding regulation, insurance, liability, and moral concerns are significant challenges that will need to be managed before AVs will become mainstream. The likely reality will be that technology will outpace progress made on the regulation and policy fronts.

On the regulatory front, the United States Department of Transportation (USDOT) recently revised existing guidance for automotive technology. The USDOT has acknowledged the future needs of transportation infrastructure and has been working to transform government for the 21st century by harnessing innovation and technology in response to President Obama's support of an AV plan to build a 21st century transportation system.

On December 16th, 2015 the California Department of Motor Vehicles (DMV) released draft regulations for post-testing deployment of AVs for review and discussion. California State Senate Bill 1298 Vehicle Code Section 38750 requires the DMV to adopt regulations establishing vehicle equipment requirements, performance standards, and safety certifications to ensure the safe operation of autonomous vehicles on public roads.

The regulations focus on the safety of AVs and the public who will share the road. This framework ensures AV technology is deployed in a safe and responsible manner on California public roads.

Summary of Regulations:

1. Manufacturer Safety Certification
    a. Manufacturer must certify behavioral competencies of the AV.
    b. Third party vehicle demonstration to verify the manufacturer safety performance.
    c. Manufacturer must provide driver/ operator training education plan.
2. Driver Requirements
    a. Must be a licensed driver who possesses an AV operator certificate issued by DMV.
    b. Operator must be capable of taking over the vehicle in the event of technology failure or other emergency.
    c. Operator will be responsible for all traffic violations.
    d. This provision excludes driverless vehicles.
3. Vehicle Deployment
    a. Each manufacturer will be issued a three-year provisional deployment permit.

   b. Each manufacturer will be required to reports on performance, safety and usage.
4. Privacy and Cyber-Security Requirements
   a. Written disclosure of recorded data to AV operators.
   b. Vehicles must be equipped with self-diagnosis tools capable of detecting, responding, and alerting the operator to cyber-attacks or other unauthorized intrusions.
   c. Vehicles must have the capability to override the autonomous technology.

AB 1592, Assemblywoman Bonilla's bill, would allow for the small scale testing of next generation AVs that do not require an operator to be present while the vehicle is in operation. Working with the City's representatives in Sacramento, the City is interested in expanding the bill to include Beverly Hills in the initiative

Beverly Hills' Initiative: Phase I components
Realizing the full vision of having a City-owned fleet of AVs in operation will necessarily take time and will require considerable investment of resources. What is envisioned for Phase I of this effort, however, is taking modest steps that will lay the foundation for the larger project. Key components include establishing a clear understanding of the regulatory environment both at the state and federal level, and working to impact that environment to achieve City goals. To this end, the City plans to work with its contacts in both Sacramento and Washington.

Additionally, the City will explore potential partnerships with manufacturers, transportation network companies, and other governmental organizations with the intent of establishing pilot programs, developing policy, and architecting first and last mile solutions. To facilitate this process, Mayor Mirisch has enlisted the support of Technology Committee members AJ Willmer and Grayson Brulte. Leveraging their intellect, their many contacts, and their keen interest in this technology, it is anticipated that a great deal will be accomplished in a relatively short period of time.

As part of this process, it is anticipated that the City will need to develop written material that portrays the City's vision for AVs. These materials will be helpful as the City works to establish partnerships with manufacturers and others working in the AV arena. The materials will also be useful as part of our outreach program which anticipates various informal discussions with policy makers, business communities, and transportation organizations.

Phase I will culminate with a City sponsored conference to be held at the Wallis Annenberg Center for the Performing Arts sometime this fall. The conference will include a panel discussion on the current state of AVs, the potential for AVs to play a role within the larger multi-modal transportation environment, and the current regulatory landscape. It is anticipated that participants will include AV manufacturers, academics, legislators, policy makers, and others within the transportation industry.

FISCAL IMPACT
While a moderate amount of staff time will be required in executing phase I, it is anticipated that this time can be accommodated within existing work plans. Modest costs associated with holding the conference at the Wallis Center and other outreach activities will be developed as the forum planning progresses, and depending on the

potential to secure sponsorship, a budget will be developed and brought to Council at a future meeting.

RECOMMENDATION

It is recommended that Council consider declaring support for the implementation of an autonomous vehicle program as envisioned, and approving moving forward with Phase I of the initiative.

David Schirmer
Approved By