TO: HONORABLE CITY COUNCIL

FROM: CITY MANAGER      DEPARTMENT: ADMINISTRATIVE SERVICES/IT

DATE: FEBRUARY 6, 2006    CMR: 139:06

SUBJECT: REQUEST FOR APPROVAL OF PARTICIPATION IN A WIRELESS-BASED AUTOMATIC VEHICLE LOCATION TRIAL IN THE CALIFORNIA AVENUE CORRIDOR

RECOMMENDATION
Staff recommends that Council authorize the Mayor to approve the City’s participation in a wireless-based Automatic Vehicle Location trial in the California Avenue corridor.

BACKGROUND
In July 2005, the City was approached by representatives of Intel Corporation and SAP regarding the possibility of establishing a trial application for Automatic Vehicle Location (AVL), using Wi-Fi (wireless fidelity, a IEEE standard) technology. During a series of subsequent meetings, an application and geographic area were selected for a trial. The geographic area for the trial will be a two-mile area surrounding the California Avenue corridor.

DISCUSSION
The trial is designed to automatically track ten Fire safety vehicles. The City’s Geographic Information System (GIS) will be used to display tracking information. Some of the metrics associated with this trial are:

1. Monitoring the response time to dispatch vehicles once an emergency call is received.
2. Time taken to arrive at the scene of the emergency event.
3. Feasibility of such a system for future applications, e.g. SAP applications.

A Wi-Fi network will be installed in the California Avenue corridor to support the AVL. During discussions with public safety staff, a request to expand the area was made. Expanding the area would enhance the ability to realistically track response times. Tracking in the expanded area beyond the California Avenue corridor will be accomplished using cellular technology. The trial is scheduled to last for 30-60 days. There will be no obligation on the part of the City to continue its involvement following the 30-60 day trial period.

Participation was acknowledged and endorsed by the Local International Association of Fire Fighters (IAFF) #1319. The City Attorney’s Office has been involved in the review of the City’s participation in the project.
The project will provide valuable, practical experience with an application utilizing three significant technologies, Wi-Fi, SAP and GIS. It is hoped that experience in this project will enable staff to evaluate future implementation of similar technologies for application in the City and to determine any possible improvements that can be made to field operations.

**RESOURCE IMPACT**
Staff support for the CAD and GIS will be required from the Information Technology Division. The City’s CAD and GIS will be used to display/monitor the tracking of selected vehicles. Utilities Electric Operations has been asked to provide support for the physical installation of the Wi-Fi components in the California Avenue corridor. Utilities Engineering work to install Wi-Fi equipment on fire vehicles will be minimal, as power can be provided via a 12-volt cigarette lighter outlet and the antenna can be installed via magnetic mounts.

Expenses and fees associated with the installation of equipment on street lights will be billed by Utilities to Intel/SAP. Information Technology and Public Works Equipment Management Group time and labor is minimal.

**POLICY IMPLICATIONS**
This agreement does not represent any change to existing City policies.

**ENVIRONMENTAL REVIEW**
Approval of this agreement does not constitute a project under the California Environmental Quality Act (CEQA); therefore, no environmental assessment is required.

**PREPARED BY:**

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**APPROVED BY:**

CARL YEATS  
Director, Administrative Services

**CITY MANAGER APPROVAL:**

EMILY HARRISON  
Assistant City Manager

**ATTACHMENTS**
Attachment A: Project proposal