

**Task #1:** Install battery back-up units at five intersections. These battery backup units enable the signal to continue to operate even in the loss of power. The intersections receiving backup units are:

- a. Bell Road and 87<sup>th</sup> Avenue
- b. Bell Road and 84<sup>th</sup> Avenue
- c. 83<sup>rd</sup> Avenue and Thunderbird Road
- d. 91<sup>st</sup> Avenue and Olive Avenue
- e. Happy Valley Road and Lake Pleasant Parkway

Estimated completion of this task is spring of 2012. Cost \$97,300.00

**Task #2:** Upgrade the intersection equipment at 91<sup>st</sup> Avenue and Peoria Avenue. This signal was an old county signal and the equipment is in need of repair or replacement. The major elements of the upgrade include new pull boxes, upgraded handicap ramps with closer push buttons. There will be new signal poles and new countdown heads. In addition, much of the wiring and signs will be replaced with new equipment. Estimated completion of this task is spring of 2012. Cost \$134,830.00

**Task #3:** Install pre-emption equipment at four intersections. Pre-emption consists of a set of receivers and electronic equipment in the signal controller. It allows the Fire Department to control the signals during emergency operations. The intersections receiving pre-emption are 75<sup>th</sup> Avenue and Cactus, 83<sup>rd</sup> Avenue and Cactus, 87<sup>th</sup> Avenue and Olive Avenue and 71<sup>st</sup> Avenue and Olive Avenue. The scheduled completion of this task is the winter of 2011. Cost \$53,200.00

**Task #4:** Install Closed Circuit Television Cameras (CCTV) at three intersections. As more of the City's traffic signals are connected to the Traffic Management Center (TMC) the City will have a better ability to control traffic, change signal timing to relieve back-ups and manage emergencies. The CCTVs give the TMC real time information on the traffic conditions. No recordings are made of any of the City's traffic CCTVs. The scheduled completion of this task is winter of 2011. Cost \$31,700.00

**Task #5:** Replace the traffic controller and install a battery backup unit at 91<sup>st</sup> Avenue and Bell Road. The old equipment is beginning to fail at one of the busiest intersections in the City. This project will replace the controller. The scheduled completion of this task is the winter of 2011. Cost \$58,500.00

**Task #6:** Continue replacing the old pedestrian displays with the new countdown heads. The new countdown heads are much more intuitive to the pedestrians. They will be installed at 15 intersections with school zones and heavily traveled pedestrian ways receiving priority. The scheduled completion of this task is the winter of 2011. Cost \$62,700.00

**Task #7:** Install two audio pedestrian signals at 87<sup>th</sup> Avenue and Olive Avenue. A sight impaired citizen has requested that an audio beacon be installed on the east leg of the intersection to allow him to cross safely. The scheduled completion of this task is the winter of 2011. Cost \$5,700.00

**Task #8:** Run power to a streetlight in front of the convenience store on 91<sup>st</sup> Avenue just north of Olive Avenue. The scheduled completion of this task is the winter of 2011. Cost \$7,900.00