Department of Public Safety Highway Patrol Division (Report Highlights)

September 2001

Highway patrol officers patrol almost 6,000 miles of state and federal highways, enforcing both traffic and criminal laws. They investigate traffic accidents, make criminal arrests, promote traffic awareness and safety, and provide support and training to other law enforcement agencies.

Our Conclusions:

The Highway Patrol Division needs to improve its officer staffing projections. In addition, the Department of Public Safety needs to develop comprehensive policies for motor vehicle fleet size and replacement. Finally, the Highway Patrol's staffing model determined that it needs more officers than the 116 officers it will add over fiscal years 2002 and 2003.

The Highway Patrol Needs To Improve Its Staffing Estimates

The Division uses the nationally accepted *Police Allocation Manual* (PAM) as its staffing model. The complex model uses data and policy decision inputs to calculate staffing needs.

Item 1 Examples of Information Entered Into the PAM Model

Workload Data

Miles of roadway

- Number of accidents and requests for assistance responded to
- Average time per type of response

Policy

- Shift length
- Percentage of time officers in supervisory positions spend patrolling the highways
- Patrol speed by highway

Source: 1996 Personnel Allocation Plan, Arizona Department of Public Safety.

The Division has not updated some of the model's key inputs since 1993.

Before running the model to support future budget requests, the Division should take steps to ensure the model produces the best possible estimates. The Division should:

- Reevaluate the most critical policy decisions (e.g., highway speed limits have increased since 1993, but average patrol speeds used in the model have not been changed).
- Ensure the most important workload data is being entered accurately (the accuracy of workload data—such as number of motorists assisted—varies among officers).
- Consider incorporating paid overtime (the Division recently received additional funding for overtime, which will increase staff hours available).

The Division should also consider either revising its current model to add new fea-

tures or obtaining a newer version of the model. A newer "municipal" version of the model can be adapted to DPS' needs and it is available at no cost from the National Highway Traffic Safety Administration.

The Division should improve its staffing model by:

- Revising policy decisions where appropriate and then periodically reviewing them:
- Ensuring the workload data is accurate;
- Determining whether paid overtime should be incorporated into the model; and
- Considering obtaining an improved version of the model.

Comprehensive Policies Needed for Vehicle Fleet Size and Replacement

DPS has slightly over 2,000 employees and approximately 1,600 vehicles. DPS' fleet is relatively large in part because virtually each of the over 1,100 sworn officers is assigned a vehicle on a 24-hour basis.

A Department of Public Safety Highway Patrol Sedan



24-hour vehicles—DPS reports that it allows its sworn officers to take vehicles home in case they are called out on emergencies. However, it is difficult to know whether this practice is necessary.

- DPS has limited reliable data on how frequently some officers and civilians are called out after-hours.
- California and Oregon only make 24-hour vehicle assignments in case of special circumstances.

Monitoring usage—DPS also needs to manage its fleet size by monitoring how frequently vehicles are used. According to fleet management experts, monitoring miles driven is one of the best methods to identify opportunities to:

- Reduce the number of vehicles:
- Reassign underused vehicles; and
- Increase vehicle sharing.

Comprehensive replacement policy—DPS currently tries to replace its highway patrol vehicles at about 100,000 miles. However, it has never developed a vehicle replacement policy based on objective information. A good replacement policy can:

- Reduce maintenance costs;
- Increase reliability; and
- Increase resale values.

Missouri and Kansas Highway Patrols replace patrol cars at 49,500 miles

DPS can develop a policy by:

- Reviewing its vehicle use and repair data to find out when it is most cost-effective to replace its vehicles; and
- Considering other fleets' experiences in replacing vehicles.

DPS should:

- Collect additional data about after-hours vehicle use on an ongoing basis;
- Use such data for vehicle assignments and fleet size policies for Highway Patrol and other divisions;
- Monitor the miles each vehicle is driven and use the data to manage its fleet size; and
- ✓ Develop a policy for vehicle replacement.

Highway Patrol Understaffed

Although the Highway Patrol will add 116 officers over fiscal years 2002 and 2003 (over 80 percent in the Phoenix area), the staffing model indicates more are needed statewide. The model determined that, through 2003, 140 new officers are needed to fully staff Phoenix and Tucson and another 41 are needed for rural Arizona. However, the Division did not request all of the needed officers because it did not feel it could reasonably hire and train that many officers over a two-year period.

To Obtain More Information

➤ A copy of the full report can be obtained by calling (602) 553-0333 or by visiting our Web site at:

www.auditorgen.state.az.us

➤ The contact person for this report is **Dot Reinhard.**