



Georgia Department of Audits and Accounts Performance Audit Division

Greg S. Griffin, State Auditor
Leslie McGuire, Director

Why we did this review

This follow-up review was conducted to determine the extent to which the Georgia Department of Transportation (GDOT) addressed recommendations presented in our August 2018 performance audit (Report #16-20).

The 2018 performance audit assessed the effectiveness and efficiency of GDOT's management and utilization of the Highway Emergency Response Operators (HERO) and Towing and Recovery Incentive Program (TRIP).

About HERO and TRIP

GDOT established HERO in 1996 as a freeway service patrol. Its operators patrol Metro Atlanta roadways 24 hours a day, 365 days a year in specialized vehicles equipped to provide both traffic incident management and motorist assistance. HERO currently has over 100 operators patrolling interstates and major roadways in the Metro Atlanta area. In fiscal year 2019, HERO responded to over 97,000 traffic incidents.

TRIP focuses on commercial vehicle accidents. Implemented in 2008, prequalified heavy towing companies that respond to a commercial vehicle accident, and successfully clear it within 90 minutes, are eligible for a monetary award. In fiscal year 2019, TRIP was used in 288 commercial vehicle accidents.

HERO and TRIP help restore capacity lost due to accidents, debris, stalls, and other events blocking the travel lanes.

Follow-Up Review

Highway Emergency Response Operators (HERO) and Towing and Recovery Incentive Program (TRIP)

Action has been taken to address most recommendations

What we found

The Georgia Department of Transportation (GDOT) has taken steps to address most of the recommendations in our 2018 audit of HERO and TRIP. New procedures for staffing, inventory control, and fleet management have led to improvements in HERO operations, though issues continue to exist in documenting these procedures and decreasing operational inefficiencies.

Programs like HERO and TRIP have been proven to reduce the duration of traffic incidents on Metro Atlanta's roadways. Ensuring the resources of each program are optimized requires ongoing analysis. While GDOT analyzes data, it has opted not to utilize additional datasets, as recommended in the original audit report. Additionally, it has not established performance benchmarks or targets for individual units or shifts.

Optimizing the Utilization of HERO and TRIP services

GDOT has begun addressing some of the issues identified in the original audit, such as analyzing the appropriateness of current deployments, identifying expansion needs, and conducting cost-benefit analyses. A cost-benefit analysis of TRIP is currently underway and GDOT staff report it will be used to create clearance time benchmarks and determine needed expansions.

GDOT staff report that a cost-benefit analysis of the HERO program will begin at the conclusion of the TRIP analysis and that it will focus on similar outcomes of creating program-wide

clearance time benchmarks and potential for expanded services areas. However, the analysis will rely on data received by the Traffic Management Center (TMC) and will not incorporate accident data reported through the Georgia Electronic Accident Reporting System (GEARS). In the original audit GEARS data was overlaid with TMC data to identify where accidents were occurring. We found this data could be useful in informing deployment, and the development of benchmarks for individual operators, shifts, or roadways.

Operations

GDOT has taken some actions to improve operational deficiencies identified in our original audit; however, there are additional areas where action could be taken. While GDOT staff report that they have increased the starting salaries of HERO drivers, turnover continues to be an issue. At this time, GDOT has not instituted HERO-specific employee satisfaction surveys or exit interviews to identify potential areas for improvement and reasons for departure. Additionally, GDOT has not incorporated customer feedback information into appraisals.

As suggested in the original audit, GDOT instituted inventory controls requiring supervisory approval on equipment request forms. GDOT staff reported these new practices have restricted access to supply items, but the practices are not documented in written policy.

While GDOT staff have made improvements to their fleet management, they have not documented their rationale. As a result, it will have to rely on staff experience to continue these practices in the future. For example, GDOT staff report they have entered a regular rotation of HERO vehicle replacement every five to seven years and have gained additional flexibility in the types of purchases they can make by utilizing a different fund source. As recommended, most of the new vehicles purchased do not have fuel-recovery equipment as a requirement for all trucks. However, the decisions around the time cycle and truck specifications are not documented, so future staff may or may not be aware of the rationales guiding the decisions. GDOT has also improved its tracking and monitoring of HERO vehicle maintenance and repairs, but maintenance staff have not eliminated their backlog and do not regularly share information with HERO management.

GDOT Response: In its response to the report, GDOT noted additional actions that it has planned related to several recommendations, which are detailed in the following table. Generally, GDOT concurred with the current status as presented.

The following table summarizes the findings and recommendations in our 2018 report and actions taken to address them. A copy of the 2018 performance audit report 16-20 may be accessed at <http://www.audits.ga.gov/rsaAudits>.

Traffic Incident Management Follow-Up Review, May 2020	
Original Findings/Recommendations	Current Status
<p>HERO may be able to optimize accident response through changes to deployment, expansion, or both.</p> <p>We recommended that GDOT utilize available data to determine whether current deployment of HERO resources is appropriate, where gaps in coverage exist, and whether additional resources are needed. This should include routinely determining the cost-benefit of the HERO program.</p> <p>We recommended that GDOT establish benchmarks that address individual HERO unit performance as well as coverage of various roadways. This should include analysis and monitoring of individual HERO units based on metrics aligned with program benchmarks and goals.</p>	<p>Partially Addressed – GDOT has reported that it intends to perform a cost-benefit analysis of HERO beginning in April 2020. Additionally, the analyses currently planned will use traffic management data, as done before. In the original audit, GEARS data was overlaid with TMC data to identify where accidents were occurring, and we found that it could be useful in informing deployment planning. GDOT noted then that it had concerns regarding comparisons of GEARS data and incident data through Navigator because of differences between the systems and did not plan to incorporate it into their analyses.</p> <p>GDOT has not taken action to formalize response time goals or established performance measures and benchmarks for individual units or shifts. Although GDOT has a HERO response time goal, it is not formally documented or set in policy. GDOT management report that they periodically review response times and revise goals as needed. However, these goals are communicated to HERO operators verbally and are not part of operators’ formal review process. Additionally, benchmarks are uniform for the entire HERO program, and do not consider the performance of individual operators or shifts. Furthermore, there is no benchmark for number of incidents assisted per operator or truck, and the number per day still appears to vary widely.</p> <p><i>In response to the report, GDOT indicated that the cost-benefit analysis will be completed by the end of fiscal year 2020 and that “GDOT will utilize a similar methodology as its previous review and will also survey other state departments of transportation to determine if any factors should be added or adjusted. Initial research conducted by the Department suggests that routine benefit-cost reported can be developed by utilizing assumptions built from national and state datasets and metrics. Additionally, GDOT intends to utilize existing FHWA [Federal Highway Administration] resources and utilize information from the aforementioned survey to determine best practices for establishing and updating formalized performance goals that are more specific to shift and operator classes.”</i></p>
<p>HERO’s turnover rate among new staff is costly and could impact its ability to meet its mission.</p> <p>We recommended that GDOT institute exit interviews to identify reasons for departure and/or a satisfaction survey of current staff to identify potential areas for improvement.</p>	<p>Partially Addressed – At the time of the audit, HERO was experiencing high turnover. Since then, it has increased the starting salary of new hires to approximately \$29,000 (from \$26,500). It has also removed the hands-on portion of commercial driver’s license examination training from the onboarding process and substituted it with a classroom-based brief overview. Having this training was potentially providing an incentive for operators to leave for higher paying jobs that required such training.</p> <p>While GDOT has hired additional operators to patrol the opening of the reversible express lanes on I-75 North and South, it continues to experience turnover among HERO operator</p>

Traffic Incident Management Follow-Up Review, May 2020	
Original Findings/Recommendations	Current Status
	<p>positions. Currently it is training 19 new operators for 28 vacant positions.</p> <p>While all exiting GDOT staff are asked to participate in a voluntary exit interview, the interview does not contain any HERO-specific questions. In addition, the results of the exit interviews are anecdotally shared with upper management but are not communicated to HERO program staff.</p> <p>Although GDOT regularly conducts department-wide employee satisfaction surveys, survey questions are not HERO-specific. Management indicated participants are asked to self-identify their program and results are separated and returned to programs accordingly. Management also acknowledged that many participants do not feel comfortable self-identifying as HERO operators for fear of being singled out.</p> <p><i>In response to the report, GDOT noted it “will work with the [GDOT] Office of Human Resources to determine the most appropriate path forward to enhancing the interviews and surveys within existing processes.”</i></p>
HERO operators have complied with safety and training requirements.	No Recommendations
<p>Performance appraisals could be improved with additional information and additional goals.</p> <p>We recommended that GDOT include customer service measures informed by public input, and measures that reflect the goals and objectives of its program, in its performance appraisals of HERO operators. Specifically, information was not systematically collected and used to ensure the highest ethical standards are maintained while in the field.</p> <p>We recommended that GDOT should establish activity and/or performance targets for individual HERO operators.</p>	<p>Not Addressed – GDOT does not use incident management data to set operator performance goals or targets. HERO management reportedly incorporates incident management performance into ongoing reviews of the entire HERO unit but does not analyze individual operators against goals or targets. Individual operators’ performance is compared to the monthly average performance of the entire HERO program, which may vary widely. HERO management reported using this method to identify habitual low performers.</p> <p>Customer service data is reviewed on a weekly basis, but not compiled to determine program wide trends. While GDOT staff reported collecting public input, they noted it is not the primary indicator of an individual’s customer service performance during the annual appraisal process.</p> <p><i>In response to the report, GDOT acknowledges improvements can be made including adjusting “existing performance management form metrics to incorporate overall unit goals for each individual operator.” It also stated plans to “utilize existing FHWA resources, and survey other states to identify best practices for establishing and updating formalized performance goals.”</i></p>

Traffic Incident Management Follow-Up Review, May 2020	
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<p>The HERO Program has not established complete policies and procedures for managing its fleet.</p> <p>We recommended that GDOT assess the suitability of the current fleet of trucks and determine if new trucks should be equipped differently.</p> <p>We recommended that GDOT ensure costs related to maintenance and repairs for the HERO fleet are routinely monitored. Finally, we recommended GDOT ensure policies be established to govern purchase and replacement of the HERO fleet.</p>	<p>Partially Addressed – Staff from GDOT’s Office of Equipment Management (OEM) reported regularly entering maintenance and repair costs into the Georgia Asset Management System (GAMS). In addition, GDOT has committed approximately \$4.1 million per year towards purchasing new vehicles. Management report that the funding has placed them on a five- to seven-year cycle of replacing all vehicles, and the majority of the diesel-powered fleet will be replaced with gasoline-powered vehicles. While a small portion of the fleet will continue to carry the fuel-recovery equipment, it will no longer be equipped on all trucks. As noted in the original audit, this feature is no longer considered a requirement for all trucks.</p> <p>GDOT has not documented its decisions or policies related to fleet replacement. While relying on OEM staff’s experience may provide a short-term benefit for quick decision making, a documented risk analysis involving HERO staff would provide consistency regardless of future staffing changes. HERO management reported not being a part of the most recent fleet replacement discussions and receiving GAMS reports on an ad hoc basis.</p> <p><i>In response to the report, GDOT will coordinate with OEM “to formalize vehicle purchasing and repair strategies for the HERO fleet moving forward.”</i></p>
<p>The HERO program’s controls over equipment and supply inventory do not provide sufficient protection against misuse.</p> <p>We recommended that GDOT establish controls over supply management (inventory, monitor, checkout and use per operator, etc.) to ensure staff adhere to policies.</p>	<p>Fully Addressed – GDOT had implemented new procedures which require supervising managers to obtain equipment on behalf of operators. Supervisors complete inventory request forms for truck tools and equipment, which are executed by office administrative staff. Request for driver equipment (uniforms, boots) requires the signature of both the supervisor and the operator. Ensuring these procedures are documented would mitigate the risk that the current practice is lost with turnover.</p>
<p>Expansion of TRIP may be warranted; GDOT should analyze information to determine how much to expand the program.</p> <p>We recommended that GDOT analyze additional TRIP activity data already available to ensure that TRIP is achieving efficient and effective results. GDOT should use this analysis to set baselines and performance expectations for the program and determine how it should be expanded.</p>	<p>Fully Addressed – GDOT staff report that it recently completed a review of TRIP which included a projected benefit-cost for a potential statewide expansion. The study found that TRIP provides a “great value” and it also identified an expansion strategy. GDOT indicated that “additional actions for expansion will be taken once a new statewide traffic incident management support contract has been established, which is expected to be executed before the end of FY2020.”</p>

Traffic Incident Management Follow-Up Review, May 2020	
Original Findings/Recommendations	Current Status
7 Findings	2 Fully Addressed 3 Partially Addressed 1 Not Addressed 1 No Recommendations

The Performance Audit Division was established in 1971 to conduct in-depth reviews of state-funded programs. Our reviews determine if programs are meeting goals and objectives; measure program results and effectiveness; identify alternate methods to meet goals; evaluate efficiency of resource allocation; assess compliance with laws and regulations; and provide credible management information to decision makers. For more information, contact us at (404)656-2180 or visit our website at www.audits.ga.gov.