

NASCIO Award Category: Digital Government—Government to Government

Project Title: North Carolina eCITATION®

Executive Summary

eCITATION® is a joint initiative of the North Carolina (NC) Administrative Office of the Courts (AOC) and the NC State Highway Patrol (SHP) that benefits both the 100 county Clerks of Superior Court (CSC) offices in the court system and approximately 450 law enforcement agencies (LEA) statewide. Other entities involved in the highly successful program are the NC Criminal Justice Information Network (CJIN) and the Governor's Crime Commission (GCC).

As a result of this collaborative effort, **North Carolina is the first and only state to implement a completely electronic citation system**, where the data is transmitted from the patrol car to the court system almost instantaneously. eCITATION® is an innovative system that automates the transmission of citation data from a law enforcement officer's mobile data computer (MDC) in the patrol car, through the NC CJIN Mobile Data Network (MDN) to the AOC Automated Criminal/Infraction System (ACIS) and local LEA records management systems (RMS), eliminating the need for paper citations and redundant data entry.

Each year about 1.2 million citations are issued across the state of North Carolina. Until the advent of eCITATION®, all of these citations were handwritten by a variety of law enforcement officers statewide. Copies of the citations would subsequently be delivered by the officer to the county CSC office periodically, based on the officer's schedule and availability. A second set of copies would be kept by the LEA for its own records. Upon receipt, staff at the CSC office would then manually enter the citation information into ACIS, the statewide repository for such court records. Upon completion, the paper copy of the citation would be filed.

As of April 2007:

- All 100 county CSC offices have been implemented.
- Over 4,700 officers in nearly 140 LEAs have been provided eCITATION® access. In April 2007, over 2,000 officers processed electronic citations.
- Over 1,000,000 electronic citations have been processed to date with 0% errors.

The e-citation system benefits both the courts and law enforcement. There is less time spent filing paper and retrieving it from filing cabinets. Court labor costs are reduced, as are storage costs. More importantly, officers spend less time in the physical act of writing tickets, and more time patrolling.



NASCIO Award Category: Digital Government—Government to Government

Project Title: North Carolina eCITATION®

B. Project Description

eCITATION® is a system which automates the creation of “non-arrestable” criminal and traffic citations by law enforcement officers. The NC Uniform Citation and the NC Alcohol Law Enforcement (ALE) Citation are produced in an electronic format by eCITATION®, thus eliminating the need for paper citations in the courts and in LEAs. It benefits both the courts and LEAs.

The system was developed and continues to be administered by the NC AOC and the NC SHP. Funding has been provided by the GCC through grants. These grants included funding for development, as well as equipment for local LEAs. Note: The GCC serves as the chief advisory body to the Governor and the Secretary of the Department of Crime Control and Public Safety on crime and justice issues, and administers the state’s criminal justice and juvenile justice federal block grants awarded to the State of North Carolina.

During October 1999 through September 2001, a pilot project was conducted in one county (Cumberland) to determine the feasibility of an electronic citation. Initially, the Cumberland County Sheriff’s Office and Fayetteville Police Department assisted by serving as pilot agencies for the system. Subsequently, several other counties were piloted. As of April 2007:

- All 100 county CSC offices have been implemented.
- Over 4,700 officers in nearly 140 LEAs have been provided eCITATION® access. In April 2007, over 2,000 officers processed electronic citations.
- Over 1,000,000 electronic citations have been processed to date with 0% errors.

The system consists of four main components (Exhibit A-1):

1. LEA/Patrol Car Component

This “fat client” software is loaded on the MDC in the patrol car. Using existing wireless connections, eCITATION® allows officers to create citations and schedule court dates electronically, using a laptop computer and printer in the patrol car. The citing officer may enter the data, print a defendant copy, and transmit the citation data almost immediately to ACIS, the criminal court records system. If transmission of data is not possible at a given time, the information is stored until a more opportune time. This fat client software also interfaces with the NC Division of Motor Vehicles’ (DMV) State Title and Registration System and State Automated Drivers License System. With just a driver’s license number or tag number, the officer can download defendant information almost immediately, resulting in less time keying in data and more time on patrol. Also, rather than writing out the full description of the offense and its statute number, the software provides a complete list of chargeable offenses. The officer simply clicks on the



laws that the defendant is accused of violating. Online edits ensure integrity and successful transmission of data.

2. CSC/Courthouse Component

This browser-based application is used by clerks' staff to monitor and print citations on a daily basis. Citations are available almost immediately following transmission by the officer. By converting this component from a fat client to a browser-based application, implementation to all 100 CSC offices was accelerated by over a year.

3. Interface with the NC AOC's ACIS

Upon transmission, citation data is not only provided to the county CSC office, it is also transmitted to the system of record, ACIS, on the NC AOC's enterprise server. This system is centrally housed in Raleigh, the state capital, and the information can be accessed by any CSC and district attorney office in the state.

4. Interface with the NC DMV systems

This interface allows the officers to automatically pre-fill identifying information (name, address, etc.) for defendants using either the drivers' license and/or plate number.

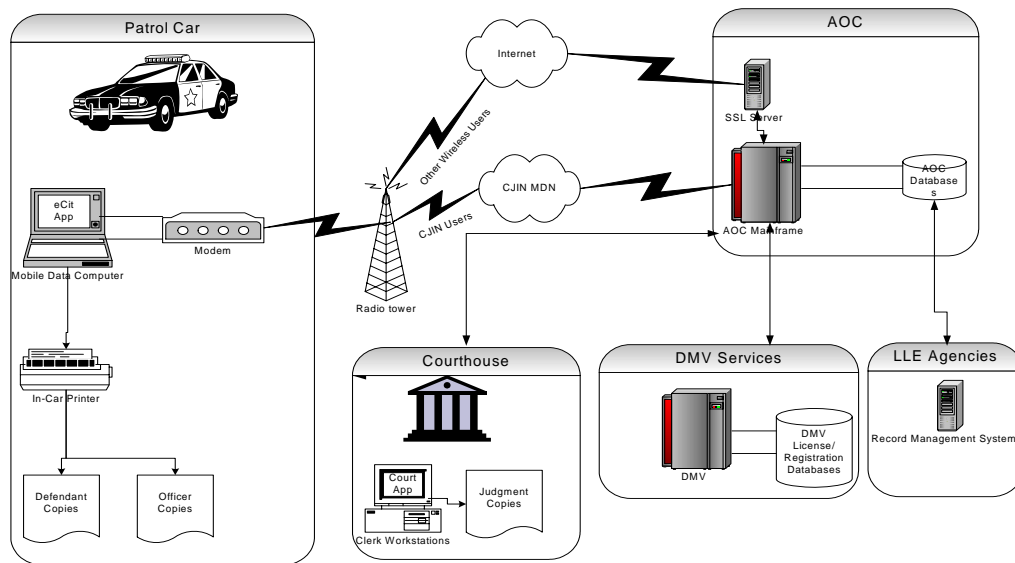


Exhibit A-1: eCITATION® Components

A fifth component currently being implemented (not shown) provides electronic citation data to LEAs for their own RMS. This new component, benefits the LEAs by providing the data more quickly and eliminating redundant data entry on their part.

C. Significance to the Improvement of the Operation of Government

eCITATION® is a joint initiative of the NC AOC and the NC SHP that benefits both the 100 county CSC in the court system and approximately 450 LEAs statewide. Other entities involved in the highly successful program are the NC CJIN and the GCC.



As a result of its benefits, including elimination of redundant data entry and improved accuracy, eCITATION® has proven to be extremely popular among both CSCs and LEAs. eCITATION® is a voluntary program, and LEAs which were originally not interested in it are now asking to be implemented. eCITATION® is a successful initiative because it automates a complex criminal justice process and its technological components are readily available. The program required and received the strong commitment of all of the agencies involved, making it an excellent example of collaboration between multiple state and local government agencies, including those in constitutionally separate branches government. The NC AOC continues to work with both CSCs and LEAs to improve the system.

Another example of its commitment to and collaboration with other agencies, the NC AOC, in an effort to assist state, county, and municipal agencies with implementation, procured GCC grant funding to purchase printers for use in the patrol cars. These printers continue to be provided to local agencies to accelerate their participation. In general, this initiative clearly aligns with the State of North Carolina's priorities, including those of the NC AOC. It is consistent with the goals of the NC CJIN, a project that facilitates the sharing of information between state and local criminal justice agencies. eCITATION® is a major milestone in moving to a fully integrated, statewide criminal justice information network. eCITATION® builds on the current infrastructure of the NC CJIN MDN.

D. Public Value of the Project

Benefits Realized

In general, eCITATION® is faster, more accurate, and more cost effective than paper citations:

- It is faster, since issuing of the citations at the roadside is faster, with defendant information being downloaded from DMV systems. After the electronic citation is issued, the data is then transmitted almost immediately to the ACIS and the CSC office, eliminating redundant data entry.
- It is more accurate because the deciphering of handwriting is no longer an issue, resulting in the improved integrity of the record, since the data that the officer enters now becomes the court record. The efficiency of the courts increases since court dates are also more legible to the defendants. Audit capability is improved with fewer sources of information that are more easily accessed. Only relevant information is printed for the defendant.
- It is more cost effective due to reduced recurring material costs (i.e., paper citation books), the amount of paper generated by the citing officers and fewer personnel hours consumed by the citation process.

Implementation of eCITATION® results in savings for the court system, including human resources (reallocation of resources), reduction in labor intensive manual activity, filing systems, storage space, and time/efficiency. A goal of eCITATION® is to provide a paperless flow of citation data from the patrol car to the county CSC office. LEAs also experience savings from the elimination of labor-intensive activity due to the following:

- Citations are no longer hand written, improving the accuracy of the information.



- The capability of the officer to download offender information from DMV systems results in less time spent keying in data and more time on patrol.
- The gathering and delivery of citations to the clerk’s office for data entry is no longer required, resulting in time and energy savings.
- Data entry by the law enforcement agency is no longer required, as electronic citation data is available for the agency’s RMS.

Improved data accuracy results from the following:

- A more complete set of application tools for accurate completion of the citation by the citing officer. These tools include the availability of charging language online, resulting in less subjectivity by the officer.
- The online access to the offender driver’s license and tag information via the interface with DMV systems.
- Expedition of data availability; citation data is available at the time of issuance rather being delayed by the officer’s delivery of citations and/or clerks’ manual entry of data.

Return on Investment

The resulting estimated savings from the eCITATION® program is substantial. The savings in human resources in CSC offices, based on elimination of redundant data entry alone, could justify the expenditures. Added to this is the time savings realized by not having to decipher handwriting and possibly contacting the citing officer for clarification. The elimination of redundant data entry in LEA offices also results in cost savings. Furthermore, the savings resulting from officers not having to make extra trips to the courthouse to deliver citations results in time and energy savings. Finally, the savings realized by not having to generate the citation forms is substantial.

Based on estimated saving noted above, the estimated time to recovery of the investment after full implementation is less than 20 months. This estimate does not include savings generated during implementation. This amount was estimated to be about \$3,094,366. The table in exhibit B-1 lists the funding (or investment) amounts to develop and implement eCITATION® statewide by state fiscal year (July through June).

Funding Description	FY99-00	FY00-01	FY01-02	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07
Development (State)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$280,000
(Grant)	\$500,000	\$375,000	\$200,000	\$0	\$300,000	\$298,213	\$298,242	\$0
Equipment (State)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(Grant)	\$0	\$0	\$0	\$0	\$0	\$505,700	\$505,700	\$147,251
Total funding (investment)	\$500,000	\$375,000	\$200,000	\$0	\$300,000	\$804,913	\$803,942	\$427,251

Exhibit B-1 eCITATION® Funding by State Fiscal Year



2007 NASCIO RECOGNITION AWARD NOMINATION FORM

The table in exhibit B-2 lists the estimated savings and revenue increases generated for five years after full implementation of eCITATION® statewide.

Post Implementation Cost Savings/Revenue Increase Description	FY 1	FY 2	FY 3	FY 4	FY 5
Elimination of redundant data entry-CSC	\$ 523,738	\$ 549,925	\$ 577,421	\$ 606,292	\$ 636,607
Elimination of redundant data entry-LEA	\$ 540,865	\$ 567,908	\$ 596,303	\$ 626,118	\$ 657,424
Officer time savings at stop	\$1,352,163	\$1,419,772	\$1,490,761	\$1,565,299	\$1,643,564
Elimination of paper citations	\$ 75,600	\$ 79,380	\$ 83,349	\$ 87,516	\$ 91,892
Officer travel-time	\$ 541,000	\$ 568,050	\$ 596,453	\$ 626,276	\$ 657,590
Officer travel-mileage	\$ 8,500	\$ 8,925	\$ 9,371	\$ 9,840	\$ 10,332
Increased revenue From efficiency improvements	\$ 52,500	\$ 55,125	\$ 57,881	\$ 60,775	\$ 63,814
Total Annual Return	\$3,094,366	\$3,249,085	\$3,411,539	\$3,582,116	\$3,761,223

Exhibit B-2 eCITATION® Savings and Additional Revenue Following Implementation

