

# State of Tennessee



## **TITAN** **Tennessee's Integrated Traffic Analysis Network**

### **Electronic Citation**

Tennessee General Sessions Judges Conference  
Nashville TN.  
February 9, 2011



## ***Foreword***

This document contains some of the specifications to be delivered for the State of Tennessee TITAN (Tennessee's Integrated Traffic Analysis Network) E-Citation application. The application features and functionality to be developed by OPS (Open Portal Solutions) are outlined within this document.

This document contains a brief description, of the features and functions including screen samples, database structure, logic, workflow diagrams, and query and reporting specifications.

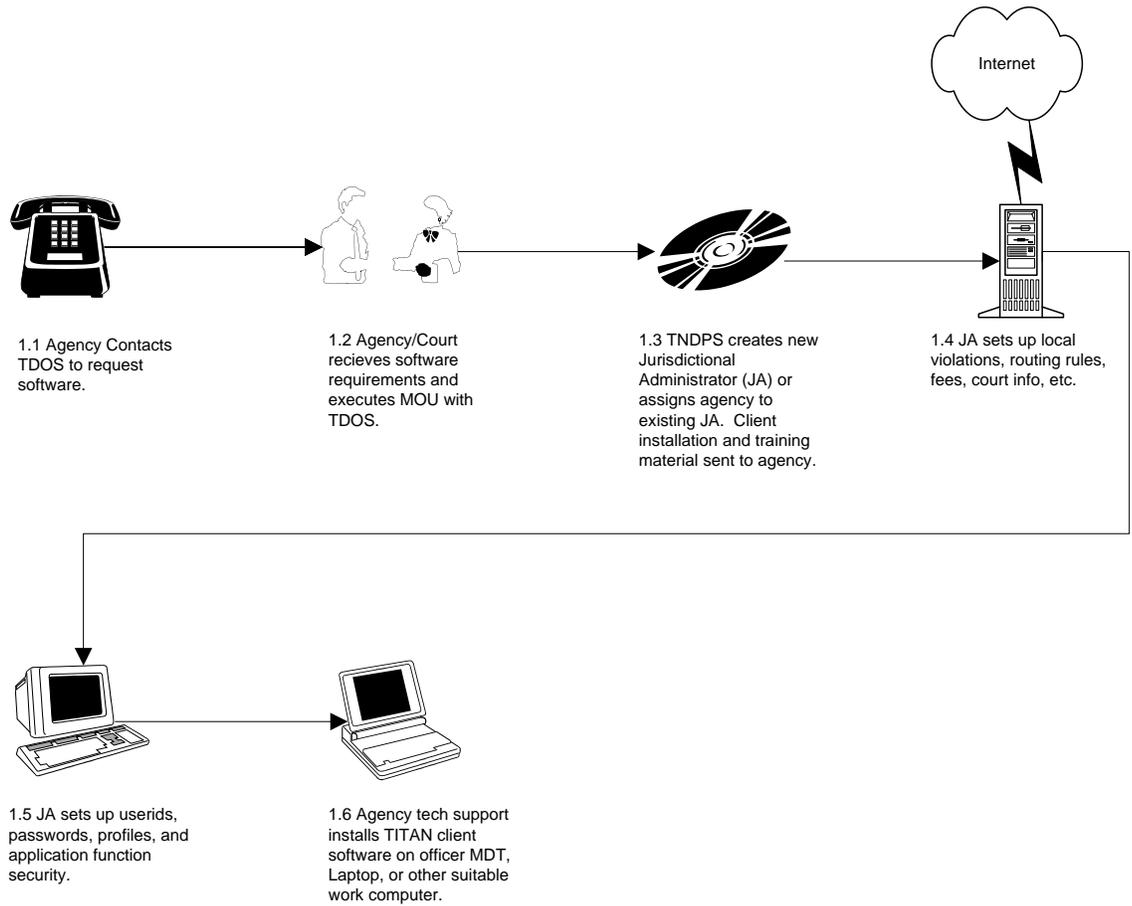
The detailed information gathering performed to develop this document has been managed by staff members from Open Portal Solutions. Primary participants have included staff members from State of Tennessee Court and Court Clerks, Tennessee Department of Safety, Governor's Highway Safety Office, and local law enforcement personnel. During the numerous detail design meetings, individuals from these organizations participated and provided the detailed information necessary to design the E-Citation solution. Their support, information, ideas, and cooperation made this document possible.

Today, THP and 160 Local Law Enforcement Agencies participate in the TITAN Electronic Crash Reporting Process. The system receives over 79,000 reports annually and 92.4% of those are available for reliable statistical production within 15 days of the event.

The TITAN application contains the platform for the electronic citation and other useful reports utilized by safety minded persons daily.

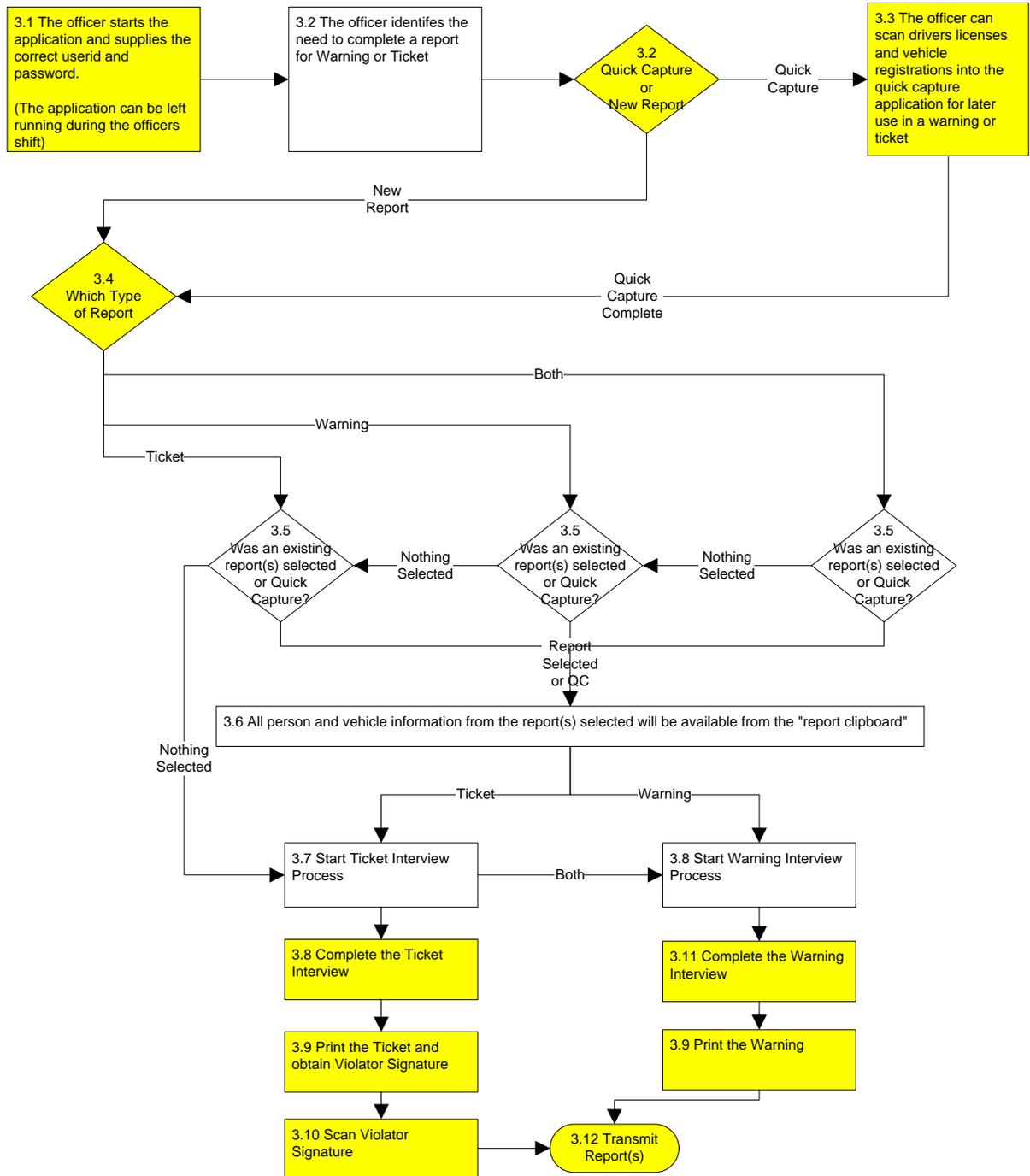
# TITAN E-Citation Agency Setup

## 1.0 TITAN AGENCY SETUP



# TITAN E-Citation Processing

## 3.0 TITAN REPORT PROCESSING



## TITAN Officer Collection Screens

**Ticket Interview - Preliminary**

Please enter the following preliminary information.

Violation Date: 10/28/2008  
 Time: 14:14

County: [Dropdown]  
 City: [Dropdown]  
 Court: [Dropdown]

Primary Trafficway: TEST 111 OR [Dropdown]  
Block No: Milepost:

Reference Trafficway: TEST

MPH: 50\_ Posted MPH: 45 Measuring Method: [Dropdown]

Speeding?  Yes  No  
 Vehicle Info?  Yes  No  
 Work Zone?  Yes  No  
 School Zone?  Yes  No  
 Witnesses?  Yes  No

**Additional Circumstances**

In Car Video?  Yes  No  
 Special Program?  Yes  No  
 Misc Information?  Yes  No  
 Commercial Vehicle?  Yes  No  
 Hazmat Involved?  Yes  No  
 16+ Passenger Vehicle?  Yes  No

Latitude: [Text] Longitude: [Text]

**Ticket Interview - Violator**

Please enter the following violator information.

Driver  Passenger  Violator

**Identification**

Driver's License OR  State Identicaid  
 State: [Dropdown] Expiration: [Dropdown]  Military  CDL

Photo Id Matched?  Yes  No NOTE: If other ID is presented, enter that information in your written narrative.

Name: [Text] [Text] [Text] [Text]  
Last Name First Name Middle Name Filial

Address: [Text]  
 [Text]  
 [Text]  
City State Zip

Residence Phone: [Text]  
 Cell/Pager Phone: [Text]  
 Work Phone: [Text]

Address New?  Yes  No

Hair Color: [Dropdown] Gender: [Dropdown]  
 Height: 6' 1" Race: [Dropdown]  
 Weight: [Text] Eyes: [Dropdown]  
 Employer: [Text]

BAC: [Dropdown] 0. [Text]  
 Birthdate: [Text]

Employer Location: [Text]

This are the first screens an officer will see when issuing an E-Citation.

User guide example:

- 1) Vehicle Information (Set to Yes if Speeding, Default Yes if Traffic, Allow to change from No if Non-Traffic)- Activate the Vehicle and Trailer Screen
- 2) Witnesses- Activate the Witness screen
- 3) Commercial Vehicle- Determined thru a particular set of criteria.
- 4) Misc Information (Default from User Profile)
- 5) Speeding- Automatically assign the appropriate violation based on the MPH and Posted MPH

Printed E-Citation

L.E.A.		COURT ORI #		AGENCY TRACKING #	
IN THE					
<input type="checkbox"/> STATE OF TENNESSEE		<input type="checkbox"/> COUNTY OF		<input type="checkbox"/> CITY/TOWN OF	
, PLAINTIFF VS. NAMED DEFENDANT					
VIOLATION DATE ON OR ABOUT		AT LOCATION REF. TRAFFICWAY		M.M. BLOCK #	CITY/COUNTY OF
<b>THE UNDERSIGNED CERTIFIES AND SAYS THAT IN THE STATE OF TENNESSEE</b>					
DRIVER'S LICENSE NO.		STATE	EXPIRES	CDL <input type="checkbox"/> YES <input type="checkbox"/> NO	PHOTO ID <input type="checkbox"/> YES <input type="checkbox"/> NO
NAME: LAST		FIRST		MIDDLE SFX	
ADDRESS			<input type="checkbox"/> IF NEW ADDRESS	<input type="checkbox"/> VIOLATOR <input type="checkbox"/> PASSENGER	CITY STATE ZIP CODE
EMPLOYER			EMP LOCATION		
DATE OF BIRTH	AGE	RACE	SEX	HEIGHT	WEIGHT
EYES	HAIR	RESIDENTIAL PHONE NO.		CELL/PAGER PHONE NO.	WORK PHONE NO.
<b>DID OPERATE THE FOLLOWING VEHICLE/MOTOR VEHICLE ON A PUBLIC HIGHWAY AND</b>					
VEH LIC NO	STATE	EXPIRES	VEH YR	MAKE	MODEL
STYLE	COLOR				
TR #1 LIC NO	STATE	EXPIRES	TR YR	TR #2 LIC NO	STATE
EXPIRES	TR YR	US DOT #			
OWNER/COMPANY IF OTHER THAN		ADDRESS		CITY	STATE
ZIP CODE		SCHOOL ZONE			
CRASH	IN-CAR VIDEO?	YES <input type="checkbox"/> NO <input type="checkbox"/>	VEH SPEED	IN A ZONE	RADAR PACE
LIDAR OTHER	COMMERCIAL VEHICLE	YES <input type="checkbox"/> NO <input type="checkbox"/>	HAZMAT Involved?	YES <input type="checkbox"/> NO <input type="checkbox"/>	HAZMAT Placard Required?
YES <input type="checkbox"/> NO <input type="checkbox"/>	CONSTRUCTION ZONE WORKERS PRESENT				
<b>DID THEN AND THERE COMMIT EACH OF THE FOLLOWING OFFENSES</b>					
1. VIOLATION/STATUTE CODE		AMOUNT \$		<p>In consideration of my not appearing in Court, I the undersigned, do hereby enter my appearance on the Affidavit for the offense charged on this notice and WAIVE the reading of the Affidavit in the above named cause and the right to be present at the trial of said action. I hereby enter a plea of Guilty and waive the right to prosecute, appeal or error proceedings. I understand the nature of the charge(s) against me; I understand my right to have counsel and I waive this right and the right to a continuance. I waive my right to trial before a judge or jury. I plead GUILTY to the charge(s), being fully aware that my signature to this plea will have the same effect as a judgment of this court and that a record of it will be sent to the Tennessee Department of Safety Records Section.</p> <p><b>Check one of the 2 boxes below, sign, date, and mail this form to:</b></p> <p>Court _____ Address: _____ _____ _____ ON _____ THE _____ DAY OF _____ AT _____</p> <p><input type="checkbox"/> YOU MUST APPEAR IN COURT. THE OFFENSE FOR WHICH YOU HAVE BEEN CHARGED CAN NOT BE PAID BY MAIL. FAILURE TO APPEAR CONSTITUTES THE SEPARATE OFFENSE OF CONTEMPT OF COURT. FAILURE TO APPEAR TO ANSWER OF SATISFY THIS CITATION WILL BE THE SAME AS A CONVICTION AND WILL RESULT IN THE SUSPENSION OF YOUR LICENSE.</p> <p><input type="checkbox"/> YOU MAY PAY BY MAIL. IF YOU WISH TO PLEAD GUILTY TO THE OFFENSE CHARGED AGAINST YOU, YOU MUST SIGN THE WAIVER PRINTED BELOW AND MAIL THIS COPY OF THE CITATION AND THE PRESCRIBED AMOUNT SET BY THE COURT.</p>	
2. VIOLATION/STATUTE CODE		AMOUNT \$			
3. VIOLATION/STATUTE CODE		AMOUNT \$			
4. VIOLATION/STATUTE CODE		AMOUNT \$			
5. VIOLATION/STATUTE CODE		AMOUNT \$			
		DATE ISSUED	TOTAL AMOUNT \$		
<p>I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF TENNESSEE THAT I HAVE ISSUED THIS ON THE DATE AND AT THE LOCATION ABOVE, THAT I HAVE PROBABLE CAUSE TO BELIEVE THE ABOVE NAMED PERSON COMMITTED THE ABOVE OFFENSE(S), AND MY REPORT WRITTEN ON THIS DOCUMENT OR ATTACHED TO THIS INFRACTION IS TRUE AND CORRECT.</p> <p>OFFICER _____ BADGE# _____</p> <p><input type="checkbox"/> SERVED ON VIOLATOR <input type="checkbox"/> SENT TO COURT FOR MAILING <input type="checkbox"/> REFERRED TO PROSECUTOR</p>					
<b>NOTICE OF CITATION</b>		<p>FAILURE TO APPEAR IN COURT ON THE DATE ASSIGNED BY THIS CITATION OR AT THE APPROPRIATE POLICE STATION FOR BOOKING AND PROCESSING WILL RESULT IN YOUR ARREST FOR A SEPARATE CRIMINAL OFFENSE WHICH IS PUNISHABLE BY A JAIL SENTENCE OF ELEVEN (11) MONTHS AND TWENTY-NINE (29) DAYS AND/OR A FINE OF UP TO TWO THOUSAND FIVE HUNDRED DOLLARS (\$2,500)</p>			
<b>NOTICE</b>		<p>THE COURT WILL ISSUE A WARRANT FOR THE ARREST OF ANY DEFENDANT WHO HAS FAILED TO RESPOND TO A TRAFFIC NOTICE DULY SERVED UPON HIM/HER AND UPON WHICH AN AFFIDAVIT HAS BEEN FILED.</p>			
<b>I UNDERSTAND THE ABOVE NOTICE AND THAT MY SIGNATURE IS NOT AN ADMISSON OF GUILT.</b>					
X _____ (VIOLATOR'S SIGNATURE)			X _____ (SIGNATURE)		

## ***E-Citation Access***

Once the officer transmits the citation(s) to the TITAN Repository, it may be accessed by the court clerk thru a login authentication and retrieved for entry into a local system.

It is planned for future phases of this project for a web services application to be created that will provide an opportunity for the various court management systems in use across Tennessee to interface directly with the TITAN E-Citation application. The effect of these web services would be to eliminate the duplication of entry of information from the electronic citation into the court management system for adjudication of the violation(s).

This phase of the E-Citation project has been researched and is to include a web service component to accomplish this interface.

External court users (clerks/prosecutors/judges) will access the TITAN web portal and gain access to electronic inboxes\* of electronic tickets that have been submitted by officers and that are to be adjudicated by their court. This electronic inbox functionality will serve as the access to E-Citation information for all external users requiring access to the citation information.

### **\*Inboxes**

#### **DESCRIPTION:**

An inbox is a virtual location for documentation that is considered “work in progress” including newly received and captured documents requiring additional processing for completing the work associated with the document received. Each jurisdiction created will, by default, have an existing work inbox labeled as the “Catch All” inbox.

#### **USAGE:**

Each jurisdiction (processing area) has established processing needs and requirements for the various documents they receive each day. When a processing area needs to separate a document received into a unique processing category or step, the inbox administration can be used to configure these locations and access can be granted to that location to users responsible for the processing of those documents.

## TITAN Back Office and Web Application Overview

The Back Office and Web Application of the TITAN system will include several features which are focused on managing the data collected by the client software and controlling accessibility to the ticket and warning data and documents stored in the back office server. Functionality in the back office and the web application will allow users of the TITAN system to administer, query, display, and report on warning and ticket data from a browser interface when network access is available.

The goals of the functionality provided through the back office and web application:

- 1) Store in a relational database all data captured by the client software
- 2) Allow for the administration of users of the TITAN application.
- 3) Reduce or eliminate the duplication of the warning and ticket data and document storage and access within the agency
- 4) Allow authorized remote users flexible access to the documents and data housed in the back office server

The keys to design principles followed to address these goals include:

- Utilize a proven and industry **standard** relational database as the backbone of the back office application
- The tools delivered should be **easy** for the users to access and understand
- The **functionality** implemented must address the physical and logical separation of users and the documents and data they may access

Some of the major highlights of the functionality include:

- **Web services** to address security and data access from the client application
- **Ticket number** inventory control
- **Find a Document** – Provide the ability for the records clerks and others wishing to eliminate the paper storage and handling process to quickly and easily find a document and provide it to the requesting party. Easy searching, viewing, printing, and saving images of documents will be available to efficiently replace the duplication of related paper copies.
- **Query the Ticket Data** – Provide individuals the functionality to ask questions and receive answers on a real time basis, thus allowing them to respond to requests for information quickly and easily. Simplifying the way individuals ask for their information and providing the answers back in the form of counts, detailed lists, and data extracts will give them the flexibility to address most common requests for information.
- **Request, Schedule, Generate, and View Statistical Reports** – Provide a feature that will allow individuals to have formatted reports created on an as-needed basis. These formatted reports are developed to address the need for summarized statistics presented in a way that can be distributed and reviewed. Tickets by Violation, Warnings by Officer, Violations by County, etc. are examples of a few types of reports that can be made available for request from this tool.

## Performance Metrics

Two primary performance metrics are developed into the TITAN application.

1) **Client Performance** – The primary performance metric affecting the client, which will be addressed by the design of the TITAN client application, is the size of the file when transmitting between the TITAN client and the TITAN back-office. While the speed of the transmission is directly affected by the speed and reliability of the network connection, minimizing the size of the file for each warning ticket and citation is a requirement for optimal performance.

The file size for a standard ticket with 2 violations will be 12k or less inclusive of the signature image (the attached image of the violator signature increases the file size above the data captured)

The average 12k ticket will transmit across a 28bps connection in 4 seconds.

2) **Back-office Performance** – The primary performance metric affecting the back-office is the number of reports that can be processed per minute in an environment where numerous officers can submit numerous reports simultaneously.

The web services supporting the processing of warning report and ticket processing is designed to support up to 50 reports per minute when running within the minimum server hardware specifications established for the TITAN back-office.

**The TITAN Web Application URL** – The URL will be used to allow individuals who have access to the back office and a supported browser on their local computer to access the content and features of the web application.

[http\(s\)://titan.safety.state.tn.us](http(s)://titan.safety.state.tn.us)

Sergeant Marty Pollock  
Tennessee Department of Safety  
Research Planning & Development  
1150 Foster Avenue Nashville Tn.  
[marty.pollock@tn.gov](mailto:marty.pollock@tn.gov)

ARNOLD AIR FORCE BASE SECURITY	GREENFIELD POLICE DEPT	NASHVILLE INTERN'L AIRPORT PUB
ASHLAND CITY POLICE DEPT	GRUNDY CO SHERIFFS DEPT	NEW JOHNSONVILLE POLICE DEPT
ATHENS POLICE DEPT	HALLS POLICE DEPT	NEW TAZEWEILL POLICE DEPT
ATOKA POLICE DEPT	HAMILTON CO SHERIFFS DEPT	NEWPORT POLICE DEPT
BAILEYTON POLICE DEPT	HARTSVILLE-TROUSDALE SHERIFF	NIOTA POLICE DEPT
BARTLETT POLICE DEPT	HENDERSON POLICE DEPT	NOLENSVILLE POLICE DEPT
BEAN STATION POLICE DEPT	HOHENWALD POLICE DEPT	OAK RIDGE POLICE DEPT
BELLE MEADE POLICE DEPT	HOUSTON CO SHERIFFS DEPT	OAKLAND POLICE DEPT
BELLS POLICE DEPT	HUMBOLDT POLICE DEPT	OLIVER SPRINGS POLICE DEPT
BLOUNT CO SHERIFFS DEPT	HUMPHREYS CO SHERIFFS DEPT	OVERTON CO SHERIFFS DEPT
BRADFORD POLICE DEPT	HUNTINGDON POLICE DEPT	PARIS POLICE DEPT
BRADLEY CO SHERIFFS DEPT	HUNTLAND POLICE DEPT	PETERSBURG POLICE DEPT
BRENTWOOD POLICE DEPT	JACKSBORO POLICE DEPT	PIPERTON POLICE DEPARTMENT
BRIGHTON POLICE DEPT	JACKSON POLICE DEPT	POLK CO SHERIFFS DEPT
BROWNSVILLE POLICE DEPT	JEFFERSON CO SHERIFFS DEPT	PUTNAM COUNTY SHERIFF'S OFFICE
CANNON CO SHERIFFS DEPT	JOHNSON CITY POLICE DEPT	RED BANK POLICE DEPT
CARTER CO SHERIFFS DEPT	JOHNSON CO SHERIFFS DEPT	RHEA CO SHERIFFS DEPT
CHAPEL HILL POLICE DEPT	KIMBALL POLICE DEPT	ROGERSVILLE POLICE DEPT
CHARLESTON POLICE DEPT	KINGSPORT POLICE DEPARTMENT	ROSSVILLE POLICE DEPT
CLAIBORNE CO SHERIFFS DEPT	KNOXVILLE METRO AIRPORT AUTH	SELMER POLICE DEPT
CLEVELAND POLICE DEPT	KNOXVILLE POLICE DEPT	SEWANEE POLICE DEPT
COFFEE CO SHERIFFS DEPT	LAKE TANSI SECURITY	SHELBY CO SHERIFF DEPT
COLLIERVILLE POLICE DEPT	LAWRENCEBURG POLICE DEPT	SHELBYVILLE POLICE DEPT
COOKEVILLE POLICE DEPT	LEBANON POLICE DEPT	SMYRNA POLICE DEPT
COOPERTOWN POLICE DEPT	LENOIR CITY POLICE DEPT	SODDY DAISY POLICE DEPT
CORNERSVILLE POLICE DEPT	LEWIS CO SHERIFFS DEPT	SOMERVILLE POLICE DEPT
COVINGTON POLICE DEPT	LEXINGTON POLICE DEPT	SOUTH FULTON POLICE DEPT
COWAN POLICE DEPT	LIVINGSTON POLICE DEPT	SPARTA POLICE DEPT
CROCKETT CO SHERIFFS DEPT	MACON CO SHERIFFS OFFICE	SPRING HILL POLICE DEPT
CROSSVILLE POLICE DEPT	MADISON CO SHERIFFS DEPT	SULLIVAN CO SHERIFFS DEPT
CUMBERLAND CO SHERIFFS DEPT	MADISONVILLE POLICE DEPT	SUMNER CO SHERIFFS DEPT
DANDRIDGE POLICE DEPT	MANCHESTER POLICE DEPT	SWEETWATER POLICE DEPT
DAYTON POLICE DEPT	MARTIN POLICE DEPT	TAZEWEILL POLICE DEPT
DECHERD POLICE DEPT	MARYVILLE POLICE DEPT	TENNESSEE HIGHWAY PATROL
DICKSON CO SHERIFFS OFFICE	MAYNARDVILLE POLICE DEPT	TENNESSEE TECH UNIV POLICE
DICKSON POLICE DEPT	MCKENZIE POLICE DEPT	TIPTON CO SHERIFFS DEPT
DOVER POLICE DEPT	MCMINN CO SHERIFFS DEPT	TULLAHOA POLICE DEPT
DRESDEN POLICE DEPT	MCMINNVILLE POLICE DEPT	TUSCULUM POLICE DEPT
DYER CO SHERIFFS DEPT	MEDINA POLICE DEPT	UNION CITY POLICE DEPT
DYERSBURG POLICE DEPT	MEMPHIS POLICE DEPT	UNIV OF TENN MEMPHIS POLICE
EAGLEVILLE POLICE DEPT	MIDDLE TN STATE UNIVERSITY	UT Martin Dept of Public Safety
ELIZABETHTON POLICE DEPT	MIDDLETON POLICE DEPT	VONORE POLICE DEPT
ELKTON POLICE DEPT	MILAN POLICE DEPT	WAVERLY POLICE DEPT
ENGLEWOOD POLICE DEPT	MILLERSVILLE POLICE DEPT	WAYNESBORO POLICE DEPT
ERIN POLICE DEPT	MILLINGTON POLICE DEPT	WHITE CO SHERIFFS DEPT
ETOWAH POLICE DEPT	MONTGOMERY CO SHERIFFS DEPT	WHITE HOUSE POLICE DEPT
ETSU Dept of Public Safety	MOORE CO SHERIFFS DEPT	WHITE PINE POLICE DEPT
FAIRVIEW POLICE DEPT	MORRISTOWN POLICE DEPT	WILLIAMSON CO SHERIFFS DEPT
FRANKLIN POLICE DEPT	MOUNT CARMEL POLICE DEPT	WINCHESTER POLICE DEPT
FRIENDSHIP POLICE DEPT	MOUNT JULIET POLICE DEPT	WOODBURY POLICE DEPT

