



**Cross Island Parkway  
Palmetto Pass  
South Carolina  
Department of Transportation**

**TRCS Auditors Manual**

Rev 1.0

May 2008



# ACS

## *Government Solutions, TSS.*

### Revision History

Revisions of this document are listed in chronological order. There is no relationship between the document release number and the software release number.

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### Document Ownership

Owner	Germantown Project Management
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# 1. Introduction

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The Auditors Manual is designed to assist the Audit Manager in making the transition to the Next Generation (NG) application software being installed at the SCDOT toll facilities.

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*Note: This guide has been written from a global user perspective. Your usage may be different based on your business rules.*

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Before proceeding, a user should have a basic understanding of computers and Microsoft Windows applications. If not, refer to sections 7 and 8, *Using Windows Applications* and *Using On-Line Help* for an explanation.

The following topics are covered in this manual:

- How to log-in and log-out of the application
- How to perform multiple audit functions
- How to run reports
- How to perform system administration functions
- How to use Help functions

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*Note: Before beginning, make sure you are viewing the application from the latest version of Internet Explorer or Mozilla's Firefox.*

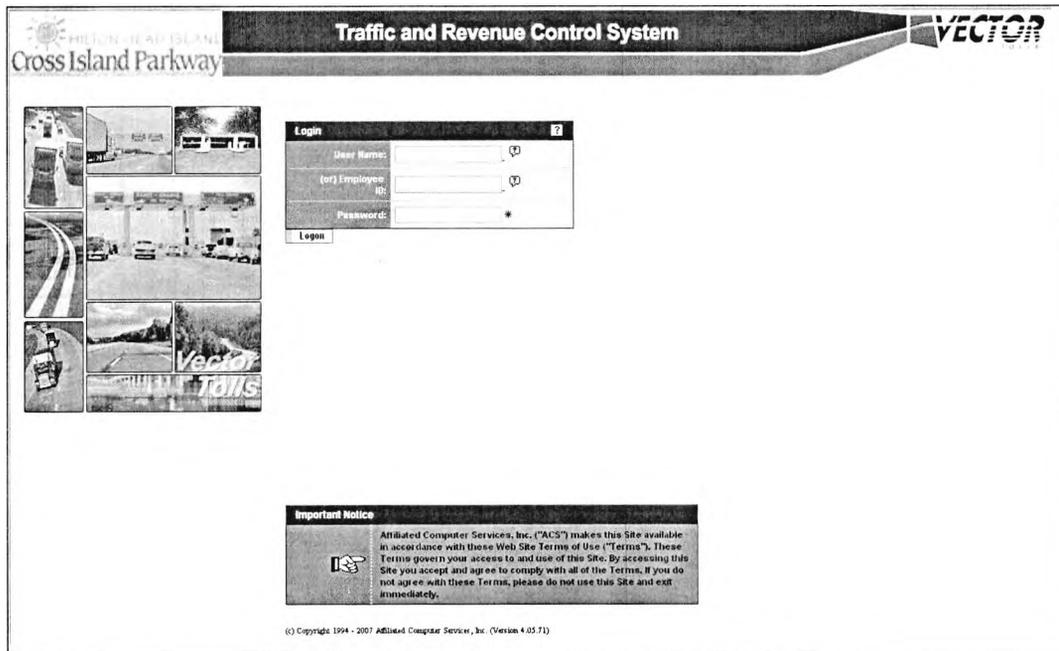
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## 2. Accessing the Application

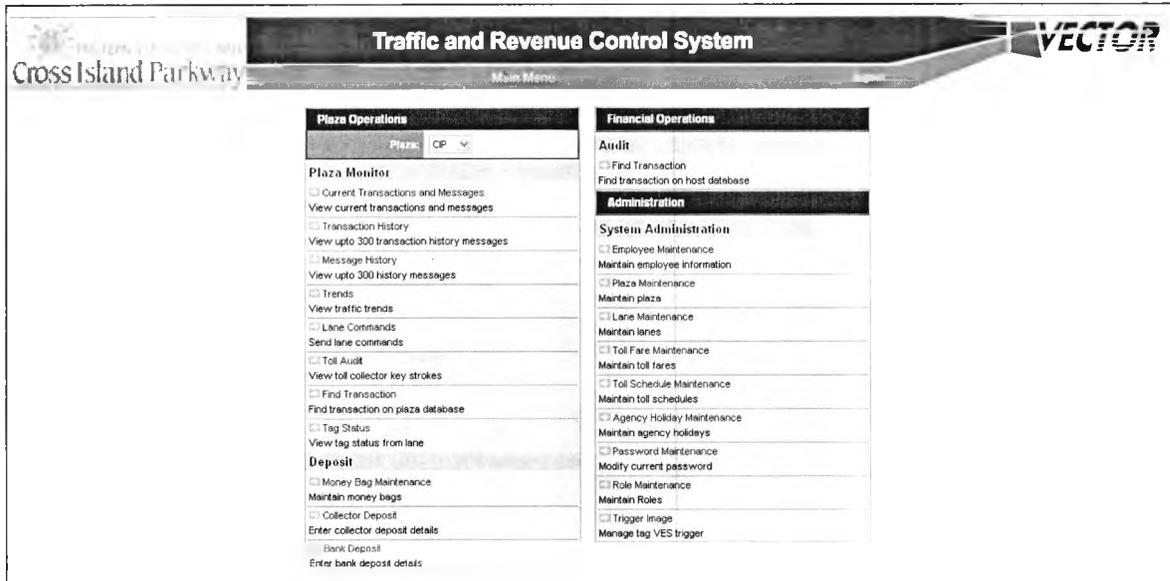
### 2.1 Logging In

The login process provides a secure way for authorized users to access the system. To login, follow these steps:

1. Go to the website for the VECTOR Traffic and Revenue Control System (TRCS) application.
2. The following login window displays:



3. Enter in your correct login ID and password. Click the **Login** button. The following screen displays:



From this screen, you can access the following functions:

- *Plaza Monitor*, which allows you to view tag statuses from lanes
- *Audit*, which allows the Find Transaction function.
- *Reports*, which allows you to view and print reports.
- *System Administration*, which allows you to search for toll fares and modify current passwords.
- *Help*, which allows you to access on-line help functions for the application.

## 2.2 Plaza Monitor

The *Plaza Monitor* function allows you to view tag statuses.

## 2.3 Audits

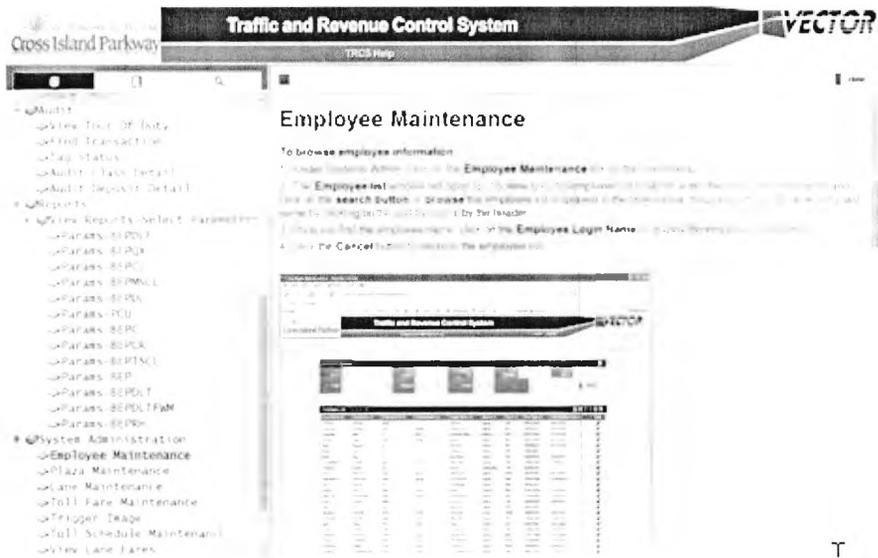
The *Audit* function allows you to find transactions.

## 2.4 System Administration

The selection of the System Administration function allows you to search for toll fares and modify current passwords.

## 2.5 Help

If you need additional help during your use of the application, click . This icon is found in the upper right hand corner of each information window. For example if you have additional questions about how to use the Plaza Monitor sub-functions, the following displays after clicking the icon:



## 2.6 Logging out of the application

Logging out of the application is a simple process. In the top right hand corner of the screen, there is a **Logout** button as shown by the following example.

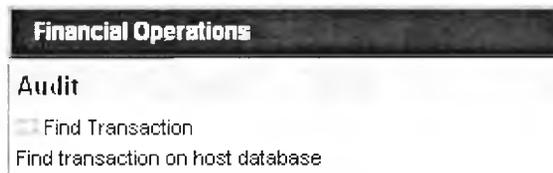


To log out of the application, click **Logout**. This action will return you to the main login screen.

## 3. Audit

### 3.1 Overview

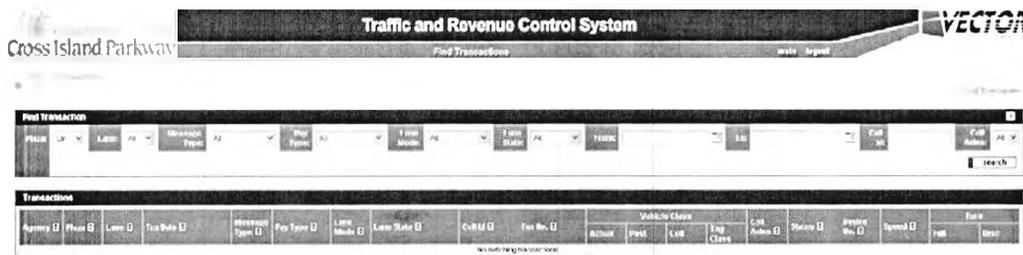
This audit capability creates the foundation for an independent audit of the collector activity in the lane along with AVC data compared with deposits made by the collector. This audit process will provide the data to explain or confirm variances.



### 3.2 Find Transaction

The *Find Transaction* subfunction allows you to find transactions for the toll plaza.

1. Select the Find Transaction subfunction from the main TRCS menu.



2. Select a plaza from the Plaza drop down menu. Select a lane and message type. Select the To and From Dates from the calendar.
3. Enter the Collector Login ID and select Coll Axle from the drop down menu. Click *Search*. The following window displays underneath the *Find Transaction* search.



Find Transactions

**Traffic and Revenue Control System** VECTOR

Cross Island Parkway

Find Transactions

Find Transaction

From: 07/22/2007 14:38:34 To: 07/23/2007 14:38:34

Transactions

Agency	Phase	Lane	Trn Date	Message Type	Pay Type	Lane Mode	Lane State	Coll St	Trn No.	Vehicle Class			Coll Amt	Status	Device No.	Speed	Fare	
										Actual	Foot	Coll					Full	Disc
001			2007-07-26 10:18:00	VIOLATION	ETC	ETC	OPEN	-15	Q 802022308	2	2	0	0	0	0	0	0	0
001			2007-07-26 09:59:33	VIOLATION	ETC	ETC	OPEN	-15	Q 802022302	4	4	0	0	0	0	0	0	0
001			2007-07-26 09:59:47	VIOLATION	ETC	ETC	OPEN	-15	Q 802022309	3	3	0	0	0	0	0	0	0
001			2007-07-26 09:57:53	VIOLATION	ETC	ETC	OPEN	-15	Q 802022300	2	2	0	0	0	0	0	0	0
001			2007-07-26 10:33:10	VIOLATION	ETC	ETC	OPEN	-15	Q 802022311	2	2	0	0	0	0	0	0	0
001			2007-07-24 11:22:55	VIOLATION	ETC	ETC	MANUAL	OPEN	103	Q 802021487	2	2	0	0	0	0	0	0
001			2007-07-26 11:20:13	VIOLATION	ETC	ETC	OPEN	-15	Q 802022337	2	2	0	0	0	0	0	0	0
001			2007-07-26 11:18:37	VIOLATION	ETC	ETC	OPEN	-15	Q 802022330	4	4	0	0	0	0	0	0	0
001			2007-07-26 10:18:01	VIOLATION	ETC	ETC	OPEN	-15	Q 802022308	3	3	0	0	0	0	0	0	0
001			2007-07-26 10:06:08	VIOLATION	ETC	ETC	OPEN	-15	Q 802022307	2	2	0	0	0	0	0	0	0
001			2007-07-26 09:50:43	VIOLATION	ETC	ETC	OPEN	-15	Q 802022303	4	4	0	0	0	0	0	0	0
001			2007-07-26 09:49:47	VIOLATION	ETC	ETC	OPEN	-15	Q 802022302	3	3	0	0	0	0	0	0	0
001			2007-07-26 09:48:46	VIOLATION	ETC	ETC	OPEN	-15	Q 802022301	2	2	0	0	0	0	0	0	0
001			2007-07-26 14:22:41	VIOLATION	ETC	ETC	OPEN	-15	Q 802021483	2	2	0	0	0	0	0	0	0
001			2007-07-24 16:30:00	VIOLATION	ETC	ETC	MANUAL	OPEN	145	Q 802021488	2	2	0	0	0	0	0	0
001			2007-07-26 13:23:22	VIOLATION	ETC	ETC	MANUAL	OPEN	173	Q 802022360	2	2	0	0	0	0	0	0
001			2007-07-26 12:52:19	VIOLATION	ETC	ETC	OPEN	-15	Q 802022328	3	3	0	0	0	0	0	0	0
001			2007-07-26 12:18:08	VIOLATION	ETC	ETC	OPEN	-15	Q 802022310	4	4	0	0	0	0	0	0	0
001			2007-07-26 09:50:26	VIOLATION	ETC	ETC	OPEN	-15	Q 802022306	2	2	0	0	0	0	0	0	0
001			2007-07-26 09:50:16	VIOLATION	ETC	ETC	OPEN	-15	Q 802022305	4	4	0	0	0	0	0	0	0
001			2007-07-26 09:51:29	VIOLATION	ETC	ETC	OPEN	-15	Q 802022304	3	3	0	0	0	0	0	0	0
001			2007-07-26 12:24:21	VIOLATION	ETC	ETC	OPEN	-15	Q 802021482	2	2	0	0	0	0	0	0	0
001			2007-07-26 11:17:44	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022338	3	3	0	0	0	0	0	0	0
001			2007-07-26 10:49:37	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022324	2	2	0	0	0	0	0	0	0
001			2007-07-26 10:47:51	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022322	2	2	0	0	0	0	0	0	0
001			2007-07-26 10:47:50	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022321	2	2	0	0	0	0	0	0	0
001			2007-07-26 10:19:00	VIOLATION	TOLL/EASER	ETC	CLOSED	-15	Q 802022318	3	3	0	0	0	0	0	0	0
001			2007-07-26 10:19:17	VIOLATION	ETC	ETC	CLOSED	-15	Q 802022314	2	2	0	0	0	0	0	0	0
001			2007-07-26 10:11:48	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022307	4	4	0	0	0	0	0	0	0
001			2007-07-26 10:11:48	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022306	3	3	0	0	0	0	0	0	0
001			2007-07-26 10:11:42	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022305	2	2	0	0	0	0	0	0	0
001			2007-07-26 10:08:17	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022304	4	4	0	0	0	0	0	0	0
001			2007-07-26 10:08:00	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022303	3	3	0	0	0	0	0	0	0
001			2007-07-26 10:08:07	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022302	2	2	0	0	0	0	0	0	0
001			2007-07-26 10:02:08	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022297	4	4	0	0	0	0	0	0	0
001			2007-07-26 10:01:33	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022296	3	3	0	0	0	0	0	0	0
001			2007-07-26 10:00:23	VIOLATION	TOLL/EASER	ETC	OPEN	-15	Q 802022295	2	2	0	0	0	0	0	0	0



The generated Transaction List is composed of the following columns:

<b>Column Name</b>	<b>Column Description/Function</b>
Agency	Name of agency (SCDOT)
Plaza	Name of plaza
Lane	Lane number
Transaction Date	Transaction date
Message Type	Message (Ex. ETC)
Pay Type	Pay Type (Ex. Violation)P
Lane Mode	Lane Mode (Ex. ETC_Manual)
Collector ID	Toll Collector ID
Transaction Number	Transaction Number
Vehicle Class	Actual, Post, Coll, and Tag Class
Coll Axles	Collector Classification of Axles
Device Number	Tag Number
Speed	Vehicle speed
Fare	Full and discounted Fares

### 3.2.1 Viewing Associated Transaction Types

An additional feature that can be used to view more in-depth information about a particular transaction is found within the Find Transaction feature.

Transactions									
Agency	Plaza	Lane	Trnx Date	Message Type	Pay Type	Lane Mode	Lane State	Coll Id	Trnx No.
SC	CIP	001	2007-07-26 10:15:02	VIOLATION	ETC	ETC	OPEN	-15	 502922309
SC	CIP	001	2007-07-26 09:59:38	VIOLATION	ETC	ETC	OPEN	-15	 502922292
SC	CIP	001	2007-07-26 09:58:47	VIOLATION	ETC	ETC	OPEN	-15	 502922291
SC	CIP	001	2007-07-26 09:57:53	VIOLATION	ETC	ETC	OPEN	-15	 502922290

1. To view a particular transaction, click the Magnification icon  on a selected row. The following image displays:

Find Transactions

**Traffic and Revenue Control System** VECTOR

Cross Island Parkway

Image View

Transaction Information	
Plaza:	Cross Island Parkway
Lane:	001
Transaction Date:	2007-07-26 10:15:02.900
Transaction Sequence No:	15173
Device No:	01600802450
Plate:	PPPPPPPPPP
OCR Confidence Level:	0
State:	SS



Image View

Thumbnails




The image contains information on the following:

Column Name	Column Description/Function
Plaza Name	Name of plaza
Lane Number	Lane number
Transaction Date	Date of transaction
Transaction Sequence Number	Transaction sequence number
Device Number	EZ Pass Device (Tag) Number
Plate	License Plate
OCR Confidence Level	Not Applicable for SCDOT - Confidence Level of license plate read - defaulted to 0
State	The State where the license plate was issued.

## 4. Plaza Monitor

The Plaza Monitor functions are grouped under the Plaza Operations section of the main screen.

Plaza Operations	
Plaza:	CIP ▼
<b>Plaza Monitor</b>	
<input type="checkbox"/>	Current Transactions and Messages View current transactions and messages
<input type="checkbox"/>	Transaction History View upto 300 transaction history messages
<input type="checkbox"/>	Message History View upto 300 history messages
<input type="checkbox"/>	Trends View traffic trends
<input type="checkbox"/>	Lane Commands Send lane commands
<input type="checkbox"/>	Toll Audit View toll collector key strokes
<input type="checkbox"/>	Find Transaction Find transaction on plaza database
<input type="checkbox"/>	Tag Status View tag status from lane

### 4.1 Current Transactions and Messages

1. Select the Current Transactions and Messages subfunction from the main TRCS menu. The following window displays.

**Traffic and Revenue Control System**

Cross Island Parkway

Plaza Monitor main logout

Vehicles This Day: 0 | This Hour: 0 | Last Hour: 0

Logon: @collector@ipe | Last Update: Fri May 09 16:31:26 EDT 2008

North Bound Lanes										South Bound Lanes											
Lane	Dir	Mode	State	Collector	Aces			Revenue Type	Amount	Lane Health	Lane	Dir	Mode	State	Collector	Aces			Revenue Type	Amount	Lane Health
					AVC	Coll	Tag									AVC	Coll	Tag			
004	N	ETC	CLOSED		0	0	0	CASH	\$0.00		004	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
002	N	ETC	CLOSED		0	0	0	CASH	\$0.00		008	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
007	N	ETC	CLOSED		0	0	0	CASH	\$0.00		009	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
005	N	ETC	CLOSED		0	0	0	CASH	\$0.00		010	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
006	N	ETC	CLOSED		0	0	0	CASH	\$0.00		011	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
008	N	ETC	CLOSED		0	0	0	CASH	\$0.00		012	S	ETC	CLOSED		0	0	0	CASH	\$0.00	

Vehicles This Direction This Hour: 0 Last Hour: 0

Vehicles This Direction This Hour: 0 Last Hour: 0

Transactions & Messages

Toll Transactions

Lane	Truck	Date/Time	Collector	Aces			Revenue Type	Amount	Transponder	Tag Status	Info	KeyStrokes
				AVC	Collector	Tag Actual						
No toll transactions for display												

Lane Messages

Lane	Date/Time	Messages
No lane messages for display		

The screen is divided into four areas.

- Area 1 and Area 2: North and South Bound Lanes windows are found on every sub-function screen. These windows are used to view lane information and limited toll transactions in near real time. The continuously updated display allows the toll shift supervisor to monitor all aspects of the transactions.
- Area 3: is broken down into six tabbed sections. The highlighted tab reflects the sub-function selected. It lists the current transactions.
- Area 4: lists current lane messages.

For this sub-function, you see a listing of toll transactions and then a listing of lane messages.

## 4.2 Transaction History

The *Transaction History* sub-function allows you to view all transactions from the previous 24 hours. Selection of the *Transaction History* sub-function displays the following screen:

North Bound Lanes											South Bound Lanes										
Lane	Dir	Mode	State	Collector	Aides			Revenue	Amount	Lane Health	Lane	Dir	Mode	State	Collector	Aides			Revenue	Amount	Lane Health
					AVC	Coll	Tag								AVC	Coll	Tag				
041	N	ETC	CLOSED	1	2	0	2	AVI	\$0.00		013	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
042	N	ETC	CLOSED		0	0	0	CASH	\$0.00		014	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
043	N	ETC	CLOSED	0	2	0	0	TOLL_EVADER	\$0.00		015	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
044	N	ETC	CLOSED		0	0	0	CASH	\$0.00		016	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
045	N	ETC	CLOSED		0	0	0	CASH	\$0.00		017	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
046	N	ETC	CLOSED		0	0	0	CASH	\$0.00		018	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
047	N	ETC	CLOSED		0	0	0	CASH	\$0.00		019	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
048	N	ETC	CLOSED		0	0	0	CASH	\$0.00		020	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
049	N	ETC	CLOSED		0	0	0	CASH	\$0.00		021	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
010	N	ETC	CLOSED		0	0	0	CASH	\$0.00		022	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
011	N	ETC	CLOSED		0	0	0	CASH	\$0.00		023	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
012	N	ETC	CLOSED		0	0	0	CASH	\$0.00		024	S	ETC	CLOSED		0	0	0	CASH	\$0.00	

Vehicles This Direction This Hour:	0	Last Hour:	0
Vehicles This Direction This Hour:	0	Last Hour:	0

Transaction History											
ID	Time	Date	Year	AVC	Coll	Tag	Revenue	Amount	Code	Notes	
001	2915	2006-11-16 09:39:31	2004	0	0	2	2	AVI	\$0.00	01600002434 GOOD	
001	2907	2006-11-16 08:43:41	2004	2	0	2	2	AVI	\$0.00	01600002434 GOOD	
001	2906	2006-11-16 08:23:42	2004	0	0	2	2	AVI	\$0.00	01600002434 GOOD	
001	2890	2006-11-16 07:50:46	035	41710	0	2	0	2	CASH	\$2.33	Cash/ClassTwo, Receipt, Direction, Direction, OpenLane
001	2878	2006-11-16 07:49:22	002	11710	0	0	2	2	AVI	\$0.00	01600002433 GOOD
001	2597	2006-11-15 17:29:46	0	3	0	0	3	TOLL_EVADER	16.96		
002	2526	2006-11-15 17:31:44	016	0	2	0	2	TOLL_EVADER	16.96		
003	2536	2006-11-15 17:26:03	002	0	4	0	2	AVI_BARCODE	\$0.00		
002	2517	2006-11-15 17:21:48	075	0	2	0	2	TOLL_EVADER	16.96		
002	2517	2006-11-15 17:18:41	091	0	2	0	2	TOLL_EVADER	16.96	LaneState, Standby, LaneState, EntryGateDown, CloseLane	
001	2522	2006-11-15 17:09:14	073	49710	0	3	0	3	CASH	\$10.11	Cash/ClassThree, Receipt, Direction, Direction
001	2034	2006-11-15 17:01:19	0110	1	0	1	1	AVI	16.96	0160002461 GOOD	

The screen is divided into three areas.

- Area 1 and Area 2: North and South Bound Lanes windows are found on every sub-function screen. These windows are used to view lane information and limited toll transactions in near real time. The continuously updated display allows the toll shift supervisor to monitor all aspects of the transactions.
- Area 3 is broken down into six tabbed sections. The highlighted tab reflects the sub-function selected. It lists the current transactions history. Transactions that are highlighted in red are toll violations. Transactions marked with a yellow highlighted 'M' indicate a vehicle misclassification.

You can view up to 300 messages by clicking the pull down menu in the upper right hand corner of the Transaction History panel. To refresh the Transaction History list, click the adjacent  button.

### 4.3 Message History

The *Message History* sub-function allows you to view all messages from the previous 24 hours for all the lanes. Selection of the *Message History* sub-function displays the following screen:



Lane	Date/Time	Messages
001	2006-11-14 11:25:20 475	Collector ID: (41710) is attempting to login
001	2006-11-14 11:25:20 475	Collector ID: (41710) is attempting to login
001	2006-11-14 11:25:20 481	Collector ID: (41710) logged on to the lane
001	2006-11-14 11:30:07 129	Receipt Initial Paper Issue Sensor
001	2006-11-14 11:30:17 129	Receipt Paper Paper Issue Sensor OK
001	2006-11-14 11:30:54 002	Collector ID: (41710) has logged off from the lane
001	2006-11-14 12:43:26 083	Collector ID: (41360) is attempting to login
001	2006-11-14 12:43:29 100	Collector ID: (41360) is attempting to login
001	2006-11-14 12:43:41 110	Collector ID: (41360) logged on to the lane
001	2006-11-14 12:54:43 381	Collector ID: (41360) has logged off from the lane
001	2006-11-14 13:04:46 010	Collector ID: (41710) is attempting to login
001	2006-11-14 13:04:46 011	Collector ID: (41710) is attempting to login
001	2006-11-14 13:04:41 063	Collector ID: (41710) logged on to the lane
001	2006-11-14 13:19:52 162	Lane 0 - Degraded
001	2006-11-14 13:24:09 475	Lane 0 - OK
001	2006-11-14 13:32:20 129	Overhead Scanner Degraded
001	2006-11-14 13:38:55 195	Overhead Scanner OK
001	2006-11-14 13:42:00 100	HSI Trade 31 & 2 down
001	2006-11-14 13:42:08 180	HSI Trade 31 & 2 down
001	2006-11-14 13:50:54 196	HSI Trade 31 & 2 up

### 4.4 Traffic Trends

The *Trends* sub-function allows you to view the traffic trends for the toll plaza as shown by the following screen:

Cross Island Parkway

Lanes Open: 0 | Vehicles This Day: 0 | This Hour: 0 | Last Hour: 0

Logoff | Help | Last Updated: 4/27/2008 4:35:16 PM

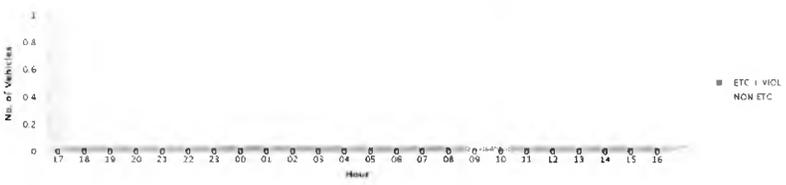
North Bound Lanes										South Bound Lanes											
Lane	Dir	Mode	State	Collector	Rates			Revenue Type	Amount	Lane Health	Lane	Dir	Mode	State	Collector	Rates			Revenue Type	Amount	Lane Health
					#/AC	Col	Tag								#/AC	Col	Tag				
000	N	ETC	CLOSED		0	0	0	CASH	\$0.00		000	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
001	N	ETC	CLOSED		0	0	0	CASH	\$0.00		001	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
002	N	ETC	CLOSED		0	0	0	CASH	\$0.00		002	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
003	N	ETC	CLOSED		0	0	0	CASH	\$0.00		003	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
004	N	ETC	CLOSED		0	0	0	CASH	\$0.00		004	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
005	N	ETC	CLOSED		0	0	0	CASH	\$0.00		005	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
006	N	ETC	CLOSED		0	0	0	CASH	\$0.00		006	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
Vehicles This Direction This Hour: 0										Vehicles This Direction This Hour: 0											
Last Hour: 0										Last Hour: 0											

Transactions 2 Messages Transaction History Message History **Traffic Trend** Lane Command Toll Collector Audit

1 / 14 100%

Traffic Trend For Plaza

As of: 4:35:55PM



	Hour																								
	17	18	19	20	21	22	23	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	
ETC + VIOL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON ETC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

### 4.5 Lane Commands

The *Lane Commands* sub-function allows you to remotely operate the lane. Selection of the *Lane Commands* sub-function displays the following screen:

Cross Island Parkway Lanes Open: 0 | Vehicles This Day: 0 | This Hour: 0 | Last Hour: 0 Login ID: test@super | Last Update: Fri May 09 16:37:32 EDT 2008

North Bound Lanes											South Bound Lanes										
Lane	Dir	Mode	State	Collector	Axles			Revenue Type	Amount	Lane Health	Lane	Dir	Mode	State	Collector	Axles			Revenue Type	Amount	Lane Health
					RVC	Coll	Tag								RVC	Coll	Tag				
001	N	ETC	CLOSED		0	0	0	CASH	\$0.00		004	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
002	N	ETC	CLOSED		0	0	0	CASH	\$0.00		006	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
003	N	ETC	CLOSED		0	0	0	CASH	\$0.00		008	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
005	N	ETC	CLOSED		0	0	0	CASH	\$0.00		010	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
007	N	ETC	CLOSED		0	0	0	CASH	\$0.00		011	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
008	N	ETC	CLOSED		0	0	0	CASH	\$0.00		012	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
Vehicles This Direction This Hour: 0 Last Hour: 0											Vehicles This Direction This Hour: 0 Last Hour: 0										

**Command Parameters**

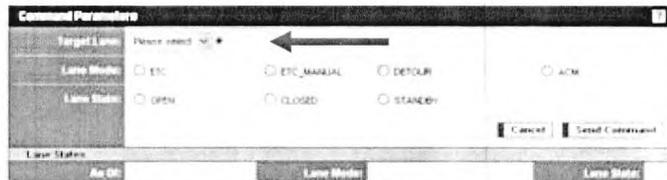
Target Lane: Please select \*  
 Lane Mode:  ETC  ETC\_MANUAL  DETOUR  ACM  
 Lane State:  OPEN  CLOSED  STANDBY  
 Cancel Send Command

Lane States  
 As Of: Lane Mode: Lane State:

### 4.5.1 How to Send a Lane Command

To send a lane command, follow these steps.

1. Select a target lane by using the pull down menu.

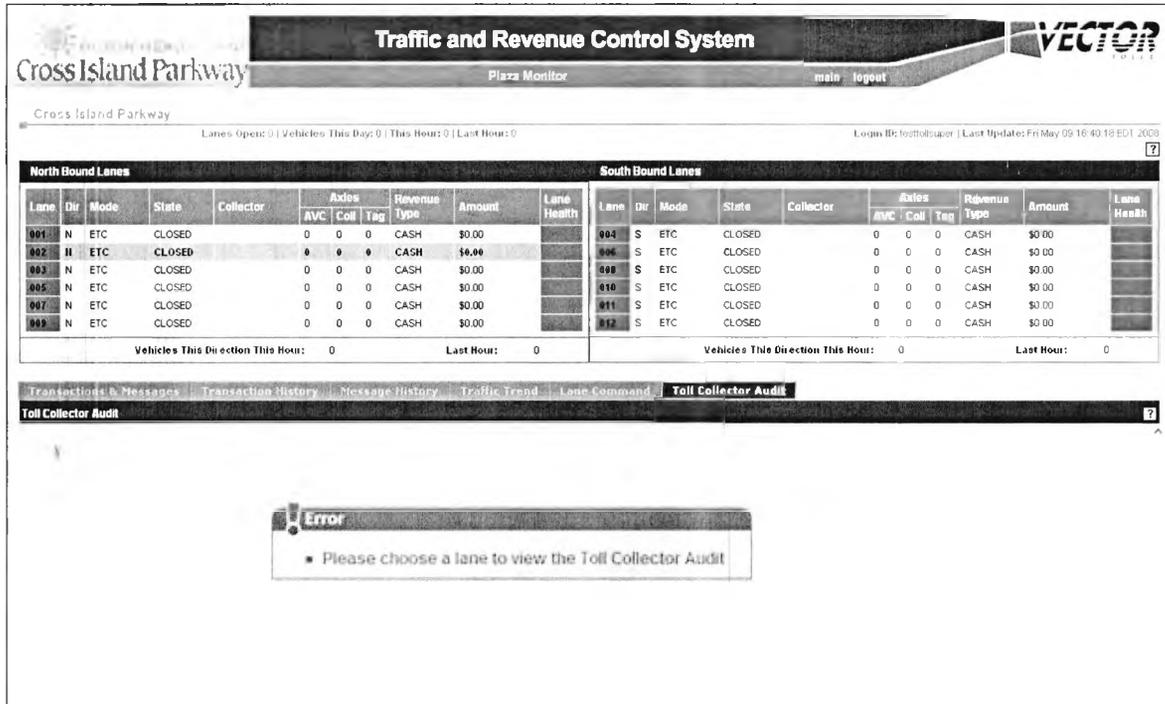


2. Set lane mode. There are three options to choose from: ETC, ETC\_MANUAL, and DETOUR
3. Set lane state. There are three options to choose from: OPEN, CLOSED, and STANDBY
4. Set gate state. There are two options to choose from: CLOSED and OPEN
5. Click the Send Command button. The following screen displays if the command was successful.

## 4.6 Toll Audit

The *Toll Audit* function allows you to view a toll collector's key strokes.

1. From the TRCS main menu, select the Toll Audit sub-function. The following window displays:



**Traffic and Revenue Control System**

Cross Island Parkway Plaza Monitor main logout

Cross Island Parkway Lanes Open: 0 | Vehicles This Day: 0 | This Hour: 0 | Last Hour: 0 Login ID: testtollpaper | Last Update: Fri May 09 16:40:18 EDT 2008

North Bound Lanes										South Bound Lanes											
Lane	Dir	Mode	State	Collector	Axes			Revenue Type	Amount	Lane Health	Lane	Dir	Mode	State	Collector	Axes			Revenue Type	Amount	Lane Health
					AVC	Coll	Tag									AVC	Coll	Tag			
001	N	ETC	CLOSED		0	0	0	CASH	\$0.00		004	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
002	N	ETC	CLOSED		0	0	0	CASH	\$0.00		006	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
003	N	ETC	CLOSED		0	0	0	CASH	\$0.00		008	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
005	N	ETC	CLOSED		0	0	0	CASH	\$0.00		010	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
007	N	ETC	CLOSED		0	0	0	CASH	\$0.00		011	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
009	N	ETC	CLOSED		0	0	0	CASH	\$0.00		012	S	ETC	CLOSED		0	0	0	CASH	\$0.00	

Vehicles This Direction This Hour: 0 Last Hour: 0 Vehicles This Direction This Hour: 0 Last Hour: 0

Transactions & Messages Transaction History Message History Traffic Trend Lane Command **Toll Collector Audit**

**Toll Collector Audit**

**Error**

- Please choose a lane to view the Toll Collector Audit

Select a lane from either the NorthBound Lanes or SouthBound Lanes window. The bottom of the screen will display the step by step actions of the toll collector. When the toll collector's activity is viewed at a local plaza workstation, the mimic image will display.

## 4.7 Tag Status

The *Tag Status* subfunction allows you to find vehicle tag statuses.

1. Select the Tag Status subfunction from the main TRCS menu. The following window displays.



The screenshot displays the TRCS interface for the Tag Status subfunction. At the top, there is a header bar with the text "Traffic and Revenue Control System" and the "VECTOR" logo. Below this is a navigation bar with "Tag Status", "main", and "logout" options. The main content area features a "Tag Search" form with the following fields:

- Plaza: OP (dropdown menu)
- Lane: (dropdown menu)
- Tag Number: (text input field)
- search (button)

2. Select a plaza ID and lane number from the Plaza and Lane Number pull down menus. Enter in the vehicle tag number. Click Search when finished.

## 5. Deposit

---

### 5.1 Overview

The *Deposit* function allows you to maintain your toll plaza money bags.

- *Moneybag Maintenance*: Maintains money bags
- *Collector Deposit*: Enter collector deposit details
- *Bank Deposit*: Enter bank deposit details

This section will discuss the sub-functionalities.

### 5.2 Money Bag Maintenance

The *Money Bag Maintenance* function manages the inventory of money bags.

#### 5.2.1 Inventory Tab

The Inventory function creates a range of bag numbers to be used for tracking deposits.

1. From the TRCS main menu, select the Money Bag Maintenance sub-function. The following window displays:

Inventory Assign/Return Change Status

**Bag Inventory Maintenance**

Bag Type: Money Bag

Plaza: LP

Bag Number Entry

Bag Prefix:

Start Bag Number:

End Bag Number:

Generate

Generated Bag Numbers

Bag Number	Validity
No bag numbers generated	

Validated Bag Number Status:

- To generate a proposed list of bags, select the Inventory tab. Select a plaza from the pull menu at the top of the window beneath the three tabs. Enter in the Start Bag and End Bag Numbers. (From 1-100) Click Generate. The following window displays:

Inventory **Assign/Return** Change Status

---

**Bag Inventory Maintenance** ?

Bag Type: Revenue Bag

Plaza: \* \*

Bag Number Entry

Bag Prefix: BAG \*

Start Bag Number: 2 \*

End Bag Number: 15 \*

Generate

---

Generated Bag Numbers

1 to 10 of 14    << 1 2 >>

Bag Number	Validity
BAG02	Valid
BAG03	Valid
BAG04	Valid
BAG05	Valid
BAG06	Valid
BAG07	Valid
BAG08	Valid
BAG09	Valid
BAG10	Valid
BAG11	Valid

Validated Bag Number Status:

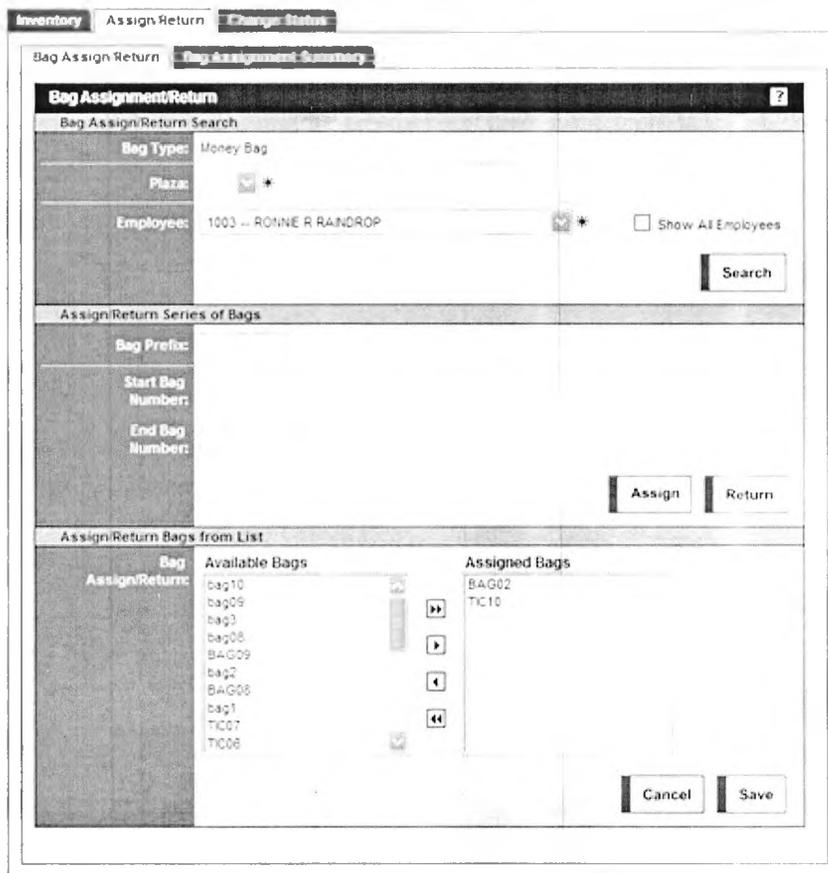
Cancel Save

3. The Generated Bag Numbers window lists the number of bags entered from start to end. To view the entire list of validated bags, click the page numbers or the side arrows in the panel above the list of bags.
4. Click Save if the information is correct.

### 5.2.2 Assign/Return Tab

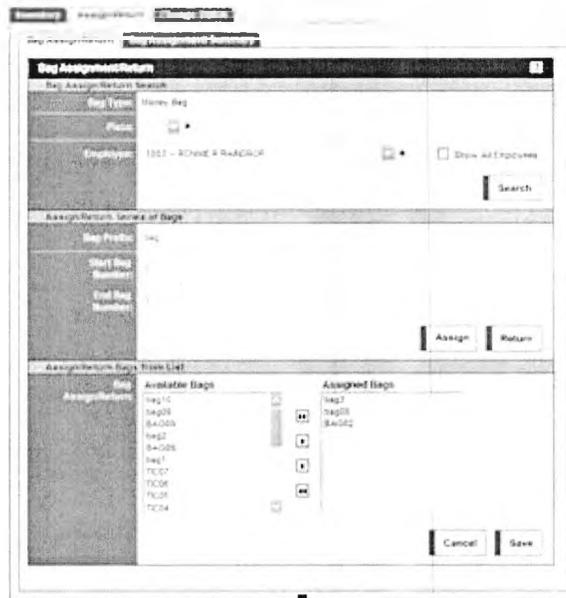
The *Assign/Return* function assigns one or more to employees that are authorized to make deposits for the selected plaza. Typically, this is a toll collector who is also an active employee. This check limits the numbers of employees listed to a manageable selection.

1. Select the Assign/Return Tab. The following screen displays:



There two tabs to work with Bag/Assign Return and Bag Assignment Summary. The Bag Assignment/Return tab allows you to assign money bags to particular employee and return money bags from a particular employee. The Bag Assignment Summary tab lists moneybags assigned to that plaza along with the name of the employees. The following steps will outline how to use each tab.

2. To assign a bag, select a plaza by using the Plaza pull down menu located at the top of the window to view its Assign or Return Status.
3. Select the name of the employee to assign or return money bags. Click Search.
4. A list of available bags displays in the Available Bags window at the bottom of the window. Click the Arrow buttons located between the Available Bags and Assigned Bags windows. Click Save after your selection.
5. To return a bag from an employee, enter in Bag Prefix ( ie. "bag" as shown by the example below), Start Bag ("3") and End Bag ("3"), and click Return. The bag will now be removed from the Assigned Bags.



### 5.2.3 Bag Assignment Summary

1. To view the bag assignment summary, select the Bag Assignment Summary tab. Select the plaza to view using the Plaza pull down tab. Click Search. A summary of the bag assignments for that particular plaza will display at the bottom window. Use the Arrows or numbers located at the middle right hand corner of the window to scroll from page to page.

Inventory Assign/Return Change Status

Bag Assign/Return Bag Assignment Summary

**Bag Assignment Summary Search** ?

Bag Assignment Summary Search Criteria

Bag Type: Money Bag

Plaza:

Search

---

**Bag Assignment Summary** page 1 of 2

ID	Name
FMT	FORT MCHENRY TUNNEL
1003	RONNE R RAINDROP
1007	ANTHONY L HAGEN
1010	MARE ANGE T BRICCHE
1013	NORTA T SIMMONS
19	test mda
26	collect toll
37	to_collo102 to_collo102
49	tester1 host
59	TRCS TOLL_COLL
62	file trcs
65	file3 trcs
66	file14 trcs
72	plaza trcs
85	collector matrix

## 5.2.4 Change Status

1. To change a bag status, select the Change Status tab. Select a plaza from the Plaza pull down menu. Select the bag status from the Bag Status pull down menu and click Search. The Revenue Bag List Inventory will display the selected bag status list.

Inventory | Assign/Return | Change Status

### Revenue Bag Change Status

Bag Inventory - Search

Bag Type: Money Bag

Plaza:

Bag Status: ASSIGNED

Search

#### Money Bag List in Inventory

Bag Number	Status	Assigned To	Value	<input type="checkbox"/> Void	<input type="checkbox"/> UnVoid
BAG02	ASSIGNED	1003 -- RONNE R RAINDROP	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
BAG03	ASSIGNED	9 -- smith susan	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
BAG10	ASSIGNED	2 -- lee robert	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
TIC08	ASSIGNED	2 -- lee robert	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
TIC09	ASSIGNED	9 -- smith susan	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
TIC10	ASSIGNED	1003 -- RONNE R RAINDROP	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
bag08	ASSIGNED	1003 -- RONNE R RAINDROP	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
bag3	ASSIGNED	1003 -- RONNE R RAINDROP	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
bag4	ASSIGNED	9 -- smith susan	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>

Inventory List:

Cancel Save

- To change the status of a revenue bag, select Unassigned from the Bag Status menu. Check all the bag numbers you want to void by clicking on the void icon located next the bag number.
- Click the Save button to save your changes. All unassigned money bags will be voided.

# 6. System Administration

---

## 6.1 Overview

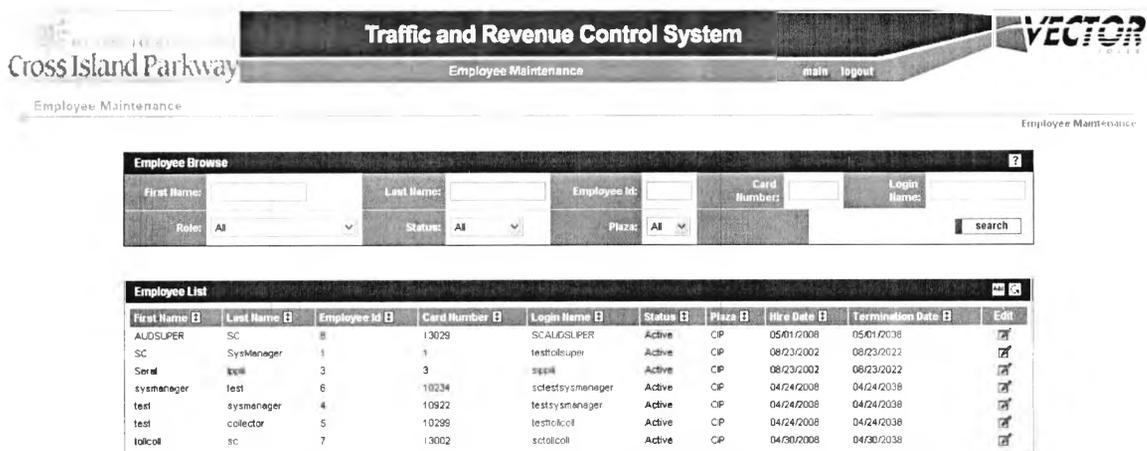
To maintain the efficiency of toll plaza processes, routine maintenance schedules are implemented to ensure all toll plaza equipment is running smoothly. The *System Administration* function is broken down into sub-functions that allow you to perform maintenance.

Administration
<b>System Administration</b> <input type="checkbox"/> Employee Maintenance Maintain employee information
<input type="checkbox"/> Plaza Maintenance Maintain plaza
<input type="checkbox"/> Lane Maintenance Maintain lanes
<input type="checkbox"/> Toll Fare Maintenance Maintain toll fares
<input type="checkbox"/> Toll Schedule Maintenance Maintain toll schedules
<input type="checkbox"/> Agency Holiday Maintenance Maintain agency holidays
<input type="checkbox"/> Password Maintenance Modify current password
<input type="checkbox"/> Role Maintenance Maintain Roles
<input type="checkbox"/> Trigger Image Manage tag YES trigger

## 6.2 Employee Maintenance

The *Employee Maintenance* subfunction allows you to view, create, and edit an employee's profile.

1. Select the Employee Maintenance subfunction. The following window displays:



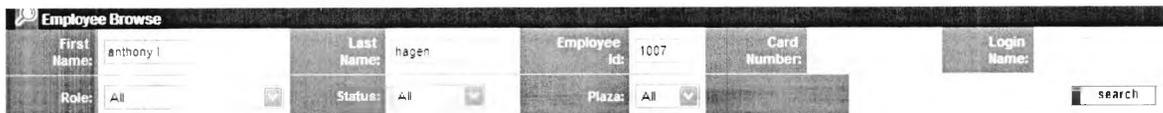
The screenshot shows the 'Employee Maintenance' window with the following components:

- Header:** Traffic and Revenue Control System, VECTOR logo, Cross Island Parkway, Employee Maintenance, main, logout.
- Employee Browse Section:**
  - Search filters: First Name, Last Name, Employee ID, Card Number, Login Name.
  - Dropdown menus: Role (All), Status (All), Plaza (All).
  - Search button.
- Employee List Section:**

First Name	Last Name	Employee ID	Card Number	Login Name	Status	Plaza	Hire Date	Termination Date	Edit
AUDSUPER	SC	8	13029	SCAUDSUPER	Active	CP	05/01/2008	05/01/2038	[Edit]
SC	Systemanager	1	1	teststolsuper	Active	CP	08/23/2002	08/23/2022	[Edit]
Serial	sppl	3	3	sppl	Active	CP	08/23/2002	08/23/2022	[Edit]
sysmanager	test	6	10234	sclestsysmanager	Active	CP	04/24/2008	04/24/2038	[Edit]
test	sysmanager	4	10922	testsysmanager	Active	CP	04/24/2008	04/24/2038	[Edit]
test	collector	5	10299	teststolcol	Active	CP	04/24/2008	04/24/2038	[Edit]
tolcol	sc	7	13002	scstolcol	Active	CP	04/30/2008	04/30/2038	[Edit]

The window is divided into two sections: Employee Browse and an Employee List.

### 6.2.1 Employee Browse



The screenshot shows the 'Employee Browse' search form with the following values:

- First Name: anthony l
- Last Name: hagen
- Employee ID: 1007
- Card Number: [Empty]
- Login Name: [Empty]
- Role: All
- Status: All
- Plaza: All
- Search button.

The Employee Browse feature allows you to search for a specific employee by using information fields.

Column Name	Column Description/Function
First Name	Employee's first name
Last Name	Employee's last name
Employee ID	Employee's ID number
Card Number	Employee's proximity card
Login Number	Employee's login number
Role	Pull down menu of roles
Status	Pull down menu of status
Plaza	Pull down of plazas

1. Enter in as many information fields as you can and then click Submit. The following window will display underneath the Employee Browse feature.



First Name	Last Name	Employee Id	Card Number	Login Name	Role	Status	Plaza	Hire Date	Termination Date	Edit	Delete
ANTHONY L	HAGEN	1007	43012	AHAGEN	TOLL_COLL	Actr.e		2006-08-24	2026-02-24		

2. To edit the employee's profile, click the Edit icon at the far right hand side of the window. The following window displays:

Employee Edit	
<b>Identification</b>	
Login Name:	AHAGEN
Employee ID:	1007
Card No:	43C12
Last Name:	HAGEN *
First Name:	ANTHONY L *
Password:	<input type="checkbox"/> Reset Password
<b>Phone and Address</b>	
Home Phone:	(xxx)xxx-xxxx
Work Phone:	(xxx)xxx-xxxx
Mobile Phone:	(xxx)xxx-xxxx
Street1:	*
Street2:	
City:	*
State:	*
Zip:	*
Country:	USA
<b>Status</b>	
Hire Date:	2006-08-24 (yyyy-MM-dd)
Termination Date:	2006-08-24 (yyyy-MM-dd)
Locations:	*
Type:	Full *
Status:	Active *
Administrator:	<input type="checkbox"/> Check if user would be an Administrator
<b>Roles</b>	
Role:	Toll Collector *
Role Start Date:	1965-01-01 (yyyy-MM-dd)
Role End Date:	1965-01-01 (yyyy-MM-dd)
Role Location:	Please select
<input type="button" value="back"/> <input type="button" value="save"/>	

3. Make the necessary changes to the employee's profile. Click Save to save the new changes.

## 6.2.2 Employee List

You can also use the Employee List to select and change an employee's profile.

First Name	Last Name	Employee Id	Card Number	Login Name	Status	Place	Hire Date	Termination Date	Edit
AUDSUPER	SC	8	13029	SCAUDSUPER	Active	CIP	05/01/2008	05/01/2038	
SC	SysManager	1	1	testtolcuper	Active	CIP	08/23/2002	08/23/2022	
Serret	lppili	3	3	sippili	Active	CIP	08/23/2002	08/23/2022	
sysmanager	test	6	10234	sctestsysmanager	Active	CIP	04/24/2008	04/24/2038	
test	sysmanager	4	10922	testsysmanager	Active	CIP	04/24/2008	04/24/2038	
test	collector	5	10299	testtolccoll	Active	CIP	04/24/2008	04/24/2038	
tolccoll	sc	7	13002	sctolccoll	Active	CIP	04/30/2008	04/30/2038	

The employee list is set up in a table. There are several ways to scroll through the list.

Icon Example	Description
	Use the up and down arrows to scroll up down the list.
	From left to right: <i>a. Box with Cross icon:</i> Creates new employee profile. <i>b. Refresh icon:</i> Refreshes screen <i>c. Green arrow icons:</i> Scrolls through list <i>d. Grey arrow icons:</i> Scrolls through list <i>e. Help:</i> Accesses TRCS help menu

1. Select an employee from the list. Click the Edit icon located at the right right hand side of the window.
2. The Employee Edit screen displays the same as in Employee Browse:
3. Make the necessary changes to the employee's profile. Click Save to save the new changes.

## 6.2.3 Create an Employee Profile

An authorized user may create a new employee profile. To create a new employee profile, perform the following steps.

1. From the Employee Maintenance window, click the  icon found at the top right hand corner of the Employee List window.
2. The following window displays:

Employee Create	
<b>Identification</b>	
Last Name:	<input type="text"/> *
First Name:	<input type="text"/> *
Employee ID:	<input type="text"/> *
Login Name:	<input type="text"/> *
Card No.:	<input type="text"/>
<b>Phone and Address</b>	
Home Phone:	<input type="text"/> (00)00-000
Work Phone:	<input type="text"/> (00)00-000
Mobile Phone:	<input type="text"/> (00)00-000
Street:	<input type="text"/> *
Street2:	<input type="text"/>
City:	<input type="text"/> *
State:	<input type="text"/> *
Zip:	<input type="text"/> *
Country:	Please select
<b>Status</b>	
Hire Date:	<input type="text"/> (??)-MM-00
Termination Date:	<input type="text"/> (??)-MM-00
Location:	Please select *
Type:	Please select *
Status:	Please select *
Administrator:	<input type="checkbox"/> Check if user would be an Administrator
<b>Roles</b>	
Role:	Please select
Role Start Date:	<input type="text"/> (??)-MM-00
Role End Date:	<input type="text"/> (??)-MM-00
Role Location:	Please select
<input type="button" value="Back"/> <input type="button" value="Save"/>	

4. Add the following information to employee's profile. Click Save to save the new changes.



<b>Column Name</b>	<b>Column Description/Function</b>
Login Name	Employee login name
Employee ID	Employee ID
Card No.	Employee proximity ID
Last Name	Employee last name
First Name	Employee first name
Password	Check box
Home Phone	Employee home phone
Work Phone	Employee work phone
Mobile Phone	Employee mobile phone
Street 1	Employee address
Street 2	Employee address
City	Employee city
State	Employee state
Zip	Employee zip code
Country	Employee country pull down menu
Hire Date	Employee hire date pull down menu
Termination Date	Employee termination date pull down menu
Location	Employee location pull down menu
Type	Employee type pull down menu
Status	Employee status pull down menu

Column Name	Column Description/Function
Administrator	Check box
Roles	Employee role pull down menu
Role Start Date	Employee role start date pull down menu
Role End Date	Employee role end date pull down menu
Role Location	Employee role location pull down menu

### 6.3 Plaza Maintenance

The *Plaza Maintenance* subfunction allows you to create/and or edit the plaza name, open date, default plan, revenue, and time.

1. From the TRCS main menu, select the *Plaza Maintenance* subfunction. A list of plazas displays in the window. To see more detailed information about each plaza, click Plaza ID located on the left hand side of the window. To edit or add a new plaza, follow these steps.

Plaza List							Add	Refresh	Help
Agency	Plaza	Name	Open Date	Default Plan	Revenue Time	Edit			
SC	CIP	Cross Island Parkway	01/16/1998	STANDARD	23:00:00				
SC	RMP	Cross Island Parkway	01/16/1998	STANDARD	23:00:00				

Column Name	Column Description/Function
Agency	Agency name
Plaza	Plaza acronym
Name	Plaza name
Open Date	Plaza Commissioning Date
Default Plan	Default Plan
Revenue Time	Time at which the revenue day starts

### 6.3.1 To Edit A Plaza

2. Select a plaza from the list and click the Edit icon  . The following screen displays:



3. Edit the fields for Name, Open Date, Default Plan, and Revenue Time. Click *Save* when finished.

### 6.3.2 To Create a New Plaza

4. To create a new plaza entry, select the Create New Item icon  located in the top right hand corner of the plaza list.

Plaza List						
Agency	Plaza	Name	Open Date	Default Plan	Revenue Time	Edit
SC	CIP	Cross Island Parkway	01/16/1998	STANDARD	23:00:00	
SC	RMP	Cross Island Parkway	01/16/1998	STANDARD	23:00:00	

5. The following window displays:



The 'Plaza Create' window contains the following fields:

- Plaza: \*
- Name: \*
- Agency: SC
- Open Date: (MM/DD/YYYY)
- Default Plan: STANDARD
- Revenue Time: 14:00:36 \*

Buttons: Cancel, Save

6. Enter the name for the new acronym and name for the plaza, open date, default plan, and revenue time. Click **Save**.

## 6.4 Lane Maintenance

The *Lane Maintenance* subfunction allows you change the status of a lane from open to closed/closed to open. For the purpose of the Lane Maintenance subfunction, *open lane* refers to an *active lane*, and *close lane* to an *inactive lane*.

1. From the TRCS main menu, select the *Lane Maintenance* subfunction. The following window displays.

**Lane Browse**

Plaza:

**Lane List**

Plaza	Lane	Direction	Lane Status	Edit
CP	001	N	OPEN	<input type="checkbox"/>
RMP	001	N	OPEN	<input type="checkbox"/>
CP	002	N	OPEN	<input type="checkbox"/>
RMP	002	S	OPEN	<input type="checkbox"/>
CP	003	N	OPEN	<input type="checkbox"/>
CP	004	S	OPEN	<input type="checkbox"/>
CP	005	N	OPEN	<input type="checkbox"/>
CP	006	S	OPEN	<input type="checkbox"/>
CP	007	N	OPEN	<input type="checkbox"/>
CP	008	S	OPEN	<input type="checkbox"/>
CP	009	N	OPEN	<input type="checkbox"/>
CP	010	S	OPEN	<input type="checkbox"/>
CP	011	S	OPEN	<input type="checkbox"/>
CP	012	S	OPEN	<input type="checkbox"/>

Column Name	Column Description/Function
Plaza	Plaza acronym
Lane	Lane number
Direction	Lane direction
Lane Status	Lane open/closed
Edit	Edits lane entry

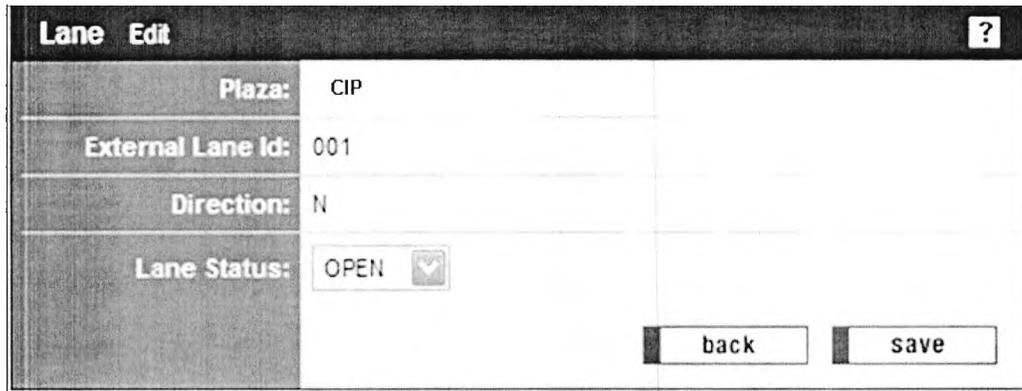
The window is divided into two sections:

- *Lane Browse*: The pull down menu allows you to search for a specific lane or display all lanes at all plazas.
- *Lane List*: Displays the number of lanes at a plaza, lane number, direction, and lane status.

2. To display lanes at a particular plaza, select a plaza from the pull down menu. Click **Search**. The screen above displays with a list of lanes for the selected plaza:

### 6.4.1 To Edit a Lane

3. Select a lane from the list and click the Edit icon .
4. The following screen displays:



The screenshot shows a window titled "Lane Edit" with a question mark icon in the top right corner. The form contains the following fields:

Plaza:	CIP
External Lane Id:	001
Direction:	N
Lane Status:	OPEN 

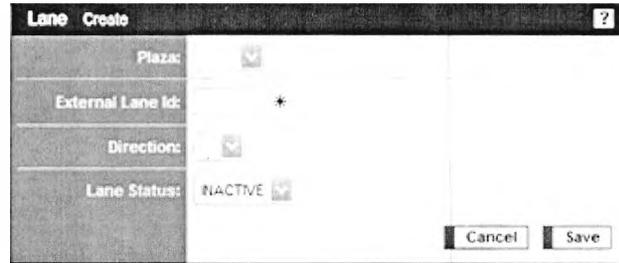
At the bottom right of the form, there are two buttons: "back" and "save".

5. Select a lane status from Lane Status pull down menu. Click *Save* when completed. The following message displays:

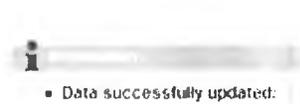


### 6.4.2 To Create a Lane

6. To create a new lane entry, select the Create New Item icon  located in the top right hand corner of the lane list.
7. The following window displays:



8. Select a plaza from the Plaza pull down menu and then give the plaza an external lane ID. Select a direction and Lane Status from the pull down menus and then click *Save*. The following message displays:



## 6.5 Toll Fare Maintenance

The *Toll Fare Maintenance* subfunction allows you to view and set toll fees by facility, lane direction, axle count, vehicle class, day, and time. It also provides you the ability to have multiple fee rate schedules for the same facility.

1. From the TRCS main menu, select the *Toll Fare Maintenance* subfunction. The following window displays.

Toll Fare Maintenance

Master Toll Fare Information

**Toll Rates Search**

Exit Plaza: All | Vehicle Class: All | Revenue Type: All | Plan Type: STANDARD  
 Full Fare: | Discount Fare: | Effective Date: (mm/dd/yyyy) | Start Time: (hh:mm:ss)

search

**Toll Rates List**

Exit Plaza	Vehicle	Toll Type			Fare			Schedule			Delete
		Revenue	Plan	Full	Discount	Axle	Effective	Expires	Day	Start	
No Rates available...											

Edit

The screen is divided into two windows:

- *Toll Rates Search*: Allows you to search toll rates by specific parameters.
- *Toll Rates List*: Displays the lists of toll rates and types of revenue types from the plazas.

### 6.5.1 Toll Rates Search

The *Toll Rates Search* feature allows you to search for a specific employee by using information fields.

**Toll Rates Search**

Agency: SC | Vehicle Class: All | Full Fare: | Effective Date: (mm/dd/yyyy)  
 Entry Plaza: All | Revenue Type: All | Discount Fare: | Start Time:  
 Exit Plaza: All | Plan Type: All

search

Column Name	Column Description/Function
Entry Plaza	Pull down list of plazas
Exit Plaza	Pull down list of plazas
Vehicle Class	Pull list of vehicle classes
Revenue Type	Pull down list of revenue types
Plan Type	Pull down list of plan types
Discount Fare	Discount Fare
Full Fare	Full Fare
Effective Date	Effective date of fare
Start Date	Start date of fare

1. Enter in as many information fields as you can and then click **Submit**.
2. The following window will display underneath the Toll Rates Search feature.



- Adjust
- Schedule (pull down menu)

The listing will now appear alphabetically in the Toll Rates List.

## 6.6 Toll Schedule Maintenance

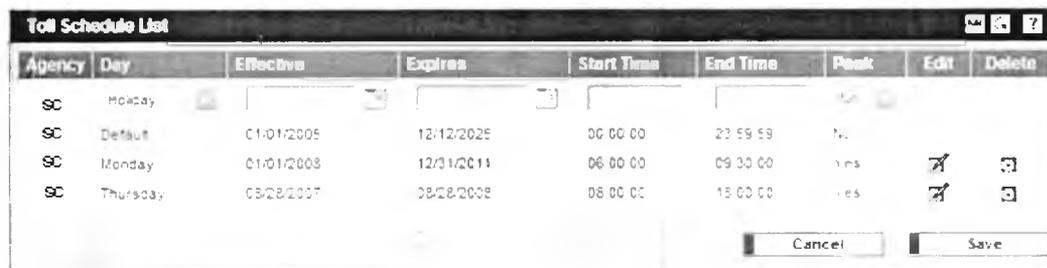
The *Toll Schedule Maintenance* subfunction allows you edit and add entries to the toll schedule.

1. From the TRCS main menu, select the *Toll Schedule Maintenance* subfunction. The following window displays.



### 6.6.1 To Create a New Toll Schedule

1. To create a new toll schedule, click the Create New Item icon . The following window displays:



2. Enter the new toll schedule information in the following fields; Effective, Expires, Day, Start Time, End Time, and Peak.

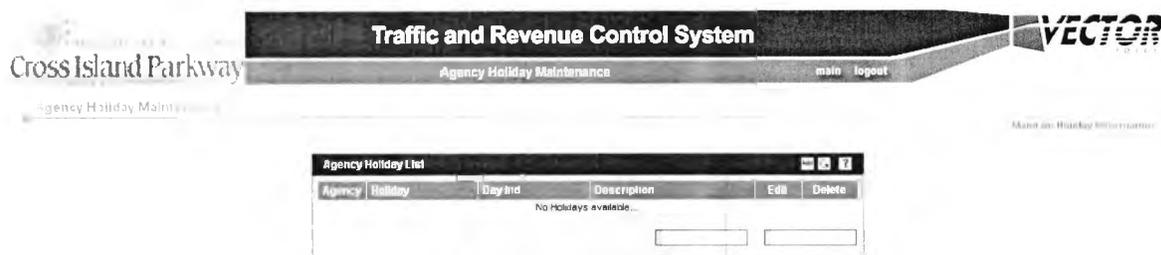
Column Name	Column Description/Function
Effective	Effective date of new schedule
Expires	Expiration date of new schedule
Day	Pull down menu
Start Time	Start time for schedule
End Time	End time for schedule
Peak	Pull down menu

3. Click Save when done.
4. If additional changes need to be made, click the *Edit* icon  . If you want to delete an entry, click the *Delete* icon  .

## 6.7 Agency Holiday Maintenance

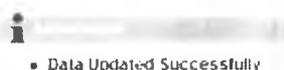
The *Agency Holiday Maintenance* subfunction allows you to add and edit holidays

1. From the TRCS main menu, select the *Agency Holiday Maintenance* subfunction. The following window displays.



## 6.7.1 To Edit an Agency Holiday

- To edit an agency holiday, click the **Edit** icon . The Agency Holiday List window displays with a list of current holidays:
- Select a different date for the Holiday field and provide a description in the Description field. Click **Save**. The following message displays in the window along with the new changes.

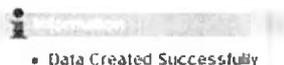


## 6.7.2 To Create an Agency Holiday

- To create a new agency holiday, click the Create New Item icon . The Agency Holiday List window displays:

Agency Holiday List					
Agency	Holiday	Day Ind	Description	Edit	Delete
SC	10/30/2007 	H	All Hallows Eve		
SC	08/17/2007	H	New year eve		
SC	04/11/4222	H	T1		
SC	08/10/2007	H	State holiday		
SC	12/25/2007	X	Christmas Day's		

- Select a date for the Holiday field and provide a description in the Description field. Click **Save**. The following message displays with the new changes.



## 6.8 Password Maintenance

For security purposes, you will occasionally need to reset your password according to the timeframes set by your agency. You can do this by selecting the **Change Password** function. The following screen displays.



**Change Password** ?

Old Password:

New Password:

Re-Type New Password:

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1. To change your password, enter in your old password and then new password. Enter in your new password again for confirmation. Click **Save**. The following window displays to confirm that your changes have been made.

 **INFORMATION**

■ **Password Successfully updated:**

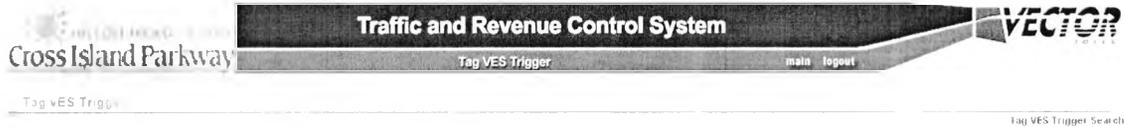
*Notes:*

- Password must be a minimum of 8 characters and consist of mixed alphabetic and numeric characters.
- Password must not consist of all numbers, alphabetic or special characters.
- Password must not contain more than 2 consecutive identical characters.
- Password needs to be changed every 90 days for regular users and every 45days for network and database administrators.

## 6.9 Trigger Image

The *Trigger Image* subfunction allows you to create a VES Trigger for a particular tag and search/edit tags for which the VES trigger is active.

1. From the TRCS main menu, select the *Trigger Image* subfunction. The following window displays:



Tag VES Trigger Search	
Status:	ALL <input type="button" value="v"/>
OR:	
Device No:	<input type="text"/>
<input type="button" value="Search"/>	

Column Name	Column Description/Function
Device No.	Device number
Start Date	Day device is activated.
End Date	Day device is deactivated.
Status	Active or inactive

2. Enter in either the device number or status. Click *Search*. The following window displays:



The image shows two screenshots from a software application. The top screenshot is titled "Tag VES Trigger Search" and contains a search form with the following fields:

- Status: ACTIVE (dropdown menu)
- OR:
- Device No:

There are two "Search" buttons. The bottom screenshot is titled "Tag VES Triggers List" and displays a table of device triggers:

Device No	Start Dt	End Dt	Status	Edit	Delete
01603351053	2006-01-30	2008-01-31	ACTIVE		
01603351052	2005-01-01	2010-12-31	ACTIVE		
01603351009	2005-11-30	2008-11-11	ACTIVE		
01603351010	2005-11-30	2008-11-11	ACTIVE		
01603351011	2005-11-30	2008-11-11	ACTIVE		

3. A list of devices displays in the Tag VES Triggers List. You can either edit current device information or add a new device.

### 6.9.1 To Edit a Device

4. To edit a device, click the Edit icon . The following window displays:



The image shows a screenshot of the "Tag VES Trigger Edit" window. It contains the following fields:

- Device No: 01603351053
- Start Dt: 2006-01-30 (calendar icon) (yyyy-MM-dd) \*
- End Dt: 2008-01-31 (calendar icon) (yyyy-MM-dd) \*

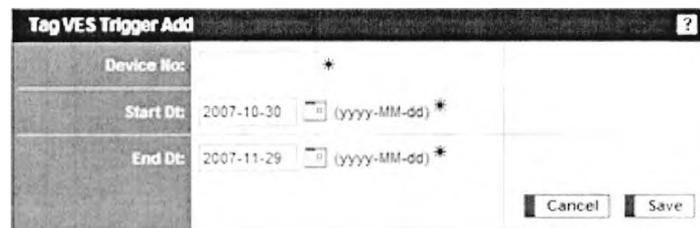
At the bottom right, there are "Cancel" and "Save" buttons.

5. Change the Start and End Dates for the device. Click **Save**. The following message displays to indicate the new changes.



## 6.9.2 To Create a Device

6. To create a new device entry, click the Create New Item icon . The following window displays:



Tag VES Trigger Add	
Device No:	*
Start Dt:	2007-10-30 (yyyy-MM-dd) *
End Dt:	2007-11-29 (yyyy-MM-dd) *
<input type="button" value="Cancel"/> <input type="button" value="Save"/>	

7. Enter in the new device number and set the parameters for the Start and End Dates. When entering a new device, the first three numbers must match an existing plaza or an error message will display. Click **Save**.

## 7. Using Windows Applications

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### 7.1 Using a Mouse

A mouse is a device connected to the computer and used to 'point and click' at objects on the computer screen or windows within the screen.

1. Place your hand over the mouse with your index finger on the left button. (For left-handed users, please contact your System Administrator to reconfigure your mouse.)
2. Move the mouse over the mouse pad to move the cursor on the screen.
3. Place the cursor over buttons on the screen to perform a function, for example:

**OK** or **CANCEL**

Or

Radio buttons

Or

The arrow on a drop-down menu

4. Press the left button down and release. This is called a **Click**.
5. When instructed to **Double-click**, quickly press the left button down twice.

## 7.2 Menus and Toolbars

The menus and toolbars display on the screen. Use the mouse to click a button or main menu name and to access Help directly from this screen.

1. Click the main topic to be accessed. A drop-down menu may display depending on what part of the application you are in.
2. Click the process to access the correct window.
3. Select a function, such as **Trends** in the Plaza Monitor function.
4. Click to open the window corresponding to the function to be used.

### Plaza Monitor

Current Transactions and Messages  
View current Transactions and Messages

Transaction History  
View upto 300 Transaction History messages

Message History  
View upto 300 history messages

Trends   
View Traffic Trends

Lane Commands  
Send Lane Commands

Toll Audit  
View Toll Collector Audits

### Reports

Reports  
View Reports

### System Administration

Password Maintenance  
Modify Current Password

## 7.3 Scroll Bars

Scroll bars are used in the following places:

- List Drop Boxes
- Data Windows
- On-Line Training
- On-Line Help

### 7.3.1 Working with the Scroll Bars

When a list contains more text or selections than can display at once, a scroll bar displays on the right side of the screen. Use one of the following methods to use a scroll bar:

- Click the arrow up and arrow down to scroll up and down.

Or

- Click the button between the arrow up and the arrow down — holding down the left mouse button — and slide the button up or down to view additional information.

Example:

1. Click the arrow down on the right of the window to scroll down to see the information listed in the windows. For example, you can view specific transactions by highlighting an entry in the North and South Bound Lanes windows. Left click to highlight an entry and use the scroll bar on the right hand side to view the information in the panels below as shown by the following example.

North Bound Lanes										South Bound Lanes											
Lane	Dir	Mode	Status	Collector	Axles			Revenue Type	Amount	Lane Hours	Lane	Dir	Mode	Status	Collector	Axles			Revenue Type	Amount	Lane Hours
					AVC	Colt	Tag								AVC	Colt	Tag				
001	N	ETC_MANUAL	OPEN	41068	0	0	2	ETC	\$0.00		013	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
002	N	ETC	CLOSED		0	0	0	CASH	\$0.00		014	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
003	N	ETC	CLOSED		0	0	0	CASH	\$0.00		015	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
004	N	ETC	CLOSED		0	0	0	CASH	\$0.00		016	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
005	N	ETC	CLOSED		0	0	0	CASH	\$0.00		017	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
006	N	ETC	CLOSED		0	0	0	CASH	\$0.00		018	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
007	N	ETC	CLOSED		0	0	0	CASH	\$0.00		019	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
008	N	ETC	CLOSED		0	0	0	CASH	\$0.00		020	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
009	N	ETC	CLOSED		0	0	0	CASH	\$0.00		021	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
010	N	ETC	CLOSED		0	0	0	CASH	\$0.00		022	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
011	N	ETC	CLOSED		0	0	0	CASH	\$0.00		023	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
012	N	ETC	CLOSED		0	0	0	CASH	\$0.00		024	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
Vehicles This Direction This Hour: 0    Last Hour: 0										Vehicles This Direction This Hour: 0    Last Hour: 0											

Transactions & Messages												
Toll Transactions												
Lane	Trax #	Date/Time	Collector	Axles			Revenue Type	Amount	Transponder	Tag Status	Info	KeyStroke
				AVC	Collector	Tag	Actual					
001	151	2007-07-02 14:59:31.930	41068	0	0	2	2	ETC	\$0.00	0160002441	0000	
001	150	2007-07-02 14:58:20.970	41068	0	0	0	0	CASH	\$0.00			M    Last Lane
001	147	2007-07-02 14:50:37.400	41068	0	0	0	0	CASH	\$0.00			TOE, LANE
001	146	2007-07-02 14:50:42.570	41068	0	0	0	0	TOLL EVADNR	\$0.00			K
001	145	2007-07-02 14:50:47.440	41068	0	0	0	0	NO CLASS	\$0.00			V
001	141	2007-07-02 14:50:39.470	41068	0	0	0	0	ETC	\$0.00	0160002441	0000	
001	144	2007-07-02 14:46:38.870	41068	2	0	0	2	TOLL EVADNR	\$0.00			V    Last Lane
001	141	2007-07-02 14:40:42.200	41068	0	0	0	0	CASH	\$0.00			T    Last Lane
Lane 001 Vehicle Counts - This Hour: 0    Last Hour: 0    Since Lane Open: 0    Axle Counts - Collector This Hour: 0    Collector Last Hour: 0    AVC This Hour: 0    AVC Last Hour: 0												
Lane Messages												
Lane	Date/Time	Message										
001	2007-07-02 14:51:58.260	Collector ID 41068: logged on to the lane										
001	2007-07-02 14:51:45.330	Collector ID 41068: attempting to login										

## 7.4 Tab Folders

When each process opens, a set of tab folders displays in the middle window of the screen. The tabs give quick accessibility to each sub-function.



When the system opens a sub-function, it defaults to the first tab folder, displaying the folder information.

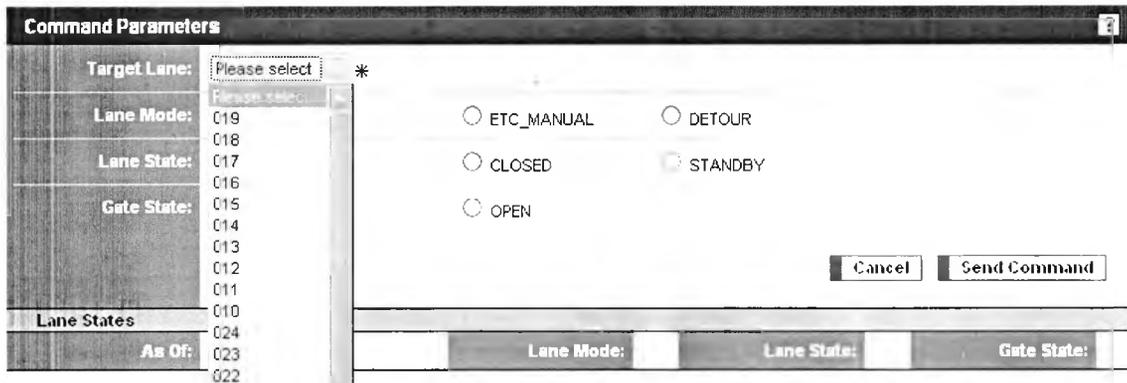
1. Click the new tab folder title at the top of the folder. For this example, the Transactions & Messages tab is opened and displays the following information.

Lane	Trans #	Date/Time	Collector	Axles				Revenue Type	Amount	Transponder	Tag Status	Info	KeyStrokes
				AVC	Collector	Tag	Actual						
001	151	2007-07-02 14:59:31.920	41068	0	0	2	2	ETC	90.00	0160002441	0000		
001	150	2007-07-02 14:58:20.710	41068	0	1	0	1	CASH	15.00			M	Car/Class
001	147	2007-07-02 14:53:33.400	41068	0	2	0	2	CASH	33.00				Toll/Class
001	149	2007-07-02 14:53:32.570	41068	0	0	0	0	TOLL LVADLR	90.00			L	
001	146	2007-07-02 14:53:07.480	41068	0	0	0	0	NO CLASS	86.00			V	
001	143	2007-07-02 14:50:41.470	41068	0	0	2	2	ETC	90.00	0160002436	0000		
001	142	2007-07-02 14:50:40.370	41068	0	0	0	0	TOLL LVADLR	86.00			V	Toll/Class
001	141	2007-07-02 14:48:42.250	41068	0	2	0	2	CASH	33.00			T	Car/Class

## 7.5 List Drop Box Selections

List Drop Boxes are menu fields that contain an arrow button at the right. This option is used to view values and select the one that best applies.

1. Click the arrow down on the right of the List Drop Box. A list of entries drops down from the field.
2. Click a selection to highlight it. The List Drop Box closes, displaying the selection in the field.





## 7.6 Data Windows

On many tab folders, there is a data window that displays data entered into the system.

- If there are more selections than those displayed in the data window, there is a scroll bar on the right side. To view additional information, use the scroll bar.

North Bound Lanes											South Bound Lanes										
Lane	Dir	Mode	State	Collector	Axles			Revenue Type	Amount	Lane Health	Lane	Dir	Mode	State	Collector	Axles			Revenue Type	Amount	Lane Health
					AVC	COB	Tag								AVC	COB	Tag				
901	S	ETC_MANUAL	OPEN	41968	0	0	2	ETC	\$0.00		913	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
902	N	ETC	CLOSED		0	0	0	CASH	\$0.00		914	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
903	N	ETC	CLOSED		0	0	0	CASH	\$0.00		915	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
904	N	ETC	CLOSED		0	0	0	CASH	\$0.00		916	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
905	N	ETC	CLOSED		0	0	0	CASH	\$0.00		917	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
906	N	ETC	CLOSED		0	0	0	CASH	\$0.00		918	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
907	N	ETC	CLOSED		0	0	0	CASH	\$0.00		919	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
908	N	ETC	CLOSED		0	0	0	CASH	\$0.00		920	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
909	N	ETC	CLOSED		0	0	0	CASH	\$0.00		921	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
910	N	ETC	CLOSED		0	0	0	CASH	\$0.00		922	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
911	N	ETC	CLOSED		0	0	0	CASH	\$0.00		923	S	ETC	CLOSED		0	0	0	CASH	\$0.00	
912	N	ETC	CLOSED		0	0	0	CASH	\$0.00		924	S	ETC	CLOSED		0	0	0	CASH	\$0.00	

Vehicles This Direction This Hour: 0      Last Hour: 0      Vehicles This Direction This Hour: 0      Last Hour: 0

---

**Transactions & Messages**    Transaction History    Message History    Traffic Fines    Lane Commands    Toll Collector Audit

**Toll Transactions**

Lane	Trans #	Date/Time	Collector	Axles			Revenue Type	Amount	Transponder	Tag Status	Info	KeyStroke
				AVC	Collector	Tag	Actual					
001	151	2007-07-02 14:58:31.900	41968	0	0	2	2	ETC	\$0.00	5160582441	GOOD	
001	150	2007-07-02 14:58:20.310	41968	0	2	0	2	CASH	\$0.00			M    LastClass1
001	147	2007-07-02 14:53:32.400	41968	0	2	0	2	CASH	\$0.00			Toll: 908
001	156	2007-07-02 14:53:02.570	41968	0	0	0	0	TOLL EVADER	\$0.00			L
001	155	2007-07-02 14:53:02.460	41968	2	0	0	2	NO CLASS	\$0.00			V
001	143	2007-07-02 14:50:41.615	41968	0	0	2	2	ETC	\$0.00	5160582438	GOOD	
001	152	2007-07-02 14:50:38.870	41968	2	0	0	2	TOLL EVADER	\$0.00			V    LastClass1
001	141	2007-07-02 14:49:42.250	41968	0	2	0	2	CASH	\$0.00			L

Lane 001 Vehicle Counts    This Hour: 0    Last Hour: 0    Since Lane Open: 0    Axle Counts    Collector This Hour: 0    Collector Last Hour: 0    AVC This Hour: 0    AVC Last Hour: 0

---

**Lane Messages**

Lane	Date/Time	Messages
001	2007-07-02 14:51:16.260	Collector ID: 41968, logged on to the lane
001	2007-07-02 14:37:43.160	Collector ID: 41968, in attendance & logged

## 7.7 Buttons & Hotkeys

The application has the following button types:

- Toolbar
- Command
- Radio

### 7.7.1 Toolbar

Toolbar buttons are used to bring up an application window.

1. Place the cursor on the toolbar button. A small balloon pop-up displays describing the function of the button.
2. Click the button to open the corresponding window.

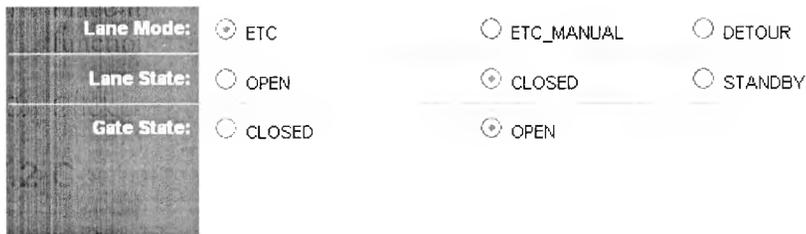
### 7.7.2 Command Buttons

Command buttons, which usually display at the bottom of a window, are used to save, cancel, or delete information entered in the window.

1. Click the command button to carry out a save, cancel, or delete function in a window.
2. Normally a  or  pop-up displays, requiring the user to click **OK** or **CANCEL**.

### 7.7.3 Radio Buttons

Radio buttons enable a selection within the application.



1. A radio button displays as .
2. Click the radio button. A green dot  displays in the center of the button and the function is triggered.

### 7.7.4 Using Hotkeys

Hotkeys are for users who prefer using a keyboard instead of a mouse. The hotkeys, which use the keyboard, can be used instead of buttons or drop-down menus.

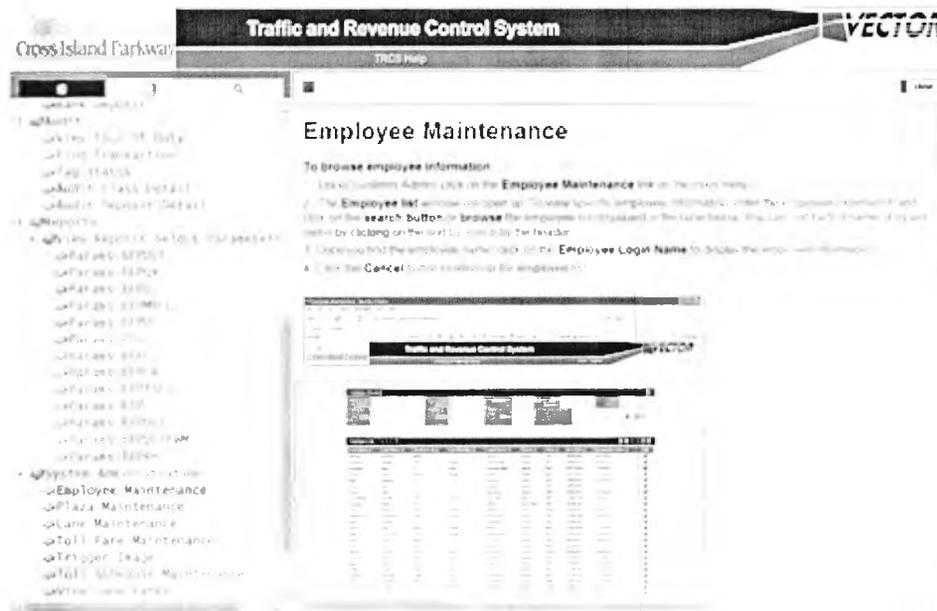
1. On the Main Toolbar, each main menu title has a letter underlined, for example File.
2. Press <Alt> F. The File menu drops down.
  - Use arrow up or arrow down to move to and highlight the selection.

Or

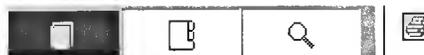
  - Press <Alt> and the underlined letter of the menu item selection.
3. Press **ENTER**. The selected window displays.

## 8. Using On-Line Help

If you need additional help during your use of the application, click . This icon is found in the upper right hand corner of each information window. For example if you have additional questions about how to use the Plaza Monitor sub-functions, the following would display:



In the left panel, you will see a toolbar and listing of functionality within the Traffic Revenue Control System.



The toolbar allows you to view a listing of functions, functionality index, filter for specific functionality, and print the desired help directions.