SCDOT

South Carolina
Department of Transportation
Cross Island Parkway
Palmetto Pass

(Toll Collection System Integration Work Package 1)

TRCS Demonstration Test Scripts

Rev 1.1

May 2008

A   C   S

ACS
Transportation Solutions Systems, 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.

Version Date	Changes Highlighted	Version #
May 2008	N/A	1.0
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Document Ownership

Owner	Germantown Quality Assurance
Author	Germantown Quality Assurance

Important: This document has been through a formal review process. To the best of our knowledge it is accurate. ACS reserves the right to make further modifications as necessary.

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F-001 System Security

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STEP	SPECIFIC TEST INSTRUCTION
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STEP	SPECIFIC TEST INSTRUCTION
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101.	SCDOT STRONG PASSWORDS validation
102.	SCDOT STRONG PASSWORDS validation
103.	SCDOT Strong Passwords validation
104.	Terminate System Manager user

STEP	SPECIFIC TEST INSTRUCTION
105.	Terminate System Manager user (cont.)
106.	Terminate System Manager user (cont.)
107.	Terminate System Manager user
108.	Terminate System Manager user (cont.)
109.	Logon to the TRCS application
110.	Create Toll Collector (Toll Collector #4 – Terminated)
111.	Terminate Toll Collector user
112.	Create Financial Department Clerk
113.	Create Financial Department Clerk II
114.	Create Ramp Toll Revenue Clerk
115.	Validate the Employee Identification Report
116.	Logout of the TRCS application

F-002 Tag Status Download

STEP	SPECIFIC TEST INSTRUCTION (S)
1.	Data Setup
2.	Trigger VES on a tag
3.	Logon to the TRCS application
4.	Trigger Image
5.	Convert Tag Status File to Lane format.
6.	Download Tag Status file from the Plaza/Host to the Lane.
7.	Validate Tag Status file downloaded to the Lane.
8.	Logon to the CIP plaza/host application
9.	Verify Tag Status file download.
10.	Verify Tag Search Low Balance Tag #
11.	Verify Tag Search Valid Tag #
12.	Verify Tag Search Negative Balance Tag #
13.	Verify Tag Search Lost/Stolen Tag #
14.	Verify Tag Search Stolen Tag #
15.	Verify Tag Search Valid Tag #
16.	The supervisor places the lane into ETC Dedicated open state.
17.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph.
18.	Drive a Class 2 vehicle with a Low balance valid status transponder through the lane at 10 mph.
19.	Drive a Class 2 vehicle with a Lost/Stolen status transponder through the lane at 10 mph.

STEP	SPECIFIC TEST INSTRUCTION (S)
20.	Drive a Class 2 vehicle with a Negative Balance status transponder through the lane at 10 mph.
21.	Verify Trigger VES
22.	Using the plaza remote command, the supervisor places the lane into standby mode.
23.	The supervisor places the lane in ETC closed state.
24.	Logout

F-003 Employee File Download

STEP	SPECIFIC TEST INSTRUCTION(S)
1.	Data Setup CIP
2.	Data Setup (con't)
3.	Data Setup (con't)
4.	Create Employee File
5.	Validate zip file content
6.	Start the TRCS application.
7.	Logon to the CIP TRCS application
8.	Download Employee File from a Plaza/Host lane.
9.	Verify Employee File Transfer from Plaza/Host to Lane.
10.	Verify Employee File Transfer from Plaza/Host to Lane Toll Collector (CIP)Card No.
11.	Logoff
12.	Logon Toll Collector
13.	Logon Shift Supervisor
14.	Logoff
15.	Log onto the Toll Money Room Clerk (CIP)
16.	Logs onto the Toll System Manager (Terminated)
17.	The collector presses the "Open Lane" button on the touch screen.
18.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph.
19.	The collector will press the "Lane State" button.
20.	The collector presses the "Stand By" button on the touch screen.
21.	The collector will press the "Lane State" button.
22.	Prepare to Logoff
23.	Logout

F-004 Dedicated ETC Collection

STEP	SPECIFIC TEST INSTRUCTION (S)
1.	Start TRCS application
2.	Logon to the TRCS application (Shift Supervisor #1)
3.	Current Transaction and Messages
4.	The supervisor places the lane into ETC Dedicated open state.
5.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph.
6.	Drive a Class 3 vehicle with valid status transponder through the lane at 10 mph.
7.	Drive a Class 2 vehicle with a low balance status transponder through the lane at 10 mph.
8.	Drive a Class 3 vehicle with a Low balance status transponder through the lane at 10 mph.
9.	Drive a Class 2 vehicle with a Lost/Stolen status transponder through the lane at 10 mph.
10.	Drive a Class 3 vehicle with a Lost/Stolen status transponder through the lane at 10 mph.
11.	Drive a Class 2 vehicle with a Negative Balance status transponder through the lane at 10 mph.
12.	Drive a Class 2 vehicle with a Closed status transponder through the lane at 10 mph.
13.	Drive a Class 2 vehicle without a transponder through the lane at 10 mph.
14.	Class Mismatch
15.	Drive a 2 axle Class 2 vehicle into the lane at 10 MPH. Vehicle will be equipped with a valid Class 3 tag.
16.	Drive a 2 axle Class 2 vehicle into the lane at 10 MPH. Vehicle will be equipped with a Lost/Stolen Class 3 tag.
17.	The supervisor places the lane into standby mode.
18.	The supervisor places the lane in ETC closed state.
19.	Class 2 Vehicle with a valid tag performed at 10 mph
20.	Logout of the TRCS application.
21.	Current Transaction and Messages
22.	The Shift Supervisor runs the HOST-0001A (Collector Tour Of Duty) Report
23.	The supervisor runs the Host – 0016 – Detail Transaction Report (DTR).
24.	Verify Transaction Logger
25.	The Shift Supervisor runs the Host – 0032B (ETC Posting – Integrity Report) report. .
26.	Logout

F-005 Mixed Mode Collection

STEP	SPECIFIC TEST INSTRUCTION (S)
1.	Start CIP TRCS application
2.	Logon to the TRCS application
3.	Create Money Bag Inventory
4.	Assign Money Bag
5.	Assign Money Bag Toll Collector #1
6.	Assign Money Bag Toll Collector #2
7.	Validate Assigned Money Bags
8.	Access Plaza Monitoring Screen
9.	Shift Supervisor assigned Toll Collector # 1 to lane
10.	The collector logs onto the Toll
11.	The collector presses the "Open Lane" button on the touch screen.
12.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph.
13.	Drive a Class 3 vehicle with valid status transponder through the lane at 10 mph.
14.	Drive a Class 2 vehicle with Low Balance status transponder through the lane at 10 mph.
15.	Drive a Class 2 vehicle with a Lost/Stolen status transponder through the lane at 10 mph.
16.	Drive a Class 2 vehicle with a Negative Balance status transponder into the lane stopping at the booth.
17.	Drive a Class 2 vehicle without a tag into the lane stopping at the booth.
18.	Drive a Class 3 vehicle without a tag into the lane stopping at the booth.
19.	Drive a Class 2 vehicle without a tag into the lane stopping at the booth.
20.	Drive a Class 2 vehicle without a tag into the lane stopping at the booth.
21.	Turn Around Pass: Issue
22.	Class mismatch
23.	Drive a Class 2 vehicle into the lane without stopping at the booth at 10 MPH.
24.	Turn Around Pass: Accept
25.	Stand By
26.	Lane State
27.	Logoff
28.	Change Shift
29.	The collector logs onto the Toll
30.	The collector opens lane.
31.	No Class Late Queue
32.	Process the previous vehicle by pressing "2 axle" then "Cash" buttons.

STEP	SPECIFIC TEST INSTRUCTION (S)
33.	Drive a Class 2 vehicle without a tag into the lane stopping at the booth.
34.	Drive a 2 axle Class 2 vehicle thru the lane at 5 MPH.
35.	Class mismatch
36.	Drive a Class 2 vehicle with a low balance status transponder through the lane at 10 mph.
37.	Stand By
38.	Lane State
39.	Logoff
40.	Verify Transaction Logger
41.	The supervisor runs the Host – 0013B (Integrity Report) report.
42.	The supervisor runs the Host – 0016 – Detail Transaction Report (DTR).
43.	The supervisor runs the Host – 0026 – Revenue bag Assignment Report.
44.	Logout

F-006 ACM ETC Ramp Collection

STEP	SPECIFIC TEST INSTRUCTION (S)
1.	Start TRCS Application
2.	Logon to the TRCS application – Shift Supervisor #1
3.	Current Transaction and Messages
4.	The supervisor places the lane into ACM open state.
5.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph.
6.	Drive a Class 3 vehicle with valid status transponder through the lane at 10 mph.
7.	Drive a Class 2 vehicle with a Lost/Stolen status transponder through the lane at 10 mph.
8.	Drive a Class 3 vehicle with a Lost/Stolen status transponder through the lane at 10 mph.
9.	Drive a Class 2 vehicle with a Negative Balance status transponder through the lane at 10 mph.
10.	Drive a Class 2 vehicle without a transponder through the lane at 10 mph.
11.	Drive a Class 3 vehicle without a transponder through the lane at 10 mph.
12.	Drive a Class 2 vehicle into the lane without a tag stopping at the ACM. Insert 8 dimes and 4 nickel into the ACM. Vehicle then leaves the lane.
13.	Drive a Class 3 vehicle into the lane without a tag stopping at the ACM. Insert a $10 bill into the lower level of the ACM. Insert $1bill into the bill accepter. Vehicle then leaves the lane.

STEP	SPECIFIC TEST INSTRUCTION (S)
14.	Drive a Class 2 vehicle into the lane without a tag stopping at the ACM. Insert 4 quarters into the ACM. Vehicle then leaves the lane.
15.	Drive a Class 2 vehicle into the lane with a valid tag. Stop at the ACM and insert 2 quarters and 10 nickels into the ACM. Vehicle then leaves the lane.
16.	Drive a Class 3 vehicle into the lane with a valid tag. Stop at the ACM and insert 2 $1 bills and 1 quarter into the ACM. Insert the quarter before the bills. Vehicle then leaves the lane.
17. .	Drive a Class 2 vehicle into the lane stopping at the ACM. Insert a $5 bill into the ACM. Vehicle then leaves the lane.
18.	Drive a Class 3 vehicle into the lane with a negative tag. Vehicle will stop at the ACM and inserts 2 $1bills into the ACM. Vehicle then leaves the lane.
19.	INSUFFICIENT FUNDS TRANSACTION – Drive a Class 2 vehicle into the lane stopping at the ACM. Insert 1 quarter and 4 dimes into the ACM. Vehicle then leaves the lane.
20.	Drive a Class 2 vehicle into the lane without a tag stopping at the ACM. Insert 7 dimes and 4 nickels and 10 pennies into the ACM. Vehicle then leaves the lane.
21.	Drive a Class 3 vehicle into the lane with an Lost/Stolen tag. Vehicle will stop at the ACM and inserts 2 $1bills into the ACM. Vehicle then leaves the lane.
22.	OVERPAYMENT- Drive a Class 2 vehicle into the lane without a tag stopping at the ACM. Insert 2 dimes and a $1 bill into the ACM. Insert the dimes before the bill. Vehicle then leaves the lane.
23.	The supervisor places the lane in ACM closed state.
24.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph.
25.	Logout of the TRCS Application.
26.	Current Transaction and Messages.
27.	The Shift Supervisor runs the HOST-0001A (Collector Tour Of Duty) Report
28.	The supervisor runs the Host – 0016 – Detail Transaction Report (DTR).
29.	Verify Transaction Logger
30.	The Shift Supervisor runs the Host – 0032B (ETC Posting – Integrity Report) report.
31.	Logout.

F-007 Mixed Mode Collector Deposits

STEP	SPECIFIC TEST INSTRUCTION (S)
1.	Prepare Toll Collector #1 report of cash from Money Bag # 1.
2.	Prepare Toll Collector #1 report of cash from Money Bag # 2.
3.	Prepare Toll Collector #2 report of cash from Money Bag # 3.

STEP	SPECIFIC TEST INSTRUCTION (S)
4.	Start TRCS Application
5.	Run Collector's Report
6.	The Toll Manager runs the Host – 0027 (Revenue bag Status Report)
7.	Login to the TRCS Application – Toll Revenue Clerk
8.	Make Collector Deposit (Collector #1)
9.	Make Collector Deposit (Collector #1)
10.	Make Collector Deposit (Collector #1, Money Bag #1 and 2)
11.	Make Collector Deposit (Collector #1, Money Bag #1 and 2, coin and bill counts)
12.	Make Collector Deposit (Collector #1, Money Bag #1 and 2, coin and bill counts).
13.	Make Collector Deposit (Collector #1, Money Bag #1 and 2, Complete deposit)
14.	Make Collector Deposit (Collector #1, Money Bag #1 and 2, Complete deposit)
15.	Remove a $1 bill and 4 quarters from Money Bag #3
16.	Make Collector Deposit (Collector #2, Money Bag #3)
17.	Make Collector Deposit (Collector #2)
18.	Make Collector Deposit (Collector #2, Money Bag #3)
19.	Make Collector Deposit (Collector #2, Money Bag #3, coin and bill counts)
20.	Make Collector Deposit (Collector #2, Money Bag #3, coin and bill counts)
21.	Make Collector Deposit (Collector #2, Money Bag #3, bill and coin counts)
22.	Make Collector Deposit (Collector #2, Money Bag #3, coin and bill counts)
23.	Make Collector Deposit (Collector #2, Bag #3, Complete deposit)
24.	Make Collector Deposit (Collector #2, Money Bag #3, Complete deposit)
25.	Logout
26.	Logon to the CIP Plaza Application
27.	Adjust Collector Deposit (Collector #2, Money Bag #3)
28.	Make Collector Deposit (Collector #2, Money Bag #3, Complete deposit)
29.	Make Collector Deposit (Collector #2, Money Bag #3, Complete deposit)
30.	Validate Unassigned Money Bags
31.	Run Collector's Report
32.	The Toll Manager runs the Host 0033A (Money Room Detail) report.
33.	The Toll Manager runs the Host 0033B (Money Room Summary) report.
34.	The Toll Manager runs the Host 0033A (Money Room Detail) report.
35.	The Toll Manager runs the Host 0033B (Money Room Summary) report.
36.	The Toll Manager runs the Host – 003A (Daily Collector Report)

STEP	SPECIFIC TEST INSTRUCTION (S)
37.	The Toll Manager runs the Host – 003A (Daily Collector Report)
38.	The Toll Manager runs the Host – 003B (Daily Collector Report)
39.	The Toll Manager runs the Host – 003B (Daily Collector Report) report.
40.	The Toll Manager runs the Host – 0023 (Denomination Breakdown) report.
41.	The Toll Manager runs the Host – 0023 (Denomination Breakdown) report.
42.	The Toll Manager runs the Host – 0036 (Toll Collector summary by Revenue Day) report.
43.	The Toll Manager runs the Host – 0036 (Toll Collector summary by Revenue Day) report.
44.	The Toll Manager runs the Host – 0027 (Revenue bag Status Report).
45.	Logout.

F-008 Host Collector Audit and Adjustments

STEP	SPECIFIC TEST INSTRUCTION(S)
1.	Start TRCS Application
2.	Logon to the TRCS application
3.	Verify Transaction Logger
4.	The Toll Manager runs the Host – 0032 (ETC Posting – Integrity Report) report.
5.	The Toll Manager runs the Host – 0006 (Toll Facility Overage and Shortage) report.
6.	Review Tour of Duty in Dedicated ETC lane.
7.	Review Tour of Duty in Dedicated ETC lane
8.	Review Tour of Duty in Dedicated ETC lane
9.	Review Tour of Duty on Dedicated ETC lane
10.	Attempt to adjust Segment 1 Tour of Duty ETC transactions
11.	Review Dedicated ETC lane Toll Evader transactions.
12.	Reconcile Tour of Duty for Dedicated ETC lane
13.	Review Collector #1 Tour of Duty
14.	Review Collector #1 Tour of Duty. The Toll Manager runs the HOST-0001A (Collector Tour Of Duty – Summary) Report
15.	Review Collector #1 Tour of Duty. The Toll Manager runs the HOST-0001B (Collector Tour Of Duty –Detail) Report
16.	Review Collector # 1 Tour of Duty
17.	Review Collector # 1 Tour of Duty
18.	Review Collector #1 Tour of Duty
19.	Adjust Collector #1 Tour of Duty
20.	Adjust Collector #1 Tour of Duty

STEP	SPECIFIC TEST INSTRUCTION(S)
21.	Reconcile Collector #1 Tour of Duty
22.	Review Collector #1 Adjusted Tour of Duty
23.	Review Collector #1 Adjusted Tour of Duty. The Toll Manager runs the HOST-0001C (Collector Tour Of Duty – summary) Report
24.	Review Collector #1 Adjusted Tour of Duty. The Toll Manager runs the HOST-0001D (Collector Tour Of Duty – detail) Report
25.	Review Collector #2 Tour of Duty. The Toll Manager runs the HOST-0001A (Collector Tour Of Duty) Report
26.	Review Collector # 2 Tour of Duty
27.	Review Collector #2 Tour of Duty
28.	Review Collector #2 Tour of Duty
29.	Adjust Collector #2 Tour of Duty
30.	Reconcile Collector #2 Tour of Duty
31.	Review Collector #2 Adjusted Tour of Duty
32.	Review Collector #2 Adjusted Tour of Duty. The Toll Manager runs the HOST-0001C (Collector Tour Of Duty – summary) Report
33.	Review Collector #2 Adjusted Tour of Duty. The Toll Manager runs the HOST-0001D (Collector Tour Of Duty – detail) Report
34.	Review Collector #3 Tour of Duty
35.	Review Collector #3 Tour of Duty
36.	Reconcile Collector #3 Tour of Duty
37.	Logout of the TRCS Application
38.	Verify Shift Supervisor cannot make adjustments
39.	The Toll Manager runs the HOST-0002 (Settlement) Report
40.	The Toll Manager runs the HOST-0002 (Settlement) Report
41.	Logout of the TRCS Application

F-001 Toll Revenue Collection System (TRCS)
System Security

Title: TRCS System Security	Date: May 15, 2008	Test No. F-001	Rev. 1.1

APPROVALS

Author: R Rhyme	Test Verification:	Dept. Mgr./Designee:	QA/Designee:	SCDOT

TEST OBJECTIVES

1. Demonstrate the creation, modification and termination of TRCS employees.
2. Demonstrate user authentication process.
3. Demonstrate user authorization as defined by roles and rights.
4. Demonstrate system compliance to South Carolina's Information Technology Security Policy and Standards.
5. Demonstrate system ability to create customized user roles.
6. User access level is demonstrated by TRCS main menu item available when a user logins to the application. When a menu item is visible, the user has access to that functionality. If a menu item is not visible, the user does not have access to the functionality.

TEST CRITERIA

1. All system administration interfaces and functionalities are working properly.
2. All system access functionalities are working properly.
3. System authorizes access to user with the correct user name and password.
4. System denied access to users with incorrect user name and password.
5. User access is controlled by user roles and rights.

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TEST ASSUMPTIONS/CONSTRAINTS

1. TRCS Plaza/Host application is installed and functioning correctly.
2. Authorized SCDOT representative(s) are available to witness the test.
3. QA personal will conduct the test.

SAFETY

1. All personnel will be briefed prior to the start of testing on proper safety practices to be observed at all times while within the testing area.

PRETEST CONDITIONS/EQUIPMENT

1. The Plaza/Host workstation must be available and running.
2. A previously created System Administration user ID to be used during initial test case setup.
3. Start and stop times of this test will be monitored and recorded.
4. All testing equipment will be located in the SCDOT facilities for the purpose of observing the results of the test.
5. A set of available card numbers for assignment when creating users.

TEST DISCUSSION AND DESCRIPTION

STEPS	DESCRIPTION
1 – 6	Create System Administrator user and validate role.
7 – 11	Create and update Toll Collector user and validate role.
12 – 17	Create Toll Manager user and validate role.
18 – 20	Create Assistant Toll Manager user and validate role.
21 - 25	Create Shift Supervisor user and validate role.
26 – 30	Create Toll Revenue Clerk user and validate role.
31 – 36	Create Toll Revenue Clerk II user and validate role.
37 -- 40	Create Auditor user and validate Auditor role.
41 – 45	Create Auditor Supervisor user and validate role.
46 – 50	Create Auditor Manager user and validate role.
51 – 53	Create new TRCS role.
54 – 57	Create Toll Collector, modify role to Toll manager and validate role.
58 – 67	Modify Toll Manager to Assistant Toll manager and validate role.
68 - 70	Modify Assistant Toll Manager to Shift Supervisor and validate role.
71 – 75	Modify Shift Supervisor to System Manager and validate role.
76 - 103	Password validation.
104 - 109	Terminate user.
110 – 115	Create Financial Department users
116 - 117	Run Employee Identification Report

Each step of this functional test will be conducted as written. For each step that meets all expected results, the test coordinator / designee may indicate passing as "P". For each step that does not fully meet the expected result(s), the test coordinator / designee will document the results and indicate failure as "F". Any and all abnormalities will be fully described. Any disagreements on the test results or their acceptability between SCDOT and ACS representatives shall be documented in test results and subject to review by SCDOT and ACS and possible re-test.

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If by mutual agreement between ACS and SCDOT it is determined the Factory Acceptance Test is not progressing as expected due to major issues encountered, testing will be suspended, and resumed after the issues have been rectified.

At the conclusion of testing at the designated lane, post test analysis will be performed. The complete results of this functional test will be retained by ACS and a copy will be forwarded to the SCDOT.

EXPECTED RESULTS

TRCS application access is controlled by user login and application role restriction. A user must supply the correct login for application access and access to certain portion of the application is control by the user assigned role.

Date Test Was Performed:	Test Supervisor/Lead:	SCDOT Representative:

START TIME: _____   STOP TIME: _____

TEST STEPS

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/FAIL	COMMENTS
1.	Start TRCS application • Start the web browser • Enter the Application web address into the URL input box of the web browser • Press the enter key	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

2.	Logon to the TRCS application
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	User Name:_____
	User Password:_____
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

3.	Create System Manager user.
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink.
	• Click on the Create New Item button (button with "Add") on the Employee List form.
	• Complete the required fields (*) on the Employee Create form.
	• Verify that the following list items are selected
	  ○ Location = CIP
	  ○ Status = Active
	• Select the following items from the Role Mapping form
	  ○ Role = System Manager
	  ○ Plaza = CIP
	  ○ Start Date = Today
	  ○ End Date = Today + 1 year.
	• Click on the Save button
	User Name:_____
	Default Password:
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  ○ Employee Browse window.
			  ○ Employee List window.
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  ○ Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
4.	Logout of the TRCS application. At the Employee Maintenance screen: • Click on the logout button.	N/A	• TRCS application login screen is displayed.		
5.	Validate System Manager Role. At the TRCS application login screen. • Enter a Login name (System Manager user created in step 3) • Enter default password. • Click on the Logon button. Login Name:_____ Default Password:	N/A	• Password should only be displayed as asterisks. • TRCS application Change Password screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

6.	Validate System Manager Role (cont.) .
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box.
	• Enter a new user password in the New Password input box.
	• Re-enter the new user password in the Retype New Password input box.
	• Click on the Save button.
	
	Login Name:_____
	Old Password: _____
	New Password: _____
	
	• Enter a Login name (System Manager user created in step 3)
	• Enter NEW password.
	• Click on the Logon button.
		N/A	• Password should only be displayed as asterisks.
			• The TRCS application displays the following message: Password successfully set for (login name). Please login again.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

7.	Create Toll Collector user (Toll Collector #1 used in scripts, F-004, F-005).
	At the TRCS application main menu screen:
	• Click on Employee Maintenance hyperlink.
	• Click on the Create New Item button (button with "Add") on the Employee List form.
	• Complete the required fields (*) on the Employee Create form.
	• Verify that the following list items are selected
	   o Card No = next available card number
	   o Location = CIP
	   o Status = Active
	• Select the following items from the Role Mapping form
	   o Role = Toll Collector
	   o Plaza = CIP
	   o Start Date = Today
	   o End Date = Today + 1 year.
	• Click on the Save button.
	Login Name:_____
	Default Password:_____
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			   o Employee Browse window
			   o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			   o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

8.	Create Toll Collector user (Toll Collector #3 used in scripts, F-004, F-005).
	At the TRCS application main menu screen:
	• Click on Employee Maintenance hyperlink.
	• Click on the Create New Item button (button with "Add") on the Employee List form.
	• Complete the required fields (*) on the Employee Create form.
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = CIP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Toll Collector
	  o Plaza = CIP
	  o Start Date = Today
	  o End Date = Today + 1 year.
	• Click on the Save button.
	Login Name:_____
	Default Password:
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

9.	Update Toll Collector (Toll Collector #1)
	
	At the TRCS application main menu screen:
	• Click on Employee Maintenance hyperlink.
	• Enter the login name of the collector created in step 7 into the login field of the Employee Browse window.
	• Click on the search button.
	• Click on the edit button of the return record.
	• Enter the next available card number into the Card No input field.
	• Click on the save button.
	
	Card No:
			• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Edit form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

10.	Logout of the TRCS application At the Employee Maintenance window: • Click on the Logout button.	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

11.	Validate Toll Collector Role.
	
	At the TRCS application login screen.
	• Enter a login name (Toll Collector created in step 7).
	• Enter default password.
	• Click on the Logon button.
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
	
	• Enter a login name (Toll Collector created in step 7).
	• Enter NEW password.
	• Click on the Logon button.
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks.
			• TRCS application Change Password screen is displayed.
			• The TRCS application displays the following message: Password successfully set for (login name). Please login again.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o System Administration
			       ▪ Password Maintenance		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
12.	Validate Toll Collector Role (cont.) At the TRCS application Main Menu • Click on the Password Maintenance hyperlink • Enter the user password in the Old Password input box • Enter a new user password in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ New Password: _____		• TRCS application Change Password screen is displayed. • The TRCS application displays the following message: Password error: New password is too young to be modified or New password should not be in the last 10 passwords created.		
13.	Logout of the TRCS application. At the TRCS application Main Menu screen. • Click on the Logout button.	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

14.	At the TRCS application login screen.
	
	• Enter a Login name (User with System Manager Role)
	• Enter a password.
	• Click on the Logon button.
	
	Login Name:_____
	Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

15.	Create Toll Manager user (Toll Manager #1).
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink.
	• Click on the Create New Item button (button with "Add") on the Employee List form.
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	   o Card No = next available card number
	   o Location = CIP
	   o Status = Active
	• Select the following items from the Role Mapping form
	   o Role = Toll Manager
	   o Plaza = CIP
	   o Start Date = Today
	   o End Date = Today + 1 year.
	Login Name:_____
	Default Password:
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			   o Employee Browse window
			   o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			   o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
16.	Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/FAIL	COMMENTS

17.	Validate Toll Manager Role.
	
	At the TRCS application login screen
	
	• Enter a Login name (Toll Manager #1 created in step 14)
	• Enter default password.
	• Click on the Logon button.
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
	
	• Enter a Login name (Toll Manager #1 created in step 14)
	• Enter default password.
	• Click on the Logon button.
		N/A	• TRCS application Main Menu is displayed.
			• Password should only be displayed as asterisks.
			• System requires user to change password.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			    ▪ Tag Status
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

18.	Create Assistant Toll Manager user. (Assistant Toll Manager #1)
	
	Login to the TRCS application as a System Manager
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink.
	• Click on the Create New Item button (button with + sign) on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = CIP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Assistant Toll Manager
	  o Plaza = CIP
	  o Start Date = Today
	  o End Date = Today + 1 year.
	Login Name:_____
	Default Password:
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
19.	Logout of the TRCS application. At the TRCS application Main Menu screen • Click on the Logout button.	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

20.	Validate Assistant Toll Manager Role
	
	At the TRCS application login screen
	
	• Enter a Login name (Assistant Toll Manager #1 created in step 19)
	• Enter a Password
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
	
	• Enter a Login name (Assistant Toll Manager #1 created in step 19)
	• Enter NEW Password
		N/A	• TRCS application Main Menu is displayed
			• Password should only be display as asterisks.
			• System requires user to change password.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			    ▪ Tag Status
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			  o Reports
			    ▪ Reports		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

21.	Create Shift Supervisor user (Shift Supervisor # 1 and 2 used in script F2-008).
	
	At the TRCS application login screen.
	• Enter a Login name (User with System Manager Role)
	• Enter a password.
	• Click on the Logon button.
	
	Login Name:_____
	Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

22.	Create Shift Supervisor user
	
	Create two shift supervisors and assign cards.
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink.
	• Click on the Create New Item button (button with + sign) on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = CIP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Shift Supervisor
	  o Plaza = CIP
	  o Start Date = Today
	  o End Date = Today + 1 year
	
	Login Name#1:_____
	Default Password #1:_____
	Card No #1:_____
	Login Name#2:_____
	Default Password #2:_____
	Card No #2:_____
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
23.	Logout of the TRCS application At the TRCS application Employee Maintenance screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

24.	Validate Shift Supervisor Role
	
	At the TRCS application login screen
	
	• Enter a Login name (Shift Supervisor # 1 created in step 25)
	• Enter a Password
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
	
	• Enter a Login name (Shift Supervisor # 1 created in step 25)
	• Enter NEW Password
		N/A	• TRCS application Main Menu is displayed
			• Password should only be display as asterisks.
			• System requires user to change password.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o Audit
			      ▪ Find Transaction
			   o System Administration
			      ▪ Employee Maintenance
			      ▪ Toll Fare Maintenance
			      ▪ Password Maintenance
			• PLAZA OPERATIONS
			   o Plaza Monitoring
			      ▪ Current Transactions and Messages
			      ▪ Transaction History
			      ▪ Message History
			      ▪ Trends
			      ▪ Lane Commands
			      ▪ Toll audit
			      ▪ Tag Status
			   o Deposit
			      ▪ Money Bag Maintenance
			   o Reports
			      ▪ Reports		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
25.	Logout of the TRCS application At the TRCS application main menu screen • Click on the logout button	N/A	• TRCS application login screen is displayed.		

26.	Create Toll Revenue Clerk user.
	
	At the TRCS application login screens.
	
	• Enter a Login name (User with System Manager Role)
	• Enter a password.
	• Click on the Logon button.
	
	Login Name:_____
	Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

27.	Create Toll Revenue Clerk user.
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with + sign) on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = CIP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Toll Revenue Clerk
	  o Plaza = CIP
	  o Start Date = Today
	  o End Date = Today + 1 Year
	Login Name:_____
	Default Password: _____
	Card Number_____
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

28.	Logout of the TRCS application At the TRCS application Employee Maintenance screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

29.	Validate the Toll Revenue Clerk Role
	
	At the TRCS application login screen
	
	• Enter a Login name (Toll Revenue Clerk #1 created in step 31)
	• Enter a Password
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
	
	• Enter a Login name (Toll Revenue Clerk #1 created in step 31)
	• Enter NEW Password
		N/A	• TRCS application Main Menu is displayed
			• Passwords should only be displayed as asterisks.
			• System requires user to change password.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o System Administration
			       • Password Maintenance
			• PLAZA OPERATIONS
			   o Deposit
			       • Collector Deposit
			   o Reports
			       • Reports		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
30.	Logout of the TRCS application At the TRCS application main menu screen • Click on the logout button	N/A	• TRCS application login screen is displayed.		

31.	Create Toll Revenue Clerk II user
	
	At the TRCS application login screen
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

SUBMITTAL TRANSMITTAL

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Item	Qty	Document	Description	Action Requested
001	1	Test Scripts - TRCS	Rev 1.1	Review

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

34.	Validate the Toll Revenue Clerk II Role
	
	At the TRCS application login screen
	
	• Enter a Login name (Toll Revenue Clerk II user created in steps 37)
	• Enter a Password
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
	
	• Enter a Login name (Toll Revenue Clerk II user created in steps 37)
	• Enter NEW Password
		N/A	• TRCS application Main Menu is displayed
			• Passwords should only be displayed as asterisks.
			• System requires user to change password.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Deposit
			    ▪ Collector Deposit
			  o Reports
			    ▪ Reports		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

35.	Validate Toll Revenue Clerk II User
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with + sign) on the Employee List form
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			   o Employee Browse window
			   o Employee List window
			• The user does not have permission to create an employee record.		

36.	Logout of the TRCS application At the TRCS application main menu screen • Click on the logout button	N/A	• TRCS application login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

37.	Create Auditor user (Auditor #1)
	
	At the TRCS application login screen
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o System Administration
			      ▪ Employee Maintenance
			      ▪ Plaza Maintenance
			      ▪ Lane Maintenance
			      ▪ Toll Fare Maintenance
			      ▪ Toll Schedule Maintenance
			      ▪ Agency Holiday Maintenance
			      ▪ Password Maintenance
			      ▪ Role Maintenance		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

38.	Create Auditor user (cont.)
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with "Add") on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	   o Card No = next available card number
	   o Location = CIP
	   o Status = Active
	• Select the following items from the Role Mapping form
	   o Role = Auditor
	   o Plaza = CIP
	   o Start Date = Today
	   o End Date = Today + 1 year
	• Logout of the TRCS application.
	
	Login Name:_____
	Default Password:_____
	Card No:_____
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			   o Employee Browse window
			   o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			   o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

39.	Validate Auditor Role
	
	At the TRCS application login screen
	
	• Enter a Login name (Auditor user created in step 45)
	• Enter a Password
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
	
	• Enter a Login name (Auditor user created in step 45)
	• Enter a Password
		N/A	• TRCS application Main Menu is displayed
			• Passwords should only be displayed as asterisks.
			• System requires user to change password.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Tour Of Duty
			    ▪ Find Transaction
			  o System Administration
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• Plaza Operations
			  o Tag Status		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
40.	Logout of the TRCS application At the TRCS application main Menu screen • Click on the logout button	N/A	• TRCS application login screen is displayed.		
41.	Create Auditor Supervisor user (Auditor Supervisor #1) At the TRCS application login screen • Enter a Login name (User with System Manager Role) • Enter a password • Click on the Logon button Login Name:_____ Password: _____	N/A	• TRCS application Main Menu screen is displayed. • Password should only be displayed as asterisks. • TRCS application Main Menu screen contains the following menu items • FINANCIAL OPERATIONS o System Administration ▪ Employee Maintenance ▪ Plaza Maintenance ▪ Lane Maintenance ▪ Toll Fare Maintenance ▪ Toll Schedule Maintenance ▪ Agency Holiday Maintenance ▪ Password Maintenance ▪ Role Maintenance		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/FAIL	COMMENTS
42.	Create Auditor Supervisor (cont.) At the TRCS application Main Menu screen: • Click on Employee Maintenance hyperlink • Click on the Create New Item button (button with "Add") on the Employee List form • Complete the required fields (*) on the Employee Create form • Verify that the following list items are selected o Card No = next available card number o Location = CIP o Status = Active • Select the following items from the Role Mapping form o Role = Auditor Supervisor o Plaza = CIP o Start Date = Today o End Date = Today + 1 year • Click on the Save button Login Name:_____ Default Password:_____ Card No:	N/A	• The Employee Maintenance screen is displayed. • The Employee Maintenance screen contains: o Employee Browse window o Employee List window • The Employee Create form is displayed. • The TRCS application displays the following message: o Data successfully updated: Last Name, First Name (user id). • The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
43.	Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

44.	Validate Auditor Supervisor Role
	
	At the TRCS application login screen
	
	• Enter a Login name (Auditor Supervisor user created in step 50)
	• Enter a Password
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
	
	• Enter a Login name (Auditor Supervisor user created in step 50)
	• Enter NEW Password
		N/A	• TRCS application Main Menu is displayed
			• Passwords should only be displayed as asterisks.
			• System requires user to change password.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Tour Of Duty
			    ▪ Find Transaction
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Tag Status		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
45.	Logout of the TRCS application At the TRCS application main menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

46.	Create Auditor Manager (Auditor Manager #1)
	
	At the TRCS application login screen
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o System Administration
			      ▪ Trigger Image
			      ▪ Employee Maintenance
			      ▪ Plaza Maintenance
			      ▪ Lane Maintenance
			      ▪ Toll Fare Maintenance
			      ▪ Toll Schedule Maintenance
			      ▪ Agency Holiday Maintenance
			      ▪ Password Maintenance
			      ▪ Role Maintenance		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

47.	Create Auditor Manager (cont.)
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with "Add") on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = CIP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Auditor Manager
	  o Plaza = CIP
	  o Start Date = Today
	  o End Date = Today + 1 year
	• Click on the Save button
	Login Name:_____
	Default Password: _____
	Card No:_____
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
48.	Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

49.	Validate the Auditor Manager Role (cont.)
	
	At the TRCS application login screen
	
	• Enter a Login name (Auditor Manager user created in step 56)
	• Enter a Password
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
	
	• Enter a Login name (Auditor Manager user created in step 56)
	• Enter NEW Password
		N/A	• TRCS application Main Menu is displayed
			• Password should only be displayed as asterisks
			• System requires user to change password.
			
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o Audit
			      ▪ Tour Of Duty
			      ▪ Find Transaction
			   o System Administration
			      ▪ Employee Maintenance
			      ▪ Toll Fare Maintenance
			      ▪ Password Maintenance
			• PLAZA OPERATIONS
			   o Tag Status		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
50.	Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

51.	Create Ramp Toll Collector
	
	At the TRCS application login screen
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
			• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

52.	Create Ramp Toll Collector user (cont)
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with "Add") on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	   o Card No = next available card number
	   o Location = RMP
	   o Status = Active
	• Select the following items from the Role Mapping form
	   o Role = Toll Collector
	   o Plaza = RMP
	   o Start Date = Today
	   o End Date = Today + 1 year
	• Click on the Save button
	Login Name:_____
	Default Password:_____
	Card No:
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			   o Employee Browse window
			   o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			   o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

53.	Create Ramp Shift Supervisor user
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with "Add") on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = RMP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Shift Supervisor
	  o Plaza = RMP
	  o Start Date = Today
	  o End Date = Today + 1 year
	• Click on the Save button
	Login Name:_____
	Default Password:_____
	Card No:_____
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: Last Name, First Name (user id).
			• The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

54.	Create New Toll Collector Role
	
	At the TRCS application Main Menu screen:
	• Click on Role Maintenance hyperlink
	• Click on the Create New Item button (button with + sign) on the Permission List window
	• Complete the Role Add form with the following data:
	  ○ Role Name = <u>TOLL_COLL_TRC S</u>
	  ○ Description = <u>Toll Collector TRCS</u>
	  ○ Selected Rights: CreateTagVesTrigg er DepositCollector SendLaneComman d ViewPlaza ViewReportCollect orPerformance ViewReportDeposit VewReportRevenu e
	• Click on the Save button
		N/A	• The Permission List window is displayed
			• The Role Add window is displayed
			• The TRCS application displays the following message:
			  ○ Data Created successfully: Toll Collector TRCS (TOLL_COLL_TRCS)		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

55.	Create Toll Collector (New Toll Collector Role – Toll Collector #2)
	
	At the Role Add form:
	• Click on the Main button
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with + sign) on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = CIP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Toll Collector TRCS
	  o Plaza = CIP
	  o Start Date = Today
	  o End Date = Today + 1 year
	• Click on the Save button
	Login Name:_____
	Default Password:_____
	Card No:_____
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: First Name, Last Name (user id).
			• The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
56.	Validate Toll Collector (New Toll Collector Role cont.) At the TRCS application main menu is displayed • Select CIP from the Plaza list • Click on the Report hyperlink • Select CollectorPerformanceReport from the Category drop down list. • Select HOST – 0003B from the drop down list. • Click on submit button. • Select Plaza = CIP • Enter Begin Date = Today's date. • Enter End Date = Today's date. • Select Collector =ALL • Click on the submit button.	N/A	• The Reporting Option window is displayed. • The Report Criteria window is displayed. • Daily Collector Report is displayed Host Req. # 4.0.0		
57.	Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

58.	Modify TRCS User
	
	Create Toll Collector user and change role to Toll Manager
	
	At the TRCS application login screen
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
			• TRCS application Main Menu screen is displayed.
			• Password should only be display as asterisks
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Trigger Image
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

59.	Modify TRCS User
	
	Create Toll Collector user and change role to Toll Manager.
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with "Add") on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = CIP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Toll Collector
	  o Plaza = CIP
	  o Start Date = Today
	  o End Date = Today + 1 year
	Login Name:_____
	Default Password: _____
	Card No _____
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: First Name, Last Name (user id).
			• The Employee Maintenance screen is displayed.		

60.	Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

61.	Modify TRCS User
	
	Create Toll Collector user and change role to Toll Manager. (cont).
	
	At the TRCS application login screen.
	• Enter a Login name (Toll Collector created in previous steps).
	• Enter default password.
	• Click on the Logon button.
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password:
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be display as asterisks
			• TRCS application Change Password screen is displayed.
			• TRCS application Main Menu screen contains the following menu items
			  o System Administration
			    ▪ Password Maintenance		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
62.	Modify TRCS User Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

63.	Modify TRCS User
	
	Create Toll Collector user and change role to Toll Manager (cont)
	
	At the TRCS application login screen
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
			• TRCS application Main Menu screen is displayed.
			• Password should only be display as asterisks
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Trigger Image
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
64.	Modify TRCS User Create Toll Collector user and change role to Toll Manager. (cont.) At the TRCS application Main Menu screen: • Click on Employee Maintenance hyperlink • At the Employee Browse window enter the Toll Collector Login name then click on the Search button • Click on the Edit button located to the far right corner of the Toll Collector record in the Employee List window. • Select the Toll Manager role from the Role drop down list. • Click on the Save button.	N/A	• The TRCS application Find Employee window is displayed. • The search results returns a record that matches the Toll Collector Login name. • The Modify Employee form displays the Toll Collector record. • The TRCS application displays the following message: o Data successfully updated: First Name, Last Name (user id). • The Employee Maintenance screen is displayed.		
65.	Modify TRCS User Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
66.	Modify TRCS User Create Toll Collector user and change role to Toll Manager (cont.) At the TRCS application login screen • Enter a login name (Toll Collector modified to Toll Manager in step 63) • Enter a Password Login Name: _____ Password: _____	N/A	• TRCS application Main Menu is displayed • Passwords should only be displayed as asterisks • TRCS application Main Menu screen contains the following menu items • FINANCIAL OPERATIONS o Audit ▪ Find Transaction o System Administration ▪ Employee Maintenance ▪ Toll Fare Maintenance ▪ Password Maintenance • PLAZA OPERATIONS o Plaza Monitoring ▪ Current Transactions and Messages ▪ Transaction History ▪ Message History ▪ Trends ▪ Lane Commands ▪ Toll audit ▪ Tag Status o Deposit ▪ Money Bag Maintenance ▪ Collector Deposit ▪ Bank Deposit o Reports ▪ Reports		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
67.	Modify TRCS User Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

68.	Modify Toll Manager user to Assistant Toll Manager
	
	At the TRCS application login screen
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
			• TRCS application Main Menu screen is displayed.
			• Password should only be display as asterisks
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Trigger Image
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
69.	Modify TRCS User Modify Toll Manager user to Assistant Toll Manager At the TRCS application Main Menu screen: • Click on Employee Maintenance hyperlink • At the Employee Browse window enter the Toll Manager Login name then click on the Search button • Click on the Edit button located to the far right corner of the Toll Manager record in the Employee List window. • Select the Assistant Toll Manager role from the Role drop down list. • Click on the Save button.	N/A	• The TRCS application Find Employee window is displayed • The search results returns a record that matches the Toll Manager Login name • The Modify Employee form displays the Toll Manager record • The TRCS application displays the following message: o Data successfully updated: First Name, Last Name (user id). • The Employee Maintenance screen is displayed.		
70.	Modify TRCS User Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

71.	Modify TRCS User
	
	Modify Shift Supervisor to System Manager user
	
	At the TRCS application login screen
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
			• TRCS application Main Menu screen is displayed.
			• Password should only be display as asterisks
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Trigger Image
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
72.	Modify TRCS User Modify Shift Supervisor to System Manager user (cont.) At the TRCS application Main Menu screen: • Click on Employee Maintenance hyperlink • At the Find Employee window enter the Toll Collector Login name then click on the Search button • Click on the Edit button located to the far right corner of the Shift Supervisor record in the Employee List window. • Select the System Manager role from the Role drop down list. • Click on the Save button.	N/A	• The TRCS application Find Employee window is displayed • The search results returns a record that matches the Toll Collector Login name • The Modify Employee form displays the Shift Supervisor record • The TRCS application displays the following message: o Data successfully updated: First Name, Last Name (user id). • The Employee Maintenance screen is displayed.		
73.	Modify TRCS User Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

74.	Modify TRCS User
	
	Modify Shift Supervisor to System Manager user (cont.)
	
	At the TRCS application login screen
	• Enter a Login name (User Shift Supervisor modified in step 90)
	• Enter a password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Passwords should only be display as asterisks
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Trigger Image
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

75.	Modify TRCS User Logout of the TRCS application At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
76.	Validate System Manager user password At the TRCS application login screen • Enter a Login name (User System Manager Role) • Enter Login name into the password field. • Click on the Logon button Login Name:_____ Password:	N/A	• Passwords should only be displayed as asterisks. • TRCS application displays the following message: "The Credentials supplied are invalid. Please supply the correct credentials to login successfully"		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

77.	Validate System Manager user password
	
	At the TRCS application login screen
	• Enter a Login name (User System Manager Role)
	• Enter a valid password
	• Click on the Logon button
	
	Login Name:_____
	Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o System Administration
			     ▪ Trigger Image
			     ▪ Employee Maintenance
			     ▪ Plaza Maintenance
			     ▪ Lane Maintenance
			     ▪ Toll Fare Maintenance
			     ▪ Toll Schedule Maintenance
			     ▪ Agency Holiday Maintenance
			     ▪ Password Maintenance
			     ▪ Role Maintenance
			• PLAZA OPERATIONS
			   o Reports
			     ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
78.	Validate System Manager user password At the TRCS application Main Menu screen: • Click on the Password Maintenance hyperlink At the Change Password screen: • Enter the user password in the Old Password input box • Enter a new user password that is less then 8 characters in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ New Password: _____		TRCS application displays the following message: "Password should be minimum of 11 characters"		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
79.	Validate System Manager user password At the Change Password screen: • Enter the user password in the Old Password input box • Enter a new user password that is all numbers in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button • Exit the Application Login Name: _____ Old Password: _____ New Password: _____		• TRCS application displays the following message: "Password should not consists of only numbers or alphabets or special characters"		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
80.	Validate System Manager user password At the Change Password screen: • Enter the user password in the Old Password input box • Enter a new user password that is all alphabetic characters in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ New Password: _____		• TRCS application displays the following message: "Password should not consists of only numbers or alphabets or special characters"		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
81.	Validate Toll Manager user password At the Change Password screen: • Enter the user password in the Old Password input box • Enter a new user password that is all special characters in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ New Password: _____		• TRCS application displays the following message: "Password should not consists of only numbers or alphabets or special characters"		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
82.	Validate Toll Manager user password At the Change Password screen: • Enter the user password in the Old Password input box • Enter a new user password that is contains leading blank in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ New Password: _____		• TRCS application displays the following message: "Passwords should not contain leading or trailing blanks"		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
83.	Validate Toll Manager user password At the Change Password screen: • Enter the user password in the Old Password input box • Enter a new user password that is contains trailing blanks in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ New Password: _____		• TRCS application displays the following message: "Passwords should not contain leading or trailing blanks"		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
84.	Validate Assistant Toll Manager user password At the Change Password screen: • Enter the user password in the Old Password input box • Enter a new user password that is contains two consecutive identical characters in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ New Password: _____		• TRCS application displays the following message: "The Credentials supplied are invalid. Please supply the correct credentials to login successfully"		

				PASS/	

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
85.	Validate Assistant Toll Manager user password At the Change Password screen: • Click on the Password Maintenance hyperlink At the Change Password screen: • Enter the user password in the Old Password input box • Enter the default password in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ Default Password: _____		• TRCS application displays the following message: "New and verification passwords are not matching"		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

86.	Validate Assistant Toll Manager user password
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a valid password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
		N/A	• TRCS application Main Menu is displayed
			• Password should only be display as asterisks.
			• System requires user to change password
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			    ▪ Bank Deposit
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
87.	Validate Auditor Supervisor user password At the TRCS application Main Menu screen: • Click on the Password Maintenance hyperlink At the Change Password screen: • Enter the user password in the Old Password input box • Enter a new user password that is one character less then the old password in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ New Password: _____		• TRCS application displays the following message: "You cannot change, add or delete only one character to your old password"		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
88.	Validate Auditor Supervisor user password At the TRCS application Main Menu screen: • Click on the Password Maintenance hyperlink At the Change Password screen: • Enter the user password in the Old Password input box • Enter a new user password that is has one additional character then the old password in the New Password input box • Re-enter the new user password in the Retype New Password input box • Click on the Save button Login Name: _____ Old Password: _____ New Password: _____		• TRCS application displays the following message: "You cannot change, add or delete only one character to your old password"		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

89.	Validate Auditor supervisor user password
	
	At the Change Password screen:
	• Enter the user password in the Old Password input box
	• Enter a valid new user password in the New Password input box
	• Re-enter the new user password in the Retype New Password input box
	• Click on the Save button
	
	Login Name: _____
	Old Password: _____
	New Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  ○ Audit
			    ▪ Tour Of Duty
			    ▪ Find Transaction
			    ▪ Tag Status
			  ○ System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance		

90.	At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
91.	Validate System Manager user password At the TRCS application login screen • Enter a Login name (System Manager) • Enter an invalid Password • Click on the Logon button Repeat the above steps four consecutive times Attempt Logon Time:_____	N/A	• After the 4th attempt the TRCS application screen displays the message "Password disabled"		
92.	Validate System Manager user password 1. This test case is run 5 minutes after completing previous test case. 2. Logout of the TRCS application. 3. Attempt to login with the same valid user id and valid password.		• TRCS application screen displays the message "Password disabled"		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

93.	Validate System Manager user password
	
	1. This test case is run 10 minutes after completing previous test case
	2. Logout of the TRCS application.
	3. Attempt to login with the same valid user id and valid password.
			• TRCS application Main Menu screen is displayed.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Trigger Image
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

94.	At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
95.	Validate System Manager user Logon At the TRCS application login screen • Enter a Login name (System Manager) • Click on the Logon button	N/A	• TRCS application Main Menu screen is displayed. "Password is required		
96.	Validate System Manager user Logon At the TRCS application login screen • Enter a Password • Click on the Logon button	N/A	• TRCS application Main Menu screen is displayed. "Login Name or Employee ID is required"		
97.	Validate System Manager user Logon At the TRCS application login screen • Enter a card no • Click on the Logon button	N/A	• TRCS application Main Menu screen is displayed. "Password is required"		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
98.	Validate System Manager user Logon At the TRCS application login screen • Enter a card no • Enter an invalid password • Click on the Logon button	N/A	• TRCS application Main Menu screen is displayed. "The Credentials supplied are invalid. Please supply the correct credentials to login successfully"		
99.	Validate System Manager user Logon At the TRCS application login screen • Enter an invalid card no • Enter an valid password • Click on the Logon button	N/A	• TRCS application Main Menu screen is displayed. "The Credentials supplied are invalid. Please supply the correct credentials to login successfully"		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

100.	Validate System Manager user Logon
	
	At the TRCS application login screen
	• Enter an valid card no
	• Enter an valid password
	• Click on the Logon button
		N/A	• TRCS application Main Menu screen is displayed.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Trigger Image
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

101.	SCDOT STRONG PASSWORDS validation
	
	At the TRCS application login screen
	
	• Enter a Login name (System Manager)
	
	• Enter a Password
	
	Login Name: _____
	Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• System requires user to change password
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o System Administration
			      ▪ Trigger Image
			      ▪ Employee Maintenance
			      ▪ Plaza Maintenance
			      ▪ Lane Maintenance
			      ▪ Toll Fare Maintenance
			      ▪ Toll Schedule Maintenance
			      ▪ Agency Holiday Maintenance
			      ▪ Password Maintenance
			      ▪ Role Maintenance
			• PLAZA OPERATIONS
			   o Reports
			      ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
102.	SCDOT STRONG PASSWORDS validation At the TRCS application Main Menu screen: • Click on Password Maintenance hyperlink • Enter the user password in the Old Password input box (1234sys_man) • Enter a new user password in the New Password input box (lh@ve2go123456789) • Re-enter the new user password in the Retype New Password input box (lh@ve2go123456789) • Click on the Save button		• TRCS application displays A password updated successfully message.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
103.	SCDOT Strong Passwords validation At the TRCS application Main Menu screen: • Click on Password Maintenance hyperlink • Enter the user password in the Old Password input box (1234sys_man) • Enter a new user password in the New Password input box (sys_man0202) • Re-enter the new user password in the Retype New Password input box (sys_man0202) • Click on the Save button		• TRCS application displays "Invalid Password.		
104.	Terminate System Manager user At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
105.	Terminate System Manager user (cont.) At the TRCS application login screen • Enter a Login name (User with System Manager Role) • Enter a password • Click on the Logon button Login Name:_____ Password:_____	N/A	• TRCS application Main Menu screen is displayed. • Password should only be displayed as asterisks. • TRCS application Main Menu screen contains the following menu items • FINANCIAL OPERATIONS 　o System Administration 　　▪ Trigger Image 　　▪ Employee Maintenance 　　▪ Plaza Maintenance 　　▪ Lane Maintenance 　　▪ Toll Fare Maintenance 　　▪ Toll Schedule Maintenance 　　▪ Agency Holiday Maintenance 　　▪ Password Maintenance 　　▪ Role Maintenance • PLAZA OPERATIONS 　o Reports • Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
106.	Terminate System Manager user (cont.) At the TRCS application Main Menu screen: • Click on Employee Maintenance hyperlink • At the Find Employee window enter the System Manager Login name then click on the Search button • Click on the Edit button located to the far right corner of System Manager record in the Employee List window. • Select Terminate from the Status drop down list. • Click on the Save button.	N/A	• The TRCS application Find Employee window is displayed • The search results returns a record that matches the System Manager Login name • The Modify Employee form displays the System Manager record • The TRCS application displays the following message: o Terminate is included in the Status drop down list. • The Employee Maintenance screen is displayed.		
107.	Terminate System Manager user At the TRCS application Main Menu screen • Click on the Logout button	N/A	• TRCS application login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
108.	Terminate System Manager user (cont.) At the TRCS application login screen • Enter a Login name (System Manager terminated in step 107) • Enter a password • Click on the Logon button Login Name:_____ Password:	N/A	• Passwords should only be display as asterisks • TRCS application Main Menu screen is not displayed. • The TRCS application displays following message: "Access to system not allowed"		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

109.	Logon to the TRCS application
	
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	User Name:_____
	User Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be display as asterisks
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Trigger Image
			    ▪ Employee Maintenance
			    ▪ Plaza Maintenance
			    ▪ Lane Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Toll Schedule Maintenance
			    ▪ Agency Holiday Maintenance
			    ▪ Password Maintenance
			    ▪ Role Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

110.	Create Toll Collector (Toll Collector #4 - Terminated)
	
	 At the Employee Maintenance screen:
	 • Click on the Main menu button.
	 • Click on Employee Maintenance hyperlink
	 • Click on the Create New Item button (button with + sign) on the Employee List form
	 • Complete the required fields (*) on the Employee Create form
	 • Verify that the following list items are selected
	    o Card No = next available card number
	    o Location = CIP
	    o Status = Active
	 • Select the following items from the Role Mapping form
	    o Role = Toll Collector
	    o Plaza = CIP
	    o Start Date = Today
	    o End Date = Today + 1 year
	 • Click on the Save button
	
	 Login Name:_____
	 Default Password:_____
		N/A	• The Employee Maintenance screen is displayed
			 • The Employee Maintenance screen contains:
			    o Employee Browse window
			    o Employee List window
			 • The Employee Create form is displayed
			 • The TRCS application displays the following message:
			    o Data successfully updated: First Name, Last Name (user id).
			 • The Employee Maintenance screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
111.	Terminate Toll Collector user At the TRCS application Main Menu screen: • Click on Employee Maintenance hyperlink • At the Find Employee window enter the System Manager Login name then click on the Search button • Click on the Edit button located to the far right corner of the Toll Collector record in the Employee List window. • Select Terminated from the Status drop down list. • Click on the Save button.	N/A	• The TRCS application Find Employee window is displayed • The search results returns a record that matches the Toll Collector Login name • The Modify Employee form displays the System manager record • The TRCS application displays the following message: o Data successfully updated: First Name, Last Name (user id). • The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

112.	Create Financial Department Clerk
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with + sign) on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	   o Card No = next available card number
	   o Location = CIP
	   o Status = Active
	• Select the following items from the Role Mapping form
	   o Role = Financial Clerk
	   o Plaza = CIP
	   o Start Date = Today
	   o End Date = Today + 1 year
	Login Name:_____
	Default Password:_____
	Card No
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			   o Employee Browse window
			   o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			   o Data successfully updated: First Name, Last Name (user id).
			• The Employee Maintenance screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

113.	Create Financial Department Clerk II (Financial Clerk #2 used in script F2-011).
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with + sign) on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = CIP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Financial Clerk II
	  o Plaza = CIP
	  o Start Date = Today
	  o End Date = Today + 1 year
	Login Name:_____
	Default Password: _____
	Card No _____
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: First Name, Last Name (user id).
			• The Employee Maintenance screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

114.	Create Ramp Toll Revenue Clerk
	
	At the TRCS application Main Menu screen:
	• Click on Employee Maintenance hyperlink
	• Click on the Create New Item button (button with + sign) on the Employee List form
	• Complete the required fields (*) on the Employee Create form
	• Verify that the following list items are selected
	  o Card No = next available card number
	  o Location = RMP
	  o Status = Active
	• Select the following items from the Role Mapping form
	  o Role = Toll Revenue Clerk
	  o Plaza = RMP
	  o Start Date = Today
	  o End Date = Today + 1 year
	Login Name:_____
	Default Password: _____
	Card No
		N/A	• The Employee Maintenance screen is displayed.
			• The Employee Maintenance screen contains:
			  o Employee Browse window
			  o Employee List window
			• The Employee Create form is displayed.
			• The TRCS application displays the following message:
			  o Data successfully updated: First Name, Last Name (user id).
			• The Employee Maintenance screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
115.	Validate the Employee Identification Report At the TRCS application main menu • Select CIP from the Plaza list • Click on the report hyperlink • Select TollCollectorAudit from the Category drop down list. • Select HOST-0024 REPORT from the drop down list. • Click on Submit button. • Select Plaza = ALL • Collector = ALL. • Click on the Submit button.	N/A	• The Reporting Option window is displayed. • The Report Criteria window is displayed. • The Employee Identification Report is displayed. • The report contains all employee created in this test script.		
116.	Logout of the TRCS application At the TRCS application main menu screen • Click on the logout button	N/A	• TRCS application login screen is displayed.		

THE FOLLOWING STEPS ARE TO BE DONE DURING POST TEST ANALYSIS

END OF POST TEST ANALYSIS

END OF TEST

Title: TRCS System Security	Date: May 15, 2008	Test No. F-001	Rev. 1.1

TEST DISCREPANCIES/COMMENTS REPORT

TEST STEP	DISCREPANCIES/COMMENTS

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FINAL SIGN OFF AND COMMENTS

TEST SUPERVISOR/LEAD:	DATE:	SCDOT REPRESENTATIVE:	DATE:

F-002 Tag Status Download

Title: Tag Status File Download	Date: May 15, 2008	Test No. F-002	Rev. 1.1

APPROVALS

Author: R. Rhyme	Test Verification:	Dept. Mgr./Designee:	QA/Designee:	SCDOT:

TEST OBJECTIVES

1. Demonstrate the process by which the Tag Status file is transferred from the CSC to the Plaza/Host system.

2. Demonstrate the process by which the merged Tag Status file is converted from the CSC file format to the Lane file format.

3. Demonstrate the Tag Status validation process that ensures that the number of tags present in the current file is within a certain predefined limit.

4. Demonstrate the process by which the Tag Status file is transfer from the plaza to the lane.

5. Demonstrate the process by which the Tag Status file is downloaded from the plaza to the lane.

6. Demonstrate that tags in the Tag status file is successfully loaded in the lane tag database.

7. Demonstrate that transactions are generated using tag in the Tag Status file downloaded to the lane.

8. Demonstrate the capability of querying the Lane for the status of a specific tag to confirm the correctness of the Tag Status file.

9. Demonstrate the ability to trigger VES on any tag.

10. Demonstrate system compliance with South Carolina's Information Technology Security Policy and Standards.

Title: Tag Status File Download	Date: May 15, 2008	Test No. F-002	Rev. 1.1

TEST CRITERIA

1. All system administration interfaces and functionalities are working properly.
2. All system access functionalities are working properly.
3. System authorizes access to user with the correct user name and password.
4. System denied access to users with incorrect user name and password.
5. User access is controlled by user roles and rights.

TEST ASSUMPTIONS/CONSTRAINTS

1. All programs involved in the creation and transfer of the Tag Status file is installed and functioning correctly.
2. All required system environmental variables are defined correctly.

SAFETY

1. All personnel will be briefed prior to the start of testing on proper safety practices to be observed at all times while within the testing area.

PRETEST CONDITIONS/EQUIPMENT

1. The Plaza/Host workstation must be available and running.
2. The Plaza/Host Linux server is available and running.
3. The TRCS Plaza/Host application must be installed and running.
4. Start and stop times of this test will be monitored and recorded.
5. All testing equipment will be located in the Germantown Test Facility for the purpose of observing the results of the test.

TEST DISCUSSION AND DESCRIPTION

STEPS	DESCRIPTION
1	Data setup
2 – 4	Validate VES trigger
5	Convert Tag Status file from CSC format to Lane format
6	Download Tag Status from plaza to lane
7	Validate Tag Status download
10 – 15	Validate Tag Search
17 – 23	Validate Tags

Each step of this functional test will be conducted as written. For each step that meets all expected results, the test coordinator / designee may indicate passing as "P". For each step that does not fully meet the expected result(s), the test coordinator / designee will document the results and indicate failure as "F". Any and all abnormalities will be fully described. Any disagreements on the test results or their acceptability between SCDOT and ACS representatives shall be documented in test results and subject to review by SCDOT and ACS and possible re-test.

If by mutual agreement between ACS and SCDOT it is determined the Demonstration Test is not progressing as expected due to major issues encountered, testing will be suspended, and resumed after the issues have been rectified.

At the conclusion of testing at the designated lane, post test analysis will be performed. The complete results of this functional test will be retained by ACS and a copy will be forwarded to the SCDOT.

EXPECTED RESULTS

- The Tag Status file is created on the Plaza/Host.
- The Tag Status file is in Lane format.
- The Tag Status file is downloaded to the Lane.
- The Lane successfully loaded the Tag Status file into the Lane database.

Title: Tag Status File Download	Date: May 15, 2008	Test No. F-002	Rev. 1.1

- Transactions are generated using tags included in the tag Status file.
- VES is trigger for a specific tag
- Tag data is displayed for a specific tag.

Date Test Was Performed:	Test Supervisor/Lead:	SCDOT Representative:

START TIME: _____ STOP TIME: _____ PLAZA REVENUE TIME:_____

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TEST STEPS

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

1.	Data Setup
	
	• Create a File on the QA CSC SCDOT server.
	• Transfer the tag file from the QA server to the Plaza/Host server.
	• Verify that all tag status logical is defined on the Plaza/Host server.
		N/A	• Tag status file is created on the SCDOT QA CSC server.
			• The following logical are defined
			    o VECTOR_SCDOT_FILE_SOURCE
			    o VECTOR_SCDOT_FILE_PROC
			    o VECTOR_SCDOT_FILE_UNPROC
			    o VECTOR_SCDOT_FILE_TRCS
			    o VECTOR_SCDOT_RPT_DIR
			    o VECTOR_SCDOT_CFG_DIR
			• The Tag Status file is transferred and stored in VECTOR_SCDOT_FILE_SOURCE directory on the Plaza/Host server.		

2.	Trigger VES on a tag Start the TRCS application • Start the web browser • Enter the Plaza Application web address into the URL input box of the web browser • Press the enter key	N/A	• TRCS application login screen is displayed.		

		Date: May 15, 2008	Test No. F-002	Rev. 1.1
Title: Tag Status File Download				

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

3.	Logon to the TRCS application
	
	• Enter a login name (System Admin user).
	• Enter a password.
	• Click on the Logon button.
	
	User Name:_____
	User Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o Reports
			      ▪ Reports
			   o System Administration
			      ▪ Trigger Image
			      ▪ Employee Maintenance
			      ▪ Plaza Maintenance
			      ▪ Lane Maintenance
			      ▪ Toll Fare Maintenance
			      ▪ Toll Schedule Maintenance
			      ▪ Agency Holiday Maintenance
			      ▪ Password Maintenance
			      ▪ Role Maintenance
			      ▪ Password Maintenance
			• PLAZA OPERATIONS
			   o Reports
			      ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

4.	Trigger Image
	
	Add Agency tag to Trigger VES list
	
	At the TRCS application Main Menu:
	• Click on the Trigger Image hyperlink
	• Select ALL from the Status drop down list
	• Click the Search button.
	• Click on the Add button (+)
	• Enter the tag number in the Device No input box.
	• Set Start Date = today
	• Set end Date = Today + 1 month
	• Click on the Save button.
	• Logout of TRCS application.
	
	Agency
	Valid Tag
		N/A	• The TagVesTrigger search screen is displayed.
			• The Tag VES Trigger list is displayed.
			• The Tag Status From Lane windows displays:
			  ○ Tag Number = _____
			  ○ Tag Status = Valid
			• The TRCS application displays a message that the record was successfully updated.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
5.	Convert Tag Status File to Lane format. At the Plaza/Host server command prompt: • Run the process (vector_SCDOT_create _tagsts_files.sh) to convert the Tag Status File. • Change to the directory that contains the converted zip file and unzip the file.	N/A	• The conversion process completed successfully. • The converted file is stored in the $VECTOR_SCDOT_FILE_TRCS directory. • The file is zipped and named with the following format: o TB_DB_YYYYMMDDHH MISS.ZIP • The zipped file contains two files: o Tag_db.dat o Tag_db.idx		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
6.	Download Tag Status file from the Plaza/Host to the Lane. At the Plaza server command prompt: • Run the LANE_XFER process to download the Tag Status file to the lane.	• Lane uses the download.db file to determine the file to download. • Lane FTP's the CHECK.DAT file and validates the pervious file download. • Lane FTP's the Tag Status file from the Plaza to the Lane. • Lane validates and loads the Tag Status file into the Lane database. • Lane sends an acknowledgment to the plaza (DOWNLOAD_SUCCESS= 1).	• The process completed successfully. • The Tag Status file is transferred from the Plaza to the lane.. • The Lanes acknowledges reception of the file (DOWNLOAD_SUCCESS= 1).		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
7.	Validate Tag Status file downloaded to the Lane. Start the TRCS application • Start the web browser • Enter the TRCS application web address into the URL input box of the web browser • Press the enter key	N/A	• TRCS application login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

8.	Logon to the CIP plaza/host Application
	
	• Enter an Employee ID (Shift Supervisor ID).
	• Enter a password.
	• Click on the Logon button.
	
	User Name:_____
	User Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
9.	Verify Tag Status file download. Run File Transfer Report At the Plaza Monitoring screen • Click on the main menu button. • Click on the Report hyperlink. • Click on the System Admin Category. • Select the File Transfer report from the drop down list. • Click on the Submit	N/A	• Report shows that the Tag Status file was downloaded successfully to the CIP lane.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

10.	Verify Tag Search
	
	At the Plaza Report screen:
	• Click on the Application Main Menu button.
	• Click on the Tag Status hyperlink.
	• Select CIP from the Plaza drop down list.
	• Select lane 001 from the Lane drop down list.
	• Enter the tag number in the Tag Number text box.
	• Click the Search button.
	
	Low Balance Tag #
	_____
		N/A	• The Tag search screen is displayed
			• The Tag Status From Lane windows displays:
			  ○ Tag Number = _____
			  ○ Tag Status = Low Balance
			  ○ Trigger VES = No
			  ○ Call Agency = No		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

11.	Verify Tag Search
	
	Tag with Trigger VES
	
	At the Plaza Report screen:
	• Click on the Application Main Menu button.
	• Click on the Tag Status hyperlink.
	• Select CIP from the Plaza drop down list.
	• Select lane 001 from the Lane drop down list.
	• Enter the tag number in the Tag Number text box.
	• Click the Search button.
	
	Valid Tag # _____
		N/A	• The Tag search screen is displayed
			• The Tag Status From Lane windows displays:
			   o Tag Number = _____
			   o Tag Status = GOOD
			   o Trigger VES = YES
			   o Call Agency = No		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

12.	Verify Tag Search
	
	At the Plaza Application Main Menu:
	• Click on the Tag Status hyperlink
	• Select CIP from the Plaza drop down list.
	• Select lane 001 from the Lane drop down list.
	• Enter the tag number in the Tag Number text box.
	• Click the Search button
	
	Negative Balance Tag #
		N/A	• The Tag search screen is displayed
			• The Tag Status From Lane windows displays:
			  o Tag Number = _____
			  o Tag Status = Neg Balance
			  o Trigger VES = No
			  o Call Agency = No		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

13.	Verify Tag Search
	
	At the Plaza Application Main Menu:
	• Click on the Tag Status hyperlink
	• Select CIP from the Plaza drop down list
	• Select lane 001 from the Lane drop down list
	• Enter the tag number in the Tag Number text box.
	• Click the Search button
	
	Lost/Stolen Tag
	#_____
		N/A	• The Tag search screen is displayed
			• The Tag Status From Lane windows displays:
			   o Tag Number = _____
			   o Tag Status = Lost/Stolen
			   o Trigger VES = No
			   o Call Agency = No		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

14.	Verify Tag Search
	
	At the Plaza Application Main Menu:
	• Click on the Tag Status hyperlink
	• Select CIP from the Plaza drop down list
	• Select lane 001 from the Lane drop down list
	• Enter the tag number in the Tag Number text box.
	• Click the Search button
	
	Stolen Tag
	#_____
		N/A	• The Tag search screen is displayed
			• The Tag Status From Lane windows displays:
			   o Tag Number = _____
			   o Tag Status = Stolen
			   o Trigger VES = No
			   o Call Agency = No		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS

15.	Verify Tag Search
	
	At the Plaza Application Main Menu:
	• Click on the Tag Status hyperlink
	• Select CIP from the Plaza drop down list
	• Select lane 001 from the Lane drop down list
	• Enter the tag number in the Tag Number text box.
	• Click the Search button.
	
	Valid Tag
	# _____
		N/A	• The Tag search screen is displayed
			• The Tag Status From Lane windows displays:
			    o Tag Number = _____
			    o Tag Status = GOOD
			    o Trigger VES = No
			    o Call Agency = No		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
16.	Using the plaza remote command, the supervisor places the lane into ETC Dedicated open state. Steps to place lane in ETC open state: • Select the lane from the Target Lane drop down list. • Click on the Lane Mode ETC radio button • Click on the Lane State OPEN radio button. • Click on the Send Command button.	• The canopy light is amber and flashing. • The Patron Fare Display is blank. • Traffic Signal is green.	• A message is displayed indicating remote command was successful. • Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane status field displays lane no. • Lane mode field displays ETC. • Lane state field displays OPEN. • Collector field displays shift supervisor id. • Lane health field color is green • A collector Logon message displayed in the Lane Messages Window. • Logon message contains Shift Supervisor's id, lane number and logon date and time.		Logon message Date/Time: _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
17.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Valid Tag # _____	• PFD displays "PAID" • Canopy light is flashing amber. • Traffic light remains green. • A high pulse tone is heard from the toll booth indicator and the green light is lit.	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field color remains green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
18.	Drive a Class 2 vehicle with a Low balance valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Low Balance Tag #_____	• PFD displays "PAID LOW BALANCE" • Canopy light is flashing amber • Traffic light remains green. • A high pulse tone is heard from the toll booth indicator and the green light is lit. • Valid ETC transaction	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = LOW BALANCE		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
19.	Drive a Class 2 vehicle with a Lost/Stolen status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Lost/Stolen Tag # _____	• PFD will display "INVALID TAG". • Canopy light is flashing amber. • Traffic light remains green. • The strobe light and audible alarm are activated. • A low continuous tone is heard from the toll booth indicator and the red light is lit. • Invalid ETC transaction	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = Lost/Stolen • Info field displays V • Transaction shaded Red • Image captured and processed		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
20.	Drive a Class 2 vehicle with a Negative Balance status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Neg Balance Tag #_____	• PFD will display "INVALID TAG". • Canopy light is flashing amber. • Traffic light remains green. • The strobe light and audible alarm are activated. • A low continuous tone is heard from the toll booth indicator and the red light is lit. • Invalid ETC transaction	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = Negative Balance • Info field displays V • Transaction shaded Red • Image captured and processed		Txn # _____ Date/Time _____

	Title: Tag Status File Download		Date: May 15, 2008	Test No. F-002	Rev. 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
21.	Verify Trigger VES Drive a Class 2 vehicle with a Valid status transponder (Tag flagged for trigger VES) through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Valid Tag # _____	• PFD displays "PAID" • Canopy light is flashing amber. • Traffic light remains green. • A high pulse tone is heard from the toll booth indicator and the green light is lit.	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field remains green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD • Image captured and processed		Txn # _____ Date/Time _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
22.	Using the plaza remote command, the supervisor places the lane into standby mode. Steps to place ETC Lane in Standby state: • Click on the target lane • Set lane state to standby • Click on send command button	• The canopy light is red. • The Patron Fare Display is blank. • Traffic light is green.	• A message is displayed indicating remote command was successful • Lane status field displays lane no. • Lane status field color changes to red indicating the lane is in Standby mode. • Lane mode field remains ETC. • Lane state field displays STANDBY. • The lane health field color remains Green. • A message is displayed in the Lane Messages Window indicating the lane is in standby mode.		Standby message Date/Time: _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
23.	The supervisor places the lane in ETC closed state. Steps to place lane in ETC closed state: • Select the lane from the Target Lane drop down list. • Click on the Lane State CLOSED radio button. • Click on the Send Command button.	• The canopy light is red. • The Patron Fare Display is blank. • The Traffic Signal is off.	• A message is displayed indicating remote command was successful. • Lane status field displays lane no. • Lane status field color remains red. • Lane mode field remains ETC. • Lane state field changes to CLOSED. • A collector Logoff message is displayed on the Lane Messages Window • Logoff message contains shift supervisor's id, lane number, logoff date and time.		Logoff message Date/Time: _____
24.	At the Plaza Monitoring Window screen: • Click on the Logout button	N/A	• Plaza/Host Application Login screen is displayed.		

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THE FOLLOWING STEPS ARE TO BE DONE DURING POST TEST ANALYSIS

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED LANE RESULTS	EXPECTED HOST/PLAZA RESULTS	PASS/ FAIL	COMMENTS
25.	Obtain a copy of the Lane file download process log.	Lane File Download log contains messages indicating successful or unsuccessful file download.			Review Lane tranlog for the proper recording of file download process.
26.	Obtain a copy of the Plaza/Host file download process log.		Plaza/Host File Download log contains messages indicating successful or unsuccessful file download.		Review Plaza/Host log for the proper recording of file download process.
27.	Obtain a copy of the Plaza/Host file Transfer process log.		Plaza/Host FileTransfer log contains messages indicating successful or unsuccessful transfer of file.		Review Plaza/Host log for the proper recording of file transfer process.

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END OF POST TEST ANALYSIS
END OF TEST

TEST DISCREPANCIES/COMMENTS REPORT

TEST STEP	DISCREPANCIES/COMMENTS

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TEST STEP	DISCREPANCIES/COMMENTS

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FINAL SIGN OFF AND COMMENTS

TEST SUPERVISOR/LEAD: DATE:	SCDOT REPRESENTATIVE: DATE:

F-003 Employee File Download

Title: Employee File Download	Date: May 15, 2008	Test No. F-003	Rev 1.1

APPROVALS

Author: R. Rhyme	Test Verification:	Dept. Mgr./Designee:	QA/Designee:	SCDOT:

TEST OBJECTIVES

1. Demonstrate the process of creating the Employee file on the Host server.
2. Demonstrate the process of transferring the Employee file from the Host server to the Plaza server
3. Demonstrate the process of downloading the Employee file from the Plaza server to the Lane
4. Demonstrate the process of opening and closing the lane using employees included in the Employee file.

TEST CRITERIA

1. All system administration interfaces and functionalities are working properly.
2. All system access functionalities are working properly.
3. System authorizes access to user with the correct user name and password.
4. System denied access to users with incorrect user name and password.
5. User roles and rights control user access to the system.

TEST ASSUMPTIONS/CONSTRAINTS

1. All programs involved in the creation and transfer of the Employee file is installed and functioning correctly.
2. All required system environmental variables are defined correctly.

SAFETY

Title: Employee File Download	Date: May 15, 2008	Test No. F-003	Rev 1.1

1. All personnel will be briefed prior to the start of testing on proper safety practices to be observed at all times while within the testing area.

PRETEST CONDITIONS/EQUIPMENT

1. The Plaza/Host workstation must be available and running.
2. The Plaza/Host Linux server is available and running
3. The TRCS Host/Plaza application must be installed and running.
4. Start and stop times of this test will be monitored and recorded.
5. All testing equipment will be located in the SCDOT Test Facility for the purpose of observing the results of the test.
6. Username and password for plaza supervisor is setup.
7. Start and stop time of this test will be monitored and recorded.
8. The plaza/host software will be running.

TEST DISCUSSION AND DESCRIPTION

STEPS	DESCRIPTION
1 – 3	Data Setup
4	Create Employee file
5	Validate the Employee file
7 – 9	Login to the TRCS application
10	Verify Employee file transfer from Host to Plaza server
11	Download Employee File from a Plaza it lane.
12 – 29	Verify Employee File download at the lane.

Each step of this functional test will be conducted as written. For each step that meets all expected results, the test coordinator /

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designee may indicate passing as "P". For each step that does not fully meet the expected result(s), the test coordinator / designee will document the results and indicate failure as "F". Any and all abnormalities will be fully described. Any disagreements on the test results or their acceptability between SCDOT and ACS representatives shall be documented in test results and subject to review by SCDOT and ACS and possible re-test.

If by mutual agreement between ACS and SCDOT it is determined the Demonstration Test is not progressing as expected due to major issues encountered, testing will be suspended, and resumed after the issues have been rectified.

At the conclusion of testing at the designated lane, post test analysis will be performed. The complete results of this functional test will be retained by ACS and a copy will be forwarded to the SCDOT.

EXPECTED RESULTS

- The Employee file is created.
- The Employee file is validated.
- The Employee file is downloading from the Plaza/Host to the Lane.
- Employee included in the downloaded Employee file is able to perform lane operations, such as, Lane opening and closing.

Date Test Was Performed:	Test Supervisor/Lead:	SCDOT Representative:

START TIME: _____ STOP TIME: _____ PLAZA REVENUE TIME:_____

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TEST STEPS

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
1.	Data Setup CIP A subset of employees created in F2-001 test script will be used to validate the Employee file download process. Toll Collector (CIP) Card No:_____ Shift Supervisor (CIP) Card No:_____ Money Room Clerk (CIP) Card No:_____	N/A	N/A		
2.	Data Setup (con't) Toll Manager (CIP) Card No:_____ Toll Collector (terminated) Card No:_____	N/A	N/A		
3.	Data Setup (con't) System Manager (Terminated) Card No:_____ Toll Collector (TOLL_COLL_TRCS Role) Card No:_____	N/A	N/A		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

4.	Create Employee File
	
	Login to the Plaza/Host server
	
	At the Plaza/Host server command prompt:
	• Verify all logical are defined.
	• Run the process (vector_SCDOT_create_emp_fare_files) to create the Employee File.
	• Change to the directory where the Employee file is created.
	• List the content on the directory.
		N/A	• User allowed access to the server.
			• The following logical are defined
			   o VECTOR_SCDOT_FILE_SOURCE
			   o VECTOR_SCDOT_FILE_PROC
			   o VECTOR_SCDOT_FILE_UNPROC
			   o VECTOR_SCDOT_FILE_TRCS
			   o VECTOR_SCDOT_RPT_DIR
			   o VECTOR_SCDOT_CFG_DIR
			• The process completed successfully.
			• An Employee file is created.
			• The Employee file is created in VECTOR_SCDOT_FILE_TRCS directory.
			• The Employee file is zipped and the filename matches the format: EMP_YYYYMMDDHHMMSS.DAT.gz.		

5.	Validate zip file content At the Plaza/Host server command prompt: • Copy the file to a local director • Unzip the employee file.		• The zip file contains a file with the name: EMP_YYYYMMDDHHMMSS.DAT		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
6.	Start the TRCS Application. • Start the web browser • Enter the Plaza Application web address into the URL input box of the web browser • Press the enter key	N/A	• TRCS Application Login screen is displayed.		

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

7.	Logon to the CIP TRCS Application
	• Enter a Employee ID (Shift Supervisor ID).
	• Enter a password.
	• Click on the Logon button.
	
	User Name:_____
	User Password: _____
		N/A	• TRCS Application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• TRCS Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			    ▪ Tag Status
			  o Deposit
			    ▪ Money Bag Maintenance
			  o Reports
			    ▪ Reports		

Title: Employee File Download	Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
8.	Download Employee File from a Plaza/Host lane. At the Plaza server command prompt: • Run the LANE_XFER process to download the Employee File to the lanes.	• Lane uses the download.db file to determine the file to download. • Lane Controller FTP's the Employee File from the Plaza/host to the Lane. • Lane FTP's the CHECK.DAT file and validates the pervious file download. • Lane validates and activates the employee file. • Lane sends an acknowledgment to the plaza/host.	• A download request message is sent to the Lane Controller. • Plaza/Host receives an acknowledgement message (DOWNLOAD_SUCCESS = 1) from the Lane that the transfer was successful.		

Title: Employee File Download	Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
9.	Verify Employee File Transfer from Plaza/Host to Lane. At the Plaza Application Main Menu screen: Run File Transfer Report o Click on the Report hyperlink on the Plaza Application Main Menu. o Click on the File Transfer Category. o Select the File Transfer report from the drop down list. o Click on the Submit button.	N/A	• File Transfer Report shows that the download to the lane was unsuccessful.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
10.	Verify Employee File Transfer from Plaza/Host to Lane If the touch screen is in screen saver mode the tester touches it. The tester logs onto the Toll Terminal by manually entering a card no by pressing the numbers on the keypad. The tester will press the "Enter" button. Toll Collector (CIP)Card No:_____	The entry is displayed in the Collector ID field. After the supervisor approves the login, the touch screen displays a Dynamic Display with four options: • Open Lane • Logoff • Standby	• Lane status field is red. • Lane state filed displays Closed. • Lane health field is green • A successful collector Logon message is displayed on the Lane Messages Window. • Logon message contains the collector's ID, lane number and date and time.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
11.	The tester will press the "Logoff" button.	• The lane is closed. • Screen-saver is enabled but the screen saver does not come on. • The canopy light is red. • The PFD is blank. • The Traffic Signal is off.	• Lane status field remains red. • Lane state field displays Closed. • Lane health field remains green. • A collector Logoff message is displayed on the Lane Messages Window. • Logoff message contains tester's id, lane number, logoff date and time.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
12.	If the touch screen is in screen saver mode the tester touches it. The tester logs onto the Toll Terminal by manually entering a card no by pressing the numbers on the keypad. The tester will press the "Enter" button. Toll Manager (CIP) Card No:_____	• The entry is displayed in the Collector ID field.	• Lane status field remains red. • Lane state field displays Closed. • Lane health field remains green.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
13.	If the touch screen is in screen saver mode the tester touches it. The tester logs onto the Toll Terminal by manually entering a card no by pressing the numbers on the keypad. The tester will press the "Enter" button. Shift Supervisor (CIP) Card No:_____	The entry is displayed in the Collector ID field. After the supervisor approves the login, the touch screen displays a Dynamic Display with four options: • Open Lane • Logoff • Standby	• Lane status field is red. • Lane state filed displays Closed. • Lane health field is green • A successful collector Logon message is displayed on the Lane Messages Window. Logon message contains the collector's ID, lane number and date and time		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
14.	The tester will press the "Logoff" button.	• The lane is closed. • Screen-saver is enabled but the screen saver does not come on. • The canopy light is red. • The PFD is blank. • The Traffic Signal is off.	• Lane status field remains red. • Lane state field displays Closed. • Lane health field remains green. • A collector Logoff message is displayed on the Lane Messages Window. • Logoff message contains tester's id, lane number, logoff date and time.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
15.	If the touch screen is in screen saver mode the tester touches it. The tester logs onto the Toll Terminal by manually entering a card no by pressing the numbers on the keypad. The tester will press the "Enter" button. Money Room Clerk (CIP) Card No:_____	• The touch screen displays the login screen with "Invalid Collector ID"	• Lane status field remains red. • Lane state field displays Closed. • Lane health field remains green.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
16.	If the touch screen is in screen saver mode the tester touches it. The tester logs onto the Toll Terminal by manually entering a card no by pressing the numbers on the keypad. The tester will press the "Enter" button. System Manager (Terminated) Card No:_____	• The touch screen displays the login screen with "Invalid Collector ID"	• Lane status field remains red. • Lane state field displays Closed. • Lane health field remains green.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
17.	The collector presses the "Open Lane" button on the touch screen.	• The lane is open in mixed mode. • The touch screen displays the main classification screen. • Canopy light changes to green. • Traffic Signal changes to red. • PFD display is blank"	• Lane status field color changes to green indicating open mixed mode. • Lane status field displays lane no. • Lane mode field displays ETC_MANUAL. • Lane state field displays OPEN. • Collector field displays collector's id. • Lane health field color is green. • A collector logon message displayed in the Lane Messages Window. • Logon message contains collector's id, lane no, and logon date and time.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
18.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD displays "PAID" • Canopy light is green. • Traffic light remains green. • A high pulse tone is heard from the toll booth indicator and the green light is lit.	• Lane status field color is green indicating Open Mixed mode. • Lane health field is green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD		Txn # _____ Date/Time _____ Axle count = _____ Class Count = _____

	Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

19.	The collector will press the "Lane State" button.	• The touch screen displays a Dynamic Display with four options:
		  ○ Open Lane
		  ○ Logoff
		  ○ Standby
			No change on plaza monitoring screen.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
20.	The collector presses the "Stand By" button on the touch screen.	• The lane is placed in stand by mode. • The touch screen displays the main classification screen. • Canopy light changes to red. • Traffic Signal is red. • PFD is blank	• Lane status field color changes to red indicating stand by mixed mode. • Lane mode field displays ETC_MANUAL. • Lane state field changes to STANDBY. • Lane health field color remains green. • A message is displayed in the Lane Messages Window indicating the lane is in standby mode.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
21.	The collector will press the "Lane State" button.	• The touch screen displays a Dynamic Display with four options: o Open Lane o Logoff o Standby	No change on plaza monitoring screen.		

Title: Employee File Download		Date: May 15, 2008	Test No. F-003	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
22.	The collector will press the "Logoff" button.	• The lane is closed. • Screen-saver is enabled but the screen saver does not come on. • The canopy light is red. • The PFD is blank. • The Traffic Signal is off.	• Lane status field color remains red. • Lane mode field displays ETC_MANUAL. • Lane state field changes to CLOSED. • Lane health field color remains green. • A collector Logoff message is displayed on the Lane Messages Window. • Logoff message contains collector 's id, lane number, logoff date and time		Logoff message Date/Time: _____
23.	At the Plaza Monitoring Window screen: • Click on the Logout button	N/A	• TRCS Application Login screen is displayed.		

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THE FOLLOWING STEPS ARE TO BE DONE DURING POST TEST ANALYSIS

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED LANE RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
24.	Obtain a copy of the Lane transaction log.	Lane tranlog will reflect test scenario of the previous steps.			Review Lane tranlog for the proper recording of each transaction.
25.	Obtain a copy of the Lane file download process log.	Lane File Download log contains messages indicating successful or unsuccessful file download.			Review Lane tranlog for the proper recording of file download process.
26.	Obtain a copy of the Plaza/Host file download process log.		Plaza/Host File Download log contains messages indicating successful or unsuccessful file download.		Review Plaza log for the proper recording of file download process.

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27.	Obtain a copy of the Host file Transfer process log.		Host FileTransfer log contains messages indicating successful or unsuccessful transfer of file.		Review Host log for the proper recording of file transfer process.
END OF POST TEST ANALYSIS					
END OF TEST					

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TEST DISCREPANCIES/COMMENTS REPORT

TEST STEP	DISCREPANCIES/COMMENTS

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FINAL SIGN OFF AND COMMENTS

TEST SUPERVISOR/LEAD: DATE:	SCDOT REPRESENTATIVE: DATE:

F-004 Dedicated ETC Lane Revenue Collection

Title: Dedicated ETC Lane Revenue Collection	Date: May 15, 2008	Test No. F-004	Rev 1.1

APPROVALS

Author: R. Rhyme	Test Verification:	Dept. Mgr./Designee:	QA/Designee:	SCDOT:

TEST OBJECTIVES

1. Demonstrate remote operations of a dedicated ETC lane for the purpose of starting and ending a collector's shift.
2. Demonstrate Plaza processing of ETC transactions generated in an opened dedicated ETC lane.
3. Demonstrate Plaza processing of ETC transactions generated in a closed lane.
4. Demonstrate Plaza processing of violation transactions generated in a dedicated ETC lane.
5. Demonstrate collector Tour of Duty functionalities.
6. Validation of reports generated after a collector's shift has ended.

TEST CRITERIA

1. All system administration interfaces and functionalities are working properly.
2. All system access functionalities are working properly.
3. System authorizes access to user with the correct user name and password.
4. System denied access to users with incorrect user name and password.
5. User access is controlled by user roles and rights.
6. Correct operational response to various vehicle classifications.
7. Correct operational response to various vehicle speeds, spacing and location within the lane.
8. All valid transponders accepted and logged.
9. Correct operational response of the driver feedback traffic light (Traffic Signal), and driver feedback sign (Patron Fare Display).

10. All violations logged.

11. Correct transponder reads and correct logging of all ETC transactions.

12. All transactions properly categorized and logged on the Lane tranlog.

TEST ASSUMPTIONS/CONSTRAINTS

1. Vehicle operator safety will be paramount at all times during testing.

2. Test vehicles will drive through the lane at the speed indicated in each step.

3. Test passes will be conducted with multiple classifications of vehicles. With safety in mind, 2 and 3 axle vehicles will be tested at no more than 10 mph.

4. No unusual class vehicles will be demonstrated during the client demo.

5. Test passes will be conducted at various speeds, vehicle spacing, and vehicle location.

6. Authorized SCDOT representative(s) are available to witness testing.

7. QA personnel will operate the toll collection booth.

SAFETY

1. All personnel to include testers, drivers, and observers will be briefed prior to the start of testing on proper safety practices to be observed at all times while within the testing area.

2. Any speeding, reckless driving, horseplay, or un-safe activity by the drivers will be grounds for immediate dismissal.

3. All vehicles will be equipped with a rotating flashing beacon on the roof of their vehicle. The beacon will be operating any time the vehicle is in the testing zone.

4. All personnel will be required to wear reflective vests while in the testing zone.

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PRETEST CONDITIONS/EQUIPMENT

1. The Plaza workstation must be available and running.
2. Username and password for plaza supervisor.
3. Start and stop time of this test will be monitored and recorded.
4. The plaza software will be running.
5. Vehicles of multiple classifications will be available, as required, for testing.
6. Valid, low balance, lost / stolen, negative, and closed account status transponders will be available for each vehicle class participating in this test.
7. The MLT will be inactive for this test.
8. Clear lane transaction log.
9. Clear plaza communication buffer transactions.
10. All testing equipment will be located at the SCDOT Facility for the purpose of observing the results of the test.
11. Testing will not be performed during snow or lightning. Testing during other conditions will be determined by SCDOT/ACS.
12. Ensure that all lane equipment is functioning correctly.

TEST DISCUSSION AND DESCRIPTION

STEPS	DESCRIPTION
1 - 2	Shift Supervisor login to TRCS application
3 - 4	Shift Supervisor opens Lane in Dedicated ETC mode. First tour segment.
5 – 6	Generate toll transactions for class 2,3 vehicles with valid tags.
7 – 8	Generate toll transactions for class 2,3 vehicles with Low Balance tags.
9 – 10	Generate toll transactions for class 2,3 vehicles with Lost/Stolen tags.
11 – 12	Generate toll transactions for class 2,3 vehicles with Negative Balance tags.
15 – 16	Generate toll transactions for class 2,3 vehicles with Closed tags.
17 – 18	Generate toll evader toll transactions for class 2,3 vehicles without tags.
19 – 21	Generate class mismatch toll transactions.
22 – 23	Generate tailgating toll transactions.
24 – 25	Shift Supervisor closes the Lane.
26	Generate toll transaction while Lane is closed.
27	Shift Supervisor generates shift reports.
28	Shift Supervisor logoff the Plaza application.

Each step of this functional test will be conducted as written. For each step that meets all expected results, the test coordinator / designee may indicate passing as "P". For each step that does not fully meet the expected result(s), the test coordinator / designee will document the results and indicate failure as "F". Any and all abnormalities will be fully described. Any disagreements on the test results or their acceptability between SCDOT and ACS representatives shall be documented in test results and subject to review by SCDOT and ACS and possible re-test.

If by mutual agreement between ACS and SCDOT it is determined the Demonstration Test is not progressing as expected due to major issues encountered, testing will be suspended, and resumed after the issues have been rectified.

At the conclusion of testing at the designated lane, post test analysis will be performed. The complete results of this functional test will be retained by ACS and a copy will be forwarded to the SCDOT.

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EXPECTED RESULTS

1. Transactions generated during Shift Supervisor #1 first login session are assigned to Shift Supervisor #1 first tour segment.
2. All violation transactions and images are processed correctly at the plaza.

Date Test Was Performed:	Test Supervisor/Lead:	SCDOT Representative:

START TIME: _____ STOP TIME: _____ PLAZA REVENUE TIME:_____

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TEST STEPS

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
1.	Start TRCS application • Start the web browser • Enter the TRCS application web address into the URL input box of the web browser • Press the enter key	N/A	• TRCS application Login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

2.	Logon to the TRCS application
	• Enter a Login Name (Shift Supervisor #1)
	
	• Enter a password
	• Click on the Logon button
	
	User Name:_____
	User Password: _____
	
	Shift Supervisor #1
		N/A	• TRCS application Main Menu screen is displayed.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

3.	At the TRCS application Main Menu screen:
	• Click on the Current Transaction and Messages hyperlink
		N/A	• The TRCS Plaza Monitoring screen is displayed
			• The Toll Transaction window displays the following tabs:
			  o Transaction & Message
			  o Transaction History
			  o Message History
			  o Traffic Trends
			  o Lane Commands
			  o Toll Collector Audit		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
4.	Using the plaza remote command, the supervisor places the lane into ETC Dedicated open state. Steps to place lane in ETC open state: • Select the Lane Command tab. • Select the lane from the target Lane drop down list. • Click on the Lane Mode ETC radio button. • Click on the Lane State OPEN radio button. • Click on the Send Command button.	• The canopy light is red. • The canopy light changes to amber and is flashing. • The Patron Fare Display is blank. • Traffic Signal is yellow.	• A message is displayed indicating remote command was successful. • Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane status field displays lane no. • Lane mode field displays ETC. • Lane state field displays OPEN. • Collector field displays employee ID. • Lane health field color is green. • A collector Logon message displayed in the Lane Messages Window. • Logon message contains employee ID, lane number and logon date and time. • A lane not in Standby message is displayed in the Lane Message Window.		Logon message Date/Time: _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
5.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag #_____	• PFD displays "Thank You" • Canopy light is flashing amber. • Traffic light turns green and then back to yellow. • Valid ETC transaction.	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
6.	Drive a Class 3 vehicle with valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD displays "Thank You" • Traffic light turns green and then back to yellow. • Canopy light is flashing amber. • Valid ETC transaction.	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green. • AVC, Tag, and Actual axle = 3. • Collector axle is = 0. • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD		Txn # _____ Date/Time _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
7.	Drive a Class 2 vehicle with a low balance status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD displays "LOW BALANCE" • Canopy light is flashing amber • Traffic light remains yellow • Valid ETC transaction	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = LOW BALANCE		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
8.	Drive a Class 3 vehicle with a Low balance status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD displays "LOW BALANCE" • Canopy light is flashing amber • Traffic light remains yellow. • Valid ETC transaction	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green • AVC, Tag, and Actual axle = 3. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = LOW BALANCE		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
9.	Drive a Class 2 vehicle with a Lost/Stolen status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD will display "Go Unpaid". • Canopy light is flashing amber. • Traffic light remains yellow. • The strobe light and audible alarm are activated. • VES will be triggered. • Invalid ETC transaction	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0. • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = Lost/Stolen • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
10.	Drive a Class 3 vehicle with a Lost/Stolen status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD will display "Go Unpaid". • Canopy light is flashing amber. • Traffic light remains yellow. • The strobe light and audible alarm are activated. • VES will be triggered. • Invalid ETC transaction	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green. • AVC, Tag, and Actual axle = 3. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = Lost/Stolen • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
11.	Drive a Class 2 vehicle with a Negative Balance status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD will display "Go Unpaid". • Canopy light is flashing amber. • Traffic light remains Yellow. • The strobe light and audible alarm are activated. • VES will be triggered. • Invalid ETC transaction	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = Neg Bal. • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____ Axle count = _____ Class Count = _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
12.	Drive a Class 2 vehicle with a Closed status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD will display "Go Unpaid". • Canopy light is flashing amber. • Traffic light remains yellow. • The strobe light and audible alarm are activated. • VES will be triggered. • Invalid ETC transaction	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0. • Revenue type = ETC. • Amount = $0.00. • Transponder = _____. • Transponder Status = Invalid. • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
13.	Drive a Class 2 vehicle without a transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD will remain blank. • Canopy light is flashing amber. • Traffic light remains yellow. • The strobe light and audible alarm are activated. • VES will be triggered. • Violation transaction is recorded.	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field is green. • AVC, and Actual axle = 2. • Tag, Collector axle is = 0. • Revenue type = TOLL_EVADER. • Amount = $0.00. • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
14.	**Class Mismatch** Drive a 3 axle Class 3 vehicle into the lane at 10 MPH. Vehicle will be equipped with a valid Class 2 tag. Plate # _____ Tag# _____	• The ETC equipment reads the tag. • The AVC classifies the vehicle. • The AVC class is charged. • PFD displays "Thank You". • Traffic Signal remains yellow.	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field remains green. • AVC and Actual axle = 3. • Tag axle = 2. • Collector = 0. • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD. • Info field displays M. • Info field shaded yellow.		Txn # _____ Date/Time _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
15.	Drive a 2 axle Class 2 vehicle into the lane at 10 MPH. Vehicle will be equipped with a valid Class 3 tag. Tag# _____ Plate # _____	• The ETC equipment read the tag. • The AVC classifies the vehicle. • The AVC class is charged. • PFD displays "Thank You" • Traffic Signal will remain green • VES will be triggered. • The transaction will be a violation and images will be captured.	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field remains green. • AVC and Actual axle = 2. • Tag axle = 3. • Collector = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____. • Transponder Status = GOOD. • Info field displays M. • Info field shaded yellow. • Image captured and processed.		Txn # _____ Date/Time _____

	Title: Dedicated ETC Lane Revenue Collection	Date: May 15, 2008	Test No. F-004	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
16.	Drive a 2 axle Class 2 vehicle into the lane at 10 MPH. Vehicle will be equipped with a Lost/Stolen Class 3 tag. Tag# _____ Plate # _____	• The ETC equipment read the tag. • The AVC classifies the vehicle. • The AVC class is charged. • PFD displays "Go Unpaid" • Traffic Signal will remain yellow • VES will be triggered. • The transaction will be a violation and images will be captured.	• Lane status field color is flashing yellow indicating dedicated ETC mode. • Lane health field remains green. • AVC and Actual axle = 2. • Tag axle = 3. • Collector = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____. • Transponder Status = Lost/Stolen. • Transaction shaded Red • Info field displays M. • Info field shaded yellow. • Image captured and processed.		Txn # _____ Date/Time _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
17.	Using the plaza remote command, the supervisor places the lane into standby mode. Steps to place ETC Lane in Standby state: • Click on the target lane. • Set lane state to STANDBY. • Click on send command button.	• The canopy light is red. • The Patron Fare Display is blank. • Traffic light is green.	• A message is displayed indicating remote command was successful • Lane status field displays lane no. • Lane status field color changes to red indicating the lane is in Standby mode. • Lane mode field remains ETC. • Lane state field displays STANDBY. • The lane health field color remains Green. • A message is displayed in the Lane Messages Window indicating the lane is in standby mode.		Standby message Date/Time: _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
18.	The supervisor places the lane in ETC closed state. Steps to place lane in ETC closed state: • Select the lane from the Target Lane drop down list. • Click on the Lane State CLOSED radio button. • Click on the Send Command button.	• The canopy light is red. • The Patron Fare Display is blank. • The Traffic Signal is off.	• A message is displayed indicating remote command was successful. • Lane status field displays lane no. • Lane status field color remains red. • Lane mode field remains ETC. • Lane state field changes to CLOSED. • A collector Logoff message is displayed on the Lane Messages Window • Logoff message contains shift supervisor's id, lane number, logoff date and time.		Logoff message Date/Time: _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
19.	The following transaction is to be performed at 10 mph Class 2 Vehicle with a valid tag Tag # _____ Plate # _____	• PFD will remain blank. • Canopy light is red. • Traffic light remains off. • Both the audible alarm and strobe light are activated. • Violation transaction is recorded.	• Lane status field color remains red. • Lane health field remains green. • Lane state displays closed AVC/Tag/Actual axle = 2 Collector axle = 0 Transponder = _____. Transponder Status = GOOD Revenue type is ETC Toll amount is $0.00. Info field displays "V". Transactions shaded Red. Images processed and Reviewed.		
20.	Logout of the TRCS application. At the Plaza Monitoring screen: • Click on the Logout button.	N/A	• TRCS application Login screen is displayed.		

	Title: Dedicated ETC Lane Revenue Collection		Date: May 15, 2008	Test No. F-004	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

21.	At the Plaza Application Main Menu screen:
	• Click on the Current Transaction and Messages hyperlink
		N/A	• The Plaza Monitoring screen is displayed
			• The Toll Transaction window displays the following tabs:
			  o Transaction& Message
			  o Transaction History
			  o Message History
			  o Traffic Trends
			  o Lane Commands
			  o Toll Collector Audit		

Title: Dedicated ETC Lane Revenue Collection	Date: May 15, 2008	Test No. F-004	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

22.	The Shift Supervisor runs the HOST-0001A (Collector Tour Of Duty) Report
	
	Steps to run the report:
	At the Plaza/Host Monitoring window:
	• Click on the Report main button.
	• Select CollectorPerfromance from the Category drop down list.
	• Select HOST 0001A from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Today's date.
	   o Lane= 001
	   o Collector = Shift Supervisor #2
	   o Tour Segment = 1
	   o Revenue Type = ALL
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			
			• The Report Criteria window is displayed.
			
			• Report shows all transactions generated during the first Shift Supervisor 1st tour of duty.		

Title: Dedicated ETC Lane Revenue Collection	Date: May 15, 2008	Test No. F-004	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
23.	The supervisor runs the Host – 0016 - Detail Transaction Report (DTR). Steps to run the report: At the Crystal Report window: • Click on the Reports Main button. • Select Traffic from the Category drop down list • Select HOST0016 – Detailed Transaction Report from the Report drop down list. • Click on the Submit button. • Select CIP from the Plaza drop down list. • Enter Begin Date = Today's date. • Enter End Date = Today's date. • Click on the Submit button.	N/A	• The Reporting Option window is displayed. • The Report Criteria window is displayed. • The Detailed Transaction Report is displayed. • The report provides a complete listing of vehicle and toll transactions in a lane for a specific collector for a specified period of revenue days.		

Title: Dedicated ETC Lane Revenue Collection	Date: May 15, 2008	Test No. F-004	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
24.	Verify Transaction Logger Run Integrity Report. Report must be run after data has been synchronized from the Lane to the Plaza.	N/A	N/A		

Title: Dedicated ETC Lane Revenue Collection	Date: May 15, 2008	Test No. F-004	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

25.	The Shift Supervisor runs the Host – 0032B (ETC Posting – Integrity Report) report.
	
	Steps to run the report:
	At the Plaza/Host Monitoring window:
	• Click on the Report main button.
	• Select ViewReportsTraffic from the Category drop down list.
	• Select HOST – 00032B from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = ALL
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Tomorrow's date.
	   o Direction = ALL
	   o Lane = ALL
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			
			• The Report Criteria window is displayed.
			
			• ETC Posting Integrity report is displayed.
			
			• All transaction generated in scripts F2-008 is included on the report		

26.	At the Report window: • Click on the Main button • Click on the Logout button	N/A	• TRCS application Login screen is displayed.		

THE FOLLOWING STEPS ARE TO BE DONE DURING POST TEST ANALYSIS

27.	Obtain a copy of the Lane transaction log.	Lane tranlog will reflect test scenario of the previous steps.			Review Lane tranlog for the proper recording of each transaction.
28.	Review VES images.	Images clearly and accurately show plate information.	Images captured in the following test steps are reviewed:		
29.	Obtain a copy of the Host – 0032B (ETC Posting Report)	Host – 0032B will reflect test scenario of the previous steps.	Review Host – 0032B ETC Posting Report for the proper recording of each transaction.		
30.	Obtain a copy of the Host – 0016 (Detail Transaction Report) report.	Host – 0016 will reflect test scenario of the previous steps.	Review Host – 0016 Detail Transaction Report for the proper recording of each transaction.		

END OF POST TEST ANALYSIS

END OF TEST

Title: Dedicated ETC Lane Revenue Collection	Date: May 15, 2008	Test No. F-004	Rev 1.1

TEST DISCREPANCIES/COMMENTS REPORT

TEST STEP	DISCREPANCIES/COMMENTS

Title: Dedicated ETC Lane Revenue Collection	Date: May 15, 2008	Test No. F-004	Rev 1.1

FINAL SIGN OFF AND COMMENTS

TEST SUPERVISOR/LEAD: DATE:	SCDOT REPRESENTATIVE: DATE:

F-005 Mixed Mode Revenue Collection

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

APPROVALS

Author: R Rhyme	Test Verification:	Dept. Mgr./Designee:	QA/Designee:	SCDOT:

TEST OBJECTIVES

1. Demonstrate mixed mode lane opening and closing for the purpose of starting and ending a collector's shift.
2. Demonstrate Plaza/Host processing of ETC transactions generated in an opened mixed mode lane.
3. Demonstrate Plaza/Host processing of violation transactions generated in a mixed mode lane.
4. Demonstrate Plaza/Host processing of toll transactions for Cash, Non Revenue, No Class, ETC, Toll Evader, and Full Fare revenue types.
5. Demonstrate collector Tour of Duty functionalities.
6. Validation of reports generated after a collector's shift has ended.

TEST CRITERIA

1. All system administration interfaces and functionalities are working properly.
2. All system access functionalities are working properly.
3. System authorizes access to user with the correct user name and password.
4. System denies access to users with incorrect user name and password.
5. User access is controlled by user roles and rights.
6. All paid transactions recorded properly.
7. All violations recorded properly.
8. Correct operational response of traffic signal, canopy light, MLT, receipt printer, and patron fare display.
9. Ensure that all lane devices (including treadles) are functioning properly.
10. All transactions properly categorized and logged onto the lane tranlog.

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

TEST ASSUMPTIONS/CONSTRAINTS

1. Vehicle operator safety will be paramount at all times during testing.
2. All transactions will be at 10 MPH. Test passes will be conducted with Class 2 and class 3 vehicles. No unusual class vehicles will be demonstrated during the Factory Acceptance Test.
3. Test passes will be conducted at various vehicle spacings.
4. QA personnel will operate the toll collector booth.
5. Availability of authorized SCDOT representative (s) to witness tests.

SAFETY

1. All personnel to include testers, drivers, and observers will be briefed prior to the start of testing on proper safety practices to be observed at all times while within the testing area.
2. Any speeding, reckless driving, horseplay, or un-safe activity by the drivers will be grounds for immediate dismissal.
3. All vehicles will be equipped with a rotating flashing beacon on the roof of their vehicle. The beacon will be operating any time the vehicle is in the testing zone.
4. All personnel will be required to wear reflective vests while in the testing zone.

PRETEST CONDITIONS/EQUIPMENT

1. The Plaza/Host workstation must be available and running.

2. Username and password for plaza supervisor.

3. Start and stop time of this test will be monitored and recorded.

4. The Plaza/Host software will be running.

5. Vehicles of multiple classifications will be available, as required, for testing.

6. Valid account status transponders will be used for each vehicle participating in this test.

7. The MLT will be active for this test.

8. The tester should have a valid employee login for logging into the lane.

9. Clear lane transaction log.

10. All testing equipment will be located at the SCDOT Facility.

11. Testing will not be performed during snow or lightning. Testing during other conditions will be determined by SCDOT/ACS.

12. Ensure that all lane equipment is functioning correctly.

TEST DISCUSSION AND DESCRIPTION

STEPS	DESCRIPTION
1- 2	Login to Plaza/Host application
3	Configure Plaza/Host Revenue Day
4 – 8	Assign Money bags
9	Validate Assigned Money Bags
10 – 13	Collector # 1 login into mixed mode lane
14 - 17	Generate toll transactions for class 2,3,4,5 vehicles with valid tags.
18	Generate toll transactions for vehicle with Low Balance tag.
19	Generate toll transactions for vehicle with Lost/Stolen tag.
20 - 31	Generate toll transactions for Cash, Non Revenue and Full Fare payment methods.
32,36	Generate No Class toll transaction.
33 – 34	Generate class mismatch transactions.
35	Generate Toll Evader transactions.
37 – 40	Generate transactions to validate Plaza/Host revenue time.
41 – 44	Collector # 1 logoff from the mixed mode lane.
41 – 44	Collector # 1 logoff from the mixed mode lane.
45 – 48	Collector # 2 login to the mixed mode lane.
51 – 61	Generate toll transactions for Cash, Non Revenue, No Class, ETC, TA, Toll Evader revenue types
65 – 69	Collector # 2 close lane.
70 – 74	Shift Supervisor generates shift reports.
69	Shift Supervisor logout of Plaza/Host application

Each step of this functional test will be conducted as written. For each step that meets all expected results, the test coordinator /

designee may indicate passing as "P". For each step that does not fully meet the expected result(s), the test coordinator / designee will document the results and indicate failure as "F". Any and all abnormalities will be fully described. Any disagreements on the test results or their acceptability between SCDOT and ACS representatives shall be documented in test results and subject to review by SCDOT and ACS and possible re-test.

If by mutual agreement between ACS and SCDOT it is determined the Demonstration Test is not progressing as expected due to major issues encountered, testing will be suspended, and resumed after the issues have been rectified.

At the conclusion of testing at the designated lane, post test analysis will be performed. The complete results of this functional test will be retained by ACS and a copy will be forwarded to the SCDOT.

EXPECTED RESULTS

TRCS application access is controlled by user login and application role restriction. A user must supply the correct login for application access and access to certain portions of the application is control by the user assigned role.

Date Test Was Performed:	Test Supervisor/Lead:	SCDOT Representative:

START TIME: _____   STOP TIME: _____ PLAZA/HOST REVENUE TIME:_____

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

TEST STEPS

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
1.	Start CIP TRCS application • Start the web browser • Enter the TRCS application web address into the URL input box of the web browser • Press the enter key	N/A	• TRCS application Login screen is displayed.		

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

2.	Logon to the TRCS application
	• Enter a Login name (User with System Manager Role)
	• Enter a password
	• Click on the Logon button
	
	User Name:_____
	User Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Password should only be displayed as asterisks.
			TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o System Administration
			      ▪ Trigger Image
			      ▪ Employee Maintenance
			      ▪ Plaza Maintenance
			      ▪ Lane Maintenance
			      ▪ Toll Fare Maintenance
			      ▪ Toll Schedule Maintenance
			      ▪ Agency Holiday Maintenance
			      ▪ Password Maintenance
			      ▪ Role Maintenance
			      ▪ Password Maintenance
			• PLAZA OPERATIONS
			   o Reports
			      ▪ Reports		

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

3.	Create Money Bag Inventory
	
	At the Plaza Monitoring Window screen:
	• Click on the Money Room hyperlink.
	• Complete the Bag Inventory Maintenance form with the following data:
	   o Plaza: = CIP
	   o Bag Prefix: = MOM
	   o Start Bag: = 0001
	   o End Bag: = 0010
	• Click on the Generate button
	• Click on the Save button
			• The Revenue Bag Maintenance screen is displayed.
			• The Bag inventory maintenance window tag is active.
			• The TRCS application displays the following message "Bag Inventory successfully created"
			• The Generated Bag Number window contains entries for bags created.
			• The Bag Number matches the bag numbers entered
			• The Validity field values show Valid for all bags.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
4.	Assign Money Bag At the Plaza Monitoring Window screen: • Click on the Money Bag Maintenance hyperlink • Click on the Assign/Return tab. • Select CIP from the Plaza drop down list. • Select the CIP Toll Collector created in F2-001 (Toll Collector #1) from the Employee drop down list. • Click on the search button. • Select the first bag in the Available list and click on the assign button. • Click on the Save button Toll Collector #1 ID_____ Money Bag #1 ID_____	N/A	• The Plaza displays a message that the bag has been assigned		

	Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
5.	Assign Money Bag At the Revenue Bag Maintenance window: • Click on the Main menu button. • Click on the Money Bag Maintenance hyperlink. • Click on the Assign/Return tab. • Select CIP from the Plaza drop down list. • Select the Toll Collector created in F2-001 (Toll Collector #1) from the Employee drop down list. • Click on the search button. • Select the first bag in the Available list and click on the assign button. • Click on the Save button Toll Collector #1 ID_____ Money Bag #2 ID_____	N/A	• The Plaza displays a message that the bag has been assigned.		

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
6.	Assign Money Bag At the Revenue Bag Maintenance window: • Click on the Main menu button. • Click on the Money Bag Maintenance hyperlink. • Click on the assign/Return tab. • Select CIP from the Plaza drop down list. • Select the Toll Collector created in F2-001 (Toll Collector #2) from the Employee drop down list. • Click on the search button. • Select the last bag in the Available list and click on the assign button. • Click on the Save button Toll Collector #2 ID_____ Money Bag #3 ID	N/A	• The Plaza displays a message that the bag has been assigned.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
7.	Validate Assigned Money Bags At the Revenue Bag Maintenance window: • Click on the Change Status tab. • Select CIP from the Plaza drop down list. • Click on Assigned from the Bag Status drop down list. • Click on the Search button	N/A	• The Revenue Bag List is displayed. • Bags assigned are displayed in the list along with the assigned collector's name.		

8.	Access Plaza Monitoring Screen
	
	At the Revenue Bag Maintenance window:
	• Click on the Main Menu button.
	• Click on the Current Transaction and Messages hyperlink.
		N/A	• The Plaza Monitoring screen is displayed
			• The Toll Transaction window displays the following tabs:
			   o Transaction& Message
			   o Transaction History
			   o Message History
			   o Traffic Trends
			   o Lane Commands
			   o Toll Collector Audit		

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
9.	Shift Supervisor assigned Toll Collector # 1 to lane Plaza _____ Lane Number _____ Shift Number _____ Shift Start Time_____ Revenue Bag No (s)_____	N/A			
10.	If the touch screen is in screen saver mode the tester touches it. The collector logs onto the Toll Terminal by manually entering his card number by pressing the numbers on the keypad. The collector will press the "Enter" button. Toll Collector #1 Card No _____	The entry is displayed in the Collector ID field. After the supervisor approves the login, the touch screen displays a Dynamic Display with four options: • Open Lane • Logoff • Standby	• A successful collector Logon message is displayed on the Lane Messages Window. • Logon message contains the collector's ID, lane number and date and time.		Date/Time Logon Message _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
11.	The collector presses the "Open Lane" button on the touch screen.	• The lane is open in mixed mode. • The touch screen displays the main classification screen. • Canopy light changes to green. • Traffic Signal changes to red. • PFD is blank	• Lane status field color changes to green indicating open mixed mode. • Lane status field displays lane no. • Lane mode field displays ETC_MANUAL. • Lane state field displays OPEN. • Collector field displays collector's id. • Lane health field color is green. • Lane message indicates lane is not in standby mode.		
12.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag #_____	• PFD displays "Thank You" • Canopy light is green. • Traffic light turns green. • Valid ETC transaction. • MLT will display Valid	• Lane status field color is green indicating Open mixed mode. • Lane health field is green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD		Txn # _____ Date/Time _____

	Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
13.	Drive a Class 3 vehicle with valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD displays "Thank You" • Canopy light is green. • Traffic light turns green • Valid ETC transaction • MLT will display Valid	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC, Tag, and Actual axle = 3. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD		Txn # _____ Date/Time _____
14.	Drive a Class 2 vehicle with Low Balance status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD displays "LOW BALANCE" • Canopy light is green. • Traffic light turns yellow. • Valid ETC transaction. • MLT will display Valid	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = LOW BALANCE		Txn # _____ Date/Time _____ Changed from 5 axle to 2 axle low balance

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
15.	Drive a Class 2 vehicle with a Lost/Stolen status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• PFD will be blank. • Canopy light is green. • Traffic light remains red. • The strobe light and audible alarm are activated. • MLT will display Invalid • Invalid ETC transaction VES Activated.	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = Lost/Stolen • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____ Change from TOLL_EVADER to ETC

	Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
16.	Drive a Class 2 vehicle with a Negative Balance status transponder into the lane stopping at the booth. Drive a Class 2 vehicle without a tag into the lane stopping at the booth. Customer pays with 1 $1 bills and 1 quarter. Tester will press "2 axle" then "Cash" buttons. Tester will press the "Receipt" button. Money placed in Money Bag # 1 Vehicle leaves the lane. Plate # _____ $1 Bill _____ Quarters _____ Vehicle exits the lane. Plate #_____ Tag # _____	• PFD will be blank. • PFD will display "Fare $1.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green • Receipt printer will issue 1 receipt. • PFD is blank • Traffic signal changes to red. • MLT will display Invalid • Valid transaction	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC, COLL and Actual axle = 2 • Tag axle = 2 • Revenue type = CASH • Amount = $1.25		Txn # _____ Date/Time _____ Axle count = _____ Class Count = _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
17.	Drive a Class 2 vehicle without a tag into the lane stopping at the booth. Customer pays with 1 $1 bills and 1 quarter. Tester will press "2 axle" then "Cash" buttons. Tester will press the "Receipt" button. Money placed in Money Bag # 1 Vehicle leaves the lane. Plate # _____ $1 Bill _____ Quarters _____	• PFD will display "Fare $1.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green • Receipt printer will issue 1 receipt. • PFD is blank • Traffic signal changes to red. • Valid transaction	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC, COLL and Actual axle = 2 • Tag axle = 0 • Revenue type = CASH • Amount = $1.25		Txn # _____ Date/Time _____

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
18.	Drive a Class 3 vehicle without a tag into the lane stopping at the booth. Customer pays with 2 $1 bills and 1 quarter. Tester will press "3 axle" then "Cash" buttons. Tester will press the "Receipt" button. Money placed in Money Bag # 1 Vehicle leaves the lane. Plate # _____ $1 Bill_____ Quarters _____	• PFD will display "Fare $2.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green • Receipt printer will issue 1 receipt. • PFD is blank • Traffic signal changes to red • Valid transaction.	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green. • AVC, COLL and Actual axle = 3. • Tag axle = 0. • Revenue type = CASH. • Amount = $2.25.		Txn # _____ Date/Time _____

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
19.	Drive a Class 2 vehicle without a tag into the lane stopping at the booth. Customer pays with a 2 $1 bill and 1 quarters. Tester will press "2 axle" then "Cash" buttons. Tester will press the "Receipt" button. Money placed in Money Bag # 1 Vehicle leaves the lane. Plate # _____ $1 Bill_____ Quarters _____	• PFD will display "Fare $1.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green • Receipt printer will issue 1 receipt. • PFD is blank • Traffic signal changes to red • Valid transaction	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC, COLL and Actual axle = 2 • Tag axle = 0 • Revenue type = CASH • Amount = $1.25		Txn # _____ Date/Time _____

	Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
20.	Drive a Class 2 vehicle without a tag into the lane stopping at the booth. Customer pays with 1 $1 bill, 1 quarters, 2 dimes and 1 nickel. Tester will press "2 axle" then "Cash" buttons. Tester will press the "Receipt" button. Money placed in Money Bag # 1 Vehicle leaves the lane. Plate # _____ $1 Bill_____ Quarter _____ Dimes _____ Nickel _____	• PFD will display "Fare $1.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green • Receipt printer will issue 1 receipt. • PFD is blank • Traffic signal changes to red • Valid transaction	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC , COLL and Actual axle = 2 • Tag axle = 0 • Revenue type = CASH • Amount = $1.25		Txn # _____ Date/Time _____

Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
21.	Turn Around Pass Issue Drive a Class 2 vehicle into the lane stopping at the booth. Tester will press "2 axle" then "Cash" buttons. Tester will then press "Turn Around Issue" Vehicle leaves the lane. Plate #_____	• PFD will display "Fare $1.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green • Receipt printer will issue 1 receipt and 1 Turn Around Pass.	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC , COLL and Actual axle = 2 • Tag axle = 0 • Revenue type = CASH • Amount = $1.25		Txn # _____ Date/Time _____

	Title: Mixed Mode Lane Revenue Collection		Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
22.	Class mismatch Drive a Class 2 vehicle into the lane stopping at the booth. Customer pays with a $2 bills and 1 quarter. Tester will press the "3 axle" then "Cash" buttons. Tester will press the "Receipt" button. Tester will press the "Directions" button. Tester will press the direction button in the lower center position. Vehicle leaves the lane. Money placed in Money Bag # 1 Plate#_____ $1 Bill_____	• PFD will display "Fare $2.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green. • Receipt printer will issue 1 receipt. • Receipt printer will issue a set of direction. • PFD is blank. • Traffic signal changes to red. • Valid transaction.	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC = 2. • Coll , and Actual axle = 3. • Tag axle = 0. • Revenue type = CASH. • Amount = $2.25. • Info field displays "M" • Info field shaded yellow. Plate # _____		Txn # _____ Date/Time _____

	Title: Mixed Mode Lane Revenue Collection	Date: May 15, 2008	Test No. F-005	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
23.	Drive a Class 2 vehicle into the lane without stopping at the booth at 10 MPH. The tester presses "Toll Evader." When vehicle has left the lane. Plate # _____	• Violation transaction • Canopy light is green • PFD is blank. • Traffic Signal is red. • Strobe light and audible alarm are activated.	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC, and Actual axle = 2 • Tag and Coll axle = 0 • Revenue type = TOLL EVADER. • Amount is $0.00. • Info field displays "V" • Transaction shaded Red • Images captured processed Plate # _____		Txn # _____ Date/Time _____
24.	Turn Around Pass Accept Drive a Class 2 vehicle into the lane stopping at the booth. Tester will press "2 axle then cash" buttons. Tester will then press "Turn Around" Vehicle leaves the lane. Plate # _____	• PFD will display "Fare $1.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC , COLL and Actual axle = 2 • Tag axle = 0 • Revenue type = CASH • Amount = $1.25 • Info field displays T		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
25.	The collector presses the "Lane State" button The collector presses the "Stand By" button on the touch screen.	• The lane is placed in stand by mode. • The touch screen displays the main classification screen. • Canopy light changes to red. • Traffic Signal is red. • PFD is blank	• Lane status field color changes to red indicating stand by mixed mode. • Lane mode field displays ETC_MANUAL. • Lane state field changes to STANDBY. • Lane health field color remains green. • A message is displayed in the Lane Messages Window indicating the lane is in standby mode.		Standby message Date/Time: _____

26.	The collector will press the "Lane State" button.	• The touch screen displays a Dynamic Display with four options:
		  o Open Lane
		  o Logoff
		  o Standby
			No change on plaza monitoring screen.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
27.	The collector will press the "Logoff" button.	• The lane is closed. • Screen-saver is enabled but the screen saver does not come on. • The canopy light is red. • The PFD is blank. • The Traffic Signal is off.	• Lane status field color remains red. • Lane mode field displays ETC_MANUAL. • Lane state field changes to CLOSED. • Lane health field color remains green. • A collector Logoff message is displayed on the Lane Messages Window. • Logoff message contains collector 's id, lane number, logoff date and time		Logoff message Date/Time: _____
28.	Change Shift Shift Setup • Shift Supervisor assigned Toll Collector #2 to lane Plaza _____ Lane Number _____ Shift Number _____ Shift Start Time_____ Revenue Bag No(s)				

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
29.	If the touch screen is in screen saver mode the tester touches it. The collector logs onto the Toll Terminal by manually entering his card number by pressing the numbers on the keypad. The collector will press the "Enter" button. Toll Collector #2 Card No _____	The entry is displayed in the Collector ID field. After the supervisor approves the login, the touch screen displays a Dynamic Display with four options: • Open Lane • Logoff • Standby	• A successful collector Logon message is displayed on the Lane Messages Window. • Logon message contains the collector's ID, lane number and date and time.		Date/Time Logon Message _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
30.	The collector presses the "Open Lane" button on the touch screen.	• The lane is open in mixed mode. • The touch screen displays the main classification screen. • Canopy light changes to green. • Traffic Signal changes to red. • PFD display is blank"	• Lane status field color changes to green indicating open mixed mode. • Lane status field displays lane no. • Lane mode field displays ETC_MANUAL. • Lane state field displays OPEN. • Collector field displays collector's id. • Lane health field color is green. • A collector logon message displayed in the Lane Messages Window. • Logon message contains collector's id, lane no, and logon date and time.		
31.	No Class Late Queue Drive a Class 2 vehicle into the lane stopping at the booth. Vehicle leaves the lane. Tester does not do anything. Plate #_____	• Violation transaction • Canopy light is green • PFD is blank. • Traffic Signal is red. • Strobe light and audible alarm are activated. • VES will be triggered • Late Queue will equal 1	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC and Actual axle = 2 • Tag and Coll axle = 0 • Revenue type = NO CLASS. • Amount is $0.00. • Info field displays "V" • Transaction shaded Red • Images captured processed Plate # _____		Txn # _____ Date/Time _____ Audit adjustment require

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
32.	Process the previous vehicle by pressing "2 axle" then "Cash" buttons.	• The late queue will equal 0.			
33.	Drive a Class 2 vehicle without a tag into the lane stopping at the booth. Customer pays with a 1 $1 bill, 4 nickels and 5 pennies. Tester will press "2 axle" then "Cash" buttons. Tester will press the "Receipt" button. Money placed in Money Bag # 2 Vehicle leaves the lane. Plate # _____ $1 Bill_____ Quarter _____ Nickel _____ Pennies _____	• PFD will display "Fare $1.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green • Receipt printer will issue 1 receipt. • PFD is blank • Traffic signal changes to red • Valid transaction	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC , COLL and Actual axle = 2 • Tag axle = 0 • Revenue type = CASH • Amount = $1.25		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
34.	Drive a 2 axle Class 2 vehicle thru the lane at 5 MPH. A 2nd Class 2 vehicle equipped with a valid tag enters the lane as the first vehicle leaves the exit loop. Tester will press "Toll Evader" button after the 1st vehicle has passed the exit loop. 1st vehicle leaves the lane. Plate # _____ Tag # _____ 2nd vehicle leaves the lane. Plate # _____ Tag # _____	**1st vehicle** • Violation transaction • Canopy light is green • PFD is blank. • Traffic signal remains red. • Strobe light and alarm are activated • VES will be triggered **2nd vehicle** • PFD displays "Thank You ". • Canopy light is green • Traffic Signal changes to green. • Touch Screen displays "Valid Tag"	Lane health and status is Green **1st vehicle** AVC ,Collector and Actual axle is 2 Tag=0 Revenue type is TOLL EVADER Toll amount is $0.00. Transaction shaded red Images processed and reviewed Info field displays 'V' **2nd vehicle** AVC, Tag and Actual axle is 2 Collector = 0 Revenue type is ETC Toll amount is $0.00. Transponder _____ Tag status is Good		Txn # _____ Date/Time _____ Txn # _____ Date/Time _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
35.	Class mismatch Drive a Class 3 vehicle into the lane stopping at the booth. Customer pays with 2 $1 bills and 1 quarter. Tester will press the "2 axle" then "Cash" buttons. Tester will press the "Receipt" button. Tester will press the "Directions" button. Tester will press the direction button in the lower center position. Money placed in Money Bag # 2 Vehicle leaves the lane. Plate#_____ $1 Bill _____	• PFD will display "Fare $2.25" • PFD will display "Thank You" • Traffic signal changes to green. • Canopy light will be green. • Receipt printer will issue 1 receipt. • Receipt printer will issue a set of direction. • PFD is blank. • Traffic signal changes to red. • Valid Transaction	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC = 3. • Coll and Actual axle = 2. • Tag axle = 0. • Revenue type = CASH. • Amount = $2.25. • Info field displays "M" • Info field shaded yellow. Plate # _____		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
36.	Drive a Class 2 vehicle with a low balance status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag #_____	• PFD displays "LOW BALANCE" • Canopy light is green. • Traffic light remains green. • MLT will display Valid • Valid ETC transaction	• Lane status field color is green indicating Open mixed mode. • Lane health field remains green • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = LOW BALANCE		Txn # _____ Date/Time _____
37.	The collector presses the "Stand By" button on the touch screen.	• The lane is placed in stand by mode. • The touch screen displays the main classification screen. • Canopy light changes to red. • Traffic Signal is red. • PFD is blank	• Lane status field color changes to red indicating stand by mixed mode. • Lane mode field displays ETC_MANUAL. • Lane state field changes to STANDBY. • Lane health field color remains green. • A message is displayed in the Lane Messages Window indicating the lane is in standby mode.		Standby message Date/Time: _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
38.	The collector will press the "Lane State" button.	• The touch screen displays a Dynamic Display with six options: ○ Open Lane ○ Logoff ○ Standby	No change on plaza monitoring screen.		
39.	The collector will press the "Logoff" button.	• The lane is closed. • Screen-saver is enabled but the screen saver does not come on. • The canopy light is red. • The PFD is blank. • The Traffic Signal is off.	• Lane status field color remains red. • Lane mode field displays ETC_MANUAL. • Lane state field changes to CLOSED. • Lane health field color remains green. • A collector Logoff message is displayed on the Lane Messages Window. • Logoff message contains collector 's id, lane number, logoff date and time		Logoff message Date/Time: _____
40.	Verify Transaction Logger Run Integrity Report. Report must be run after data has been synchronized from the Lane to the Plaza.	N/A	N/A		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
41.	The supervisor runs the Host – 0013B (Integrity Report) report. Steps to run the report: At the Crystal Report window: • Click on the Report main button. • Select Revenue from the Category drop down list. • Select Host – 0013B from the drop down list • Select CIP from the Plaza drop down list. • Enter Begin Date = Today's date. • Enter End Date = Today's date. • Click on the Submit button.	N/A	• The Reporting Option window is displayed. • The Report Criteria window is displayed. • The ETC Posting Report is displayed. • The report displays vehicle count summarized by Host and ETC under regular and violation headings. This report is used to reconcile daily activity after reconciliation has been done.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
42.	The supervisor runs the Host – 0016 - Detail Transaction Report (DTR). Steps to run the report: At the Crystal Report window: • Click on the Reports Main button. • Select TrafficReports from the Category drop down list • Select HOST0016 – Detailed Transaction Report from the Report drop down list. • Click on the Submit button. • Select CIP from the Plaza drop down list. • Enter Begin Date = Today's date. • Enter End Date = Tomorrow's date. • Click on the Submit button.	N/A	• The Reporting Option window is displayed. • The Report Criteria window is displayed. • The Detailed Transaction Report is displayed. • The report provides a complete listing of vehicle and toll transactions in a lane for a specific collector for a specified period of revenue days.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS
43.	The supervisor runs the Host – 0026 – Revenue bag Assignment Report. Steps to run the report: At the Crystal Report window: • Click on the Reports Main button. • Select Deposit from the Category drop down list • Select HOST0026 – from the Report drop down list. • Click on the Submit button. • Select CIP from the Plaza drop down list. • Enter Begin Date = Today's date. • Enter End Date = Tomorrow's date. • Click on the Submit button.	N/A	• The Reporting Option window is displayed. • The Report Criteria window is displayed. • This report lists revenue bag information by plaza as assigned to the toll collectors and showing revenue date assignment information		
44.	At the Crystal Report window: • Click on the Main button • Click on the Logout button	N/A	• TRCS application Login screen is displayed.		

THE FOLLOWING STEPS ARE TO BE DONE DURING POST TEST ANALYSIS

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA/HOST RESULTS	PASS/ FAIL	COMMENTS

#					
45.	Obtain a copy of the Lane transaction log.	Lane tranlog will reflect test scenario of the previous steps.			Review Lane tranlog for the proper recording of each transaction.
46.	Review VES images.	Images clearly and accurately show plate information.	Images captured in the following test steps are reviewed:		
47.	Perform the following analysis: Collector #1 Transactions: Total ETC :_____ Total Toll Evader: _____ Total CASH:_____ Total No Class _____ Total Transactions:_____ Axle Count Total Class 2 Axle:_____ Total Class 3 Axle:_____ Total Class 4 Axle:_____ Total Axles :	Perform the following analysis: Collector #2 Transactions: Total ETC :_____ Total Toll Evader: _____ Total CASH:_____ Total No Class _____ Total Transactions:_____ Axle Count Total Class 2 Axle:_____ Total Class 3 Axle:_____ Total Class 4 Axle:_____ Total Axles :	Perform the following analysis: Collector # 1 Total Cash = _____ Collector # 2 Total Cash = _____		
48.	Obtain a copy of the Host – 00016(Detail Transaction Report)	This report displays the Actual (not expected) vehicle/revenue information for a specific/ALL plaza(s) for a given tour date range.	Review Detail Transaction Report for the proper recording of each transaction.		

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49.	Obtain a copy of the Host – 0013B (Integrity Report)	Host – 0013B will reflect test scenario of the previous steps.	Review Host – 0013B Integrity Report for the proper recording of each transaction.		
	END OF POST TEST ANALYSIS				
	END OF TEST				

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TEST DISCREPANCIES/COMMENTS REPORT

TEST STEP	DISCREPANCIES/COMMENTS

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FINAL SIGN OFF AND COMMENTS

TEST SUPERVISOR/LEAD: DATE:	SCDOT REPRESENTATIVE: DATE:

F-006 ACM ETC Ramp Collection

Title: ACM ETC Ramp Lane	Date: May 15, 2008	Test No. F-006	Rev 1.1

APPROVALS

Author: R. Rhyme	Test Verification:	Dept. Mgr./Designee:	QA/Designee:	SCDOT:

TEST OBJECTIVES

1. Demonstrate remote operations of an ACM ETC ramp lane for the purpose of starting and ending a collector's shift.
2. Demonstrate Plaza processing of ACM ETC ramp lane transactions generated in an opened dedicated ETC lane.
3. Demonstrate Plaza processing of ACM ETC ramp lane transactions generated in a closed lane.
4. Demonstrate Plaza processing of violation transactions generated in a ACM ETC ramp lane.
5. Demonstrate collector Tour of Duty functionalities.
6. Validation of reports.

TEST CRITERIA

1. All system administration interfaces and functionalities are working properly.
2. All system access functionalities are working properly.
3. System authorizes access to user with the correct user name and password.
4. System denies access to users with incorrect user name and password.
5. User access is controlled by user roles and rights.
6. Correct operational response to various vehicle classifications.
7. Correct operational response to various vehicle speeds, spacing and location within the lane.
8. All valid transponders accepted and logged.
9. Correct operational response of the driver feedback traffic light (traffic signal), and driver feedback sign (Patron Fare Display).
10. All violations logged.
11. Correct transponder reads and correct logging of all ETC transactions.
12. All transactions properly categorized and logged on the Lane tranlog.

Title: ACM ETC Ramp Lane	Date: May 15, 2008	Test No. F-006	Rev 1.1

TEST ASSUMPTIONS/CONSTRAINTS

1. Vehicle operator safety will be paramount at all times during testing.
2. Test vehicles will drive through the lane at the speed indicated in each step.
3. Test passes will be conducted with multiple classifications of vehicles. With safety in mind, 2 and 3 axle vehicles will be tested at no more than 10 mph.
4. No unusual class vehicles will be demonstrated during the client demo.
5. Test passes will be conducted at various speeds, vehicle spacing, and vehicle location.
6. Authorized SCDOT representative(s) is (are) available to witness testing.

SAFETY

1. All personnel to include testers, drivers, and observers will be briefed prior to the start of testing on proper safety practices to be observed at all times while within the testing area.
2. Any speeding, reckless driving, horseplay, or un-safe activity by the drivers will be grounds for immediate dismissal.
3. All vehicles will be equipped with a rotating flashing beacon on the roof of the vehicle. The beacon will be operating any time the vehicle is in the testing zone.
4. All personnel will be required to wear reflective vests while in the testing zone.

PRETEST CONDITIONS/EQUIPMENT

1. The Plaza workstation must be available and running.
2. Username and password for plaza supervisor.
3. Start and stop time of this test will be monitored and recorded.
4. The plaza software will be running.
5. Vehicles of multiple classifications will be available, as required, for testing.
6. Valid, low balance, lost / stolen, negative, and closed account status transponders will be available for each vehicle class participating in this test.

7. There will be no booth operations for this test.

8. Clear lane transaction log.

9. Clear plaza communication buffer transactions.

10. All testing equipment will be located at the SCDOT facility for the purpose of observing the results of the test.

11. Testing will not be performed during snow or lightning. Testing during other conditions will be determined by SCDOT/ACS.

12. Ensure that all lane equipment is functioning correctly.

Title: ACM ETC Ramp Lane	Date: May 15, 2008	Test No. F-006	Rev 1.1

TEST DISCUSSION AND DESCRIPTION

STEPS	DESCRIPTION
1 - 2	Shift Supervisor login to TRCS Application
3 - 4	Shift Supervisor opens Lane in Dedicated ETC mode. First tour segment.
5 – 6	Generate toll transactions for class 2,3 vehicles with valid tags.
7 – 8	Generate toll transactions for class 2,3 vehicles with Low Balance tags.
9 – 10	Generate toll transactions for class 2,3 vehicles with Lost/Stolen tags.
11 – 12	Generate toll transactions for class 2,3 vehicles with Negative Balance tags.
15 – 16	Generate toll transactions for class 2,3 vehicles with Closed tags.
17 – 18	Generate toll evader toll transactions for class 2,3 vehicles without tags.
19 – 21	Generate class mismatch toll transactions.
22 – 23	Generate tailgating toll transactions.
24 – 25	Shift Supervisor closes the Lane.
26	Generate toll transaction while Lane is closed.
27	Shift Supervisor generates shift reports.
28	Shift Supervisor logoff the Plaza application.

Each step of this functional test will be conducted as written. For each step that meets all expected results, the test coordinator / designee may indicate passing as "P". For each step that does not fully meet the expected results, the test coordinator / designee will document the results and indicate failure as "F". Any and all abnormalities will be fully described. Any disagreements on the test results or their acceptability between SCDOT and ACS representatives shall be documented in test results and subject to review by SCDOT and ACS and possible re-test.

If by mutual agreement between ACS and SCDOT it is determined the Demonstration Test is not progressing as expected due to major issues encountered, testing will be suspended, and resumed after the issues have been rectified.

At the conclusion of testing at the designated lane, post test analysis will be performed. The complete results of this functional test will be retained by ACS and a copy will be forwarded to the SCDOT.

Title: ACM ETC Ramp Lane	Date: May 15, 2008	Test No. F-006	Rev 1.1

EXPECTED RESULTS

1. All violation transactions and images are processed correctly at the plaza.

Date Test Was Performed:	Test Supervisor/Lead:	SCDOT Representative:

START TIME: _____ STOP TIME: _____ PLAZA REVENUE TIME:_____

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TEST STEPS

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
1.	Start TRCS Application • Start the web browser • Enter the TRCS Application web address into the URL input box of the web browser • Press the enter key	N/A	• TRCS Application Login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

2.	Logon to the TRCS application
	
	• Enter a Login Name (Shift Supervisor #1)
	• Enter a password
	• Click on the Logon button
	
	User Name:_____
	User Password: _____
	
	Shift Supervisor #1
		N/A	• TRCS Application Main Menu screen is displayed.
			• TRCS Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  ○ Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  ○ System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  ○ Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  ○ Deposit
			    ▪ Money Bag Maintenance
			  ○ Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

3.	At the TRCS Application Main Menu screen:
	• Click on the Current Transaction and Messages hyperlink
		N/A	• The TRCS Plaza Monitoring screen is displayed
			• The Toll Transaction window displays the following tabs:
			   o Transaction & Message
			   o Transaction History
			   o Message History
			   o Traffic Trends
			   o Lane Commands
			   o Toll Collector Audit		

4.	Using the plaza remote command, the supervisor places the lane into ACM open state. Steps to place lane in ACM open state: • Select the Lane Command tab. • Select the lane from the target Lane drop down list. • Click on the Lane Mode ACM radio button. • Click on the Lane State OPEN radio button. • Click on the Send Command button.	• Traffic Signal is red.	• A message is displayed indicating remote command was successful. • Lane status field displays lane no. • Lane mode field displays ACM. • Lane state field displays OPEN. • Collector field displays employee ID. • Lane health field color is green. • A collector Logon message displayed in the Lane Messages Window. • Logon message contains employee ID, lane number and logon date and time. • A lane not in Standby message is displayed in the Lane Message Window.		Logon message Date/Time: _____

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
5.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• Traffic light turns green and then back to Red. • Valid ETC transaction.	• Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD		Txn # _____ Date/Time _____
6.	Drive a Class 3 vehicle with valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• Traffic light turns green and then back to red. • Valid ETC transaction.	• Lane health field is green. • AVC, Tag, and Actual axle = 3. • Collector axle is = 0. • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = GOOD		Txn # _____ Date/Time _____

Title: ACM ETC Ramp Lane		Date: May 15, 2008	Test No. F-006	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
7.	Drive a Class 2 vehicle with a Lost/Stolen status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• Traffic light remains red. • ACM will display "Toll Due $1.00" • The strobe light and audible alarm are activated. • VES will be triggered. • Invalid ETC transaction	• Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0. • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = Lost/Stolen • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
8.	Drive a Class 3 vehicle with a Lost/Stolen status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• Traffic light remains Red. • ACM will display "Toll Due $2.00" • The strobe light and audible alarm are activated. • VES will be triggered. • Invalid ETC transaction	• Lane health field is green. • AVC, Tag, and Actual axle = 3. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = Lost/Stolen • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
9.	Drive a Class 2 vehicle with a Negative Balance status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• Traffic light remains Red. • ACM will display "Toll Due $1.00" • The strobe light and audible alarm are activated. • VES will be triggered. • Invalid ETC transaction	• Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0 • Revenue type = ETC. • Amount = $0.00. • Transponder = _____ • Transponder Status = Neg Bal. • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____ Axle count = _____ Class Count = _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
10.	Drive a Class 2 vehicle without a transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• Traffic light remains red. • ACM will display "Toll Due $1.00" • The strobe light and audible alarm are activated. • VES will be triggered. • Violation transaction is recorded.	• Lane health field is green. • AVC, and Actual axle = 2. • Tag, Collector axle is = 0. • Revenue type = TOLL_EVADER. • Amount = $0.00. • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
11.	Drive a Class 3 vehicle without a transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag #_____	• Traffic light remains red. • ACM will display "Toll Due $2.00" • The strobe light and audible alarm are activated. • VES will be triggered. • Violation transaction is recorded.	• Lane health field is green. • AVC, and Actual axle = 3. • Tag, Collector axle is = 0. • Revenue type = TOLL_EVADER. • Amount = $0.00. • Info field displays V. • Transaction shaded Red. • Image captured and processed.		Txn # _____ Date/Time _____
12.	Drive a Class 2 vehicle into the lane without a tag stopping at the ACM. Insert 8 dimes and 4 nickel into the ACM. Vehicle then leaves the lane. Plate #_____ Tag #_____	• ACM will display "Toll Due $1.00" • Traffic light turns green and then back to red. • Valid ACM transaction.	• Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0. • Revenue type = ACM. • Amount = $1.00. • Transponder = _____ • Transponder Status = GOOD		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
13.	Drive a Class 3 vehicle into the lane without a tag stopping at the ACM. Insert a $10 bill into the lower level of the ACM. Insert $1bill into the bill accepter. Vehicle then leaves the lane. Plate #_____ Tag # _____	• ACM will display "Toll Due $2.00" • ACM will reject the $10 and return it immediately after insertion to the patron. • Valid ACM transaction. • Traffic light turns green and then back to red	• Lane health field is green. • AVC, Tag, and Actual axle = 3. • Collector axle is = 0. • Revenue type = ACM. • Amount = $2.00. • Transponder = _____ • Transponder Status = GOOD		
14.	Drive a Class 2 vehicle into the lane without a tag stopping at the ACM. Insert 4 quarters into the ACM. Vehicle then leaves the lane. Plate #_____ Tag # _____	• ACM will display "Toll Due $1.00" • Valid ACM transaction • Traffic light turns green and then back to red	• Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0. • Revenue type = ACM. • Amount = $1.00. • Transponder = _____ • Transponder Status = GOOD		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
15.	Drive a Class 2 vehicle into the lane with a valid tag. Stop at the ACM and insert 2 quarters and 10 nickels into the ACM. Vehicle then leaves the lane. Plate #_____ Tag #_____	• Traffic light turns green and then back to red. • ACM will display "Toll Due $1.00" when coins are inserted • Valid ACM transaction.	• Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0. • Revenue type = ACM. • Amount = $1.00. • Transponder = _____ • Transponder Status = GOOD		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
16.	Drive a Class 3 vehicle into the lane with a valid tag. Stop at the ACM and insert 2 $1 bills and 1 quarter into the ACM. Insert the quarter before the bills. Vehicle then leaves the lane. Plate #_____ Tag # _____	• ACM will display "Toll Due $2.00" • When the first quarter is inserted the ACM display will begin to decrement. • After the bills are inserted a quarter will be returned to the customer. • Traffic light turns green and then back to red. • Valid ACM transaction.	• Lane health field is green. • AVC, Tag, and Actual axle = 3. • Collector axle is = 0. • Revenue type = ACM. • Amount = $2.00. • Transponder = _____ • Transponder Status = GOOD		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
17.	Drive a Class 2 vehicle into the lane stopping at the ACM. Insert a $5 bill into the ACM. Vehicle then leaves the lane. Plate #_____ Tag #_____	• ACM will display "Toll Due $1.00" • After the bill is inserted 16 quarters will be returned to the customer. • Traffic light turns green and then back to red. • Valid ACM transaction.	• Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0. • Revenue type = ACM. • Amount = $1.00. • Transponder = _____ • Transponder Status = GOOD •		
18.	Drive a Class 3 vehicle into the lane with a negative tag. Vehicle will stop at the ACM and inserts 2 $1bills into the ACM. Vehicle then leaves the lane. Plate #_____ Tag #_____	• ACM will display "Toll Due $2.00" • Traffic light turns green and then back to red. • Valid ACM transaction	• Lane health field is green. • AVC, Tag, and Actual axle = 3. • Collector axle is = 0. • Revenue type = ACM. • Amount = $2.00. • Transponder = _____ • Transponder Status = GOOD		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
19.	INSUFFICIENT FUNDS TRANSACTION- Drive a Class 2 vehicle into the lane stopping at the ACM. Insert 1 quarter and 4 dimes into the ACM. Vehicle then leaves the lane. Plate #_____ Tag #_____	• When the first quarter is inserted the ACM display will begin to decrement • Traffic light turns green and then back to red. • ACM will display "Toll Due $1.00" • Valid ACM transaction.	• Lane health field is green. • AVC, and Actual axle = 2. • Tag, Collector axle is = 0. • Revenue type = TOLL_EVADER. • Amount = $0.00. • Info field displays V. • Transaction shaded Red. • Image captured and processed.		
20.	Drive a Class 2 vehicle into the lane without a tag stopping at the ACM. Insert 7 dimes and 4 nickels and 10 pennies into the ACM. Vehicle then leaves the lane. Plate #_____ Tag #_____	• ACM will display "Toll Due $1.00" • Traffic light turns green and then back to red. • Valid ACM transaction.	• Lane health field is green. • AVC, Tag, and Actual axle = 2. • Collector axle is = 0. • Revenue type = ACM. • Amount = $1.00. • Transponder = _____ • Transponder Status = GOOD		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
21.	Drive a Class 3 vehicle into the lane with an Lost/Stolen tag. Vehicle will stop at the ACM and inserts 2 $1bills into the ACM. Vehicle then leaves the lane. Plate #_____ Tag # _____	• ACM will display "Toll Due $2.00" • Traffic light turns green and then back to red. • Valid ACM transaction	• Lane health field is green. • AVC, Tag, and Actual axle = 3. • Collector axle is = 0. • Revenue type = ACM. • Amount = $2.00. • Transponder = _____ • Transponder Status = GOOD		
22.	OVERPAYMENT- Drive a Class 2 vehicle into the lane without a tag stopping at the ACM. Insert 2 dimes and a $1 bill into the ACM. Insert the dimes before the bill. Vehicle then leaves the lane. Plate #_____ Tag # _____	• When the first dime is inserted the ACM display will begin to decrement • Traffic light turns green and then back to red. • ACM will display "Toll Due $1.00" • Valid ACM transaction. • Change will not be returned to the customer.	• Lane health field is green. • AVC, Tag, and Actual axle = 3. • Collector axle is = 0. • Revenue type = ACM. • Amount = $1.00. • Transponder = _____ • Transponder Status = GOOD		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
23.	The supervisor places the lane in ACM closed state. Steps to place lane in ACM closed state: • Select the lane from the Target Lane drop down list. • Click on the Lane State CLOSED radio button. • Click on the Send Command button.	• The canopy light is red. • The Patron Fare Display is blank. • The Traffic Signal is off.	• A message is displayed indicating remote command was successful. • Lane status field displays lane no. • Lane status field color remains red. • Lane mode field remains ACM. • Lane state field changes to CLOSED. • A collector Logoff message is displayed on the Lane Messages Window • Logoff message contains shift supervisor's id, lane number, logoff date and time.		Logoff message Date/Time: _____
24.	Drive a Class 2 vehicle with valid status transponder through the lane at 10 mph. Vehicle exits the lane. Plate #_____ Tag # _____	• Traffic light remains off. • Both the audible alarm and strobe light are activated. • Violation transaction is recorded.	• Lane status field color remains red. • Lane health field remains green. • Lane state displays closed AVC/Tag/Actual axle = 2 Collector axle = 0 Transponder = _____. Transponder Status = GOOD Revenue type is ETC Toll amount is $0.00. Info field displays "V". Transactions shaded Red. Images processed and Reviewed.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
25.	Logout of the TRCS Application. At the Plaza Monitoring screen: • Click on the Logout button.	N/A	• TRCS Application Login screen is displayed.		

26.	At the Plaza Application Main Menu screen:
	• Click on the Current Transaction and Messages hyperlink
		N/A	• The Plaza Monitoring screen is displayed
			• The Toll Transaction window displays the following tabs:
			  o Transaction& Message
			  o Transaction History
			  o Message History
			  o Traffic Trends
			  o Lane Commands
			  o Toll Collector Audit		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

27.	The Shift Supervisor runs the HOST-0001A (Collector Tour Of Duty) Report
	
	Steps to run the report:
	At the Plaza/Host Monitoring window:
	• Click on the Report main button.
	• Select CollectorPerfromance from the Category drop down list.
	• Select HOST 0001A from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Today's date.
	   o Lane= 001
	   o Collector = Shift Supervisor #2
	   o Tour Segment = 1
	   o Revenue Type = ALL
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Report shows all transactions generated during the first Shift Supervisor 1st tour of duty.		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
28.	The supervisor runs the Host – 0016 - Detail Transaction Report (DTR). Steps to run the report: At the Crystal Report window: • Click on the Reports Main button. • Select Traffic from the Category drop down list • Select HOST0016 – Detailed Transaction Report from the Report drop down list. • Click on the Submit button. • Select CIP from the Plaza drop down list. • Enter Begin Date = Today's date. • Enter End Date = Today's date. • Click on the Submit button.	N/A	• The Reporting Option window is displayed. • The Report Criteria window is displayed. • The Detailed Transaction Report is displayed. • The report provides a complete listing of vehicle and toll transactions in a lane for a specific collector for a specified period of revenue days.		
29.	Verify Transaction Logger Run Integrity Report. Report must be run after data has been synchronized from the Lane to the Plaza.	N/A	N/A		

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

30.	The Shift Supervisor runs the Host – 0032B (ETC Posting – Integrity Report) report.
	
	Steps to run the report:
	At the Plaza/Host Monitoring window:
	• Click on the Report main button.
	• Select ViewReportsTraffic from the Category drop down list.
	• Select HOST – 00032B from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = ALL
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Tomorrow's date.
	   o Direction = ALL
	   o Lane = ALL
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• ETC Posting Integrity report is displayed.
			• All transaction generated in scripts F2-008 is included on the report		

31.	At the Report window: • Click on the Main button • Click on the Logout button	N/A	• TRCS Application Login screen is displayed.		

THE FOLLOWING STEPS ARE TO BE DONE DURING POST TEST ANALYSIS

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
32.	Obtain a copy of the Lane transaction log.	Lane tranlog will reflect test scenario of the previous steps.			Review Lane tranlog for the proper recording of each transaction.
33.	Review VES images.	Images clearly and accurately show plate information.	Images captured in the following test steps are reviewed:		
34.	Obtain a copy of the Host – 0032B (ETC Posting Report)	Host – 0032B will reflect test scenario of the previous steps.	Review Host – 0032B ETC Posting Report for the proper recording of each transaction.		
35.	Obtain a copy of the Host – 0016 (Detail Transaction Report) report.	Host – 0016 will reflect test scenario of the previous steps.	Review Host – 0016 Detail Transaction Report for the proper recording of each transaction.		
	END OF POST TEST ANALYSIS				
	END OF TEST				

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TEST DISCREPANCIES/COMMENTS REPORT

TEST STEP	DISCREPANCIES/COMMENTS

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FINAL SIGN OFF AND COMMENTS

TEST SUPERVISOR/LEAD: DATE:	SCDOT REPRESENTATIVE: DATE:

F-007 Mixed Mode Collector Deposits

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

APPROVALS

Author: R. Rhyme	Test Verification:	Dept. Mgr./Designee:	QA/Designee:	SCDOT:

TEST OBJECTIVES

1. Demonstrate the system capability of recording a collector's deposit for a given shift and storing that information for reconciliation and auditing functions.
2. Demonstrate system capability of to utilize the integrated currency counters to verify collector deposits.
3. Demonstrate the system ability to properly separate collector tour of duty and segments using plaza revenue dates.
4. To generate TRCS plaza reports that accurately shows collector deposit information.

TEST CRITERIA

1. All system administration interfaces and functionalities are working properly.
2. All system access functionalities are working properly.
3. System authorizes access to user with the correct user name and password.
4. System denied access to users with incorrect user name and password.
5. User access is controlled by user roles and rights.
6. All collector deposits information is stored into the system.
7. All assigned bags are returned to their unassigned state.

TEST ASSUMPTIONS/CONSTRAINTS

1. TRCS application is installed and functioning correctly.

SAFETY

1. All personnel will be briefed prior to the start of testing on proper safety practices to be observed at all times while within the testing area.

PRETEST CONDITIONS/EQUIPMENT

1. The Plaza Money Room workstation must be available and running.

2. Username and password must be available for Toll Revenue Clerk and Toll Revenue Clerk II.

3. Start and stop times of this test will be monitored and recorded.

4. The TRCS plaza software is running.

TEST DISCUSSION AND DESCRIPTION

STEPS	DESCRIPTION
1 – 3	Setup collector deposit
4 – 6	Toll Revenue Clerk login to Deposit workstation and TRCS application.
7 – 9	Enter collector # 1 deposit for money bag #1
10 – 11	Count coins and bills in money bag #1
12 -13	Make collector #1 deposit for money bag #1
14 – 16	Enter collector #1 deposit from money bag #2
17 -18	Count coins and bills in money bag #2
19 – 20	Make collector #1 deposit for money bag #2
21 – 24	Enter collector # 2 deposit from money bag #3
25 – 26	Count coins and bills in money bag #3
27 – 30	Make collector #1 deposit from money bag #3
31 – 34	Toll Revenue Clerk II login to Deposit workstation and TRCS application
35	Validate bag state
36 – 41	Run collector deposit reports
45	Logoff TRCS application

Each step of this functional test will be conducted as written. For each step that meets all expected results, the test coordinator / designee may indicate passing as "P". For each step that does not fully meet the expected result(s), the test coordinator / designee will document the results and indicate failure as "F". Any and all abnormalities will be fully described. Any disagreements on the test results or their acceptability between SCDOT and ACS representatives shall be documented in test results and subject to review by SCDOT and ACS and possible re-test.

If by mutual agreement between ACS and SCDOT it is determined the Demonstration Test is not progressing as expected due to major issues encountered, testing will be suspended, and resumed after the issues have been rectified.

At the conclusion of testing at the designated lane, post test analysis will be performed. The complete results of this functional test will be retained by ACS and a copy will be forwarded to the SCDOT.

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

EXPECTED RESULTS

1. Collector #1 deposits are stored in the TRCS plaza system
2. Collector #2 deposits are stored in the TRCS plaza system
3. Reports show all transactions and deposits clearly and are separated by tour of duty and revenue date.

Date Test Was Performed:	Test Supervisor/Lead:	SCDOT Representative:

START TIME: _____ STOP TIME: _____ PLAZA REVENUE TIME:_____

	Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

TEST STEPS

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
1.	• Prepare Toll Collector #1 report of cash from Money Bag # 1.	N/A	Money Bag #1 ID_____ • $100 Bill _____ • $50 Bill _____ • $20 Bill _____ • $10 Bill _____ • $5 Bill_____ • $1 Bill_____ • $2 Bill_____ • $1 Coin_____ • Half dollar coin _____ • Quarter _____ • Dimes _____ • Nickel _____ • Pennies _____ Total _____		

	Title: Mixed Mode Lane Collector Deposit		Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
2.	• Prepare Toll Collector #1 report of cash from Money Bag # 2.	N/A	Money Bag #2 ID_____ • $100 Bill _____ • $50 Bill _____ • $20 Bill _____ • $10 Bill _____ • $5 Bill_____ • $1 Bill_____ • $2 Bill _____ • $1 Coin _____ • Half dollar coin _____ • Quarter _____ • Dimes _____ • Nickel _____ • Pennies _____ Total _____		

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
3.	• Prepare Toll Collector #2 report of cash from Money Bag # 3.	N/A	Money Bag #3 ID_____ • $100 Bill _____ • $50 Bill _____ • $20 Bill _____ • $10 Bill _____ • $5 Bill _____ • $1 Bill _____ • $2 Bill _____ • $1 Coin _____ • Half dollar coin _____ • Quarter _____ • Dimes _____ • Nickel _____ • Pennies _____ Total _____		
4.	Start TRCS Application • Start the web browser • Enter the TRCS Application web address into the URL input box of the web browser • Press the enter key	N/A	• TRCS Application Login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

5.	Run Collector's Report
	
	Logon to the CIP Application
	
	• Enter a Login name (User with Toll Manager created in previous step)
	• Enter a password
	• Click on the Logon button
	
	Login Name: _____
	Password: _____
		N/A	• TRCS Application Main Menu screen is displayed.
			• TRCS Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			    ▪ Bank Deposit
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

6.	The Toll Manager runs the Host – 0027 (Revenue bag Status Report)
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select Deposit from the Category drop down list.
	• Select HOST – 0027 from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Tomorrow's date.
	Click on the Submit button.
	
	• Click on the Logout button
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• The Revenue Bag Status report is displayed.
			• This report lists revenue bag information by bag status and creation date showing each bag number and its assignment information, as well as associated bank deposit information.		

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

7.	Login to the TRCS Application. Select CIP plaza from the Plaza list
	
	The Toll Revenue Clerk (Toll Revenue Clerk Role) logs into TRCS
		N/A	• TRCS Application Main Menu screen is displayed.
			• The Plaza list is displayed
			• The TRCS application displays the following menu items.
			• FINANCIAL OPERATIONS
			   o System Administration
			      ▪ Password Maintenance
			• PLAZA OPERATIONS
			   o Deposit
			      ▪ Collector Deposit
			      ▪ Bank Deposit
			   o Reports
			      ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
8.	Make Collector Deposit (Collector #1) At the TRCS Application Main Menu: • Click on the Collector Deposit hyperlink. • Select CIP from the Plaza drop down list • Select Collector #1 from the employee & Name list. • Select the Revenue Date that match the first Revenue date in F-005 script. • Click on the Get Shifts button	N/A	• The TRCS Application Tour of Duty Search screen is displayed. • The record corresponding to the shift times for Collector # 1 is displayed. • Toll Collector start shift time matches shift start time recorded during F-005 testing. • Toll Collector end shift time matches shift end time recorded during F-005 testing.		
9.	Make Collector Deposit (Collector #1) • Click on the Check box corresponding to collector # 1 shift. • Click on the Search TOD button. • Click on the Continue button	N/A	• The Tour Of Duty record for the selected shift time is displayed. • The Tour Of Duty state displays Close. • The Deposit Identification Detail screen is displayed. • Only the Cash and Check tabs are available on the screen.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
10.	Make Collector Deposit (Collector #1, Money Bag #1 and 2) At the Collector/Clerk/Misc/Vault Deposit screen: • Enter the deposit amount reported by Collector #1 for Money bag #1 and 2 in the "Control Total" input box. • Select Money Bag #1 and 2 from the BAG ID drop down list. • Click on the Continue button	N/A	• The Deposit Detail screen is displayed.		
11.	Make Collector Deposit (Collector #1, Money Bag #1 and 2, coin and bill counts) • Count the coins reported for Money Bag #1 and. • Count the bills reported for Money Bag #1 and 2.	N/A	• Revenue Clerk Enters the coin and bill counts into the TRCS pop-up application form.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
12.	Make Collector Deposit (Collector #1, Money Bag #1 and 2, coin and bill counts) • Verify the counts on the TRCS pop-up form. • Click the Add to Cash button.	N/A	• The amount matches amount reported by the Collector #1 for Money Bag #1 and 2. • The total amount matches the Control total entered from Collector #1 deposit slips.		
13.	Make Collector Deposit (Collector #1, Money Bag #1 and 2, Complete deposit) • Click on the "Proceed To Confirmation" button.	N/A	• The Deposit Confirmation screen is displayed. • The Total Deposit matches the Control Deposit amounts.		
14.	Make Collector Deposit (Collector #1, Money Bag #1 and 2, Complete deposit) • Click on the "Confirm Deposit" button • Print deposit receipt		• The TRCS application displays the following message: o Data successfully inserted in repository • Receipt is print to the laser printer.		
15.	Remove a $1 bill and 4 quarters from Money Bag #3	N/A	N/A		

	Title: Mixed Mode Lane Collector Deposit		Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
16.	Make Collector Deposit (Collector #2, Money Bag #3) At the TRCS Application Main Menu: • Click on the Collector Deposit hyperlink. • Select CIP from the Plaza drop down list • Select Collector #2 from the employee & Name list. • Verify that the Revenue Date match the second Revenue date in F-005 script (transaction date). • Click on the Get Shifts button	N/A	• The TRCS Application Tour Of Duty Search screen is displayed. • The record corresponding to the shift times for Collector # 2 is displayed. Toll Collector start shift time matches shift start time recorded during F-005 testing. • Toll Collector end shift time matches shift end time recorded during F-005 testing.		
17.	Make Collector Deposit (Collector #2) • Click on the Check box corresponding to collector # 2 shift. • Click on the Search TOD button. • Click on the Continue button	N/A	• The Tour Of Duty record for the selected shift time is displayed. • The Tour Of Duty status is Close. • The Deposit Identification Detail screen is displayed. • Only the Cash and Check tabs are available on the screen.		

	Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
18.	Make Collector Deposit (Collector #2, Money Bag #3) At the Collector/Clerk/Misc/Vault Deposit screen: • Enter the deposit amount reported by Collector #2 for Money bag #3 in the "Control Total" input box • Select Money Bag #3 from the BIG ID drop down list. • Click on the Continue button	N/A	• The Deposit Detail screen is displayed.		
19.	Make Collector Deposit (Collector #2, Money Bag #3, coin and bill counts) • Count the coins reported for Money Bag #3 in the Coin Counting Machine. • Count the bills reported for Money Bag #3 in the Bill Counting Machine.	N/A	• Revenue Clerk Enters the coin and bill counts into the TRCS pop-up application form.		
20.	Make Collector Deposit (Collector #2, Money Bag #3, coin and bill counts) • Verify the counts on the TRCS pop-up form.	N/A	• The total amount does not match the control total entered from Collector #2 deposit slip.		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
21.	Make Collector Deposit (Collector #2, Money Bag #3, bill and coin counts) • Click on the Clear counts button. • Recount the bills and coins reported for Money Bag #3 in the bill and coin counting machines. • Enter the counts on the TRCS pop-up form.	N/A	• The counts are transferred from the Coin and Bill counting machines to the TRCS pop-up application form.		
22.	Make Collector Deposit (Collector #2, Money Bag #3, coin and bill counts) • Verify the counts on the TRCS pop-up form. • Click the Add to Cash button.	N/A	• The total amount does not match the Control Total entered from Collector #2 deposit slip.		
23.	Make Collector Deposit (Collector #2, Bag #3, Complete deposit) • Click on the "Proceed To Confirmation" button.	N/A	• The Deposit Confirmation screen is displayed. • The total deposit does not match the control deposit amounts.		

Title: Mixed Mode Lane Collector Deposit		Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
24.	Make Collector Deposit (Collector #2, Money Bag #3, Complete deposit) • Click on the "Confirm Deposit" button • Print deposit receipt		• The TRCS application displays the following message: o Data successfully inserted in repository • Receipt is printed to the laser printer. • Totals on the receipt are verified.		
25.	At the Collector/Clerk/Misc/Vault Deposit screen: • Click on the Logout button	N/A	• TRCS Application Login screen is displayed.		

26.	Logon to the CIP Plaza Application
	
	• Enter a card no (Toll Revenue Clerk Role II)
	• Enter a password
	• Click on the Logon button
	
	Card No:_____
	User Password: _____
		N/A	• Plaza Application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• Plaza Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Deposit
			    ▪ Collector Deposit
			    ▪ Bank Deposit
			  o Reports
			    ▪ Reports		

	Title: Mixed Mode Lane Collector Deposit		Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
27.	Adjust Collector Deposit (Collector #2, Money Bag #3) • Select Collector #2 from the employee & name drop down list. • Click on the Search TOD button. • Click on the Continue button • Click on Adjust button.	N/A	• The Tour Of Duty record for the selected shift time is displayed. • The Tour Of Duty state is Close. • The Deposit Identification Detail screen is displayed. • Only the Cash and Check tabs are available on the screen.		
28.	Make Collector Deposit (Collector #2, Money Bag #3, Complete deposit) • On the Cash Deposit form o Increment the quarter count by 4 • Verify the totals • Click on the "Proceed To Confirmation" button.	N/A	• The Deposit Confirmation screen is displayed. • The amount matches amount reported by the Collector #2 for Money Bag #3. • The total amount matches the Control Total entered from Collector #2 deposit slip. • The Bag Total does not match the Control Total.		

			Date: May 15, 2008	Test No. F-007	Rev 1.1
Title: Mixed Mode Lane Collector Deposit					

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
29.	Make Collector Deposit (Collector #2, Money Bag #3, Complete deposit) • Click on the "Confirm Deposit" button • Print deposit receipt		• The TRCS application displays the following message: o Data successfully inserted in repository • Receipt is printed to the Laser printer. • Receipt totals are verified.		
30.	Validate Unassigned Money Bags Login as a Toll Manager At the TRCS Main Application Window: • Click on the Money Bag Maintenance window • Click on the Assigned/Return tab. • Select CIP from the plaza drop down list. • Select Collector #1 from the employee list. • Click on the Search button • Verify bag assignment status • Repeat for Collector #2. • Click on the Logout button	N/A	• The Revenue Bag List is displayed. • Money Bags # 1, 2 and 3 are listed in the Available bag list.		

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

31.	Run Collector's Report
	
	Logon to the CIP Application
	
	• Enter a Login name (User with Toll Manager created in previous step)
	• Enter a password
	• Click on the Logon button
	
	Login Name: _____
	Password: _____
		N/A	• TRCS Application Main Menu screen is displayed.
			• TRCS Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			    ▪ Bank Deposit
			  o Reports
			    ▪ Reports		

	Title: Mixed Mode Lane Collector Deposit		Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
32.	The Toll Manager runs the Host 0033A (Money Room Detail) report. Steps to run the report: At the Plaza Monitoring window: • Click on the Report main button. • Select Deposit from the Category drop down list. • Select HOST – 0033A from the drop down list. • Click on Submit button. • Select ○ Plaza = CIP ○ Enter Begin Date = Today's date. ○ Enter End Date = Today's Date. ○ Collector =Collector #1 • Click on the Submit button.	N/A	• The Reporting Option window is displayed. • The Report Criteria window is displayed. • The Money Room -Detail Report report is displayed. • This report details the collector deposits for a given date.		

Title: Mixed Mode Lane Collector Deposit		Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

33.	The Toll Manager runs the Host 0033B (Money Room Summary) report.
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select Deposit from the Category drop down list.
	• Select HOST – 0033B from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Today's Date.
	   o Collector =Collector #1
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• The Money Room -Summary Report report is displayed.
			• This report summary the collector deposits for a given date.		

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

34.	The Toll Manager runs the Host 0033A (Money Room Detail) report.
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select Deposit from the Category drop down list.
	• Select HOST – 0033A from the drop down list.
	• Click on Submit button.
	• Select
	    o Plaza = CIP
	    o Enter Begin Date = Today's date.
	    o Enter End Date = Today's Date.
	    o Collector =Collector #2
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• The Money Room -Detail Report report is displayed.
			• This report details the collector deposits for a given date.		

	Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

35.	The Toll Manager runs the Host 0033B (Money Room Summary) report.
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select Deposit from the Category drop down list.
	• Select HOST – 0033B from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Today's Date.
	   o Collector =Collector #2
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• The Money Room -Summary Report report is displayed.
			• This report summary the collector deposits for a given date.		

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

36.	The Toll Manager runs the Host – 003A (Daily Collector Report)
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select CollectorPerformance from the Category drop down list.
	• Select HOST – 0003A from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Tomorrow's date.
	   o Collector =Collector #1
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Daily Collector Report is displayed.
			• This report displays the vehicle/revenue information for a specific/all collector(s) and plaza (s) for a given tour date range.		

Title: Mixed Mode Lane Collector Deposit			**Date: May 15, 2008**	**Test No. F-007**	**Rev 1.1**

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

37.	The Toll Manager runs the Host – 003A (Daily Collector Report)
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select CollectorPerformance from the Category drop down list.
	• Select HOST – 0003A from the drop down list.
	• Click on Submit button.
	• Select
	    o Plaza = CIP
	    o Enter Begin Date = Today's date.
	    o Enter End Date = Tomorrow's date.
	    o Collector =Collector #2
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Daily Collector Report is displayed.
			• This report displays the vehicle/revenue information for a specific/all collector(s) and plaza (s) for a given tour date range.		

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Title: Mixed Mode Lane Collector Deposit		Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

38.	The Toll Manager runs the Host – 003B (Daily Collector Report)
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select CollectorPerformance from the Category drop down list.
	• Select HOST – 0003B from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Tomorrow's date.
	• Collector = Collector #1
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Daily Collector Report (vechicle/axle summary) is displayed.
			• This report provides Class Axles Variance per Plaza, Employee ID, Tour Date, per Revenue type and per Vehicle Class (number of Axles).		

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STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

39.	The Toll Manager runs the Host – 003B (Daily Collector Report) report.
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select CollectorPerformance from the Category drop down list.
	• Select HOST – 0003B from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Today's date.
	   o Enter End Date = Tomorrow's date.
	• Collector =Collector #2
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Daily Collector Report (vechicle/axle summary) is displayed.
			• This report provides Class Axles Variance per Plaza, Employee ID, Tour Date, per Revenue type and per Vehicle Class (number of Axles).		

	Title: Mixed Mode Lane Collector Deposit		Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

40.	The Toll Manager runs the Host – 0023 (Denomination Breakdown) report.
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select Deposit from the Category drop down list.
	• Select HOST – 0023 from the drop down list.
	• Click on Submit button.
	• Select
	    ○ Plaza = CIP
	    ○ Enter Begin Date = Today's date.
	    ○ Enter End Date = Tomorrow's date.
	    ○ Collector =Collector #1
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• The Denomination Breakdown report is displayed.
			• This report details the bank deposits for a given revenue date showing each collector and the amounts deposited by denomination type.		

	Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

41.	The Toll Manager runs the Host – 0023 (Denomination Breakdown) report.
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select Deposit from the Category drop down list.
	• Select HOST – 0023 from the drop down list.
	• Click on Submit button.
	• Select
	  o Plaza = CIP
	  o Enter Begin Date = Today's date.
	  o Enter End Date = Tomorrow's date.
	  o Collector =Collector #2
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• The Denomination Breakdown report is displayed.
			• This report details the bank deposits for a given revenue date showing each collector and the amounts deposited by denomination type.		

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

42.	The Toll Manager runs the Host – 0036 (Toll Collector summary by Revenue Day) report.
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select Deposit from the Category drop down list.
	• Select HOST – 0036 from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Yesterday's date.
	   o Enter End Date = Today's date.
	   o Collector =Collector #1
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• The Toll Collection Summary By Revenue Day Report is displayed.
			• This report summarizes verified cash revenue by Collector and Revenue Date for a plaza.		

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

43.	The Toll Manager runs the Host – 0036 (Toll Collector summary by Revenue Day) report.
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select Deposit from the Category drop down list.
	• Select HOST – 0036 from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Yesterday's date.
	   o Enter End Date = Today's date.
	   o Collector =Collector #2
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed. The Toll Collection Summary By Revenue Day Report is displayed.
			• This report summarizes verified cash revenue by Collector and Revenue Date for a plaza.		

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS

44.	The Toll Manager runs the Host – 0027 (Revenue bag Status Report)
	
	Steps to run the report:
	At the Plaza Monitoring window:
	• Click on the Report main button.
	• Select Deposit from the Category drop down list.
	• Select HOST – 0027 from the drop down list.
	• Click on Submit button.
	• Select
	   ○ Plaza = CIP
	   ○ Enter Begin Date = Today's date.
	   ○ Enter End Date = Tomorrow's date.
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• The Revenue Bag Status report is displayed.
			• This report lists revenue bag information by bag status and creation date showing each bag number and its assignment information, as well as associated bank deposit information.		

45.	At the Report window: • Click on the Main button • Click on the Logout button	N/A	• TRCS Application Login screen is displayed.		

THE FOLLOWING STEPS ARE TO BE DONE DURING POST TEST ANALYSIS

	Title: Mixed Mode Lane Collector Deposit		Date: May 15, 2008	Test No. F-007	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION (S)	EXPECTED RESULTS	EXPECTED PLAZA RESULTS	PASS/ FAIL	COMMENTS
46.	Obtain a copy of the Host 0033A (Money Room Detail)		Review report for the proper recording of each transaction.		
47.	Obtain a copy of the Host 0033B (Money Room Summary)		Review report for the proper recording of each transaction.		
48.	Obtain a copy of the Host – 003A (Daily Collector Report)		Review report for the proper recording of each transaction.		
49.	Obtain a copy of the Host – 0003B (Daily Collector Report)		Review Report for the proper recording of each transaction.		
50.	Obtain a copy of the Host – 0023 (Denomination Breakdown)		Review Report for the proper recording of each transaction.		
51.	Obtain a copy of the Host – 0027 (Revenue bag Status Report)		Review Report for the proper recording of each transaction		
52.	Obtain a copy of the Host – 0036 (Toll Collector summary by Revenue Day)		Review Report for the proper recording of each transaction		
	END OF POST TEST ANALYSIS				
	END OF TEST				

Title: Mixed Mode Lane Collector Deposit	Date: May 15, 2008	Test No. F-007	Rev 1.1

TEST DISCREPANCIES/COMMENTS REPORT

TEST STEP	DISCREPANCIES/COMMENTS

| Title: Mixed Mode Lane Collector Deposit | Date: May 15, 2008 | Test No. F-007 | Rev 1.1 |

FINAL SIGN OFF AND COMMENTS

TEST SUPERVISOR/LEAD:	DATE:	SCDOT REPRESENTATIVE:	DATE:

F-008 Host Collector Audit and Adjustments

Title: Host Collector Audit and Adjustments	Date: May 15, 2008	Test No. F-008	Rev 1.1

APPROVALS

Author: R Rhyme	Test Verification:	Dept. Mgr./Designee:	QA/Designee:	SCDOT:

TEST OBJECTIVES

1. Demonstrate the system ability to synchronize transactions from multiple plazas to a central Host server.
2. Demonstrate the functionality for auditing Tour of Duty operations in a dedicated ETC lane.
3. Demonstrate the functionality for auditing toll collector operations in a mixed mode lane.
4. Demonstrate the functionality of adjusting collector's tour of duty records to reconcile differences between collector's reported deposits, Money Room counts and system calculated deposits.

TEST CRITERIA

1. All system administration interfaces and functionalities are working properly.
2. All system access functionalities are working properly.
3. System authorizes access to user with the correct user name and password.
4. System denied access to users with incorrect user name and password.
5. User access is controlled by user roles and rights.
6. All collector deposits information is stored into the system.
7. All transactions have been transferred from all plazas to the central host server.

TEST ASSUMPTIONS/CONSTRAINTS

1. TRCS application is installed and functioning correctly.

Title: Host Collector Audit and Adjustments	Date: May 15, 2008	Test No. F-008	Rev 1.1

SAFETY

1. All personnel will be briefed prior to the start of testing on proper safety practices to be observed at all times while within the testing area.

PRETEST CONDITIONS/EQUIPMENT

1. The TRCS Workstation must be available and running.

2. Username and password for Toll Manager.

3. Start and stop time of this test will be monitored and recorded.

4. The TRCS software will be running.

TEST DISCUSSION AND DESCRIPTION

STEPS	DESCRIPTION
1 – 3	Logon the TRCS application
4	Run Integrity Report to verify that all transaction has reached the Host server.
5-6	Run Toll Facility Overage and Shortage and No Class reports.
7 – 9	Review first Tour Of Duty operation for Dedicated ETC lane
10	Attempt to adjust first Tour Of Duty operation for Dedicated ETC lane
11- 13	Review first Tour Of Duty operation for Dedicated ETC lane
14 -21	Audit Toll Collector #1
22 -27	Audit Toll Collector #2
28 -32	Audit Toll Collector #3
33-36	Run settlement reports

Each step of this functional test will be conducted as written. For each step that meets all expected results, the test coordinator / designee may indicate passing as "P". For each step that does not fully meet the expected results, the test coordinator / designee will document the results and indicate failure as "F". Any and all abnormalities will be fully described. Any disagreements on the test results or their acceptability between SCDOT and ACS representatives shall be documented in test results and subject to review by SCDOT and ACS and possible re-test.

If by mutual agreement between ACS and SCDOT it is determined the Factory Acceptance Test is not progressing as expected due to major issues encountered, testing will be suspended, and resumed after the issues have been rectified.

At the conclusion of testing at the designated lane, post test analysis will be performed. The complete results of this Functional Test will be retained by ACS and a copy will be forwarded to the SCDOT.

EXPECTED RESULTS

TRCS application access is controlled by user login and application role restriction. A user must supply the correct login for application access and access to certain portion of the application is control by the user assigned role.

Title: Host Collector Audit and Adjustments	Date: May 15, 2008	Test No. F-008	Rev 1.1

Date Test Was Performed:	Test Supervisor/Lead:	SCDOT Representative:

START TIME: _____ STOP TIME: _____ PLAZA REVENUE TIME:_____

| Title: Host Collector Audit and Adjustments | Date: May 15, 2008 | Test No. F-008 | Rev 1.1 |

TEST STEPS

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS
1.	Start TRCS Application • Start the web browser • Enter the TRCS application web address into the URL input box of the web browser • Press the enter key	N/A	• TRCS application login screen is displayed.		

Title: Host Collector Audit and Adjustments	Date: May 15, 2008	Test No. F-008	Rev 1.1

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

2.	Logon to the TRCS application
	
	• Enter a login name (User with Toll Manager role)
	• Enter a password
	• Click on the logon button
	
	User Name:_____
	User Password: _____
		N/A	• TRCS application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			    ▪ Bank Deposit
			  o Reports
			    ▪ Reports		

| | | Title: Host Collector Audit and Adjustments | | Date: May 15, 2008 | Test No. F-008 | Rev 1.1 |

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS
3.	Verify Transaction Logger Run Integrity Report. Report must be run after data has been synchronized from the Plaza to the Host.	N/A	N/A		

4.	The Toll Manager runs the Host – 0032 (ETC Posting – Integrity Report) report.
	
	Steps to run the report:
	At the TRCS main menu window:
	• Click on the Report main button.
	• Select TollCollectorAudit from the Category drop down list.
	• Select HOST – 00032 from the drop down list.
	• Click on submit button.
	• Select
	   o Plaza = ALL
	   o Enter Begin Date = Transaction date.
	   o Enter End Date = Transaction date.
	   o Direction = ALL
	   o Lane = ALL
	• Click on the submit button.
		N/A	• The reporting option window is displayed.
			• The report criteria window is displayed.
			• ETC Posting Integrity report is displayed.
			• All transactions generated in scripts F-004, F-005 are included in the report totals.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

5.	The Toll Manager runs the Host – 0006 (Toll Facility Overage and Shortage) report.
	
	Steps to run the report:
	At the TRCS Main window:
	• Click on the report main button.
	• Select Revenue from the Category drop down list.
	• Select HOST – 0006 from the drop down list.
	• Click on submit button.
	• Select
	    o Plaza = ALL
	    o Enter Begin Date = Transaction date.
	    o Enter End Date = Transaction date.
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• This report displays vehicle and revenue information for each day of the month for each plaza(s)		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS
6.	Review Tour of Duty in Dedicated ETC lane. The Toll Manager runs the HOST-0001A (Collector Tour Of Duty) Report Steps to run the report: At the TRCS Main window: - Click on the Report main button. - Select CollectorPerfromance from the Category drop down list. - Select HOST 0001A from the drop down list. - Click on submit button. - Select - Plaza = CIP - Enter Begin Date = Revenue Date for F-004. - Enter End Date = Revenue Date for F-004. - Lane= 001 - Collector = CIP Lane 001 - Tour Segment = ALL - Revenue Type = ALL - Click on the Submit button. - Click on the logout button	N/A	- The Reporting Option window is displayed. - The Report Criteria window is displayed. - Report shows all transactions generated in script F-004. - Report shows three tour segments for the Dedicated ETC lane. - Total ETC transactions are correct. - Total Toll Evader transactions are correct.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

7.	Review Tour of Duty in Dedicated ETC lane
	
	Logon to the TRCS Application
	• Enter a Login name (User with Auditor Role)
	• Enter a password
	• Click on the Logon button
			• TRCS Application Main Menu is displayed
			• TRCS Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Tour Of Duty
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

8.	Review Tour of Duty in Dedicated ETC lane At the TRCS Main menu: • Click on the Tour of Duty hyperlink. • Select CIP from the Facility drop down list. • Enter Revenue Date = Transaction date for F-004 • Select CIP Lane 001 from the Employee drop down list. Click on the search button		• The Tour of Duty Summary screen is displayed. • The Tour of Duty Summary List for Dedicated ETC lane is displayed.		

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS
9.	Review Tour of Duty on Dedicated ETC lane At the Tour of Duty Summary window: • Review Tour of duty record. • Click on Adjust Button		• Three tour of duty segments are recorded for the Dedicated ETC lane • All transactions generated during the tours of duty are correct.		
10.	Attempt to adjust Segment 1 Tour of Duty ETC transactions • Click on Tour Segment 1 • Adjust the total vehicle counts.		• There is a class mismatch. User is unable to make adjustments to ETC transactions.		
11.	Review Dedicated ETC lane Toll Evader transactions At the Tour of Duty Summary window: • Review Tour of duty record • Click on TollEvader Hyperlink • Click on Spyglass Hyperlink to view image		• Total Toll Evader transactions are correct. • An image is displayed for the Toll Evader transaction selected		
12.	Reconcile Tour of Duty for Dedicated ETC lane At the Tour of Duty Summary window: • Click reconcile Tour of duty at the Audit Tour Summary List screen • Logout of the TRCS application		• The Tour of Duty is reconciled		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

13.	Review Collector #1 Tour of Duty
	
	Logon to the TRCS Application
	• Enter a Login name (User with Toll Manager Role)
	• Enter a password
	• Click on the Logon button
		N/A	• TRCS application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			    ▪ Bank Deposit
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

14.	Review Collector #1 Tour of Duty
	
	The Toll Manager runs the HOST-0001A (Collector Tour Of Duty - Summary) Report
	
	Steps to run the report:
	At the TRCS Main window:
	• Click on the Report main button.
	• Select CollectorPerfromance from the Category drop down list.
	• Select HOST 0001A from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Revenue Date F-005.
	   o Enter End Date = Revenue Date F-005.
	   o Lane= 001
	   o Collector = Collector #1
	   o Tour Segment = ALL
	   o Revenue Type = ALL
	• Click on the Submit button.
			• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Report shows all transactions generated by Collector #1 in script F-005.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

15.	Review Collector #1 Tour of Duty
	
	The Toll Manager runs the HOST-0001B (Collector Tour Of Duty -Detail) Report
	
	Steps to run the report:
	At the TRCS Main window:
	• Click on the Report main button.
	• Select CollectorPerfromance from the Category drop down list.
	• Select HOST 0001B from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Revenue Date F-005.
	   o Enter End Date = Revenue Date F-005.
	   o Lane= 001
	   o Collector = Collector #1
	   o Tour Segment = ALL
	   o Revenue Type = ALL
	• Click on the Submit button.
	• Click on the logout button
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Report shows all transactions generated by Collector #1 in script F-005.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

16.	Review Collector # 1 Tour of Duty
	
	Logon to the TRCS Application
	• Enter a Login name (User with Auditor Role)
	• Enter a password
	• Click on the Logon button
			• TRCS Application Main Menu is displayed
			• TRCS Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Tour Of Duty
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Reports
			    ▪ Reports		

17.	Review Collector # 1 Tour of Duty At the TRCS Main menu: • Click on the Tour of Duty hyperlink. • Select CIP from the Plaza drop down list. • Enter Revenue Date = Revenue Date for script F-005 • Select Collector #1 from the Employee drop down list. • Click on the Search button		• The TRCS application main menu is displayed. • The Tour of Duty Summary screen is displayed. • The Tour of Duty Summary List for Collector #1 is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS
18.	Review Collector #1 Tour of Duty At the Tour of Duty Summary window: • Review Collector #1 Tour of duty record.		• Collector and money room deposits are correct.		
19.	Adjust Collector #1 Tour of Duty At the Tour of Duty Summary window: • Click on the Class Adjust button. • Review the image for the NO CLASS transactions.	N/A	• The Adjust Class Detail screen is displayed. • The Find Transaction screen is displayed. • Transactions generated during collector#1 tour of duty are displayed. • The images of the NO Class transactions are displayed.		
20.	Adjust Collector #1 Tour of Duty At the Tour of Duty Summary window: • Make the adjustment to the AVC count by clicking on the Adjust button for CASH pay type. • Enter the necessary adjustments. • Click on the Confirm Adjustment button.	N/A	• The Adjust Class Detail screen is displayed. • The correct Audit code is selected. • Collector Tour of Duty is adjusted. • The screen shows both the original and adjusted counts.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS
21.	Reconcile Collector #1 Tour of Duty At the Tour of Duty Summary window: • Click on the Reconcile box • Click on the logout button		• The Reconcile check box is selected next to the Tour of Duty Summary record. • The Tour of Duty for Collector #1 is reconciled.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

22.	Review Collector #1 Adjusted Tour of Duty
	
	Logon to the TRCS Application
	• Enter a Login name (User with Toll Manager Role)
	• Enter a password
	• Click on the Logon button
		N/A	• TRCS application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			    ▪ Bank Deposit
			  o Reports
			    ▪ Reports		

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

23.	Review Collector #1 Adjusted Tour of Duty
	
	The Toll Manager runs the HOST-0001C (Collector Tour Of Duty - summary) Report
	
	Steps to run the report:
	At the TRCS Main window:
	• Click on the Report main button.
	• Select CollectorPerfromance from the Category drop down list.
	• Select HOST 0001C from the drop down list.
	• Click on Submit button.
	• Select
	    o Plaza = CIP
	    o Enter Begin Date = Revenue Date F-005.
	    o Enter End Date = Revenue Date F-005.
	    o Lane= 001
	    o Collector = Collector #1
	    o Tour Segment = ALL
	    o Revenue Type = ALL
	• Click on the Submit button.
			• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Report shows all transactions generated by Collector #1 in script F-005.
			• Report shows the adjustments to Collector #1 Tour of Duty.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

24.	Review Collector #1 Adjusted Tour of Duty
	
	The Toll Manager runs the HOST-0001D (Collector Tour Of Duty - detail) Report
	
	Steps to run the report:
	At the TRCS Main window:
	• Click on the Report main button.
	• Select CollectorPerfromance from the Category drop down list.
	• Select HOST 0001D from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Revenue Date F-005.
	   o Enter End Date = Revenue Date F-005.
	   o Lane= 001
	   o Collector = Collector #1
	   o Tour Segment = ALL
	   o Revenue Type = ALL
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Report shows all transactions generated by Collector #1 in script F-005.
			• Report shows the adjustments to Collector #1 Tour of Duty.		

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

25.	Review Collector #2 Tour of Duty
	
	The Toll Manager runs the HOST-0001A (Collector Tour Of Duty) Report
	
	Steps to run the report:
	At the TRCS Main window:
	• Click on the Report main button.
	• Select CollectorPerfromance from the Category drop down list.
	• Select HOST 0001A from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Tomorrow's date.
	   o Enter End Date = Tomorrow's date.
	   o Lane= 001
	   o Collector = Collector #2
	   o Tour Segment = ALL
	   o Revenue Type = ALL
	• Click on the Submit button.
	• Click on the logout button
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Report shows all transactions generated by Collector #2 in script F-005.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

26.	Review Collector # 2 Tour of Duty
	
	Logon to the TRCS Application
	• Enter a Login name (User with Auditor Role)
	• Enter a password
	• Click on the Logon button
			• TRCS Application Main Menu is displayed
			• TRCS Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			   o Audit
			      ▪ Tour Of Duty
			      ▪ Find Transaction
			      ▪ Tag Status
			   o System Administration
			      ▪ Toll Fare Maintenance
			      ▪ Password Maintenance
			• PLAZA OPERATIONS
			   o Reports
			      ▪ Reports		

27.	Review Collector #2 Tour of Duty At the TRCS Main menu: • Click on the Tour of Duty hyperlink. • Select CIP from the Plaza drop down list. • Enter Revenue Date = Transaction date for F-005 • Select Collector #2 from the Employee drop down list. • Click on the search button		• The TRCS application main menu is displayed. • The Tour of Duty Summary screen is displayed. • The Tour of Duty Summary List for Collector #2 is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS
28.	Review Collector #2 Tour of Duty At the Tour of Duty Summary window: • Review Collector #2 Tour of duty record.		• Collector and money room deposits are correct. • Class Mismatch transactions counts are correct. • Toll Evader transactions counts are correct. • A variance exists between collector #2 deposits and money room count.		
29.	Adjust Collector #2 Tour of Duty At the Tour of Duty Summary window: • Click on the Deposit Adjust button. • Click on the Adjust button on the Deposit screen. • Correct the deposited amount to match the expected revenue amount. • Click on Adjust button. • Click on the Back button	N/A	• The Deposit screen is displayed. • The deposited amount is adjusted.		
30.	Reconcile Collector #2 Tour of Duty At the Tour of Duty Summary window: • Click on the Reconcile box. • Click on the logout button.		• The Reconcile check box is selected on the Tour of Duty Summary record. • Collector #2 Tour of Duty is reconciled.		

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

31.	Review Collector #2 Adjusted Tour of Duty
	
	Logon to the TRCS Application
	• Enter a Login name (User with Toll Manager Role)
	• Enter a password
	Click on the Logon button
		N/A	• TRCS application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			    ▪ Bank Deposit
			  o Reports
			    ▪ Reports		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

32.	Review Collector #2 Adjusted Tour of Duty
	
	The Toll Manager runs the HOST-0001C (Collector Tour Of Duty - summary) Report
	
	Steps to run the report:
	At the TRCS Main window:
	• Click on the Report main button.
	• Select CollectorPerfromance from the Category drop down list.
	• Select HOST 0001C from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Revenue Date F-005.
	   o Enter End Date = Revenue Date F-005.
	   o Lane= 001
	   o Collector = Collector #2
	   o Tour Segment = ALL
	   o Revenue Type = ALL
	• Click on the Submit button.
			• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Report shows all transactions generated by Collector #2 in script F-005.
			• Report shows all adjustments along with the correct audit code.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

33.	Review Collector #2 Adjusted Tour of Duty
	
	The Toll Manager runs the HOST-0001D (Collector Tour Of Duty - detail) Report
	
	Steps to run the report:
	At the TRCS Main window:
	• Click on the Report main button.
	• Select CollectorPerfromance from the Category drop down list.
	• Select HOST 0001D from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Revenue Date F-005.
	   o Enter End Date = Revenue Date F-005.
	   o Lane= 001
	   o Collector = Collector #2
	   o Tour Segment = ALL
	   o Revenue Type = ALL
	• Click on the Submit button.
		N/A	• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• Report shows all transactions generated by Collector #2 in script F-005.
			• Report shows all adjustments along with the correct audit code.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

34.	Review Collector #3 Tour of Duty
	
	Logon to the TRCS Application
	• Enter a Login name (User with Auditor Role)
	• Enter a password
	• Click on the Logon button
			• TRCS Application Main Menu is displayed
			• TRCS Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			 ○ Audit
			  ▪ Tour Of Duty
			  ▪ Find Transaction
			  ▪ Tag Status
			 ○ System Administration
			  ▪ Toll Fare Maintenance
			  ▪ Password Maintenance
			• PLAZA OPERATIONS
			 ○ Reports
			  ▪ Reports		

35.	Review Collector #3 Tour of Duty At the Tour of Duty Summary window: • Review Collector #3 Tour of duty record.	N/A	• Money room deposits are verified. • Class Mismatch transaction count is verified. • Toll Evader transaction count is verified..		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS
36.	Reconcile Collector #3 Tour of Duty At the Tour of Duty Summary window: • Click on the Reconcile box	N/A	• The Deposit screen is displayed. • The Reconcile check box is selected on the Tour of Duty Summary record.		
37.	Logout of the TRCS Application At the TRCS Application Main Menu screen • Click on the Logout button	N/A	• TRCS Application Login screen is displayed.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

38.	Verify Shift Supervisor cannot make adjustments
	
	At the TRCS Application Login screen
	• Enter a Login name (User with Shift Supervisor Role)
	• Enter a Password
	• Click on the Logout button
	
	Login Name: _____
	Password: _____
		N/A	• TRCS Application Main Menu is displayed
			• Password should only be display as asterisks.
			• TRCS Application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			  o Reports
			    ▪ Reports
			• Shift supervisor does not have access to make adjustment.		

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STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

39.	The Toll Manager runs the HOST-0002 (Settlement) Report
	
	Logon to the TRCS Application
	• Enter a Login name (User with Toll Manager Role)
	• Enter a password
	• Click on the Logon button
		N/A	• TRCS application Main Menu screen is displayed.
			• Passwords should only be displayed as asterisks.
			• TRCS application Main Menu screen contains the following menu items
			• FINANCIAL OPERATIONS
			  o Audit
			    ▪ Find Transaction
			    ▪ Tag Status
			  o System Administration
			    ▪ Employee Maintenance
			    ▪ Toll Fare Maintenance
			    ▪ Password Maintenance
			• PLAZA OPERATIONS
			  o Plaza Monitoring
			    ▪ Current Transactions and Messages
			    ▪ Transaction History
			    ▪ Message History
			    ▪ Trends
			    ▪ Lane Commands
			    ▪ Toll audit
			  o Deposit
			    ▪ Money Bag Maintenance
			    ▪ Collector Deposit
			    ▪ Bank Deposit
			  o Reports
			    ▪ Reports		

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/FAIL	COMMENTS

40.	The Toll Manager runs the HOST-0002 (Settlement) Report
	
	Steps to run the report:
	At the TRCS Main window:
	• Click on the Report main button.
	• Select Settlement from the Category drop down list.
	• Select HOST 0002 from the drop down list.
	• Click on Submit button.
	• Select
	   o Plaza = CIP
	   o Enter Begin Date = Revenue Date F-005.
	   o Enter End Date = Revenue Date F-005.
	   o Collector = ALL
	• Click on the Submit button.
			• The Reporting Option window is displayed.
			• The Report Criteria window is displayed.
			• The report will display expected revenue under different revenue heads (toll revenue type) and the reported amount that the collector deposited at the time of collector deposit.		

41.	Logout of the TRCS Application At the TRCS Application Main Menu screen • Click on the Logout button	N/A	• TRCS Application Login screen is displayed.		

THE FOLLOWING STEPS ARE TO BE DONE DURING POST TEST ANALYSIS

STEP	SPECIFIC TEST INSTRUCTION(S)	EXPECTED RESULTS	EXPECTED AUDIT/REPORT RESULTS	PASS/ FAIL	COMMENTS
42.	Obtain copies of the Host 0001A		Review report for the proper recording of each transaction.		
43.	Obtain copies of the Host 0001B		Review report for the proper recording of each transaction.		
44.	Obtain copies of the Host 0001C		Review report for the proper recording of each transaction.		
45.	Obtain copies of the Host 0001D		Review report for the proper recording of each transaction.		
46.	Obtain a copy of the Host – 0032		Review report for the proper recording of each transaction.		
47.	Obtain a copy of the Host – 0006		Review report for the proper recording of each transaction.		
END OF POST TEST ANALYSIS					
END OF TEST					

Title: Host Collector Audit and Adjustments	Date: May 15, 2008	Test No. F-008	Rev 1.1

TEST DISCREPANCIES/COMMENTS REPORT

TEST STEP	DISCREPANCIES/COMMENTS

| Title: Host Collector Audit and Adjustments | Date: May 15, 2008 | Test No. F-008 | Rev 1.1 |

FINAL SIGN OFF AND COMMENTS

TEST SUPERVISOR/LEAD:	DATE:	SCDOT REPRESENTATIVE:	DATE: