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1 REVISION HISTORY

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision Number</th>
<th>By</th>
<th>CRF</th>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/3/03</td>
<td>3.31</td>
<td>Roger Pruitt</td>
<td>XX</td>
<td>All</td>
<td>Version update</td>
</tr>
<tr>
<td>2/26/04</td>
<td>4.0</td>
<td>Cora Sharp</td>
<td>XX</td>
<td>All</td>
<td>Version update</td>
</tr>
<tr>
<td>9/15/04</td>
<td>4.1</td>
<td>Vadis Frone</td>
<td>XX</td>
<td>All</td>
<td>Version update</td>
</tr>
</tbody>
</table>

1.1 List of Changes in the Field Data Collection System (FDCS) Version 4.1

1.1.1 System:
- Add FDCS Manual button to main page.
- Web Upload Process replaced BBS Upload.
- New Backup System: backup/restore only selected records, user specifies criteria with the option of overwriting or appending to existing records; backup system recognizes duplicate records and will only backup/restore the latest records.

1.1.2 Asphalt:
- Customize AC Correction Factor and Temperature Correction Factor for each sample in 159 report.
- Asphalt Rating Report: New Summary and Detail Reports
- Corrected Report 150 cursor bug. Cursor pointed to second record even when it should point to the last record.
- Add date range to Asphalt Plant Summary Report.
- Add input fields for daily tonnage in 159 report.
- Add rating time period to Asphalt Plant Rating Report.
- Disable Average % Deviation Fields on Report 159 Samples.
- Add Lots Summary Report for DOT159. This can be used to check for Lots without Compaction.
- Add Contract ID as search field for DOT150.
- Connect Data Information between DOT159 and DOT150.
- Add Contract ID in the Find DOT150.

1.1.3 Aggregate:
- Aggregate Grouping: Move source 067C, 031C, and 112C to group II from group I.
- Add Verified button to DOT 640 to verify the entire block. Add Plant Code grouping.
- Exclude Aggregate Quality Control Blended Sources (“B”) in Aggregate Rating report.
- Correct Sieves order for Aggregate Report.
- Check for Empty Used In Codes in DOT640.

1.1.4 Miscellaneous:
- Add the Contractor Code to DOT553.
- Gauge Calibration: Add four more decimal digits to gauge factors and correct default values in the density blocks and the moisture blocks.
2 Installation Instructions for FDCS 4.1

This chapter provides an overview on how to install the latest version of FDCS. Download the correct update by clicking the link at http://tomcat2.dot.state.ga.us/fdcs/upgrade/fdcsupgrade2.cfm. See the installation instructions under the Help button for each type of installation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Details</th>
<th>Size</th>
<th>Content</th>
<th>Download</th>
<th>Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDCS Full Upgrade</td>
<td>Download this package if you have FDCS 3.31 or below on your machine.</td>
<td>16 MB</td>
<td>VB-Plug-ins, Upgrade Components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Upgrade</td>
<td>Download this package if you have FDCS 4.0 or above on your machine.</td>
<td>7 MB</td>
<td>Upgrade Components only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDCS Full Install</td>
<td>Download this package if you do not have any FDCS version on your machine.</td>
<td>28 MB</td>
<td>MS Access Runtime, VB-Plug-ins, Upgrade Components</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

System Requirements:
- Access to the Internet
- Internet Explorer 5.0 or above
- 40 MB of hard disk
- 64 MB of ram (256 MB recommended)
- 166 MHz CPU clock (500 MHz recommended)
- May need administrator profile to perform installation

This page has been accessed 53 times

NOTE: YOU DO NOT NEED TO BACKUP YOUR DATABASE OR UNINSTALL THE OLD FDCS VERSION TO UPGRADE YOUR FDCS. Contact the GDOT Solutions Center at 1-800-651-4GDOT if you have difficulty with this upgrade/installation or you wish to request a CD to be sent to you. You can also use the attached form to submit any request.

2.1 Full Upgrade from Field Data Collection System 3.x.

If you are upgrading from a previous Version 3.x you should back up any field data using the Data Collection System’s built in Backup function prior to installing Version 4.0. This is ONLY a precaution and is not required.

With Version 4.0, it is not necessary to uninstall the previous version. With Version 4.0, it is not necessary to Backup your database prior to installation; the database on your hard drive is updated along with the application.

2.2 Light Upgrade - Future Updates of Version 4.x

You can find links to the latest version of the GDOT Field Data Collection System and related documents at: http://www.dot.state.ga.us/dot/construction/materials-research/software.shtml

You must keep your copy of FDCS software up-to-date. GDOT does not support older versions of this software. Attempting to Upload with an unsupported version will result in an error message directing the user to the FDCS Update webpage.

2.3 New Installation of the Field Data Collection System

If the technician’s computer does not have any previous version of FDCS, use the Full Install.
2.4 Technical Information
The software is available for installation in several ways:

- Installing from an Internet download
- Installing from a CD-ROM
- Installing from a GDOT network download

Additional technical information regarding the operation of this program can be found on the CD-ROM in the DOCS folder. If you did not receive this program on CD-ROM then they can be downloaded from the Internet on the update page mentioned above.

2.4.1 System Requirements
For the best results you should have at least a Microsoft Windows 95 or higher (Windows NT 4 needs service pack 4 or later). This program requires:

- Access to the Internet (any Internet Service Provider or GDOT Network connection)
- Internet Explorer 5.0 or above
- 40 MB of hard disk
- 64 MB of ram (256 MB recommended)
- 166 MHZ CPU clock (500 MHZ recommended)
- WinZip
- May need administrator profile to perform installation.

IMPORTANT: If this software is to be installed on a computer that belongs to your company, you must contact your computer systems administrator and get permission to install it or have them install it for you. Your administrator will also need to make sure that you have write permissions to the **GDOTDCS.MDE** file.

2.5 Contacting GDOT for support
You may contact the GDOT IT Division Solutions Center for assistance with this software, using the Support Request form on the OMR Software webpage: [http://www.dot.state.ga.us/dot/construction/materials-research/downloads/fdcs-index.shtml](http://www.dot.state.ga.us/dot/construction/materials-research/downloads/fdcs-index.shtml)

However, *before you do* please check the following things:

1. Check for a new version of this software. If you have run in to a problem with the program, it may have already been fixed in the latest version. Additionally the Solutions Center only provides support for current version of FDCS.
2. Write down any error messages. Do not paraphrase them. Write them down exactly as they appear on your computer's screen. OR make a “screen shot” of the error message(s). Include any error messages or screen shots with the Support Request.
3. If you have not already read it, read this manual. Most usage problems can be answered by reading the manual.
4. Be at your computer when contacted by the GDOT IT Division Solutions Center. You may be asked to do things to your computer while talking to them.

The phone number for the GDOT IT Division Solutions Center is 404-651-5010. The first available Solution Provider will take your call.
3 Introduction to Field Data Collection System, Version 4.1

This chapter briefly describes the Field Data Collection Software test forms and documents the flow of test data from the field project sites to the Office of Materials and Research database server.

3.1 Terminology
The following terms are used throughout this document:

**FDCS** - Abbreviation for the Field Data Collection System.
**Client** – The edition of FDCS on the technician’s computer. The data collected in this edition should be uploaded to the Server version and can be used to generate local reports.
**Server** – The central database collection of uploaded test data. The data can be verified and used for various reports on a statewide basis.
**Field** - A single piece of information, such as a measurement or a description (when referring to data entry).
**Record** - A group of fields that describe one entity. In this application the entity is usually a sample taken for testing.
**Key fields** - Each record must contain a field or a set of fields that uniquely identifies it. This prevents duplicates and enables searching. These special fields are called key fields.
**Filter** - The process used to show you a specified selection of your records or just one record rather than all records at once.
**Form** - In the Field Data Collection System, a Form is a window or dialog containing the contents of one or more records that you may view, edit, or add to.
**Report** - A record or group of records, or calculation obtained from one or more records, specially formatted for printing.
**Upload** - The process of electronically sending data to the GDOT using the Field Data Collection System.

3.2 Overview of the Field Data Collection Software
The GDOT Field Data Collection Software (FDCS) is a computer program that is used by GDOT Testing Technicians and Contractor Testing Technicians to collect and distribute field test data. It is designed to be a standalone system that can be used in remote location to collect field test data for future distribution.

FDCS is composed of a collection of field test data forms that are used to collect, distribute and report field material test data. It is broken down into four functional areas (Roadway & Plant, Independent Assurance, Aggregates, and Portland Cement).
3.2.1 Additional Options Provided By Field Data Collection Software

Special features include a link to the Office of Materials and Research web page where reference data (Nuclear Gauge Calibrations, the latest version of the Field Data Collection Software) can be downloaded to the client.

- Forms perform calculations: Many of the entry screens perform the initial calculations on the test data.
- Ability to Backup or Restore test data
- Ability to exchange data between technicians: Some tests are multi-part, which are started by one technician and finished by another. This requires that technicians be able to exchange test report data between machines. The FDCS provides the technicians the ability to backup test data, exchange the data, and restore from the backup file. Computer diskettes or e-mail attachments are the recommended media to use to exchange test data between technicians at remote locations.
- Ability to generate hardcopy test reports and statistical summaries and quality ratings: Field Technicians can also generate hardcopy or electronic test reports. Some of the test forms provide for generation of statistical and quality ratings on the data collected on the client. All of the reports can be printed or sent by e-mail.
- Ability to edit, review or delete test data
- Ability to upload test data to the GDOT
- For certain producers, the ability to Import test data from their own system to FDCS.
- Certified data can be downloaded into the client and used for reference data

This Training Guide can be reviewed by clicking the button at the bottom of the FDCS main screen labeled ‘OMR Training Manual’.

OMR Training Manual

Other Options

- Random Number Sampling Utility
- Update Nuclear Gauge factors
- Edit Nuclear Gauge Factors
- Generic Random Number Generator
3.3 Processing and Flow of Uploaded Test Data

Most technicians are not near a telephone or GDOT network line at the time they collect the data. This requires the Field Data Collection Software to be able to:

- Store and save test data locally on the client computer
- Upload the test data to the GDOT External Web Server.
- Batch process copy the data to a temporary database every hour
- Data must be verified by certified GDOT personnel.

Only reviewed and verified test data is used to generate the final test reports or to generate statistical reports or quality product ratings. **Note:** On each test report is a field you must check in order for the data to be uploaded to the GDOT. If this field is not checked the FDCS software does not upload this record to GDOT.

Contractors and GDOT technicians collect and enter test data into FDCS via laptop/desktop computers. Authorized GDOT personnel on the GDOT network can distribute hardcopy test reports or electronic copies plus generate statistical reports or quality ratings.
4 Using the Field Data Collection System

This chapter provides brief introduction to the Field Data Collection System (FDCS) main menu options and describes the additional options available within the software. It also provides a brief introduction to the windows functions within the software and how to navigate within the FDCS using these functions.

4.1 Getting Started with FDCS

You can start the application in two ways:

- Accessing from the Desktop
- Accessing from the Program Menu

Starting from the Desktop

When the Field Data Collection System software installs on your computer, it automatically copies a shortcut to your desktop.

Follow the steps below to start the application from your desktop:

1. Locate the Field Data Collection System Icon.
2. Double-click to start the application.

Starting from the Programs Menu

You also have the option to start the Field Data Collection System software from the Windows Program menu.

Follow the steps below to start the software from the Program menu:

1. Click Start.
2. Click Programs.
3. Click Field Data Collection System
4.2 Navigating the Main Menu
When you start FDCS, the first thing you will see is the Main Menu. The Main Menu provides a “pallet” of entry forms and utilities for each testing group that uses this application. Click on the tab with the name of your testing group to see the forms and reports.

1. Click on the first tab for **Roadway + Plant**. Note the test forms, reports and reference updates on this panel.

2. Click the fourth tab for Concrete. Note the different test forms, reports and reference updates on this panel.

3. Other buttons on the Main Menu:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check for updates on the GDOT web site</td>
<td>Clicking this button opens your default web browser and takes you to the GDOT FDCS download web page. (This requires an Internet connection). You should check this page regularly.</td>
</tr>
<tr>
<td>Upload Data to GDOT</td>
<td>Click this button to start the process of sending entered and modified data to the GDOT electronically.</td>
</tr>
<tr>
<td>Backup/Restore</td>
<td>Clicking this button will open the backup/restore window that enables you to make a copy of your data on floppy disk or re-load data from a diskette.</td>
</tr>
<tr>
<td>Read / Print Manual</td>
<td>Clicking this button opens the User Manual, which includes a detailed description of each function and form.</td>
</tr>
<tr>
<td>Load Contract IDs</td>
<td>Contract ID fields on all entry forms have a pull down box that lets you select from a list of current contract IDs. (You can still type Contract IDs in the field.) The list on the OMR web site is not currently being updated.</td>
</tr>
<tr>
<td>OMR User Training Manual</td>
<td>Clicking this button opens this Training Manual.</td>
</tr>
</tbody>
</table>
The following test forms are available: (depending on which testing group tab you selected)

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Roadway and Plant Group Test Forms</th>
<th>English and Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT159-5</td>
<td>Asphaltic Concrete Lot Worksheet entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT176</td>
<td>Thickness Measurement entry form</td>
<td></td>
</tr>
<tr>
<td>DOT553</td>
<td>Roadway Compaction Form</td>
<td></td>
</tr>
<tr>
<td>DOT150</td>
<td>Control Strip and Asphaltic Compaction data entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT152</td>
<td>Water Turbidity entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT152</td>
<td>Asphaltic Concrete Comparison / Referee entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT161</td>
<td>Asphaltic Concrete Quality Entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT160</td>
<td>Asphaltic Concrete Comparison/Referee</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Independent Assurance Group Test Forms</th>
<th>English and Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT176</td>
<td>Thickness Measurement entry form</td>
<td></td>
</tr>
<tr>
<td>DOT553</td>
<td>Roadway Compaction Form</td>
<td></td>
</tr>
<tr>
<td>DOT386</td>
<td>Asphaltic Comparison Compaction / Void data entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT168</td>
<td>Concrete Quality Comparison data entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT163</td>
<td>Field Paint Thickness data entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT162</td>
<td>Bridge Painting Conditions data entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT165</td>
<td>Galvanized Coating data entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT116</td>
<td>Pipe Certification and Quality data entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT150</td>
<td>Control Strip and Asphaltic Compaction data entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT160</td>
<td>Asphaltic Concrete Comparison / Referee entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT169</td>
<td>Miscellaneous data entry form</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Aggregate Group Test Forms</th>
<th>English and Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT 640</td>
<td>Aggregate Producer Quality data entry form.</td>
<td></td>
</tr>
<tr>
<td>DOT 641</td>
<td>Aggregate Producer Quantify data entry form.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Portland Cement Group Test Forms</th>
<th>English and Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMR-049</td>
<td>Portland Cement data entry form.</td>
<td></td>
</tr>
</tbody>
</table>
Other options provided by the software include the following:

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Reports</td>
<td>Clicking this button will open the Asphalt Reports window, which contains options for generating printed statistical reports relating to the DOT 159 Asphaltic Concrete Lot Worksheet.</td>
</tr>
<tr>
<td>Aggregate Reports</td>
<td>Clicking this button will open the Aggregate Reports dialog box, which contains options for generating printed statistical reports relating to the DOT 640 and DOT 641 reports.</td>
</tr>
<tr>
<td>Materials Summary Report</td>
<td>A test report can be created for each form that does not have a specified report.</td>
</tr>
<tr>
<td>Edit Gauge Factors</td>
<td>Clicking this button will show you the gauge factors used for the DOT 553 Roadway Compaction form. You may also edit them if necessary, but usually you will use the “Update Gauge Factors” to get the correct factors.</td>
</tr>
<tr>
<td>Update Gauge Factors</td>
<td>Clicking this button will update the list of gauge factors with one provided on an update disk.</td>
</tr>
<tr>
<td>Import Custom Data</td>
<td>This is a special function for Aggregate producers and Portland Cement producers who use their own custom software for data collection. It enables them to automatically import data from their system and send it to the GDOT.</td>
</tr>
<tr>
<td>Random Number Sampling Utility</td>
<td>Users of the 159 forms use this to determine which loads in a lot are randomly sampled.</td>
</tr>
<tr>
<td>Generic Random Number Generator</td>
<td>This utility is a general-purpose random number generator for tests that use random sampling.</td>
</tr>
</tbody>
</table>
4.3 Opening a form for data entry

Each form has fields which are unique to the test type. For the training example, we will use the DOT 159 on the first tab for **Roadway + Plant**.

1. Click on the button for **DOT 159 (English)**

2. The DOT 159 Create/ Edit window will open. Enter the Header information:
   - Plant No.: **123**
   - Project ID: **STP-123(11)01**
   - Type Mix: **19mm**
   - Level: **A**
   - Lot No.: **01**

<table>
<thead>
<tr>
<th>Header Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Number</td>
<td>An Asphalt Plant Number is the designation assigned by the DOT to asphalt producers that supply material to the DOT. The Source Plant Number entered must be the number of the plant producing the mix. This is a numeric field. Only numbers may be entered.</td>
</tr>
<tr>
<td>Project ID</td>
<td>This is the project designation for the specific project being performed under the contract. You must type the project code in EXACTLY as it is issued; otherwise your data may not be filed properly.</td>
</tr>
<tr>
<td>Type Mix</td>
<td>The GDOT Mix designation for the mix being tested. This must be a valid mix code selected from the dropdown list.</td>
</tr>
<tr>
<td>Level</td>
<td>The level of the mix if applicable. Select one: N/A, A, B, C or D.</td>
</tr>
<tr>
<td>Lot No</td>
<td>The lot number of the mix being tested. Only positive integer numeric values are valid in this field. Letters and symbols are not allowed.</td>
</tr>
</tbody>
</table>
3. Click the **Create/Edit** button.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create/Edit</td>
<td>If you entered values for all fields you will be taken to the record if it exists. If it does not, a new one is created automatically. (Note: When using this method new blank records are immediately created and stored. To remove this record you must delete it.) If you left one or more fields blank and more than one record matching the entered values is found, you will be prompted to select a record from a list.</td>
</tr>
<tr>
<td>Search All</td>
<td>Clicking this brings up a list of all records you have entered. This is the same as if you left all of the prompted fields blank and clicked create/edit.</td>
</tr>
<tr>
<td>Open All</td>
<td>Opens the data entry form but lets you work with all records at once instead of just one at a time. You may browse all of the records using the navigation buttons at the bottom of the entry form. This also allows you to use the “find” option on the form and apply your own filters.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Returns you to the main menu.</td>
</tr>
</tbody>
</table>

4. The DOT 159 Asphaltic Concrete Lot Worksheet will open. Notice the header information from the Create/Edit screen is populated on the top row of the window.

![DOT 159 - Asphaltic Concrete Lot Worksheet (ENGLISH)](image)

**Figure 1 - Asphaltic Concrete Lot Worksheet**

Because of the large number of fields on this form, the form is broken up into multiple pages which can be selected by clicking on the appropriate tab. This form was opened just as a sample. *With the exception of the 640, 641, and OMR-049, which are continuous forms (that is you can see more than one record at a time), you must specify which record you wish to enter.*
Note: If you created a new record, some fields will be filled in automatically with the values from the last form of that type that you edited.
4.3.1 **Form buttons**

This is an example of a generic data entry form.

- **Selection Bar:** Clicking this selects records for copying or pasting.
- **Title Bar:** You can drag this to move the window.
- **Maximize**
- **Minimize**
- **Close & Save Data**
- **Scroll Bars:** If the form is too big to fit in the window you can use the scroll bar.
- **Resize:** If the window is too small you can drag this to make it larger.

- **First:** Takes you to the first record.
- **Previous:** Take you to the previous record.
- **Displays:** The record you are currently reviewing.
- **Next:** Takes you to the next record.
- **Last:** Takes you to the last record.
- **New:** Creates or moves to a new record.
- **Total:** Displays the total number of records.

Record: [ ] [ ] 1 [ ] [ ] [ ] of 1
5 Generating Reports in FDCS Client Software

This chapter describes how users can generate reports from the FDCS client. Three types of reports are available from within the client software.

5.1 Generating Aggregate Reports
When you click the “Aggregate reports and printouts” button from the ‘Aggregate’ tab on the main menu, you will see the following screen:

Before running any of the reports listed here, you must enter a range of dates that you wish the report to cover.

Additional Options:
- **Plant** – Source Number
- **Product** – Aggregate Size Code
- **Sample From** – Where the sample was taken.
- **Used In** – Pay Item Code
- **Meets Requirements** – Pass / Fail
- **Washed/Unwashed** – The product is produced as washed or unwashed.

From here you may generate the following aggregate reports:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Description of Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate Quarry Rating</td>
<td>A quality rating system for &quot;Standard Coarse Aggregate Sources has been developed. This system is designed to provide Industry and the Department with a management tool for measuring the success of the Producer Certification Program and to promote consistency of products. This program will generate a quality rating based upon the data you have entered into the client.</td>
</tr>
<tr>
<td>Aggregate Quarry Rating Summary</td>
<td>Provides a summary based on the results of the above report.</td>
</tr>
<tr>
<td>Aggregate Quality 640 Report Sheet</td>
<td>This will print a report on all Quality test data entered for the specified time period.</td>
</tr>
<tr>
<td>Aggregate Quantity 641 Report Sheet</td>
<td>This will print a report on all Quantity test data entered for the specified time period.</td>
</tr>
<tr>
<td>Total Tests Per Aggregate Product</td>
<td>Is a summary report that shows how many tests were performed per aggregate size?</td>
</tr>
<tr>
<td>Aggregate Producer Statistical Report</td>
<td>Generates averages and standard deviations per sieve size per aggregate size.</td>
</tr>
</tbody>
</table>
5.2 Generating Asphalt Reports from FDCS

When you click the ‘Asphalt Reports and Printouts’ button on the ‘Roadway + Plant’ tab, from the main menu, you will see the following screen:

From here you may generate the following asphaltic concrete reports:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Report Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Plant Rating</td>
<td>The asphalt plant rating system was developed using the Mixture Control Tolerances established in Section 828 of Georgia’s Standard Specifications. Uses the data from all of the entered 159 Asphalt Concrete Lot Worksheets within the specified time range to generate a rating for a specified plant. Requires three samples per product code to be rated.</td>
</tr>
<tr>
<td>Asphalt Plant Rating Probation</td>
<td>Same as above, but there is no minimum number of samples needed to generate a score.</td>
</tr>
<tr>
<td>Rating Summary for all Asphalt Plants</td>
<td>A summary of Asphalt Plant Ratings from all of the entered 159 Asphalt Concrete Lot Worksheets within the specified time range for all plants.</td>
</tr>
<tr>
<td>Asphalt Tonnage Report</td>
<td>A report of all tonnage from all 159s within the specified time range.</td>
</tr>
<tr>
<td>IPD and PCT Voids Report</td>
<td>A statistical report of in-place densities and percent voids for each asphaltic concrete mix.</td>
</tr>
</tbody>
</table>
Gradation Report | A statistical breakdown of gradations for each asphaltic concrete mix.
Lots Summary Report | A summary report of Asphalt Lots per Contract ID
List of all projects entered by users | Produces a list of unique project codes gathered from all entered 159 reports. This helps identify incorrectly typed project codes.

5.2.1 Lots Summary Report

1. Click the next to last ‘Lots Summary Report’ button. The report detail screen appears.

2. In the Contract ID field, enter **B12345-00-000-0**
3. Click **Get Details**. You might receive an error that states, ‘No Record Found. Error 1’. Just click ‘OK’ and then the Lots Summary report appears.
4. Click Print or Email File to save or share the report.

*Note: Each Type Mix is grouped and a Total Quantity for each mix is calculated. The Lots are listed in numeric order, making it easier to notice missing Lots or missing compaction data.*

Example of Lots Summary Report
5.3  Printing or E-mailing reports

To print the report, click the print button and the report will be printed. To his preview may be printed, e-mailed, or saved to a folder on your (desktop, a diskette or a folder on the network). Be sure and create the folder before you create the report.

To create a folder on the desktop (right click your mouse, select new, select folder, rename the folder),

Note: This example will create a sub-folder in the windows default desktop folder.

5.3.1 To Print a Report

To print a hardcopy report if you are attached to a printer, click “File” and then “Print”.

When the print dialog box appears click “OK”.

![Print dialog box]

![Report preview]

![Folder creation dialog box]
5.3.2 To e-mail a Report

1. To e-mail the report, click “File” and then “Send as Document”.


3. Click OK. At this point your e-mail program should appear.  
   Note: This is a generic document format recognized by most Word Processing Software

4. Typically this is Microsoft Outlook, in which case it will prompt you for your user profile.  
   Select your profile and click OK.

5. Your report will appear in the email as an attachment.  
   Note: Using this method you can only send one report. You must send the e-mail before you continue with any other program.
5.3.3 **Alternate method to send a report.**

1. After generating the report, click **Email File** button
2. Right click the file with the report name
3. Select **Send To**-> **Mail Recipient**
4. Choose Outlook as the mail profile

5. Enter the e-mail addressee and click **Send** the message.
5.4 Save a Report to a folder on your computer

1. On the File menu, select Output to Document

2. Select the folder where you wish to save the report, then click OK.

Note: Be sure to use the rtf extension on the file. The Rich Text Format (RTF) preserves the special formatting and header information in the test report. If you try to save the report using any other format extension it rearranges the data within the test report.
5.5 To e-mail a group of reports
To email more than one report at a time it is recommended that you save all the reports to one folder on your computer. Then create an e-mail message and insert all the reports into the message as follows.

1. Open your email program.
2. Create a new message.
3. Use the Insert menu to select and include multiple report files in your email message.
4. Address and Send the message.

![Example of More Than One Report - Message (HTML)](example_image.png)

**To...** Duffey, David

**Cc...**

**Subject:** Example of More Than One Report

Good Morning David

The attached documents contain the lot reports for Contract 000000-00-0000.
6 Uploading to the GDOT External Web Server

Test data uploaded to the web server is copied through secure GDOT network lines into the main GDOT Field Data database. Only authorized personnel can verify test data once it has been uploaded to the database server. Users of the Field Data Collection System Web Upload must have an Account ID, Password, and Technician Code. Please contact the District Testing Management Operations Supervisor, OMR Pit & Quarry Branch Chief, OMR Concrete Branch Chief, or OMR Bituminous Paving Branch Chief to have an account set up.

6.1 Web Upload Process

To perform this process, you must be connected to the internet (via Virtual Private Network (VPN) or your Internet Service Provider (ISP). Also, you will need to obtain login credentials (user name and password) as provided by your company computer administrator. Once you have your login information and are connected to the internet, follow the steps detailed below to upload your information.

1. Connect to your internet provider.
   **Note:** For GDOT personnel, this means you should be logged on to the GDOT network.
2. From the main FDCS menu, click the **Upload Data to GDOT** button in the lower left hand corner.

   ![Upload Data to GDOT](image)

   The upload options window appears.

3. Click **Web Upload**.

   ![FormUploadMenu](image)

   Make sure that you are already connected to the internet before using the Web Upload option.

4. The start screen options screen appears.
5. Click the **Login** button in the top left hand corner.

![Start screen](image)

**Click "Login" to start.**

**Start screen**


![Log In screen](image)

**Log In screen**

7. Verify the ‘**Upload Files**’ option (lower left) is selected.
8. Click the ‘**Log In**’ button. After clicking the ‘Log In’ button the ‘Data Upload Page’ appears.
9. Simultaneously pressing the ‘Ctrl’ and ‘V’ keys will select data located in the C:\Program Files\GDOTDCS\VBPlugins\webupload\upload area.

10. If the location of the data you wish to upload is not displayed correctly, click the Browse… key and locate the date you wish to upload manually. If you’ve successfully done the Ctrl-V step, your screen will look like the one below (Figure 67).
11. The path to the example file is shown in the file field (in this example, C:\Program Files\GDOTDCS\VBPlugins\webupload\upload\8z-.txt).
12. Once the file you wish to upload is listed in the file field of the Data Upload screen, click the ‘Submit Now!’ button.
13. Next the data upload log appears.
6.2 Retrieve Password

Users of the Web Upload can retrieve their password and account ID if that information has been lost or forgotten.

1. To use this feature, starting at the Upload login menu, click the log in button. The log in screen appears.

![Log In screen](image1)

2. Click the **Retrieve Password** button. The password retrieval screen appears.

![Password Retrieval Screen](image2)

3. Ensure the cursor is in place and enter your email address.
4. Finally, click **Send Password**. An e-mail from the Georgia DOT Solutions Center will be sent to your email address. It will contain your account ID and password information from an *FDCS Auto-Generated Mail* program.

6.3 **Update Account information**

*Note:* Each user must ensure an accurate e-mail address is listed for them. Your email address will be used if you ever need to retrieve your password, so it is critical that your email address is correct.

1. Connect to your internet provider.

*Note: For GDOT personnel, this means you should be logged on to the GDOT network.*

2. Open FDCS, if not already in use.
3. Click on the **Upload Data to GDOT** button.
4. Click **Web Upload** button.
5. Enter your Account ID, password, and technician code.

*Note: The default password for new accounts is NICEDAY.*
6. Check the **UPDATE ACCOUNT** radio button (lower right).
7. Finally click the **Log In** button.
8. Check your user account to make sure it is correct.
   - Change your password from NICEDAY (using up to 10 characters).
   - Enter your correct telephone number.
   - Enter a correct and accurate e-mail address. This will be used if you ever need to retrieve your password, so it is critical the email address is correct.

9. Click the Update Account button to save the changes to your information.
10. Exit the user account update.
6.4 **View Log**

If the user wants to see a log of the files uploaded, click the 'View Log' option under the 'Update Account' area.

1. Click the **View Log** button. After a short delay, the View log screen appears.
2. The panel on the left displays the log of files uploaded to the server.
3. The panel on the right is the list of the batch run that uploads data from the external web server to the internal server to be verified by GDOT personnel.

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**View Log Screen**
7  Using the Backup/Restore Utility

The Field Data Collection Software backup/restore utility program enables users to back up or restore data that has been saved to a diskette, hard drive or to a networked computer or server. This utility can be used to Backup test reports and transfer the file to another user so that another user can Restore the data on their computer. This chapter provides a description of what is provided by the Backup/Restore Data utility in FDCS.

7.1 Backing Up Data

4. From the main menu, click the **Backup/Restore 4.x Data** button. The FDCS Backup window appears.

5. Click the **Start** button to begin the backup/restore process. The transaction mode screen appears:
7.1.1 Database Backup – New Backup

6. On the transaction mode screen, click the Database Backup option.

![Database Backup Selected](image)

7. Click the Next button, which will take you to the backup options screen appears:

![Backup Options](image)

8. Select the New Backup option and click the Next button.
9. Enter the backup file name ‘new’.
   Note: In the “Your Full Name Is:” field, the system will add the date and file extension ‘.bkp’

Full File Name

10. Click the Next button.
11. In the “1. Select Drive” field, select the C:\ drive.
12. In the “2. Double-click to select the directory” field, double click the FDCS folder.
13. Verify “This is the location you chose:” and click the **Next** button. The reports selection screen appears.

### Reports Selection

14. Click the **Select All Sections** button.
15. Click the **Next** button.

*Note: You can either select all (to select all types of reports) by clicking the ‘Select All’ button beneath the corresponding reports or you could select an individual ‘type’ of report.*
16. Click the **Let Me Choose** option if you wish to customize the backup.
17. Then click **Next**.

18. In the “Project No.” field, enter **STP-123(11)01**
19. Click the **Next** button. The confirmation window appears.

20. Click **Yes**.
21. Click the **Exit** button to return to the Main Menu.

### 7.1.2 Database Backup – Append

22. From the main menu, click the **New Backup/Restore Data** button. On the transaction mode screen, click the **Database Backup** option.

![Database Backup Screen]

Database Backup Selected

23. Click the **Next** button, which will take you to the backup options screen appears:
Backup Options

24. Select the **Append to Existing Backup** option and click the **Next** button. The file location window appears.

File Location

25. In area 1 select the **C:\** drive.
26. In area 2 double click the **FDCS** folder.
27. In area 3 double click your file (in this example ‘sample021804.bkp’ is the file)
28. Verify the contents of the lower “This is the file you selected” area and click the **Next** button. The reports selection screen appears.
Reports Selection

29. Click the **Select All Sections** button.
30. Click the **Next** button

Note: You can either select all of a type of report (by clicking the ‘Select All’ button beneath the corresponding reports) or select individual report types.

Backup Customization

31. Click ‘**Back up all**’.
32. Click **Next**.

Process Complete Screen

33. Click the **Exit** button to return to the Main Menu.
7.2 Database Restore

FDCS users are encouraged to utilize the Restore process detailed in the section that follows. Completing the Database Restore process is very similar to the Database Backup process detailed in the previous section. *Note, The newest of all files will be used. If you are restoring to a file that was created say, 9/15/04 with a file dated, 10/15/04, the 9/15/04 file will be overwritten. The 9/15/04 file will be completely erased. Therefore before restoring save any FDCS data you wish to keep by copying it to a test folder (create a test folder by clicking file-new) then copy your data before restoring.

34. From the main menu, click the **Backup/Restore 4.x Data** button. The FDCS Backup window appears.

35. Click the **Start** button to begin the restore process. The transaction mode screen appears.
Transaction Mode Screen

36. Click the **Database Restore** button and click the **Next** button. The file location screen appears.

![Database Restore Screen]

37. In the “1. Select or enter location:” field, select **C:\FDCS**

38. In area “2.” select the folder where the file resides (remember you are appending or adding this backup to a backup that is already present).

39. Finally, double click the file you wish to restore (we are appending to the sample021804.bkp file in this example)

40. Verify “This is the file you selected:” and click the **Next** button. The **Report Restore Selection** screen appears.

   **Note:** If you ordinarily restore data from your ‘A:’ drive and you do not have a diskette in that drive, you may see the following error (Figure 55). Click the **OK** button.
Report Restore Selection

41. Click the Select All Sections button.
42. Click the Next button, which will bring you to the restore customization screen.

Restore Customization

43. Click Restore All.
44. Click Next.

Note: The user can either backup all or choose which ones to back up. The “Let me choose” options are shown in the ‘Backup-New file’ training.
45. Click the **Next** button. The final restore verification screen appears, confirming the restoration. **********Read the following carefully**********

Final Confirmation

46. Click **Yes**. The Process Complete screen appears.

Process Complete

47. Click **Exit** to return to the main menu.