ART Gallery Report 0253

Income Data Quality Report

Entry Exit Optional

EXECUTIVE SUMMARY:

This report captures numerous data quality issues that can occur within the income sub-assessment. This includes duplicate sources and amounts, earned income conflicts, and no income conflicts. This report will display a client's income sub-assessment records as of program entry or exit. It will also display income records for clients based on their income start and end dates and provider entering income. The report can be run for several providers at once during a specified date range.

AUDIENCE:

For case managers to accurately maintain income records for clients. For agency administrators, executive directors, and stakeholders interested in limiting duplication errors and getting a snap shot of income at the client's program entry, exit, and anytime in between the report time frame.

FREQUENCY:

This report should be run as needed for data quality or general information. If desired, the report date prompts may be used to modify the date range for the current funding cycle.

PURPOSE:

Data Quality and historical overview of a client's income record.

COMPATIBILITY AND SYSTEM REQUIREMENTS

This version of the report requires ServicePoint 5x and ART 3x.

PREREQUISITES AND WORK FLOW REQUIREMENTS

Entry exit records are required for Tabs A and B of the report. If a client does not have income records for the entry exit portion of the report the record columns for that clients Income will be blank. Income sub-assessments are required for Tab C; if a client does not have an income record within the report range the client will not pull into the report.

INSTRUCTIONS:

Instruction on how to retrieve, copy, run, and read this report is outlined below. Requests for additional information concerning the report function/design should be directed to Bowman Systems' staff via email (ART_Reports@BowmanSystems.com).

How to retrieve and copy: Detailed step-by-step instructions concerning how to retrieve, save a copy, and map this ART Report to your site can be found in the Bowman Systems Published Documents folder under ART Documentations in you Public Folders.

How to install: The original version of the report is a template and must be copied from the ART Gallery Templates folder into another folder on your site and mapped to your data before it can be used. Detailed instructions for installing report templates are provided in the Bowman Documentation folder on your ART site.

Before running the report: Prior to running the report the user must determined the providers to be included in the report and a date range on which to base the results.

How to run:
Upon opening the report, the user will be prompted (see Diagram 1) to specify parameters which control the data returned by the report. Once the user has provided these parameters by responding to the user prompts, a green check-mark will appear next to each field to indicate that a selection has been made. The user should then single-click the “Run Query” button to generate the report.

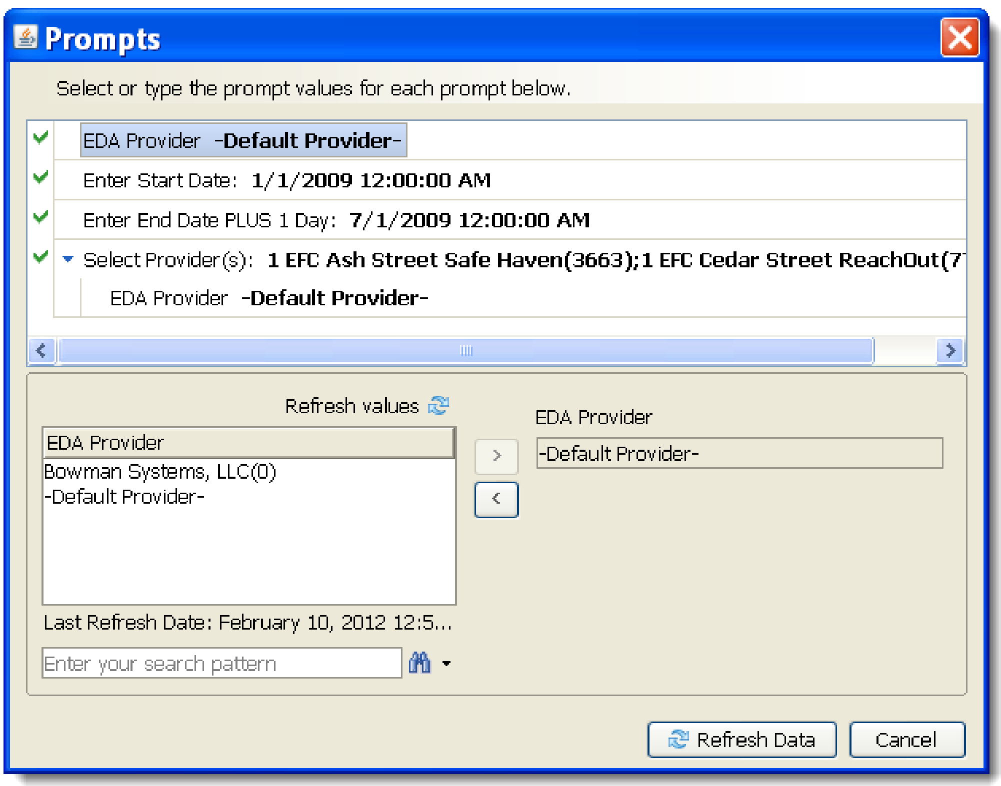

Diagram 1

The three user prompts contained in this report are:

1. **Enter Start Date:** The user should enter (or select from the calendar) the first date in the range of interest. Entry exits after this date and before the “Enter End Date PLUS 1 Day” prompt date will be included in the report. For non-entry exit related income records, the income start and

end dates are used in the same manner as the entry exit dates. The value selected is retained as the default for the next time the report is run.

2. **Enter End Date PLUS 1 Day:** The user should enter (or select from the calendar) one day after the last date the range of interest. Entry exits before the end date and after the start date will be included in the report. For non-entry exit related income records, the income start and end dates are used in the same manner as the entry exit dates. The value selected is retained as the default for the next time the report is run.
3. **Select Provider(s):** Click the "refresh list" icon and wait for the left window to refresh. Now select the providers to include by highlighting them in the left window and moving them into the right window using the right selection arrow.

How to read: Each tab within this report contains three sections:

- **Report Header:** The header contains the title of the report, and specifies any date parameters.
- **Report Footer:** The report footer contains the title of the report, the name of the sub-report, the page number, the version number, and the date/time the report was run /printed.
- **Report Body:** The report body is the main section of the report located between the header and the footer where the reports data is displayed in a variety of different chart and graph formats. The data contained in each of the Tabs in this report are displayed and described below.

NOTE: Tab A and **Tab B** are identical in layout. For explanations of column headers please refer to Tab A.

Tab A – EE Entry Income (Diagram 2): This tab contains a table that will display any client with an entry exit record within the report time frame and if there was income record present at the client's entry date. Overlapping income records will be highlighted blue by an alerter and marked in the Duplicate Income column. It is possible to run the report and return a table with no highlights; this means no overlaps in income were detected.

Client Unique Id (865)	Client Id (865)	EE Id (948)	EE Provider Name	EE Entry	EE Exit	Record Id (854)	Start Date	End Date	Income Source	Income Amount	Duplicate Income
aacf02141959a530d652	253211	299451	1 EFC Cedar Street ReachOut(7768)	12/15/2008	3/15/09	563973	12/6/2007		SSI (HUD)		
aafm04011984a140p620	324783	296025	1 OTS - Emergency Shelter(5134)	5/2/2009	5/5/09	660737	5/1/2009		No Financial Resources (HUD)	$0.00	
aafm08311949a636z420	104050	215486	1 EFC Oak Street Housing(7443)	5/23/2007	3/10/09	532716	9/1/2006		SSI (HUD)	$623.00	
		309276	1 EFC Oak Street Housing SRO(7445)	3/11/2009	10/27/10	532716	9/1/2006		SSI (HUD)	$623.00	
aaof03201963a500r332	29213	213728	1 EFC Oak Street Housing SRO(7445)	4/7/2006		31321	1/13/2003		SSDI (HUD)	$664.00	X
			1 EFC Oak Street Housing SRO(7445)	4/7/2006		31320	1/13/2003		SSI (HUD)	$552.00	X
abpf09131963a500h526	170391	202365	1 EFC Oak Street Housing Trail(7860)	2/20/2007	7/31/09	462966	2/27/2005		SSI (HUD)	$350.00	X
			1 EFC Oak Street Housing Trail(7860)	2/20/2007	7/31/09	492865	11/16/2006		SSI (HUD)	$683.00	X
abpm07282007a655h630	253393	286042	1 EFC Maple Street Transitional Housing Program(3334)	1/30/2009	6/30/10						
acif08242004a650a352	159315	241541	1 EFC Oak Street Housing(7443)	12/16/2007							
aclf07031954a420w416	225107	269326	1 EFC Maple Street THP - STABLE(7442)	8/22/2008	2/27/09	530743	6/6/2007	12/4/09	SSI (HUD)	$634.00	X
			1 EFC Maple Street THP - STABLE(7442)	8/22/2008	2/27/09	591797	6/6/2007		SSI (HUD)	$83.78	X
adcm10271980a356z120	105102	297696	1 OTS - Emergency Shelter(5134)	5/13/2009	7/22/09	440634	11/10/2005		SSI (HUD)	$600.00	X
			1 OTS - Emergency Shelter(5134)	5/13/2009	7/22/09	663928	5/12/2009	5/31/10	SSDI (HUD)	$590.00	X
adsm10161975a620v536	246585	293336	1 OTS - Emergency Shelter(5134)	4/6/2009	4/7/09						
adum11181976a450i210	313887	286407	1 EFC Oak Street Housing(7443)	12/18/2008		754162	12/18/2008		Earned Income (HUD)	$900.00	
afbf04012001a530j200	132595	392377	1 EFC Oak Street Housing(7443)	10/25/2006							
afdf01102000a210s530	38391	255018	1 EFC Oak Street Housing(7443)	4/29/2008							
afqf01252000a240h235	61378	243109	1 EFC Maple Street Transitional Housing Program(3334)	11/26/2007	9/20/09						

Diagram 2

COLUMN EXPLANATIONS:

- **Client Unique Id:** The column header counts all client unique IDs in the report range. The cells are merged, which means multiple rows of data for that client will only display one client unique ID.
- **Client Id:** The column header counts all client IDs in the report range. The cells are merged, which means multiple rows of data for that client will only display one client ID.
- **Provider:** The provider of the entry exit will be displayed in this column.
- **EE Id:** The ID of either the entry exit record will be displayed in this column. The header is a count of all IDs in the report range.
- **EE Entry:** This will display the date of the entry date, per client, per provider, per entry exit record.
- **EE Exit:** This will display the date of the exit Date, per client, per provider, per entry exit record.
- **Record Id:** This will display the ID number of the income sub-assessment recordset present during the entry exit record. The column header contains a count of the total number of unduplicated income record Ids in the report. EXAMPLE: If the report contains a client with Earned Income, SSI, and Child Support, the count is 3.
- **Start Date:** This will display the start date of each income record.
- **End Date:** This will display the end date of each income record.
- **Income Source:** This will display the source of income for each income record.
- **Income Amount:** This will display the amount entered in the "Last 30 days Income" field in the income sub-assessment, per record.
- **Duplicate Count:** Any clients with a possible error will receive an X in this column. This column was created specifically for users who wish to export the report to Excel and sort by data quality.

Tab B – EE Exit Income: This tab contains a table that will display any client with an entry exit within the report time frame and if there was income record present on the client's exit date. Overlapping income records will be highlighted blue by an alerter and marked in the Duplicate Income column. It is possible to run the report and return a table with no highlights; this means no overlaps in income were detected.
Note: Please refer to Tab A for a description of column headers, alerters and input controls.

Tab C – Income (Diagram 3): This tab contains a table that will display any client with an income records present during the report range. Unlike Tab A and B, clients with no income sub-assessment records will not appear on this Tab. Overlapping income records will be highlighted blue by an alerter and marked in the Duplicate Income column. It is possible to run the report and return a table with no highlights; this means no overlaps in income were detected.

Client Unique Id (3,358)	Client Id (3,358)	Provider (140-provider)	Record Id (4,082)	Start Date	End Date	Income Source	Income Amount	Duplicate Income
aabm03161965a165m642	329001	1 EFC HH Transit for Jobs Program (7842)	791581	2/9/2004		Other (HUD)	$640.00	
aacf01241941a300s400	272562	1 OTS - Emergency Shelter(5134)	586666	5/5/2008		SSI (HUD)	$329.00	X
		1 OTS - Emergency Shelter(5134)	591305	5/24/2008		Earned Income (HUD)	$336.00	X
aafm04011984a140p620	324783	1 OTS - Emergency Shelter(5134)	660737	5/1/2009		No Financial Resources (HUD)	$0.00	
aalf12301956a500c152	276009	1 EFC HH Transit for Jobs Program (7842)	592113	6/9/2008		No Financial Resources (HUD)		
aakm08061984a535t620	78658	1 OTS - Emergency Shelter(5134)	472865	8/1/2006		Earned Income (HUD)	$1,190.00	
aalm02251952a415l120	250291	1 OTS - Emergency Shelter(5134)	600712	6/5/2008		Earned Income (HUD)	$1,667.00	
aapm03101982a536p230	126612	1 OTS - Emergency Shelter(5134)	409790	2/4/2005	9/1/09	No Income	$0.00	
aapm04211952a535w524	90705	1 OTS - Emergency Shelter(5134)	386455	7/1/2004		SSDI (HUD)	$657.00	
aarf07031981a420b420	164462	1 OTS - Emergency Shelter(5134)	454724	2/14/2006	9/30/09	Earned Income (HUD)	$1,280.00	X
		1 OTS - Emergency Shelter(5134)	757358	11/15/2008	9/30/09	Earned Income (HUD)	$280.00	X
aasm07141952a535g422	138705	1 OTS - Emergency Shelter(5134)	424994	6/5/2005		No Income		
aatm11071957a636c160	184045	1 OTS - Emergency Shelter(5134)	479610	9/6/2006		SSI (HUD)	$580.00	
aauf05311989a535o140	290914	1 OTS - Emergency Shelter(5134)	612929	9/16/2008		Earned Income (HUD)	$520.00	
aavf07271981a524c451	161706	1 OTS - Emergency Shelter(5134)	451091	3/1/2006		Earned Income (HUD)	$960.00	
aavm02191967a535s351	150373	1 EFC Maple Street Transitional Housing Program(3334)	501007	10/11/2005		Earned Income (HUD)	$800.00	

Diagram 3

COLUMN EXPLANATIONS:

- **Client Unique Id:** The column header counts all client unique IDs in the report range. The cells are merged, which means multiple rows of data for that client will only display one client unique ID.
- **Client Id:** The column header counts all client IDs in the report range. The cells are merged, which means multiple rows of data for that client will only display one client ID.
- **Provider:** The provider of the entry exit will be displayed in this column.
- **Record Id:** This will display the ID number of the income record present during the entry exit. The column header contains a count of the total number of unduplicated income record IDs in the report. EXAMPLE: If the report contains a client with Earned Income, SSI, and Child Support, the count is 3.
- **Start Date:** This will display the start date of each income record.
- **End Date:** This will display the end date of each income record.
- **Income Source:** This will display the source of income for each income record.
- **Income Amount:** This will display the amount entered in the "Last 30 days Income" field in the income sub-assessment, per record.
- **Duplicate Count:** Any clients with a possible error will receive an X in this column. This column was created specifically for users who wish to export the report to Excel and sort by data quality.

Tab A through C Alerter Explanations:

Highlighted records indicate possible overlapping dates of income records. Note that where income end dates are missing, it is assumed that the income end date is today.

Tab A through C Input Controls (Diagram 5): This report makes use of the Input Control function for further filtering of report results.

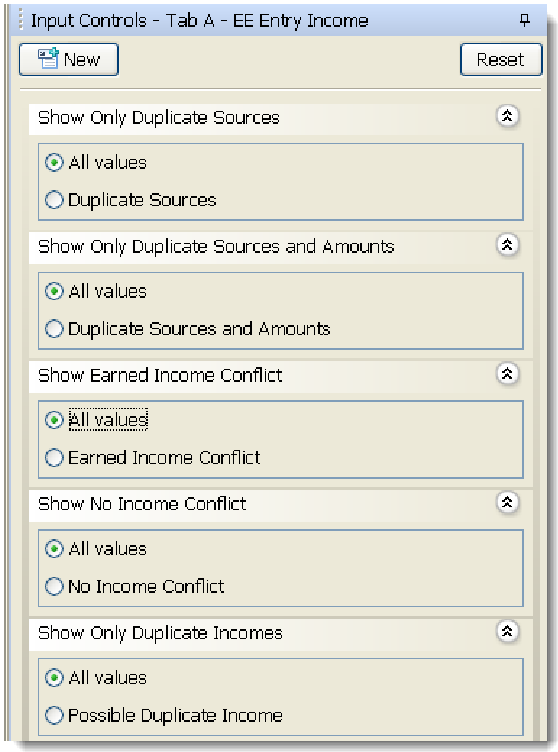

Diagram 5

Note: It is recommended that each of the input filters be use one at a time as they filter for different conditions that will result in no data returned.

- **Duplicate Source:** This control limits data to only display income records with the same source for each entry exit ID during on Tab A and Tab B, or for each client on Tab C.
- **Duplicate Source and Amount:** This control limits data to only display income records with the same source and amounts for each entry exit ID during on Tab A and Tab B, or for each client on Tab C.
- **Earned Income Conflict:** This control limits records to those that have an "Earned Income (HUD)" source that conflicts with other income records in the entry exit ID (Tab A and Tab B), or in the client (Tab C). Conflicting income records are: TANF (HUD), SSI (HUD), Worker's Compensation (HUD)
- **No Income Conflict:** This control limits records to those that have an "No Financial Resources (HUD)" source that conflicts with other income records in the entry exit ID (Tab A and Tab B), or in the client (Tab C). Conflicting income records are: Alimony or Other Spousal Support (HUD), Veteran's Disability Payment (HUD), Child Support (HUD), Earned Income (HUD), General Assistance (HUD), Pension From a Former Job (HUD), Private Disability Insurance (HUD), Retirement Income From Social Security (HUD), SSDI (HUD), SSI (HUD), TANF (HUD), Unemployment Insurance (HUD), Veteran's Pension (HUD), Worker's Compensation (HUD)
- **Duplicate Incomes:** This control limits data to only display income records with overlapping income dates for each entry exit ID during on Tab A and Tab B, or for each client on Tab C.

TAB A through C Filter Summary (Diagram 6): At the end of each Tab for Tabs A, B, and C, a summary box is present that displays all Input Controls applied for that particular tab.

Filters applied to Tab A - EE Entry Income

Filter on Block Detail:

(
Entry Dup Source Amt Equal Duplicate Sources and Amounts
)
AND
(
Input Control Entry Overlap Equal Possible Duplicate Income
)

Diagram 6

Tab D – Additional Information (Diagram 7): This tab contains all prompt responses for the report along with a client count by provider, by tab of the report.

Income Data Quality Report
Additional Information
Report Dates: 1/1/09 - 6/30/09

User Prompt Field:	Values Selected:
Enter Start Date:	1/1/09
Enter End Date PLUS 1 Day:	7/1/09
Select Provider(s):	1 EFC Ash Street Safe Haven(3663); 1 EFC Cedar Street ReachOut(7768); 1 EFC HH DIGS(7452); 1 EFC HH Transit for Jobs Program(7842); 1 EFC Maple Street THP - PTO(7444); 1 EFC Maple Street THP - STABLE(7442); 1 EFC Maple Street Transitional Housing Program(3334); 1 EFC Oak Street Housing(7443); 1 EFC Oak Street Housing SRO(7445); 1 EFC Oak Street Housing Trail(7860); 1 OTS - Emergency Shelter(5134); 1 OTS - Transitional Living Program(7092)

Providers Reporting Information:	Tab A/B: Entry/Exit Income	Tab C: Income
1 EFC Ash Street Safe Haven(3663)	39	159
1 EFC Cedar Street ReachOut(7768)	136	29
1 EFC HH DIGS(7452)	0	108
1 EFC HH Transit for Jobs Program(7842)	0	153
1 EFC Maple Street THP - PTO(7444)	22	88
1 EFC Maple Street THP - STABLE(7442)	11	35
1 EFC Maple Street Transitional Housing Program(3334)	59	109
1 EFC Oak Street Housing(7443)	157	162
1 EFC Oak Street Housing SRO(7445)	76	180
1 EFC Oak Street Housing Trail(7860)	17	15
1 OTS - Emergency Shelter(5134)	377	2,345
1 OTS - Transitional Living Program(7092)	20	43

Diagram 7

- **Tab A/B Entry Exit Income:** This is a client count determined by the client unique ID and is broken down by provider. All clients that are included in the report Tabs A and B are totaled here.
- **Tab C Income:** This is a client count determined by the client unique ID and is broken down by provider. All clients that are included in report Tab C are totaled here.

TECHNICAL INFORMATION

How the data is pulled: This report utilizes four separate queries, three of which are based on the Entry Exit Universe and one based on the Client Universe. Clients are pulled into report Tabs A and B based on the query filters present in query EE Data. After determining if a client has an entry exit record in the EE Data query, the clients are then pulled into two other queries to verify income; EE Inc Entry for Income at Entry and EE Inc Exit for Income at Exit. This is accomplished by using the Results from Another Query operand. The last query of the report Income does not take entry exit records into account and pulls clients into the report if an income record is present during the time period by the specified provider.

The chart below shows how clients with entry exits are included in the report (Tabs A and B).

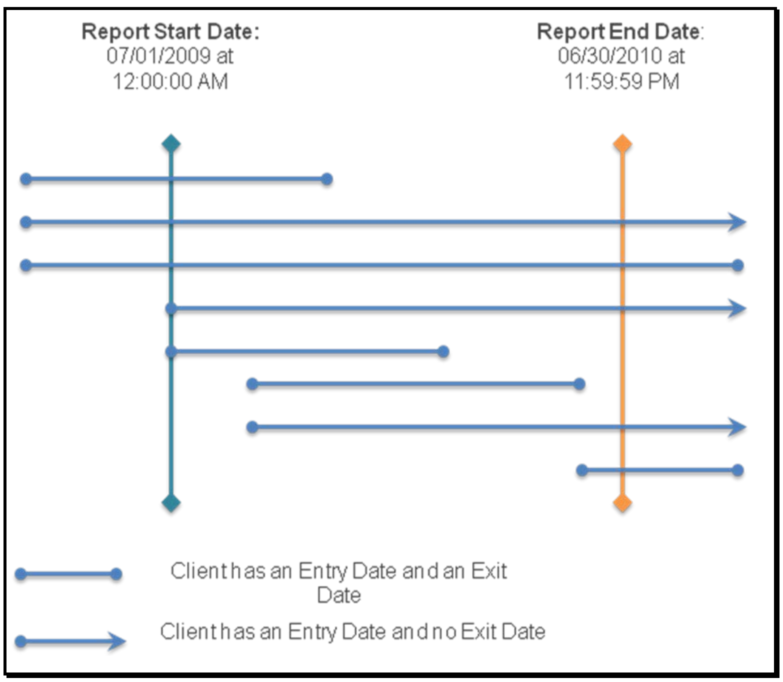

Diagram 8

The chart below shows how Income can be included in the report for Tab A:

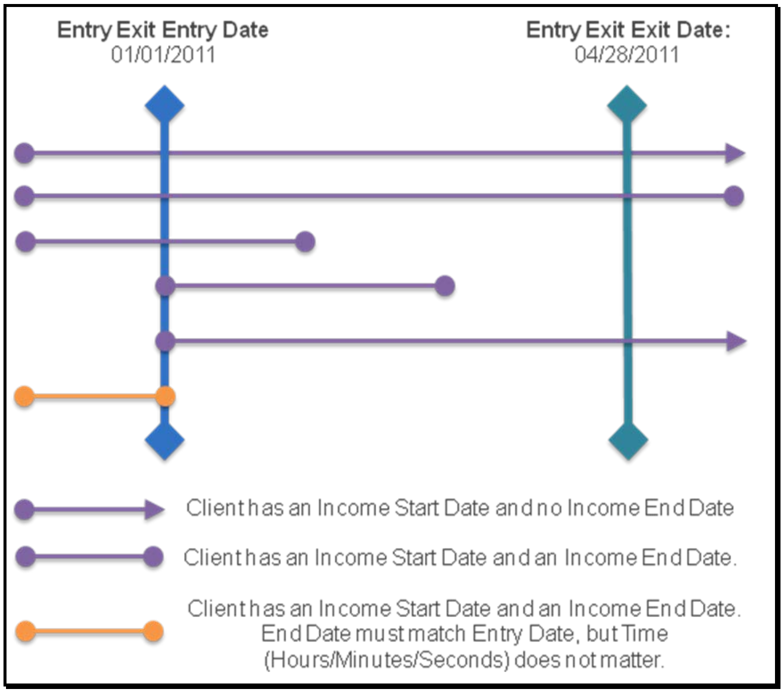

Diagram 9

The chart below shows how Income can be included in the report for Tab B:

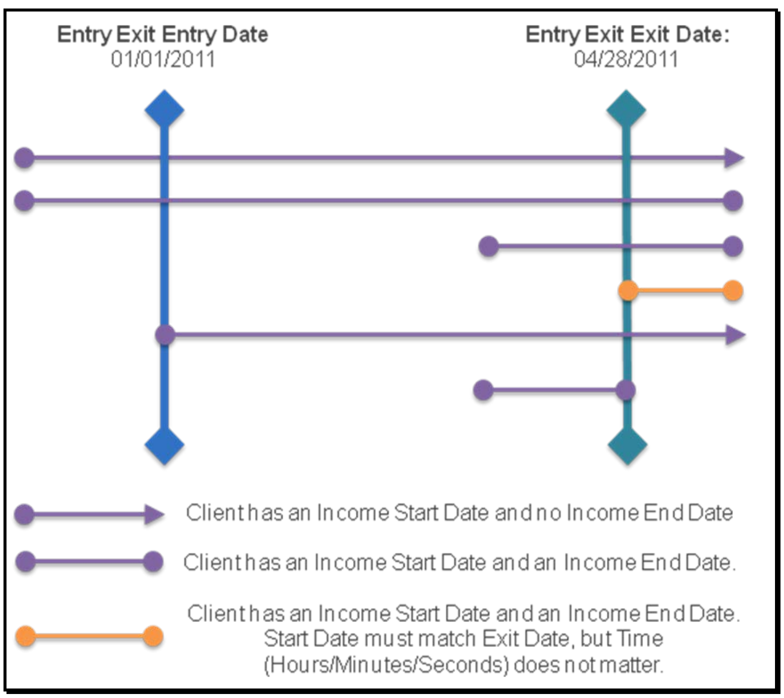

Diagram 10

The chart below shows how clients can be included in the report for Tab C:

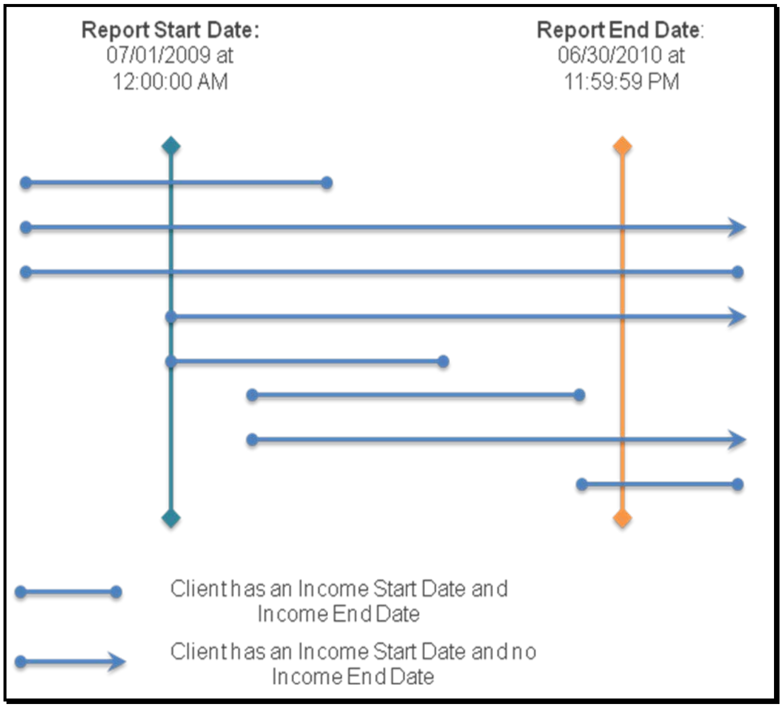

Diagram 11

Programming notes:

- **Input Controls:** Input Controls on their respective tabs should be used one at a time. Using them in conjunction may result in no data returned. For example, using the No Income Conflict and Earned Income Conflict filters together will only return clients with both conflicts and will exclude all other records with only one of the conflicts.

TECHNICAL NOTES:

1. Report counts are de-duplicated by client unique ID. To find potential duplicate client IDs, refer to Tab E Data Quality.
2. Client's records at minimum must have either an entry exit or an income record to appear in the report.
3. Dates are not actually compared determine if there is an overlap in income dates. Instead a series of ranks are compared to determine if an overlap is probable. For this reason modifications are not recommended.

MODIFICATION OPTIONS:

Modification is not recommended for this report.

MAPPING OBJECTS:
A listing of the report objects and their source universe and source folder is provided below. Objects are arranged by query and by object type.

QUERY NAME	OBJECT TYPE	FIELD NAME	LOCATION
EE Data Universe: ee_u (Entry Exit Universe)	Result Objects:	Client Uid	Entry Exit / Clients folder
		Client Unique Id	Entry Exit / Clients folder
		Entry Exit Uid	Entry Exit folder
		Entry Exit Provider Id	Entry Exit folder
		Entry Exit Entry Date	Entry Exit folder
		Entry Exit Exit Date	Entry Exit folder
	Filter Objects:	Client Inactive	Entry Exit / Clients folder
		Entry Exit Inactive	Entry Exit folder
EE Inc Entry Universe: ee_u (Entry Exit Universe)	Result Objects:	Client Uid	Entry Exit / Clients folder
		Client Unique Id	Entry Exit / Clients folder
		Entry Exit Uid	Entry Exit folder
		Entry Exit Provider Id	Entry Exit folder
		Entry Exit Entry Date	Entry Exit folder
		Entry Exit Exit Date	Entry Exit folder
		Recordset ID Subassessment: (MONTHLYINCOME)	Entry Objects / Monthly Income folder
		Provider	Entry Objects / Monthly Income folder
		Start Date	Entry Objects / Monthly Income folder
		End Date	Entry Objects / Monthly Income folder
		Source of Income (SOURCEOFINCOME)	Entry Objects / Monthly Income folder
		Last 30 Day income (AMOUNTMONTHLYINCOME)	Entry Objects / Monthly Income folder
		Right Now	Date Objects / Right Now
	Filter Objects:	Entry Exit Uid Results from another query Entry Exit Uid	Entry Exit folder Entry Exit folder (EE Data Query)
EE Inc Exit Universe: ee_u (Entry Exit Universe)	Result Objects:	Client Uid	Entry Exit / Clients folder
		Client Unique Id	Entry Exit / Clients folder
		Entry Exit Uid	Entry Exit folder
		Entry Exit Provider Id	Entry Exit folder
		Entry Exit Entry Date	Entry Exit folder
		Entry Exit Exit Date	Entry Exit folder
		Recordset ID Subassessment: (MONTHLYINCOME)	Exit Objects / Monthly Income folder
		Provider	Exit Objects / Monthly Income folder
		Start Date	Exit Objects / Monthly Income folder
		End Date	Exit Objects / Monthly Income folder
		Source of Income (SOURCEOFINCOME)	Exit Objects / Monthly Income folder
		Last 30 Day income (AMOUNTMONTHLYINCOME)	Exit Objects / Monthly Income folder

		Right Now	Date Objects / Right Now
	Filter Objects:	Entry Exit Uid Results from another query Entry Exit Uid	Entry Exit folder Entry Exit folder (EE Data Query)
Income Universe: _u (Client Universe)	Result Objects:	Client Uid	Clients folder
		Client Unique Id	Clients folder
		Recordset ID Subassessment: (MONTHLYINCOME)	Clients / Assessments / HUD-40118 / Monthly Income folder
		Provider	Clients / Assessments / HUD-40118 / Monthly Income folder
		Start Date	Clients / Assessments / HUD-40118 / Monthly Income folder
		End Date	Clients / Assessments / HUD-40118 / Monthly Income folder
		Source of Income (SOURCEOFINCOME)	Clients / Assessments / HUD-40118 / Monthly Income folder
		Right Now	Date Objects / Right Now
	Filter Objects:	Last 30 Day income (AMOUNTMONTHLYINCOME)	Clients / Assessments / HUD-40118 / Monthly Income folder
		Client Inactive	Clients folder

Version	Description of Changes
V1	Original version –BETA
V2	Added Now object to report to eliminate date miscalculation for some sites.