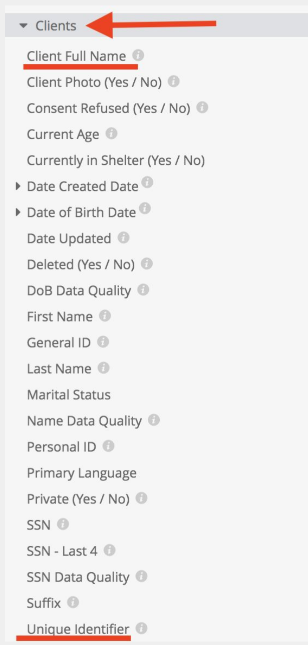
Getting Started With Looker: Exploring Looks to Support Data Entry

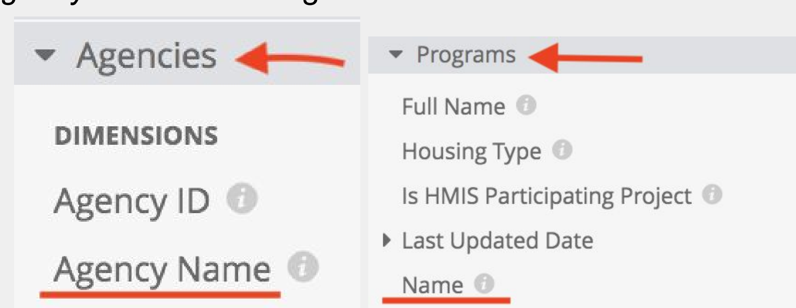
Look #1: Clients with Annual Assessments Due

1. Create a new Look in the Data Quality Model

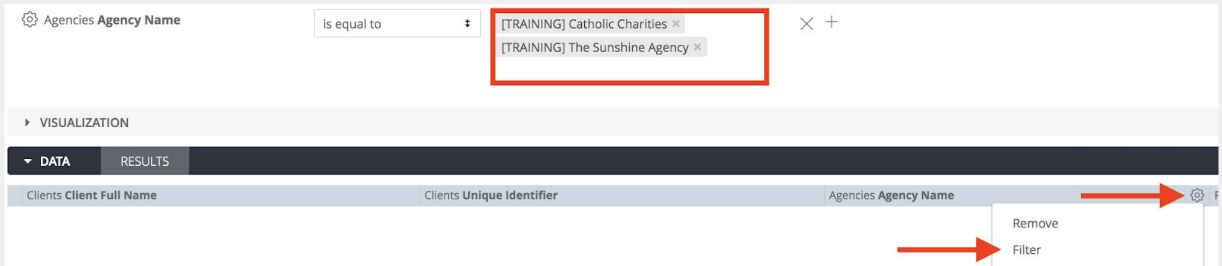
2. Add *Client Full Name* and *Unique Identifier* columns to the Look



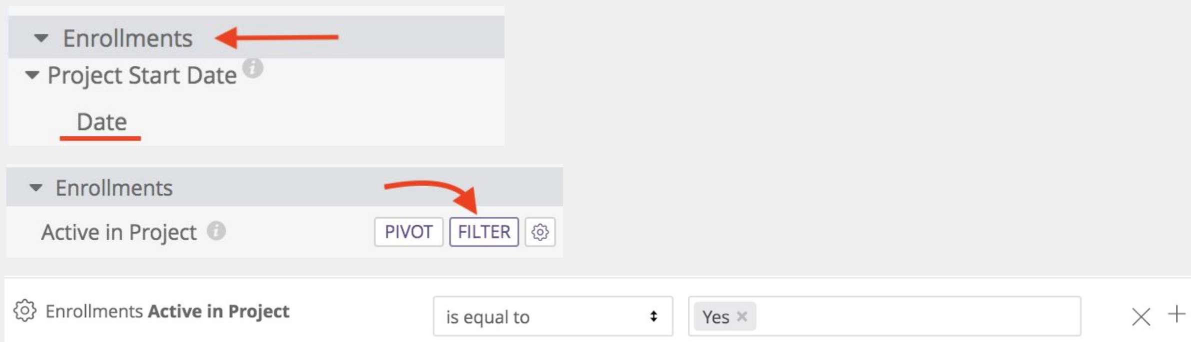
3. Add *Agency Name* and Program *Name* columns to the Look



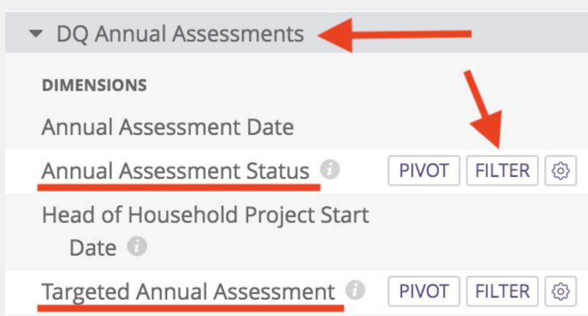
4. Click on the gear in the *Agency Name* column, select “FILTER”. Then add the agencies you would like to analyze to the *Agency Name* filter at the top of the screen in the *FILTERS* section.



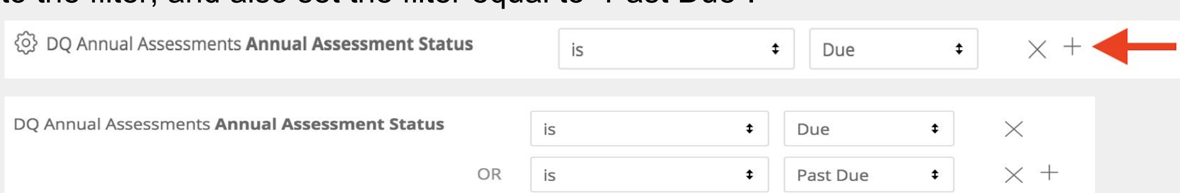
5. Under *Enrollments* section of the field search, add *Project Start Date-Date* to the Look, and select “FILTER” next to *Active in Project*. Then set the *Active in Project* filter equal to yes.



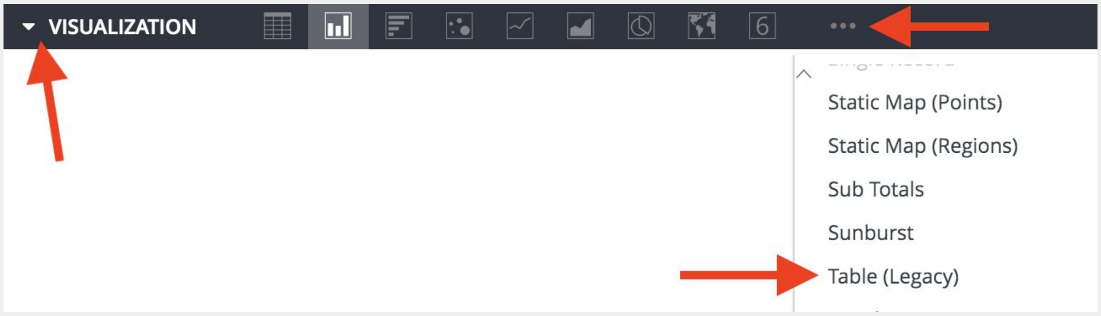
6. Under *DQ Annual Assessments* add *Annual Assessment Status* and *Targeted Annual Assessment* columns to the Look and select “FILTER” next to *Annual Assessment Status*



7. Set the *Annual Assessment Status* equal to “Due”, select the + sign next to the filter, and also set the filter equal to “Past Due”.

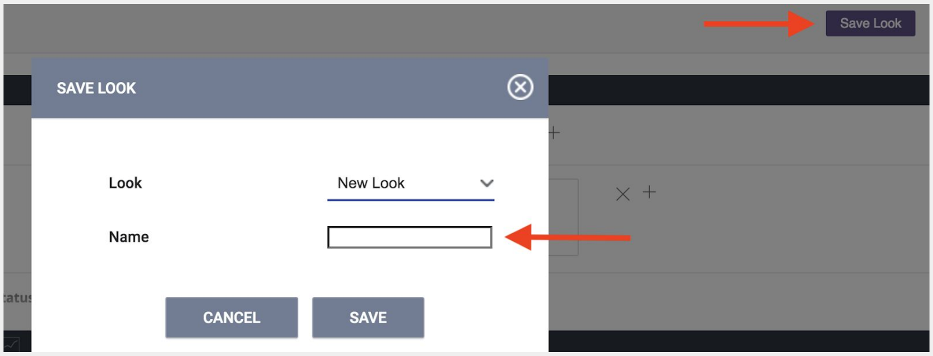


8. Hit the purple “Run” button at the top right of the page to load the Look.
9. Click the down arrow next to *VISUALIZATION* and then the ellipses to change the table visualization to “Table (Legacy)”



	Client Full Name	Unique Identifier	Agency Name	Name	Project Start Date	Annual Assessment Status	Targeted Annual Assessment
1	Bobby Wagner	5FCD9F555	[TRAINING] The Sunshine Agency	Frontline Shelter	2019-06-10	Due	2020-06-10
2	Annie Warbucks	27C61B165	[TRAINING] The Sunshine Agency	Frontline Shelter	2019-05-16	Due	2020-05-16
3	Pound Cake	3BDBBC3E6	[TRAINING] The Sunshine Agency	Sunshine Outreach Center	2019-01-03	Past Due	2020-01-03
4	Bob Sqaurepants	77FD26D60	[TRAINING] The Sunshine Agency	Frontline Shelter	2017-06-10	Due	2020-06-10
5	Alex Rodriguez	3EC4B86FD	[TRAINING] Catholic Charities	Bridges of Hope	2016-06-12	Due	2020-06-12
6	Bobby Wagner	5FCD9F555	[TRAINING] The Sunshine Agency	[CE] The Sunshine Agency	2016-06-10	Due	2020-06-10
7	Bruce Wayne	CC13896FA	[TRAINING] The Sunshine Agency	Frontline Shelter	2014-06-10	Due	2020-06-10
8	Russell Wilson	908EF1051	[TRAINING] The Sunshine Agency	Frontline Shelter	2013-06-10	Due	2020-06-10

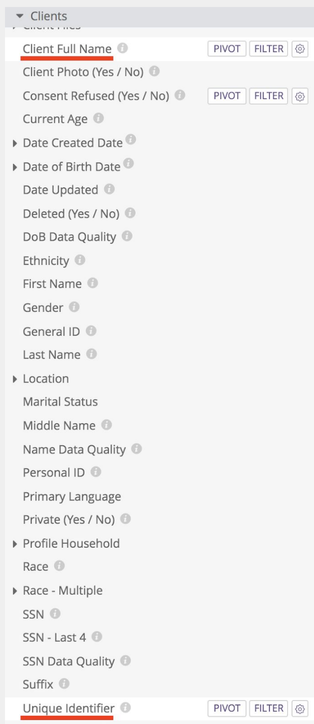
10. The Look is now complete and can be saved. If you have an access role that has the *Data Analysis Save* access right, you can select the purple “Save Look” button, name the Look, and save the Look to your active agency’s Data Analysis folder. (do not use the save option included under the gear icon as the Look will be saved to an inaccessible location)



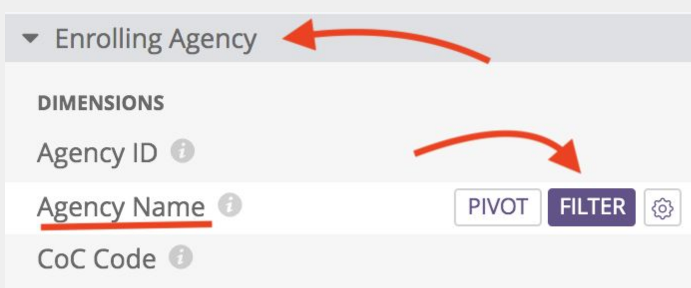
Look #2: Actively Enrolled Clients without an Active Release of Information

1. Create a new Look in the Client Model

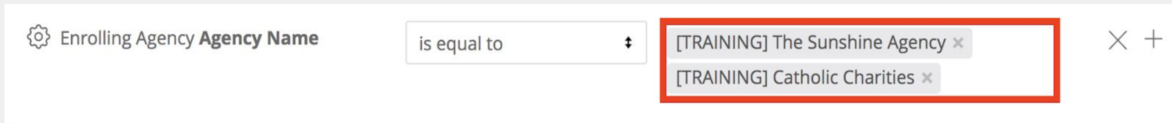
2. Add *Client Full Name* and *Unique Identifier* columns to the Look



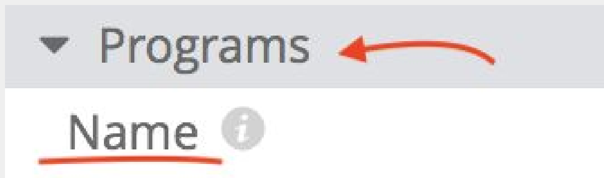
3. Add the *Agency Name* column located in the *Enrolling Agency* subsection to your Look. The client model is centered around the agency that created the client's profile, so it is important to use the *Enrolling Agency Name* field if you are trying to filter on the agency in which the clients are enrolled.



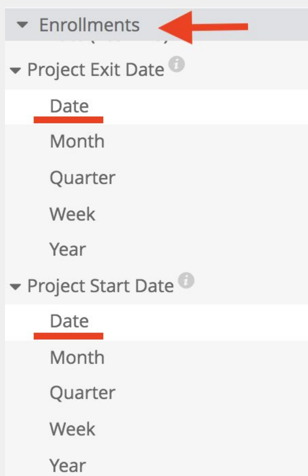
4. Select “FILTER” next to the *Agency Name* field or within the gear at the top of the *Agency Name* column and filter for the specific agencies you would like to analyze.



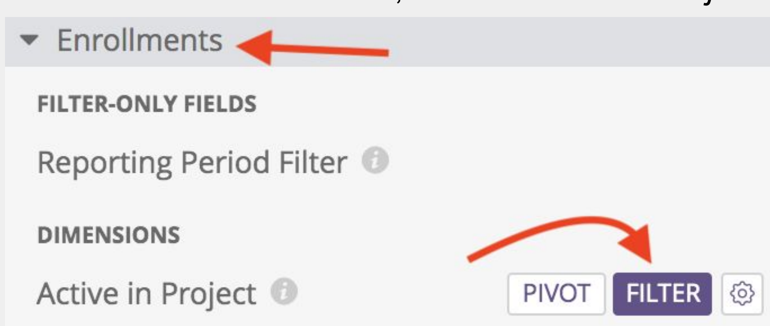
5. Add a Program *Name* column to the Look



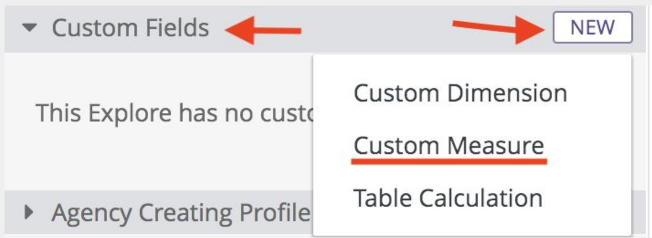
6. Within the *Enrollments* subsection, add *Project Start Date* and *Project Exit Date* columns



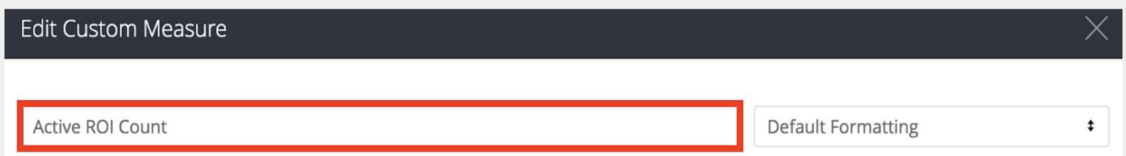
7. Also in the *Enrollments* subsection, filter for *Active in Project* equals “Yes”



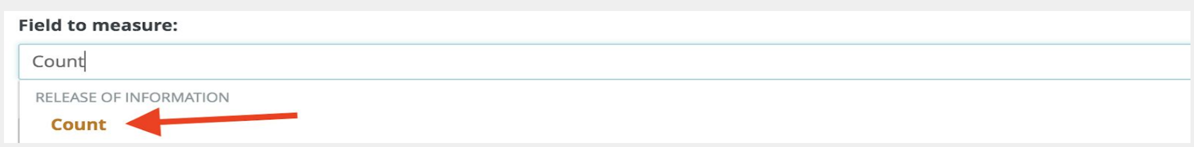
8. Identifying clients who don't have something specific (assessment, service, ROI, etc.) in Looker can be challenging because when you filter for that specific thing the Look automatically excludes clients that don't have that thing. To work around this and identify clients that do not have a Release of Information (ROI), you can create a custom measure counting how many ROIs a client has and then filter on that ROI count to be equal to zero. Therefore, the next step is adding a custom measure. In the *Custom Fields* subsection, select "NEW" and then "Custom Measure"



9. When constructing a custom measure, you first need to name the measure. In this case, name the custom measure "Active ROI Count". Since this will simply be a count of ROIs, you can leave the number format as "Default Formatting".

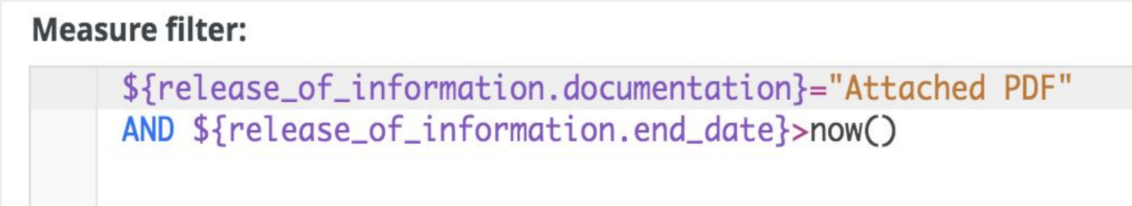


10. Next, you need to select the field you want to measure. In the "Choose Field" box, type "Count" and wait a few moments for the various count fields to load. Select *Count* under the *RELEASE OF INFORMATION* section.

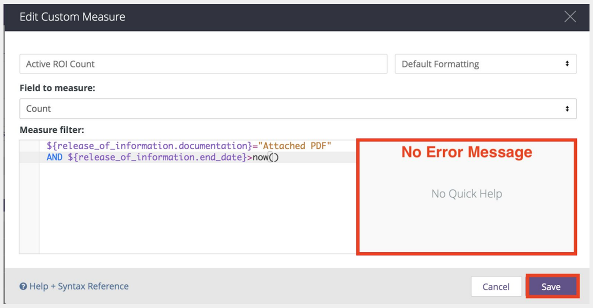


11. In the "Measure filter" box, you can now enter logic around what ROIs you want to count. In SCC, "Attached PDF" is the only viable documentation option. Start typing documentation, until you see the release of information documentation field. Select that field and set it equal to "Attached PDF".

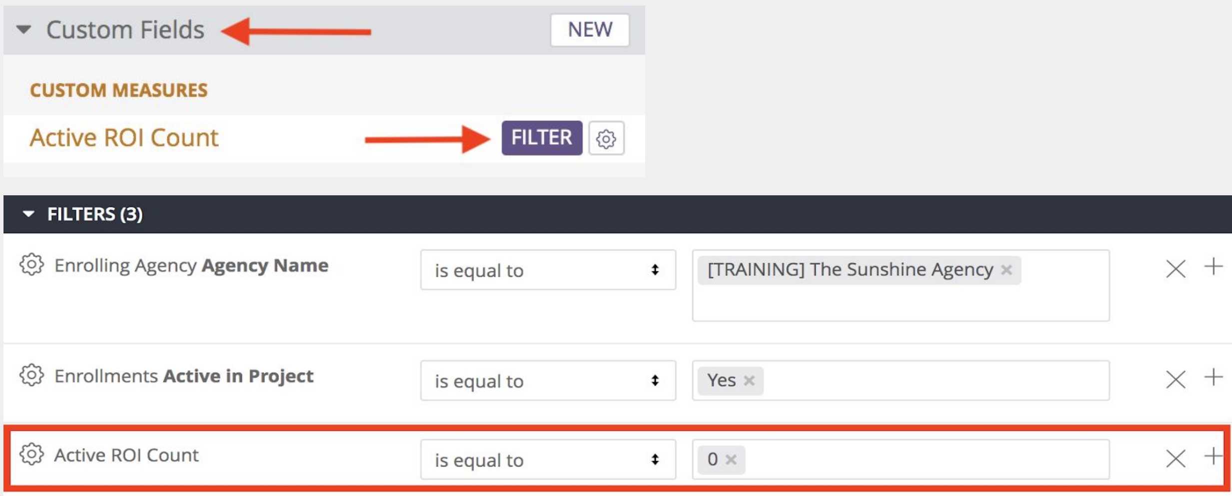
12. We also only want to count ROIs that are still active which means they have an end date in the future. We want this condition to be added on top of the documentation, so type “AND” in all caps, followed by a space, and then begin typing *release_of_information* until you find the release of information end date field. Select that field and set it greater than “now()” which indicates the ROI will expire on a date later than the current date. If you have any issues with your expression code, the gray box to the right will give you tips in red on where you have issues with your expression.



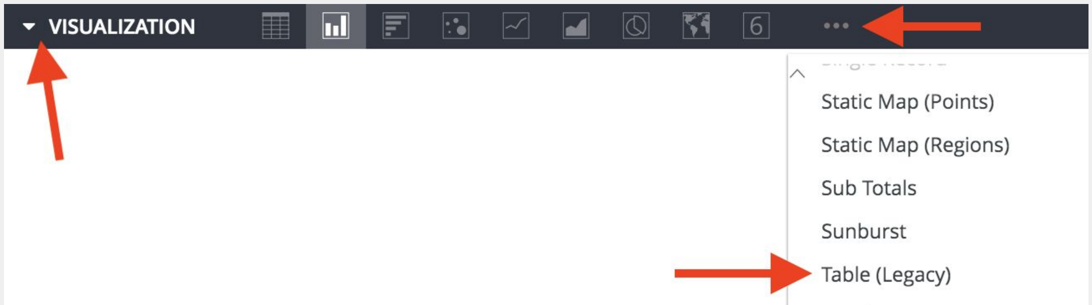
13. Once you are not seeing any errors in the message box to the right of your custom filter, “Save” your custom measure.



14. We want to identify clients with 0 active ROIs, so filter on your custom measure and set it equal to “0”.

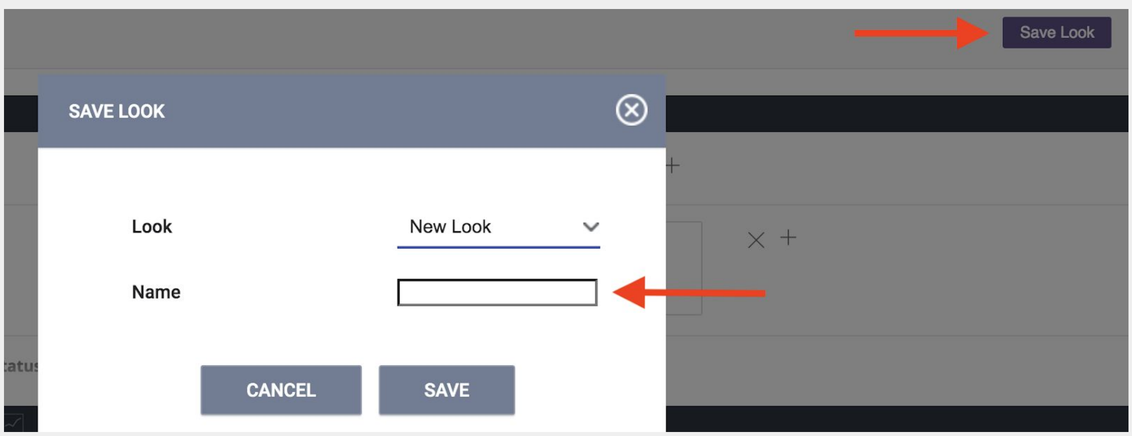


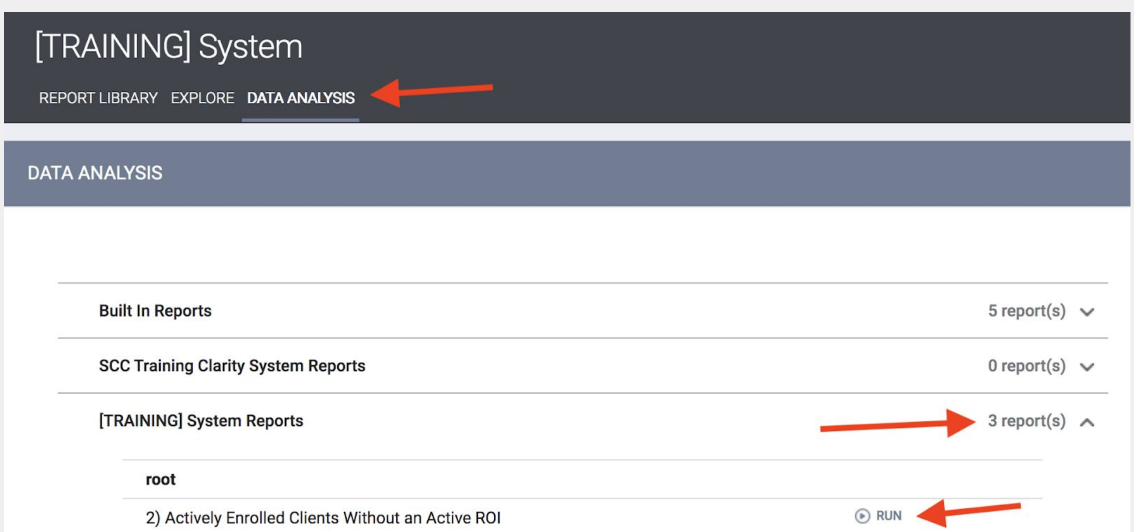
15. Click the down arrow next to *VISUALIZATION* and then the ellipses to change the table visualization to “Table (Legacy)”



16. Hit the purple “Run” button at the top right of the page to load the Look.

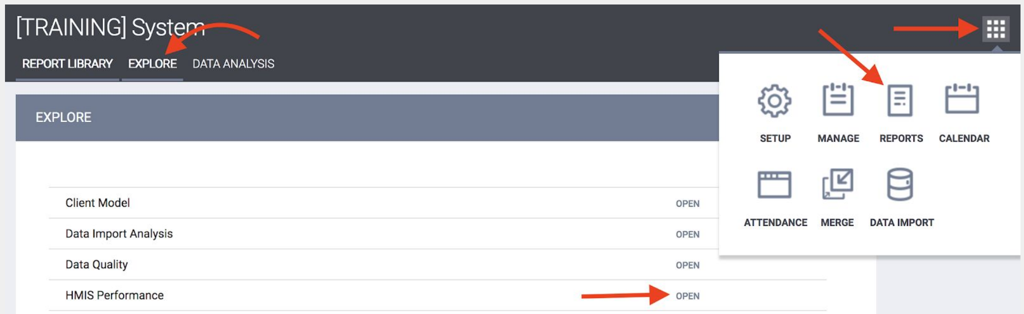
17. The Look is now complete and can be saved. If you have an access role that has the *Data Analysis Save* access right, you can select the purple “Save Look” button, name the Look, and save the Look to your active agency’s Data Analysis folder. (do not use the save option included under the gear icon as the Look will be saved to an inaccessible location)



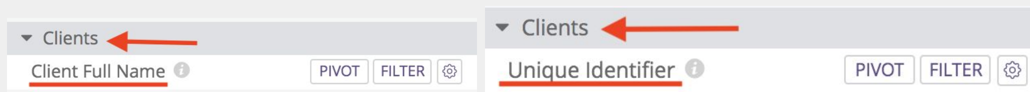


Look #3: Clients with A Change in Income

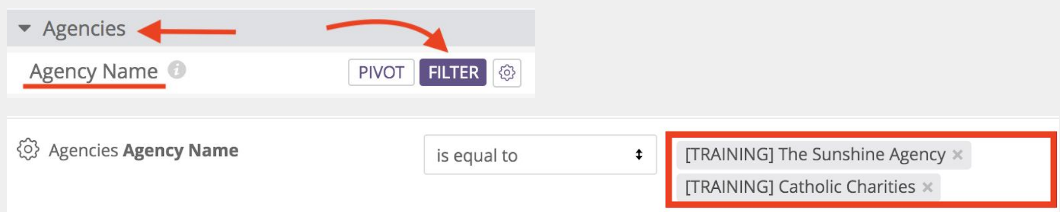
1. Create a new Look in the HMIS Performance Model



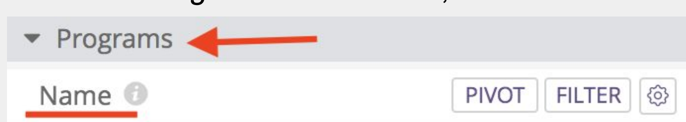
2. Under the *Clients* subsection, add columns for *Client Full Name* and *Unique Identifier*



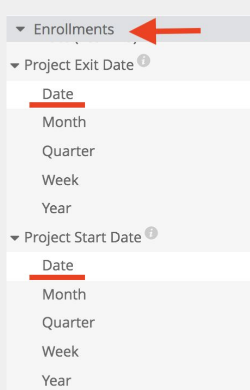
3. Under the *Agency* subsection add a column for *Agency Name* and “FILTER” for the agencies you would like to analyze



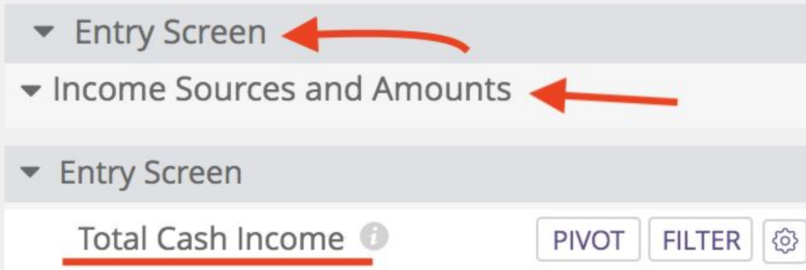
4. Under the *Programs* subsection, add a column for Program *Name*



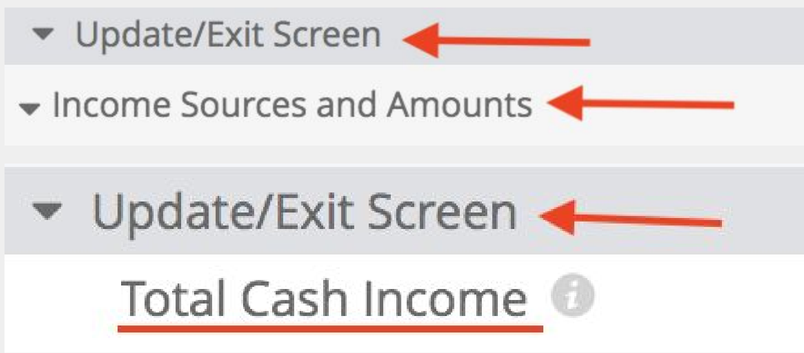
5. Within the *Enrollments* subsection, add *Project Start Date* and *Project Exit Date* columns



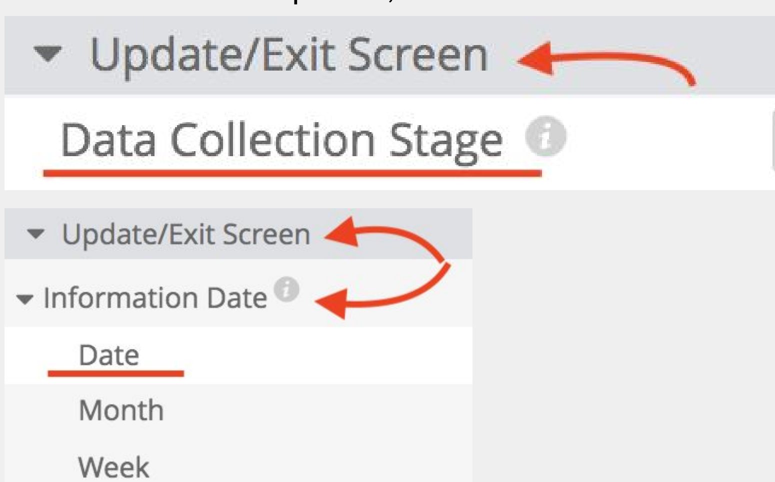
6. Within the *Entry Screen* subsection, locate and expand the *Income Sources and Amounts* dropdown. Then add a column to the Look for *Total Cash Income*



7. Scroll down to the bottom subsection, *Update/Exit Screen,* and again locate and expand the *Income Sources and Amounts* dropdown. Then add a column to the Look for *Total Cash Income* which is pulled from the client's last completed screen.

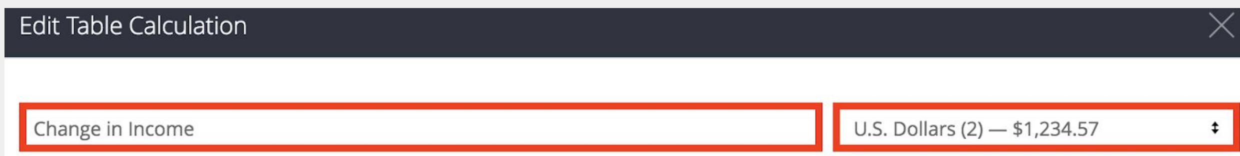


8. It is important to know on what screen type and when this most recent Total Cash Income was collected. Still in the *Update/Exit Screen* subsection, add a *Data Collection Stage* column and under the *Information Date* dropdown, add the *Date* field.

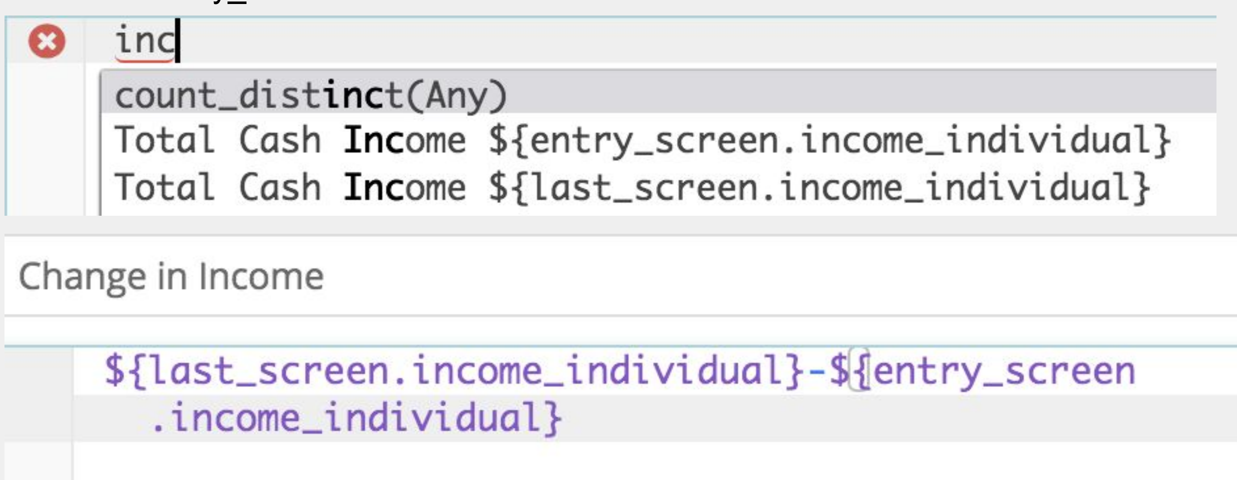


9. Now that all of the main fields have been added to the Look, we want to calculate the difference between the client's entry screen income and most recent reported income within their enrollment. To do this, on the top left of the fields in the *Custom Fields* subsection, select "NEW" and chose to add a new 'Table Calculation"

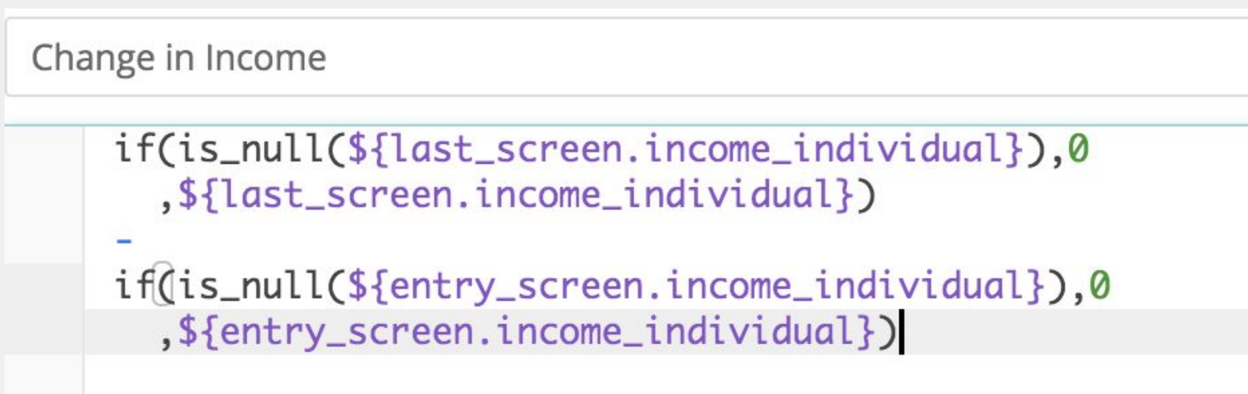
10. Change the name of the Table calculation to "Change in Income" and change the number format to "U.S. Dollars (2) - $1,234.57"



11. Now you need to add your calculation to the calculation box. You want to find the difference between the last entered income and the entry screen income, so you need to find those two fields. Start typing "income" and you will see the two "Total CASH Income" fields on which you will be evaluating. Select the "last_screen" field first, add a "-" (minus sign), and select the "entry_screen"



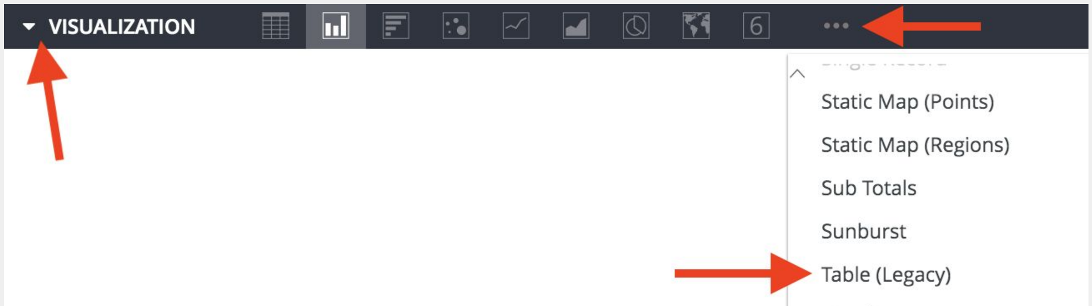
12. The logic that you just entered will give you the difference between the two incomes, unfortunately, Looker does not like doing math with “null” values. A “null” value is a field that never had any data entered into it. Therefore, if a client never reported any income on their entry or last updated screen, that value would be reported as “null”. For our purpose, we want to treat those “null” values as $0 entries, so we need to add additional logic to the calculation to do so. For both the last screen and entry screen incomes, we now need to add “if” statements to turn the “nulls” into 0s. If statements have 3 parts. First you enter “if” followed by an open parenthesis. Then you state your question/logic followed by a comma. Then you enter the result you want if your question is true, followed by a comma. Then you enter the result you want if your question is false, followed by a closed parenthesis. Example: if(x=y,1,2)
    For this calculation, we want the value to be “0” if the income is “null”, but we want to report on the income value if the income is not “null”. This would be written with the following logic:
    if(is_null(INCOME),0,INCOME)
    When we replace the “INCOME” above with the actual field names it will Look like this:



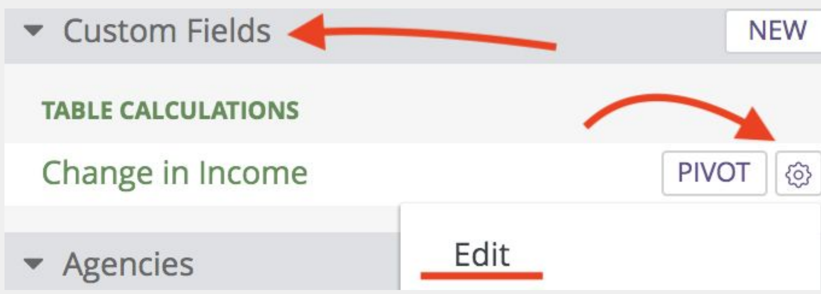
13. This table calculation will now give you the difference between the client’s last screen reported income and their enrollment screen reported income even if on one of those screens they did not report any income. Now select “Save” to save and close the table calculation box.

14. Hit the purple “Run” button at the top right of the page to load the Look.

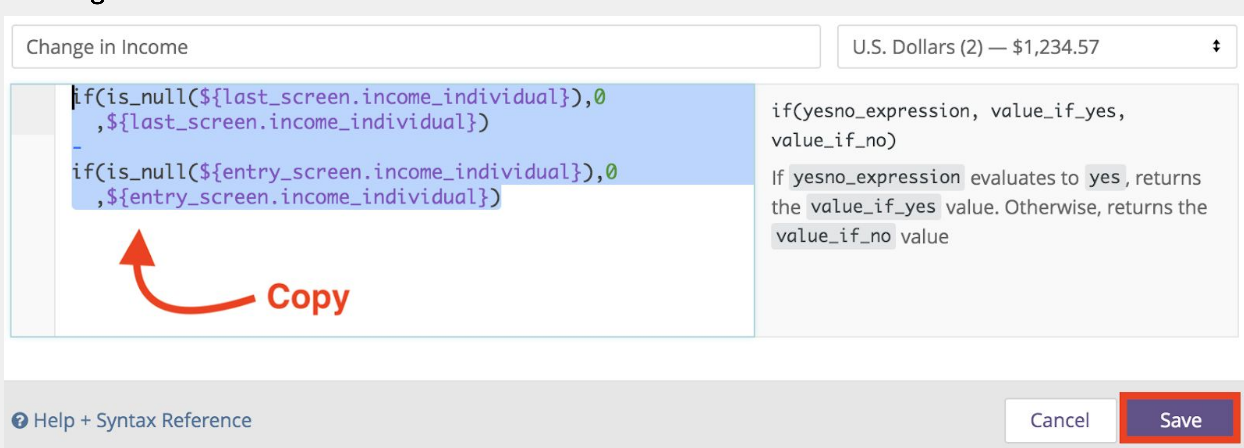
15. Click the down arrow next to *VISUALIZATION* and then the ellipses to change the table visualization to “Table (Legacy)”



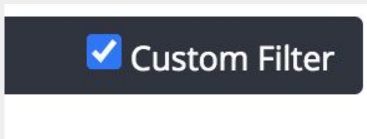
16. Your Look is now showing the change in income for all of the clients that have ever been enrolled in a program within the agencies for which you filtered. However, the goal of this Look is to only report on those that had a change in income. We do not have the option to filter on a table calculation, so to narrow down the results we need to add a custom filter to the Look. Luckily, we already wrote out most of the custom filter logic in the table calculation and we can reuse it in the custom filter. To do this, select the gear next to your table calculation and select “Edit”.

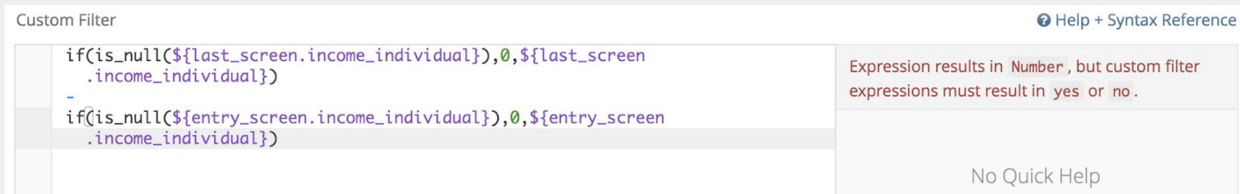


17. Highlight and copy the table calculation logic you had previously written then again hit save.



18. To paste your logic into a custom filter, you first need to check the “Custom Filter” checkbox at the top right of the FILTERS section of the Look and then paste your logic into the “Custom Filter” expression box





19. You will notice the warning in red to the right of your logic. This is because the custom filter has your table calc, rather than a yes/no logic statement. We don’t want to filter on the difference between the two incomes, but we want to filter for only clients whose initial and last reported incomes are different. To do this, we need to replace the negative sign with a not equal sign. A not equal sign is accomplished with an exclamation mark before an equal sign such as this: “!=”

20. With the addition of the not equal sign, the red warning text should disappear unless you have some other issue with your logic string. If you do, attempt to follow the instructions the warning is giving and make sure that all open parentheses are eventually closed with a closed parenthesis. If you have no warning, select the purple “Run” box to update your Look with the custom filter logic.

21. Your Look should now be showing all clients in the agencies you filtered for that had a change in income between their entry screen and last reported income. The Look is now complete and can be saved. If you have an access role that has the *Data Analysis Save* access right, you can select the purple “Save Look” button, name the Look, and save the

Look to your active agency's Data Analysis folder. (do not use the save option included under the gear icon as the Look will be saved to an inaccessible location)