Mapping Tool: Shortage Designation Management

User Guide

December 2014

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SHORTAGE DESIGNATION MANAGEMENT SYSTEM (OVERVIEW)

Goal: The Shortage Designation Management System is used to manage, apply, and update designation applications. The foundation of the Shortage Designation Management System comes from nationally sourced data and the policies and procedures of the Division of Shortage Designation and Policy (DPSD).

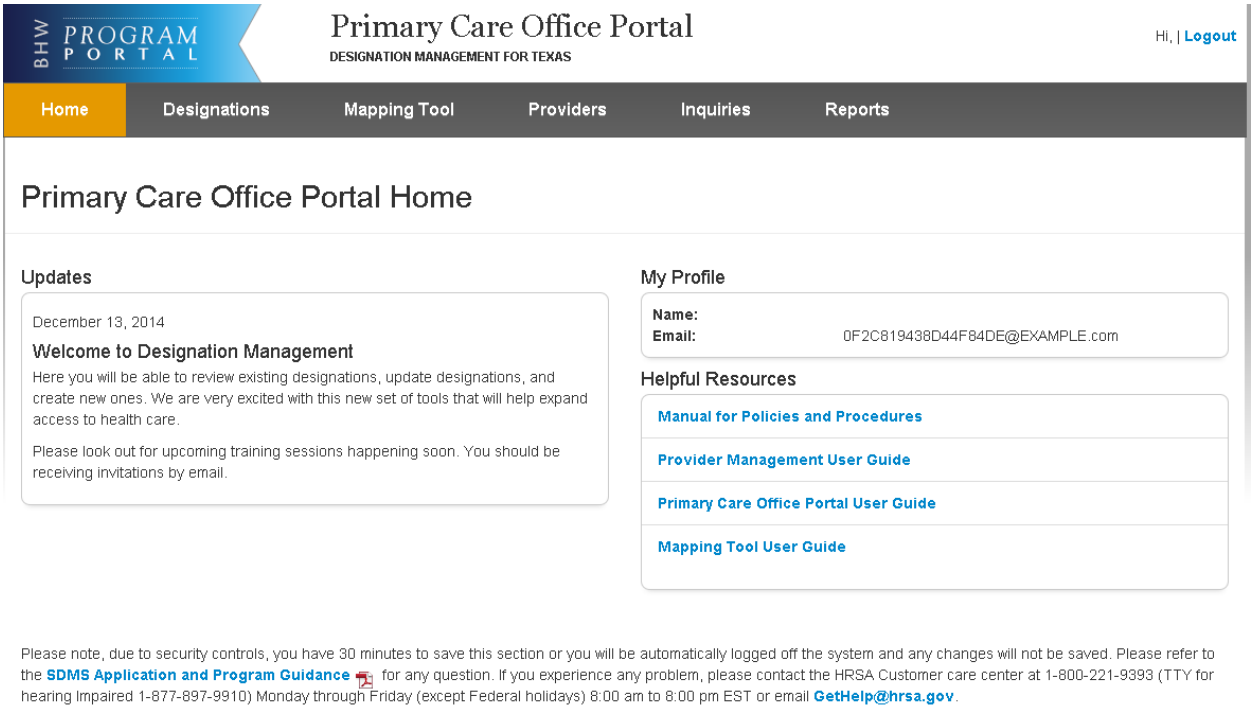
PCOs are able to complete the following:

- Search for existing designations
- View information about existing designations
- Create and Submit new designations
- Update existing designations
- Copy designations
- Create and Manage inquiries

Roles: The shortage designation role is required to be part of the PCO user account in order to have the access to the Shortage Designation Management System for Designations for their state. Please refer to the Create Account Section in the Primary Care Portal User Guide to gain the role and permission to perform the Designation Management functions.

SECTION 1: ACCESSING THE SHORTAGE DESIGNATION MAIN PAGE

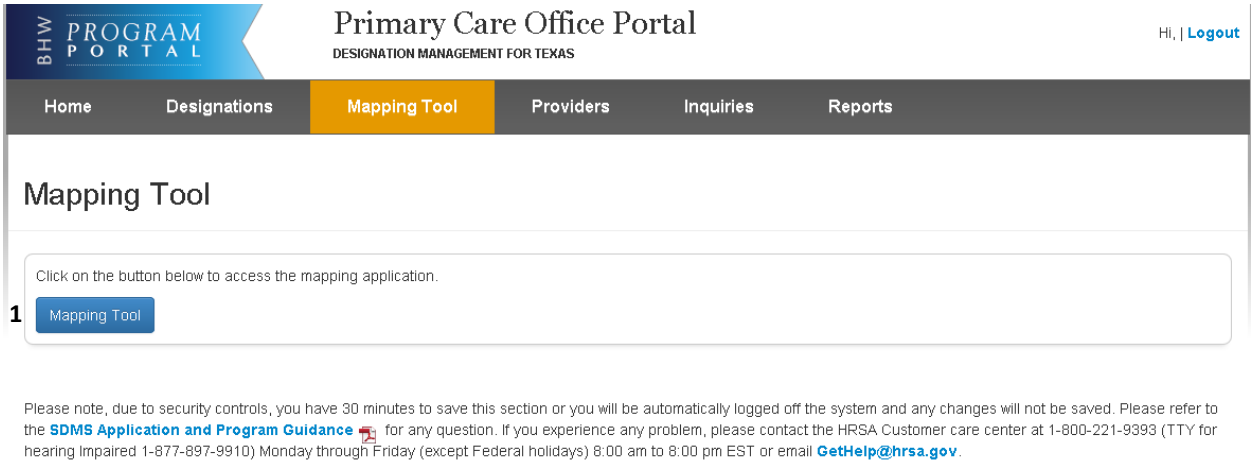
The purpose of the Shortage Designation Main Page is for the PCO to view important updates, helpful resources and access designations, provider management, inquiries and report functionalities.



1. **Updates:** This section will provide the user with new information and updates pertaining to Shortage Designation Management.
2. **My Profile:** This section will list the name and email address of the user.
3. **Helpful Resources:** This section will provide the user with resources on the policies and procedures of the new Shortage Designation Management System.

SECTION 2: CREATING A NEW DESIGNATION (OVERVIEW)

Once the Designation Homepage has been accessed, the user has the option to create a new HPSA or MUAP designation application by selecting the Mapping Tool tab.



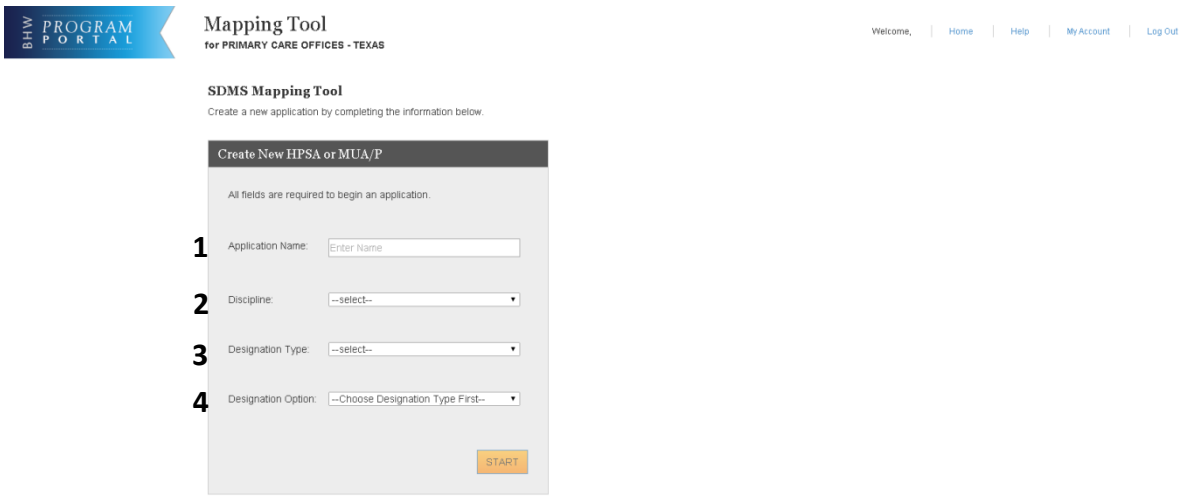
1. Mapping Tool: The user should select this button to access the mapping tool and create a new mapping application. Once selected, the user will be directed to the mapping tool landing page, displayed in the next section.

SECTION 2A: NAMING AND SELECTING DESIGNATION TYPE

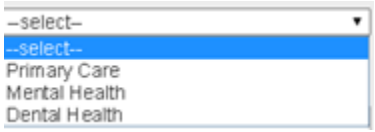
Once the Mapping Tool button is selected on the Designation homepage, the user will be directed to the Mapping Tool landing page

There are four required fields on the Mapping Tool Landing Page

- Application Name
- Discipline
- Designation Type
- Designation Option

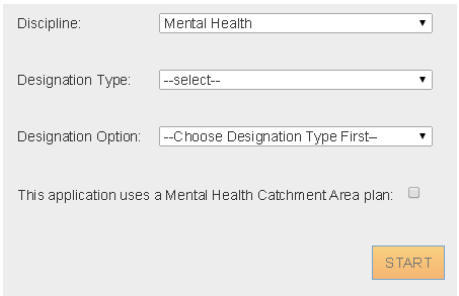


1. **Application Name:** The user should enter the Application name in the text field. The field is limited to 60 characters or less.
2. **Discipline:** The user will select one of the following options for their new Designation application



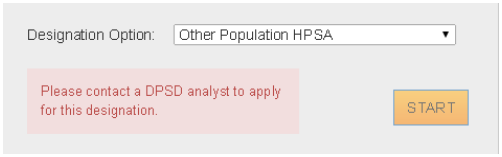
Business Rules:

- If the user selects Mental Health, the system will display the option for the PCO to classify the application as a mental health catchment area.



3. **Designation Type:** The user will select an option from the drop down. Please note, the selections are dynamic based on the discipline type.
   Buisness Rules:
   - The selections under the **Designation Type** drop down are dynamic based on the discipline type selected.
   - The system displays the following **Designation Type** options if the PCO selects Primary Care discipline:
     - MUA
     - MUP
     - HPSA Population
     - HPSA Geographic
     - HPSA Geographic High Needs
   - The system displays the following **Designation Type** options if the PCO selects Dental or Mental health discipline:
     - HPSA Population
     - HPSA Geographic
     - HPSA Geographic High Needs
4. **Designation Option:** The user will select an option from the drop down. Please note, the selections are dynamic based on the discipline and designation type selected.
   Buisness Rules:
   - The system displays the following **Designation Option** selections if the PCO selects Primary Care (Discipline) and MUA (Type):
     - Medically Underserved Area
   - The system displays the following **Designation Option** selections if the PCO selects Primary Care (Discipline) and MUP (Type):
     - MUP Low Income
     - MUP Medicaid Eligible
     - MUP Migrant Worker
     - MUP Migrant Seasonal Worker
     - MUP Native American
     - MUP Homeless
     - MUP Low Income Homeless
     - MUP Low Income Migrant Farmworker
     - MUP Low Income Homeless Migrant Farmworker
     - MUP Low Income Migrant Seasonal Worker
     - MUP Low Income Migrant Seasonal Worker Homeless
     - MUP Migrant Farmworker and Homeless
     - MUP Migrant Seasonal Worker and Homeless
     - MUP Other Population
   - The system displays the following **Designation Option** selections if the PCO selects Primary Care, Dental Health or Mental Health (Discipline) and HPSA Population (Type):
     - Low Income Population HPSA
     - Medicaid Eligible Population HPSA
     - Migrant Farmworker Population HPSA
     - Migrant Seasonal Worker Population HPSA
     - Native American Population HPSA
     - Low Income Homeless Population HPSA

- Low Income Migrant Farmworker Population HPSA
- Low Income Homeless Migrant Farmworker Population HPSA
- Low Income Migrant Seasonal Worker Population HPSA
- Low Income Homeless Migrant Seasonal Worker Population HPSA
- Homeless Population HPSA
- Migrant Farmworker and Homeless Population HPSA
- Migrant Seasonal Worker and Homeless Population HPSA
- Other Population HPSA
    - If the user selects Other Population HPSA, the system will display the following error message. Other Population HPSA applications are required to be discussed with DPSD and applied outside the system.



- The system defaults to the following **Designation Option** selection if the user selects Primary Care, Dental Health or Mental Health (Discipline) and HPSA Geographic and HPSA Geographic High Needs (Type):
    - Geographic Population

5. START: Once all the fields are completed, the user should select this button to begin the new designation application.

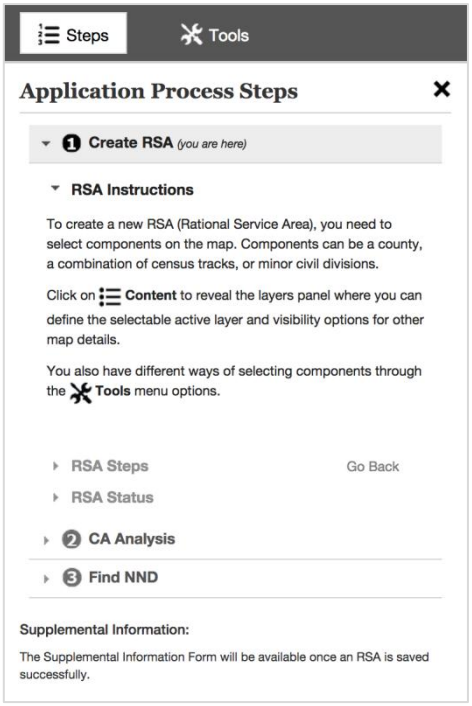
Buisness Rules:

- All fields are required in order for the START button to be enabled

SECTION 2B: APPLICATION PROCESS STEPS

The Application Process Steps is located on the left panel.

Clicking on the "**X**" on the upper right corner will close this panel. To open it again, click on the "Steps" button located on the horizontal navigation bar.



The Steps panel contains instructions and detailed information that will automatically update when user moves along the application process steps.

There are three main steps to the application: (1) "**Create RSA**" that includes locating the Population Center and generating the Travel Polygon; (2) "**CA Analysis**" which requires filling the Travel Polygon with passing Contiguous Areas; and (3) "**Find NND**" that selects the Nearest Non-Designated provider.

Steps are dependent on each other, because of that; subsequent steps will be inactive until depended steps have been completed. For example, user can only start the 2nd step (CA Analysis) after completing the 1st step (Create RSA).

The Supplemental Information form link can be accessed at the bottom of the Steps panel at any time after user saves the RSA.

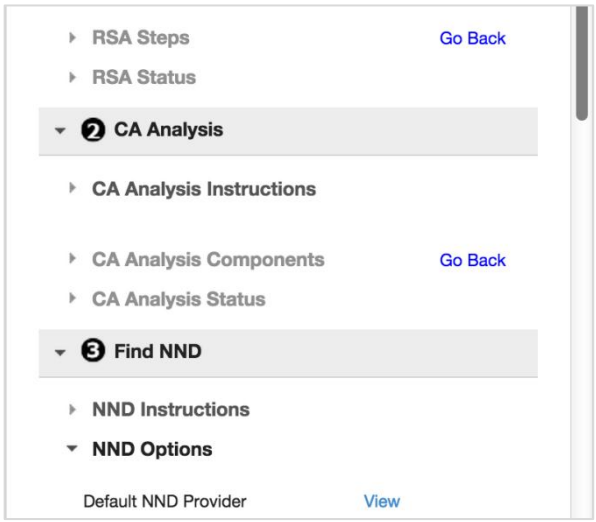
TAKING STEPS BACK

Users can take steps back during different steps of the application, as long as final submission has not been concluded yet.

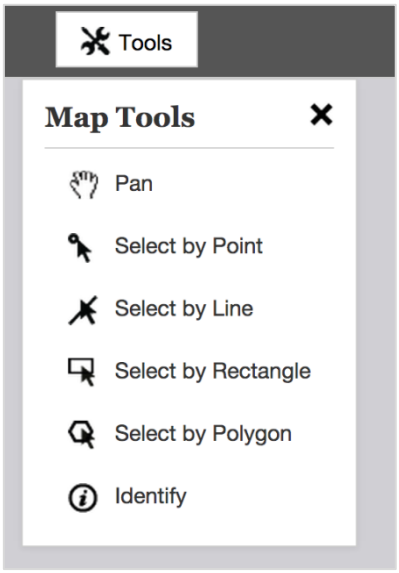
There are two options to take steps back:

(1) Click on "**Go Back**" located within the steps to make modifications to saved information; or

(2) Click on "**View**" located within the steps to see more details and not modify anything.



SECTION 2C: MAP TOOLS



The Map Tools menu is available under the second button on the horizontal navigation bar. These tools are used to select areas on the map or to show more information about selected areas on the map.

Map Tool Options:

Pan: Use this tool to navigate the map. Click on the map and hold the mouse until seeing the area where you want work on.

Select by Point: Use this tool to select a single area component (county, census tract, or MCD) on the map with one click.

Select by Line: Use this tool to select a multiple components (county, census tract, or MCD) on the map. Start with single clicks to form lines and use double-click to complete a selection.

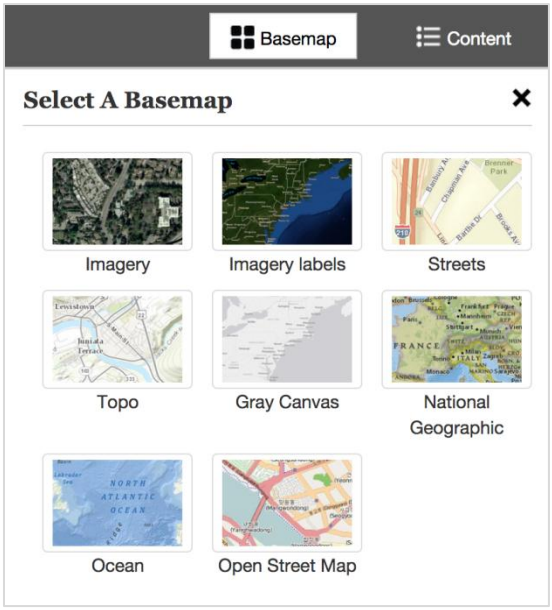
Select by Rectangle: Use this tool to select a multiple components (county, census tract, or MCD) on the map. Click on the map and drag down the mouse until the visible rectangle covers the area you want to select.

Select by Polygon: Use this tool to select multiple components (county, census tract, or MCD) on the map. Start with single clicks to form lines and use double-click to close the visible polygon.

Identify: Use this tool to click on an active layer component (county, census tract, or MCD) and see more information about the selected area. Information will include Geo ID, State FP, County FP, Name of Component, Total Population, Percent Population Below 100% FPL, and Percent Population Below 200% FPL.

SECTION 2D: BASEMAP

The Basemap menu is located on the right side of the screen, next to the Content panel. It contains multiple cartographic styles that offer different views.



Basemap Options:

Imagery: This view presents satellite imagery for the world and high-resolution imagery for the United States

Imagery Labels: This option shows satellite and high-resolution aerial imagery for the world with political boundaries and place names.

Streets: This comprehensive street map includes highways, major roads, minor roads, railways, water features, cities, parks, landmarks, building footprints, and administrative boundaries.

Topo: The topographic map includes cities, water features, physiographic features, parks, landmarks, highways, roads, railways, airports, and administrative boundaries.

Gray Canvas: This is the default basemap, which is the simplest and most neutral background with minimal colors, labels, and features. It facilitates visibility for seeing layers and saving components on the map.

National Geographic: This basemap features the National Geographic World Map, which is a cartographically rich and distinctive. It includes administrative boundaries, cities, protected areas, highways, roads, railways, water features, buildings and landmarks, overlaid on shaded relief and land cover imagery.

Ocean: This basemap includes bathymetry, marine water body names, undersea feature names, and derived depth values in meters. Land features include administrative boundaries, cities, inland waters, roads, overlaid on land cover and shaded relief imagery.

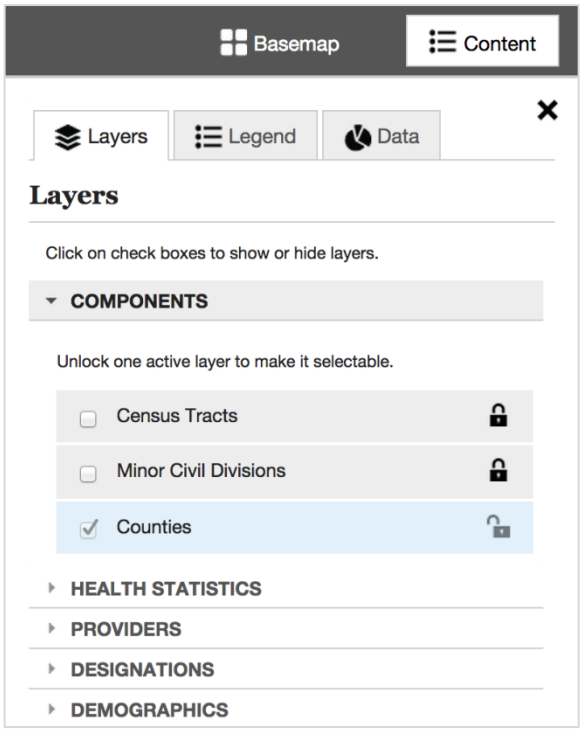
Open Street Map: This basemap references the live service from the OpenStreetMap (OSM) project, which is a collaborative initiative to create a free editable map of the world. It includes data about roads, trails, cafés, railway stations, and much more.

SECTION 2E: CONTENT PANEL (LAYERS, LEGEND, DATA)

The Content panel is located on the right side of the screen. Click on the Content button on the horizontal navigation bar to open it.

This panel includes the following tabs:

1. Layers
2. Legend
3. Data



LAYERS

The Layers tab provides the following content:

Components: This allows user to select only one active layer (county, census tract, **or** MCD) to save RSA and CAs. It also provides optional visibility for county, census tract, **and** MCD through the checkbox selection.

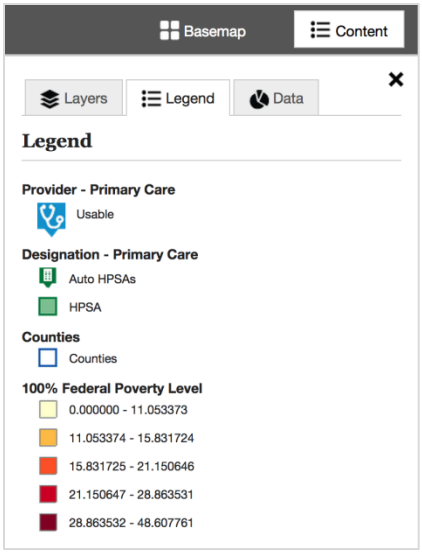
Health Statistics: This contains optional visible layers for Fertility Rate, Infant Mortality Rate, and Infant Low Birth Weight Rate.

Providers: This shows Usable and Non Usable providers on the map based on updates made on the Provider Management application.

Designations: This includes layers to see existing Auto HPSA locations, HPSAs, MUA/Ps, Prisons, and Other Facilities.

Demographics: This includes layers with statistics for African American Population, Asian Population, Caucasian Population, Hispanic Population, Native American / Alaska Native, Pacific Islander Population, 100% Federal Poverty Level, 200% Federal Poverty Level, Elderly Ratio, Youth Ratio, and Percent Population Elderly.

LEGEND

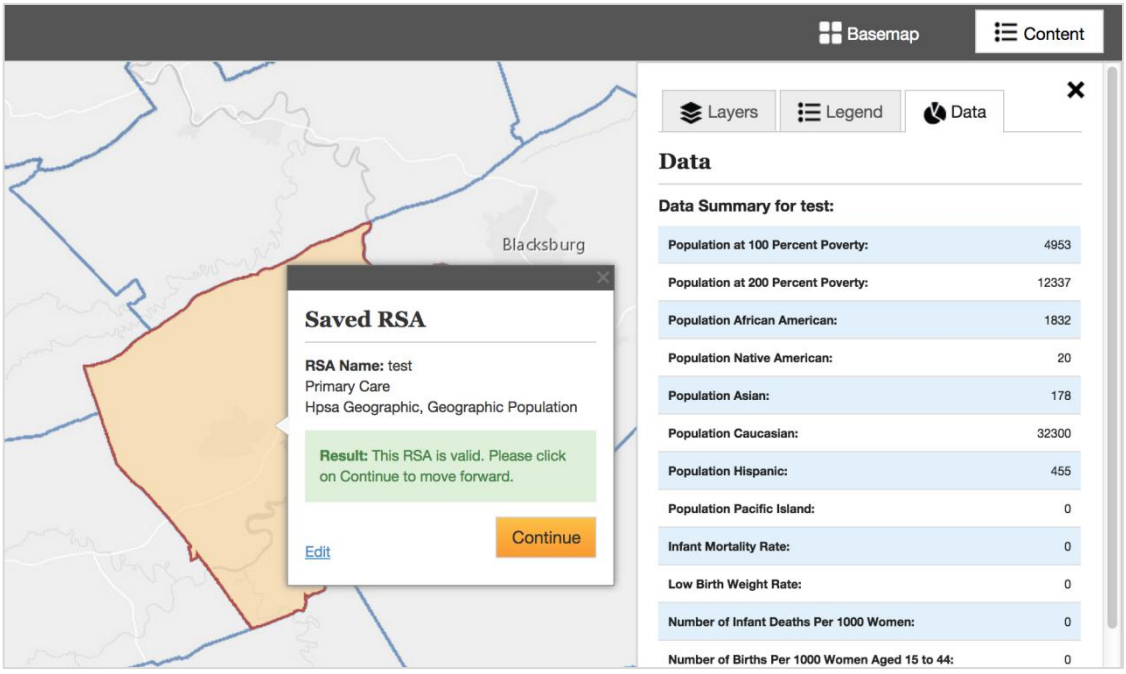


The Legend tab is the second of three tabs inside the Content panel. It automatically updates when user selects layers to show on the map.

In this example, user has selected the following layers to show: Usable providers, Auto HPSAs, HPSAs, Counties, and 100% Federal Poverty Level.

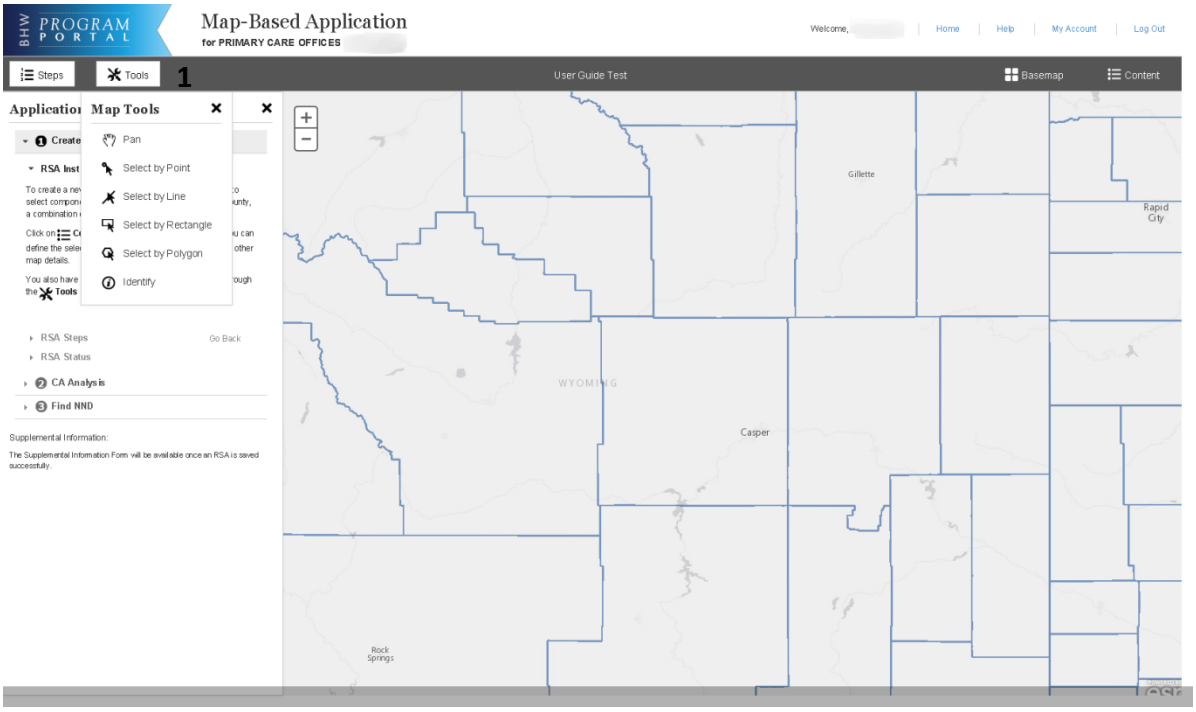
DATA

The Data tab is the last tab in the Content panel. It only shows content when user has saved a RSA or a CA on the map. If the user receives an invalid RSA message upon trying to save an RSA, the data panel will also display content for that invalid RSA. In this example, the user saved an RSA which information is showing on the Data tab.

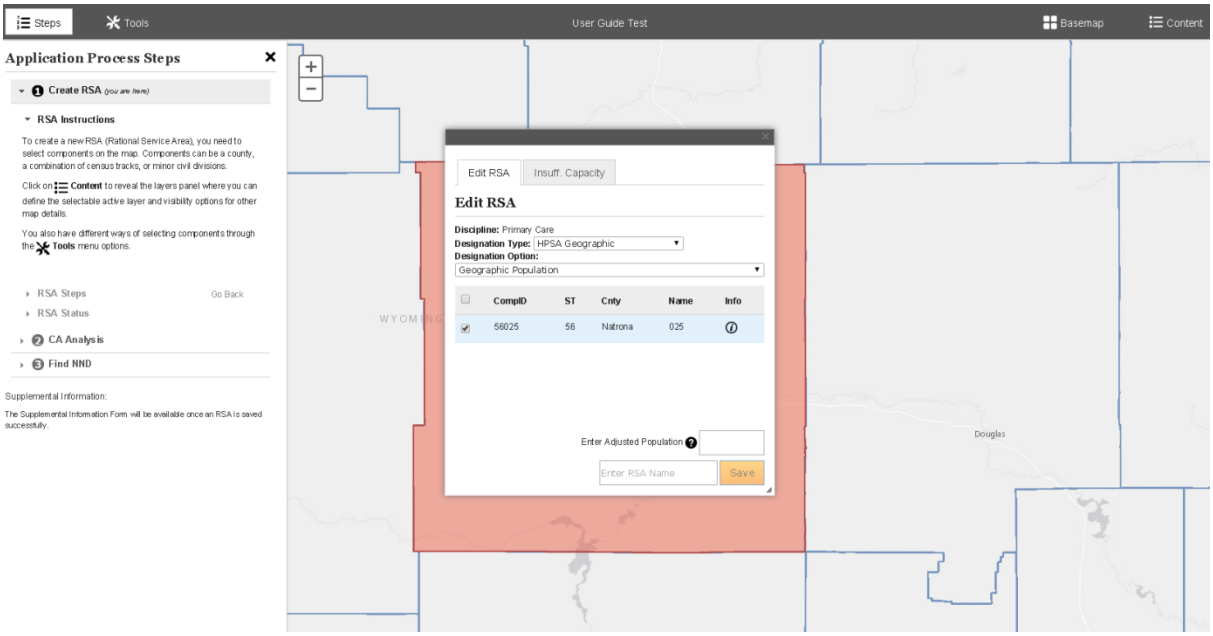


SECTION 2F: CREATING A RATIONAL SERVICE AREA (RSA)

The first step of the mapping designation application is to create a Rational Service Area (RSA). The content panel explained in section 2E will be helpful in selecting the active layer and provide visuals and data on the map to help formulate an appropriate area to create the RSA.



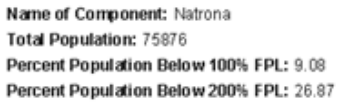
1. **Tools:** The user should select an option from map tools in order to select a RSA component on the map. Once the tool is selected the user should click on the desired component(s) on the map.



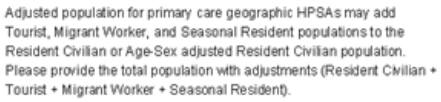
1. **Edit RSA Pop Up:** This appears after the user makes a component selection on the map. The pop up provides useful information about the component (s) selected for the RSA.
2. **Discipline, Designation Type and Designation Option:** The user is able to change the Designation Type and Option by way of the drop downs.

   Business Rules:
   - Discipline is a non-editable column.
   - Designation Type and Option are dynamic based on discipline and include the same options as the selections on the New Mapping Tool landing page (see section 2A).
   - If the Designation Type is changed to HPSA Population or MUP Population, the user is required to select a new designation option.
   - Changing from a HPSA to a MUA or MUP or vice versa within the Edit RSA box is not applicable. The user must create a new application if switching between the two types is desired.
3. The user uses this icon to select or deselect the component(s) of the RSA. If deselected, the color will be removed from the component(s) on the map to indicate that it will not be included in the saved RSA.

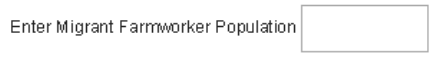
   Business Rules:
   - The user must have at least one component selected in order to save the RSA.
   - The darker red color indicates that the component(s) are not saved.
4. **Name:** Represents the name of each component.
5. **CompID:** Represents the component ID.
6. **CNTY:** Represents the county each component falls under.
7. **Info:** Hover over to see the following information.

   Important Information to Note: Total Population is representative of the Total Resident Civilian population.
8. **Enter Adjusted Population:** Hover over to receive the following tips for what to enter in this field.

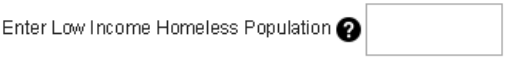
   

   Business Rules:
   - Enter Adjusted Population field appears only for HPSA Geographic and Geographic High needs application and is not required.
   - This field is numeric where the user can enter a max of 6 digits.
   - A similar **required** field will appear with the following population type HPSAs and MUPs and will be dynamic based on the population type selected.
     - Migrant Farmworker Population

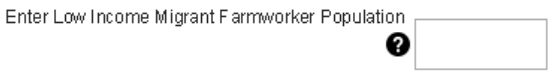
       

     - Migrant Seasonal Worker Population

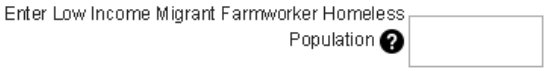
     - Low Income Homeless Population*

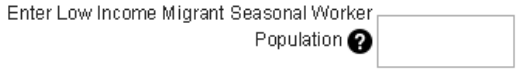
     - Low Income Migrant Farmworker Population*



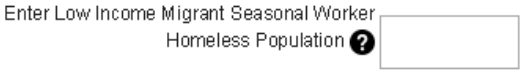
- Low Income Homeless Migrant Farmworker Population*



- Low Income Migrant Seasonal Worker Population*

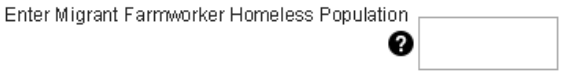


- Low Income Homeless Migrant Seasonal Worker Population*

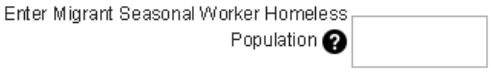


- Homeless Population HPSA

- Migrant Farmworker and Homeless Population*



- Migrant Seasonal Worker and Homeless Population*

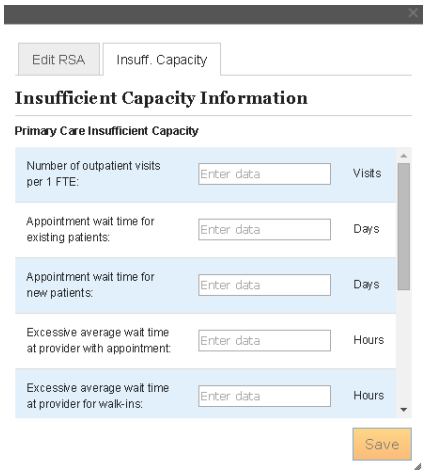


***Important Information to Note:** Hover over to receive guidance on what should be entered in each specific field.

- This field will not appear for the following HPSA and MUP types because the system sources the correct population data used for these types:
  - Low Income Population
  - Medicaid Eligible Population
  - Native American Population

9. **Insufficient Capacity Tab:** This tab should be used for Primary Care and Dental Health Geographic High Needs HPSA applications.

BUISINESS RULES FOR PRIMARY CARE GEOGRAPHIC HIGH NEEDS INSUFFICENT CAPACITY TAB

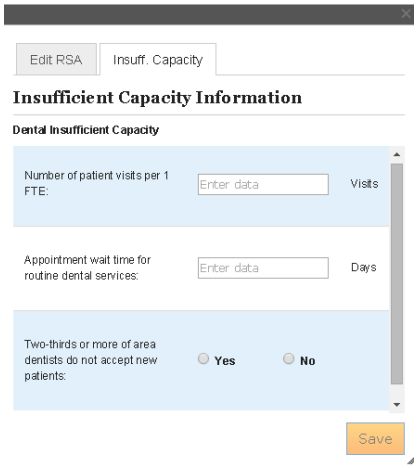


- This tab is only required if the RSA does not pass the following system checks:
  - More than 20% of the population has incomes at or below 100% FPL
  - More than 100 births per year per 1,000 women ages 15-44
  - More than 20 infant deaths per 1,000 live births
- If the Insufficient Capacity is required to be completed, the RSA must meet at least **2** of the following criteria:
  - More than 8,000 office or outpatient visits per year per FTE primary care physician serving the area
    - Numeric field-Integer
  - More than 7 days for appointment wait times for existing patients
    - Numeric field-Decimal to the hundredth
  - More than 14 days for appointment wait times for new patients
    - Numeric field-Decimal to the hundredth
  - More than 1 hour wait time for patients with appointments
    - Numeric field-Decimal to the hundredth
  - More than 2 hours wait time for patients who are treated on a first come, first served basis
    - Numeric field-Decimal to the hundredth
  - Abnormally low utilization of health services, as indicated by an average of two or fewer office visits per year on the part of the area's population
    - Numeric field-Decimal to the hundredth
  - Evidence of excessive use of emergency room facilities for routine primary care
    - User should choose between Yes or No radio buttons
  - Two-thirds or more of area physicians do not accept new patients
    - User should choose between Yes or No radio buttons
- The Save button on the Insufficeint capacity tab is enabled when the user completes at least one field on the form
- The PCO should select the Save button after completing desired field(s).
- Once the Save button is selected, the PCO will receive the following message:

Data saved successfully.

Important Information to Note: The system will verify the Insufficient capacity buiness rules upon Saving the RSA not when the PCO selects the Save button on the Insufficient Capacity tab.

BUSINESS RULES FOR DENTAL HEALTH GEOGRAPHIC HIGH NEEDS INSUFFICIENT CAPACITY TAB:



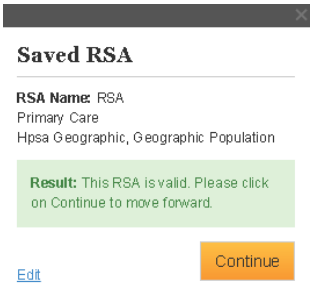
- This tab is only required if the RSA does not pass the following system checks:
  - More than 20% of the population has incomes at or below 100% FPL
  - More than 50% of the population has no fluoridated water
- If the Insufficient Capacity is required to be completed, the RSA must meet at least **1** of the following criteria:
  - More than 5,000 visits per year per FTE dentist serving the area
    - Numeric field-integar
  - More than six weeks wait time for appoitments for routine dental services
    - Numeric field-Decimal to the hundredth
  - Two-Thirds or more of the area's dentists do not accept new patients
    - User should choose between Yes or No radio buttons
- The Save button on the Insufficeint capacity tab is enabled when the user completes at least one field on the form
- The user should select the Save button after completing desired field(s).
- Once the Save button is selected, the user will receive the following message:

Data saved successfully.

Important Information to Note: The system will verify the Insufficient capacity buiness rules upon Saving the RSA not when the user selects the Save button on the Insufficient Capacity tab.

10. **Enter RSA Name:** The user must enter a name for the RSA.
Buisness Rules:
    - This field can include alphanumeric and symbols.
    - This field accomodates a maximum of 40 characters.

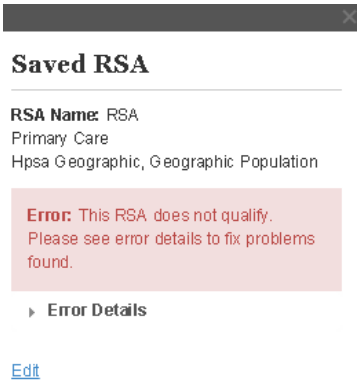
11. Save **Button:** The user selects this to Save the RSA. The system will display the following pop up when the RSA is successfully saved:



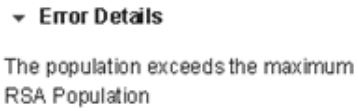
Buiness Rules:

- The user must enter a RSA name before the Save button is enabled
- The system will perform the following checks upon the selection of the Save button:
    - The population type of the HPSA in the RSA is greater than or equal to 250,000 if a whole or multiple county for Primary Care and Dental Health
    - The population type of the HPSA in the RSA is greater and or equal to 999,999 if a whole or multiple county for Mental health
    - The population for all HPSA and MUA/P types must be greater than 0

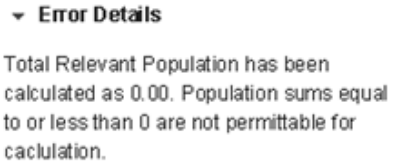
- The system will display the following message when the RSA does not qualify. The user should click on the ▸ Error Details to reveal more information about why the RSA does not qualify.



- The system will display the following message under ▸ Error Details when the RSA does not qualify because the population exceeds the maximum population allowed.

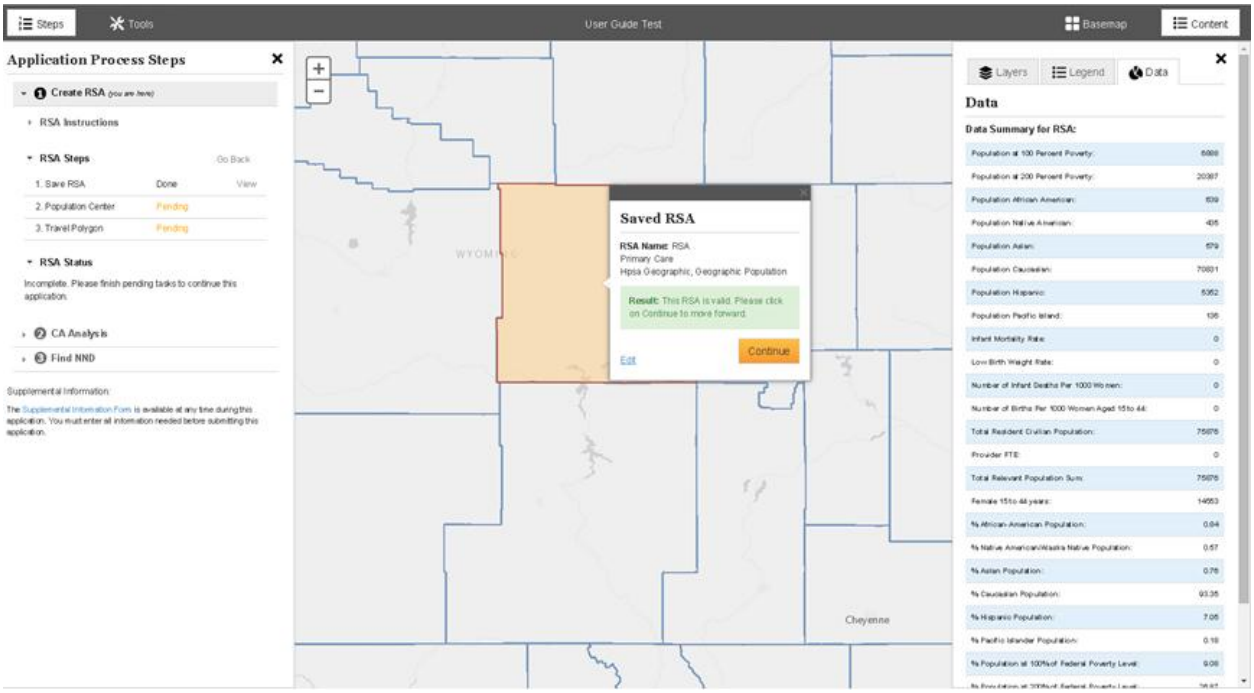


- The system will display the following message under ▸ Error Details when the RSA does not qualify because the population type is not greater than 0. The error will usually occur if the user does not put in the population number for HPSA and MUAP population types not sourced by the system.



- The system will display the following message under ▸ Error Details when the RSA does not qualify because the area selected overlaps with an existing HPSA or MUAP. This error can be avioded by turning on the Designation layers before selecting a component.

SECTION 2G: SAVED RATIONAL SERVICE AREA AND ACCESSING THE DATA PANEL

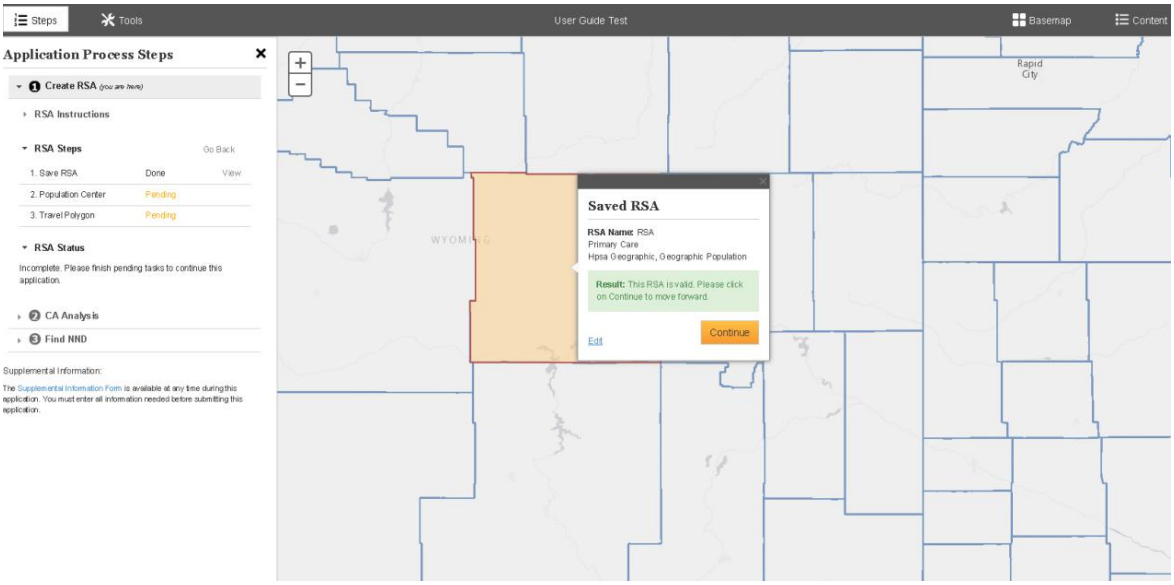


Saved RSA Pop Up: This shows the user that the RSA has been successfully completed.

Data Tab: As a result of the RSA being saved, the user can view certain health and demographic data for the RSA by selecting the Content panel and selecting the Data tab. The data points vary based on discipline of the application. Please refer to the **Shortage Designation Management System Manual for Policies and Procedures**, located on the Designation Portal Homepage, for specific information on the statistical methodology for each health and demographic data point.

SECTION 2H: SELECTING POPULATION CENTER

Once the RSA is successfully saved, the next step of the application is selecting the population center.



1. **Save RSA:** This indicates that the status of the RSA status is Done.

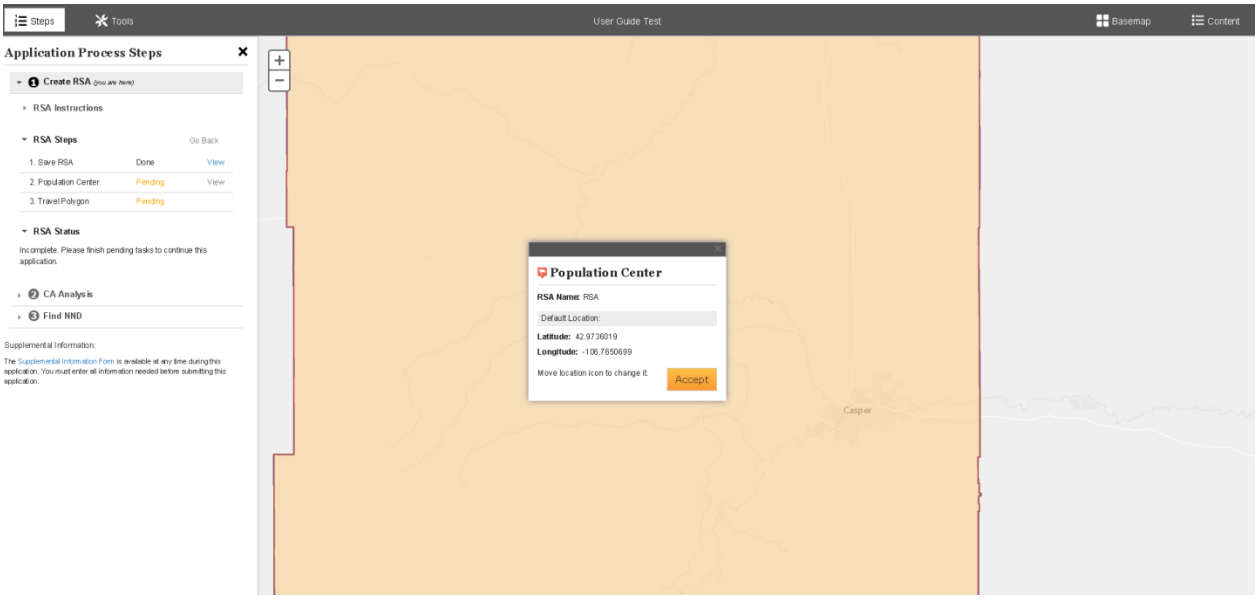
2. **Population Center:** This indicates that the population center step has not been completed yet.

3. **Travel Polygon:** This indicates that the travel polygon step has not been completed yet.

4. Edit **Link:** This link can be used to edit the RSA. If clicked on, the user will be directed back to the Edit RSA pop up to add or delete componets.

5. Continue **Button:**The user should select this button to continue on to the population center step.

Once the user selects the Continue button, the system will display the following Population Center Pop up.



Population Center Pop Up: This pop up will display the RSA name as well as the longitude and latitude coordinates for the system default population center. If the user is satisfied with this location, select Accept to save the Default population center.

Business Rules:

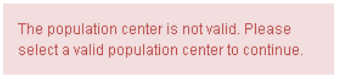
- The system will display the population center as the Geographic center of the most populous Census Tract or Minor Civil Division within the RSA.

  Important Information to Note: There might be times where the population center pop up will be covering the actual population center on the map. The user should drag the pop up to another area of the map so they can view the population center (Please see image below).

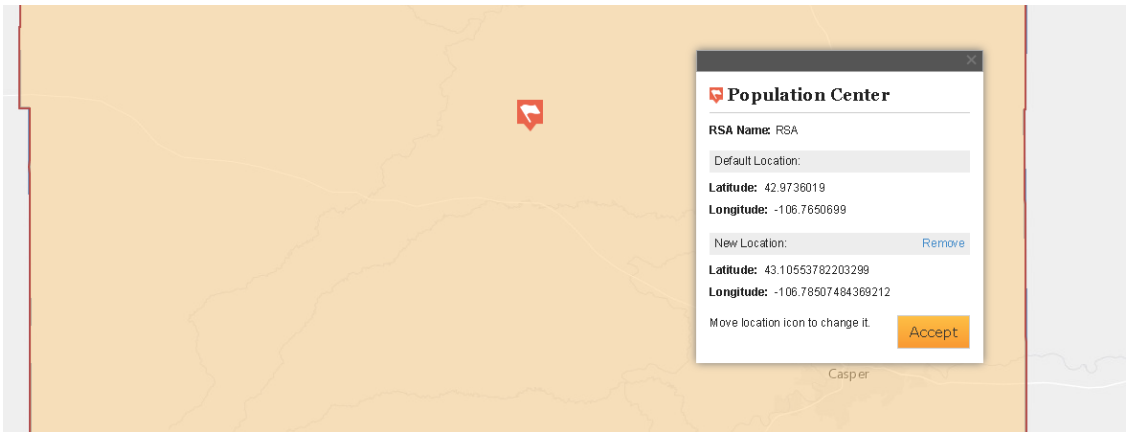
Moving the Population Center: The user can move the population center by dragging the icon to another point on the map.

Business Rules:

- The system will display the population center as the Geographic center of the most populous Census Tract or Minor Civil Division within the RSA.
- The population center must be within the boundaries of the RSA.
- The user is required to enter a justification for moving the population center on the Supplemental Information Form
- The user will receive the following warning message if the user moves the population center outside of the RSA



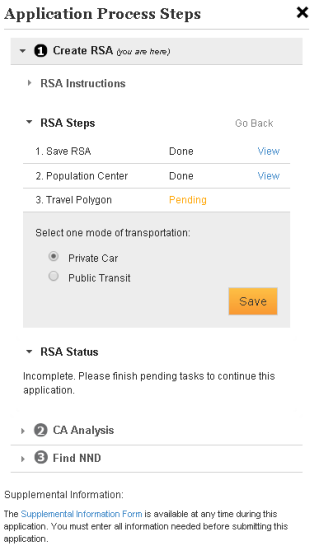
Important Information to Note: The system will automatically display the pan tool to drag the population center. The user should not select a tool to move the population center.



Accepting the non-default location Population Center: Once the user has dragged the population center to another location within the RSA, the system will display the read only latitude and longitude coordinates for both the Default location and the new location. The user can either select Accept to save the new location or Remove to go back to the Default population center location.

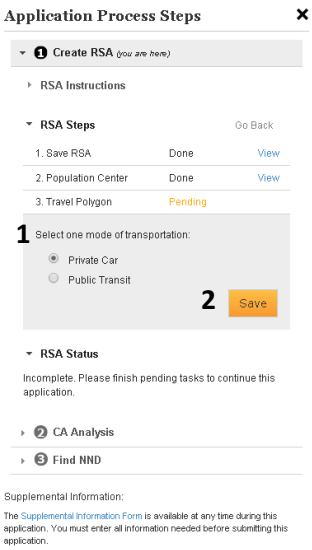
SECTION 2I: SAVED POPULATION CENTER

Once the user selects the Population Center, the system will update the Application Process steps to reflect that the population center step is now **Done** (See Screenshot below). The user can select View next to Population center to get back to the Population Center pop up. The system will direct user to the next step, Travel Polygon, indicated by the Pending status.

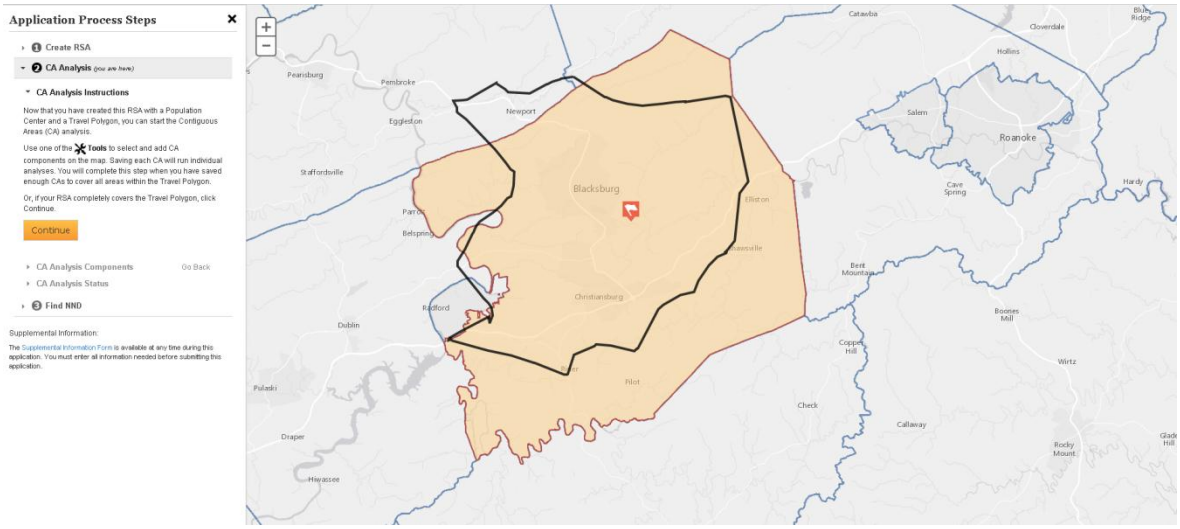


SECTION 2J: TRAVEL POLYGON

After saving the population center, the user can now complete the Travel Polygon step.



1. **Select Mode of Transportation:** The user should use this feature to pick which travel polygon type is desired. The user can choose either Private Car or Public Transit by selecting the radio button ( ). **Important Information to Note:** The system will automatically default the radio button to Private Car.
2. Save **Button:** The user should select this button once the mode of transportation has been selected. Once the save button is selected, the system will create the Travel Polygon on the map (Please see screen shot below)

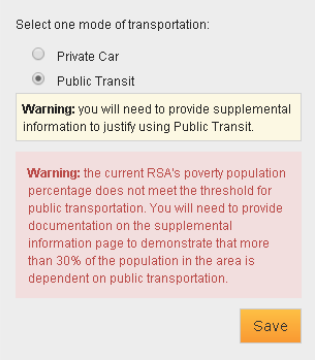


Business Rules:

- For Private Car the following rules apply:

- The system will generate the travel polygon covering 30 minutes, for Primary Care, and 40 minutes, for Dental and Mental Health, using the shortest path network analysis originating at the population center and stemming out in all directions.

- For Public Transit the following rules apply:
  - In order to use Public Transit, the area must have at least 20% of the population with an income at or below 100% of the Federal Poverty level.
  - If the area does not pass the check mentioned above the user must provide evidence on the Supplemental Information form that more than 30% of the population in the area is dependent on public transportation. The user will see the following warning message as guidance but the system won't prevent the user from choosing Public Transit.

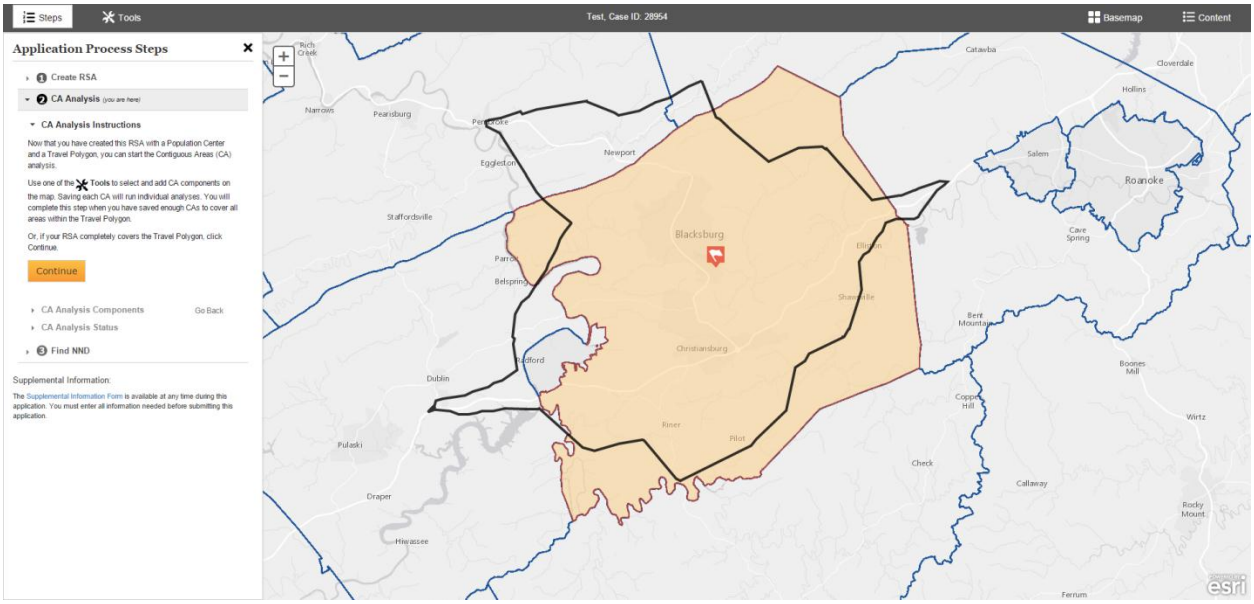


  - The system will generate the travel polygon covering 5 miles, for Primary Care, and 7 miles, for Dental and Mental Health, originating at the population center and stemming out in all directions.

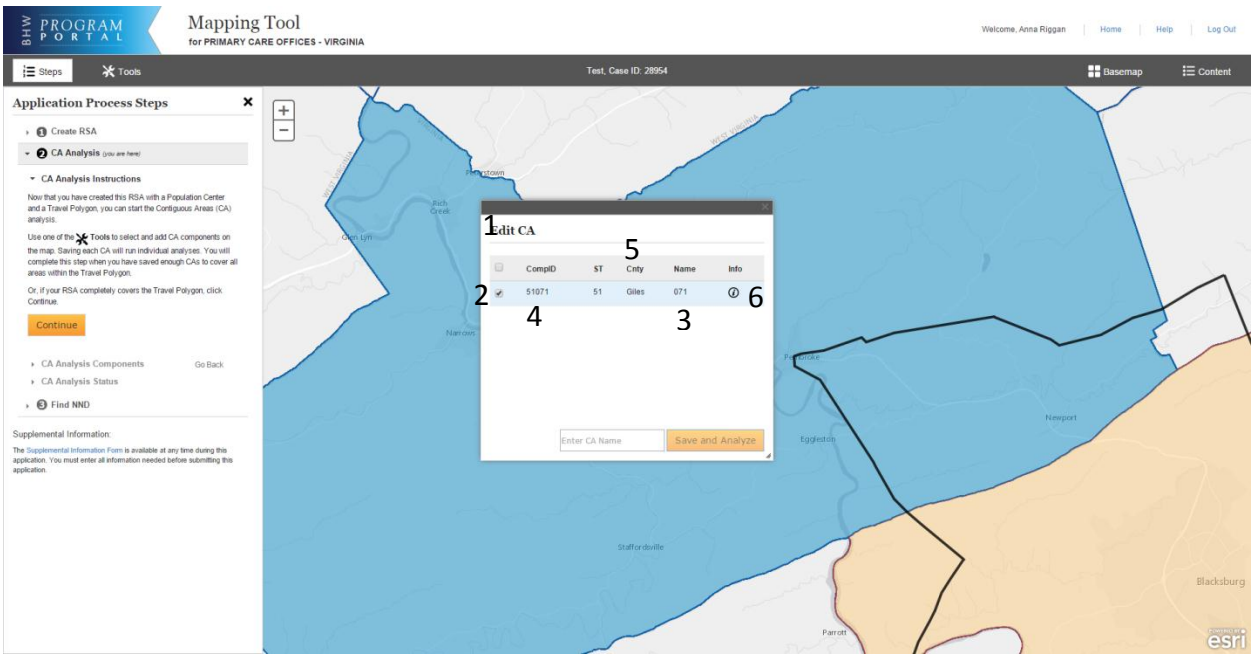
SECTION K: CONTIGIOUS AREA (CA) ANALYSIS

CREATING CONTIGUOUS AREAS

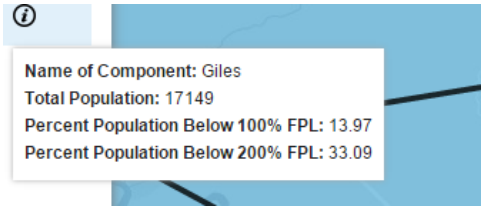
The first step of the Contiguous Area analysis section of the HPSA designation application is to view the area that will need to be analyzed. Regardless of HPSA type or discipline, all application must create valid Contiguous Areas each with a status of "Passed" that completely cover the land area covered by the travel polygon.



2. **Tools:** The PCO should select an option from map tools in order to select a CA component on the map. Once the tool is selected the PCO should click on the desired component(s) on the map.
3. **Components:** The user may select as many components as desired in order to create the CA. The user is encouraged to use the data layers to create a CA that is valid.



1. **Edit CA Pop Up:** This appears after the PCO makes a component selection on the map. The pop up provides useful information about the component (s) selected for the CA.
2. The PCO uses this icon to select or deselect the component(s) of the CA. If deselected, the color will be removed from the component(s) on the map to indicate that it will not be included in the saved CA.
   Business Rules:
   - The PCO must have at least one component selected in order to save the CA.
   - The darker red color indicates that the component(s) are not saved.
3. **Name:** Represents the name of each component.
4. **CompID:** Represents the component ID.
5. **CNTY:** Represents the county each component falls under.
6. **Info:** Hover over to see the following information.



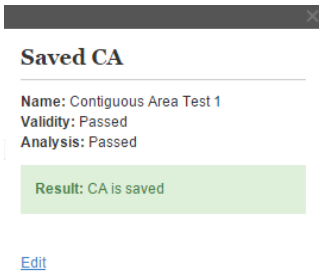
Important Information to Note: Total Population is representative of the Total Resident Civilian population.

Business Rules:

- Enter the Contiguous Area name prior to selecting “Save and Analyze”
  - This field can include alphanumeric and symbols.
  - This field accomodates a maximum of 40 characters.

- The system will not allow the user to select components that are currently part of the RSA. If the user wishes to add a component that is currently part of the RSA, the user must unselect this component by using the 'Go Back' functionality, editing the RSA, Saving, and returning to the Contiguous Area step.

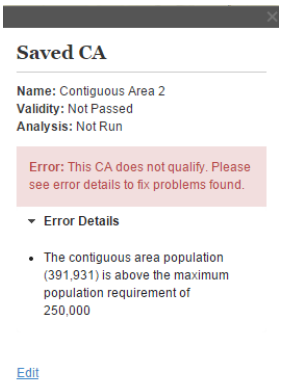
7. Save and Analyze **Button:** The PCO selects the Save and Analyze button. The system will display the following pop up when the CA is successfully saved and analyzed:



Buiness Rules:

- The PCO must enter a CA name before the Save and Analyze button is enabled
- The system will perform the following checks upon the selection of the Save and Analyze button. These checks are referred to as the CA Validity checks:
  - The system will check if the population of the CA is greater than or equal to 250,000 if a whole or multiple county for Primary Care and Dental Health
  - The system will check if the population of the CA is greater and or equal to 999,999 if a whole or multiple county for Mental health
  - The system will check if the CA is a Whole County
    - If so, then the user is not required to enter supporting documentation for the rationality of the CA, as whole counties that meet the population threshold are by definition rational
    - If the CA is made of multiple whole counties, then the user is required to enter supporting evidence on the Supplemental Information form that the population centers of the counties are within 30 minutes travel time
    - If the CA is a sub-county, then the user is required to enter supporting evidence of the area's rationality on the Supplemental Information form. Refer to the latest Manual for Policy and Procedures (MPPS) document for more information on the guiding regulation and policy for CA rationality.
  - The system will check if the CA components are contiguous and adjacent.
  - The system will proceed to the Analysis step if the Validity has been Passed.

- The system will display the following message when the CA does not qualify. The user should click on the Error Details to reveal more information about why the CA does not qualify.
- If the Validity has a status of "Not Passed," then the Analysis will always have a status of "Not Run."

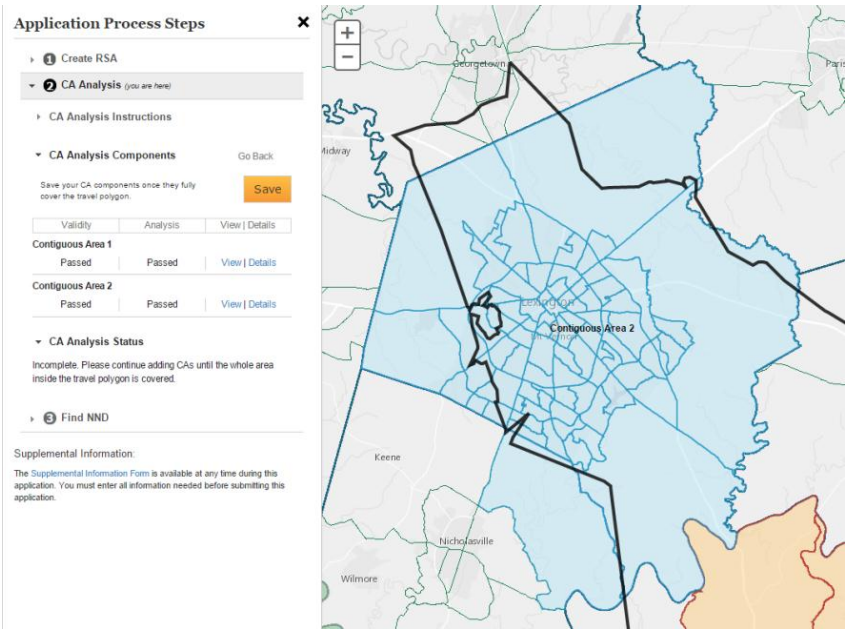


EDITING CONTIGUOUS AREAS

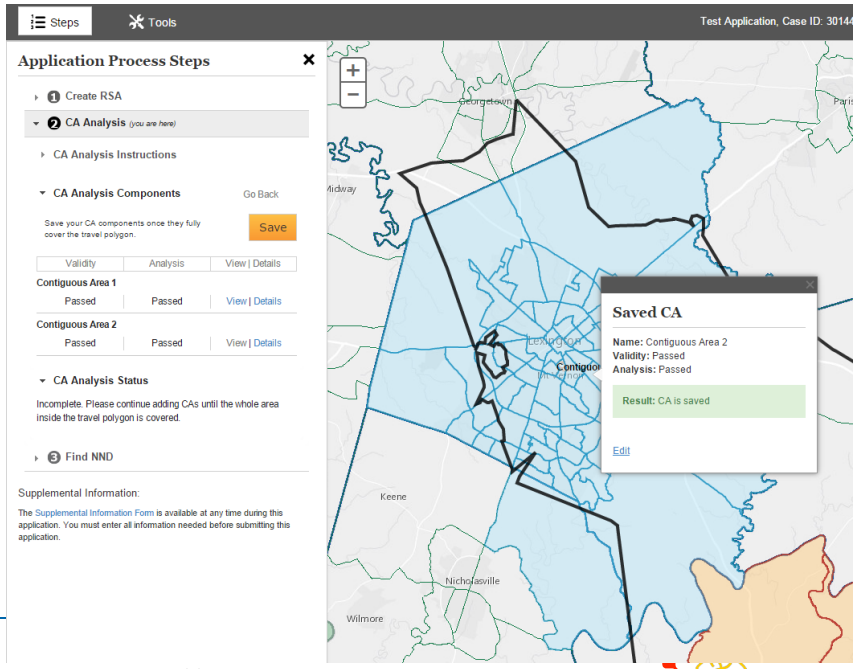
Contiguous Area Colors

1. **Light Blue:** This color is used to indicate a Contiguous Area that has passed the analysis. All Contiguous Areas must be light blue in order for the user to continue onto the NND step.
2. **Dark Blue:** This color is used to indicate that the Contiguous Area has not yet been saved. It is also used when a previously saved area is currently being edited. The user must save these changes in order to have the area checked for validity and analyzed with the edited configuration.
3. **Light Yellow:** A Contiguous Area that is Not Valid or has Not Passed the analysis will be displayed in a yellow color. The user may edit the configuration of the area, or can use the "Not Passed" drop down described below to change the status. This will create a Light Blue Contiguous Area.

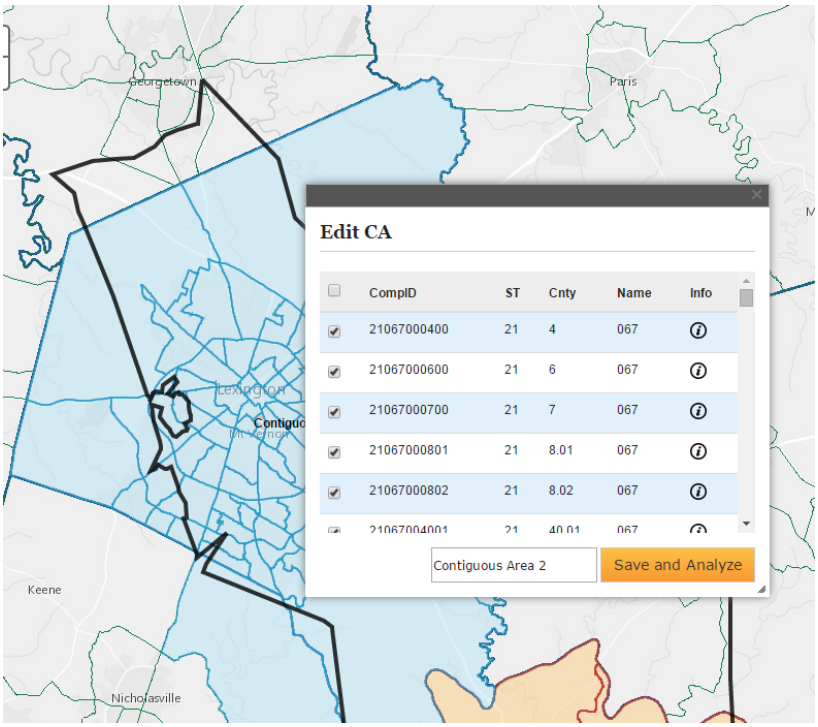
The user is able to edit the formation of a saved Contiguous Area, regardless if it has been found to pass the analysis. In order to edit the area, the user must use the "Saved CA" pop over. If this is not currently visible on the screen, the user should select the "View" link for the appropriate Contiguous Area on the Application Process Steps panel.



The system will display the "Saved CA" pop over box. The user should select the "Edit" link on this box on the map.

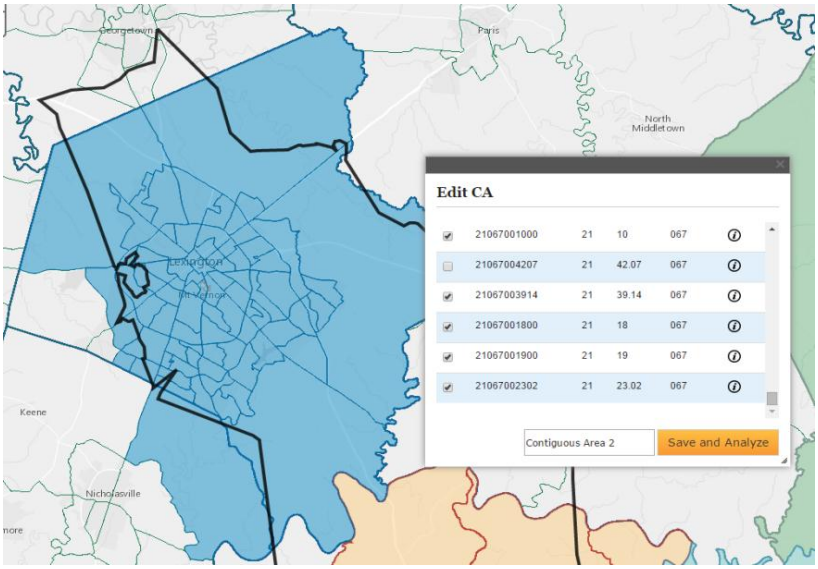


The user should un-select the components to be removed from the Contiguous Area using the multi-select check boxes in the table on the pop up box on the map. To add components, the user can select a Tool from the Tools menu and select the desired components. These will be added to the open box and can be removed using the check boxes.



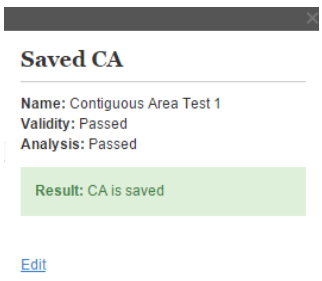
When the user un-selects the check box next to component, the color from the component will be removed from the map. In the image below, the user has removed census tracts from the southwestern side of the Contiguous Area.

In order to save the changes, the user must select the Save and Analyze button. The system will re-run the validity checks and the analysis tests for the new configuration.



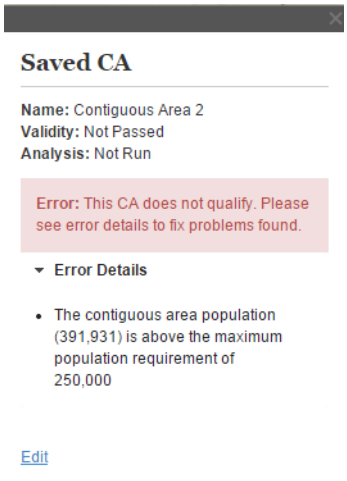
ANALYZING CONTIGUOUS AREAS

Once the user has created a Contiguous Area that has a Validity status of "Passed," the system will automatically run the Analysis step. This process is initiated when the PCO selects the Save and Analyze button.



The Analysis step is fully described in the MPPS guide. The result of the analysis is captured in the Saved CA pop-over. The pop-over indicating that the RSA has been

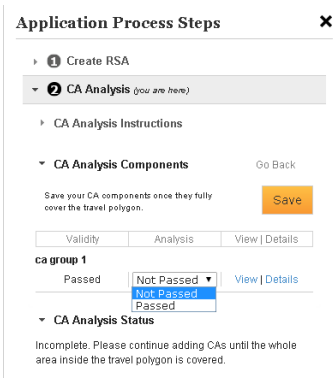
saved will include the Analysis status, as seen below.



If the Validity has not passed, then the analysis will not be run. The Saved CA pop-over in this case, will display a message as seen below.

A third possible scenario occurs when the Validity has passed, the analysis has been run, but the system has been unable to pass the Analysis. This message will be similarly displayed on the Saved CA pop-over.

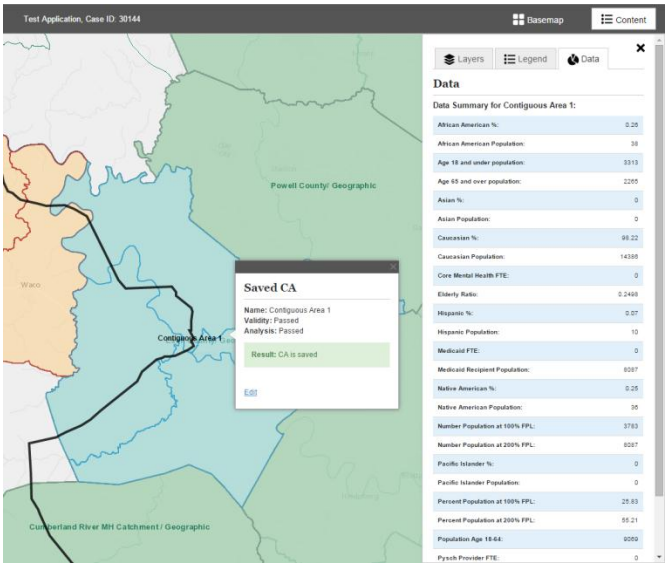
When this scenario occurs, but the PCO has a rationale for why this Contiguous Area should be considered "Passed" for the analysis, this can be addressed on the side panel. The user may select the "Passed" status from the drop down that will be created on the Application Process Steps panel.



The user will be prompted to enter an explanation on the Supplemental Information form prior to submitting the application to explain the reason that the Contiguous Area Analysis should be considered as Passed, thus ruling the area inaccessible to the population of the RSA.

VIEWING DETAILS OF CONTIGUOUS AREAS

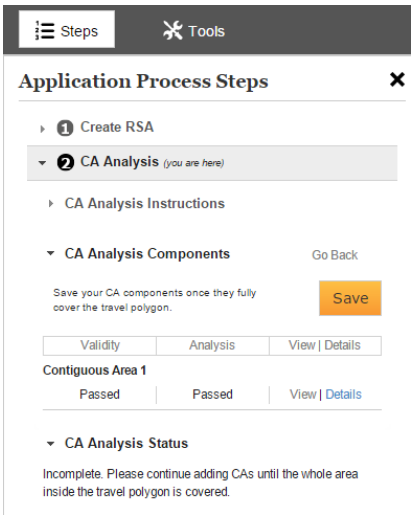
All Contiguous Areas are saved, whether valid or not. The user may edit the components making up the Contiguous Area, as described in the sections below. Once saved, supporting summary data for the Contiguous Area is available on the data section of the content panel. The user may view this information by selecting the Content drop down, and the Data tab.



This will display a table showing demographic, socio-economic and provider information for the population making up the Contiguous Area. The panel will always display the most recently saved Contiguous Area. Different statistics will show based on the HPSA discipline, such as the Infant Mortality Rate and Infant Low Birth Weight Rate information for Primary Care.

If the user has created a Contiguous Area that

has a Validity status of "Passed," the system will automatically run the Analysis. While the status is available on the "Saved CA" pop over on the map, the statuses of the Contiguous Areas are available viewable in the Application Process Steps panel.



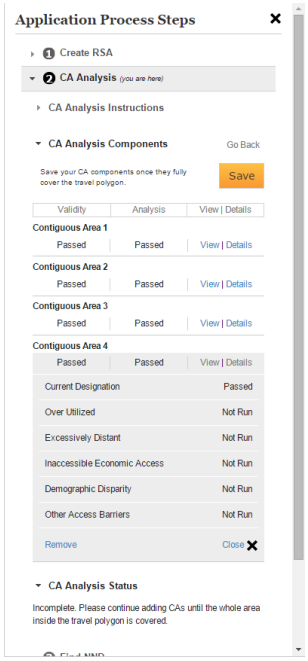
The user may view the details of any saved Contiguous Area that has been analyzed by the system by selecting the details link on the panel. This will expand the section for that Contiguous Area with the results of the system-run Contiguous Analysis

The system will indicate one of the following statuses for each test:

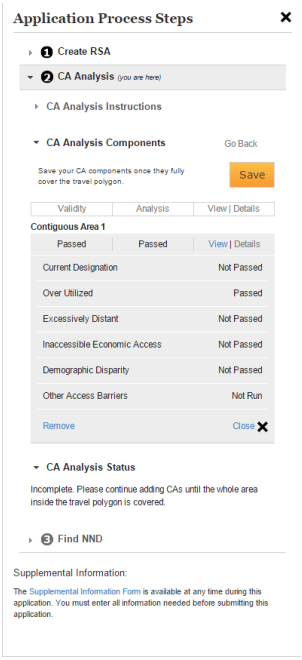
1. Not Run
2. Not Passed
3. Passed

The rules for each of these tests can be found in MPPS. The system will show which tests have been run, and which test the Contiguous Area has passed. Once the area passes a test, the system will not run the remaining tests. The possible test results are shown in the screenshots below.

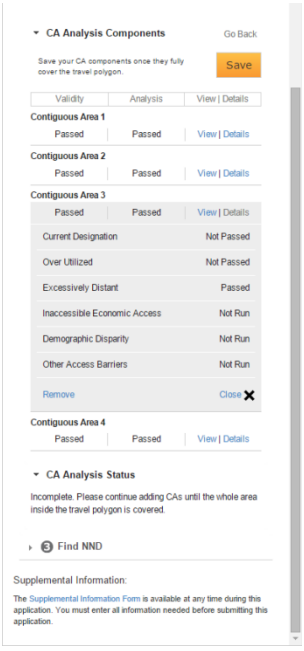
Current Designation



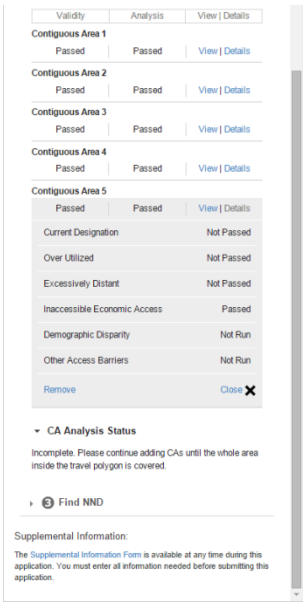
Over Utilized



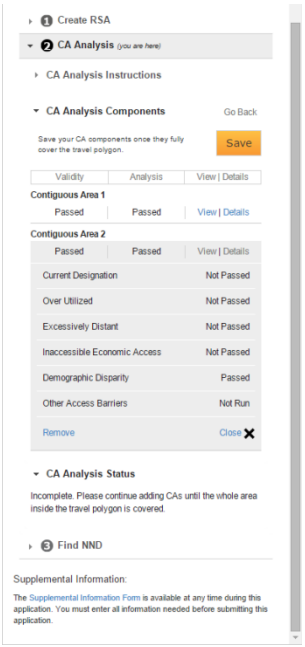
Excessively Distant



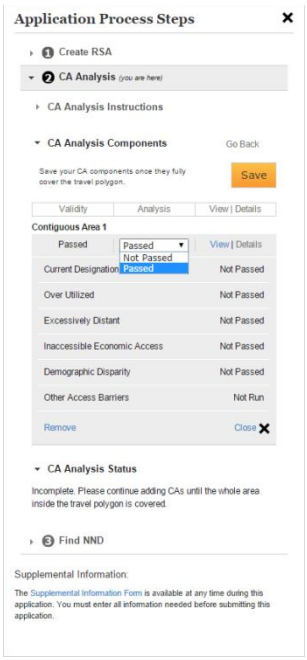
Inaccessible Economic Access



Demographic Disparity



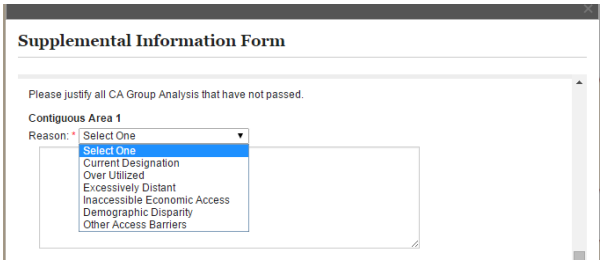
Other Access Barriers



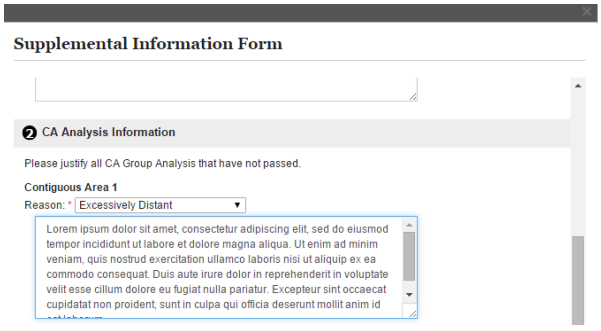
Important Information to Note: Population type HPSAs that include a user-entered population for the RSA will not have the Over Utilized check run. This includes Homeless HPSAs, Migrant Farmworker HPSAs, and Migrant Seasonal Worker HPSAs. Should this test be appropriate for the analysis of the Contiguous Area, the user may indicate this value on the Supplemental Information panel.

The system will also not run the Other Access Barriers test for any Contiguous Areas. Therefore, the status for this test will always be set to “Not Run.” The user may indicate the result and reason for this test on the Supplemental Information panel.

For any Contiguous Area that the user has elected to “Force Pass” by using the drop down available on the Application Process Steps panel, the user will be required to indicate the reason for passing the analysis on the Supplemental Information form.



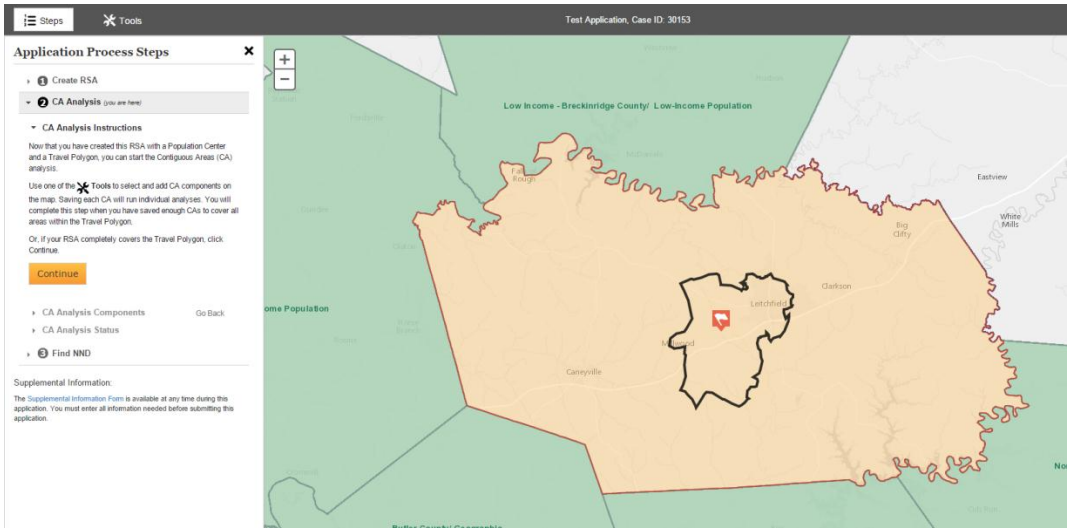
The user will also be required to enter an explanation justifying the reason for passing the Contiguous Area.



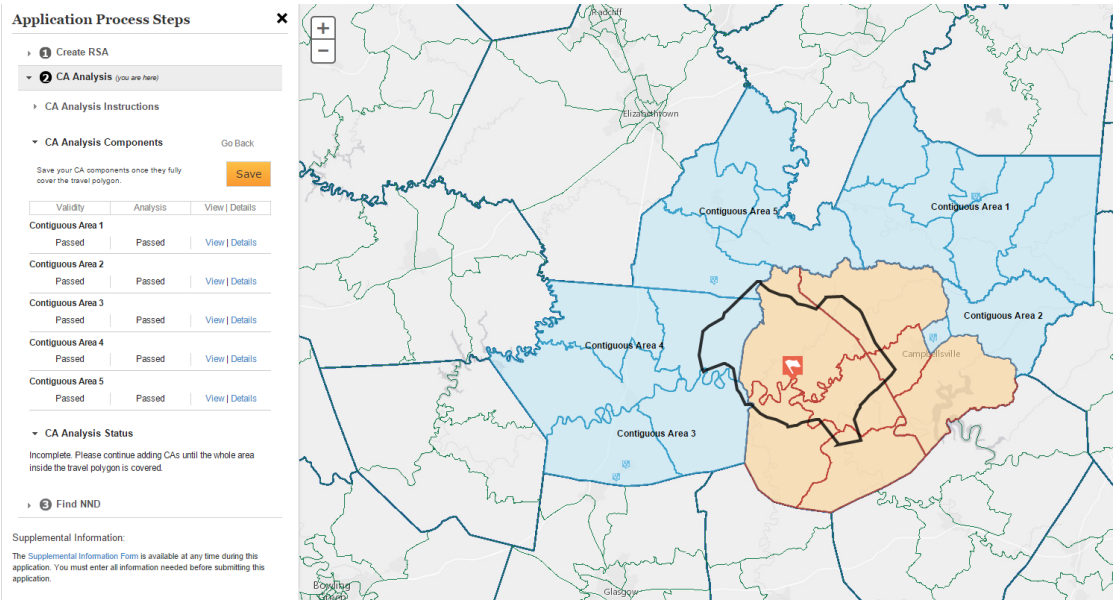
COMPLETING THE CONTIGUOUS AREA ANALYSIS SECTION

The system requires that the travel polygon's boundary is completely covered by Contiguous Areas and the RSA in order to consider the Contiguous Area analysis step completed. This can be achieved in two ways.

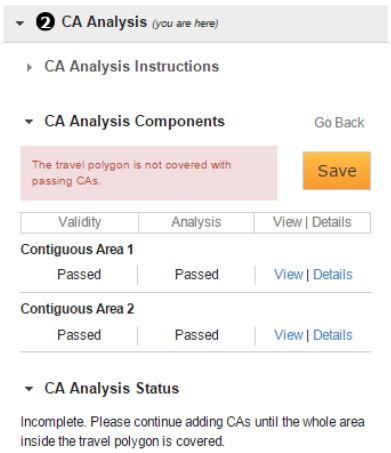
1. **Travel Polygon is completely within the RSA:** If the travel polygon is completely held within the RSA, the user is not required by the system to analyze any areas outside of the RSA. In order to progress to the next section of the application, the user should select the Continue button.



2. **Travel Polygon is covered by valid Contiguous Areas with Analysis "Passed" status:** If the user has completed the process of covering the Travel Polygon area with Contiguous Areas, and these areas have all been found valid, and have a status of passed, then the user should select the Save button located on the Application Process Steps panel. The system will run a check to confirm that the boundary of the Travel Polygon is completely covered by the RSA and Contiguous Areas with a passing status.



If the system identifies that the Travel Polygon has not been sufficiently covered, or that any of the Contiguous Areas do not have an Analysis status of "Passed," then the following error message will appear on the Application Process Steps panel.



The user should create and analyze any additional Contiguous Areas, and then select the Save button again to have the system check that the Travel Polygon is now covered.

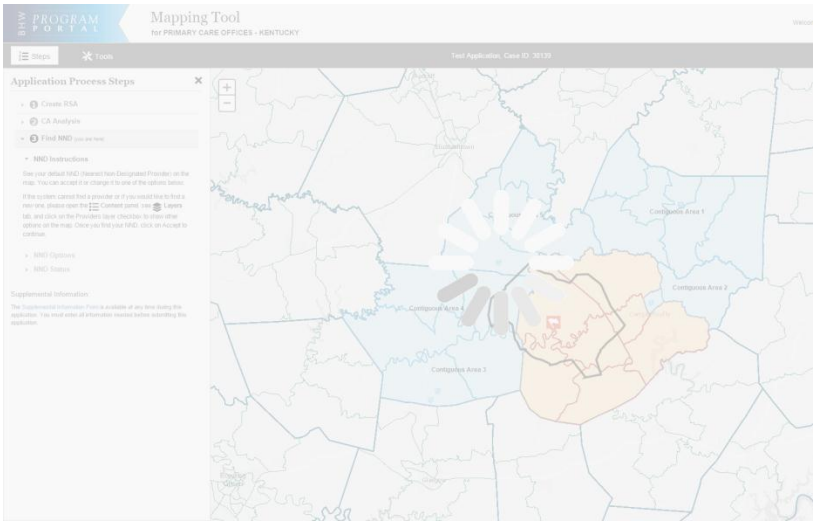
Once this check has been satisfied, the system will automatically move the user on to the Nearest Non-Designed Provider step.

Contiguous Area Business Rules:

- The user is required to analyze all areas covered by the Travel Polygon boundary.
- All Contiguous Areas must have a Validity status of "Passed" and an Analysis status of "Passed," either by the system or by the user in order for the Contiguous Area Analysis to be considered complete.

SECTION 2L: NEAREST NON-DESIGNATED PROVIDER (NND)

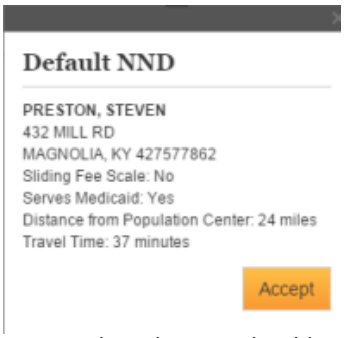
Upon advancing the user to the Nearest Non-Designated Provider step, the system performs an initial analysis. The user should expect to view the spinning icon as the system analyzes all of the providers in the surrounding areas that are both located in a non-designated area and also serve the population of the RSA.



The full details of the search radius, qualifying providers and designated areas that cannot include the provider can be found in the MPPS document.

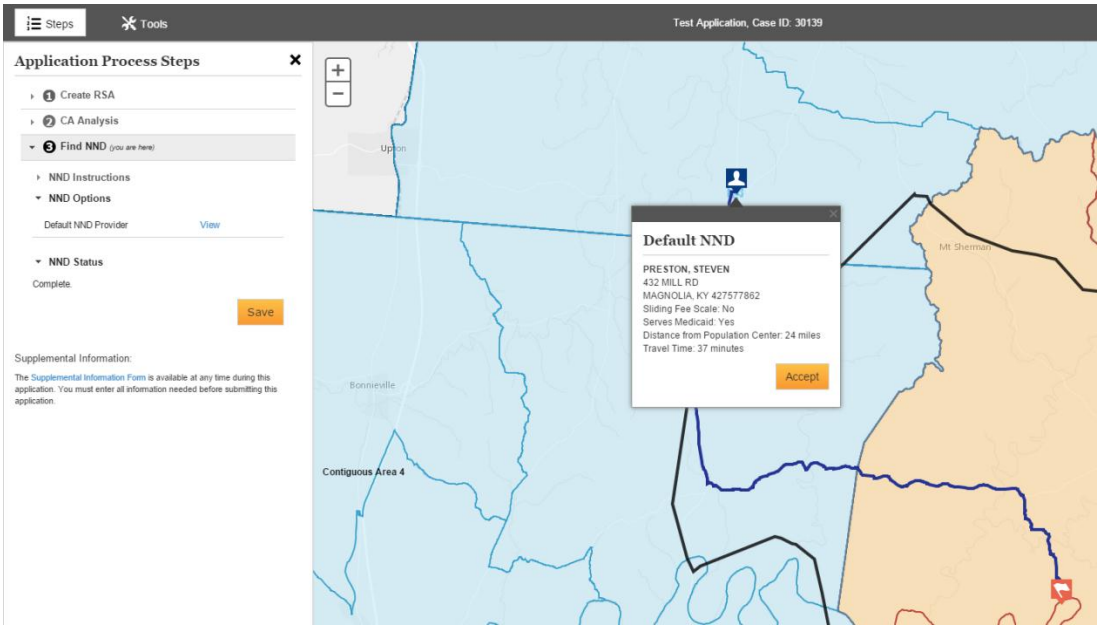
SYSTEM DEFAULT NEAREST NON-DESIGNATED PROVIDER

If the system has been able to locate a provider that meets the requirements of a Nearest Non-Designated Provider, then the system will identify this provider with the icon. The system will display the Provider Name, Address, Serves SFS? status, Serves Medicaid? status, Distance from the Population Center, and Travel Time. The system will also display the road path used to generate the travel distance and time. The user can view the route with the road labels by using the Street basemap.



The name, address and populations served statuses can be updated through Provider Management. If the user agrees with the System Default NND provider location, then the user should select the Accept button.

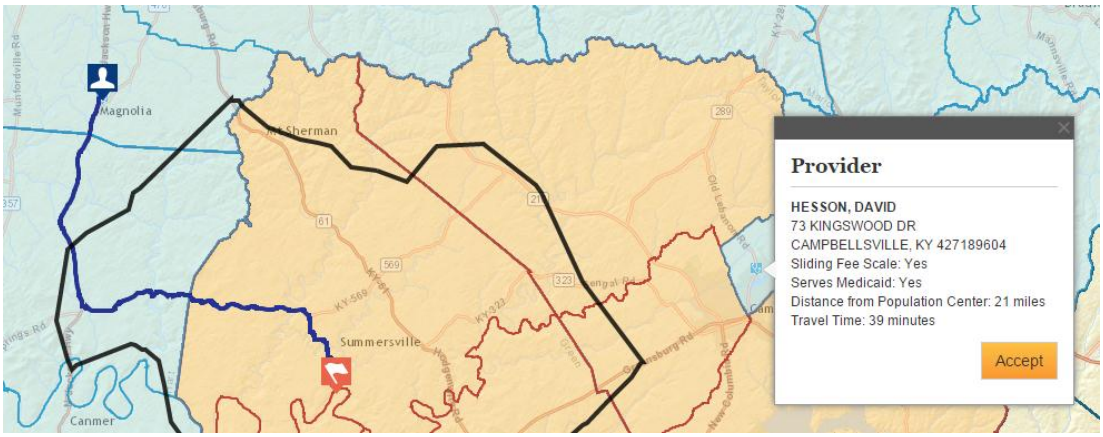
The user will have an opportunity to provide alternate travel distance and time through the Supplemental Information. At this point, the user should proceed to the Supplemental Information form to complete any necessary explanations in order to view the score. If no further explanations are required at this point, the system will generate the score, described in the 5M Scoring section.



USER SELECTED NEAREST NON-DESIGNATED PROVIDER

In certain cases, the system may be unable to identify a suitable provider to serve as the NND, or the user may wish to select an alternate NND. This can occur for several reasons.

1. **There are no providers in the search radius that serve the RSA population:** If the system cannot locate a provider within the search radius, the user will be prompted to use the Usable Provider layer on the map

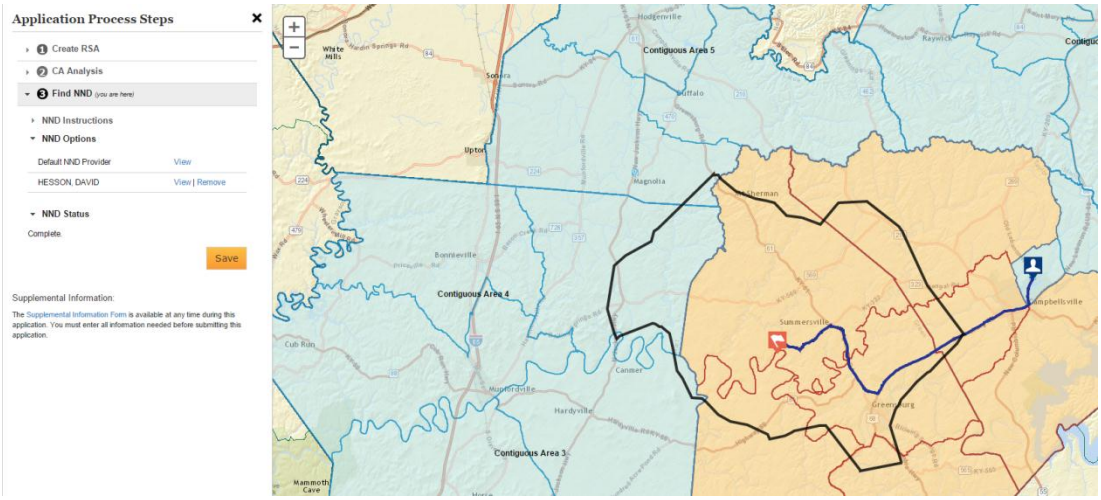


to select the provider. The user should use the standard cursor, not a “Select By” tool to select the provider. When the user clicks on the Provider icon, the system will calculate the distance and travel time to the provider. The user may proceed to select potential NNDs in the area by using the “X” in the top right corner of the Provider pop over to close the window in order to see the map. If the user wishes to use a chosen provider in the application, the user should select the Accept button. Once the user selects this button, the system will reassign the icon to the user selected NND.

In certain cases, the system may not be able to calculate the Distance and Travel Time due to inaccessible roads in the road data. If this occurs, the system will display an error message on the Provider pop over on the map. The user should enter the travel time and distance on the Supplemental Information form in order to receive a score for this section.

2. **There are no providers in Provider Management that serve the RSA population:** If the system cannot identify any providers in Provider Management that serve the RSA population, then the provider will assign the maximum number of points for the NND. The system will automatically move the application to the Supplemental Information completion step, or scoring if the required information has already been provided through Supplemental Information. However, this case is very rare, and it is recommended that the user reviews the Provider Management data for the state to ensure that the appropriate providers have been surveyed and updated with the latest data for populations served.

3. **The system default NND is not the best choice for the RSA:** If the user has reason to believe that the system identified NND is not the best choice for the designation, then the user may select an alternate NND. An explanation will be required on Supplemental Information to justify the PCO's rationale in this case. The user should use the standard cursor, not a "Select By" tool to select the provider. When the user clicks on the Provider icon, the system will calculate the distance and travel time to the provider. The user may proceed to select potential NNDs in the area by using the "X" in the top right corner of the Provider pop over to close the window in order to see the map. If the user wishes to use a chosen provider in the application, the user should select the Accept button. Once the user selects this button, the system will



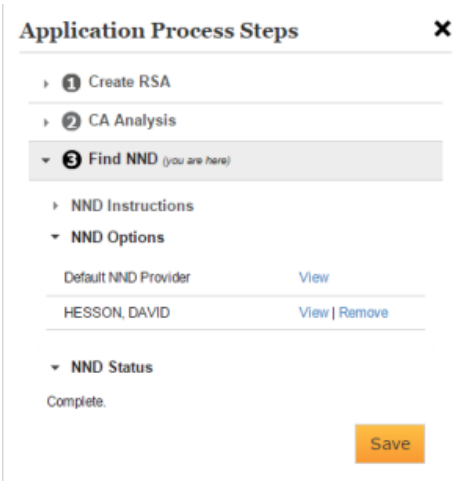
reassign the icon to the user selected NND. The PCO selected NND's name will appear on the Application Process Steps panel to the left.

In certain cases, the system may not be able to calculate the Distance and Travel Time due to inaccessible roads in the road data. If this occurs, the system will display an error message on the Provider pop over on the map. The user should enter the travel time and distance on the Supplemental Information form in order to receive a score for this section.

REVERTING FROM USER NND TO SYSTEM DEFAULT NND

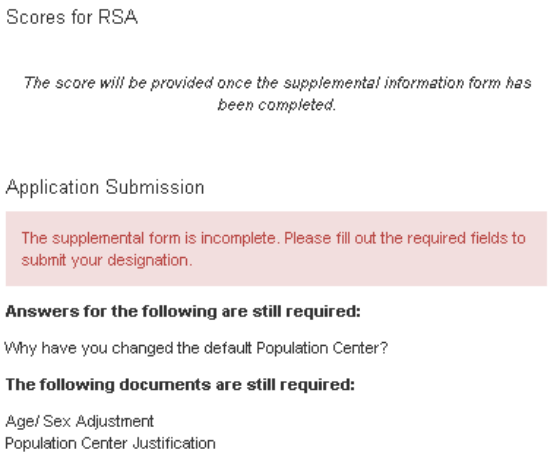
After selecting a User NND, the PCO may wish to view information about the Default NND or User NND. In order to view the NND information on the map, the user can select the "View" link on the Application Process Steps panel.

If the PCO wishes to revert to the system NND, the "Remove" link next to the User NND provider's name can be selected. This will update the NND back to the Default NND. Upon selecting Save the Default NND will be used in Scoring.



SECTION 2M: APPLICATION SUBMISSION CHECKS

Once the user saves the NND section, the system will automatically direct the user to an Application Submission message. If information is required to be completed in the Supplemental Information form before submission, the user will be notified with a red warning message. If information is required to be completed in Supplemental Information, the Designation scoring value will not appear until the form is completed.



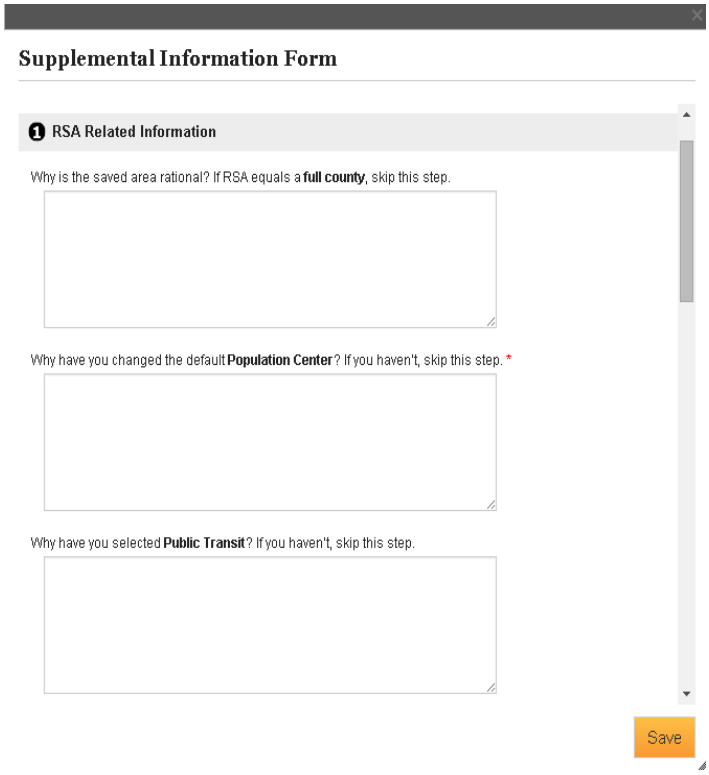
If the user has not changed any system information on the application, they will not be required to complete the Supplemental Information Form and will be directed right to scoring and submit.

SECTION 2N: SUPPLEMENTAL INFORMATION FORM

The Supplemental Information Form is available to the user at any time of the application after an RSA is saved. The form is intended for the user to enter information and justification specific to the designation. Some of the information of the supplemental information form varies by the Discipline used. The form can be accessed by selecting Supplemental Information Form at the bottom of the Application Process Steps panel. The form is divided into the following sections:

1. **RSA Related Information**
2. **CA Analysis Information**
3. **NND Related Information**
4. **Supporting Documents**

RSA RELATED INFORMATION FOR PRIMARY CARE



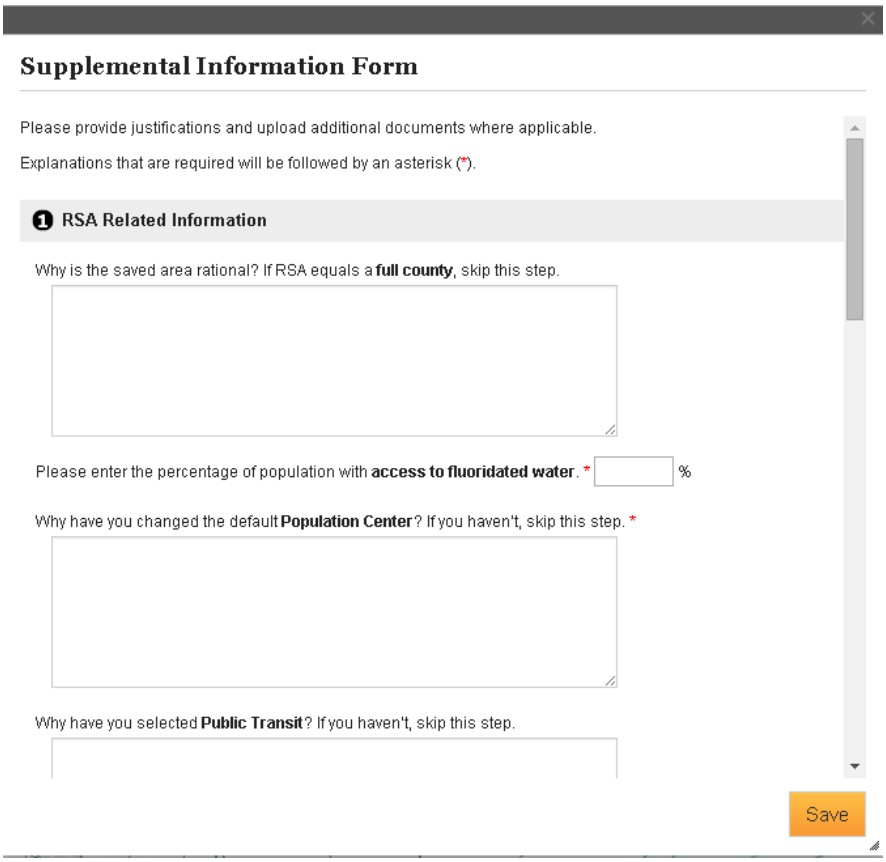
1. **RSA Related Information:** This is the first section of the Supplemental Information Form. The user should complete all required fields, indicated by *. Once the desired information is entered, the user should select the Save button to save the responses.

   Business Rules:

   - The text boxes in this section are an alpha-numeric field and have a 500 character maximum.
   - The user can edit these fields at any point during the application.

- The fields displaying * are dynamic based on what has been completed on the application and will guide the user on where a justification or explanation must be entered before submitting the application.

RSA RELATED INFORMATION FOR DENTAL HEALTH

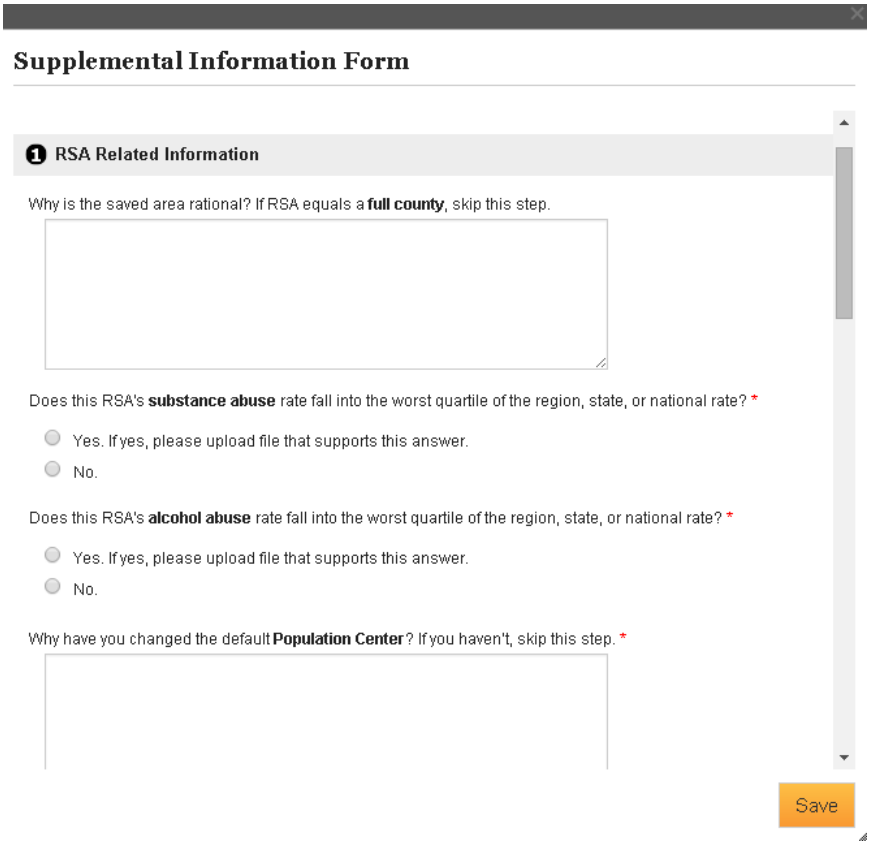


1. **RSA Related Information:** For Dental Health, this section has all the fields as Primary Care with the additional field where the user must enter the Fluoridation Rate for that RSA. The user should complete all required fields, indicated by *. Once the desired information is entered, the user should select the Save button to save the responses.

   Business Rules:

   - The text boxes in this section are an alpha-numeric field and have a 500 character maximum.
   - The Fluoridation Rate field should be less than 3 digits.
   - Please refer to the **Shortage Designation Management System Manual for Policies and Procedures** for more detailed policy information about the Fluoridation Rate.

RSA RELATED INFORMATION FOR MENTAL HEALTH



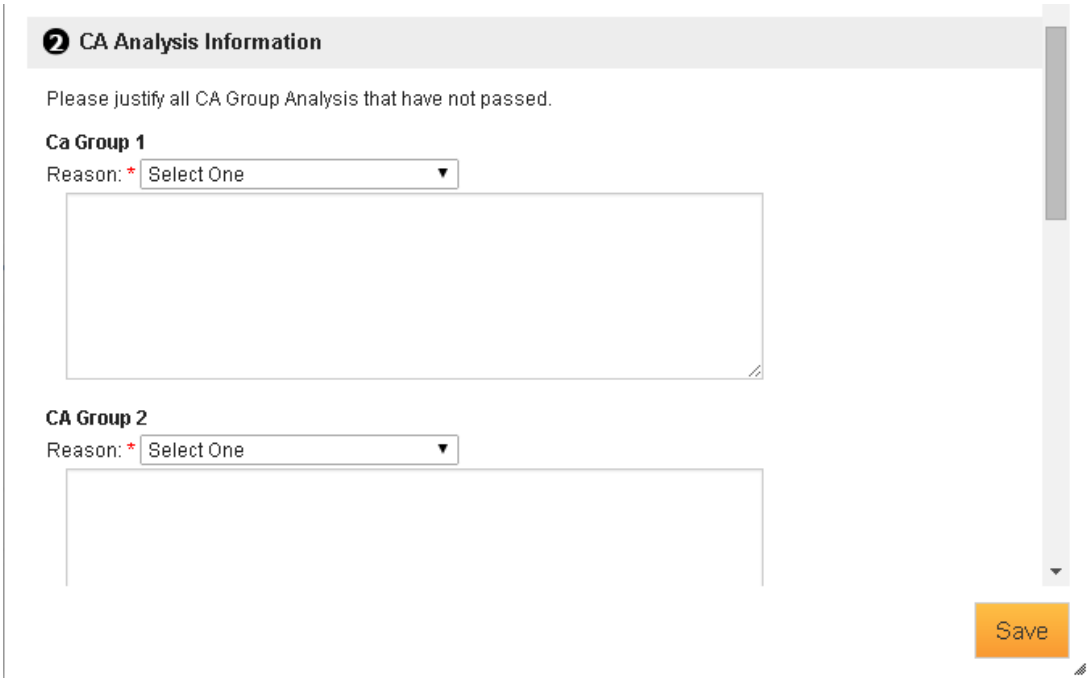
1. **RSA Related Information:** For Mental Health, this section has all the fields as Primary Care with the additional field where the user must answer the following questions about the substance abuse rate and alcohol abuse rate in the RSA (Please see screen shot above). The user should complete all required fields, indicated by *. Once the desired information is entered, the user should select the Save button to save the responses.

   Business Rules:

   - The text boxes in this section are an alpha-numeric field and have a 500 character maximum.
   - If the user selects Yes for the substance abuse and/or alcohol abuse questions, a document is required to be uploaded on the Supplemental Information form. Please refer to the **Shortage Designation Management System Manual for Policies and Procedures** for more detailed policy information about the substance and alcohol abuse rate.

CA ANALYSIS INFORMATION

The CA Analysis Information section pictured below will only appear to the user if a CA group selected does not pass the system analysis.



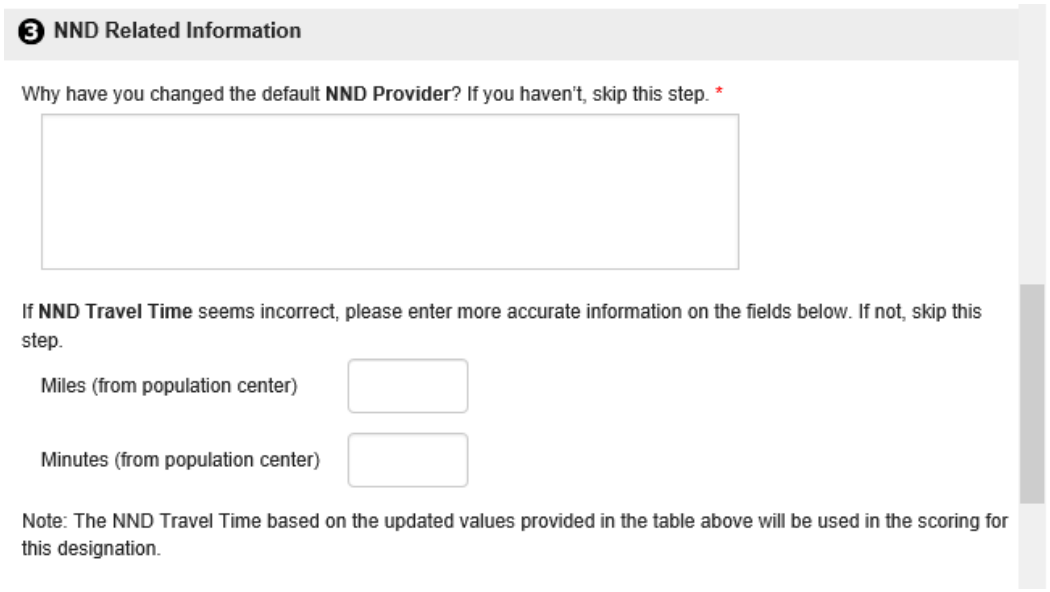
1. **Reason:** The user should use this drop down to select a reason why the area selected is a valid Contiguous Area group. The user will choose from the following options in the drop down:
    - Current Designation
    - Overutilized
    - Excessively Distant
    - Inaccessible Economic Access
    - Demographic Disparity
    - Other Access Barriers

    Business Rules:

    - The user is required to select a reason indicated by the *.
    - The user is required to enter an explanation about why the CA group passes based on the selected reason.
    - The user is required to upload supporting documentation to prove the reason and justification for why the CA group qualifies.

NND INFORMATION

The NND Related Information section will always appear on the Supplemental Information form but will only be required, as indicated by the *, if the user has selected a non-Default NND provider.



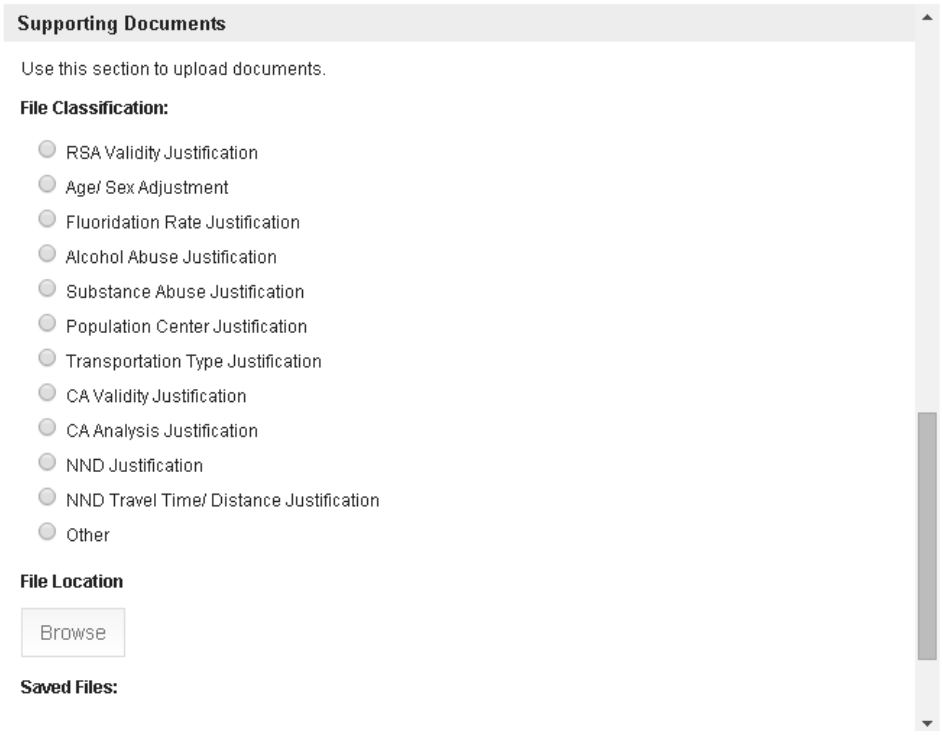
1. Miles (from population center) : This field can be used to input a different miles value for the distance from the population center to the accepted NND. The user will be required to upload evidence in the supporting documents section if a mile value is inputted.
2. Minutes (from population center) : This field can be used to input a different minute value for the travel time from the population center to the accepted NND. The user will be required to upload evidence in the supporting documents section if a minute value is inputted.
3. The miles and minutes fields can be used for both default system NND and also User NND. The user must select Save on the supplemental information form in order to have the score recalculated to reflect the user entered travel time and distance.

Business Rules:

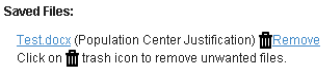
- The user is required to complete all fields indicated by *.
- The text boxes in this section are an alpha-numeric field and have a 500 character maximum.
- The miles and minutes fields are numeric and limited to 3 characters.
- The user is required to upload justification in the supporting documents section if a value is entered in the miles and/or minutes field.

SUPPORTING DOCUMENTS

The Supporting Documents section allows the user to upload document justifications to the Mapping Tool.



1. **File Classification:** The user should select the radio button ( ) for the justification desired to upload. **Important Information to Note:** The user can only select one radio button ( ) at a time.
2. Browse **:** Once the user has selected a file classification, the browse button will be enabled for the user to search for a document to upload
3. **Saved Files:** Once the user has successfully uploaded a document, it will appear under this section.



The user can view the document by selecting the hyperlink (Test.docx) on the document name. The user can also remove a file from the form by selecting Remove .

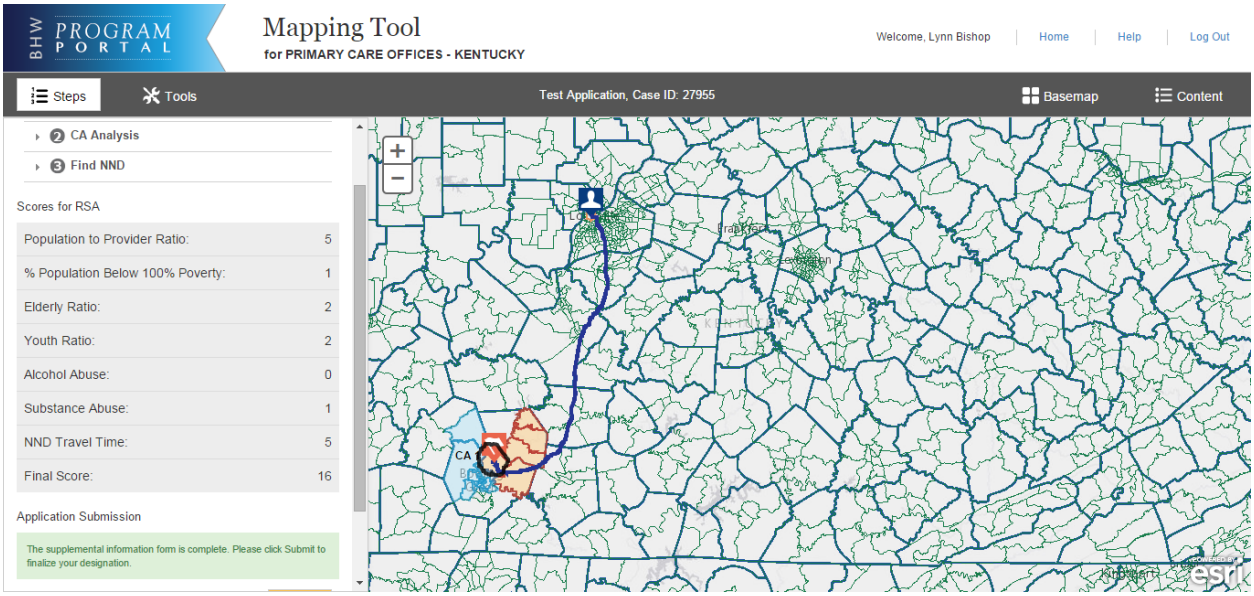
ADDITIONAL DOCUMENTS AND SCREENSHOTS

The Supplemental Information document upload section also provides the user with the ability to upload additional, optional documents prior to submitting the application. The PCO may use this document option to upload any additional information that is important to understand the designation being submitted.

It is recommended that the user takes a screenshot of the final map screen and attaches it to the Supplemental Information “other” document to provide the DPDS analyst with additional information for reviewing the designation.

PC users can use the “PrtSc” button to the right of the space on most standard keyboards to take a screenshot of the map. This image can be pasted in a Word document, or saved as a .pdf and then uploaded.

Depending on the user’s organization’s guidelines, the user can also use a free screen capture such as Jing (http://www.techsmith.com/snagit.html) to take and save screenshot in .jpg format.



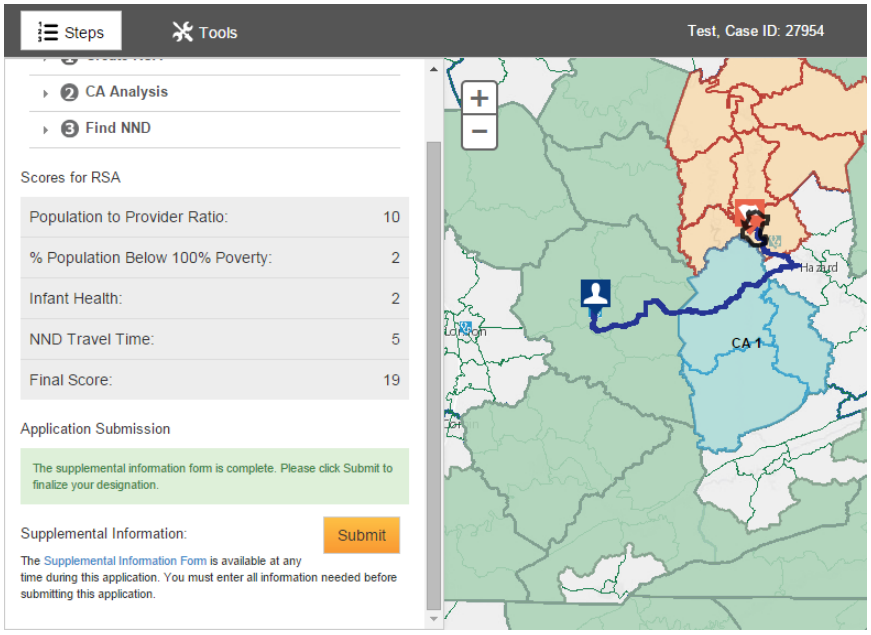
SECTION 2O: SCORING

Upon completion of the Rational Service Area, Contiguous Area Analysis, Nearest Non-Designated Provider sections and Supplemental Information Form, the system will generate a Designation score. If the user is creating an MUA/P, the score will be generated after the Rational Service Area step is completed. The following sections describe the system process for scoring a designation by type and discipline. The full description of the data used and guiding policy can be found in MPPS.

PRIMARY CARE DESIGNATION SCORE

The Primary Care HPSA score will include sub-scores for the following components: Population:Provider Ratio of the RSA, Percent of the Population at 100% of the Federal Poverty Level for the RSA, the Infant Mortality Rate or Low Birth Weight Rate for the RSA, and the Travel Time from the population center of the RSA to the Nearest Non-Designated Provider. The system will use the statistic that provides the higher number of sub-score points when determining the use of the Infant Mortality Rate versus the Low Birth Weight Rate.

The score will be generated when the user has completed all steps of the application and has completed the required text entry for the application on the Supplemental Information form. Once these conditions have been satisfied, the system will generate the overall Designation score.



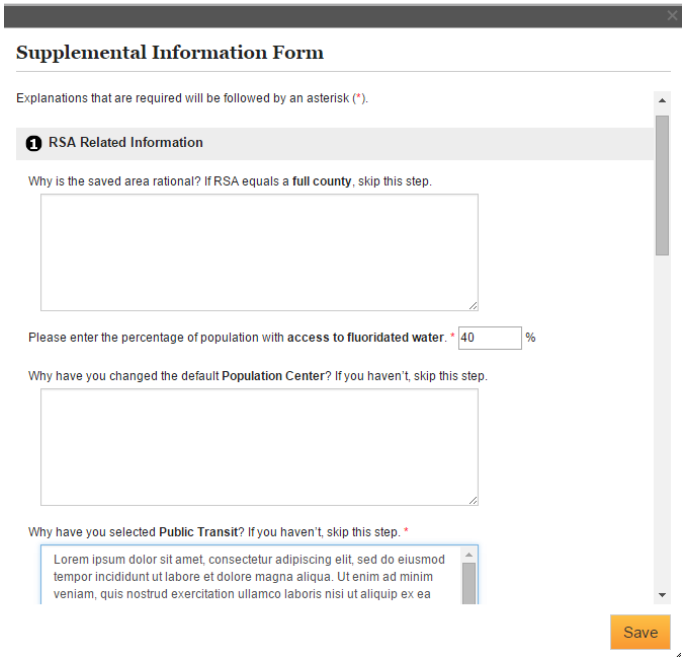
The user is not required to upload all documents in order to view a score.

If the user elects to Go Back in the application, all steps must be completed again to receive an updated score. If the user changes the Travel Time or Distance for the NND on the Supplemental Information form, the NND justification must be provided, the user should select “Save” on the Supplemental Information form, and the system will be prompted to recalculate the score based on the updated travel time and distance.

DENTAL HEALTH DESIGNATION SCORE

The Dental Designation score will include sub-scores for the following components: Population:Provider Ratio of the RSA, Percent of the Population at 100% of the Federal Poverty Level for the RSA, the Percent of the Population With Access to Fluoridated Water, and the Travel Time from the population center of the RSA to the Nearest Non-

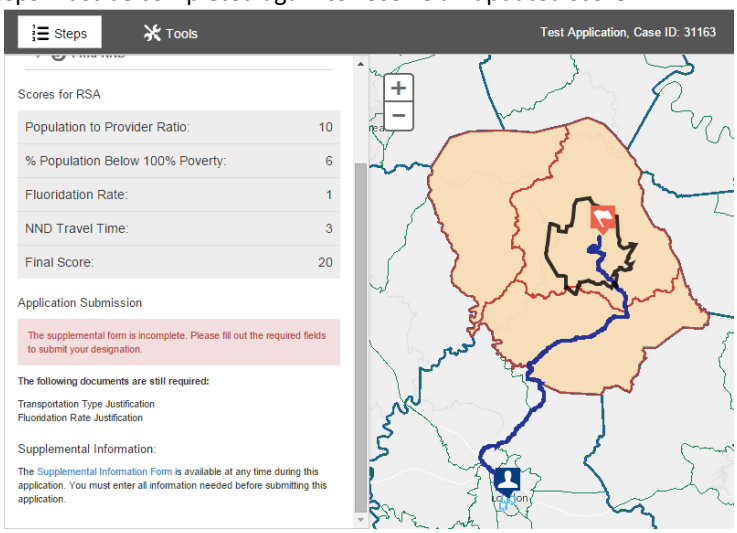
Designated Provider. The system will use the statistic provided on the Supplemental Information form for the Fluoridated Water in order to complete the score. The PCO may update the population with access to fluoridated water on the Supplemental Information form at any time during the application.



If the value entered is 50% or less, then the Fluoridation Rate sub-score will be generated with 1 point. If the value is greater than 50%, then this sub-score will remain as a 0.

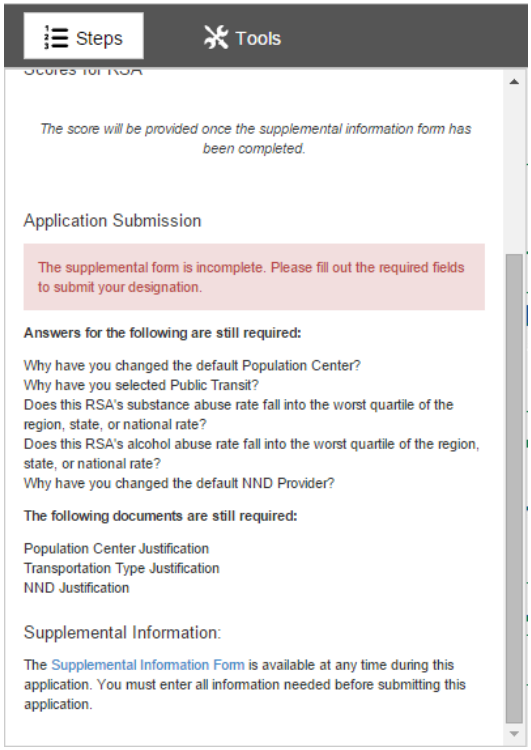
The score will be generated when the user has completed all steps of the application and has completed the required text entry for the application on the Supplemental Information form. The user isn't required to upload all documents in order to view a score. Once these conditions have been satisfied, the system will generate the overall Designation score.

If the user elects to Go Back in the application, all steps must be completed again to receive an updated score. If the user changes the Travel Time or Distance for the NND on the Supplemental Information form, the NND justification must be provided, the user should select "Save" on the Supplemental Information form, and the system will be prompted to recalculate the score based on the updated travel time and distance.

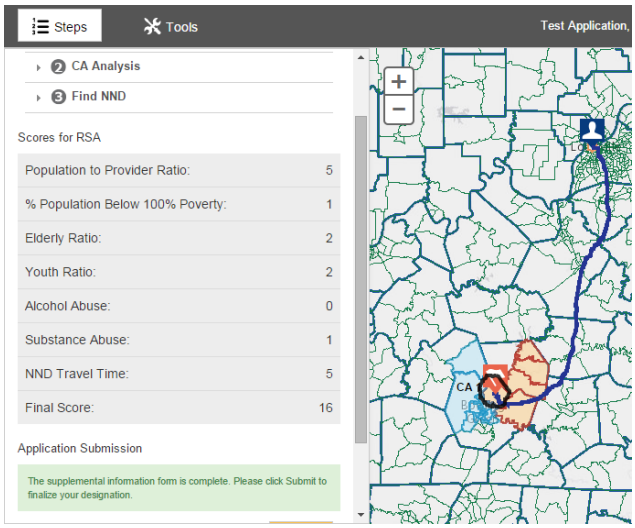


MENTAL HEALTH DESIGNATION SCORE

The Mental Designation score will include sub-scores for the following components: Population:Provider Ratio of the RSA, Percent of the Population at 100% of the Federal Poverty Level for the RSA, the Elderly Ratio, the Youth Ratio, the Prevalence of Alcohol Abuse in the RSA, the Prevalence of Substance Abuse in the RSA, and the Travel Time from the population center of the RSA to the Nearest Non-Designated Provider. The system will use the statistic provided on the Supplemental Information form for the Fluoridated Water in order to complete the score.



The score will be generated when the user has completed all steps of the application and has completed the required text entry for the application on the Supplemental Information form. The user isn't required to upload all documents in order to view a score. Once these conditions have been satisfied, the system will generate the overall Designation score, as shown in the image below.

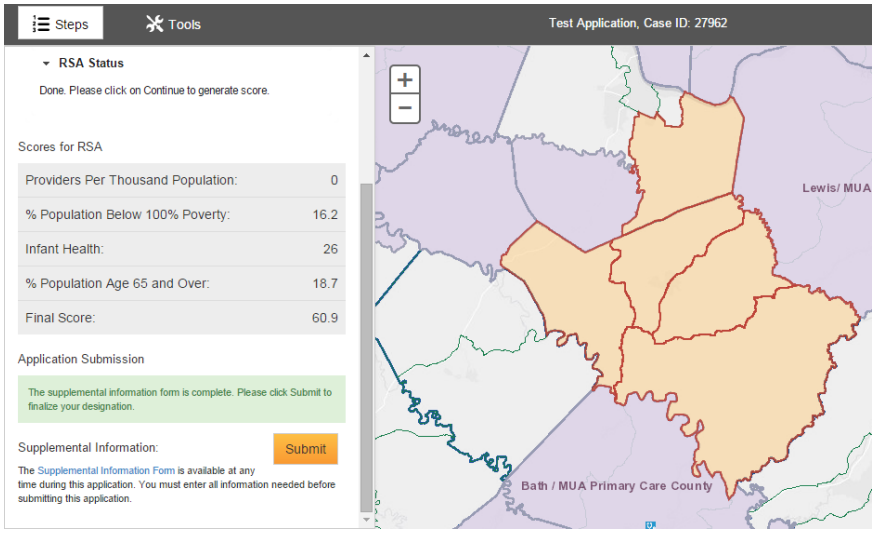


If the user elects to Go Back in the application, all steps must be completed again to receive an updated score. If the user changes the Travel Time or Distance for the NND on the Supplemental Information form, the NND justification must be provided, the user should select "Save" on the Supplemental Information form, and the system will be prompted to recalculate the score based on the updated travel time and distance.

MUA/P SCORE

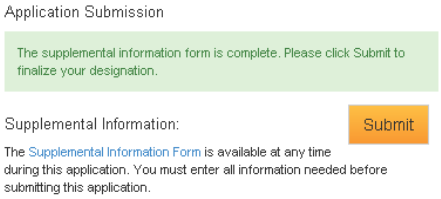
The MUA/P score will include sub-scores for the following components: Providers Per Thousand Population of the RSA, Percent of the Population at 100% of the Federal Poverty Level for the RSA, the Infant Mortality Rate for the RSA, and the Percent of the Population Age 65 and Over of the RSA.

The score is generated when the PCO has successfully created a valid RSA.



SECTION 2P: SUBMIT

Once the user has completed all required information in the Supplemental Information Form, the system will enable the Submit button and display a green message to the user that the supplemental form has been completed. Once the user selects the Submit button, the system will automatically direct the user to the General Information section of the profile for the designation submitted (See Primary Care Portal User Guide).



Important Information to Note: Once the user selects submit and is directed to the profile, the user will no longer be able to access the map for that specific designation. Until the view map functionality is implemented in the future, the user might want to take a screen shot of the finished map before submitting it to DPSD for review.