

The following is an example of extracting Lat/Long data from a larger polyline or polygon to create a new map object.

Populated Coastline Methodology

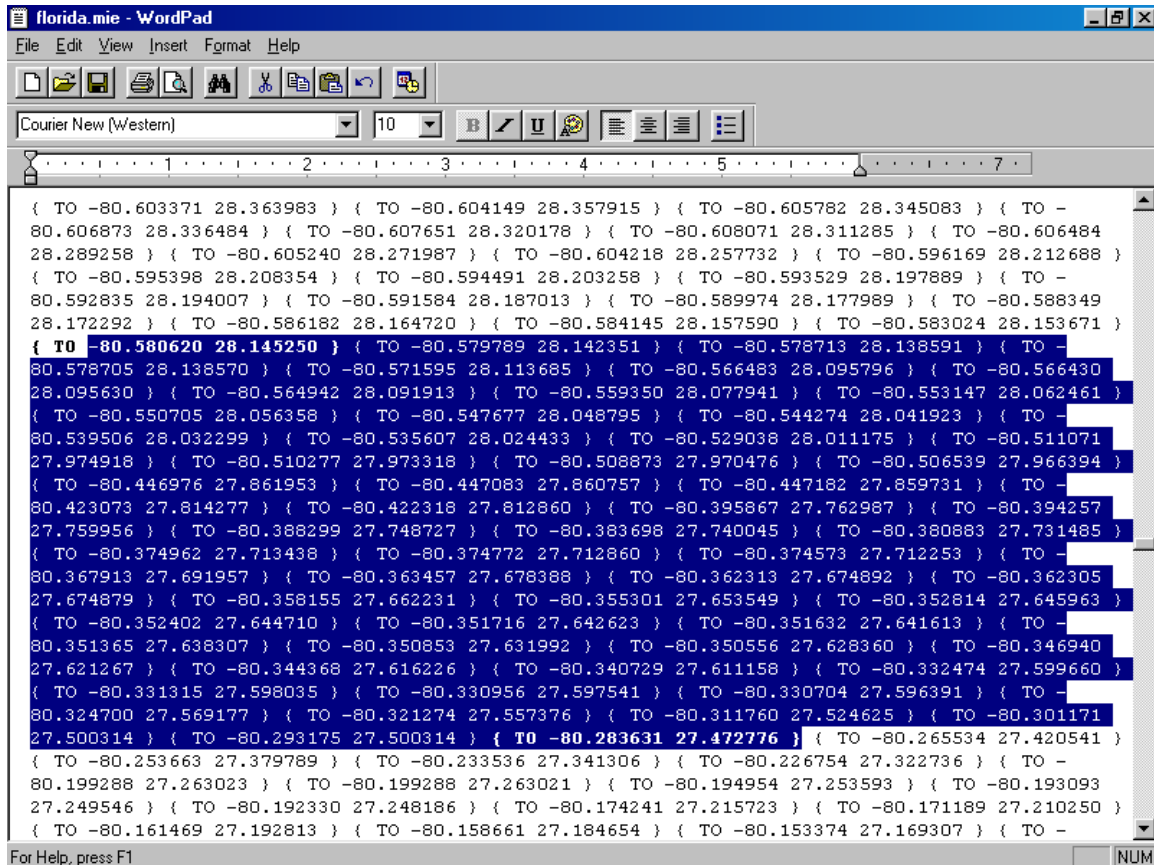
Problem: Determine the population living within five miles of the Florida coastline defined by the Latitude/Longitude pairs—27.455, -80.280 and 28.144, -80.581.

1. Create a new MARPLOT layer called “Florida Coastline”. Creating a new layer places the layer in active mode with the map drawing tools available. Use MenuBar View/Go to Lat/Long . . . to go to point defined by the initial Latitude/Longitude pair at scale of 10 miles. Mark the point. Create a new arbitrary four point polyline called, “Coastline 27.455, 80.280”, Color = pink and Line = double. Export the object as *coastline.mie*. After exporting, the polyline can be deleted. It has served its purpose of creating a shell to contain lat/long data that will be obtained in the next step.
2. In the general area of the marked point, select the closest segment on the polygon object that defines Florida. Using Objects/Object Segments . . . , determine the number that identifies the segment. In this case, it is segment 2125 of 3796 segments. Similarly, locate the segment number closest to the second latitude/longitude pair. It is segment 2066. This means that the series of lat/long pairs that define the Florida polygon proceed from Segment 2066 in order to Segment 2125. We have established the text order in the MIE file for Florida.
2. Export the State of Florida as *florida.mie*. Open the file with WordPad. The following process is somewhat easier if Word Wrap is turned on. Use Edit/Find to find, “28.14”¹. Your initial Find may not match the designated lat/long pair Use ‘Find Again’ (F3) to scroll through the latitude/longitude pairs until a best match is found. Use Format/Fonts to place this found vertex in **Bold** text for easy recognition. Similarly locate, “27.45” and its best matched lat/long pair.. Place this vertex in **Bold**. Ignoring that part of the text that reads, “{ To ”, select the text bounded by the two **Bolded** texts and do a ‘Copy’. This graphic is shown below.
3. Open *coastline.mie* with WordPad. Select and delete all latitude/longitude data immediately following the text, “**From** ”. Do not include the final bracket as, “}”. Replace this selected text with the text as copied in Paragraph 2., above. This is shown below. Save the edited document.
4. Import the edited *coastline.mie* into MARPLOT. This is shown below.
5. With this new coastline polyline in ‘Select’ mode, use Edit/Make New Polygon . . . to create a new polygon of radius “5 miles” about the polyline. This polygon can be used to capture containing Census Blocks and to determine population information in LandView. The new coastline polygon resides on the Temporary

¹ While our initial search is for Latitudes defined to two decimal places, we could be told that this value is not ‘found’. It could be necessary to expand our search up or down by several hundredths. In this case, we would expand our search to 28.15 and/or 2813.

layer in MARPLOT. If it is to be saved for future reference, it needs to be moved to a permanent layer.

6. The answer, as shown below, is 263, 746.
7. This method can be applied to saving a portion of any larger polygon/polyline as a new polyline.



Select and Copy the **Bolded** Text

```
"USER" "USER" "00000" "06/12/03" 2
"" "Coastline 27.455, 80.280" 0 "Coastline" "User's Map" POLYLINE "BBODE01E60FB0001" 1263771
"X00" 0 ONLY 16777216
PINK 2 BLACK WHITE { FROM -80.350114 28.266390 } { TO -80.094485 28.034531 } { TO -79.784322
28.157989 } { TO -79.630944 28.432004 } }
```

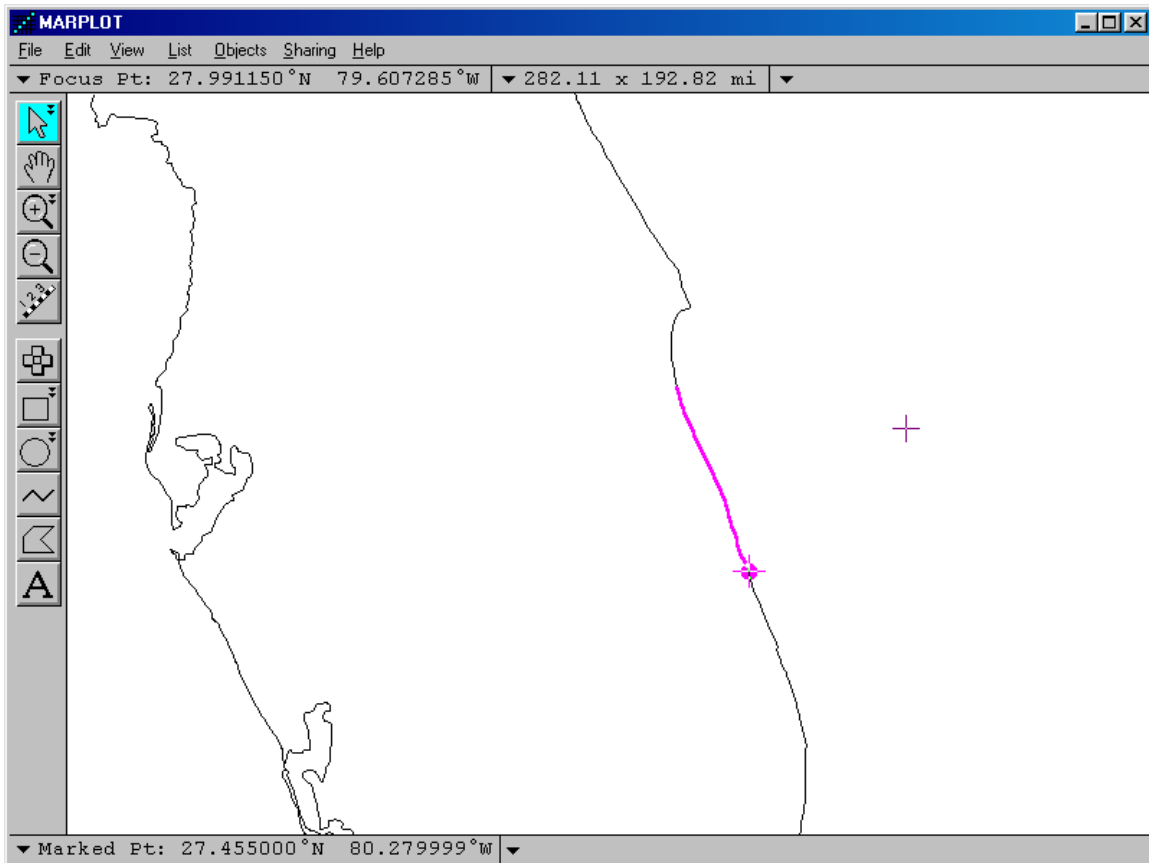
Replace the lat/long data in the Shell file with the Extracted Data from Florida

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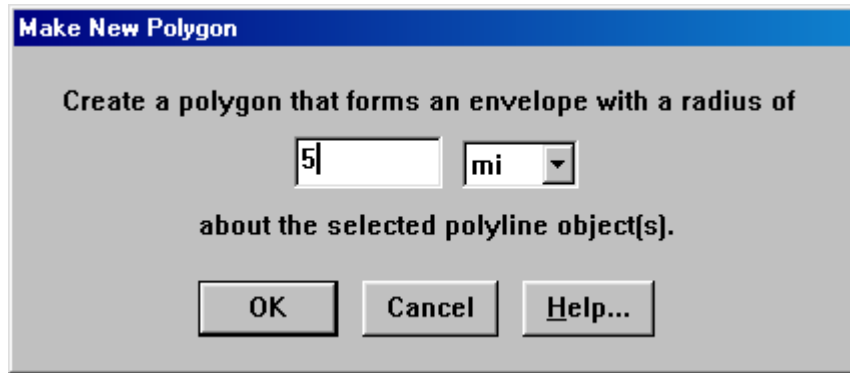
"USER" "USER" "00000" "06/12/03" 2
"" "Coastline 27.455, 80.280" 0 "Coastline" "User's Map" POLYLINE "BBODE01E60FB0001" 1263771
"X00" 0 ONLY 16777216
PINK 2 BLACK WHITE { ( FROM -80.580620 28.145250 ) ( TO -80.579789 28.142351 ) ( TO -80.578713
28.138591 ) ( TO -80.578705 28.138570 ) ( TO -80.571595 28.113685 ) ( TO -80.566483 28.095796 )
( TO -80.566430 28.095630 ) ( TO -80.564942 28.091913 ) ( TO -80.559350 28.077941 ) ( TO -
80.553147 28.062461 ) ( TO -80.550705 28.056358 ) ( TO -80.547677 28.048795 ) ( TO -80.544274
28.041923 ) ( TO -80.539506 28.032299 ) ( TO -80.535607 28.024433 ) ( TO -80.529038 28.011175 )
( TO -80.511071 27.974918 ) ( TO -80.510277 27.973318 ) ( TO -80.508873 27.970476 ) ( TO -
80.506539 27.966394 ) ( TO -80.446976 27.861953 ) ( TO -80.447083 27.860757 ) ( TO -80.447182
27.859731 ) ( TO -80.423073 27.814277 ) ( TO -80.422318 27.812860 ) ( TO -80.395867 27.762987 )
( TO -80.394257 27.759956 ) ( TO -80.388299 27.748727 ) ( TO -80.383698 27.740045 ) ( TO -
80.380883 27.731485 ) ( TO -80.374962 27.713438 ) ( TO -80.374772 27.712860 ) ( TO -80.374573
27.712253 ) ( TO -80.367913 27.691957 ) ( TO -80.363457 27.678388 ) ( TO -80.362313 27.674892 )
( TO -80.362305 27.674879 ) ( TO -80.358155 27.662231 ) ( TO -80.355301 27.653549 ) ( TO -
80.352814 27.645963 ) ( TO -80.352402 27.644710 ) ( TO -80.351716 27.642623 ) ( TO -80.351632
27.641613 ) ( TO -80.351365 27.638307 ) ( TO -80.350853 27.631992 ) ( TO -80.350556 27.628360 )
( TO -80.346940 27.621267 ) ( TO -80.344368 27.616226 ) ( TO -80.340729 27.611158 ) ( TO -
80.332474 27.599660 ) ( TO -80.331315 27.598035 ) ( TO -80.330956 27.597541 ) ( TO -80.330704
27.596391 ) ( TO -80.324700 27.569177 ) ( TO -80.321274 27.557376 ) ( TO -80.311760 27.524625 )
( TO -80.301171 27.500314 ) ( TO -80.293175 27.500314 ) { TO -80.283631 27.472776 } )

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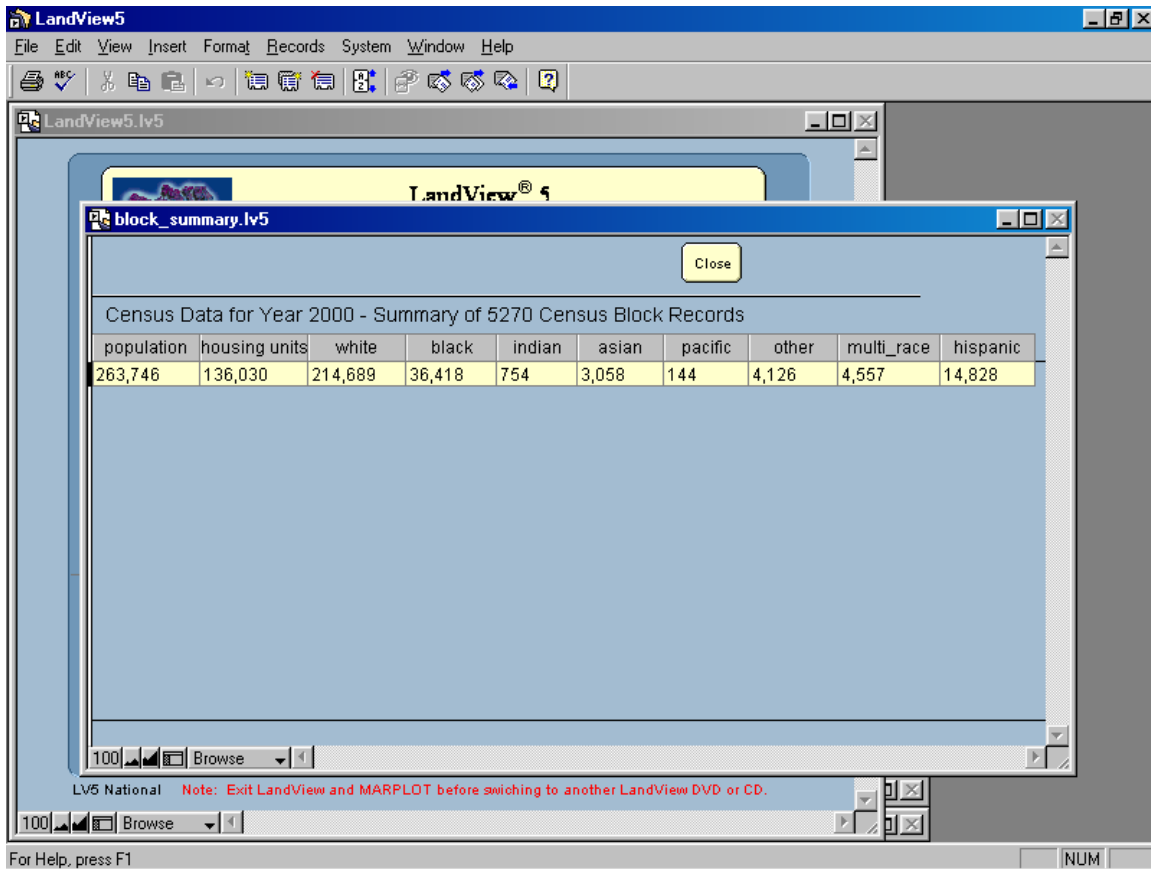
The Edited MIE File to be imported back into MARPLOT



The Coastline map object super-imposed on the Florida State Boundary Object



Making the polyline Coastline Map Object into a Polygon



LandView Population Statistics from Block Points within the Coastline Polygon