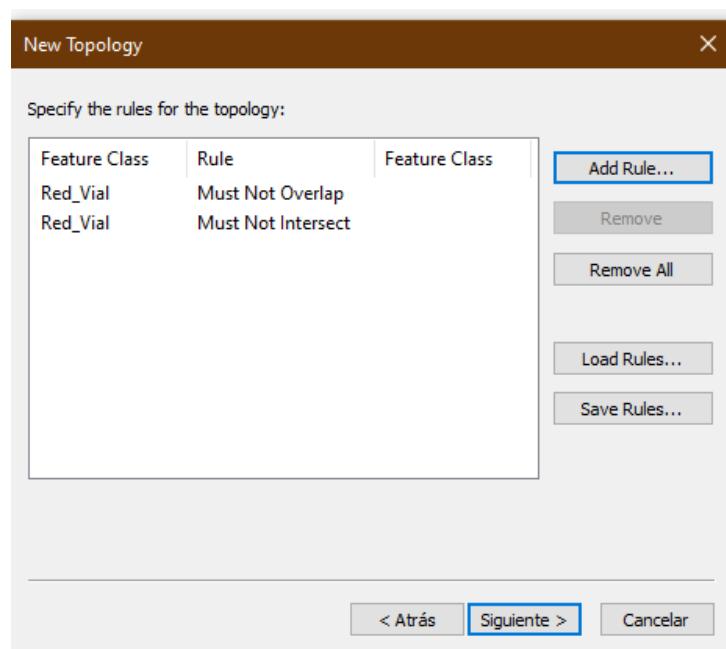
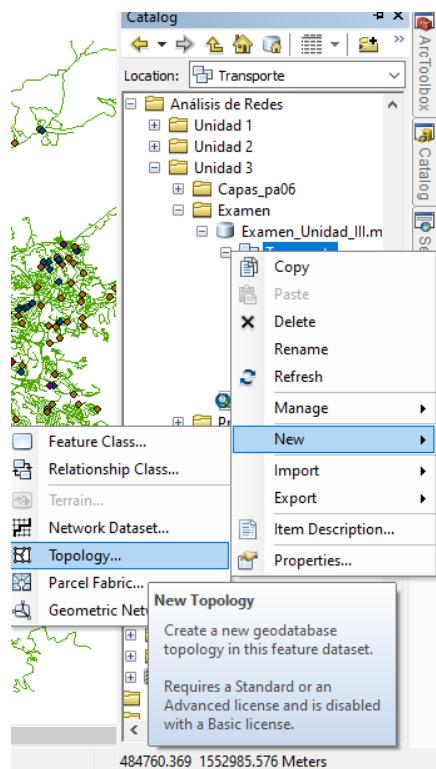




1. Realizar la limpieza topológica de la red vial, aplicando las siguientes dos reglas:

- Must not overlap
- Must not intersect

Creación de la topología





UNIVERSIDAD NACIONAL AUTONOMA DE HONDURAS
FACULTAD DE CIENCIAS ESPACIALES
CTE 324 – Análisis de Redes



The screenshot shows the ArcMap interface with a map of a city area. The Table of Contents on the left lists several layers, including **Red_Vial**, **Postas_Policiales**, and **Unidades_Salud**. A context menu is open over a red polygon feature, with the **Start Editing** option highlighted. A tooltip message reads: "Start an edit session so you can edit features or attributes. Press F1 for more help."

Errores en la capa de red vial:

The screenshot shows the ArcMap interface with the following components:

- Table of Contents:** Shows a tree view of layers. The "Transporte_Topology" layer is expanded, displaying "Area Errors" (Line Errors and Point Errors), "Universidades_DC", "Unidades_Salud", "Postas_Policiales", "Iglesias", and "Escuelas".
- Map View:** Displays a network topology (green lines) with numerous red error markers (dots and squares) scattered across the network, particularly in a dense cluster in the center-right.
- Error Inspector:** A table showing errors from rules. The "Show:" dropdown is set to "Errors from all rules". The table has columns: Rule Type, Class 1, Class 2, Shape, Feature 1, Feature 2, and Exception. The "Shape" column contains icons representing different error types (square, dot, cross). The "Exception" column has a checked checkbox.



2. Calcular el campo de velocidades en base a las siguientes restricciones:

- Anillo Periférico: 80 Km/h
- Bulevares (todos): 60 Km/h
- Resto (todas las demás): 40 Km/h

Table

Red_Vial

OBJECTID *	Shape *	osm_id	name	highway	Shape_Length	VELOCIDAD_KM_H
11154	Polyline	39580783		residential	71.242601 <Null>	
11155	Polyline	419357201	Avenida Las Uvas	tertiary	120.000008 <Null>	
11156	Polyline	419357200	Avenida Las Uvas	tertiary	174.604561 <Null>	
11157	Polyline	39580783		residential	12.936296 <Null>	
11158	Polyline	259936687		residential	60.424931 <Null>	
11159	Polyline	259936691		residential	8.641736 <Null>	
11160	Polyline	39581373		residential	13.8212 <Null>	
11161	Polyline	419357201	Avenida Las Uvas	tertiary	134.517973 <Null>	
11162	Polyline	259936686		residential	8.710408 <Null>	
11163	Polyline	364970490		residential	6.721833 <Null>	
11164	Polyline	204252039		residential	41.517585 <Null>	
11165	Polyline	204252064		residential	43.392344 <Null>	
11166	Polyline	39581306		residential	23.443271 <Null>	
11167	Polyline	204252069		residential	93.835421 <Null>	
11168	Polyline	39581304		residential	12.948953 <Null>	
11169	Polyline	419357201	Avenida Las Uvas	tertiary	60.400672 <Null>	
11170	Polyline	39611204		residential	13.102805 <Null>	
11171	Polyline	414255227		residential	31.900707 <Null>	
11172	Polyline	39611207		residential	25.372975 <Null>	
11173	Polyline	414255227		residential	43.223162 <Null>	
11174	Polyline	39611201		residential	36.987292 <Null>	
11175	Polyline	414255227		residential	52.421323 <Null>	
11176	Polyline	39611491		residential	63.318804 <Null>	
11177	Polyline	39611496		residential	38.690662 <Null>	
					29.442024	

Examen - ArcMap

Select by Attributes

Enter a WHERE clause to select records in the table window.

Method : Create a new selection

[OBJECTID]
[osm_id]
[name]
[highway]
[Shape_Length]

= <> Like
> > = And
< < = Or
? * () Not
Is In Null Get Unique Values Go To: ani

SELECT * FROM Red_Vial WHERE:
[name] = 'Anillo Periférico'

Clear Verify Help Load... Save... Apply Close

11172 Polyline
11173 Polyline



Table

Red_Vial

OBJECTID *	Shape *	osm_id	name	highway	Shape_Length	VELOCIDAD_KM_H
11348	Polyline	179564143	Anillo Periférico	trunk_link	14.417704	<Null>
1106	Polyline	35126214	Anillo Periférico	trunk_link	124.02431	<Null>
3754	Polyline	179564142	Anillo Periférico	trunk_link	87.527061	<Null>
3755	Polyline	179564143	Anillo Periférico	trunk_link	114.745369	<Null>
7976	Polyline	408699482	Anillo Periférico	trunk	21.689147	<Null>

1 ▶ | 5 out of *2000 Selected

Red_Vial

Tabla de velocidad en la capa de red vial:

Table

Red_Vial

OBJECTID *	Shape *	osm_id	name	highway	Shape_Length	VELOCIDAD_KM_H
11154	Polyline	39580783		residential	71.242601	40
11155	Polyline	419357201	Avenida Las Uvas	tertiary	120.000008	40
11156	Polyline	419357200	Avenida Las Uvas	tertiary	174.604561	40
11157	Polyline	39580783		residential	12.936296	40
11158	Polyline	259936687		residential	60.424931	40
11159	Polyline	259936691		residential	8.641736	40
11160	Polyline	39581373		residential	13.8212	40
11161	Polyline	419357201	Avenida Las Uvas	tertiary	134.517973	40
11162	Polyline	259936686		residential	8.710408	40
11163	Polyline	364970490		residential	6.721833	40
11164	Polyline	204252039		residential	41.517585	40
11165	Polyline	204252064		residential	43.392344	40
11166	Polyline	39581306		residential	23.443271	40
11167	Polyline	204252069		residential	93.835421	40
11168	Polyline	39581304		residential	12.948953	40
11169	Polyline	419357201	Avenida Las Uvas	tertiary	60.400672	40
11170	Polyline	39611204		residential	13.102805	40
11171	Polyline	414255227		residential	31.900707	40
11172	Polyline	39611207		residential	25.372975	40
11173	Polyline	414255227		residential	43.223162	40
11174	Polyline	39611201		residential	36.698729	40
11175	Polyline	414255227		residential	52.421323	40
11176	Polyline	39611491		residential	63.318804	40
11177	Polyline	39611496		residential	38.690662	40

1 ▶ | (0 out of *2000 Selected)

Red_Vial

Calculo de minutos para poder obtener la impedancia:

Table

Red_Vial

Find and Replace...

Select By Attributes...

Clear Selection

Switch Selection

Select All

Add Field...

Show All Fields On

Turn All Fields On

Show Field Aliases

Add Field Adds a new field to the table.

Arrange Tables

Restore Default Column Widths

Restore Default Field Order

Joins and Relates

Related Tables

Create Graph...

Add Table to Layout

Reload Cache

Print...

Reports

Export...

Appearance...

it of *2000 Selected)

name	highway	Shape_Length	VELOCIDAD_KM_H	minutos
Venida Las Uvas	residential	71.242601	40	<Null>
Venida Las Uvas	tertiary	120.000008	40	<Null>
Venida Las Uvas	tertiary	174.604561	40	<Null>
Venida Las Uvas	residential	12.936296	40	<Null>
Venida Las Uvas	residential	60.424931	40	<Null>
Venida Las Uvas	residential	8.641736	40	<Null>
Venida Las Uvas	residential	13.8212	40	<Null>
Venida Las Uvas	tertiary	134.517973	40	<Null>
Venida Las Uvas	residential	8.710408	40	<Null>
Venida Las Uvas	residential	6.721833	40	<Null>
Venida Las Uvas	residential	41.517585	40	<Null>
Venida Las Uvas	residential	43.392344	40	<Null>
Venida Las Uvas	residential	23.443271	40	<Null>
Venida Las Uvas	residential	93.835421	40	<Null>
Venida Las Uvas	residential	12.948953	40	<Null>
Venida Las Uvas	tertiary	60.400672	40	<Null>
Venida Las Uvas	residential	15.102805	40	<Null>
Venida Las Uvas	residential	31.900707	40	<Null>
Venida Las Uvas	residential	25.372975	40	<Null>
Venida Las Uvas	residential	43.223162	40	<Null>
Venida Las Uvas	residential	36.698729	40	<Null>
Venida Las Uvas	residential	52.421323	40	<Null>
Venida Las Uvas	residential	63.318804	40	<Null>
Venida Las Uvas	residential	38.690662	40	<Null>



The screenshot shows a table with columns: ELOCIDAD_KM_H and minutos. A context menu is open over a selected row. The menu items include: Sort Ascending, Sort Descending, Advanced Sorting..., Summarize..., Statistics..., Field Calculator..., Calculate Geometry, Turn Field Off, Freeze/Unfreeze C, Delete Field, and Properties... . The 'Field Calculator...' option is highlighted with a blue selection bar. A tooltip for 'Field Calculator' is displayed, stating: 'Populate or update the values of this field by specifying a calculation expression. If any of the records in the table are currently selected, only the values of the selected records will be calculated.'

Fórmula para calcular los minutos que se tardaría alguien en recorrer “X” tramo de la red vial:

The screenshot shows the 'Field Calculator' dialog box. Under 'Parser', 'Python' is selected. In the 'Fields:' list, several fields are listed: OBJECTID, Shape, osm_id, name, highway, Shape_Length, VELOCIDAD_KM_H, and minutos. The 'Type:' is set to 'Number'. In the 'Functions:' list, various mathematical functions are listed. The 'Codeblock' area contains the formula: 'minutos = (!Shape_Length! *0.06) / VELOCIDAD_KM_H!'. At the bottom, there are 'OK' and 'Cancel' buttons.

Resultado final:

The screenshot shows the 'Red_Vial' table in ArcGIS. The columns are: OBJECTID, Shape, osm_id, name, highway, Shape_Length, VELOCIDAD_KM_H, and minutos. The table lists numerous rows of data, each representing a road segment. The 'minutos' column contains the calculated time values based on the formula applied in the field calculator.

OBJECTID	Shape	osm_id	name	highway	Shape_Length	VELOCIDAD_KM_H	minutos
11154	Polyline	39580783		residential	71.242601	40	0.106984
11155	Polyline	419357201	Avenida Las Uvas	tertiary	120.000008	40	0.18
11156	Polyline	419357200	Avenida Las Uvas	tertiary	174.804561	40	0.261907
11157	Polyline	39580783		residential	12.936296	40	0.019404
11158	Polyline	259936687		residential	60.424931	40	0.090637
11159	Polyline	259936691		residential	8.641736	40	0.012963
11160	Polyline	39581373		residential	13.8212	40	0.020732
11161	Polyline	419357201	Avenida Las Uvas	tertiary	134.517973	40	0.201777
11162	Polyline	259936688		residential	8.710408	40	0.013066
11163	Polyline	364970490		residential	6.721833	40	0.010083
11164	Polyline	204252039		residential	41.517585	40	0.062276
11165	Polyline	204252064		residential	43.392344	40	0.065089
11166	Polyline	39581306		residential	23.443271	40	0.035185
11167	Polyline	204252069		residential	93.835421	40	0.140753
11168	Polyline	39581304		residential	12.948953	40	0.019423
11169	Polyline	419357201	Avenida Las Uvas	tertiary	60.400672	40	0.090601
11170	Polyline	39611204		residential	13.102805	40	0.019654
11171	Polyline	414255227		residential	31.900707	40	0.047851
11172	Polyline	39611207		residential	25.372975	40	0.038059
11173	Polyline	414255227		residential	43.223162	40	0.064835
11174	Polyline	39611201		residential	36.987292	40	0.055481
11175	Polyline	414255227		residential	52.421323	40	0.078632
11176	Polyline	39611491		residential	63.318804	40	0.094978
11177	Polyline	39611496		residential	38.690662	40	0.058036



3. Cree la ruta más rápida en la que se podrían visitar todos los templos mormones.
Incluir un mapa de la ruta resultante que incluya el valor de impedancia.

Selección de los templos mormones:

The screenshot shows the ArcMap interface with a table window displaying records for various churches. A context menu is open, with the 'Select By Attributes...' option highlighted. The menu also includes options like 'Find and Replace...', 'Clear Selection', 'Switch Selection', 'Select All', 'Add Field...', 'Turn All Fields On', 'Show Field Aliases', 'Arrange Tables', 'Restore Default Column Widths', 'Restore Default Field Order', 'Joins and Relates', 'Related Tables', 'Create Graph...', 'Add Table to Layout', 'Reload Cache', 'Print...', 'Reports', 'Export...', and 'Appearance...'. The table itself has columns for 'name' and 'Religion', listing various church names and their religious affiliations.

The screenshot shows the 'Select by Attributes' dialog box. The 'Method' dropdown is set to 'Create a new selection'. The 'Where' clause input field contains the query: '[Religion] = "Mormón"'. Below the input field, the generated SQL query is shown: 'SELECT * FROM Iglesias WHERE: [Religion] = "Mormón"'. At the bottom of the dialog, there are 'Clear', 'Verify', 'Help', 'Load...', 'Save...', 'Apply', and 'Close' buttons. The status bar at the bottom indicates '18 Point Iglesia P'.



Son 3 los templos mormones:

The screenshot shows a Microsoft Windows application window titled "Table". Inside, there is a table with four columns: "OBJECTID *", "Shape *", "name", and "Religion". The data is as follows:

OBJECTID *	Shape *	name	Religion
32	Point	Iglesia Mormones	Mormón
34	Point	Iglesia Mormona	Mormón
40	Point	Iglesia Mormona	Mormón

At the bottom of the window, it says "(3 out of 60 Selected)".

Creación de la ruta:

The screenshot shows the ArcMap ribbon interface with the "Network Analyst" tab selected. A context menu is open under the "New Route" option, displaying the following information:

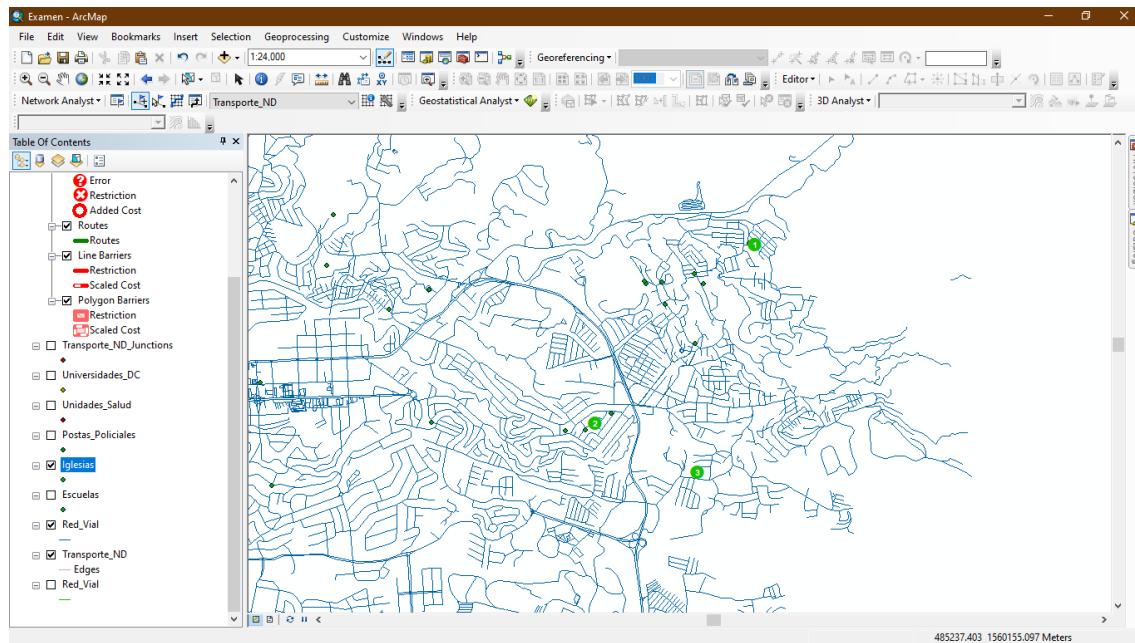
New Route
Create a Route analysis layer.
The route solver finds the shortest or quickest path between two or more stops. The solver can reorder stops to find the optimal route, which is known as the traveling salesperson problem, or TSP.

Below this, there is a list of items with checkboxes:

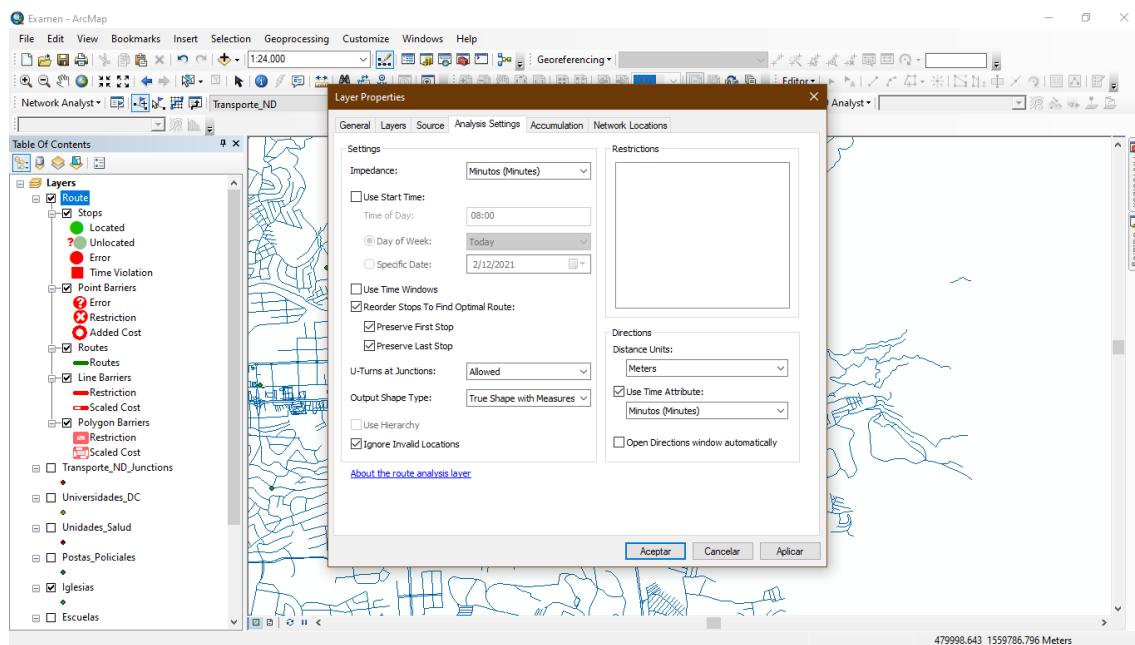
- Unidades
- Postas_Po
- Iglesias
- Escuelas
- Red_Vial



Seleccionando los templos en un orden numérico secuencial

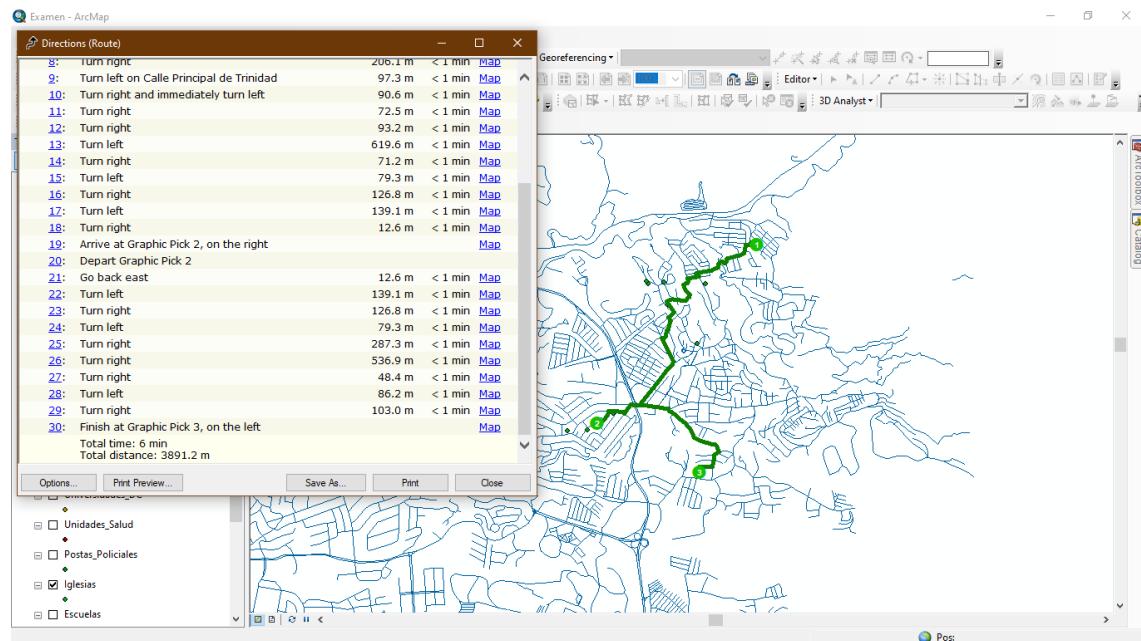


El factor de impedancia será en minutos lo que indica que mostrará la ruta en la que se tardará menor tiempo

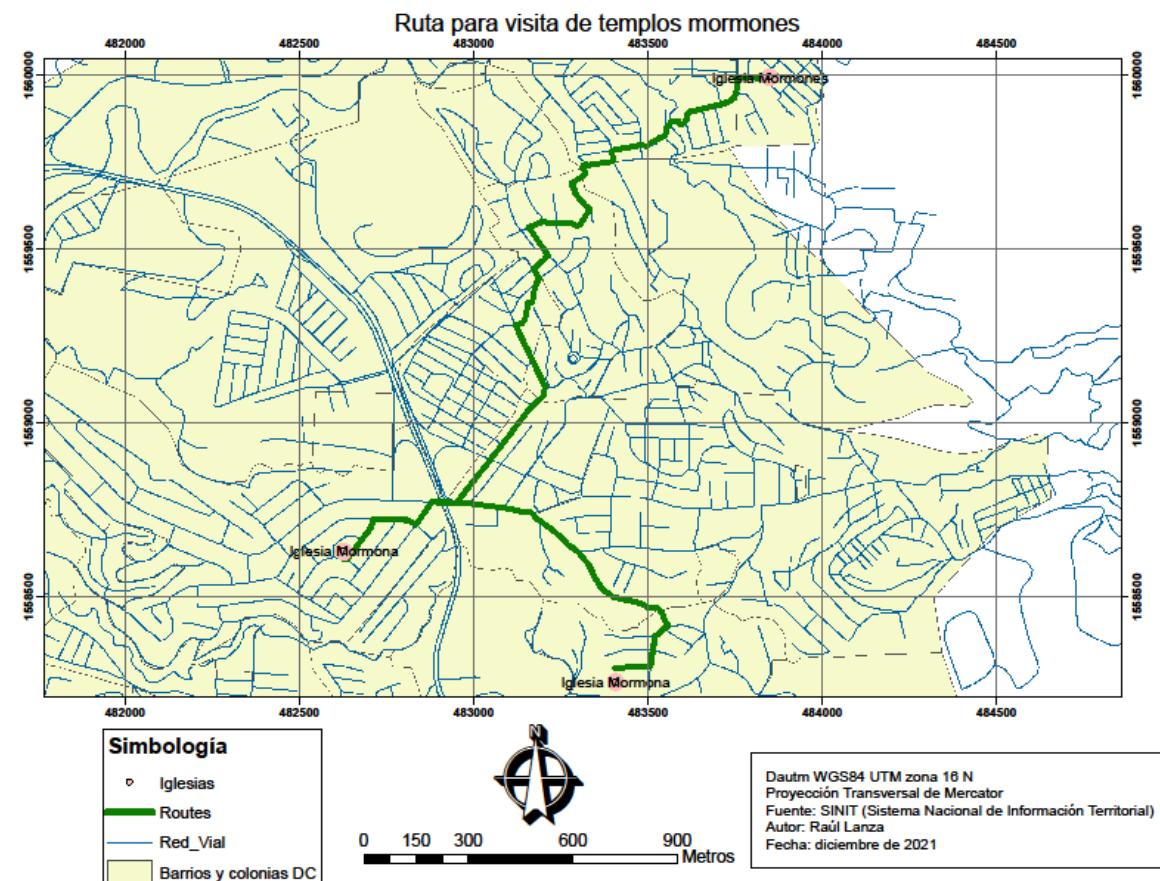




El resultado final es el siguiente:

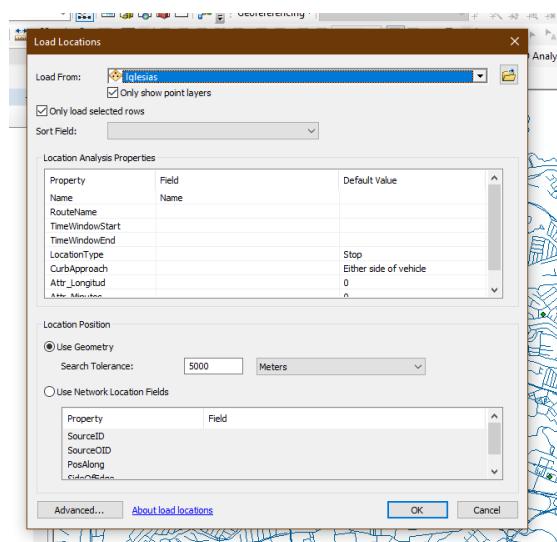
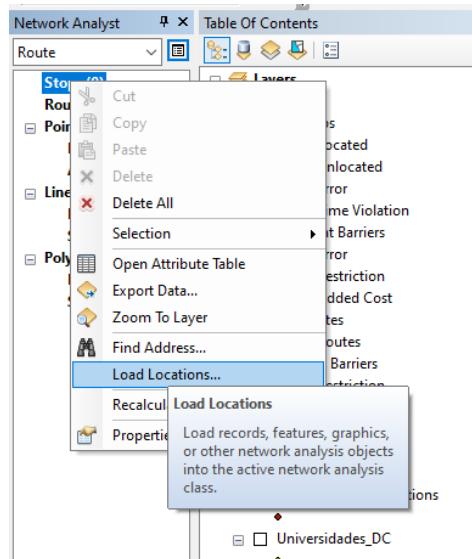


Mapa final:



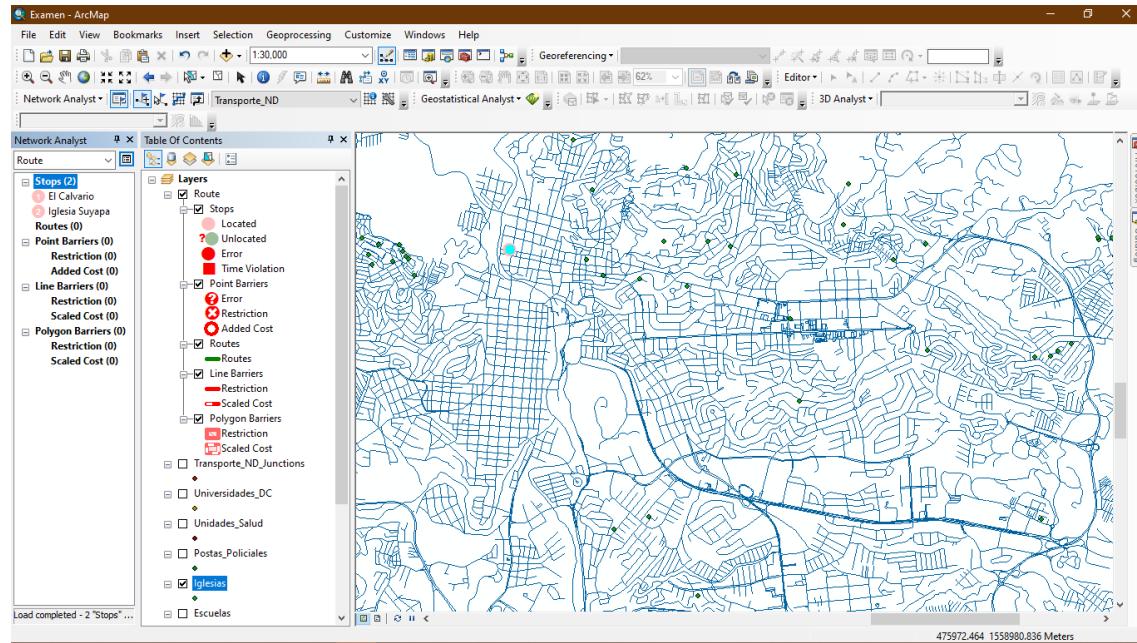


4. Una persona desea hacer una peregrinación desde la Basílica de Suyapa hasta la Iglesia El Calvario, determine la ruta más corta para hacer la peregrinación. Incluir un mapa de la ruta resultante que incluya el valor de impedancia.

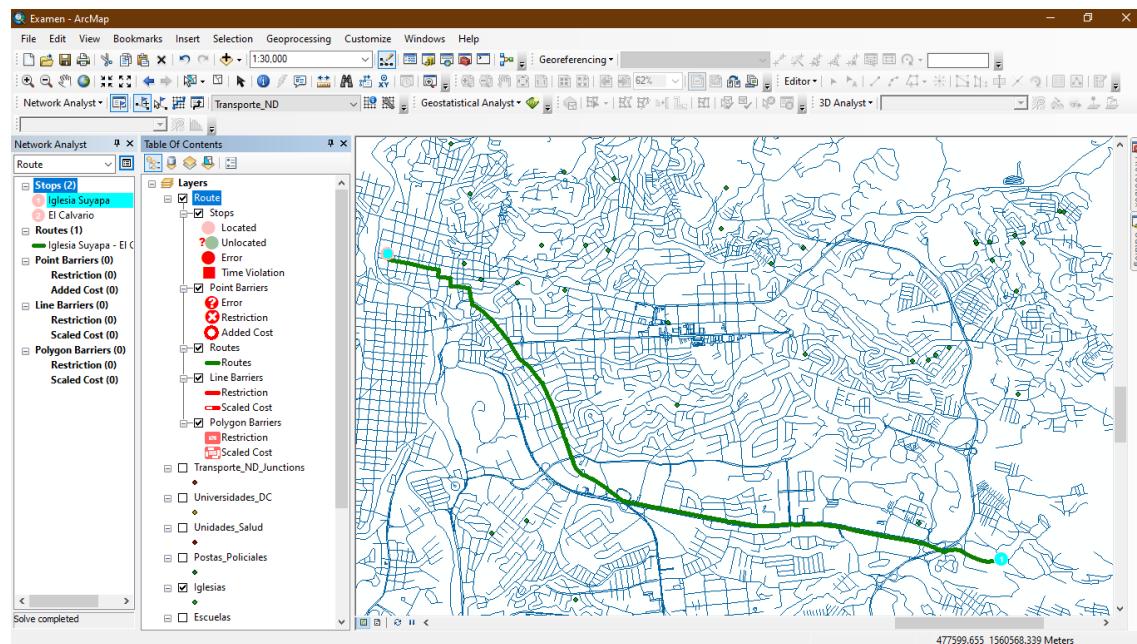




UNIVERSIDAD NACIONAL AUTONOMA DE HONDURAS
FACULTAD DE CIENCIAS ESPACIALES
CTE 324 – Análisis de Redes



La ruta sería esta:

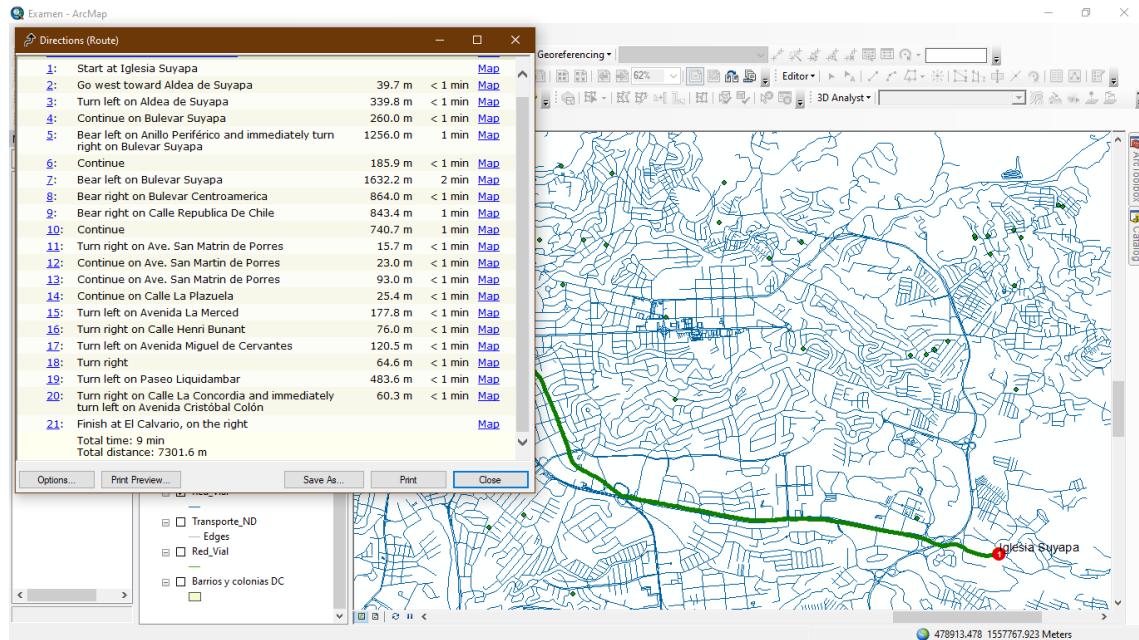




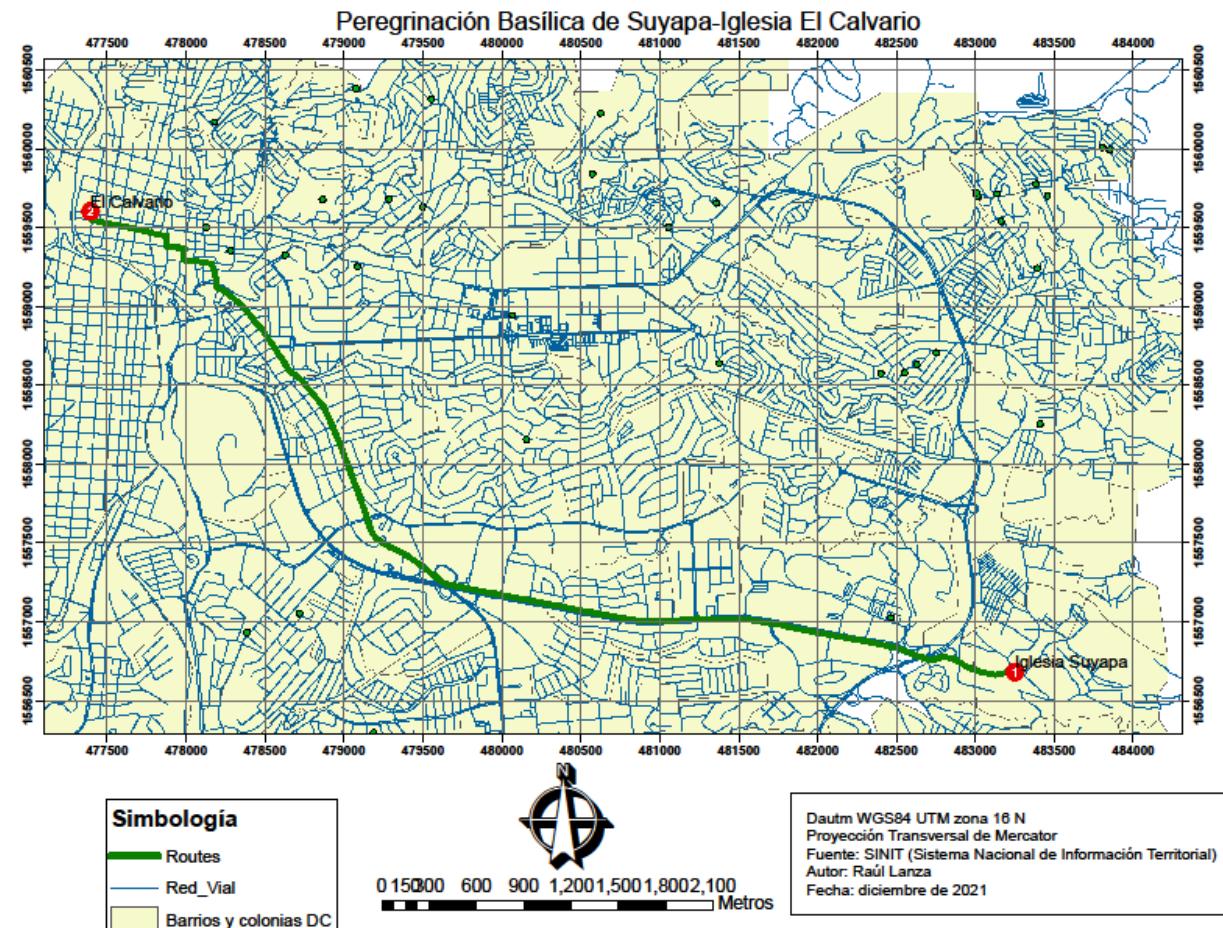
UNIVERSIDAD NACIONAL AUTONOMA DE HONDURAS
FACULTAD DE CIENCIAS ESPACIALES
CTE 324 – Análisis de Redes



El tiempo sería 9 minutos y la distancia: 7301.6 m

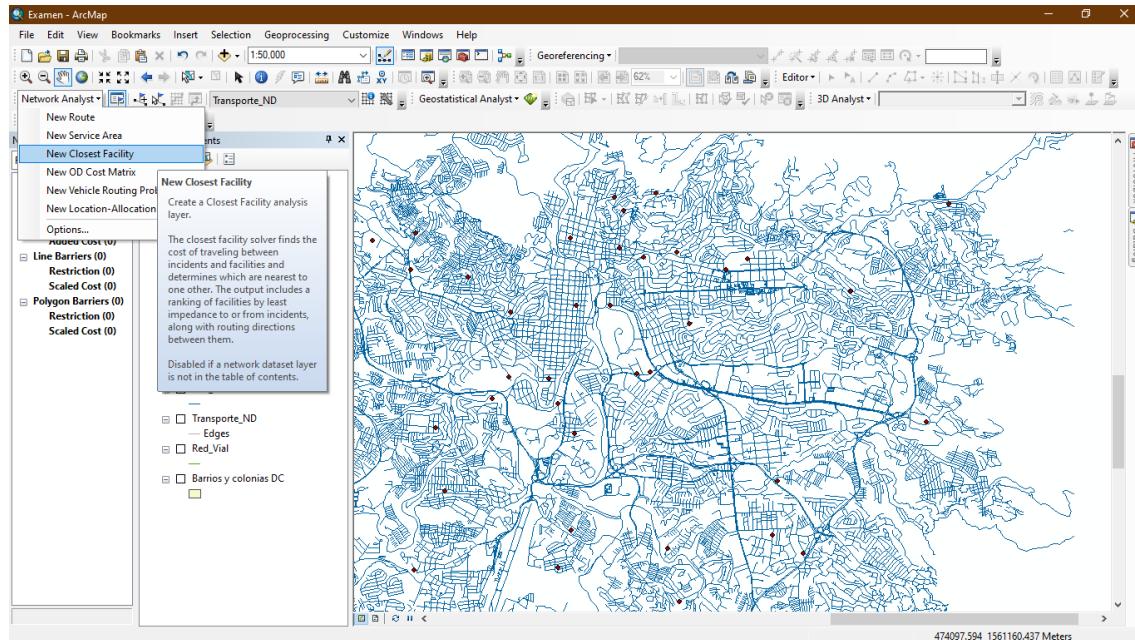


Mapa final

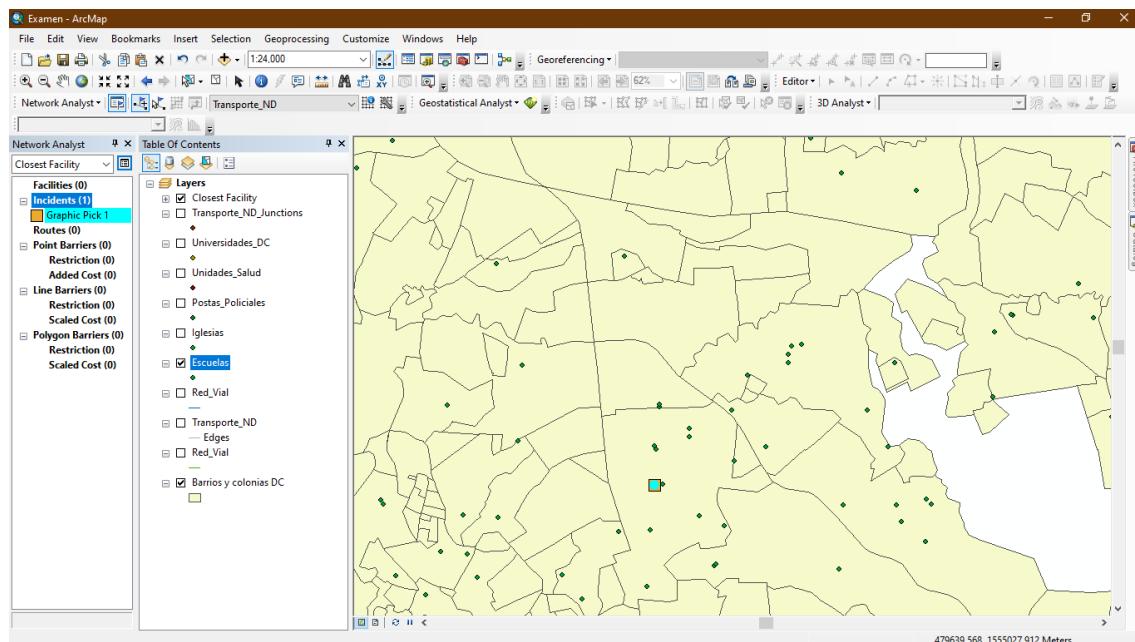




5. Ha sucedido un accidente en el Instituto Jesús Milla Selva y necesita llevar a los heridos a un centro asistencial. Cuáles son las 5 unidades de salud más próximas y cuáles son los tiempos de desplazamiento promedio de cada una de las rutas. Incluir un mapa de la ruta resultante, así como los tiempos de cada ruta



El sitio de incidente es el Instituto Jesús Milla Selva

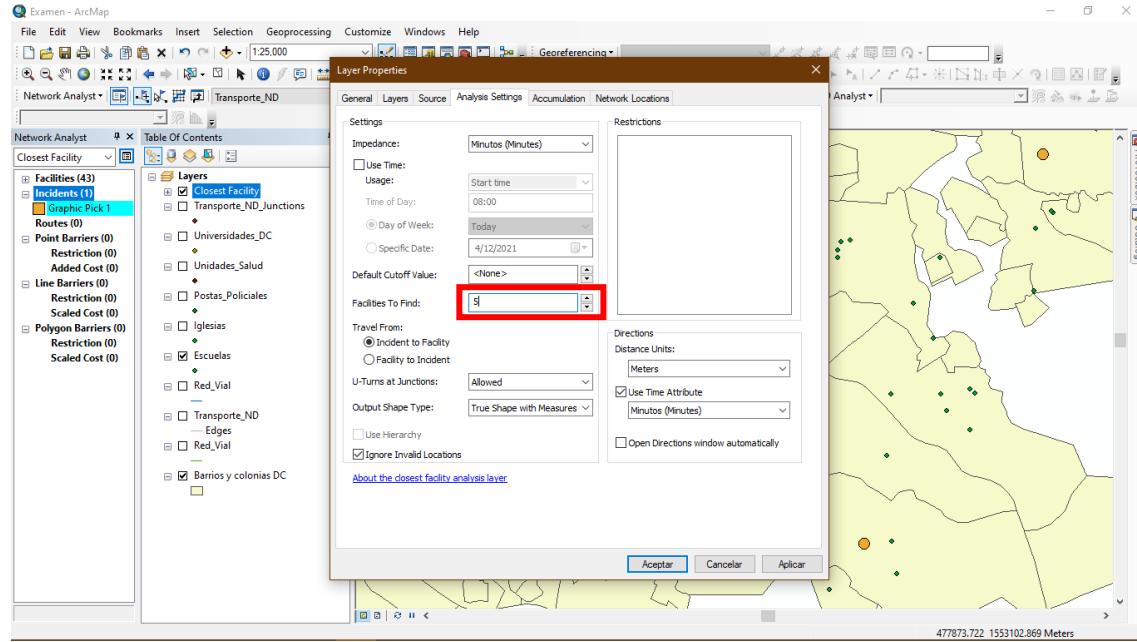




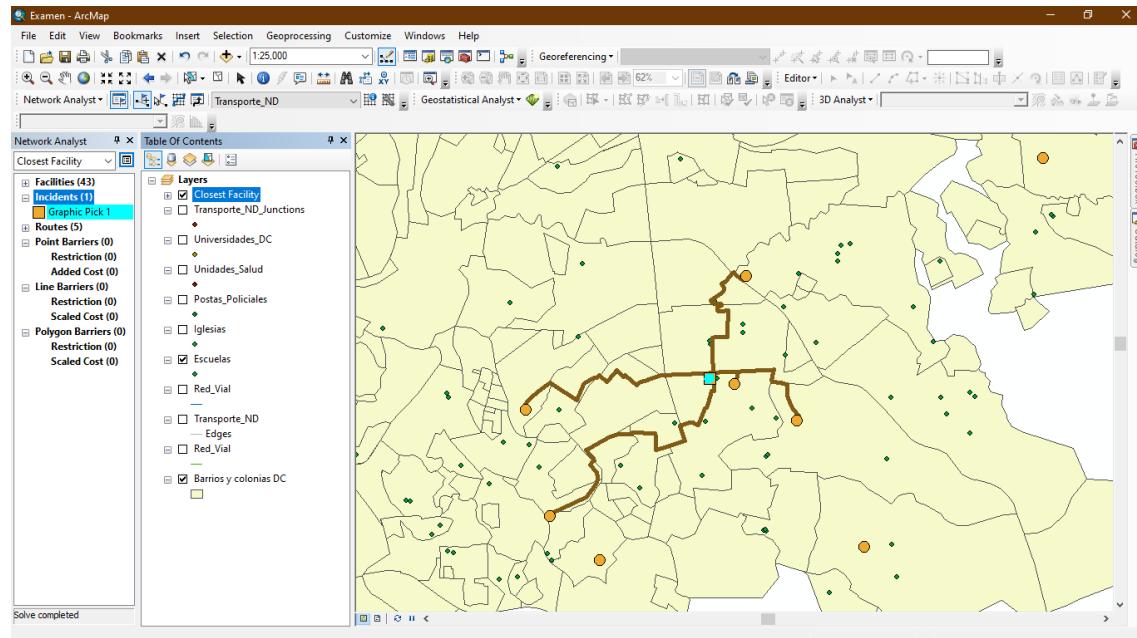
UNIVERSIDAD NACIONAL AUTONOMA DE HONDURAS
FACULTAD DE CIENCIAS ESPACIALES
CTE 324 – Análisis de Redes



El objetivo es buscar las 5 unidades de salud más cercanas para que puedan atender la emergencia



Las rutas serían las siguientes:

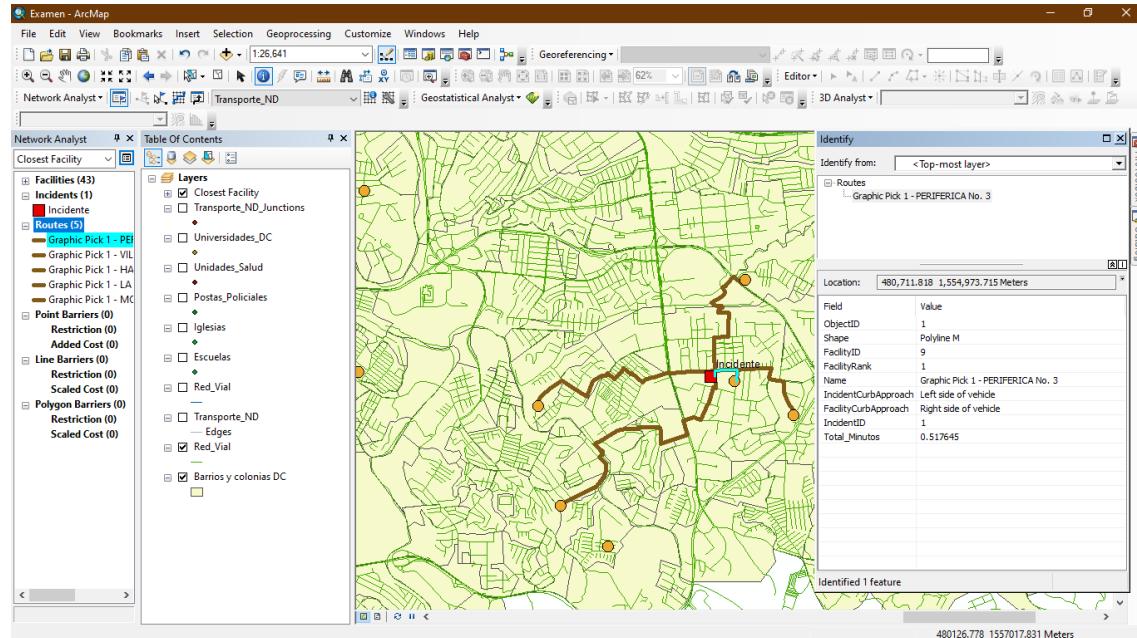




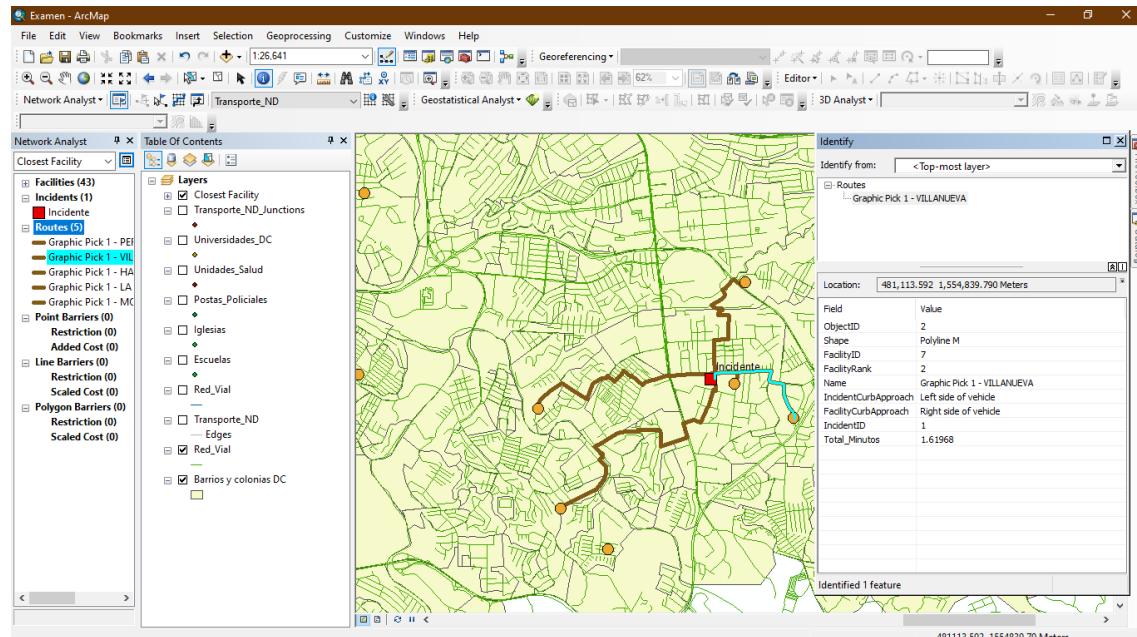
UNIVERSIDAD NACIONAL AUTONOMA DE HONDURAS
FACULTAD DE CIENCIAS ESPACIALES
CTE 324 – Análisis de Redes



Ruta A

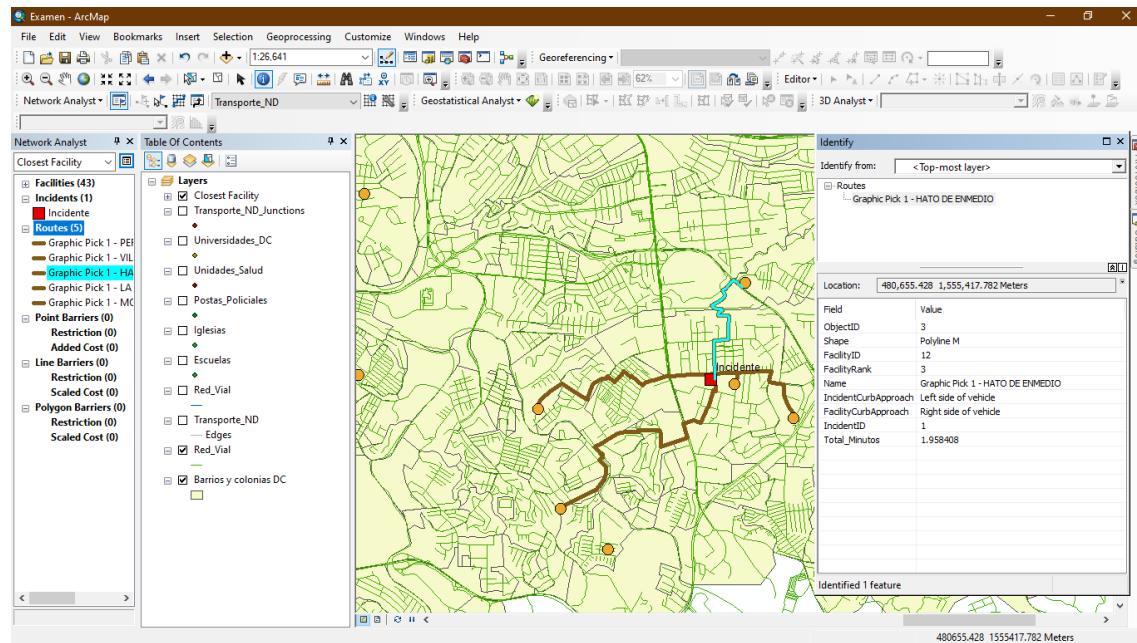


Ruta B

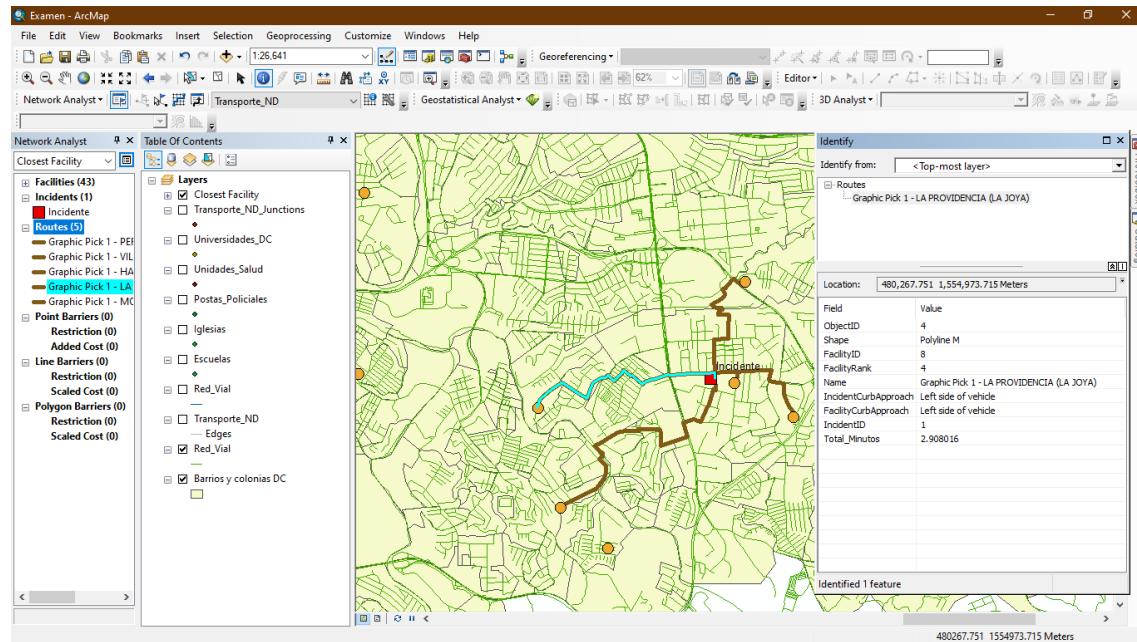




Ruta C



Ruta D

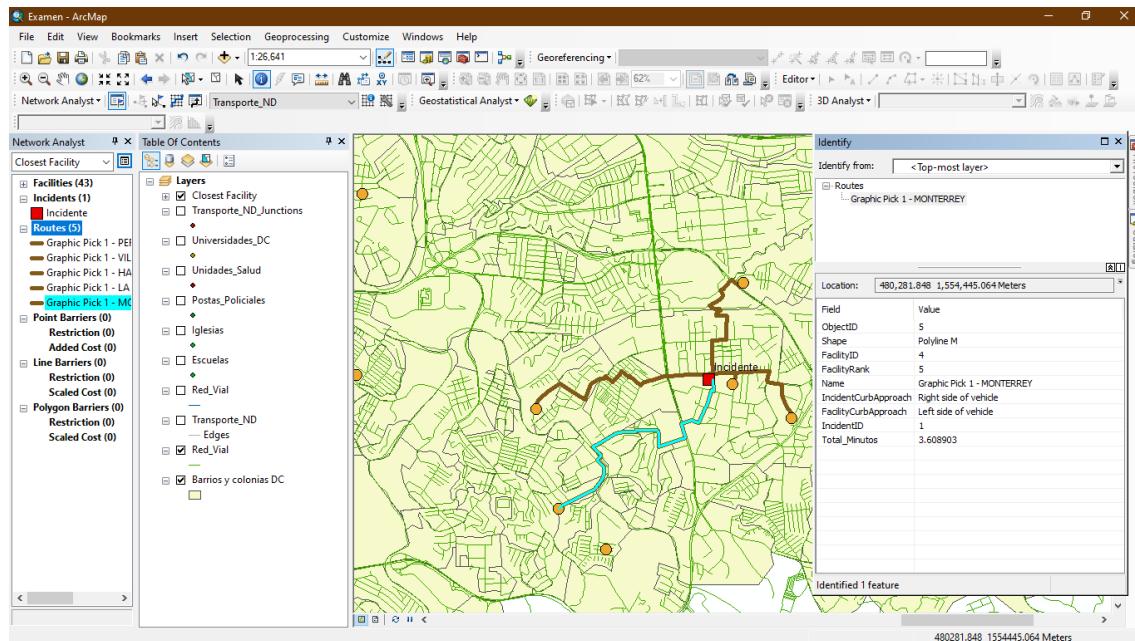




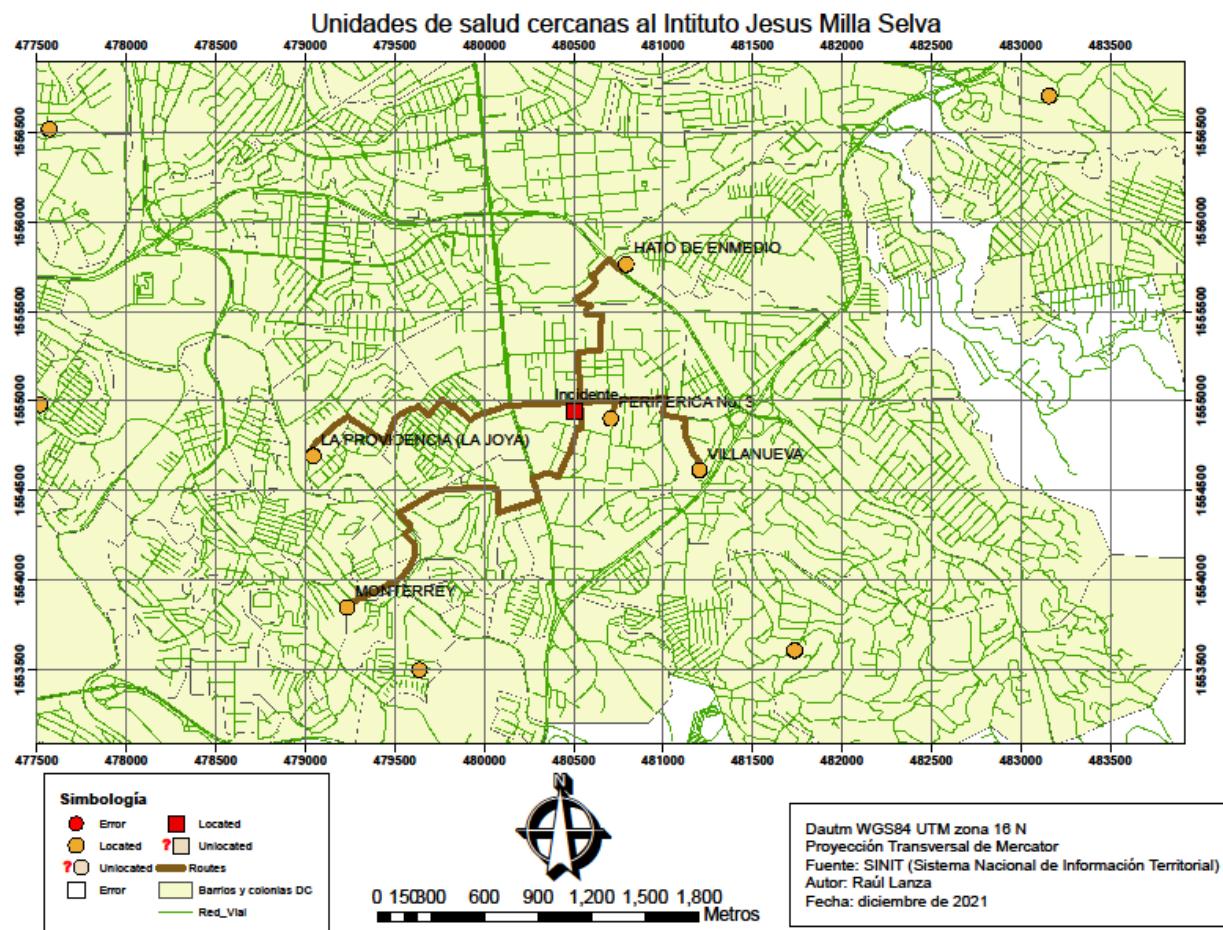
UNIVERSIDAD NACIONAL AUTONOMA DE HONDURAS
FACULTAD DE CIENCIAS ESPACIALES
CTE 324 – Análisis de Redes



Ruta E



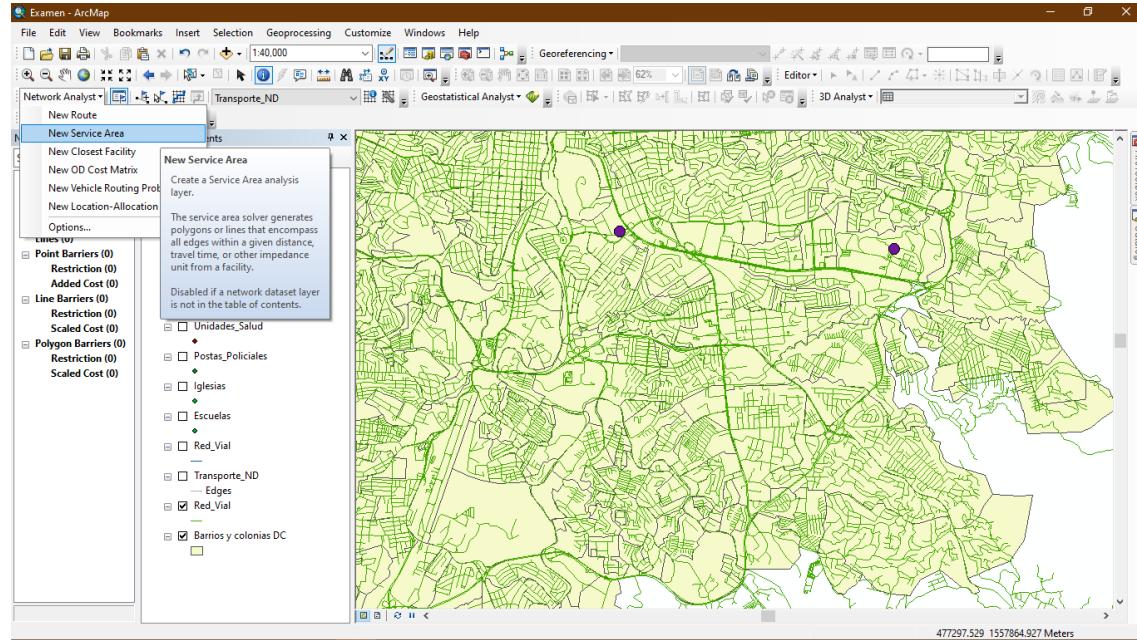
Mapa final



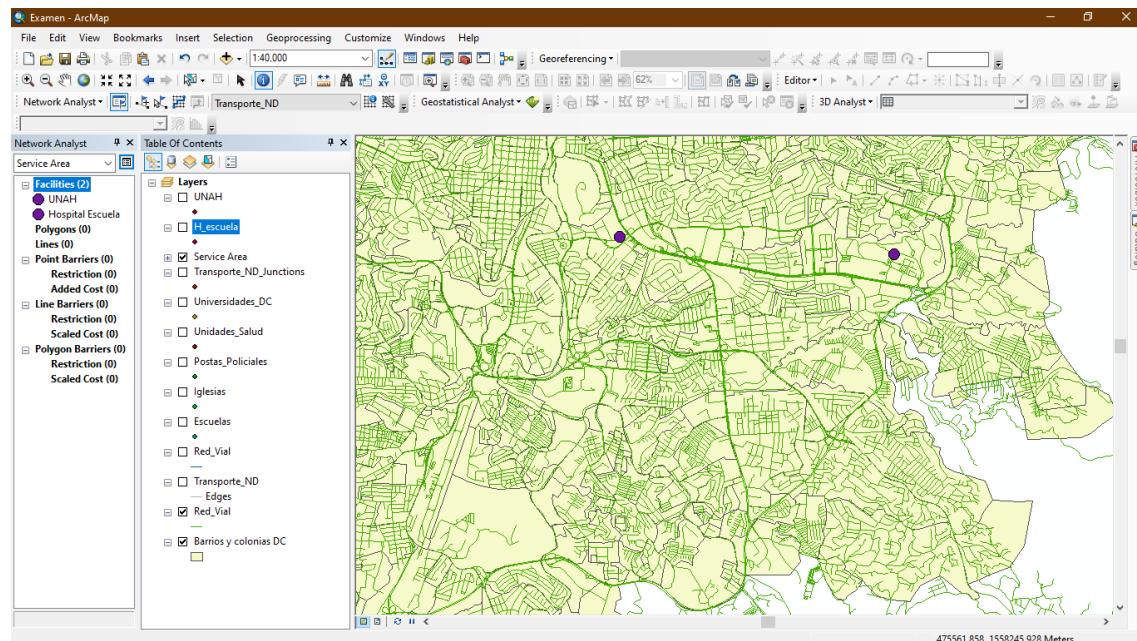


6. Se quiere localizar un negocio en el que se pueda llegar en menos de 3 minutos tanto a la UNAH como al Hospital Escuela. Marque el lugar en el que recomendaría localizar el negocio. Incluya un mapa que muestre el sitio propuesto.

Crear un área de servicio

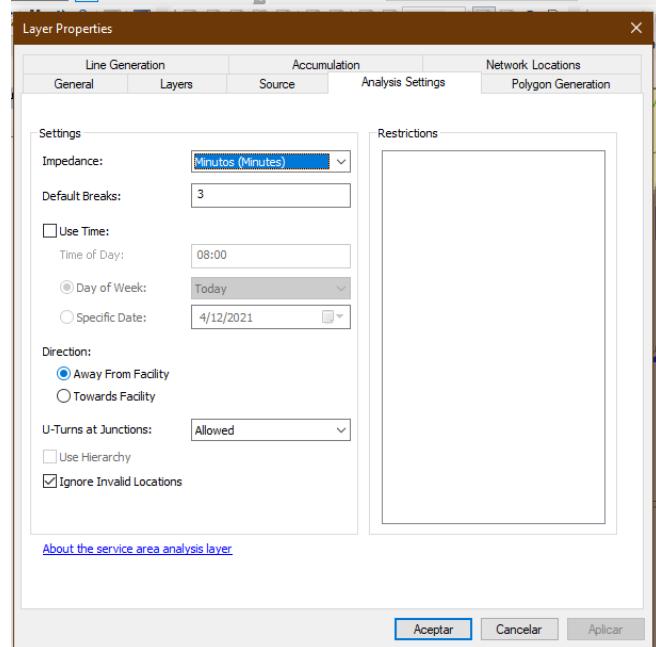


El objetivo es la ubicación para poner un negocio a menos de 3 minutos del hospital escuela y de la UNAH

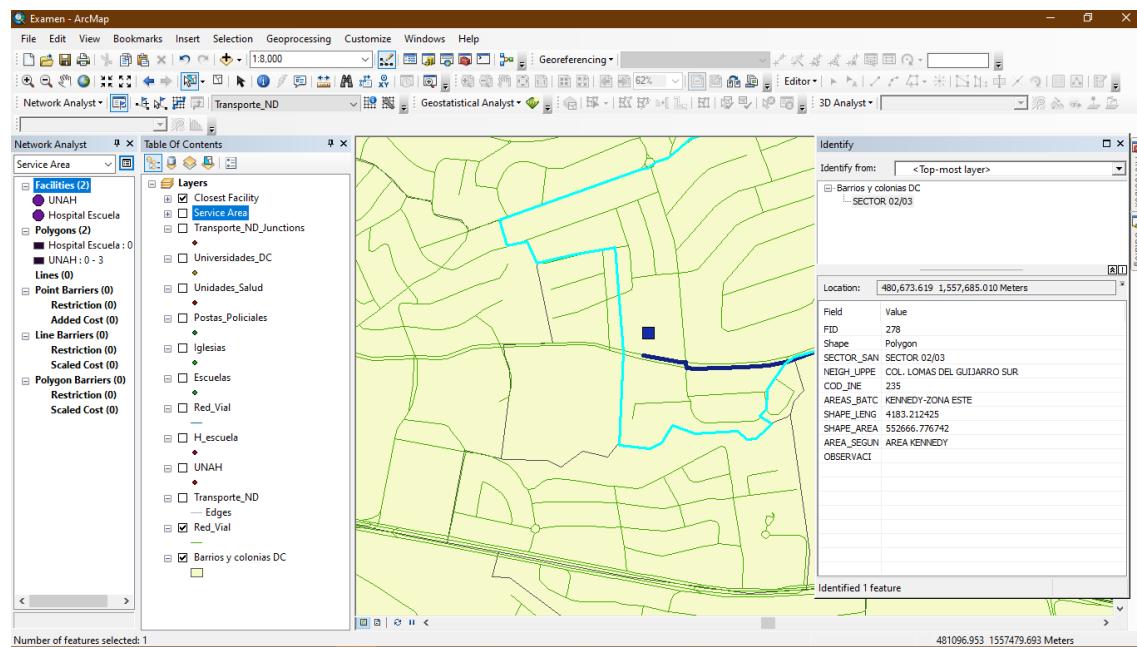




La impedancia serán los minutos, concretamente 3 minutos

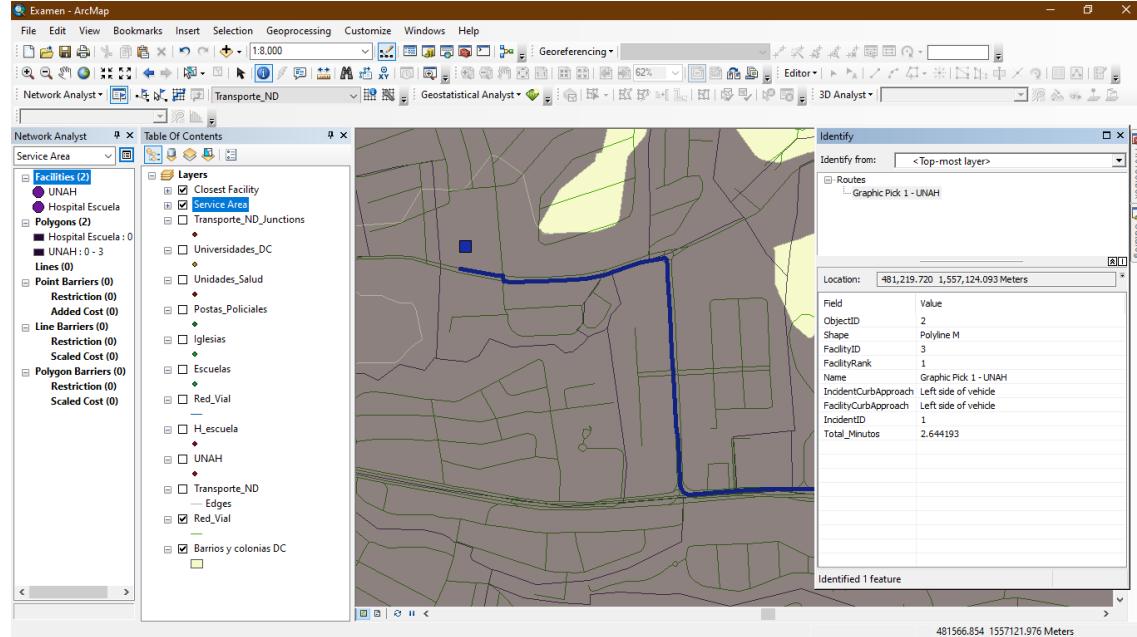
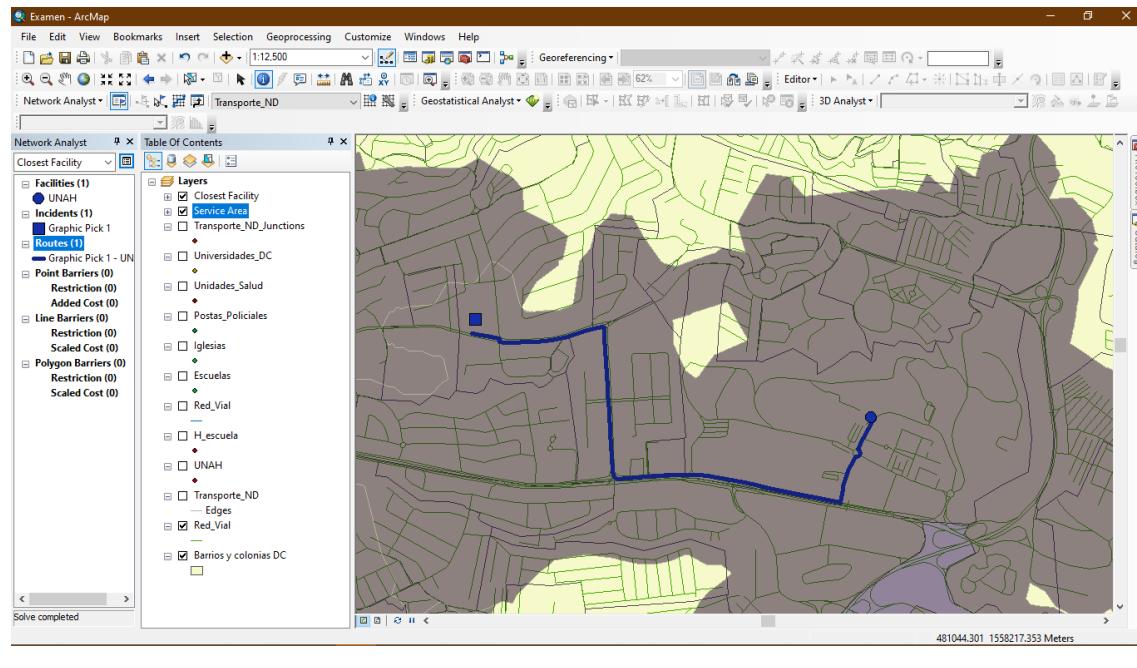


El punto el cual escogí fue en la colonia Lomas del Guijarro Sur



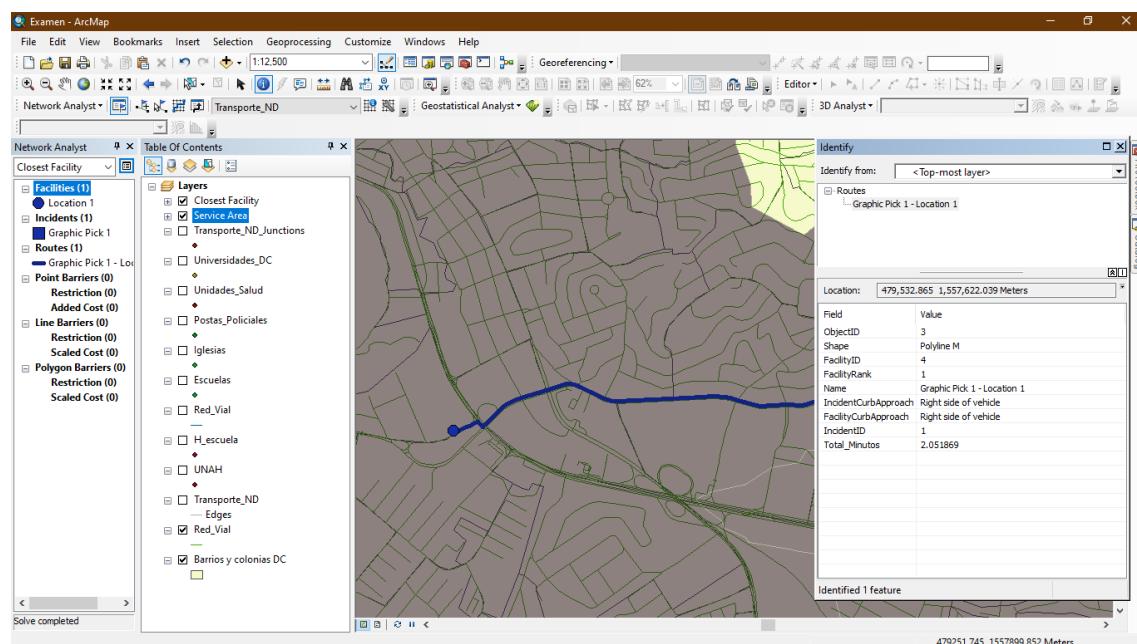
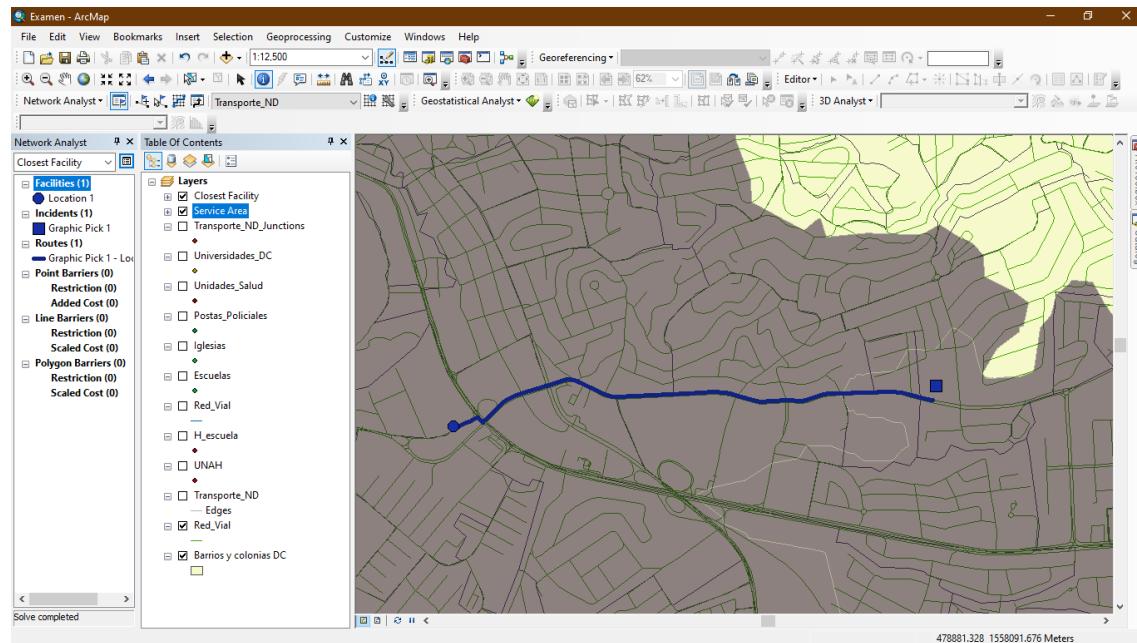


Del punto escogido a la UNAH el tiempo que se tarda es de 2.6 minutos



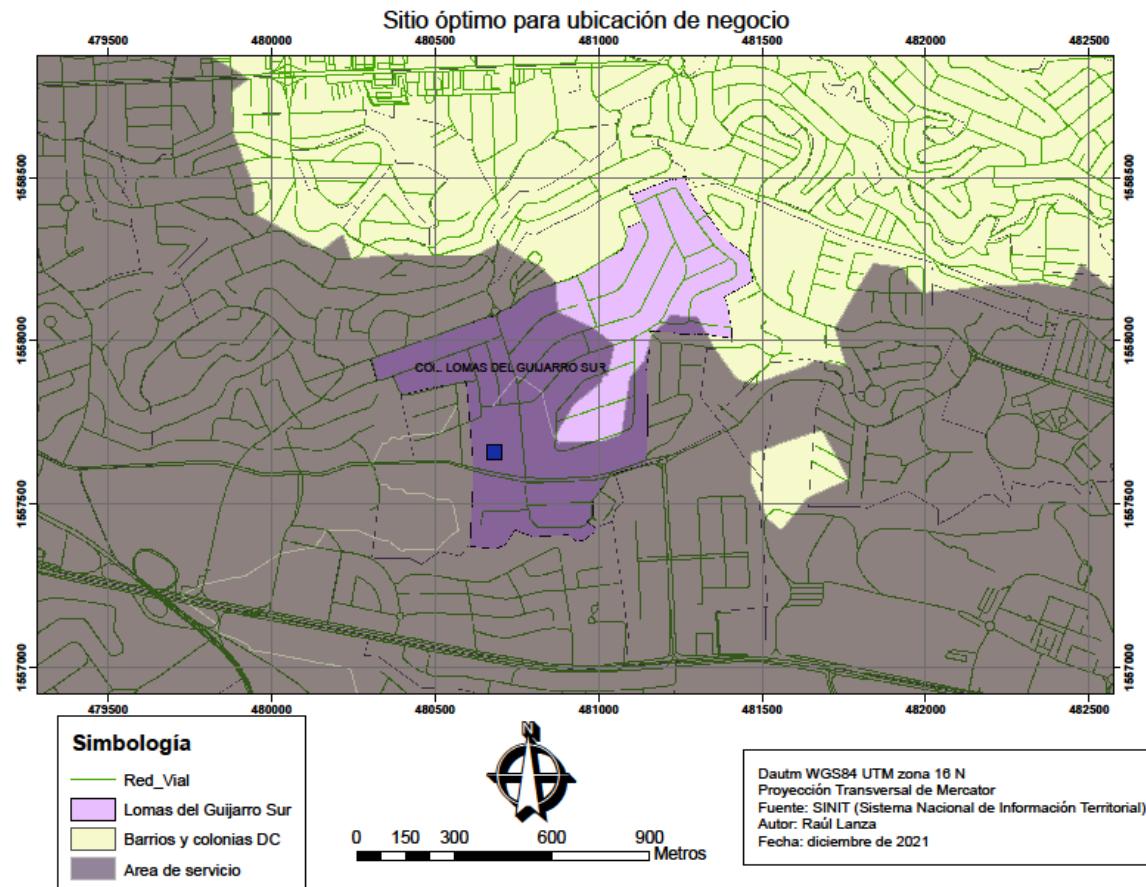


Y del hospital escuela está a 2.05 minutos



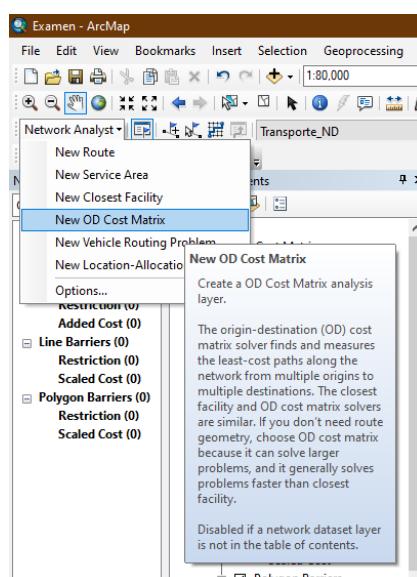


Mapa final



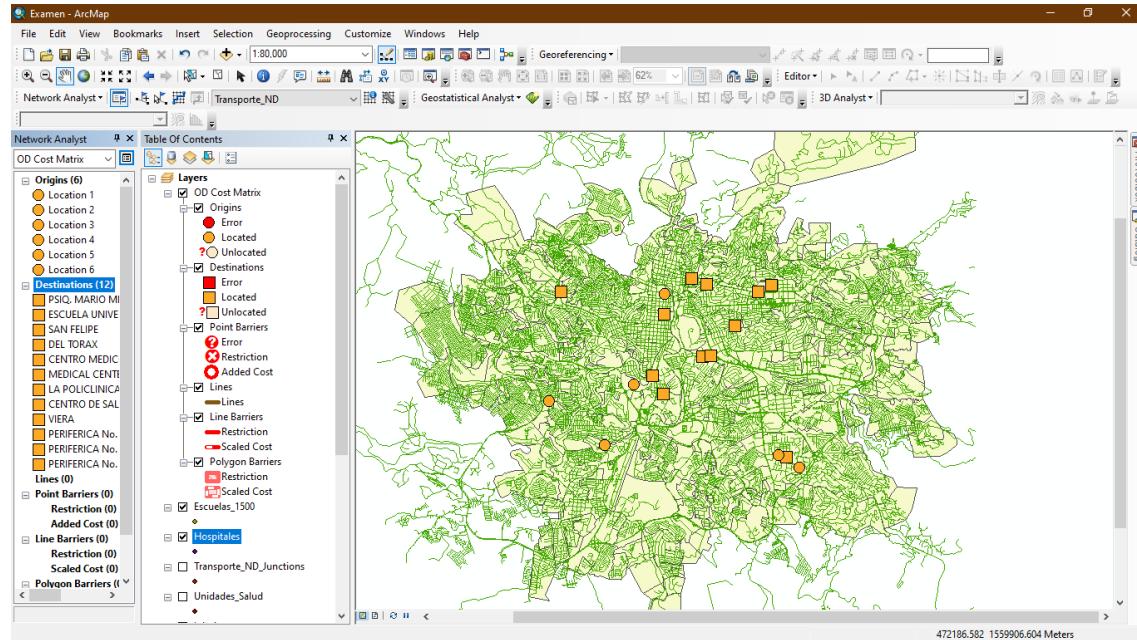
7. Calcular una matriz de costos para desplazarse desde las escuelas que tienen una matrícula mayor a 1,500 personas, hacia los hospitales de la red. Incluir una captura de pantalla de la matriz gráfica obtenida, así como la tabla resultante.

Crear una matriz de costos

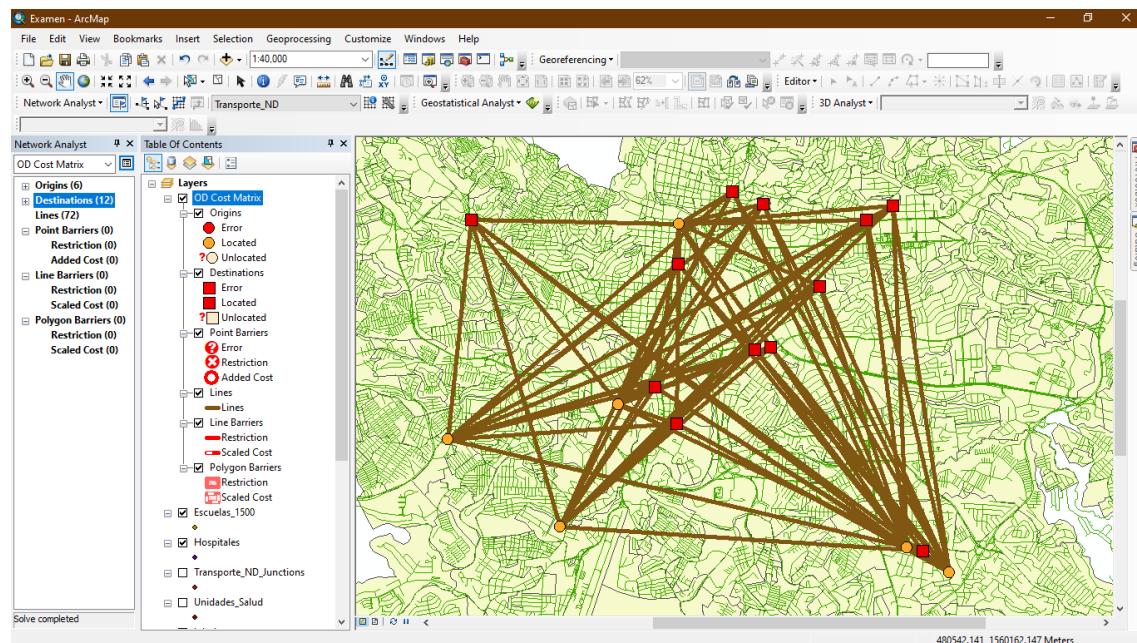




Los orígenes son las escuelas con matrícula mayor a 1500 y los destinos, los hospitales:



El resultado de la matriz de costo es la siguiente:





UNIVERSIDAD NACIONAL AUTONOMA DE HONDURAS
FACULTAD DE CIENCIAS ESPACIALES
CTE 324 – Análisis de Redes



Y la tabla de atributos de la matriz es la siguiente:

ObjectID	Shape	Name	OriginID	DestinationID	DestinationRank	Total_Minutos
1	Polyline	Location 1 - PERIFERICA No. 3	1	10	1	0.902908
2	Polyline	Location 1 - ESCUELA UNIVERSITARIO Y MATERNO INFANTIL	1	2	2	5.120734
3	Polyline	Location 1 - PSIQ. MARIO MENDOZA	1	1	3	5.399447
4	Polyline	Location 1 - MEDICAL CENTER	1	6	4	5.320745
5	Polyline	Location 1 - DEL TORAX	1	11	5	7.145585
6	Polyline	Location 1 - CENTRO MEDICO HONDUREDO	1	5	6	7.146143
7	Polyline	Location 1 - CENTRO DE SALUD EL CARMEN	1	8	7	7.539735
8	Polyline	Location 1 - LA POLCLINICA	1	7	8	7.649877
9	Polyline	Location 1 - SAN FELIPE	1	3	9	7.770759
10	Polyline	Location 1 - VERA	1	9	10	7.891311
11	Polyline	Location 1 - DEL TORAX	1	4	11	8.438765
12	Polyline	Location 1 - PERIFERICA No. 2	1	12	12	10.847955
13	Polyline	Location 2 - PERIFERICA No. 3	2	10	1	0.518132
14	Polyline	Location 2 - ESCUELA UNIVERSITARIO Y MATERNO INFANTIL	2	2	2	4.05226
15	Polyline	Location 2 - PSIQ. MARIO MENDOZA	2	1	3	4.330973
16	Polyline	Location 2 - MEDICAL CENTER	2	6	4	4.861271
17	Polyline	Location 2 - PERIFERICA No. 1	2	11	5	6.077111
18	Polyline	Location 2 - CENTRO MEDICO HONDUREDO	2	5	6	6.077669
19	Polyline	Location 2 - CENTRO DE SALUD EL CARMEN	2	8	7	6.471261
20	Polyline	Location 2 - LA POLCLINICA	2	7	8	6.581403
21	Polyline	Location 2 - SAN FELIPE	2	3	9	8.702285
22	Polyline	Location 2 - VERA	2	9	10	8.622837
23	Polyline	Location 2 - DEL TORAX	2	4	11	7.370291
24	Polyline	Location 2 - PERIFERICA No. 2	2	12	12	7.798662
25	Polyline	Location 3 - CENTRO MEDICO HONDUREDO	3	5	1	8.816076
26	Polyline	Location 3 - PERIFERICA No. 1	3	11	2	3.151178
27	Polyline	Location 3 - PSIQ. MARIO MENDOZA	3	1	3	4.918417
28	Polyline	Location 3 - LA POLCLINICA	3	7	4	5.099692
29	Polyline	Location 3 - ESCUELA UNIVERSITARIO Y MATERNO INFANTIL	3	2	5	5.240265
30	Polyline	Location 3 - MEDICAL CENTER	3	6	6	6.781331
31	Polyline	Location 3 - PERIFERICA No. 3	3	10	7	6.968191
32	Polyline	Location 3 - VERA	3	9	8	7.059988
33	Polyline	Location 3 - CENTRO DE SALUD EL CARMEN	3	8	9	7.260748
34	Polyline	Location 3 - PERIFERICA No. 2	3	12	10	7.750687
35	Polyline	Location 3 - SAN FELIPE	3	3	11	7.986229
36	Polyline	Location 3 - DEL TORAX	3	4	12	8.664234
37	Polyline	Location 4 - CENTRO MEDICO HONDUREDO	4	5	1	5.610627
38	Polyline	Location 4 - PERIFERICA No. 2	4	12	2	5.704656
39	Polyline	Location 4 - PERIFERICA No. 1	4	11	3	5.745175
40	Polyline	Location 4 - LA POLCLINICA	4	7	4	8.236869
41	Polyline	Location 4 - PSIQ. MARIO MENDOZA	4	1	5	7.595234
42	Polyline	Location 4 - ESCUELA UNIVERSITARIO Y MATERNO INFANTIL	4	2	6	7.920088
43	Polyline	Location 4 - VERA	4	9	7	8.373738
44	Polyline	Location 4 - CENTRO DE SALUD EL CARMEN	4	8	8	8.709151
45	Polyline	Location 4 - MEDICAL CENTER	4	6	9	9.047591
46	Polyline	Location 4 - SAN FELIPE	4	3	10	9.444632
47	Polyline	Location 4 - DEL TORAX	4	4	11	10.112637
48	Polyline	Location 4 - PERIFERICA No. 3	4	10	12	10.229909
49	Polyline	Location 5 - CENTRO MEDICO HONDUREDO	5	5	1	1.287159
50	Polyline	Location 5 - PERIFERICA No. 1	5	11	2	1.421707
51	Polyline	Location 5 - PSIQ. MARIO MENDOZA	5	1	3	3.274772
52	Polyline	Location 5 - LA POLCLINICA	5	7	4	3.450672
53	Polyline	Location 5 - ESCUELA UNIVERSITARIO Y MATERNO INFANTIL	5	2	5	3.59662
54	Polyline	Location 5 - MEDICAL CENTER	5	6	6	5.137686
55	Polyline	Location 5 - VERA	5	9	7	5.410967
56	Polyline	Location 5 - CENTRO DE SALUD EL CARMEN	5	8	8	5.611727
57	Polyline	Location 5 - PERIFERICA No. 2	5	12	9	5.716528
58	Polyline	Location 5 - SAN FELIPE	5	3	10	6.847205
59	Polyline	Location 5 - PERIFERICA No. 3	5	10	11	8.539497
60	Polyline	Location 5 - DEL TORAX	5	4	12	7.015214
61	Polyline	Location 6 - LA POLCLINICA	6	7	1	0.812364
62	Polyline	Location 6 - VERA	6	9	2	1.513989
63	Polyline	Location 6 - CENTRO DE SALUD EL CARMEN	6	8	3	1.987439
64	Polyline	Location 6 - PERIFERICA No. 1	6	11	4	3.030808
65	Polyline	Location 6 - ESCUELA UNIVERSITARIO Y MATERNO INFANTIL	6	2	5	3.099908
66	Polyline	Location 6 - PSIQ. MARIO MENDOZA	6	1	6	3.155974
67	Polyline	Location 6 - MEDICAL CENTER	6	6	7	3.468644
68	Polyline	Location 6 - CENTRO MEDICO HONDUREDO	6	5	8	3.663905
69	Polyline	Location 6 - SAN FELIPE	6	3	9	3.72149
70	Polyline	Location 6 - PERIFERICA No. 2	6	12	10	4.151257
71	Polyline	Location 6 - DEL TORAX	6	4	11	4.389496
72	Polyline	Location 6 - PERIFERICA No. 3	6	10	12	7.230536

ObjectID	Shape	Name	OriginID	DestinationID	DestinationRank	Total_Minutos
34	Polyline	Location 3 - PERIFERICA No. 2	3	12	10	7.750687
35	Polyline	Location 3 - SAN FELIPE	3	3	11	7.986229
36	Polyline	Location 3 - DEL TORAX	3	4	12	8.664234
37	Polyline	Location 4 - CENTRO MEDICO HONDUREDO	4	5	1	5.610627
38	Polyline	Location 4 - PERIFERICA No. 2	4	12	2	5.704656
39	Polyline	Location 4 - PERIFERICA No. 1	4	11	3	5.745175
40	Polyline	Location 4 - LA POLCLINICA	4	7	4	8.236869
41	Polyline	Location 4 - PSIQ. MARIO MENDOZA	4	1	5	7.595234
42	Polyline	Location 4 - ESCUELA UNIVERSITARIO Y MATERNO INFANTIL	4	2	6	7.920088
43	Polyline	Location 4 - VERA	4	9	7	8.373738
44	Polyline	Location 4 - CENTRO DE SALUD EL CARMEN	4	8	8	8.709151
45	Polyline	Location 4 - MEDICAL CENTER	4	6	9	9.047591
46	Polyline	Location 4 - SAN FELIPE	4	3	10	9.444632
47	Polyline	Location 4 - DEL TORAX	4	4	11	10.112637
48	Polyline	Location 4 - PERIFERICA No. 3	4	10	12	10.229909
49	Polyline	Location 5 - CENTRO MEDICO HONDUREDO	5	5	1	1.287159
50	Polyline	Location 5 - PERIFERICA No. 1	5	11	2	1.421707
51	Polyline	Location 5 - PSIQ. MARIO MENDOZA	5	1	3	3.274772
52	Polyline	Location 5 - LA POLCLINICA	5	7	4	3.450672
53	Polyline	Location 5 - ESCUELA UNIVERSITARIO Y MATERNO INFANTIL	5	2	5	3.59662
54	Polyline	Location 5 - MEDICAL CENTER	5	6	6	5.137686
55	Polyline	Location 5 - VERA	5	9	7	5.410967
56	Polyline	Location 5 - CENTRO DE SALUD EL CARMEN	5	8	8	5.611727
57	Polyline	Location 5 - PERIFERICA No. 2	5	12	9	5.716528
58	Polyline	Location 5 - SAN FELIPE	5	3	10	6.847205
59	Polyline	Location 5 - PERIFERICA No. 3	5	10	11	8.539497
60	Polyline	Location 5 - DEL TORAX	5	4	12	7.015214
61	Polyline	Location 6 - LA POLCLINICA	6	7	1	0.812364
62	Polyline	Location 6 - VERA	6	9	2	1.513989
63	Polyline	Location 6 - CENTRO DE SALUD EL CARMEN	6	8	3	1.987439
64	Polyline	Location 6 - PERIFERICA No. 1	6	11	4	3.030808
65	Polyline	Location 6 - ESCUELA UNIVERSITARIO Y MATERNO INFANTIL	6	2	5	3.099908
66	Polyline	Location 6 - PSIQ. MARIO MENDOZA	6	1	6	3.155974
67	Polyline	Location 6 - MEDICAL CENTER	6	6	7	3.468644
68	Polyline	Location 6 - CENTRO MEDICO HONDUREDO	6	5	8	3.663905
69	Polyline	Location 6 - SAN FELIPE	6	3	9	3.72149
70	Polyline	Location 6 - PERIFERICA No. 2	6	12	10	4.151257
71	Polyline	Location 6 - DEL TORAX	6	4	11	4.389496
72	Polyline	Location 6 - PERIFERICA No. 3	6	10	12	7.230536