

Delaware Department of Transportation's DelGIS Application



**Presented by
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March 18, 2003



DelGIS Users



Delaware Legislators

- *Representatives and Senators*
- *Aides of those Legislators*

DeIDOT Employees

- *Interested in finding quick transportation answers*



DelGIS Concept



❖ Create an 'open' architecture

- *Provide easy integration of other 'spatial' data*
- *Allow multiple GIS software packages to access data*

❖ Provide answers for simplistic transportation questions

❖ Provide a simplistic interface for geographic data in both mapping and non-mapping GUI

- *Provide Graphs and Charts in addition to a fully functional GIS Interface*

❖ Compare selected topic data to the topic data of the State of Delaware (DelDOT)

- *Presented in percentages (i.e. District vs. State)*



DeIGIS History



- ✿ **Application requested by the Secretary of DelDOT**
- ✿ **Users interviewed**
- ✿ **Data collected and data modeled**
- ✿ **Application written around database functionality**
- ✿ **Prototype I**
- ✿ **Additional Functionality**
- ✿ **Prototype II**



DelGIS Core Functions



- ❁ **Simple questions and answers for legislators about Senatorial and Representative districts**
 - *Information also presented via Maintenance and Municipality*
- ❁ **Logical grouping of questions and answers into 'Topics'**
 - *Infrastructure*
 - *Projects*
 - *Demographics*
 - *Transit*
 - *Traffic Monitoring*
- ❁ **Graphs for all information**
- ❁ **Tool Tips for all data**
- ❁ **Querying ability on all 'Topics'**



Heart and Soul of DelGIS



❁ Oracle 8i Spatially enabled database

- *Data queried utilizing Oracle Functions and Operators*
- *Allows for multiple GIS Software to access if needed*
 - *Minimal Construction to change GIS format(s)*

❁ Three tables run the question/answer portion of DelGIS

- *Topics → Questions → Answers*



DeGIS Software



- ✿ **Oracle Spatial**
- ✿ **Windows 2000 Server with IIS**
- ✿ **Windows NT or Windows 2000**
- ✿ **Microsoft Internet Explorer**
- ✿ **WebLogic**
- ✿ **XMarc Java Technology**
- ✿ **Utilization of FME to load spatial data**



welcome to
DelGIS

an interactive tool to explore DelDOT's geographical data

Delaware Department of Transportation

Headquarters - Administration Center
800 S. Bay Road, P.O. Box 778, Dover, DE 19903
302-760-2080 or 800-652-5600 (Instate Only)



[Click here to continue](#)

Topic: **Infrastructure** ▼

 District: **Representative District 19** ▼ New

Questions for Infrastructure topic

As of 2001, how many lane miles were in Rep. District 19?

As of 2001, how many bridges were in Rep. District 19?

Answer for the selected Question

There were 138 lane miles in this district, which was 1.23% of the state's total of 11,200 lane miles. The lanes are broken down as follows :

Lane Classification	Total Lane Miles	Total in State	Percent of State Total
Expressways	0 lane mile	364 lane miles	0%
Arterials	15 lane miles	1,920 lane miles	.8%
Collectors	15 lane miles	1,919 lane miles	.77%
Non State Maintained Roads	6 lane miles	1,286 lane miles	.47%
Local Roads			
Suburban Roads	96 lane miles	2,335 lane miles	4.09%
Other Roads	6 lane miles	4,492 lane miles	.13%

Topic:

 District: New

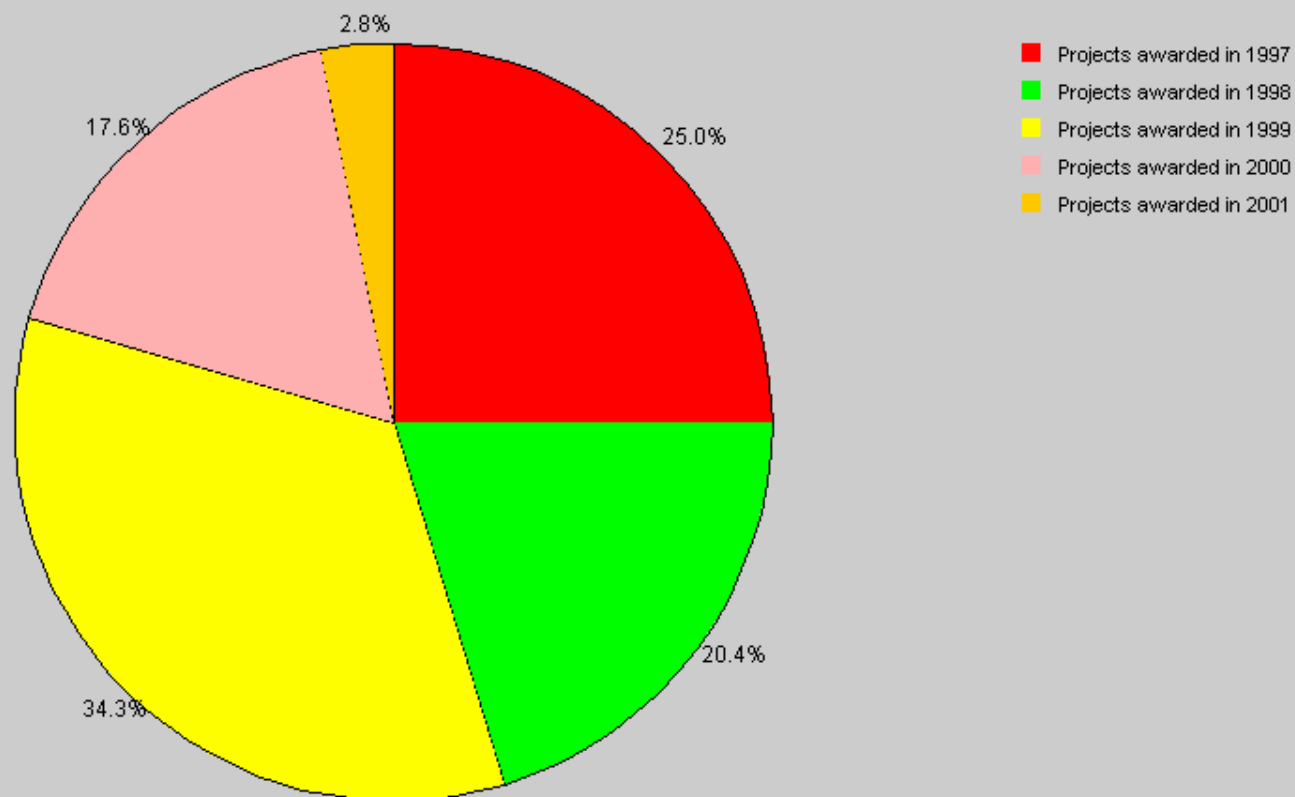
Questions for Project History topic

[Between 1992 and 1996, how many projects were awarded in Rep. District 19?](#)
[Between 1997 and 2001, how many projects were awarded in Rep. District 19?](#)
[Between 1992 and 1996, what was the total cost of all projects awarded in Rep. District 19?](#)
[Between 1997 and 2001, what was the total cost of all projects awarded in Rep. District 19?](#)

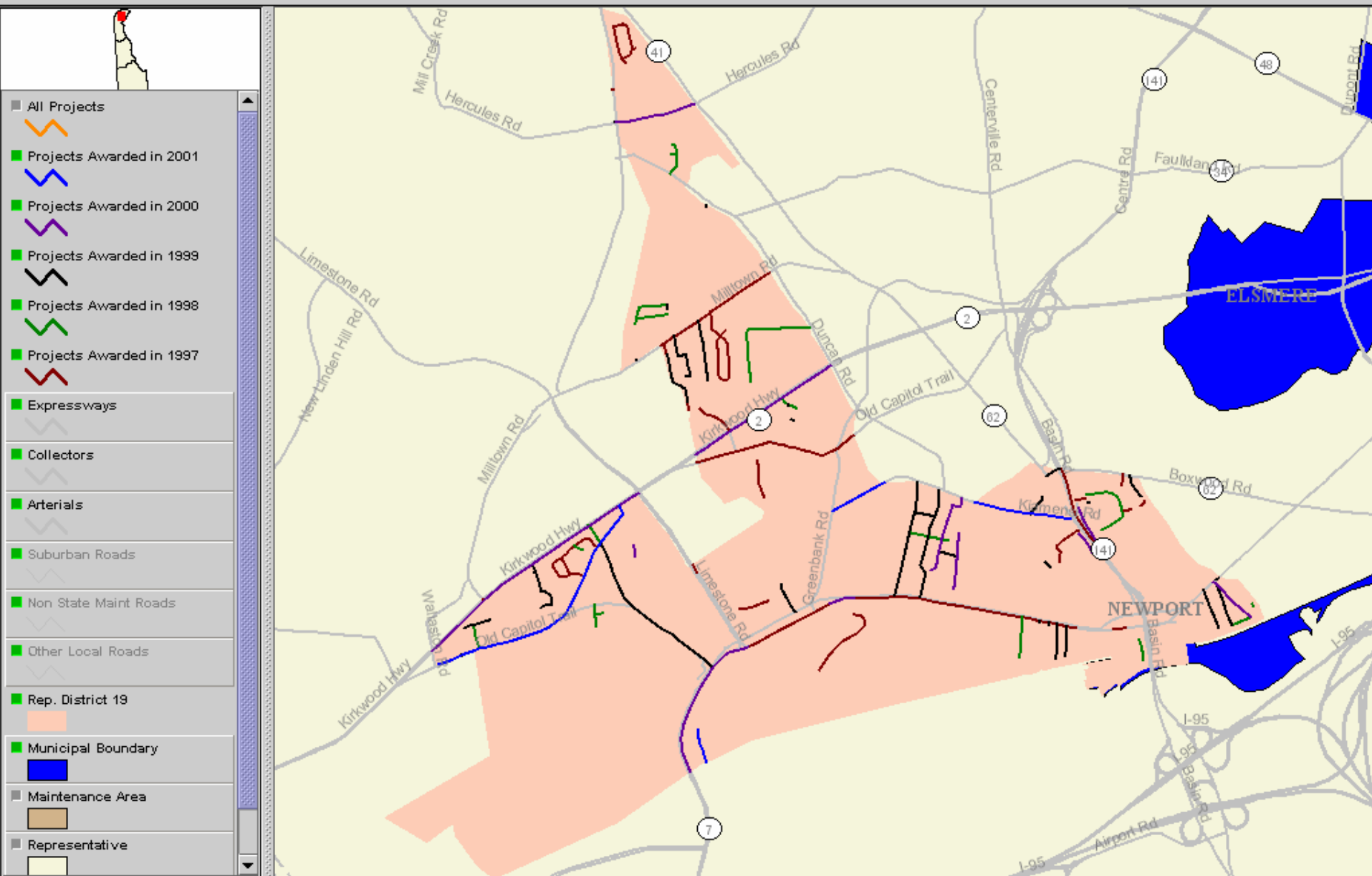
Answer for the selected Question

There were 108 projects awarded between 1997 - 2001, which was 22.45% of the state's total of 481 projects. They are broken down as follows :

Year Awarded	Total Projects	Total Projects in state	Percent of State Total
1997	27 projects	99 projects	27.27%
1998	22 projects	81 projects	27.16%
1999	37 projects	117 projects	31.62%
2000	19 projects	87 projects	21.84%
2001	3 projects	97 projects	3.09%

[Back](#)[Help](#)[Get Map](#)

Awarded Projects (1997-2001)
Representative District 19

[Back](#)


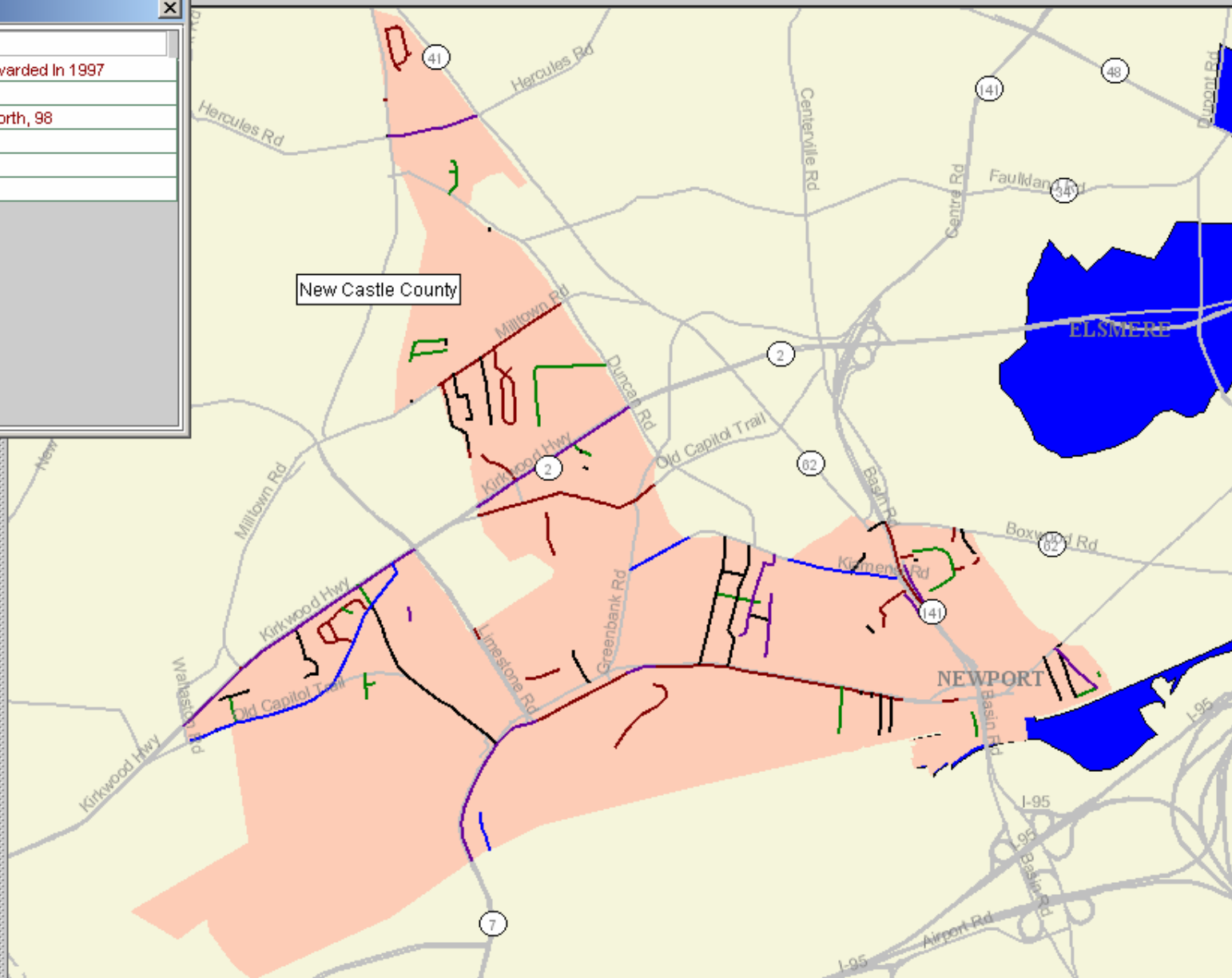
Back



Attributes

Attribute	Value
Layer	Projects Awarded In 1997
Project No	98 -064 -01
Project Title	Patching, North, 98
Project Type	Capital
Amount Awarded	\$1,099,842
Award Date	12/18/1997

- Expressways
- Collectors
- Arterials
- Suburban Roads
- Non State Maint Roads
- Other Local Roads
- Rep. District 19
- Municipal Boundary
- Maintenance Area
- Representative



Back

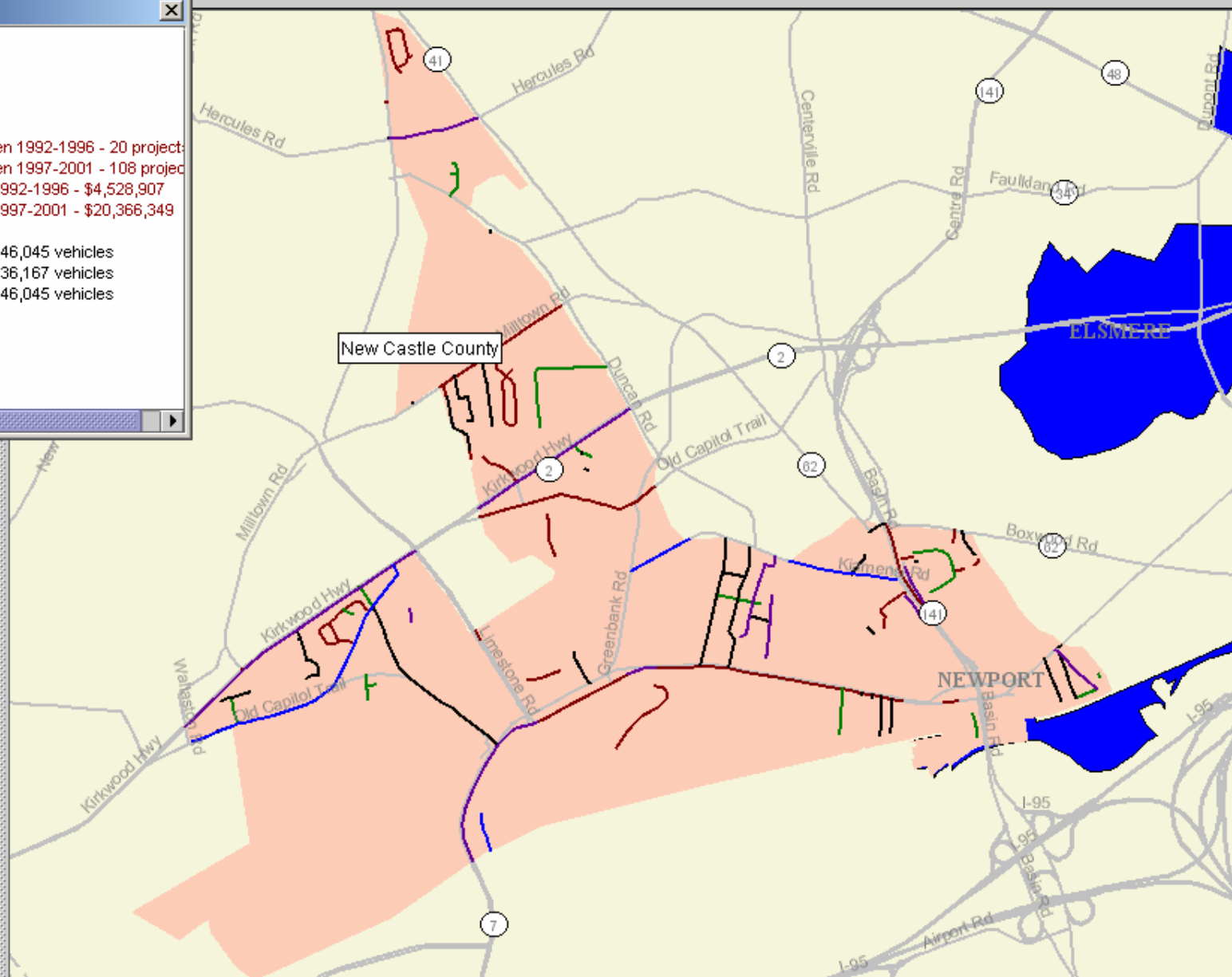


At A Glance

Rep. District 19 at a glance...

- Infrastructure
- Demographics Information
- Transit Information
- Project History
 - Projects awarded between 1992-1996 - 20 projects
 - Projects awarded between 1997-2001 - 108 projects
 - Cost awarded between 1992-1996 - \$4,528,907
 - Cost awarded between 1997-2001 - \$20,366,349
- Traffic Monitoring
 - AADT count as of 1999 - 46,045 vehicles
 - AADT count as of 2000 - 36,167 vehicles
 - AADT count as of 2001 - 46,045 vehicles

- Expressways
- Collectors
- Arterials
- Suburban Roads
- Non State Maint Roads
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Back



Search

Search Window

Frequent Search: Find Project by title

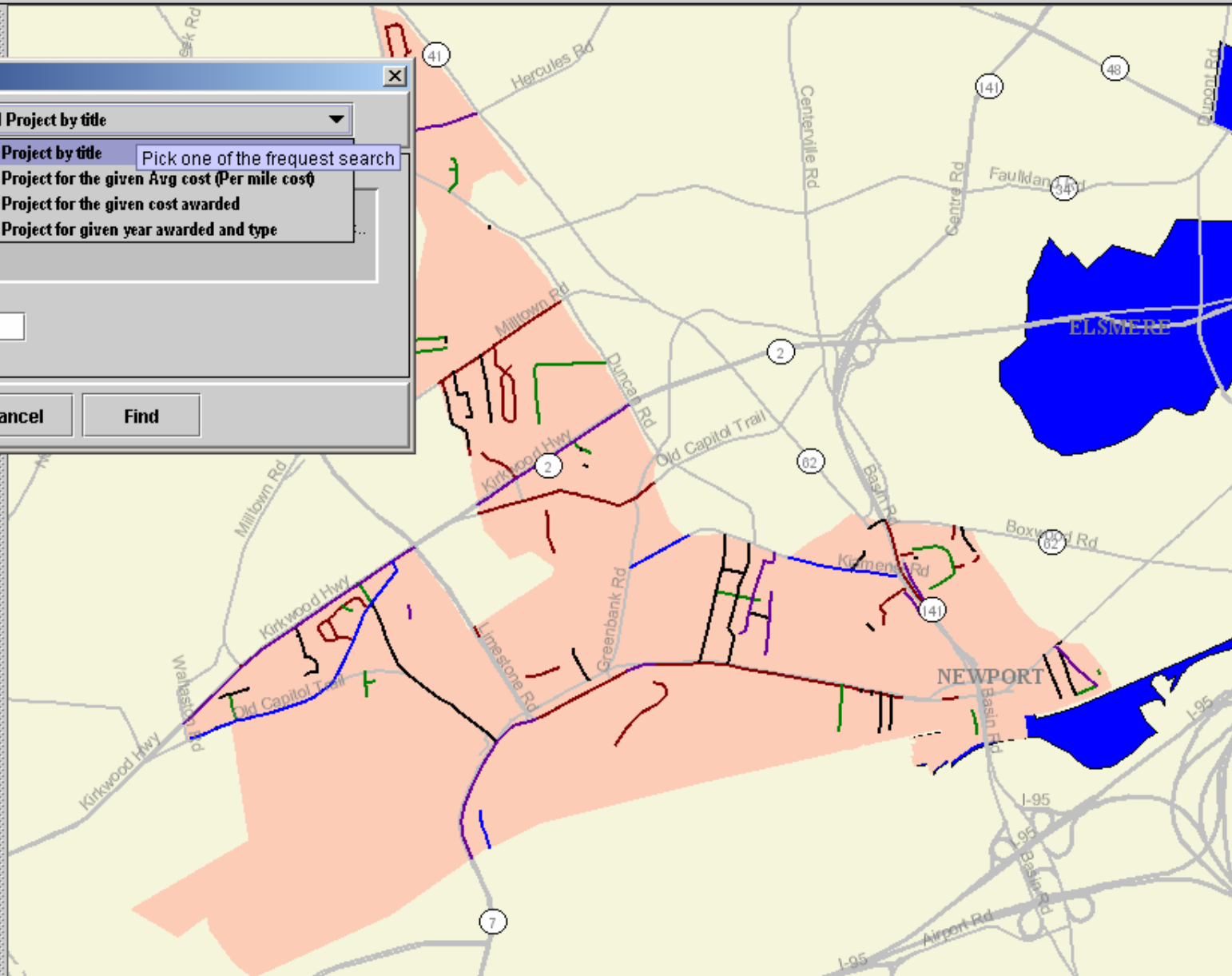
- Find Project by title Pick one of the frequent search
- Find Project for the given Avg cost (Per mile cost)
- Find Project for the given cost awarded
- Find Project for given year awarded and type

Enter as many beginn
Example, if you enter

Enter Project Title

Cancel Find

- Collectors
- Arterials
- Suburban Roads
- Non State Maint Roads
- Other Local Roads
- Rep. District 19
- Municipal Boundary
- Maintenance Area
- Representative



Back



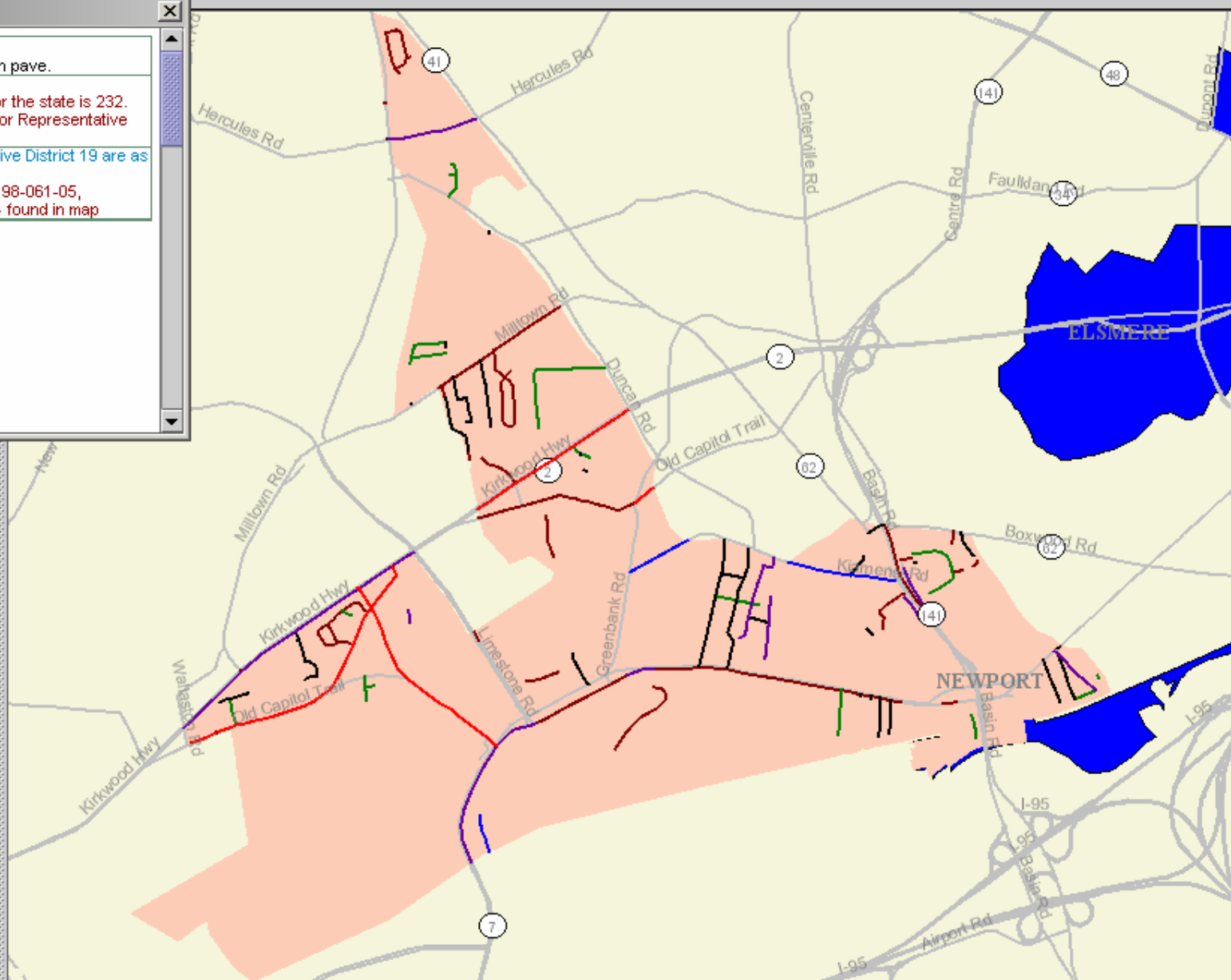
Search

Search Summary

You queried
Find Project for the title starts with pave.
Query returned
Total Number of Projects found for the state is 232.
However, 6 Project were found for Representative District 19.
Project found for the Representative District 19 are as follows:
Project Id 20-061-04, 97-061-12, 98-061-05, 98-061-05, 99-061-04, 99-061-04 found in map

Projects Awarded in 1997

- Expressways
- Collectors
- Arterials
- Suburban Roads
- Non State Maint Roads
- Other Local Roads
- Rep. District 19
- Municipal Boundary
- Maintenance Area





Special Thanks to

Delaware Department of Transportation

Office of Information Technologies

Mr. Vincent Rucinski
302-760-2604



Questions

