Business Section

The business that hired me for this job was the State of Connecticut Department of Transportation. Connecticut has a need for an overhaul of the transportation system in the state. However, funding is an issue. The state government hopes to be able to fund this endeavor by placing tolls on the roads. Connecticut is a drive through state meaning that most people from out of state do not need to stop to get gas in Connecticut as one tank of fuel is often more than enough to make it from New York to the Massachusetts line. As a result, Connecticut is missing out on tax dollars from out of state drivers. Whereas neighboring state are capitalizing on out of state traffic to help fund their road maintenance. Forty percent of traffic on the state's major highways is out of state traffic and to remain competitive with New York and Massachusetts; Connecticut needs to reinstate tolling.

The state needs a list of roads that should be tolled by applying ADT (Average Daily Traffic) data. What roads in Connecticut are the most travelled, and what locations, such as which towns are those roads most used in. This will help determine the best locations to place tolling gantries to maximize income for the state. Also, this could be used to see which roads are used the most and therefore need the most attention as far as repairs and other maintenance are concerned.

```
|-- Query 1
-- List ADT, order by RouteNUM and ADT
SELECT t.TaxCode,
       t.TownName,
       hys.RouteNum,
       CAST(adt.NumCars AS INT) AS ADT
FROM Towns t
INNER JOIN AnnualAverageDailyTrafficInterStates adt
    ON t.TaxCode = adt.TaxCode
INNER JOIN Interstates hys
    ON hys.RouteNum = adt.RouteNum
Order BY RouteNum, ADT DESC
|-- End of Interstates ADT and RouteNum order by
```

Figure 1. Query 1, produces the results in Table 1

Report 1: ADT ordered by Route Number and Average Daily Traffic ordered in descending order, this way we can see which towns and roads have the most traffic. This would show the most used area of the road because the roads are organized by Town name, and the average daily traffic. This allows us to see areas of a high travel. This gives us the best areas to place tolls.

Table 1. Average ADT, ordered by RouteNum and ADT in descending order

TaxCode	TownName	RouteNum	ADT
132	South Windsor	I-291	48817
164	Windsor	I-291	37050
077	Manchester	I-291	17000
077	Manchester	I-384	41538
043	East Hartford	I-384	36700
012	Bolton	I-384	28050
086	Montville	I-395	51486
104	Norwich	I-395	48550
073	Lisbon	I-395	38325
058	Griswold	I-395	31817
152	Waterford	I-395	27650
109	Plainfield	I-395	27650
069	Killingly	I-395	26719
116	Putnam	I-395	24089
141	Thompson	I-395	21250
051	Fairfield	I-684	70200
080	Meriden	I-691	55775
131	Southington	I-691	54167
025	Cheshire	I-691	34975
064	Hartford	I-84	138636
043	East Hartford	I-84	116122
155	West Hartford	I-84	116070
077	Manchester	I-84	107630
146	Vernon	I-84	92300
151	Waterbury	I-84	91774
034	Danbury	I-84	86719
052	Farmington	I-84	85950
110	Plainville	I-84	84517
089	New Britain	I-84	78417
009	Bethel	I-84	78300
097	Newtown	I-84	78300
131	Southington	I-84	75082
096	New Milford	I-84	70015
130	Southbury	I-84	64311
081	Middlebury	I-84	63850
142	Tolland	I-84	63843
160	Willington	I-84	50450
003	Ashford	I-84	49100
145	Union	I-84	48400
025	Cheshire	I-84	8100
119	Rocky Hill	I-91	137400
164	Windsor	I-91	129436

159	Wethersfield	I-91	128460
064	Hartford	I-91	116548
033	Cromwell	I-91	114915
093	New Haven	I-91	111575
165	Windsor Locks	I-91	109500
083	Middletown	I-91	108900
047	East Windsor	I-91	102940
101	North Haven	I-91	91078
049	Enfield	I-91	89647
080	Meriden	I-91	87286
148	Wallingford	I-91	76257
015	Bridgeport	I-95	142991
103	Norwalk	I-95	138645
051	Fairfield	I-95	138275
135	Stamford	I-95	135646
156	West Haven	I-95	133343
057	Greenwich	I-95	133323
035	Darien	I-95	133323
158	Westport	I-95	130240
093	New Haven	I-95	128546
107	Orange	I-95	126175
084	Milford	I-95	122436
044	East Haven	I-95	122436
138	Stratford	I-95	120558
095	New London	I-95	82020
014	Branford	I-95	81370
059	Groton	I-95	72289
060	Guilford	I-95	70500
045	East Lyme	I-95	67600
076	Madison	I-95	65938
105	Old Lyme	I-95	63229
027	Clinton	I-95	61425
154	Westbrook	I-95	59300
152	Waterford	I-95	58834
137	Stonington	I-95	46672
102	North Stonington	I-95	34840

The next query we order ADT and the Route Numbers by State routes. This starts with the very first road in the line. Therefore, all roads are in order starting with 1 and so on. The busiest town on each road is displayed first.

```
--Query 2
-- ADT and RouteNum order by State Routes
SELECT t.TaxCode,
       t.TownName,
       hys.RouteNum,
       adt.NumCars
FROM Towns t
INNER JOIN AverageDailyTraffic adt
    ON t.TaxCode = adt.TaxCode
INNER JOIN stateRds hys
    ON hys.RouteNum = adt.RouteNum
Order BY hys.RouteNum, NumCars DESC
--END of ADT and RouteNum order by State Routes
```

Figure 2. Orders ADT by Route, see Table 2

Table 2. Average Daily Traffic ordered by State Routes in every town in CT

TaxCode	TownName	RouteNum	NumCars
025	Cheshire	Route 10	22300
093	New Haven	Route 10	19800
131	Southington	Route 10	18300
110	Plainville	Route 10	17500
128	Simsbury	Route 10	14700
052	Farmington	Route 10	13100
004	Avon	Route 10	12900
056	Granby	Route 10	11300
062	Hamden	Route 10	10400
044	East Haven	Route 100	20700
112	Pomfret	Route 101	7800
069	Killingly	Route 101	5800
118	Ridgefield	Route 102	6700
093	New Haven	Route 103	8800
101	North Haven	Route 103	6800
135	Stamford	Route 104	13200
135	Stamford	Route 106	8700
161	Wilton	Route 106	3200
035	Darien	Route 106	13800
117	Redding	Route 107	2900
161	Wilton	Route 107	11400
126	Shelton	Route 108	8000
144	Trumbull	Route 108	11300
138	Stratford	Route 108	10600
140	Thomaston	Route 109	3600

087	Morris	Route 109	2800
150	Washington	Route 109	2000
096	New Milford	Route 109	1100
085	Monroe	Route 110	5200
138	Stratford	Route 110	22400
126	Shelton	Route 110	10100
144	Trumbull	Route 111	9100
085	Monroe	Route 111	12000
122	Salisbury	Route 112	1400
138	Stratford	Route 113	8900
167	Woodbridge	Route 114	7000
107	Orange	Route 114	13000
124	Seymour	Route 115	4800
002	Ansonia	Route 115	11100
037	Derby	Route 115	10200
118	Ridgefield	Route 116	9300
114	Preston	Route 117	8200
072	Ledyard	Route 117	5500
059	Groton	Route 117	13400
066	Harwinton	Route 118	9400
074	Litchfield	Route 118	7300
114	Preston	Route 12	7000
109	Plainfield	Route 12	4800
116	Putnam	Route 12	2200
141	Thompson	Route 12	2100
104	Norwich	Route 12	11800
072	Ledyard	Route 12	11100
073	Lisbon	Route 12	11000
058	Griswold	Route 12	10800
069	Killingly	Route 12	10100
131	Southington	Route 120	7700
084	Milford	Route 121	9200
107	Orange	Route 121	11300
156	West Haven	Route 122	12600
093	New Haven	Route 122	10000
090	New Canaan	Route 123	16200
103	Norwalk	Route 123	12000
035	Darien	Route 124	7600
090	New Canaan	Route 124	10400
031	Cornwall	Route 125	450
100	North Canaan	Route 126	400
021	Canaan	Route 126	1300
015	Bridgeport	Route 127	9300
144	Trumbull	Route 127	6600
031	Cornwall	Route 128	1400
125	Sharon	Route 128	1400

138	Stratford	Route 130	4000
015	Bridgeport	Route 130	10900
141	Thompson	Route 131	2000
153	Watertown	Route 132	850
010	Bethlehem	Route 132	2500
168	Woodbury	Route 132	1100
018	Brookfield	Route 133	5600
016	Bridgewater	Route 133	4000
051	Fairfield	Route 135	11700
158	Westport	Route 136	6100
046	Easton	Route 136	5100
035	Darien	Route 136	13900
135	Stamford	Route 137	11600
058	Griswold	Route 138	5300
073	Lisbon	Route 138	1900
147	Voluntown	Route 138	1600
133	Sprague	Route 138	1100
099	North Branford	Route 139	12900
014	Branford	Route 139	10300
022	Canterbury	Route 14	6400
163	Windham	Route 14	5000
123	Scotland	Route 14	3400
109	Plainfield	Route 14	2300
136	Sterling	Route 14	1100
165	Windsor Locks	Route 140	4500
048	Ellington	Route 140	4500
134	Stafford	Route 140	1700
047	East Windsor	Route 140	12300
014	Branford	Route 142	12900
044	East Haven	Route 142	12100
154	Westbrook	Route 145	8900
027	Clinton	Route 145	5100
036	Depp River	Route 145	3800
026	Chester	Route 145	2600
060	Guilford	Route 146	4400
014	Branford	Route 146	12100
038	Durham	Route 147	8100
082	Middlefield	Route 147	4700
026	Chester	Route 148	5300
075	Lyme	Route 148	200
070	Killingworth	Route 148	1700
028	Colchester	Route 149	5400
041	East Haddam	Route 149	5000
109	Plainfield	Route 14A	3600
136	Sterling	Route 14A	3200
159	Wethersfield	Route 15	8400

094	Newington	Route 15	18400
007	Berlin	Route 15	14000
057	Greenwich	Route 15	13400
099	North Branford	Route 150	4100
148	Wallingford	Route 150	12000
041	East Haddam	Route 151	4500
061	Haddam	Route 151	3600
042	East Hampton	Route 151	2500
107	Orange	Route 152	9500
050	Essex	Route 153	10800
154	Westbrook	Route 153	10500
050	Essex	Route 154	8300
036	Depp River	Route 154	6700
061	Haddam	Route 154	6600
026	Chester	Route 154	5300
106	Old Saybrook	Route 154	4800
083	Middletown	Route 155	9400
045	East Lyme	Route 156	9300
152	Waterford	Route 156	7400
105	Old Lyme	Route 156	3400
041	East Haddam	Route 156	1200
082	Middlefield	Route 157	3200
083	Middletown	Route 157	2200
064	Hartford	Route 159	6500
164	Windsor	Route 159	5300
165	Windsor Locks	Route 159	4900
139	Suffield	Route 159	4800
042	East Hampton	Route 16	6200
028	Colchester	Route 16	15100
071	Lebanon	Route 16	1300
007	Berlin	Route 160	9700
119	Rocky Hill	Route 160	5300
045	East Lyme	Route 161	9600
086	Montville	Route 161	5100
156	West Haven	Route 162	9000
107	Orange	Route 162	13100
084	Milford	Route 162	12500
086	Montville	Route 163	5000
013	Bozrah	Route 163	3100
058	Griswold	Route 164	3600
114	Preston	Route 164	10300
147	Voluntown	Route 165	3800
104	Norwich	Route 165	2900
114	Preston	Route 165	2700
058	Griswold	Route 165	2200
106	Old Saybrook	Route 166	4500

154	Westbrook	Route 166	3700
052	Farmington	Route 167	6500
004	Avon	Route 167	4900
128	Simsbury	Route 167	13100
139	Suffield	Route 168	4200
073	Lisbon	Route 169	6300
022	Canterbury	Route 169	5200
019	Brooklyn	Route 169	4800
104	Norwich	Route 169	4500
112	Pomfret	Route 169	4300
169	Woodstock	Route 169	2300
099	North Branford	Route 17	9500
101	North Haven	Route 17	9300
113	Portland	Route 17	7100
083	Middletown	Route 17	17700
038	Durham	Route 17	15900
054	Glastonbury	Route 17	14100
093	New Haven	Route 17	14000
145	Union	Route 171	800
116	Putnam	Route 171	6000
039	Eastford	Route 171	550
169	Woodstock	Route 171	1700
130	Southbury	Route 172	8200
155	West Hartford	Route 173	9100
094	Newington	Route 173	14900
094	Newington	Route 174	13900
089	New Britain	Route 174	12700
089	New Britain	Route 175	8500
094	Newington	Route 175	12600
159	Wethersfield	Route 175	11300
094	Newington	Route 176	8100
004	Avon	Route 177	8000
023	Canton	Route 177	7900
052	Farmington	Route 177	15300
110	Plainville	Route 177	12500
164	Windsor	Route 178	5500
011	Bloomfield	Route 178	10900
065	Hartland	Route 179	1500
023	Canton	Route 179	12000
020	Burlington	Route 179	10200
005	Barkhamsted	Route 179	1000
113	Portland	Route 17A	7200
065	Hartland	Route 181	250
005	Barkhamsted	Route 181	2300
029	Colebrook	Route 182	750
098	Norfolk	Route 182	750

029	Colebrook	Route 182A	300
143	Torrington	Route 183	4100
162	Winchester	Route 183	1300
029	Colebrook	Route 183	1100
102	North Stonington	Route 184	6100
137	Stonington	Route 184	4700
059	Groton	Route 184	14700
128	Simsbury	Route 185	8800
155	West Hartford	Route 185	3600
011	Bloomfield	Route 185	19400
129	Somers	Route 186	1900
064	Hartford	Route 187	8900
040	East Granby	Route 187	7700
139	Suffield	Route 187	4600
011	Bloomfield	Route 187	12400
081	Middlebury	Route 188	6900
130	Southbury	Route 188	5800
124	Seymour	Route 188	3700
056	Granby	Route 189	7200
064	Hartford	Route 189	19900
155	West Hartford	Route 189	13500
011	Bloomfield	Route 189	13300
128	Simsbury	Route 189	13200
040	East Granby	Route 189	10000
134	Stafford	Route 19	2900
129	Somers	Route 190	8300
139	Suffield	Route 190	3800
134	Stafford	Route 190	3500
145	Union	Route 190	2300
049	Enfield	Route 190	15500
047	East Windsor	Route 191	7600
049	Enfield	Route 191	6700
049	Enfield	Route 192	6600
141	Thompson	Route 193	2400
132	South Windsor	Route 194	11200
142	Tolland	Route 195	5100
163	Windham	Route 195	2700
078	Mansfield	Route 195	11600
042	East Hampton	Route 196	4700
061	Haddam	Route 196	2100
145	Union	Route 197	950
141	Thompson	Route 197	2800
169	Woodstock	Route 197	1800
024	Chaplin	Route 198	4500
039	Eastford	Route 198	4100
169	Woodstock	Route 198	1000

150	Washington	Route 199	1800
120	Roxbury	Route 199	1300
114	Preston	Route 2	9300
102	North Stonington	Route 2	14000
104	Norwich	Route 2	12600
137	Stonington	Route 2	12200
072	Ledyard	Route 2	10900
162	Winchester	Route 20	3600
005	Barkhamsted	Route 20	1800
065	Hartland	Route 20	1800
040	East Granby	Route 20	12500
056	Granby	Route 20	11200
141	Thompson	Route 200	4300
137	Stonington	Route 201	3200
058	Griswold	Route 201	2800
102	North Stonington	Route 201	2300
163	Windham	Route 203	4500
019	Brooklyn	Route 205	4900
109	Plainfield	Route 205	2600
133	Sprague	Route 207	3800
053	Franklin	Route 207	3100
067	Hebron	Route 207	2900
071	Lebanon	Route 207	2200
074	Litchfield	Route 209	2900
087	Morris	Route 209	2700
095	New London	Route 213	9400
152	Waterford	Route 213	1600
072	Ledyard	Route 214	4400
059	Groton	Route 215	3200
102	North Stonington	Route 216	4000
082	Middlefield	Route 217	2800
033	Cromwell	Route 217	15400
155	West Hartford	Route 218	8400
164	Windsor	Route 218	7300
011	Bloomfield	Route 218	14500
056	Granby	Route 219	4800
092	New Hartford	Route 219	3200
005	Barkhamsted	Route 219	1100
099	North Branford	Route 22	12500
049	Enfield	Route 220	10300
066	Harwinton	Route 222	500
140	Thomaston	Route 222	4300
017	Bristol	Route 229	13600
131	Southington	Route 229	10800
137	Stonington	Route 234	2100
002	Ansonia	Route 243	9700

093	New Haven	Route 243	9600
167	Woodbridge	Route 243	7800
039	Eastford	Route 244	2700
112	Pomfret	Route 244	2200
144	Trumbull	Route 25	9700
018	Brookfield	Route 25	8900
085	Monroe	Route 25	18700
097	Newtown	Route 25	17700
140	Thomaston	Route 254	7800
074	Litchfield	Route 254	3900
153	Watertown	Route 262	6500
111	Plymouth	Route 262	1200
162	Winchester	Route 263	400
055	Goshen	Route 263	250
137	Stonington	Route 27	7700
059	Groton	Route 27	2300
055	Goshen	Route 272	950
098	Norfolk	Route 272	400
143	Torrington	Route 272	1600
078	Mansfield	Route 275	2700
032	Coventry	Route 275	2400
048	Ellington	Route 286	7500
094	Newington	Route 287	14100
159	Wethersfield	Route 287	12200
163	Windham	Route 289	2500
114	Preston	Route 2A	13700
086	Montville	Route 2A	11500
119	Rocky Hill	Route 3	8600
033	Cromwell	Route 3	15400
083	Middletown	Route 3	14400
159	Wethersfield	Route 3	11100
142	Tolland	Route 30	9000
146	Vernon	Route 30	8400
132	South Windsor	Route 30	6400
048	Ellington	Route 30	4600
134	Stafford	Route 30	4200
077	Manchester	Route 30	14300
009	Bethel	Route 302	12100
164	Windsor	Route 305	5300
011	Bloomfield	Route 305	13600
023	Canton	Route 309	2100
032	Coventry	Route 31	9300
146	Vernon	Route 31	8900
078	Mansfield	Route 31	4900
167	Woodbridge	Route 313	6200
124	Seymour	Route 313	6100

159	Wethersfield	Route 314	7900
128	Simsbury	Route 315	7900
001	Andover	Route 316	3100
002	Ansonia	Route 316	3100
067	Hebron	Route 316	2100
168	Woodbury	Route 317	3100
120	Roxbury	Route 317	2200
005	Barkhamsted	Route 318	4900
134	Stafford	Route 319	3900
104	Norwich	Route 32	6800
152	Waterford	Route 32	5400
160	Willington	Route 32	5000
053	Franklin	Route 32	18300
095	New London	Route 32	14500
078	Mansfield	Route 32	13500
086	Montville	Route 32	13100
163	Windham	Route 32	10900
078	Mansfield	Route 320	4000
160	Willington	Route 320	2800
166	Wolcott	Route 322	8500
131	Southington	Route 322	15700
118	Ridgefield	Route 33	5800
161	Wilton	Route 33	16000
158	Westport	Route 33	15800
002	Ansonia	Route 334	6600
124	Seymour	Route 334	4400
093	New Haven	Route 337	6400
044	East Haven	Route 337	12000
156	West Haven	Route 34	20900
107	Orange	Route 34	19400
037	Derby	Route 34	18500
097	Newtown	Route 34	12600
093	New Haven	Route 34	10800
124	Seymour	Route 34	10600
085	Monroe	Route 34	10400
068	Kent	Route 341	2800
149	Warren	Route 341	2100
150	Washington	Route 341	1800
125	Sharon	Route 343	2600
059	Groton	Route 349	4000
118	Ridgefield	Route 35	9100
028	Colchester	Route 354	4700
121	Salem	Route 354	2400
125	Sharon	Route 361	3400
131	Southington	Route 364	8300
007	Berlin	Route 364	2900

096	New Milford	Route 37	5800
127	Sherman	Route 37	2900
091	New Fairfield	Route 37	2600
034	Danbury	Route 37	20800
007	Berlin	Route 372	3800
089	New Britain	Route 372	20200
033	Cromwell	Route 372	13200
110	Plainville	Route 372	11200
091	New Fairfield	Route 39	4800
034	Danbury	Route 39	13300
127	Sherman	Route 39	1300
155	West Hartford	Route 4	8600
055	Goshen	Route 4	5800
066	Harwinton	Route 4	5800
143	Torrington	Route 4	5200
031	Cornwall	Route 4	2400
052	Farmington	Route 4	20900
125	Sharon	Route 4	2000
020	Burlington	Route 4	13800
101	North Haven	Route 40	4000
125	Sharon	Route 41	1500
122	Salisbury	Route 41	1200
006	Beacon Falls	Route 42	8200
025	Cheshire	Route 42	4800
108	Oxford	Route 42	2600
008	Bethany	Route 42	2300
150	Washington	Route 45	2600
149	Warren	Route 45	1600
031	Cornwall	Route 45	1300
168	Woodbury	Route 47	4300
150	Washington	Route 47	2300
137	Stonington	Route 49	3000
147	Voluntown	Route 49	2200
102	North Stonington	Route 49	2100
136	Sterling	Route 49	1800
009	Bethel	Route 53	9000
161	Wilton	Route 53	6200
117	Redding	Route 53	4100
157	Weston	Route 53	3800
034	Danbury	Route 53	12300
103	Norwalk	Route 53	10600
096	New Milford	Route 55	3200
117	Redding	Route 57	5700
158	Westport	Route 57	14600
157	Weston	Route 57	11400
117	Redding	Route 58	4700

046	Easton	Route 58	3600
051	Fairfield	Route 58	19400
046	Easton	Route 59	7600
015	Bridgeport	Route 59	3900
085	Monroe	Route 59	2800
051	Fairfield	Route 59	11700
010	Bethlehem	Route 61	4700
168	Woodbury	Route 61	2300
087	Morris	Route 61	1600
081	Middlebury	Route 63	9900
088	Naugatuck	Route 63	8400
008	Bethany	Route 63	7400
153	Watertown	Route 63	4600
087	Morris	Route 63	4100
074	Litchfield	Route 63	4100
055	Goshen	Route 63	3800
021	Canaan	Route 63	2600
031	Cornwall	Route 63	2300
093	New Haven	Route 63	17500
167	Woodbridge	Route 63	13900
168	Woodbury	Route 64	6100
081	Middlebury	Route 64	19500
151	Waterbury	Route 64	19500
083	Middletown	Route 66	9900
042	East Hampton	Route 66	15700
067	Hebron	Route 66	14900
113	Portland	Route 66	14200
163	Windham	Route 66	13500
030	Columbia	Route 66	13100
079	Marlborough	Route 66	12800
082	Middlefield	Route 66	12200
096	New Milford	Route 67	8200
130	Southbury	Route 67	6900
167	Woodbridge	Route 67	6700
016	Bridgewater	Route 67	3200
120	Roxbury	Route 67	1900
108	Oxford	Route 67	15500
124	Seymour	Route 67	10000
025	Cheshire	Route 68	8600
148	Wallingford	Route 68	16900
088	Naugatuck	Route 68	14300
115	Prospect	Route 68	10700
166	Wolcott	Route 69	8800
017	Bristol	Route 69	8200
151	Waterbury	Route 69	7900
008	Bethany	Route 69	7400

020	Burlington	Route 69	6600
093	New Haven	Route 69	16500
115	Prospect	Route 69	10300
080	Meriden	Route 70	8400
025	Cheshire	Route 70	19300
080	Meriden	Route 71	9200
155	West Hartford	Route 71	7800
148	Wallingford	Route 71	5600
089	New Britain	Route 71	11100
007	Berlin	Route 71	10400
007	Berlin	Route 71A	7300
089	New Britain	Route 71A	3000
111	Plymouth	Route 72	2200
017	Bristol	Route 72	12300
110	Plainville	Route 72	12300
066	Harwinton	Route 72	1000
151	Waterbury	Route 73	12500
153	Watertown	Route 73	10500
146	Vernon	Route 74	9000
160	Willington	Route 74	7700
048	Ellington	Route 74	7500
003	Ashford	Route 74	6600
132	South Windsor	Route 74	4500
142	Tolland	Route 74	4000
165	Windsor Locks	Route 75	9200
139	Suffield	Route 75	6700
164	Windsor	Route 75	11600
060	Guilford	Route 77	4800
137	Stonington	Route 78	6900
070	Killingworth	Route 79	7300
076	Madison	Route 79	7200
162	Winchester	Route 8	6600
029	Colebrook	Route 8	2900
060	Guilford	Route 80	7600
036	Depp River	Route 80	6600
076	Madison	Route 80	4900
070	Killingworth	Route 80	4500
093	New Haven	Route 80	17600
044	East Haven	Route 80	15100
099	North Branford	Route 80	12900
061	Haddam	Route 81	7500
070	Killingworth	Route 81	6600
027	Clinton	Route 81	13100
061	Haddam	Route 82	6900
013	Bozrah	Route 82	6700
086	Montville	Route 82	5300

121	Salem	Route 82	3500
075	Lyme	Route 82	2000
104	Norwich	Route 82	11900
041	East Haddam	Route 82	10700
129	Somers	Route 83	9800
146	Vernon	Route 83	8500
077	Manchester	Route 83	6300
054	Glastonbury	Route 83	4900
048	Ellington	Route 83	13200
095	New London	Route 85	8200
012	Bolton	Route 85	7200
121	Salem	Route 85	6200
067	Hebron	Route 85	5500
028	Colchester	Route 85	16800
086	Montville	Route 85	12800
152	Waterford	Route 85	10600
071	Lebanon	Route 87	6100
053	Franklin	Route 87	5700
030	Columbia	Route 87	4500
001	Andover	Route 87	3300
078	Mansfield	Route 89	4200
003	Ashford	Route 89	2500
145	Union	Route 89	1300
067	Hebron	Route 94	3800
054	Glastonbury	Route 94	12400
063	Hampton	Route 97	900
104	Norwich	Route 97	6000
133	Sprague	Route 97	5000
112	Pomfret	Route 97	1700
123	Scotland	Route 97	1500
033	Cromwell	Route 99	8100
159	Wethersfield	Route 99	11600
119	Rocky Hill	Route 99	11400

A third query would be to list every Tax Code with its town. In a lot of data from the state the route number and ADT are listed next to only the town's tax code. Which without a list of the towns and their perspective tax codes, it would not be possible which town has which tax code.

```
--Query 3
--List Town Names and their Tax Codes
SELECT t.TaxCode,
       t.TownName
From Towns t

Group BY t.TaxCode, t.TownName
Order by t.Taxcode ASC
```

Figure 3. Displays the town its perspective tax code. See Table 3.

Table 3 Taxcodes of CT with perspective Town.

TaxCode	TownName
001	Andover
002	Ansonia
003	Ashford
004	Avon
005	Barkhamsted
006	Beacon Falls
007	Berlin
008	Bethany
009	Bethel
010	Bethlehem
011	Bloomfield
012	Bolton
013	Bozrah
014	Branford
015	Bridgeport
016	Bridgewater
017	Bristol
018	Brookfield
019	Brooklyn
020	Burlington
021	Canaan
022	Canterbury
023	Canton
024	Chaplin
025	Cheshire
026	Chester
027	Clinton
028	Colchester
029	Colebrook
030	Columbia
031	Cornwall
032	Coventry

TaxCode	TownName
033	Cromwell
034	Danbury
035	Darien
036	Depp River
037	Derby
038	Durham
039	Eastford
040	East Granby
041	East Haddam
042	East Hampton
043	East Hartford
044	East Haven
045	East Lyme
046	Easton
047	East Windsor
048	Ellington
049	Enfield
050	Essex
051	Fairfield
052	Farmington
053	Franklin
054	Glastonbury
055	Goshen
056	Granby
057	Greenwich
058	Griswold
059	Groton
060	Guilford
061	Haddam
062	Hamden
063	Hampton
064	Hartford
065	Hartland
066	Harwinton
067	Hebron

TaxCode	TownName
068	Kent
069	Killingly
070	Killingworth
071	Lebanon
072	Ledyard
073	Lisbon
074	Litchfield
075	Lyme
076	Madison
077	Manchester
078	Mansfield
079	Marlborough
080	Meriden
081	Middlebury
082	Middlefield
083	Middletown
084	Milford
085	Monroe
086	Montville
087	Morris
088	Naugatuck
089	New Britain
090	New Canaan
091	New Fairfield
092	New Hartford
093	New Haven
094	Newington
095	New London
096	New Milford
097	Newtown
098	Norfolk
099	North Branford
100	North Canaan
101	North Haven

102	North Stonington		124	Seymour		147	Voluntown
			125	Sharon		148	Wallingford
103	Norwalk		126	Shelton		149	Warren
104	Norwich		127	Sherman		150	Washington
105	Old Lyme		128	Simsbury		151	Waterbury
106	Old Saybrook		129	Somers		152	Waterford
107	Orange		130	Southbury		153	Watertown
108	Oxford		131	Southington		154	Westbrook
109	Plainfield		132	South Windsor		155	West Hartford
110	Plainville		133	Sprague		156	West Haven
111	Plymouth		134	Stafford		157	Weston
112	Pomfret		135	Stamford		158	Westport
113	Portland		136	Sterling		159	Wethersfield
114	Preston		137	Stonington		160	Willington
115	Prospect		138	Stratford		161	Wilton
116	Putnam		139	Suffield		162	Winchester
117	Redding		140	Thomaston		163	Windham
118	Ridgefield		141	Thompson		164	Windsor
119	Rocky Hill		142	Tolland		165	Windsor Locks
120	Roxbury		143	Torrington		166	Wolcott
121	Salem		144	Trumbull		167	Woodbridge
122	Salisbury		145	Union		168	Woodbury
123	Scotland		146	Vernon		169	Woodstock

Next, we should also list the towns by population. Towns with higher population will require more maintenance to roads and which towns may require more aid to reduce congestion.

```
|--Query 4
 --List towns in according to their populations
|SELECT t.TaxCode,
        t.TownName,
        CAST(t.[Population] AS INT) AS POP
 FROM Towns t
 GROUP BY t.TaxCode, t.TownName, t.[Population]
 ORDER BY POP DESC

|-- List the Town Names and their tax codes
```

Figure 4 List all Towns in order of their population, see table 4 for results

TaxCode	TownName	POP
015	Bridgeport	144229
093	New Haven	129779
064	Hartford	124775
135	Stamford	122643
151	Waterbury	110366
103	Norwalk	85603
034	Danbury	80893
089	New Britain	73206
155	West Hartford	63268
057	Greenwich	61171
062	Hamden	60960
080	Meriden	60868
017	Bristol	60477
051	Fairfield	59404
077	Manchester	58241
156	West Haven	55564
084	Milford	52759
138	Stratford	51384
043	East Hartford	51252
083	Middletown	47648
148	Wallingford	45135
049	Enfield	44654
131	Southington	43069
104	Norwich	40493
059	Groton	40115
126	Shelton	39559
144	Trumbull	36018
054	Glastonbury	34427
088	Naugatuck	31862
094	Newington	30562
025	Cheshire	29261
044	East Haven	29257
146	Vernon	29179
164	Windsor	29044
096	New Milford	28142
014	Branford	28026
095	New London	27620
097	Newtown	27560
159	Wethersfield	26668
078	Mansfield	26543
158	Westport	26391
132	South Windsor	25709
052	Farmington	25340
163	Windham	25268
118	Ridgefield	24638
101	North Haven	24093
153	Watertown	22514
128	Simsbury	23511
060	Guilford	22375
035	Darien	20732
011	Bloomfield	20486
130	Southbury	19904
007	Berlin	19866
090	New Canaan	19738
119	Rocky Hill	19709
086	Montville	19571
152	Waterford	19517
085	Monroe	19479
002	Ansonia	19249
045	East Lyme	19159
009	Bethel	18584
137	Stonington	18545
076	Madison	18269
004	Avon	18098
161	Wilton	18062
110	Plainville	17716
069	Killingly	17370
166	Wolcott	16680
124	Seymour	16540
018	Brookfield	16452
028	Colchester	16068
139	Suffield	15735
048	Ellington	15602
109	Plainfield	15405
142	Tolland	15052
143	Torrington	15052
072	Ledyard	15051
099	North Branford	14407
033	Cromwell	14005
107	Orange	13956
091	New Fairfield	13881
027	Clinton	13260
042	East Hampton	12959
037	Derby	12902
108	Oxford	12683
165	Windsor Locks	12498
032	Coventry	12435
111	Plymouth	12243
134	Stafford	12087
058	Griswold	11951
129	Somers	11444
056	Granby	11282
162	Winchester	11242
047	East Windsor	11162
106	Old Saybrook	10242
023	Canton	10292
157	Weston	10179
168	Woodbury	9975
067	Hebron	9686
116	Putnam	9584
113	Portland	9508
141	Thompson	9458
115	Prospect	9405
020	Burlington	9301
117	Redding	9158
041	East Haddam	9126
167	Woodbridge	8990
074	Litchfield	8466
061	Haddam	8346
019	Brooklyn	8210
169	Woodstock	7964
140	Thomaston	7887
105	Old Lyme	7603
081	Middlebury	7575
046	Easton	7490
038	Durham	7388
071	Lebanon	7308
092	New Hartford	6970
154	Westbrook	6938
050	Essex	6683
070	Killingworth	6525
079	Marlborough	6404
006	Beacon Falls	6049
160	Willington	6041
066	Harwinton	5642
008	Bethany	5563
030	Columbia	5485
102	North Stonington	5297
040	East Granby	5148
022	Canterbury	5132
012	Bolton	4980
114	Preston	4726
036	Depp River	4629
082	Middlefield	4425
073	Lisbon	4338
112	Pomfret	4247
121	Salem	4151
003	Ashford	4100
026	Chester	3994
136	Sterling	3830

122	Salisbury	3741	125	Sharon	2782	039	Eastford	1749
005	Barkhamsted	3620	013	Bozrah	2627	016	Bridgewater	1727
010	Bethlehem	3607	147	Voluntown	2603	123	Scotland	1726
127	Sherman	3581	075	Lyme	2406	098	Norfolk	1709
150	Washington	3578	087	Morris	2388	029	Colebrook	1485
100	North Canaan	3315	024	Chaplin	2305	149	Warren	1461
001	Andover	3303	120	Roxbury	2262	031	Cornwall	1420
133	Sprague	2984	065	Hartland	2114	021	Canaan	1234
068	Kent	2979	053	Franklin	1922	145	Union	854
055	Goshen	2976	063	Hampton	1863			

Another valuable tool would be to see the ADT of all state routes. Some have argued that tolling state routes would be necessary to determine whether tolling the roads would be appropriate. The biggest challenge was in trying to find enough data for all these roads. Below is not an exhaustive list, it includes the most travelled.

```
--Query 5
-- GET the ADT of CT state routes

SELECT t.TaxCode,
        t.TownName,
        hys.RouteNum,
        CAST(adt.NumCars AS INT) AS ADT
FROM Towns t
INNER JOIN AverageDailyTraffic adt
    ON t.TaxCode = adt.TaxCode
INNER JOIN stateRds hys
    ON hys.RouteNum = adt.RouteNum

GROUP BY t.TaxCode, t.TownName, hys.RouteNum, adt.NumCars
ORDER BY ADT DESC

-- Get the ADT of CT state routes
```

Figure 5 ADT of CT state routes Ordered in descending order by ADT

Table 5 Results from Figure 5, ADT of CT routes, ordered by ADT

TaxCode	TownName	RouteNum	ADT
138	Stratford	Route 110	22400
025	Cheshire	Route 10	22300
156	West Haven	Route 34	20900
052	Farmington	Route 4	20900
034	Danbury	Route 37	20800
044	East Haven	Route 100	20700
089	New Britain	Route 372	20200
064	Hartford	Route 189	19900
093	New Haven	Route 10	19800
081	Middlebury	Route 64	19500
151	Waterbury	Route 64	19500
051	Fairfield	Route 58	19400
107	Orange	Route 34	19400
011	Bloomfield	Route 185	19400
025	Cheshire	Route 70	19300
085	Monroe	Route 25	18700
037	Derby	Route 34	18500
094	Newington	Route 15	18400
131	Southington	Route 10	18300
053	Franklin	Route 32	18300
097	Newtown	Route 25	17700
083	Middletown	Route 17	17700
093	New Haven	Route 80	17600
093	New Haven	Route 63	17500
110	Plainville	Route 10	17500
148	Wallingford	Route 68	16900
028	Colchester	Route 85	16800
093	New Haven	Route 69	16500
090	New Canaan	Route 123	16200
161	Wilton	Route 33	16000
038	Durham	Route 17	15900
158	Westport	Route 33	15800
131	Southington	Route 322	15700
042	East Hampton	Route 66	15700
108	Oxford	Route 67	15500

049	Enfield	Route 190	15500		099	North Branford	Route 139	12900
033	Cromwell	Route 217	15400		014	Branford	Route 142	12900
033	Cromwell	Route 3	15400		099	North Branford	Route 80	12900
052	Farmington	Route 177	15300					
028	Colchester	Route 16	15100		086	Montville	Route 85	12800
044	East Haven	Route 80	15100		079	Marlborough	Route 66	12800
067	Hebron	Route 66	14900		089	New Britain	Route 174	12700
094	Newington	Route 173	14900		094	Newington	Route 175	12600
059	Groton	Route 184	14700		104	Norwich	Route 2	12600
128	Simsbury	Route 10	14700		156	West Haven	Route 122	12600
158	Westport	Route 57	14600		097	Newtown	Route 34	12600
095	New London	Route 32	14500		099	North Branford	Route 22	12500
011	Bloomfield	Route 218	14500					
083	Middletown	Route 3	14400		151	Waterbury	Route 73	12500
077	Manchester	Route 30	14300		040	East Granby	Route 20	12500
088	Naugatuck	Route 68	14300		110	Plainville	Route 177	12500
113	Portland	Route 66	14200		084	Milford	Route 162	12500
094	Newington	Route 287	14100		011	Bloomfield	Route 187	12400
054	Glastonbury	Route 17	14100		054	Glastonbury	Route 94	12400
093	New Haven	Route 17	14000		110	Plainville	Route 72	12300
102	North Stonington	Route 2	14000		017	Bristol	Route 72	12300
					034	Danbury	Route 53	12300
007	Berlin	Route 15	14000		047	East Windsor	Route 140	12300
035	Darien	Route 136	13900		137	Stonington	Route 2	12200
094	Newington	Route 174	13900		159	Wethersfield	Route 287	12200
167	Woodbridge	Route 63	13900		082	Middlefield	Route 66	12200
020	Burlington	Route 4	13800		009	Bethel	Route 302	12100
035	Darien	Route 106	13800		044	East Haven	Route 142	12100
114	Preston	Route 2A	13700		014	Branford	Route 146	12100
011	Bloomfield	Route 305	13600		148	Wallingford	Route 150	12000
017	Bristol	Route 229	13600		103	Norwalk	Route 123	12000
078	Mansfield	Route 32	13500		085	Monroe	Route 111	12000
163	Windham	Route 66	13500		023	Canton	Route 179	12000
155	West Hartford	Route 189	13500		044	East Haven	Route 337	12000
					104	Norwich	Route 82	11900
059	Groton	Route 117	13400		104	Norwich	Route 12	11800
057	Greenwich	Route 15	13400		051	Fairfield	Route 135	11700
011	Bloomfield	Route 189	13300		051	Fairfield	Route 59	11700
034	Danbury	Route 39	13300		164	Windsor	Route 75	11600
033	Cromwell	Route 372	13200		159	Wethersfield	Route 99	11600
048	Ellington	Route 83	13200		135	Stamford	Route 137	11600
128	Simsbury	Route 189	13200		078	Mansfield	Route 195	11600
135	Stamford	Route 104	13200		086	Montville	Route 2A	11500
052	Farmington	Route 10	13100		119	Rocky Hill	Route 99	11400
128	Simsbury	Route 167	13100		157	Weston	Route 57	11400
107	Orange	Route 162	13100		161	Wilton	Route 107	11400
027	Clinton	Route 81	13100		144	Trumbull	Route 108	11300
030	Columbia	Route 66	13100		056	Granby	Route 10	11300
086	Montville	Route 32	13100		107	Orange	Route 121	11300
107	Orange	Route 114	13000		159	Wethersfield	Route 175	11300
004	Avon	Route 10	12900					

132	South Windsor	Route 194	11200	083	Middletown	Route 155	9400
056	Granby	Route 20	11200	066	Harwinton	Route 118	9400
110	Plainville	Route 372	11200	095	New London	Route 213	9400
159	Wethersfield	Route 3	11100	114	Preston	Route 2	9300
089	New Britain	Route 71	11100	101	North Haven	Route 17	9300
072	Ledyard	Route 12	11100	118	Ridgefield	Route 116	9300
002	Ansonia	Route 115	11100	015	Bridgeport	Route 127	9300
073	Lisbon	Route 12	11000	045	East Lyme	Route 156	9300
015	Bridgeport	Route 130	10900	032	Coventry	Route 31	9300
072	Ledyard	Route 2	10900	165	Windsor Locks	Route 75	9200
011	Bloomfield	Route 178	10900	080	Meriden	Route 71	9200
163	Windham	Route 32	10900	084	Milford	Route 121	9200
093	New Haven	Route 34	10800	144	Trumbull	Route 111	9100
131	Southington	Route 229	10800	155	West Hartford	Route 173	9100
050	Essex	Route 153	10800	118	Ridgefield	Route 35	9100
058	Griswold	Route 12	10800	009	Bethel	Route 53	9000
115	Prospect	Route 68	10700	142	Tolland	Route 30	9000
041	East Haddam	Route 82	10700	146	Vernon	Route 74	9000
152	Waterford	Route 85	10600	156	West Haven	Route 162	9000
124	Seymour	Route 34	10600	064	Hartford	Route 187	8900
103	Norwalk	Route 53	10600	138	Stratford	Route 113	8900
138	Stratford	Route 108	10600	154	Westbrook	Route 145	8900
154	Westbrook	Route 153	10500	146	Vernon	Route 31	8900
153	Watertown	Route 73	10500	018	Brookfield	Route 25	8900
007	Berlin	Route 71	10400	166	Wolcott	Route 69	8800
085	Monroe	Route 34	10400	093	New Haven	Route 103	8800
062	Hamden	Route 10	10400	128	Simsbury	Route 185	8800
090	New Canaan	Route 124	10400	135	Stamford	Route 106	8700
014	Branford	Route 139	10300	025	Cheshire	Route 68	8600
114	Preston	Route 164	10300	119	Rocky Hill	Route 3	8600
049	Enfield	Route 220	10300	155	West Hartford	Route 4	8600
115	Prospect	Route 69	10300	166	Wolcott	Route 322	8500
020	Burlington	Route 179	10200	146	Vernon	Route 83	8500
037	Derby	Route 115	10200	089	New Britain	Route 175	8500
069	Killingly	Route 12	10100	155	West Hartford	Route 218	8400
126	Shelton	Route 110	10100	159	Wethersfield	Route 15	8400
093	New Haven	Route 122	10000	080	Meriden	Route 70	8400
040	East Granby	Route 189	10000	088	Naugatuck	Route 63	8400
124	Seymour	Route 67	10000	146	Vernon	Route 30	8400
083	Middletown	Route 66	9900	131	Southington	Route 364	8300
081	Middlebury	Route 63	9900	050	Essex	Route 154	8300
129	Somers	Route 83	9800	129	Somers	Route 190	8300
144	Trumbull	Route 25	9700	130	Southbury	Route 172	8200
002	Ansonia	Route 243	9700	114	Preston	Route 117	8200
007	Berlin	Route 160	9700	006	Beacon Falls	Route 42	8200
045	East Lyme	Route 161	9600	096	New Milford	Route 67	8200
093	New Haven	Route 243	9600	017	Bristol	Route 69	8200
099	North Branford	Route 17	9500				
107	Orange	Route 152	9500				

095	New London	Route 85	8200	139	Suffield	Route 75	6700
033	Cromwell	Route 99	8100	013	Bozrah	Route 82	6700
038	Durham	Route 147	8100	070	Killingworth	Route 81	6600
094	Newington	Route 176	8100	162	Winchester	Route 8	6600
004	Avon	Route 177	8000	036	Depp River	Route 80	6600
126	Shelton	Route 108	8000	003	Ashford	Route 74	6600
023	Canton	Route 177	7900	020	Burlington	Route 69	6600
151	Waterbury	Route 69	7900	002	Ansonia	Route 334	6600
159	Wethersfield	Route 314	7900	049	Enfield	Route 192	6600
128	Simsbury	Route 315	7900	144	Trumbull	Route 127	6600
140	Thomaston	Route 254	7800	061	Haddam	Route 154	6600
167	Woodbridge	Route 243	7800	064	Hartford	Route 159	6500
155	West Hartford	Route 71	7800	052	Farmington	Route 167	6500
112	Pomfret	Route 101	7800	153	Watertown	Route 262	6500
131	Southington	Route 120	7700	132	South Windsor	Route 30	6400
040	East Granby	Route 187	7700	093	New Haven	Route 337	6400
160	Willington	Route 74	7700	022	Canterbury	Route 14	6400
137	Stonington	Route 27	7700	073	Lisbon	Route 169	6300
046	Easton	Route 59	7600	077	Manchester	Route 83	6300
060	Guilford	Route 80	7600	121	Salem	Route 85	6200
047	East Windsor	Route 191	7600	161	Wilton	Route 53	6200
035	Darien	Route 124	7600	167	Woodbridge	Route 313	6200
061	Haddam	Route 81	7500	042	East Hampton	Route 16	6200
048	Ellington	Route 74	7500	102	North Stonington	Route 184	6100
048	Ellington	Route 286	7500				
008	Bethany	Route 69	7400	158	Westport	Route 136	6100
008	Bethany	Route 63	7400	124	Seymour	Route 313	6100
152	Waterford	Route 156	7400	071	Lebanon	Route 87	6100
074	Litchfield	Route 118	7300	168	Woodbury	Route 64	6100
164	Windsor	Route 218	7300	104	Norwich	Route 97	6000
007	Berlin	Route 71A	7300	116	Putnam	Route 171	6000
070	Killingworth	Route 79	7300	130	Southbury	Route 188	5800
076	Madison	Route 79	7200	069	Killingly	Route 101	5800
012	Bolton	Route 85	7200	055	Goshen	Route 4	5800
056	Granby	Route 189	7200	066	Harwinton	Route 4	5800
113	Portland	Route 17A	7200	118	Ridgefield	Route 33	5800
113	Portland	Route 17	7100	096	New Milford	Route 37	5800
167	Woodbridge	Route 114	7000	053	Franklin	Route 87	5700
114	Preston	Route 12	7000	117	Redding	Route 57	5700
081	Middlebury	Route 188	6900	148	Wallingford	Route 71	5600
061	Haddam	Route 82	6900	018	Brookfield	Route 133	5600
137	Stonington	Route 78	6900	072	Ledyard	Route 117	5500
130	Southbury	Route 67	6900	164	Windsor	Route 178	5500
104	Norwich	Route 32	6800	067	Hebron	Route 85	5500
101	North Haven	Route 103	6800	152	Waterford	Route 32	5400
118	Ridgefield	Route 102	6700	028	Colchester	Route 149	5400
049	Enfield	Route 191	6700	026	Chester	Route 148	5300
036	Depp River	Route 154	6700	164	Windsor	Route 159	5300
167	Woodbridge	Route 67	6700	026	Chester	Route 154	5300

058	Griswold	Route 138	5300		106	Old Saybrook	Route 166	4500
119	Rocky Hill	Route 160	5300		104	Norwich	Route 169	4500
164	Windsor	Route 305	5300		041	East Haddam	Route 151	4500
086	Montville	Route 82	5300		165	Windsor Locks	Route 140	4500
143	Torrington	Route 4	5200		048	Ellington	Route 140	4500
022	Canterbury	Route 169	5200		060	Guilford	Route 146	4400
085	Monroe	Route 110	5200		072	Ledyard	Route 214	4400
046	Easton	Route 136	5100		124	Seymour	Route 334	4400
027	Clinton	Route 145	5100		168	Woodbury	Route 47	4300
086	Montville	Route 161	5100		140	Thomaston	Route 222	4300
142	Tolland	Route 195	5100		141	Thompson	Route 200	4300
086	Montville	Route 163	5000		112	Pomfret	Route 169	4300
163	Windham	Route 14	5000		139	Suffield	Route 168	4200
041	East Haddam	Route 149	5000		134	Stafford	Route 30	4200
160	Willington	Route 32	5000		078	Mansfield	Route 89	4200
133	Sprague	Route 97	5000		087	Morris	Route 63	4100
054	Glastonbury	Route 83	4900		074	Litchfield	Route 63	4100
076	Madison	Route 80	4900		117	Redding	Route 53	4100
005	Barkhamsted	Route 318	4900		143	Torrington	Route 183	4100
078	Mansfield	Route 31	4900		039	Eastford	Route 198	4100
165	Windsor Locks	Route 159	4900		099	North Branford	Route 150	4100
004	Avon	Route 167	4900		138	Stratford	Route 130	4000
019	Brooklyn	Route 205	4900		016	Bridgewater	Route 133	4000
019	Brooklyn	Route 169	4800		102	North Stonington	Route 216	4000
139	Suffield	Route 159	4800		101	North Haven	Route 40	4000
106	Old Saybrook	Route 154	4800		078	Mansfield	Route 320	4000
124	Seymour	Route 115	4800		059	Groton	Route 349	4000
109	Plainfield	Route 12	4800		142	Tolland	Route 74	4000
056	Granby	Route 219	4800		015	Bridgeport	Route 59	3900
091	New Fairfield	Route 39	4800		134	Stafford	Route 319	3900
025	Cheshire	Route 42	4800		074	Litchfield	Route 254	3900
060	Guilford	Route 77	4800		007	Berlin	Route 372	3800
117	Redding	Route 58	4700		157	Weston	Route 53	3800
010	Bethlehem	Route 61	4700		055	Goshen	Route 63	3800
028	Colchester	Route 354	4700		067	Hebron	Route 94	3800
082	Middlefield	Route 147	4700		133	Sprague	Route 207	3800
137	Stonington	Route 184	4700		139	Suffield	Route 190	3800
042	East Hampton	Route 196	4700		147	Voluntown	Route 165	3800
139	Suffield	Route 187	4600		036	Depp River	Route 145	3800
048	Ellington	Route 30	4600		154	Westbrook	Route 166	3700
153	Watertown	Route 63	4600		124	Seymour	Route 188	3700
132	South Windsor	Route 74	4500		155	West Hartford	Route 185	3600
070	Killingworth	Route 80	4500		162	Winchester	Route 20	3600
030	Columbia	Route 87	4500		058	Griswold	Route 164	3600
163	Windham	Route 203	4500		109	Plainfield	Route 14A	3600
024	Chaplin	Route 198	4500		061	Haddam	Route 151	3600

140	Thomaston	Route 109	3600	021	Canaan	Route 63	2600
046	Easton	Route 58	3600	003	Ashford	Route 89	2500
121	Salem	Route 82	3500	163	Windham	Route 289	2500
134	Stafford	Route 190	3500	010	Bethlehem	Route 132	2500
105	Old Lyme	Route 156	3400	042	East Hampton	Route 151	2500
123	Scotland	Route 14	3400	141	Thompson	Route 193	2400
125	Sharon	Route 361	3400	032	Coventry	Route 275	2400
001	Andover	Route 87	3300	031	Cornwall	Route 4	2400
016	Bridgewater	Route 67	3200	121	Salem	Route 354	2400
096	New Milford	Route 55	3200	008	Bethany	Route 42	2300
092	New Hartford	Route 219	3200	150	Washington	Route 47	2300
082	Middlefield	Route 157	3200	059	Groton	Route 27	2300
136	Sterling	Route 14A	3200	031	Cornwall	Route 63	2300
161	Wilton	Route 106	3200	168	Woodbury	Route 61	2300
137	Stonington	Route 201	3200	145	Union	Route 190	2300
059	Groton	Route 215	3200	102	North Stonington	Route 201	2300
053	Franklin	Route 207	3100	169	Woodstock	Route 169	2300
013	Bozrah	Route 163	3100	005	Barkhamsted	Route 181	2300
168	Woodbury	Route 317	3100	109	Plainfield	Route 14	2300
001	Andover	Route 316	3100	083	Middletown	Route 157	2200
002	Ansonia	Route 316	3100	116	Putnam	Route 12	2200
137	Stonington	Route 49	3000	058	Griswold	Route 165	2200
089	New Britain	Route 71A	3000	071	Lebanon	Route 207	2200
029	Colebrook	Route 8	2900	111	Plymouth	Route 72	2200
007	Berlin	Route 364	2900	112	Pomfret	Route 244	2200
127	Sherman	Route 37	2900	120	Roxbury	Route 317	2200
104	Norwich	Route 165	2900	147	Voluntown	Route 49	2200
067	Hebron	Route 207	2900	102	North Stonington	Route 49	2100
074	Litchfield	Route 209	2900	149	Warren	Route 341	2100
134	Stafford	Route 19	2900	067	Hebron	Route 316	2100
117	Redding	Route 107	2900	023	Canton	Route 309	2100
087	Morris	Route 109	2800	137	Stonington	Route 234	2100
141	Thompson	Route 197	2800	061	Haddam	Route 196	2100
058	Griswold	Route 201	2800	141	Thompson	Route 12	2100
160	Willington	Route 320	2800	150	Washington	Route 109	2000
068	Kent	Route 341	2800	141	Thompson	Route 131	2000
082	Middlefield	Route 217	2800	125	Sharon	Route 4	2000
085	Monroe	Route 59	2800	075	Lyme	Route 82	2000
039	Eastford	Route 244	2700	120	Roxbury	Route 67	1900
078	Mansfield	Route 275	2700	073	Lisbon	Route 138	1900
087	Morris	Route 209	2700	129	Somers	Route 186	1900
163	Windham	Route 195	2700	065	Hartland	Route 20	1800
114	Preston	Route 165	2700	005	Barkhamsted	Route 20	1800
109	Plainfield	Route 205	2600	169	Woodstock	Route 197	1800
026	Chester	Route 145	2600	150	Washington	Route 199	1800
091	New Fairfield	Route 37	2600	136	Sterling	Route 49	1800
125	Sharon	Route 343	2600	150	Washington	Route 341	1800
108	Oxford	Route 42	2600	112	Pomfret	Route 97	1700
150	Washington	Route 45	2600				

169	Woodstock	Route 171	1700	136	Sterling	Route 14	1100
134	Stafford	Route 140	1700	096	New Milford	Route 109	1100
070	Killingworth	Route 148	1700	005	Barkhamsted	Route 219	1100
147	Voluntown	Route 138	1600	029	Colebrook	Route 183	1100
152	Waterford	Route 213	1600	005	Barkhamsted	Route 179	1000
087	Morris	Route 61	1600	169	Woodstock	Route 198	1000
149	Warren	Route 45	1600	066	Harwinton	Route 72	1000
143	Torrington	Route 272	1600	055	Goshen	Route 272	950
125	Sharon	Route 41	1500	145	Union	Route 197	950
123	Scotland	Route 97	1500	063	Hampton	Route 97	900
065	Hartland	Route 179	1500	153	Watertown	Route 132	850
122	Salisbury	Route 112	1400	145	Union	Route 171	800
031	Cornwall	Route 128	1400	029	Colebrook	Route 182	750
125	Sharon	Route 128	1400	098	Norfolk	Route 182	750
021	Canaan	Route 126	1300	039	Eastford	Route 171	550
162	Winchester	Route 183	1300	066	Harwinton	Route 222	500
071	Lebanon	Route 16	1300	031	Cornwall	Route 125	450
120	Roxbury	Route 199	1300	100	North Canaan	Route 126	400
145	Union	Route 89	1300				
127	Sherman	Route 39	1300	098	Norfolk	Route 272	400
031	Cornwall	Route 45	1300	162	Winchester	Route 263	400
122	Salisbury	Route 41	1200	029	Colebrook	Route 182A	300
111	Plymouth	Route 262	1200	065	Hartland	Route 181	250
041	East Haddam	Route 156	1200	055	Goshen	Route 263	250
168	Woodbury	Route 132	1100	075	Lyme	Route 148	200
133	Sprague	Route 138	1100				

Query six gives us a report of the ADT of all Interstates in Connecticut ordered by ADT in descending order. Descending order shows the busiest routes, and the best candidates for tolling.

```
--Query 6
-- Get the ADT of CT InterStates

SELECT t.TaxCode,
       t.TownName,
       hys.RouteNum,
       CAST(adt.NumCars AS INT) AS ADT
FROM Towns t
INNER JOIN AnnualAverageDailyTrafficInterStates adt
    ON t.TaxCode = adt.TaxCode
INNER JOIN Interstates hys
    ON hys.RouteNum = adt.RouteNum

GROUP BY t.TaxCode, t.TownName, hys.RouteNum, adt.NumCars
ORDER BY ADT DESC

--Get the ADT of CT InterStates
```

Figure 6 ADT of Interstates in CT, ordered by ADT in descending order

Table 6. ADT of Interstates in CT ordered by ADT in descending order, results of Query 6

TaxCode	TownName	RouteNum	ADT
015	Bridgeport	I-95	142991
103	Norwalk	I-95	138645
064	Hartford	I-84	138636
051	Fairfield	I-95	138275
119	Rocky Hill	I-91	137400
135	Stamford	I-95	135646
156	West Haven	I-95	133343
057	Greenwich	I-95	133323
035	Darien	I-95	133323
158	Westport	I-95	130240
164	Windsor	I-91	129436
093	New Haven	I-95	128546
159	Wethersfield	I-91	128460
107	Orange	I-95	126175
084	Milford	I-95	122436
044	East Haven	I-95	122436
138	Stratford	I-95	120558
064	Hartford	I-91	116548
043	East Hartford	I-84	116122
155	West Hartford	I-84	116070
033	Cromwell	I-91	114915
093	New Haven	I-91	111575
165	Windsor Locks	I-91	109500
083	Middletown	I-91	108900
077	Manchester	I-84	107630
047	East Windsor	I-91	102940
146	Vernon	I-84	92300
151	Waterbury	I-84	91774
101	North Haven	I-91	91078
049	Enfield	I-91	89647
080	Meriden	I-91	87286
034	Danbury	I-84	86719
052	Farmington	I-84	85950
110	Plainville	I-84	84517
095	New London	I-95	82020
014	Branford	I-95	81370
089	New Britain	I-84	78417
009	Bethel	I-84	78300
097	Newtown	I-84	78300
148	Wallingford	I-91	76257
131	Southington	I-84	75082
059	Groton	I-95	72289
060	Guilford	I-95	70500
051	Fairfield	I-684	70200
096	New Milford	I-84	70015
045	East Lyme	I-95	67600
076	Madison	I-95	65938
130	Southbury	I-84	64311
081	Middlebury	I-84	63850
142	Tolland	I-84	63843
105	Old Lyme	I-95	63229
027	Clinton	I-95	61425
154	Westbrook	I-95	59300
152	Waterford	I-95	58834
080	Meriden	I-691	55775
131	Southington	I-691	54167
086	Montville	I-395	51486
160	Willington	I-84	50450
003	Ashford	I-84	49100
132	South Windsor	I-291	48817
104	Norwich	I-395	48550
145	Union	I-84	48400
137	Stonington	I-95	46672
077	Manchester	I-384	41538
073	Lisbon	I-395	38325
164	Windsor	I-291	37050
043	East Hartford	I-384	36700
025	Cheshire	I-691	34975
102	North Stonington	I-95	34840
058	Griswold	I-395	31817
012	Bolton	I-384	28050
109	Plainfield	I-395	27650
152	Waterford	I-395	27650
069	Killingly	I-395	26719
116	Putnam	I-395	24089
141	Thompson	I-395	21250
077	Manchester	I-291	17000
025	Cheshire	I-84	8100

Moreover, it is important to know the high-volume areas of interstates in Connecticut to determine where funds should be diverted to for maintenance and upgrades. By placing tolls in these areas would give the greatest financial benefit to the state, rather than placing tolls in every single town along the highway. This avoids wasted money on maintenance of the toll gantries and extra police enforcement in

areas with lower traffic. To better use state funds, enforcement and public funds can be diverted to high volume areas which will give the greatest benefit to all that need to use the highway.

```
--Query 7
--Subquery to get high volume areas from interstates

SELECT t.TaxCode,
       t.TownName,
       hys.RouteNum,
       CAST(adt.NumCars as INT) AS ADT
From Towns t
INNER JOIN  AnnualAverageDailyTrafficInterStates adt
    ON t.TaxCode = adt.TaxCode
INNER JOIN Interstates hys
    ON hys.RouteNum = adt.RouteNum
WHERE adt.NumCars > 100000
GROUP BY t.TownName, t.TaxCode, hys.RouteNum, adt.NumCars
ORDER BY ADT DESC
```

Figure 7. Query 7, displays ADT from on high volume areas along the highway and orders it in descending order by ADT

Table 7. Results of Query 7, ADT from interstates from towns that see at least ADT of 10000, see Figure 15 below.

TaxCode	TownName	RouteNum	ADT
015	Bridgeport	I-95	142991
103	Norwalk	I-95	138645
064	Hartford	I-84	138636
051	Fairfield	I-95	138275
119	Rocky Hill	I-91	137400
135	Stamford	I-95	135646
156	West Haven	I-95	133343
057	Greenwich	I-95	133323
035	Darien	I-95	133323
158	Westport	I-95	130240
164	Windsor	I-91	129436
093	New Haven	I-95	128546
159	Wethersfield	I-91	128460
107	Orange	I-95	126175
044	East Haven	I-95	122436
084	Milford	I-95	122436
138	Stratford	I-95	120558
064	Hartford	I-91	116548
043	East Hartford	I-84	116122
155	West Hartford	I-84	116070
033	Cromwell	I-91	114915
093	New Haven	I-91	111575
165	Windsor Locks	I-91	109500
083	Middletown	I-91	108900
077	Manchester	I-84	107630
047	East Windsor	I-91	102940

ADT (Average Daily Traffic of Interstates with at 10,000 cars per day. Towns that see traffic also displayed.
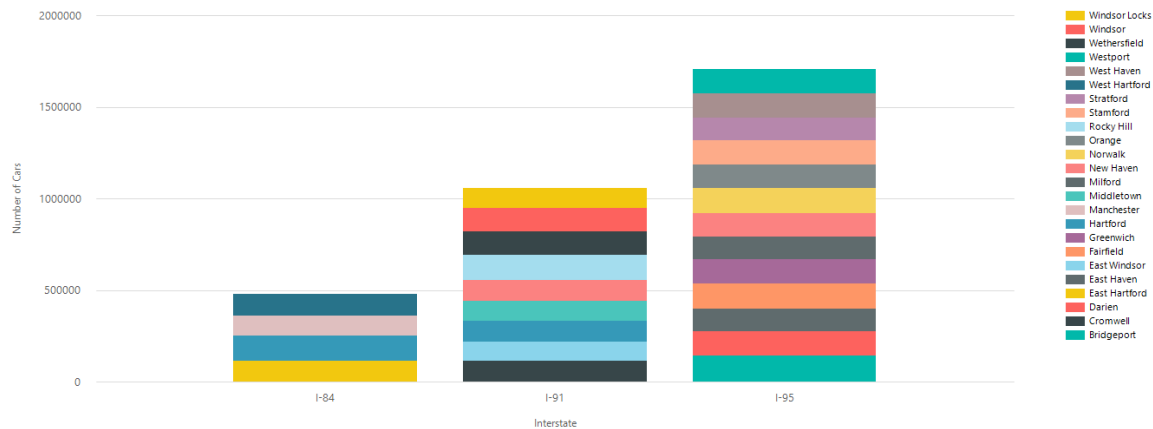
Figure 15. The most used highways in Connecticut, with each town showing the amount of traffic it sees each day on average for the year of 2011.

The next two queries also help to determine where funds should be placed. Query 8 will only display ADT on high volume roads and which towns that this occurs in. This will help regulators in Hartford decide which state routes should receive the most funding for repair and possible locations to install tolls.

Query 9 is a rerun of Query 7 but with the addition of adding town populations. This helps because it can help regulators determine if the traffic on the highway is related to local traffic or out of state traffic.

```
--Query 8
-- Subquery to get high volume areas from state routes,

SELECT t.TownName,
       hys.RouteNum,
       CAST(adt.NumCars as INT) AS ADT,
       CAST(t.[Population] AS INT) AS POP
From Towns t
INNER JOIN  AverageDailyTraffic adt
    ON t.TaxCode = adt.TaxCode
INNER JOIN stateRds hys
    ON hys.RouteNum = adt.RouteNum
WHERE adt.NumCars > 10000
GROUP BY t.TownName, hys.RouteNum, adt.NumCars, t.[Population]
ORDER BY ADT DESC, POP DESC
```

Figure 8. Displays high volume areas from state routes in CT ordered by ADT and population of the town

Table 8. Displays the results of Query 8 orderd by ADT and Town Population

TownName	RouteNum	ADT	POP
Stratford	Route 110	22400	51384
Cheshire	Route 10	22300	29261
West Haven	Route 34	20900	55564
Farmington	Route 4	20900	25340
Danbury	Route 37	20800	80893
East Haven	Route 100	20700	29257

New Britain	Route 372	20200	73206
Hartford	Route 189	19900	124775
New Haven	Route 10	19800	129779
Waterbury	Route 64	19500	110366
Middlebury	Route 64	19500	7575
Fairfield	Route 58	19400	59404
Bloomfield	Route 185	19400	20486
Orange	Route 34	19400	13956
Cheshire	Route 70	19300	29261
Monroe	Route 25	18700	19479

Derby	Route 34	18500	12902	West Hartford	Route 189	13500	63268
Newington	Route 15	18400	30562	Mansfield	Route 32	13500	26543
Southington	Route 10	18300	43069	Windham	Route 66	13500	25268
Franklin	Route 32	18300	1922	Greenwich	Route 15	13400	61171
Middletown	Route 17	17700	47648	Groton	Route 117	13400	40115
Newtown	Route 25	17700	27560	Danbury	Route 39	13300	80893
New Haven	Route 80	17600	129779	Bloomfield	Route 189	13300	20486
New Haven	Route 63	17500	129779	Stamford	Route 104	13200	122643
Plainville	Route 10	17500	17716	Simsbury	Route 189	13200	23511
Wallingford	Route 68	16900	45135	Ellington	Route 83	13200	15602
Colchester	Route 85	16800	16068	Cromwell	Route 372	13200	14005
New Haven	Route 69	16500	129779	Farmington	Route 10	13100	25340
New Canaan	Route 123	16200	19738	Simsbury	Route 167	13100	23511
Wilton	Route 33	16000	18062	Montville	Route 32	13100	19571
Durham	Route 17	15900	7388	Orange	Route 162	13100	13956
Westport	Route 33	15800	26391	Clinton	Route 81	13100	13260
Southington	Route 322	15700	43069	Columbia	Route 66	13100	5485
East Hampton	Route 66	15700	12959	Orange	Route 114	13000	13956
Enfield	Route 190	15500	44654	Branford	Route 142	12900	28026
Oxford	Route 67	15500	12683	Avon	Route 10	12900	18098
Cromwell	Route 217	15400	14005	North Branford	Route 80	12900	14407
Cromwell	Route 3	15400	14005	North Branford	Route 139	12900	14407
Farmington	Route 177	15300	25340	Montville	Route 85	12800	19571
East Haven	Route 80	15100	29257	Marlborough	Route 66	12800	6404
Colchester	Route 16	15100	16068	New Britain	Route 174	12700	73206
Newington	Route 173	14900	30562	West Haven	Route 122	12600	55564
Hebron	Route 66	14900	9686	Norwich	Route 2	12600	40493
Groton	Route 184	14700	40115	Newington	Route 175	12600	30562
Simsbury	Route 10	14700	23511	Newtown	Route 34	12600	27560
Westport	Route 57	14600	26391	Waterbury	Route 73	12500	110366
New London	Route 32	14500	27620	Milford	Route 162	12500	52759
Bloomfield	Route 218	14500	20486	Plainville	Route 177	12500	17716
Middletown	Route 3	14400	47648	North Branford	Route 22	12500	14407
Manchester	Route 30	14300	58241	East Granby	Route 20	12500	5148
Naugatuck	Route 68	14300	31862	Glastonbury	Route 94	12400	34427
Portland	Route 66	14200	9508	Bloomfield	Route 187	12400	20486
Glastonbury	Route 17	14100	34427	Danbury	Route 53	12300	80893
Newington	Route 287	14100	30562	Bristol	Route 72	12300	60477
New Haven	Route 17	14000	129779	Plainville	Route 72	12300	17716
Berlin	Route 15	14000	19866	East Windsor	Route 140	12300	11162
North Stonington	Route 2	14000	5297	Wethersfield	Route 287	12200	26668
Newington	Route 174	13900	30562	Stonington	Route 2	12200	18545
Darien	Route 136	13900	20732	Middlefield	Route 66	12200	4425
Woodbridge	Route 63	13900	8990	East Haven	Route 142	12100	29257
Darien	Route 106	13800	20732	Branford	Route 146	12100	28026
Burlington	Route 4	13800	9301	Bethel	Route 302	12100	18584
Preston	Route 2A	13700	4726	Norwalk	Route 123	12000	85603
Bristol	Route 229	13600	60477				
Bloomfield	Route 305	13600	20486				

Wallingford	Route 150	12000	45135	Bridgeport	Route 130	10900	144229
East Haven	Route 337	12000	29257	Windham	Route 32	10900	25268
Monroe	Route 111	12000	19479	Bloomfield	Route 178	10900	20486
Canton	Route 179	12000	10292	Ledyard	Route 2	10900	15051
Norwich	Route 82	11900	40493	New Haven	Route 34	10800	129779
Norwich	Route 12	11800	40493	Southington	Route 229	10800	43069
Fairfield	Route 59	11700	59404	Griswold	Route 12	10800	11951
Fairfield	Route 135	11700	59404	Essex	Route 153	10800	6683
Stamford	Route 137	11600	122643	Prospect	Route 68	10700	9405
Windsor	Route 75	11600	29044	East Haddam	Route 82	10700	9126
Wethersfield	Route 99	11600	26668	Norwalk	Route 53	10600	85603
Mansfield	Route 195	11600	26543	Stratford	Route 108	10600	51384
Montville	Route 2A	11500	19571	Waterford	Route 85	10600	19517
Rocky Hill	Route 99	11400	19709	Seymour	Route 34	10600	16540
Wilton	Route 107	11400	18062	Watertown	Route 73	10500	22514
Weston	Route 57	11400	10179	Westbrook	Route 153	10500	6938
Trumbull	Route 108	11300	36018	Hamden	Route 10	10400	60960
Wethersfield	Route 175	11300	26668	Berlin	Route 71	10400	19866
Orange	Route 121	11300	13956	New Canaan	Route 124	10400	19738
Granby	Route 10	11300	11282	Monroe	Route 34	10400	19479
South Windsor	Route 194	11200	25709	Enfield	Route 220	10300	44654
				Branford	Route 139	10300	28026
Plainville	Route 372	11200	17716	Prospect	Route 69	10300	9405
Granby	Route 20	11200	11282	Preston	Route 164	10300	4726
New Britain	Route 71	11100	73206	Derby	Route 115	10200	12902
Wethersfield	Route 3	11100	26668	Burlington	Route 179	10200	9301
Ansonia	Route 115	11100	19249	Shelton	Route 110	10100	39559
Ledyard	Route 12	11100	15051	Killingly	Route 12	10100	17370
Lisbon	Route 12	11000	4338				

```sql
]--Query 9
--Query 7 again but with the addition of town populations

]SELECT t.TownName,
        CAST(t.[Population] as INT) AS POP,
        hys.RouteNum,
        CAST(adt.NumCars as INT) AS ADT
    From Towns t
    INNER JOIN  AnnualAverageDailyTrafficInterStates adt
        ON t.TaxCode = adt.TaxCode
    INNER JOIN Interstates hys
        ON hys.RouteNum = adt.RouteNum
    WHERE adt.NumCars > 100000
    GROUP BY t.TownName, t.[Population], hys.RouteNum, adt.NumCars
    ORDER BY ADT DESC, POP DESC
```

Figure 9. Similar to query 7 but also includes population, and orders by population. ADT of interstates displayed.

Table 9. Results from Query 9 displaying population of towns where ADT is high.

TownName	POP	RouteNum	ADT
Bridgeport	144229	I-95	142991
Norwalk	85603	I-95	138645
Hartford	124775	I-84	138636
Fairfield	59404	I-95	138275
Rocky Hill	19709	I-91	137400
Stamford	122643	I-95	135646
West Haven	55564	I-95	133343
Greenwich	61171	I-95	133323
Darien	20732	I-95	133323
Westport	26391	I-95	130240
Windsor	29044	I-91	129436

| New Haven	129779	I-95	128546
Wethersfield	26668	I-91	128460
Orange	13956	I-95	126175
Milford	52759	I-95	122436
East Haven	29257	I-95	122436
Stratford	51384	I-95	120558
Hartford	124775	I-91	116548
East Hartford	51252	I-84	116122
West Hartford	63268	I-84	116070
Cromwell	14005	I-91	114915
New Haven	129779	I-91	111575
Windsor Locks	12498	I-91	109500
Middletown	47648	I-91	108900
Manchester	58241	I-84	107630
East Windsor	11162	I-91	102940
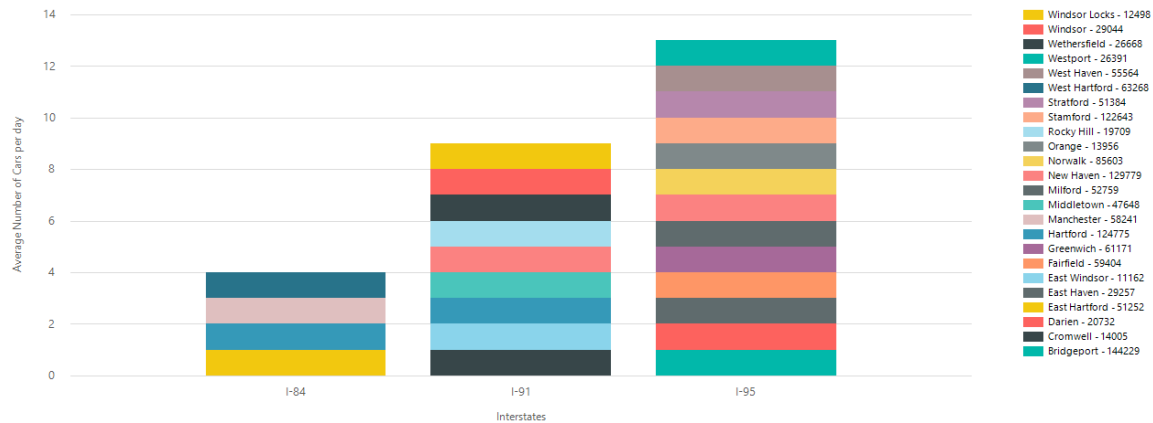
Figure 16. Average Daily traffic with the populations of each Connecticut town that the major highways run through.

Query 10 shows which towns highways run through. In addition to possible locations for tolls, these would be the areas that will need the greatest expenditure of public funds to maintain roads as they will see the majority of out of state traffic. If tolls are given a green light, these would be the first towns to look at for placing the gantries.

```
-- Query 10
SELECT adt.NumCars,
       adt.RouteNum,
       t.TownName,
       t.TaxCode
FROM AnnualAverageDailyTrafficInterStates adt
INNER JOIN (SELECT t.TaxCode
       FROM Towns t) pws
    ON adt.TaxCode  = pws.TaxCode
INNER JOIN Towns t
    ON t.TaxCode = adt.TaxCode

    -- Use of subquery, show towns that highways run through
```

Figure 10. Shows towns only that the interstates run through

Table 10. Results of Query 10 displaying Towns that interstates run through.

NumCars	RouteNum	TownName	TaxCode
17000	I-291	Manchester	077
48817	I-291	South Windsor	132
37050	I-291	Windsor	164
28050	I-384	Bolton	012
36700	I-384	East Hartford	043
41538	I-384	Manchester	077
31817	I-395	Griswold	058
26719	I-395	Killingly	069
38325	I-395	Lisbon	073
51486	I-395	Montville	086
48550	I-395	Norwich	104
27650	I-395	Plainfield	109
24089	I-395	Putnam	116
21250	I-395	Thompson	141
27650	I-395	Waterford	152
70200	I-684	Fairfield	051
34975	I-691	Cheshire	025
55775	I-691	Meriden	080
54167	I-691	Southington	131
49100	I-84	Ashford	003
78300	I-84	Bethel	009
8100	I-84	Cheshire	025
86719	I-84	Danbury	034
116122	I-84	East Hartford	043
85950	I-84	Farmington	052
138636	I-84	Hartford	064
107630	I-84	Manchester	077
63850	I-84	Middlebury	081
78417	I-84	New Britain	089
70015	I-84	New Milford	096
78300	I-84	Newtown	097
84517	I-84	Plainville	110
64311	I-84	Southbury	130

NumCars	RouteNum	TownName	TaxCode
75082	I-84	Southington	131
63843	I-84	Tolland	142
48400	I-84	Union	145
92300	I-84	Vernon	146
91774	I-84	Waterbury	151
116070	I-84	West Hartford	155
50450	I-84	Willington	160
114915	I-91	Cromwell	033
102940	I-91	East Windsor	047
89647	I-91	Enfield	049
116548	I-91	Hartford	064
87286	I-91	Meriden	080
108900	I-91	Middletown	083
111575	I-91	New Haven	093
91078	I-91	North Haven	101
137400	I-91	Rocky Hill	119
76257	I-91	Wallingford	148
128460	I-91	Wethersfield	159
129436	I-91	Windsor	164
109500	I-91	Windsor Locks	165
81370	I-95	Branford	014
142991	I-95	Bridgeport	015
61425	I-95	Clinton	027
133323	I-95	Darien	035
122436	I-95	East Haven	044
67600	I-95	East Lyme	045
138275	I-95	Fairfield	051
133323	I-95	Greenwich	057
72289	I-95	Groton	059
70500	I-95	Guilford	060
65938	I-95	Madison	076
122436	I-95	Milford	084
128546	I-95	New Haven	093
82020	I-95	New London	095
34840	I-95	North Stonington	102
138645	I-95	Norwalk	103

63229	I-95	Old Lyme	105		58834	I-95	Waterford	152
126175	I-95	Orange	107		59300	I-95	Westbrook	154
135646	I-95	Stamford	135		133343	I-95	West Haven	156
46672	I-95	Stonington	137		130240	I-95	Westport	158
120558	I-95	Stratford	138					
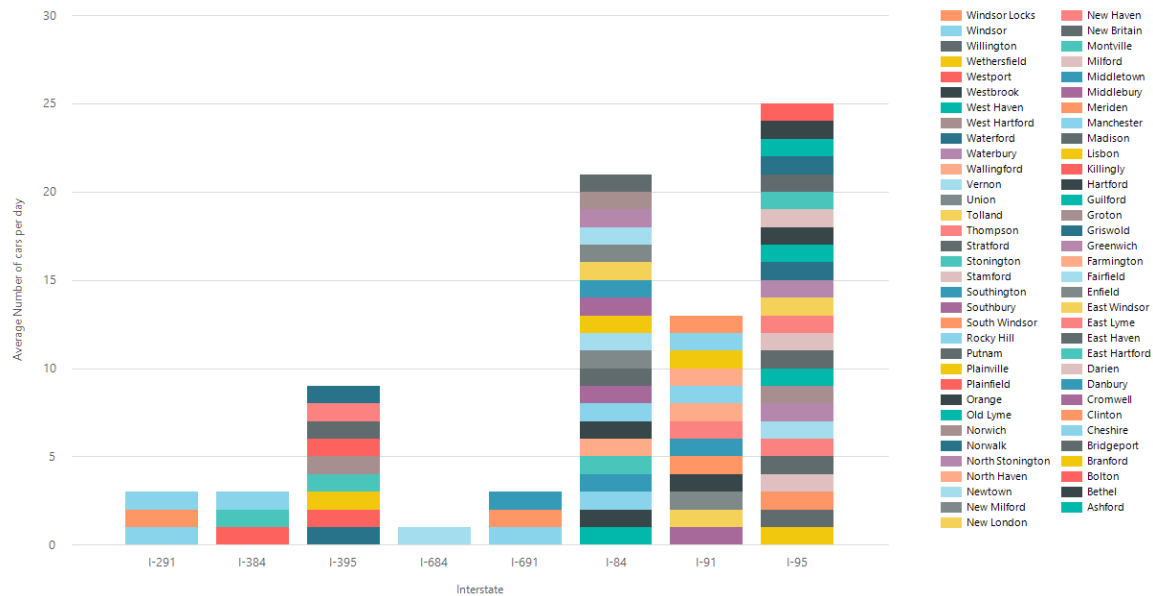
Figure 17. The average daily traffic of all interstates in Connecticut. All the towns average daily traffic are stacked together, this shows the total average daily traffic of all interstates in CT.

Query 11 displays all state routes and the towns that they go through.

```
-- Query 11

SELECT adt.NumCars,
       adt.RouteNum,
       t.TownName,
       t.TaxCode
FROM AverageDailyTraffic adt
INNER JOIN (SELECT t.TaxCode
        FROM Towns t) pws
    ON adt.TaxCode  = pws.TaxCode
INNER JOIN Towns t
    ON t.TaxCode = adt.TaxCode
    ORDER BY adt.RouteNum

-- Use of subquery to show state routes and the towns they go through.
```

Figure 11. Displays all state routes and the towns that they go through.

Table 11. Displays the results of Query 11, showing the states routes, their ADTs and the Towns that they go through

NumCars	RouteNum	TownName	TaxCode
12900	Route 10	Avon	004
22300	Route 10	Cheshire	025
13100	Route 10	Farmington	052
11300	Route 10	Granby	056
10400	Route 10	Hamden	062
19800	Route 10	New Haven	093
17500	Route 10	Plainville	110
14700	Route 10	Simsbury	128
18300	Route 10	Southington	131
20700	Route 100	East Haven	044
5800	Route 101	Killingly	069
7800	Route 101	Pomfret	112
6700	Route 102	Ridgefield	118
6800	Route 103	North Haven	101
8800	Route 103	New Haven	093
13200	Route 104	Stamford	135
8700	Route 106	Stamford	135
3200	Route 106	Wilton	161
13800	Route 106	Darien	035
11400	Route 107	Wilton	161
2900	Route 107	Redding	117
8000	Route 108	Shelton	126
10600	Route 108	Stratford	138
11300	Route 108	Trumbull	144
3600	Route 109	Thomaston	140
2000	Route 109	Washington	150
1100	Route 109	New Milford	096
2800	Route 109	Morris	087
5200	Route 110	Monroe	085
10100	Route 110	Shelton	126
22400	Route 110	Stratford	138
9100	Route 111	Trumbull	144
12000	Route 111	Monroe	085
1400	Route 112	Salisbury	122
8900	Route 113	Stratford	138
7000	Route 114	Woodbridge	167
13000	Route 114	Orange	107
4800	Route 115	Seymour	124
10200	Route 115	Derby	037
11100	Route 115	Ansonia	002
9300	Route 116	Ridgefield	118
8200	Route 117	Preston	114
5500	Route 117	Ledyard	072
13400	Route 117	Groton	059
7300	Route 118	Litchfield	074
9400	Route 118	Harwinton	066
11000	Route 12	Lisbon	073
10100	Route 12	Killingly	069
10800	Route 12	Griswold	058
11100	Route 12	Ledyard	072
2200	Route 12	Putnam	116
4800	Route 12	Plainfield	109
11800	Route 12	Norwich	104
7000	Route 12	Preston	114
2100	Route 12	Thompson	141

NumCars	RouteNum	TownName	TaxCode
7700	Route 120	Southington	131
11300	Route 121	Orange	107
9200	Route 121	Milford	084
10000	Route 122	New Haven	093
12600	Route 122	West Haven	156
12000	Route 123	Norwalk	103
16200	Route 123	New Canaan	090
10400	Route 124	New Canaan	090
7600	Route 124	Darien	035
450	Route 125	Cornwall	031
1300	Route 126	Canaan	021
400	Route 126	North Canaan	100
6600	Route 127	Trumbull	144
9300	Route 127	Bridgeport	015
1400	Route 128	Cornwall	031
1400	Route 128	Sharon	125
4000	Route 130	Stratford	138
10900	Route 130	Bridgeport	015
2000	Route 131	Thompson	141
850	Route 132	Watertown	153
1100	Route 132	Woodbury	168
2500	Route 132	Bethlehem	010
4000	Route 133	Bridgewater	016
5600	Route 133	Brookfield	018
11700	Route 135	Fairfield	051
5100	Route 136	Easton	046
13900	Route 136	Darien	035
6100	Route 136	Westport	158
11600	Route 137	Stamford	135
1100	Route 138	Sprague	133
1600	Route 138	Voluntown	147
5300	Route 138	Griswold	058
1900	Route 138	Lisbon	073
10300	Route 139	Branford	014
12900	Route 139	North Branford	099
2300	Route 14	Plainfield	109
1100	Route 14	Sterling	136
3400	Route 14	Scotland	123
5000	Route 14	Windham	163
6400	Route 14	Canterbury	022
12300	Route 140	East Windsor	047
4500	Route 140	Ellington	048
4500	Route 140	Windsor Locks	165
1700	Route 140	Stafford	134
12100	Route 142	East Haven	044
12900	Route 142	Branford	014
2600	Route 145	Chester	026
3800	Route 145	Depp River	036
5100	Route 145	Clinton	027
8900	Route 145	Westbrook	154
12100	Route 146	Branford	014
4400	Route 146	Guilford	060
4700	Route 147	Middlefield	082
8100	Route 147	Durham	038
5300	Route 148	Chester	026
200	Route 148	Lyme	075
1700	Route 148	Killingworth	070
5400	Route 149	Colchester	028
5000	Route 149	East Haddam	041
3200	Route 14A	Sterling	136

3600	Route 14A	Plainfield	109
8400	Route 15	Wethersfield	159
14000	Route 15	Berlin	007
13400	Route 15	Greenwich	057
18400	Route 15	Newington	094
12000	Route 150	Wallingford	148
4100	Route 150	North Branford	099
3600	Route 151	Haddam	061
4500	Route 151	East Haddam	041
2500	Route 151	East Hampton	042
9500	Route 152	Orange	107
10500	Route 153	Westbrook	154
10800	Route 153	Essex	050
6600	Route 154	Haddam	061
8300	Route 154	Essex	050
6700	Route 154	Depp River	036
5300	Route 154	Chester	026
4800	Route 154	Old Saybrook	106
9400	Route 155	Middletown	083
9300	Route 156	East Lyme	045
1200	Route 156	East Haddam	041
3400	Route 156	Old Lyme	105
7400	Route 156	Waterford	152
2200	Route 157	Middletown	083
3200	Route 157	Middlefield	082
6500	Route 159	Hartford	064
4800	Route 159	Suffield	139
4900	Route 159	Windsor Locks	165
5300	Route 159	Windsor	164
1300	Route 16	Lebanon	071
6200	Route 16	East Hampton	042
15100	Route 16	Colchester	028
9700	Route 160	Berlin	007
5300	Route 160	Rocky Hill	119
9600	Route 161	East Lyme	045
5100	Route 161	Montville	086
12500	Route 162	Milford	084
13100	Route 162	Orange	107
9000	Route 162	West Haven	156
5000	Route 163	Montville	086
3100	Route 163	Bozrah	013
3600	Route 164	Griswold	058
10300	Route 164	Preston	114
2700	Route 165	Preston	114
2900	Route 165	Norwich	104
3800	Route 165	Voluntown	147
2200	Route 165	Griswold	058
3700	Route 166	Westbrook	154
4500	Route 166	Old Saybrook	106
13100	Route 167	Simsbury	128
6500	Route 167	Farmington	052
4900	Route 167	Avon	004
4200	Route 168	Suffield	139
2300	Route 169	Woodstock	169
4300	Route 169	Pomfret	112
4500	Route 169	Norwich	104
5200	Route 169	Canterbury	022

4800	Route 169	Brooklyn	019
6300	Route 169	Lisbon	073
14100	Route 17	Glastonbury	054
14000	Route 17	New Haven	093
17700	Route 17	Middletown	083
15900	Route 17	Durham	038
9500	Route 17	North Branford	099
9300	Route 17	North Haven	101
7100	Route 17	Portland	113
6000	Route 171	Putnam	116
1700	Route 171	Woodstock	169
800	Route 171	Union	145
550	Route 171	Eastford	039
8200	Route 172	Southbury	130
9100	Route 173	West Hartford	155
14900	Route 173	Newington	094
12700	Route 174	New Britain	089
13900	Route 174	Newington	094
11300	Route 175	Wethersfield	159
8500	Route 175	New Britain	089
12600	Route 175	Newington	094
8100	Route 176	Newington	094
15300	Route 177	Farmington	052
7900	Route 177	Canton	023
8000	Route 177	Avon	004
12500	Route 177	Plainville	110
5500	Route 178	Windsor	164
10900	Route 178	Bloomfield	011
1000	Route 179	Barkhamsted	005
12000	Route 179	Canton	023
10200	Route 179	Burlington	020
1500	Route 179	Hartland	065
7200	Route 17A	Portland	113
250	Route 181	Hartland	065
2300	Route 181	Barkhamsted	005
750	Route 182	Colebrook	029
750	Route 182	Norfolk	098
300	Route 182A	Colebrook	029
1100	Route 183	Colebrook	029
1300	Route 183	Winchester	162
4100	Route 183	Torrington	143
4700	Route 184	Stonington	137
6100	Route 184	North Stonington	102
14700	Route 184	Groton	059
19400	Route 185	Bloomfield	011
8800	Route 185	Simsbury	128
3600	Route 185	West Hartford	155
1900	Route 186	Somers	129
4600	Route 187	Suffield	139
12400	Route 187	Bloomfield	011
7700	Route 187	East Granby	040
8900	Route 187	Hartford	064
6900	Route 188	Middlebury	081
5800	Route 188	Southbury	130
3700	Route 188	Seymour	124
13200	Route 189	Simsbury	128
13500	Route 189	West Hartford	155

19900	Route 189	Hartford	064
7200	Route 189	Granby	056
10000	Route 189	East Granby	040
13300	Route 189	Bloomfield	011
2900	Route 19	Stafford	134
3500	Route 190	Stafford	134
8300	Route 190	Somers	129
3800	Route 190	Suffield	139
2300	Route 190	Union	145
15500	Route 190	Enfield	049
6700	Route 191	Enfield	049
7600	Route 191	East Windsor	047
6600	Route 192	Enfield	049
2400	Route 193	Thompson	141
11200	Route 194	South Windsor	132
5100	Route 195	Tolland	142
2700	Route 195	Windham	163
11600	Route 195	Mansfield	078
2100	Route 196	Haddam	061
4700	Route 196	East Hampton	042
1800	Route 197	Woodstock	169
950	Route 197	Union	145
2800	Route 197	Thompson	141
1000	Route 198	Woodstock	169
4500	Route 198	Chaplin	024
4100	Route 198	Eastford	039
1800	Route 199	Washington	150
1300	Route 199	Roxbury	120
14000	Route 2	North Stonington	102
12600	Route 2	Norwich	104
9300	Route 2	Preston	114
12200	Route 2	Stonington	137
10900	Route 2	Ledyard	072
1800	Route 20	Hartland	065
11200	Route 20	Granby	056
12500	Route 20	East Granby	040
1800	Route 20	Barkhamsted	005
3600	Route 20	Winchester	162
4300	Route 200	Thompson	141
3200	Route 201	Stonington	137
2300	Route 201	North Stonington	102
2800	Route 201	Griswold	058
4500	Route 203	Windham	163
2600	Route 205	Plainfield	109
4900	Route 205	Brooklyn	019
3100	Route 207	Franklin	053
2900	Route 207	Hebron	067
2200	Route 207	Lebanon	071
3800	Route 207	Sprague	133
2900	Route 209	Litchfield	074
2700	Route 209	Morris	087
9400	Route 213	New London	095
1600	Route 213	Waterford	152
4400	Route 214	Ledyard	072
3200	Route 215	Groton	059
4000	Route 216	North Stonington	102
2800	Route 217	Middlefield	082
15400	Route 217	Cromwell	033

14500	Route 218	Bloomfield	011
8400	Route 218	West Hartford	155
7300	Route 218	Windsor	164
1100	Route 219	Barkhamsted	005
3200	Route 219	New Hartford	092
4800	Route 219	Granby	056
12500	Route 22	North Branford	099
10300	Route 220	Enfield	049
500	Route 222	Harwinton	066
4300	Route 222	Thomaston	140
10800	Route 229	Southington	131
13600	Route 229	Bristol	017
2100	Route 234	Stonington	137
7800	Route 243	Woodbridge	167
9700	Route 243	Ansonia	002
9600	Route 243	New Haven	093
2700	Route 244	Eastford	039
2200	Route 244	Pomfret	112
17700	Route 25	Newtown	097
9700	Route 25	Trumbull	144
8900	Route 25	Brookfield	018
18700	Route 25	Monroe	085
3900	Route 254	Litchfield	074
7800	Route 254	Thomaston	140
6500	Route 262	Watertown	153
1200	Route 262	Plymouth	111
400	Route 263	Winchester	162
250	Route 263	Goshen	055
2300	Route 27	Groton	059
7700	Route 27	Stonington	137
400	Route 272	Norfolk	098
1600	Route 272	Torrington	143
950	Route 272	Goshen	055
2700	Route 275	Mansfield	078
2400	Route 275	Coventry	032
7500	Route 286	Ellington	048
14100	Route 287	Newington	094
12200	Route 287	Wethersfield	159
2500	Route 289	Windham	163
13700	Route 2A	Preston	114
11500	Route 2A	Montville	086
14400	Route 3	Middletown	083
15400	Route 3	Cromwell	033
8600	Route 3	Rocky Hill	119
11100	Route 3	Wethersfield	159
9000	Route 30	Tolland	142
8400	Route 30	Vernon	146
4200	Route 30	Stafford	134
6400	Route 30	South Windsor	132
4600	Route 30	Ellington	048
14300	Route 30	Manchester	077
12100	Route 302	Bethel	009
13600	Route 305	Bloomfield	011
5300	Route 305	Windsor	164
2100	Route 309	Canton	023
9300	Route 31	Coventry	032
4900	Route 31	Mansfield	078
8900	Route 31	Vernon	146
6200	Route 313	Woodbridge	167

6100	Route 313	Seymour	124		5200	Route 4	Torrington	143

6100	Route 313	Seymour	124
7900	Route 314	Wethersfield	159
7900	Route 315	Simsbury	128
2100	Route 316	Hebron	067
3100	Route 316	Andover	001
3100	Route 316	Ansonia	002
2200	Route 317	Roxbury	120
3100	Route 317	Woodbury	168
4900	Route 318	Barkhamsted	005
3900	Route 319	Stafford	134
6800	Route 32	Norwich	104
5000	Route 32	Willington	160
10900	Route 32	Windham	163
5400	Route 32	Waterford	152
18300	Route 32	Franklin	053
13500	Route 32	Mansfield	078
13100	Route 32	Montville	086
14500	Route 32	New London	095
4000	Route 320	Mansfield	078
2800	Route 320	Willington	160
8500	Route 322	Wolcott	166
15700	Route 322	Southington	131
5800	Route 33	Ridgefield	118
16000	Route 33	Wilton	161
15800	Route 33	Westport	158
4400	Route 334	Seymour	124
6600	Route 334	Ansonia	002
12000	Route 337	East Haven	044
6400	Route 337	New Haven	093
10800	Route 34	New Haven	093
10400	Route 34	Monroe	085
18500	Route 34	Derby	037
10600	Route 34	Seymour	124
12600	Route 34	Newtown	097
19400	Route 34	Orange	107
20900	Route 34	West Haven	156
2100	Route 341	Warren	149
1800	Route 341	Washington	150
2800	Route 341	Kent	068
2600	Route 343	Sharon	125
4000	Route 349	Groton	059
9100	Route 35	Ridgefield	118
2400	Route 354	Salem	121
4700	Route 354	Colchester	028
3400	Route 361	Sharon	125
8300	Route 364	Southington	131
2900	Route 364	Berlin	007
20800	Route 37	Danbury	034
2600	Route 37	New Fairfield	091
2900	Route 37	Sherman	127
5800	Route 37	New Milford	096
11200	Route 372	Plainville	110
20200	Route 372	New Britain	089
13200	Route 372	Cromwell	033
3800	Route 372	Berlin	007
13300	Route 39	Danbury	034
4800	Route 39	New Fairfield	091
1300	Route 39	Sherman	127
2000	Route 4	Sharon	125
8600	Route 4	West Hartford	155

5200	Route 4	Torrington	143
20900	Route 4	Farmington	052
5800	Route 4	Goshen	055
5800	Route 4	Harwinton	066
2400	Route 4	Cornwall	031
13800	Route 4	Burlington	020
4000	Route 40	North Haven	101
1500	Route 41	Sharon	125
1200	Route 41	Salisbury	122
2600	Route 42	Oxford	108
4800	Route 42	Cheshire	025
2300	Route 42	Bethany	008
8200	Route 42	Beacon Falls	006
1300	Route 45	Cornwall	031
2600	Route 45	Washington	150
1600	Route 45	Warren	149
2300	Route 47	Washington	150
4300	Route 47	Woodbury	168
2200	Route 49	Voluntown	147
2100	Route 49	North Stonington	102
1800	Route 49	Sterling	136
3000	Route 49	Stonington	137
4100	Route 53	Redding	117
10600	Route 53	Norwalk	103
3800	Route 53	Weston	157
6200	Route 53	Wilton	161
12300	Route 53	Danbury	034
9000	Route 53	Bethel	009
3200	Route 55	New Milford	096
5700	Route 57	Redding	117
11400	Route 57	Weston	157
14600	Route 57	Westport	158
4700	Route 58	Redding	117
19400	Route 58	Fairfield	051
3600	Route 58	Easton	046
7600	Route 59	Easton	046
11700	Route 59	Fairfield	051
3900	Route 59	Bridgeport	015
2800	Route 59	Monroe	085
1600	Route 61	Morris	087
4700	Route 61	Bethlehem	010
2300	Route 61	Woodbury	168
13900	Route 63	Woodbridge	167
4600	Route 63	Watertown	153
7400	Route 63	Bethany	008
2600	Route 63	Canaan	021
2300	Route 63	Cornwall	031
4100	Route 63	Morris	087
8400	Route 63	Naugatuck	088
17500	Route 63	New Haven	093
9900	Route 63	Middlebury	081
4100	Route 63	Litchfield	074
3800	Route 63	Goshen	055
19500	Route 64	Middlebury	081
19500	Route 64	Waterbury	151
6100	Route 64	Woodbury	168
13500	Route 66	Windham	163
14200	Route 66	Portland	113
12800	Route 66	Marlborough	079
12200	Route 66	Middlefield	082
9900	Route 66	Middletown	083
14900	Route 66	Hebron	067

13100	Route 66	Columbia	030		7200	Route 79	Madison	076
15700	Route 66	East Hampton	042		2900	Route 8	Colebrook	029
					6600	Route 8	Winchester	162
3200	Route 67	Bridgewater	016		12900	Route 80	North Branford	099
15500	Route 67	Oxford	108					
8200	Route 67	New Milford	096		6600	Route 80	Depp River	036
1900	Route 67	Roxbury	120		15100	Route 80	East Haven	044
10000	Route 67	Seymour	124		4900	Route 80	Madison	076
6900	Route 67	Southbury	130		17600	Route 80	New Haven	093
6700	Route 67	Woodbridge	167		4500	Route 80	Killingworth	070
16900	Route 68	Wallingford	148		7600	Route 80	Guilford	060
10700	Route 68	Prospect	115		7500	Route 81	Haddam	061
8600	Route 68	Cheshire	025		6600	Route 81	Killingworth	070
14300	Route 68	Naugatuck	088		13100	Route 81	Clinton	027
16500	Route 69	New Haven	093		10700	Route 82	East Haddam	041
6600	Route 69	Burlington	020		6700	Route 82	Bozrah	013
8200	Route 69	Bristol	017		6900	Route 82	Haddam	061
7400	Route 69	Bethany	008		2000	Route 82	Lyme	075
10300	Route 69	Prospect	115		5300	Route 82	Montville	086
7900	Route 69	Waterbury	151		11900	Route 82	Norwich	104
8800	Route 69	Wolcott	166		3500	Route 82	Salem	121
19300	Route 70	Cheshire	025		9800	Route 83	Somers	129
8400	Route 70	Meriden	080		8500	Route 83	Vernon	146
9200	Route 71	Meriden	080		6300	Route 83	Manchester	077
11100	Route 71	New Britain	089		4900	Route 83	Glastonbury	054
10400	Route 71	Berlin	007		13200	Route 83	Ellington	048
5600	Route 71	Wallingford	148		16800	Route 85	Colchester	028
7800	Route 71	West Hartford	155		7200	Route 85	Bolton	012
					5500	Route 85	Hebron	067
7300	Route 71A	Berlin	007		12800	Route 85	Montville	086
3000	Route 71A	New Britain	089		8200	Route 85	New London	095
1000	Route 72	Harwinton	066		10600	Route 85	Waterford	152
12300	Route 72	Bristol	017		6200	Route 85	Salem	121
2200	Route 72	Plymouth	111		6100	Route 87	Lebanon	071
12300	Route 72	Plainville	110		5700	Route 87	Franklin	053
10500	Route 73	Watertown	153		3300	Route 87	Andover	001
12500	Route 73	Waterbury	151		4500	Route 87	Columbia	030
4000	Route 74	Tolland	142		2500	Route 89	Ashford	003
9000	Route 74	Vernon	146		4200	Route 89	Mansfield	078
7700	Route 74	Willington	160		1300	Route 89	Union	145
4500	Route 74	South Windsor	132		12400	Route 94	Glastonbury	054
					3800	Route 94	Hebron	067
6600	Route 74	Ashford	003		900	Route 97	Hampton	063
7500	Route 74	Ellington	048		1500	Route 97	Scotland	123
11600	Route 75	Windsor	164		5000	Route 97	Sprague	133
9200	Route 75	Windsor Locks	165		6000	Route 97	Norwich	104
					1700	Route 97	Pomfret	112
6700	Route 75	Suffield	139		11400	Route 99	Rocky Hill	119
4800	Route 77	Guilford	060		11600	Route 99	Wethersfield	159
6900	Route 78	Stonington	137		8100	Route 99	Cromwell	033
7300	Route 79	Killingworth	070					

Query 12 displays the average usage of all Connecticut interstates by taking the ADT of each interstate in each town and averaging them all together. Then the interstates are ordered by ADT in descending order. This will show which interstates are most used and therefore which ones would generate the most revenue if tolls were reintroduced.

```
-- Query 12
|SELECT
rts.RouteNum,
AVG(CAST(adt.NumCars AS INT)) AS AADT
FROM AnnualAverageDailyTrafficInterStates adt,
Highways hys
INNER JOIN RoutesandTowns rts
    ON rts.RouteNum = hys.RouteNum
WHERE adt.RouteNum = hys.RouteNum

GROUP BY rts.RouteNum
ORDER BY AADT DESC
|-- Use of average to show average usage of interstates in CT
```

Figure 12. Displays the Average ADT of each interstate in CT

Table 12. The results from query 12. Displaying the average ADT of each interstate in CT

RouteNum	AADT
I-91	107995
I-95	98798
I-84	78470
I-684	70200
I-691	48305
I-384	35429
I-291	34289
I-395	33059
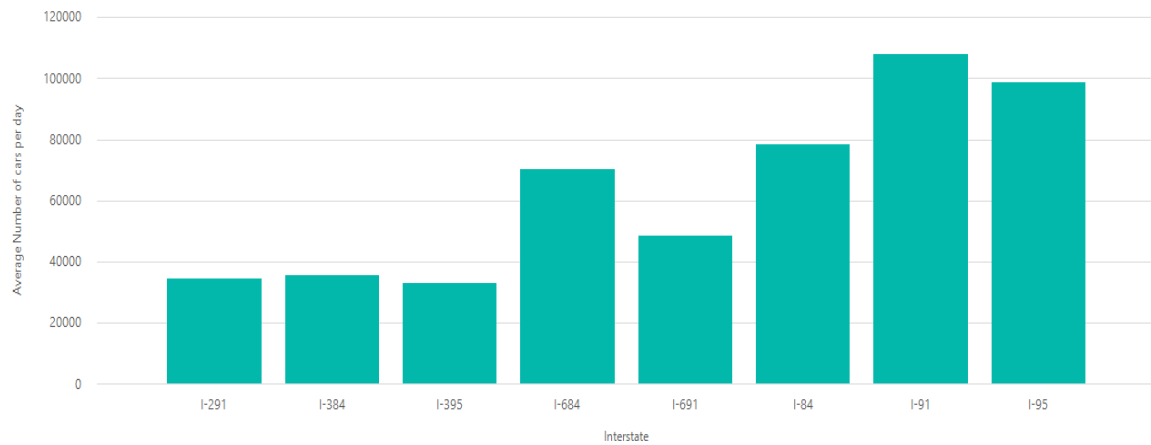
Figure 18. Average of Average Daily Traffic of all interstates in CT.

Lastly. Query 13 displays the average ADT of each of routes 2, 15, and 8 in Connecticut which along with route 9 are proposed routes for being tolled.
(https://www.ct.gov/dot/lib/dot/documents/dcommunications/press_release/ctdot_tolling_report_111 42018.pdf , pg6) Route 9 is not present because I could not find any data on this road. This shows the most used roads in CT and therefore the most profitable roads if tolls were reintroduced. Route 15, which for a portion of it, the Merritt Parkway does not allow commercial traffic but is very busy due to its proximity to New York City. This would be the best place to toll according to the average amount of cars that Route 15 accommodates each day.

```
-- Query 13
SELECT
rts.RouteNum,
AVG(CAST(adt.NumCars AS INT)) AS AADT
FROM AverageDailyTraffic adt,
Highways hys
INNER JOIN RoutesandTowns rts
    ON rts.RouteNum = hys.RouteNum
WHERE adt.RouteNum = hys.RouteNum and hys.RouteNum = 'Route 2'
    or adt.RouteNum = hys.RouteNum and hys.RouteNum  = 'Route 15'
    or adt.RouteNum = hys.RouteNum and hys.RouteNum = 'Route 8'

GROUP BY rts.RouteNum
ORDER BY AADT DESC


-- Use of average ADT of state routes in CT
```

Figure 13. Displays the average ADT of CT routes 2, 15, and 8 in descending ordered by Average Daily Traffic

Table 14. CT state routes 2,15, and 8 in database ordered by average ADT, with route 15 showing as the busiest on average.

RouteNum	AADT
Route 15	13550
Route 2	11800
Route 8	4750

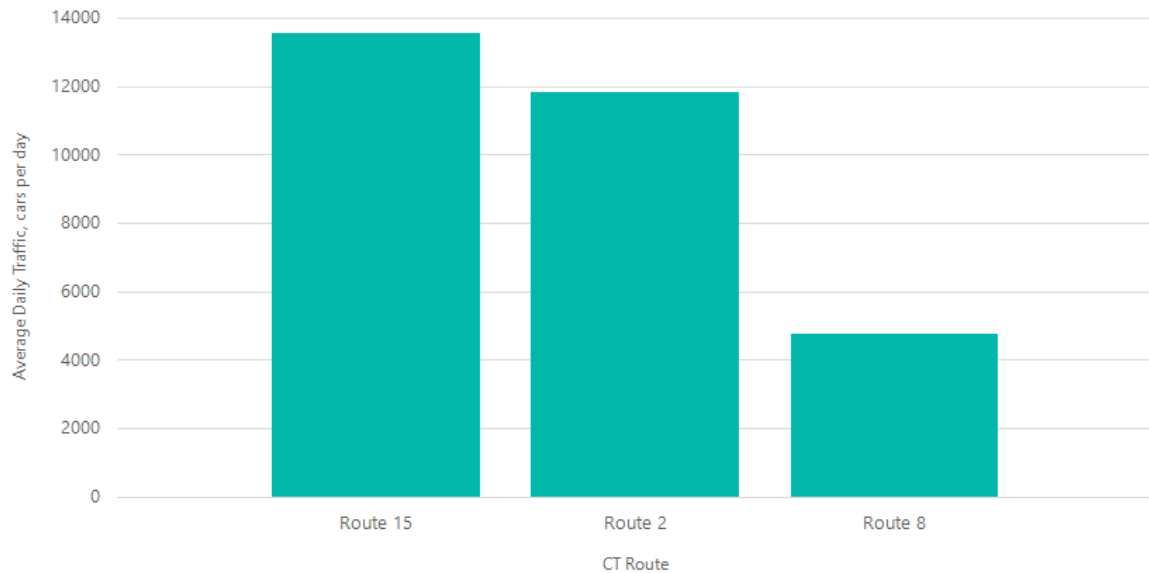Average Daily Traffic of CT Routes 15, 8, and 2

Figure 14. Visual representation of Table 14. Showing Route 15 as the most used candidate road for tolling out of the proposed three roads that data has been collected on.

In conclusion with these reports, I believe regulators would be best positioned to make an informed decision of where tolls could be placed. The data gathered illustrates the best locations for toll placements to help maintain the roads and ease congestion, while also endeavoring to show problem areas that need improvement.