

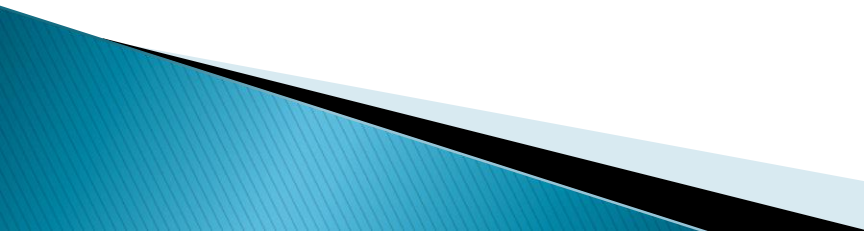
City of Greeley Pavement Management Programs

Pat Hill
John Wood



Pavement Management Programs

Greeley History

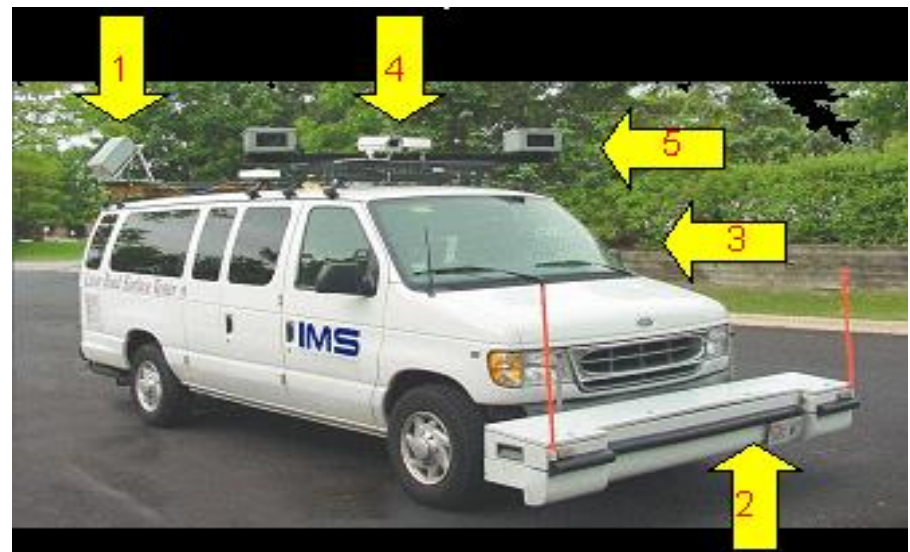
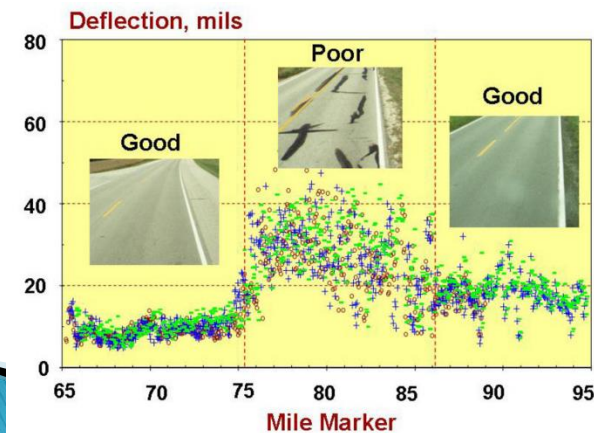
- ▶ City of Greeley's PMP System began in 1986.
 - ▶ It was 2000 that we began to see the ability to use GIS with this system to help with our management of the infrastructure.
 - ▶ Today we manage 400+ miles of our roadway system.
 - ▶ We have upgraded our PMP many times with a major upgrade this year in the software.
- 

Pavement Management Programs

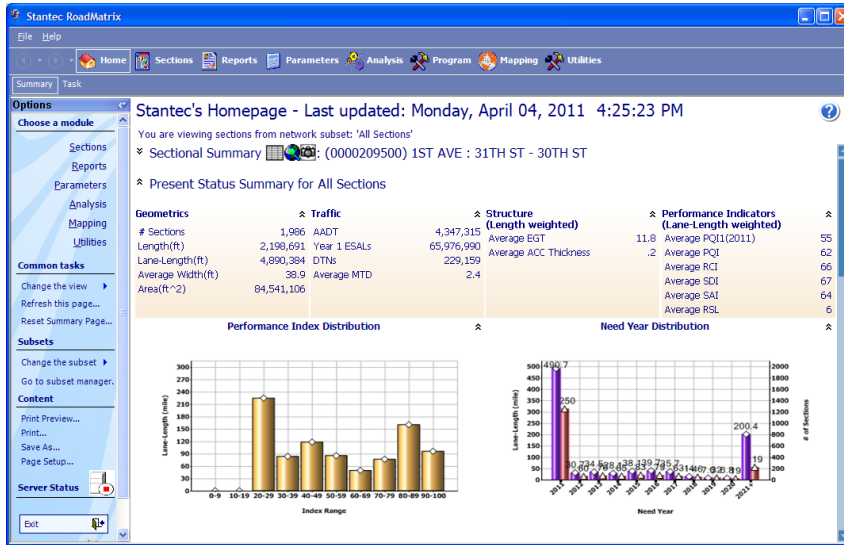


Pavement Management Programs

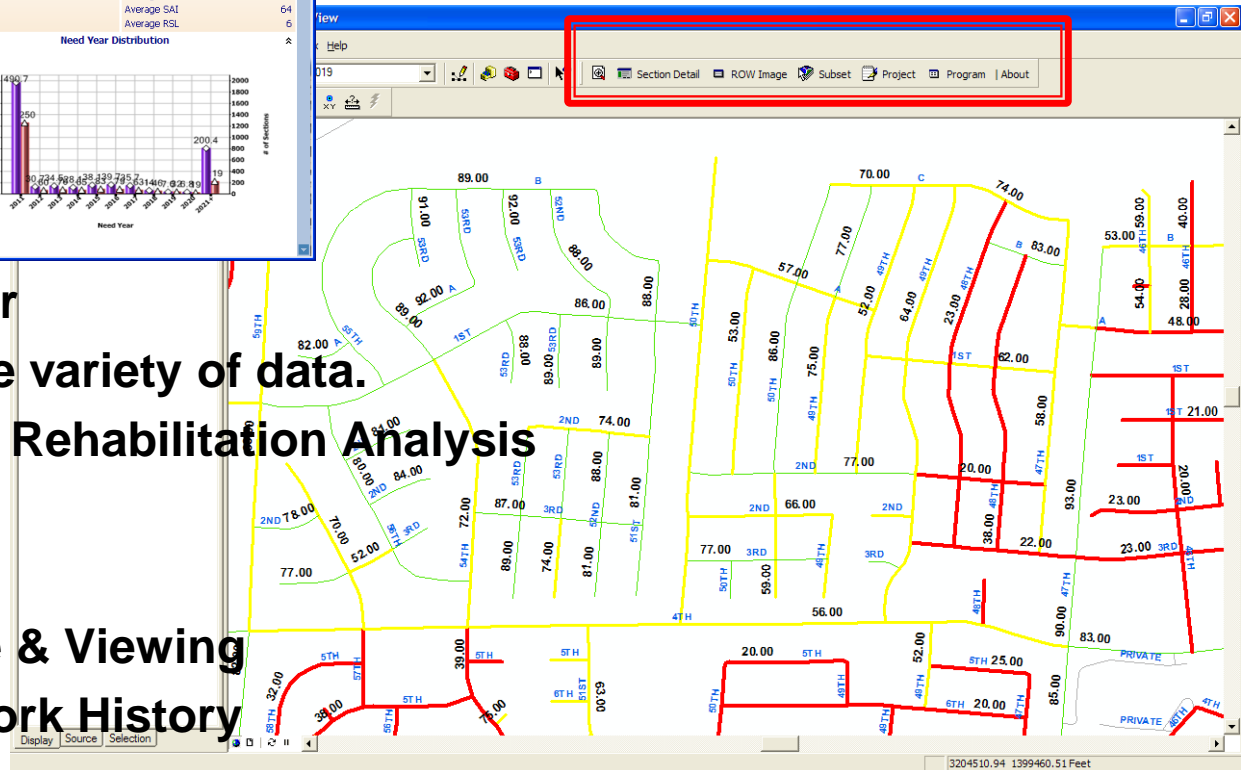
- ▶ A typical rating unit can provide a great deal of data.
- ▶ 1 and 2 – Greeley collects – Roughness, Rutting, and Geometrics.
- ▶ 3 – Full suite of Surface Distresses.
- ▶ 4 – GPS coordinates, Data location verification and production views.
- ▶ 5 – Video.



Pavement Management Programs



RoadMatrix Integration Toolbar



Integrated Modules for

- Inventory –large variety of data.
- Maintenance & Rehabilitation Analysis
- GIS Integration
- Reporting
- Images Storage & Viewing
- Data base of Work History

Choose a module Current Network Subset: 'All Sections'

Sections	Analysis	Utilities
Category Inventory	Category Location Geometric Traffic Structure Performance Documents Images	Category Traffic class and other model settings EGT class and other model settings RCI-IRI models SDI models Benkelman Beam-Dynaffect models PQI models

Modify my favorite Sections...
Go to Sections module

Modify my favorite Analysis...
Go to Analysis module

Modify my favorite Utilities...
Go to Utilities module

Parameters	Reports	Subsets
Category Inventory	Category Inventory	Category Location


Modify my favorite Parameters...
Go to Parameters module

Modify my favorite Reports...
Go to Reports module

Modify my favorite Subsets...
Go to Subsets module

Parameters	Reports	Subsets
Parameters Curbs Drainage Functional classes Neighbourhoods Structure layers Medians Maintenance districts Pavement types Shoulder types Wards Overall performance models Prediction models Roughness models Strength models Distress models Alternatives Decision trees Budget scenarios	Reports Inventory Geometric Traffic Structural Peripheral Detailed Roughness Detailed Distress Detailed Deflection Network Summarized Roughness Network Summarized Distress Network Summarized Deflection Section Performance History Section Work History Section Traffic History Network Present Status Distribution Network Remaining Service Life Distribution Sectional Performance (Do-Nothing) Sectional Performance (All) Network Section Performance (Do-Nothing) Network Section Performance (PQI-Trigger) Network Section Performance (Need-Driven) Network Section Performance (Budget) Network Section Performance (Program) Subset Definition	Subsets Location Modify my favorite Subsets... Go to Subsets module

Exit



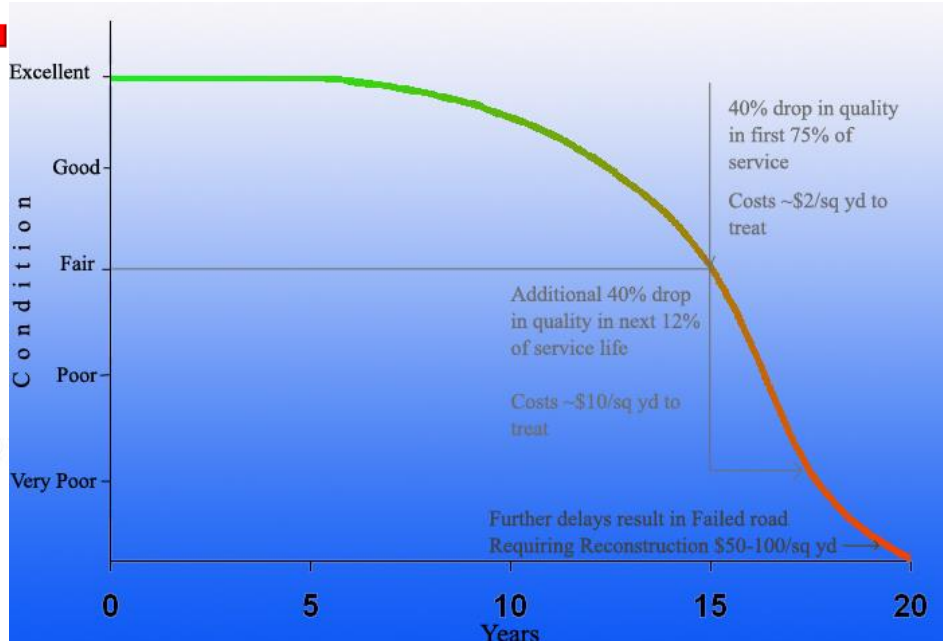
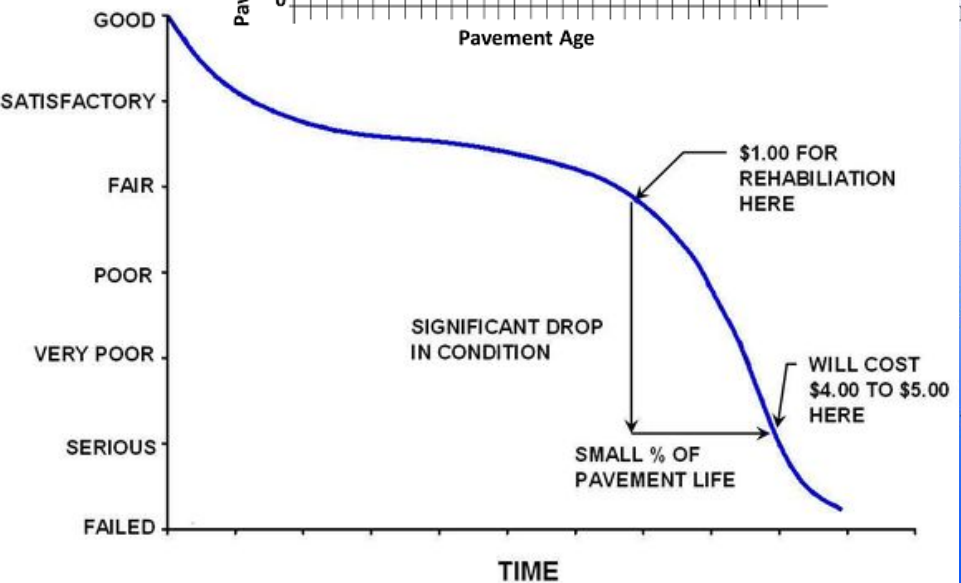
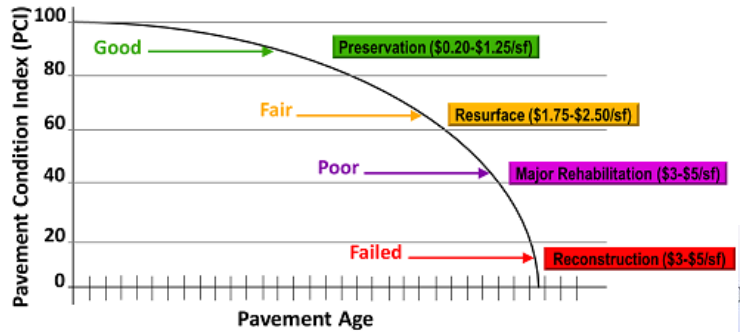
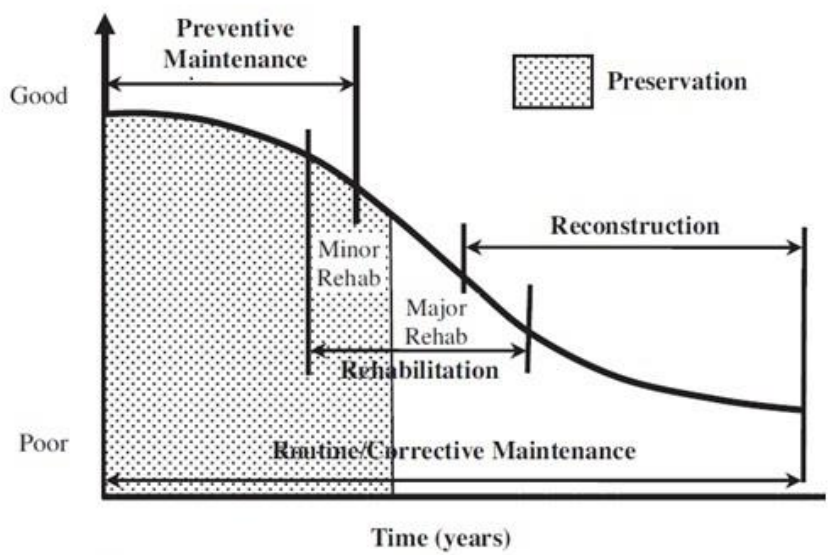
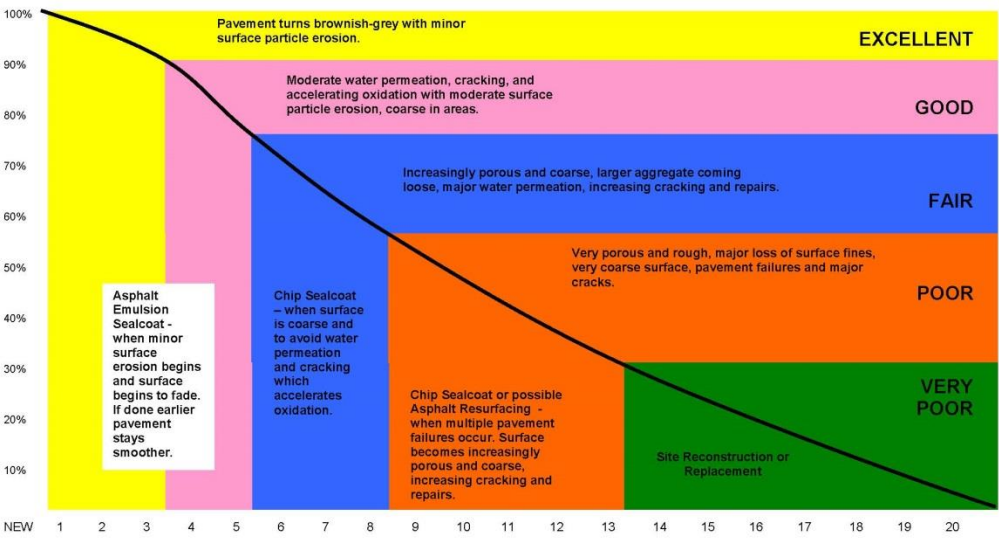
Task

Pavement Management Programs

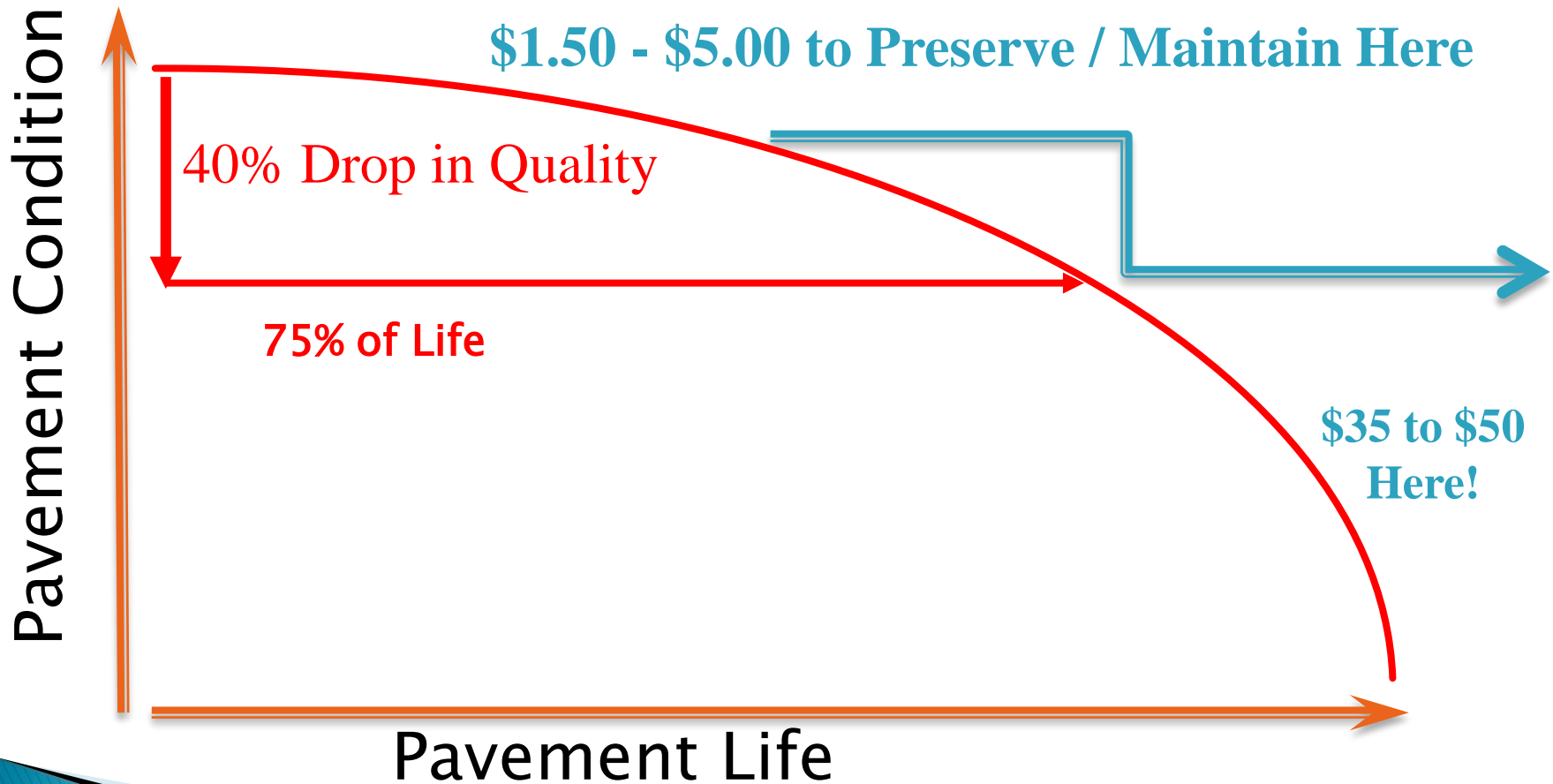
▶ Present Status

- PQI (Pavement Quality Index)
 - 0–100 scale (100 being excellent)
 - Indicates overall quality/serviceability of a roadway
 - Calculated through a combination of indices...
 - RCI (Ride Comfort Index)
 - SDI (Surface Distress Index)
 - SAI (Structural Adequacy Index)

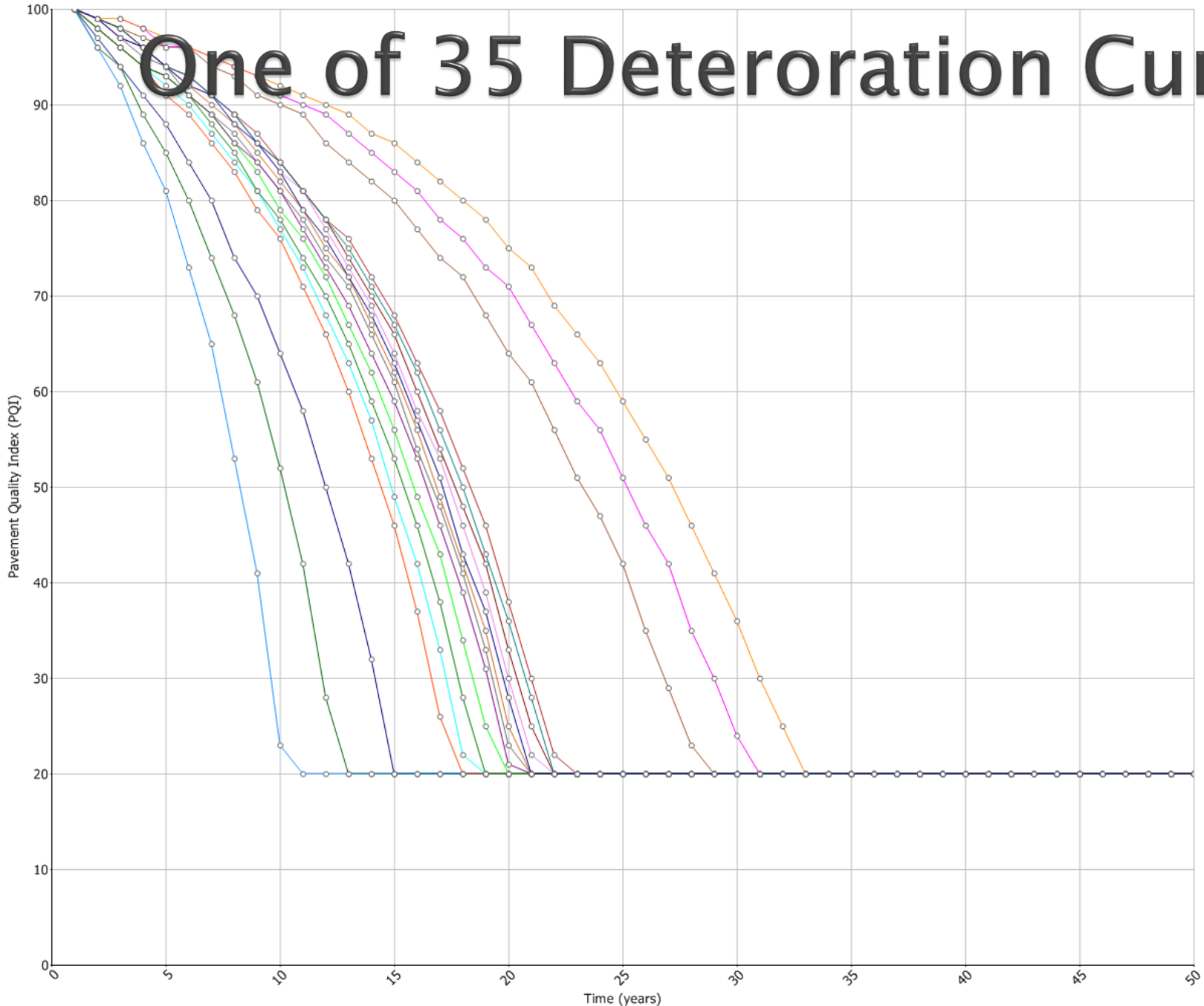
$$\mathbf{RCI + SDI + SAI = PQI}$$

Pavement Management Programs



One of 35 Deterioration Curves



- ✓ 1.Thin/Strong/Low
- ✓ 2.Thin/Strong/Medium
- ✓ 3.Thin/Strong/High
- ✓ 4.Thin/Weak/Low
- ✓ 5.Thin/Weak/Medium
- ✓ 6.Thin/Weak/High
- ✓ 7.Medium/Strong/Low
- ✓ 8.Medium/Strong/Medium
- ✓ 9.Medium/Strong/High
- ✓ 10.Medium/Weak/Low
- ✓ 11.Medium/Weak/Medium
- ✓ 12.Medium/Weak/High
- ✓ 13.Thick/Strong/Low
- ✓ 14.Thick/Strong/Medium
- ✓ 15.Thick/Strong/High
- ✓ 16.Thick/Weak/Low
- ✓ 17.Thick/Weak/Medium
- ✓ 18.Thick/Weak/High

Pavement Management Programs

Our Decision Trees

Options

Tools

- Create new tree
- Add condition node
- Add treatment node
- Condition-condition nodes
- Condition-treatment nodes
- Add link

Common tasks

- Pointer
- Zoom In/Out
- Zoom Full/Zoom None
- Pan
- Auto Layout
- Validate the tree

Layout

- Show Tree Sections
- Show Node Sections
- Highlight Branch

Print

- Print Preview...
- Print Zooming...
- Print Report...
- Save Diagram As...
- Page Setup...
- Auto Size
- Set Size...

Tree Set: Decision Tree Set 1 Subset: All Sections

Functional Class: 'Local' Pavement Type: 'Flexible'

Minimum Acceptable POI: 70.0 Minimum Acceptable Life: 1 Section:

Tree Explorer

- Default trees
- Decision Tree Set 1
 - Unknown
 - Local
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Collector
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Arterial
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Rural Roads
 - State Highway
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Cemetery
 - Bicycle Path
 - Parking Lots
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Alley
- Decision Tree Set 2
- Test Trees

Pavement Management Programs

Stantec RoadMatrix

Home Sections Reports Parameters Analysis Program Sidewalk Mapping Utilities Help -

Parameters Home Street Jurisdiction Peripheral Models Rehabilitation Others

Options
Tools
Common tasks
Layout
Print

Tree Set: Decision Tree Set 1 Subset: All Sections

Functional Class: Rural Roads Pavement Type: Flexible
Minimum Acceptable POI: 75.0 Minimum Acceptable Life: 1 Section:

Decision Tree Diagram:

```
graph TD
    Node0["RCI <= 41"]
    Node1["SAI <= 51"]
    Node2["SAI <= 51"]
    Node3["Rid <= 80"]
    Node4["Rid <= 80"]
    Node5["Rid <= 80"]
    Node6["Rid <= 80"]
    Node7["Load Cr <= 99"]
    Node8["Load Cr <= 99"]
    Node9["Load Cr <= 99"]
    Node10["Load Cr <= 99"]
    Node11["Load Cr <= 99"]
    Node12["Load Cr <= 99"]
    Node13["Load Cr <= 99"]
    Node14["Load Cr <= 99"]
    Node15["Load Cr <= 99"]
    Node16["Load Cr <= 99"]
    Node17["Load Cr <= 99"]
    Node18["Load Cr <= 99"]
    Node19["Load Cr <= 99"]
    Node20["Load Cr <= 99"]
    Node21["Load Cr <= 99"]
    Node22["Load Cr <= 99"]
    Node23["Load Cr <= 99"]
    Node24["Load Cr <= 99"]
    Node25["Load Cr <= 99"]
    Node26["Load Cr <= 99"]
    Node27["Load Cr <= 99"]
    Node28["Load Cr <= 99"]
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    Node31["Load Cr <= 99"]
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    Node38["Load Cr <= 99"]
    Node39["Load Cr <= 99"]
    Node40["Load Cr <= 99"]
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    Node51["Load Cr <= 99"]
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    Node84["Load Cr <= 99"]
    Node85["Load Cr <= 99"]
    Node86["Load Cr <= 99"]
    Node87["Load Cr <= 99"]
    Node88["Load Cr <= 99"]
    Node89["Load Cr <= 99"]
    Node90["Load Cr <= 99"]
    Node91["Load Cr <= 99"]
    Node92["Load Cr <= 99"]
    Node93["Load Cr <= 99"]
    Node94["Load Cr <= 99"]
    Node95["Load Cr <= 99"]
    Node96["Load Cr <= 99"]
    Node97["Load Cr <= 99"]
    Node98["Load Cr <= 99"]
    Node99["Load Cr <= 99"]
```

Tree Explorer

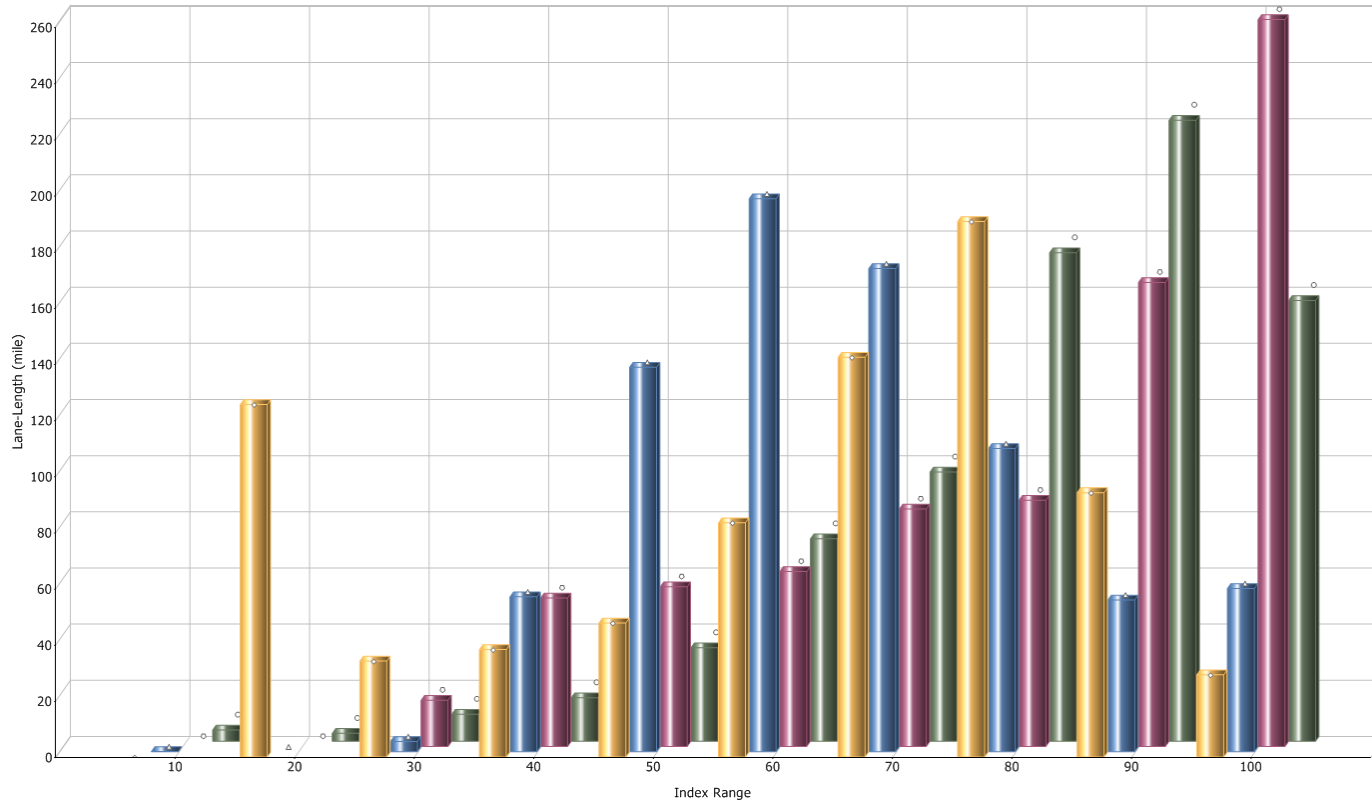
- Default trees
- Decision Tree Set 1
 - Unknown
 - Local
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Collector
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Arterial
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Rural Roads
 - Unknown
 - Flexible**
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - State Highway
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Cemetery
 - Bicycle Path
 - Parking Lots
 - Unknown
 - Flexible
 - Composite
 - Rigid
 - Gravel
 - State Highway
 - Alley
- Decision Tree Set 2
- Test Trees

Decision Tree

Options | Network Subset | Edit | Save Tree | Undo Tree | Second... | Year: 2016 | M&R Details... | OK | Cancel | Tree Explorer | Node Details

Pavement Management Programs

Network Present Status Distribution – 2016
All Streets less State

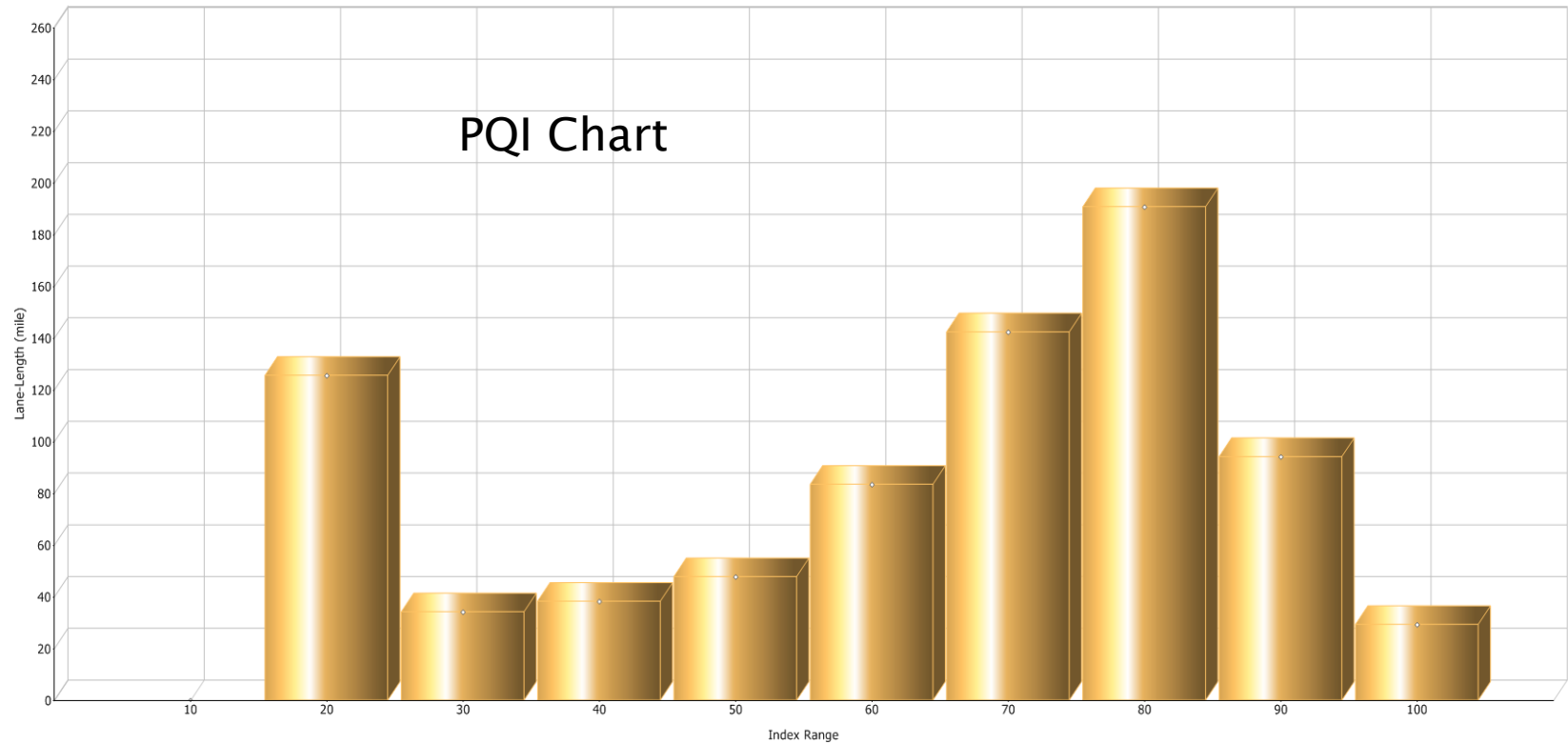


PQI Range	10	20	30	40	50	60	70	80	90	100	Total
Sections	0	316	102	95	113	195	363	488	167	53	1892
Lane-Length (mile)	0	125.6	34.2	38.3	47.8	83.5	142.4	190.8	94.2	29.3	786.1
Lane-Length %	0	16	4.4	4.9	6.1	10.6	18.1	24.3	12	3.7	100
Area (yd ²)	0	1360438.4	401948.3	376583.6	512067.2	849407.6	1414154.3	1958493.3	915502.7	301955.1	8090550.5
Area %	0	16.8	5	4.7	6.3	10.5	17.5	24.2	11.3	3.7	100

PQI(58.4)
 RCI(61.8)
 SDI(75)
 SAI(75.9)

Pavement Management Programs

Network Present Status Distribution – 2016
Less State Roads

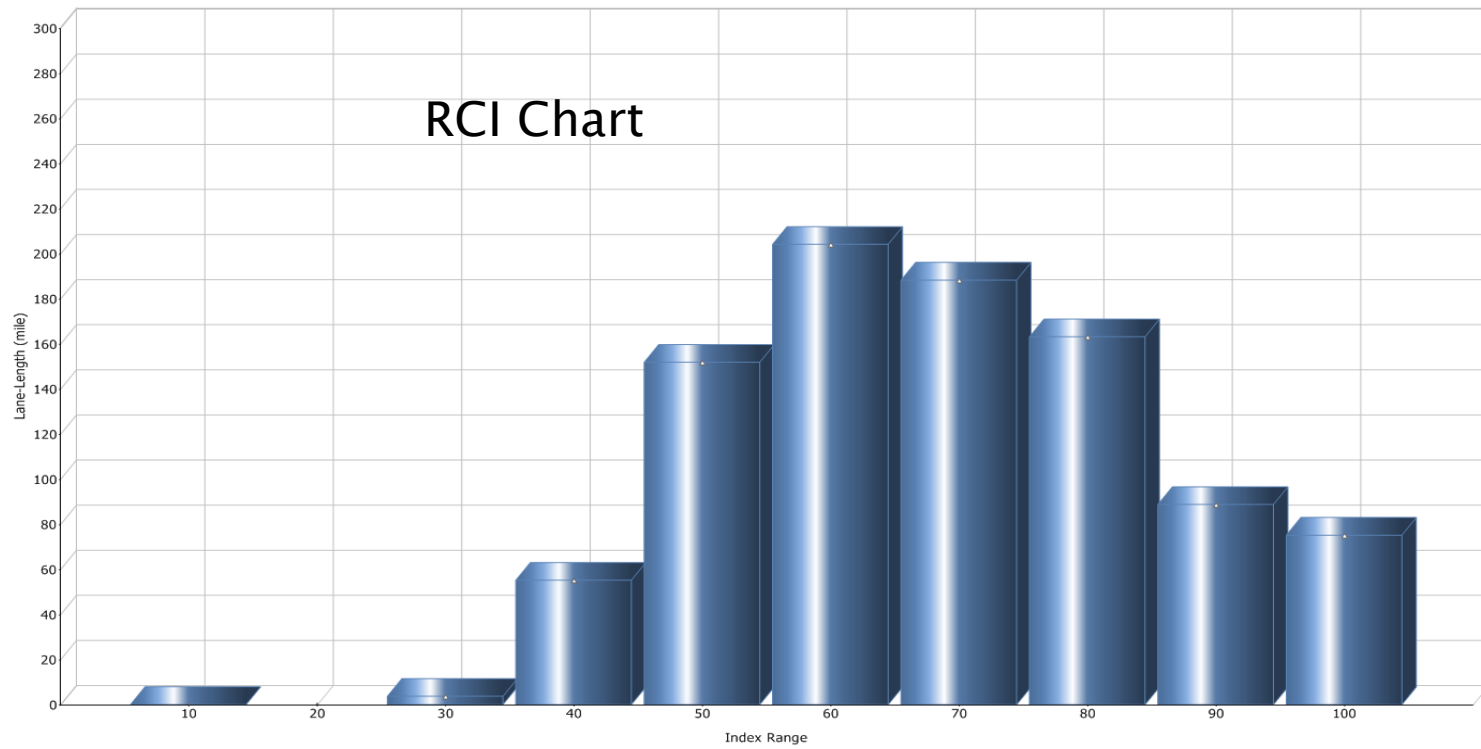


PQI Range	10	20	30	40	50	60	70	80	90	100	Total
Sections	0	316	102	95	113	195	363	488	167	53	1892
LL (mile)	0	125.6	34.2	38.3	47.8	83.5	142.4	190.8	94.2	29.3	786.1
LL %	0	16	4.4	4.9	6.1	10.6	18.1	24.3	12	3.7	100
Area (yd ²)	0	1360438.4	401948.3	376583.6	512067.2	849407.6	1414154.3	1958493.3	915502.7	301955.1	8090550.5
Area %	0	16.8	5	4.7	6.3	10.5	17.5	24.2	11.3	3.7	100

PQI(58.4)
 RCI(61.8)
 SDI(75)
 SAI(75.9)

Pavement Management Programs

Network Present Status Distribution – 2016
All Sections



RCI Range	10	20	30	40	50	60	70	80	90	100	Total
Sections	1	0	35	224	474	537	374	176	68	93	1982
LL (mile)	0.1	0	3.7	55.2	151.9	204.2	188.3	163.2	88.8	75.2	930.6
LL %	0	0	0.4	5.9	16.3	21.9	20.2	17.5	9.5	8.1	100
Area (yd ²)	919.1	0	46184.8	590861.9	1636639.9	2193385	1917477.8	1548408.7	755226	751633.4	9440736.6
Area %	0	0	0.5	6.3	17.3	23.2	20.3	16.4	8	8	100

PQL(57.8) RCI(64) SDI(75.9) SAI(77.5)

Pavement Management Programs

Stantec RoadMatrix

Home Sections Reports Parameters Analysis Program Sidewalk Mapping Utilities Help

Reports Home Inventory Performance Rehabilitation

Options

Common tasks

- Change view
- Print Preview...
- Print...
- Page Setup...
- Save As...
- Customize...
- Save as default view...

Batch Print Options

Subsets

- Change the Subset...
- Subset manager...
- Include super section...

Favorite Reports

- Add to favorites
- Remove from favorites

Grid layout

- Expand All
- Collapse All

Drag a column header here to group by that column.

Layout: Default Layout Search Section #

Section #	Street Name	Limits (To and From)	Length ⁺ (ft)	Width(ft)	Fun. Class	SOI	PQ1 Year 1	RCI	AADTI
0000205500	1ST AVE	31ST ST-30TH ST	997	52	Collector	93.4	76.6	74.9	5,171
0000210000	1ST AVE	30TH ST-28TH ST	1,691	52	Collector	88.8	73.7	71.6	5,171
0000210500	1ST AVE	28TH ST-27TH ST	467	48	Collector	89	79.6	77.4	5,171
0000210520	27TH ST / 23RD AVE	HWY 34 BYPASS (WBD)-27TH ST	717	30	State Highw	90	83.6	90	2,514
0000211000	1ST AVE	27TH ST-24TH ST (E)	2,211	48	Collector	88.7	77.4	74.7	4,434
0000211500	1ST AVE	24TH ST (E)-22ND ST	1,158	51.8	Collector	88.3	75.4	76.5	5,067
0000212000	1ST AVE	22ND ST-18TH ST	2,868	51.8	Collector	89	79.8	79.1	5,700
0000212500	1ST AVE	18TH ST-16TH ST	1,359	51.8	Collector	90.1	92.5	95	5,067
0000213000	1ST AVE	16TH ST-13TH ST	1,600	52	Collector	90.6	55.4	59.9	6,221
0000213500	1ST AVE	13TH ST-CITY LIMIT (N) (AT GATE)	783	28	Local	50.1	31.4	53.8	2,121
0000214000	1ST AVE CT	25TH ST-23RD ST	1,130	36	Local	40.5	20	39.9	236
0000214500	1ST AVE	8TH ST-CITY LIMIT (N)	1,371	27	Local	76.4	56.8	78.5	2,514
0000217000	1ST ST	61ST AVE (WFL)-59TH AVE	1,252	47	Collector	78	72.4	70.4	2,514
0000217500	1ST ST	59TH AVE-50TH AVE PL	2,900	37	Local	71.2	49.8	59.8	2,514
0000218000	1ST ST	49TH AVE CT-47TH AVE CT	1,200	37	Local	85.7	70.1	50.3	443
0000218500	1ST ST	47TH AVE-43RD AVE CT	1,836	36.5	Local	54.7	50.5	42.8	1,730
0000219000	1ST ST	23RD AVE-CITY LIMITS (W)	2,645	16	Local	62.4	52	40	4,313
0000219500	1ST ST	12TH AVE (N)-11TH AVE (N)	305	32	Local	40.6	20	47.1	236
0000220000	1ST ST	11TH AVE (N)-8TH AVE (BUS 85)	1,626	32	Local	32.1	20	37.6	566
0000222500	1ST ST DR	46TH AVE-CDS (W)	342	36.5	Local	58.4	56.5	32	247
0000224500	1ST ST DR	46TH AVE-CDS (W)	315	36.5	Local	59.9	65.1	34.9	247
0000225000	1ST ST RD	46TH AVE-45TH AVE	539	36.5	Local	59.5	28.4	28.6	535
0000227000	2ND AVE	13TH ST-10TH ST	1,453	46	Local	29.6	20	44	412
0000227100	2ND AVE	16TH ST-13TH ST	1,621	46	Local	42.1	20	54.8	2,514
0000227200	2ND AVE	18TH ST-16TH ST	1,212	46	Local	44.6	20	77.2	2,514
0000227300	2ND AVE	22ND ST-18TH ST	2,720	31	Local	79.9	64.5	78.6	2,514
0000227400	2ND AVE	22ND ST-EDP (S)	2,726	31	Local	79.6	74.7	95.4	2,514
0000229500	2ND ST	63RD AVE-61ST AVE	503	37	Local	79.5	73	62.9	2,514
0000229750	2ND ST	56TH AVE-CDS (E)	435	37	Local	87.6	58.2	52.8	2,514
0000230000	2ND ST	51ST AVE-THRU 53RD AVE CT	908	37	Local	60.7	33.3	40.1	2,514
0000230500	2ND ST	50TH AVE PL-49TH AVE	1,398	37	Local	100	71.2	59.4	1,314
0000231000	2ND ST	49TH AVE-47TH AVE CT	843	36	Local	54.9	20	43	369
0000231500	2ND ST	46TH AVE-CDS (W)	532	36.5	Local	62.4	66.2	42.6	353
0000232000	2ND ST	46TH AVE-43RD AVE CT	1,083	36.5	Local	55.2	22.6	38.6	542
0000232500	2ND ST	43RD AVE-41ST AVE	461	36	Local	83.7	71.6	43.3	82
0000232700	2ND ST	35TH AVE-32ND AVE	1,200	37	Local	78.5	76.4	60.9	312
0000233000	2ND ST	23RD AVE-21ST AVE	1,295	20	Collector	90.6	88.2	95	8,036
0000233005	2ND ST	24TH AVE-23RD AVE CT	251	38	Local	85.6	65.5	45.2	2,514
0000233500	2ND ST	21ST AVE-14TH AVE	2,697	26	Collector	90.6	87.2	95	7,894
0000234000	2ND ST	14TH AVE-11TH AVE	1,520	26	Collector	38.5	20	53.2	4,973
0000234500	2ND ST	9TH AVE-8TH AVE	437	52	Local	31.3	20	37.2	141
0000238000	2ND ST RD	50TH AVE PL-49TH AVE PL	854	37	Local	52.7	37.2	55	253
0000238100	2ND ST RD	56TH AVE-CDS (E)	418	37	Local	73.8	56.7	51.1	2,514
0000238200	2ND ST RD	59TH AVE-57TH AVE	411	37	Local	64.6	46.9	48.2	2,514
0000238500	2ND ST RD	49TH AVE-CDS (W)	232	37	Local	89	73.6	59	236
0000238700	2ND ST RD	34TH AVE-CDS (W)	187	37	Local	85	78.4	54.3	120
0000240000	3RD AVE	18TH ST-Private Drive	665	22	Local	31.4	20	47.6	236
0000240500	3RD AVE	13TH ST-CDS (S)	1,546	42	Local	33.2	20	34.8	237
0000241000	3RD AVE	13TH ST-8TH ST	2,400	52	Local	38.4	20	45.3	1,178
0000246000	3RD ST	63RD AVE-CDS (E)	475	37	Local	84.4	69.2	52.5	629
0000246500	3RD ST	54TH AVE-51ST AVE	1,018	37	Local	51.1	38	54.4	352
0000246600	3RD ST	56TH AVE-CDS (E)	256	37	Local	79.8	60.4	33.3	2,514
0000246700	3RD ST	57TH AVE-56TH AVE	275	37	Local	53.9	30.3	45.5	2,514
0000246800	3RD ST	57TH AVE-CDS (W)	433	37	Local	57.5	20	51.7	2,514
0000247000	3RD ST	49TH AVE-47TH AVE	1,069	37	Local	63.5	41.7	41.8	1,646
0000247500	3RD ST	47TH AVE-43RD AVE CT	1,641	36.5	Local	64.2	61.4	39.6	1,532

1 of 2004

Done

Pavement Management Programs

Export Network Status Distribution for PMPPP.xls [Compatibility Mode] - Microsoft Excel

Section #	Street Name	Limits (To and From)	Length*(ft)	Width(ft)	Fun. Class	SD	PQ1 Year 1	RC	AADT
1	0000209500	1ST AVE	997	52	Collector	93	76.6	75	5171
2	0000210000	1ST AVE	1691	52	Collector	89	73.7	72	5171
3	0000210500	1ST AVE	467	48	Collector	89	79.6	77	5171
4	0000210520	27TH ST / 23RD AVE EXIT from US34	717	30	State Highwa	90	83.6	90	2514
5	0000211000	1ST AVE	2211	48	Collector	89	77.4	75	4434
6	0000211500	1ST AVE	1158	51.8	Collector	88	75.4	77	5067
7	0000212000	1ST AVE	2868	51.8	Collector	89	79.8	79	5700
8	0000212500	1ST AVE	1359	51.8	Collector	90	92.5	95	5067
9	0000213000	1ST AVE	1600	52	Collector	91	55.4	60	6221
10	0000213500	1ST AVE	783	28	Local	50	31.4	54	2121
11	0000214000	1ST AVE CT	1130	36	Local	41	20	40	236
12	0000214500	1ST AVE	1371	27	Local	76	56.8	79	2514
13	0000217000	1ST ST	1252	47	Collector	78	72.4	70	2514
14	0000217500	1ST ST	2900	37	Local	71	49.8	60	2514
15	0000218000	1ST ST	1200	37	Local	86	70.1	50	443
16	0000218500	1ST ST	1836	36.5	Local	55	50.5	43	1730
17	0000219000	1ST ST	2645	16	Local	62	52	40	4313
18	0000219500	1ST ST	305	32	Local	41	20	47	236
19	0000220000	1ST ST	1626	32	Local	32	20	38	566
20	0000222500	1ST ST DR	342	36.5	Local	58	56.5	32	247
21	0000224500	1ST ST RD	315	36.5	Local	60	65.1	35	247
22	0000225000	1ST ST RD	539	36.5	Local	60	28.4	29	535
23	0000227000	2ND AVE	1453	46	Local	30	20	44	412
24	0000227100	2ND AVE	1621	46	Local	42	20	55	2514
25	0000227200	2ND AVE	1212	46	Local	45	20	77	2514
26	0000227300	2ND AVE	2720	31	Local	80	64.5	79	2514
27	0000227400	2ND AVE	2726	31	Local	80	74.7	95	2514
28	0000229500	2ND ST	503	37	Local	80	73	63	2514
29	0000229750	2ND ST	435	37	Local	88	58.2	53	2514
30	0000230000	2ND ST	800	37	Local	61	33.3	40	2514
31	0000230500	2ND ST	1398	37	Local	**	71.2	59	1314
32	0000231000	2ND ST	843	36	Local	55	20	43	369
33	0000231500	2ND ST	532	36.5	Local	62	66.2	43	353
34	0000232000	2ND ST	1083	36.5	Local	55	22.6	39	542
35	0000232500	2ND ST	461	36	Local	84	71.6	43	82
36	0000232700	2ND ST	1200	37	Local	79	76.4	61	312
37	0000233000	2ND ST	1295	20	Collector	91	88.2	95	8036
38	0000233005	2ND ST	251	38	Local	86	65.5	45	2514
39	0000233500	2ND ST	2697	26	Collector	91	87.2	95	7894
40	0000234000	2ND ST	1520	26	Collector	39	20	53	4973
41	0000234500	2ND ST	437	52	Local	31	20	37	141
42	0000238000	2ND ST RD	854	37	Local	53	37.2	55	253
43	0000238100	2ND ST RD	418	37	Local	74	56.7	51	2514
44	0000238200	2ND ST RD	411	37	Local	65	46.9	48	2514
45	0000238500	2ND ST RD	232	37	Local	89	73.6	59	236
46	0000238700	2ND ST RD	187	37	Local	85	78.4	54	120
47	0000240000	3RD AVE	665	22	Local	31	20	48	236
48	0000240500	3RD AVE	1546	42	Local	33	20	35	237
49	0000241000	3RD AVE	2400	52	Local	38	20	45	1178
50	0000246000	3RD ST	475	37	Local	84	69.2	53	629

Pavement Management Programs

Copy of Matrix all work up all street 2014 (2).xlsx [Read-Only] - Microsoft Excel

City of Greeley
Arterial & Collector Road Matrix
 Updated March, 2016

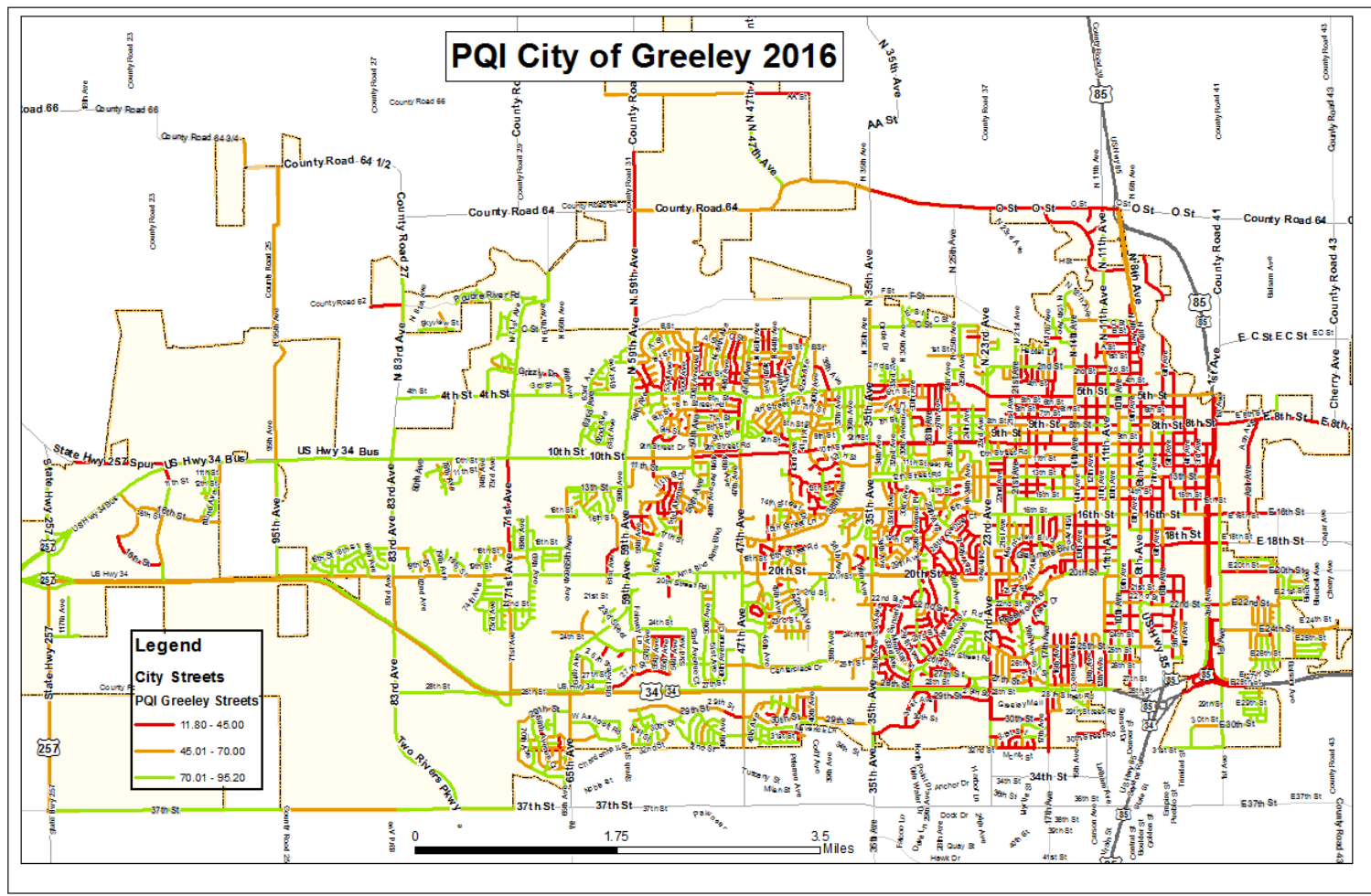
Legend:
 ADT: Average Daily Traffic
 PQI: Pavement Quality Index
 SDI: Surface Distress Index
 RCI: Ride Condition Index

Row #	Section #	Street*	Limits (To and From)	Length (ft)	Width (ft)	Class	PQI	ADT	PQI	SDI	RCI	Score	Funding
220	215	0000267000	4TH ST (W)	47TH AVE-43RD AVE	2,045	41.2 Arterial	64.7	2	2	1	1	6.0	
221	216	0000530000	16TH ST (W)	35TH AVE-28TH AVE	2,855	52.4 Arterial	62.3	2	2	1	1	6.0	
222	217	0000653900	23RD AVE	20TH ST-16TH ST	2,660	40.8 Arterial	75.6	2	2	1	1	6.0	
223	218	0000536500	16TH ST	ASH AVE-BALSAM AVE	1,362	52 Collector	73.0	1	2	2	1	6.0	
224	219	0000605000	20TH ST	43RD AVE-35TH AVE	5,867	47.8 Arterial	74.6	2	2	1	1	6.0	
225	220	0000653800	23RD AVE	RESERVOIR RD-20TH ST	2,275	40.2 Arterial	75.2	2	2	1	1	6.0	
226	221	0000767000	35TH AVE	24TH ST-22ND ST	1,338	66.7 Arterial	73.6	2	2	1	1	6.0	
227	222	0000831300	47TH AVE	10TH ST-4TH ST	2,700	50 Arterial	72.1	2	2	1	1	6.0	
228	223	0000293500	5TH ST	9TH AVE-8TH AVE	500	50 Arterial	73.6	2	2	1	1	6.0	
229	224	0000609500	20TH ST	11TH AVE-10TH AVE	545	52 Collector	70.3	2	2	1	1	6.0	
230	225	0000394000	10TH AVE	5TH ST-3RD ST	955	52 Collector	76.8	0.5	1	1	3	5.5	
231	226	0000393500	10TH AVE	6TH ST-5TH ST	456	51.4 Collector	80.5	0.5	1	1	3	5.5	
232	227	0000833000	47TH AVE	1/2 WAY 2ND CURVE N-AA ST	195	25 Arterial	81.3	0.5	1	1	3	5.5	
233	228	0000976600	GLENMERE BLVD	MOUNTVIEW BLVD-14TH AVE	2,882	25 Collector	66.2	0.5	2	1	2	5.5	
234	229	0000853500	50TH AVE	13TH ST-10TH ST	2,444	37 Collector	80.5	1.5	1	1	2	5.5	
235	230	0000325500	7TH AVE	10TH ST-8TH ST	706	52 Collector	75.3	0.5	2	1	2	5.5	
236	231	0000973700	D ST (WEST BOUND)	11TH AVE-14TH AVE	1,349	14 Collector	72.0	0.5	2	1	2	5.5	
237	232	0000969350	BALSAM AVE	22ND ST-20TH ST	1,490	46 Collector	74.7	0.5	2	1	2	5.5	
238	233	0000973600	D ST (EAST BOUND)	14TH AVE-11TH AVE	1,350	40 Collector	71.0	0.5	2	1	2	5.5	
239	234	0000464000	13TH ST	59TH AVE-58TH AVE	331	58 Collector	77.6	0.5	1	2	2	5.5	
240	235	0000642500	22ND ST	35TH AVE-CDS (W)	671	37 Collector	60.8	0.5	2	1	2	5.5	
241	236	0000830800	47TH AVE	CITY LIMIT (S)-HWY 34 BYPASS	2,310	70 Arterial	76.9	1.5	1	1	2	5.5	
242	237	0000296000	5TH ST	4TH AVE-HWY 85	1,282	25 Arterial	77.5	1.5	1	1	2	5.5	
243	238	0000851000	50TH AVE	20TH ST-EOP (S)	5,205	48 Collector	82.1	0.5	1	2	2	5.5	
244	239	0000295000	5TH ST	6TH AVE-4TH AVE	1,049	50 Arterial	79.5	1.5	1	1	2	5.5	
245	240	0002100215	37TH ST	83RD AVE-CITY LIMIT (E)	2,700	25 Arterial	85.7	1.5	1	1	2	5.5	
246	241	0002100235	F ST	35TH AVE (N)-CITY LIMIT (W)	2,700	24 Arterial	74.4	0.5	2	2	1	5.5	
247	242	0000654500	23RD AVE	1ST ST-C ST	1,329	24.4 Arterial	81.2	1.5	1	2	1	5.5	
248	243	0000469000	13TH ST	26TH AVE-23RD AVE	1,761	52.4 Collector	75.4	1.5	2	1	1	5.5	
249	244	0000565650	18TH ST	83RD AVE-82ND AVE	728	37 Collector	82.5	1	1	1	2	5.0	
250	245	0000680000	24TH ST (E)	1ST AVE-CITY LIMIT (E)	5,400	28.1 Collector	79.4	1	1	1	2	5.0	
251	246	0000967451	29TH ST	ROUNDABOUT E/S-65TH AVE	471	72 Collector	89.6	1	1	1	2	5.0	
252	247	0000619200	CENTERPLACE DR	47TH AVE-38TH AVE	4,478	32 Collector	81.2	1	1	1	2	5.0	
253	248	0002010095	16TH ST	PROMONTORY PKY-EOP (E)	1,739	60 Collector	80.3	1	1	1	2	5.0	
254	249	0000896010	60TH AVE	18TH ST-16TH ST (W) (NFL)	1,682	37 Collector	83.0	1	1	1	2	5.0	
255	250	0000942590	71ST AVE	C ST-EOP (N)	2,185	34 Collector	86.4	1	1	1	2	5.0	
256	251	0000694500	25TH ST	19TH AVE-17TH AVE	1,137	44 Collector	79.4	1	1	1	2	5.0	
257	252	0002100355	24TH ST	HWY 257-EOP (E)	1,430	37 Collector	91.9	1	1	1	2	5.0	
258	253	0002010000	101ST AVE	10TH ST-12TH ST	904	36 Collector	84.0	1	1	1	2	5.0	
259	254	0002100216	37TH ST	83RD AVE-95TH AVE	5,446	30 Arterial	76.6	1	1	1	2	5.0	

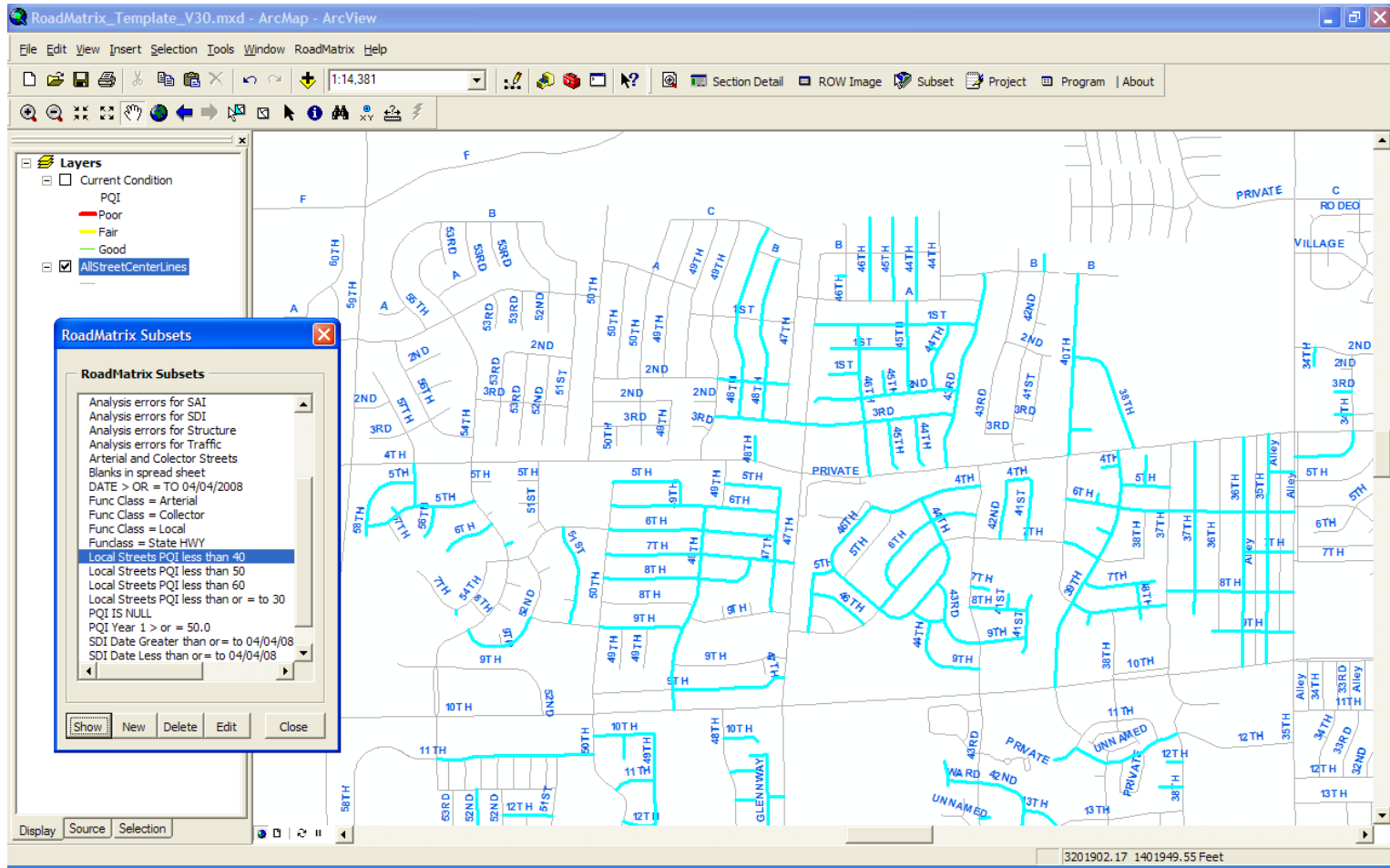
- Layers**
- G:\Gisusers_PMS\pgdb\Ed
 - MasterStreetCL_Districts
 - City Streets
 - PQI Greeley Street
 - 11.80 - 45.00
 - 45.01 - 70.00
 - 70.01 - 95.20
 - MasterStreetCenterline
 - PMA ID
 - State Highways
 - trf_funcs
 - 1
 - 2
 - 3
 - 4 - 5
 - dbo.DEFAULT (svm-gis2)
 - Major Roads
 - CLASSIFICATION
 - Expressway
 - Arterials
 - Collectors
 - G:\CityofGreeley\BaseData
 - Street Names
 - G:\CityofGreeley\PublicWorks
 - NAME
 - Greeley
 - Garden City
 - sqlcluster
 - dbo_v_sct_attr

Layout

76%



Pavement Management Programs



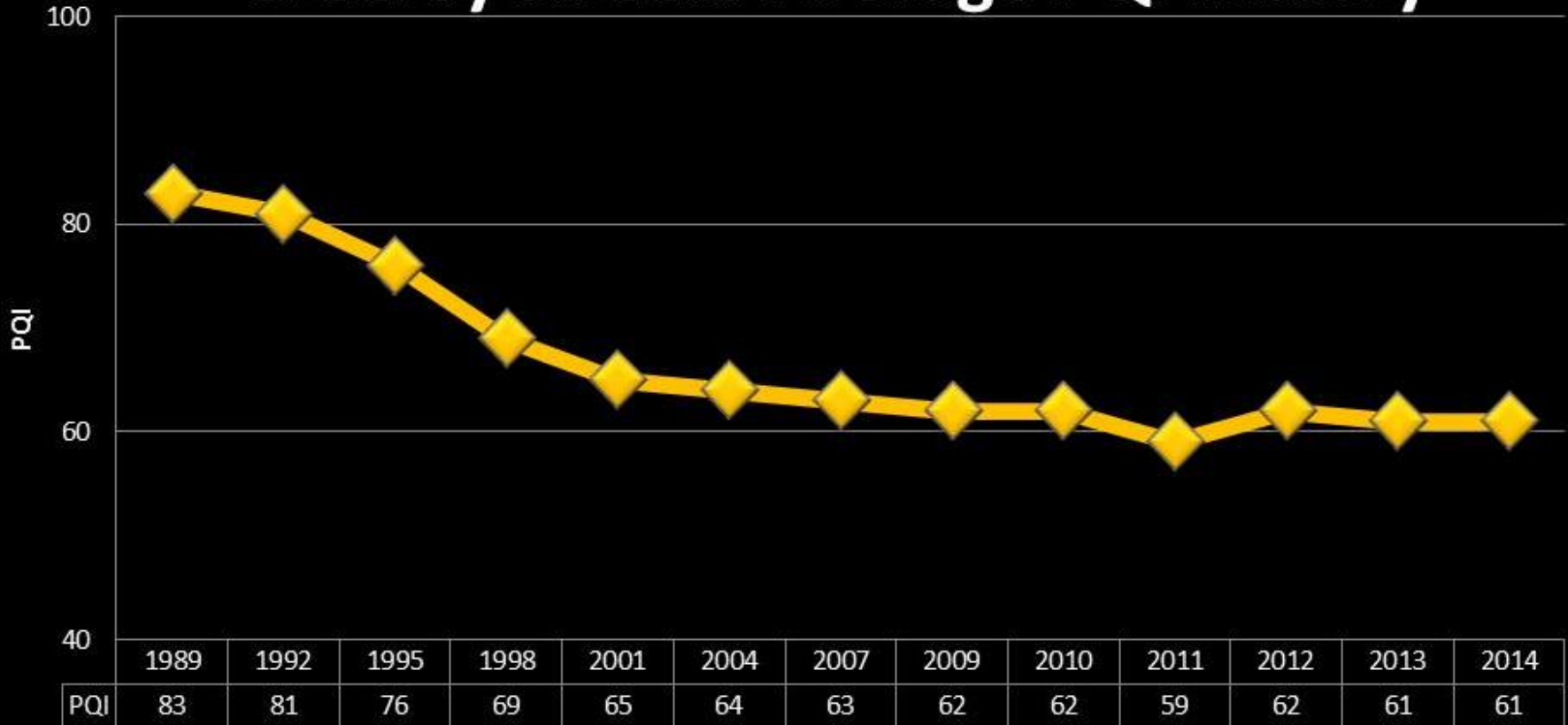
Street Maintenance Funding



**Citizens
Infrastructure
Committee
March 9, 2015**

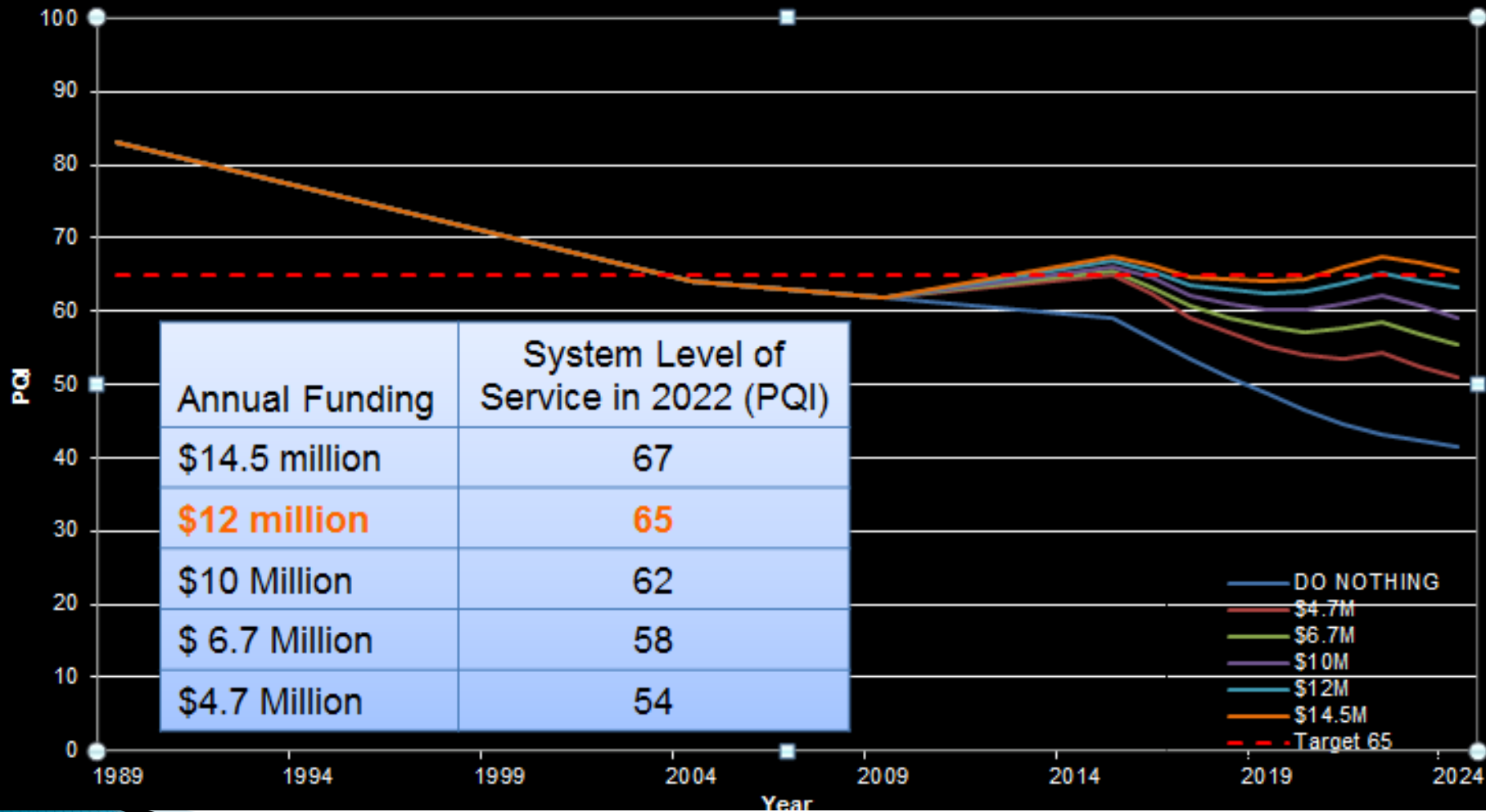
Pavement Management Programs

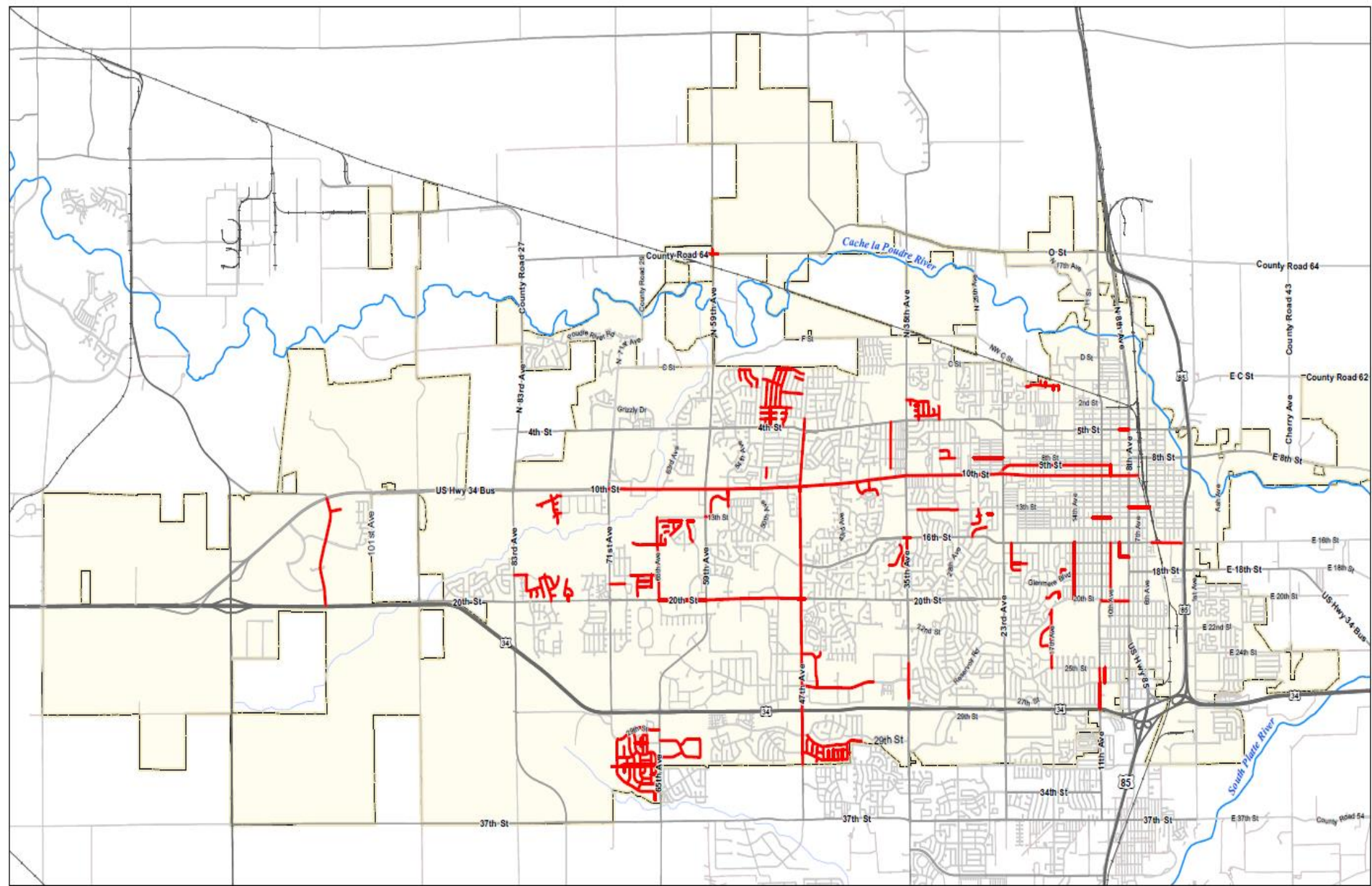
Greeley Streets Average PQI History





Pavement Management Programs

PQI Based on Various Funding Amounts

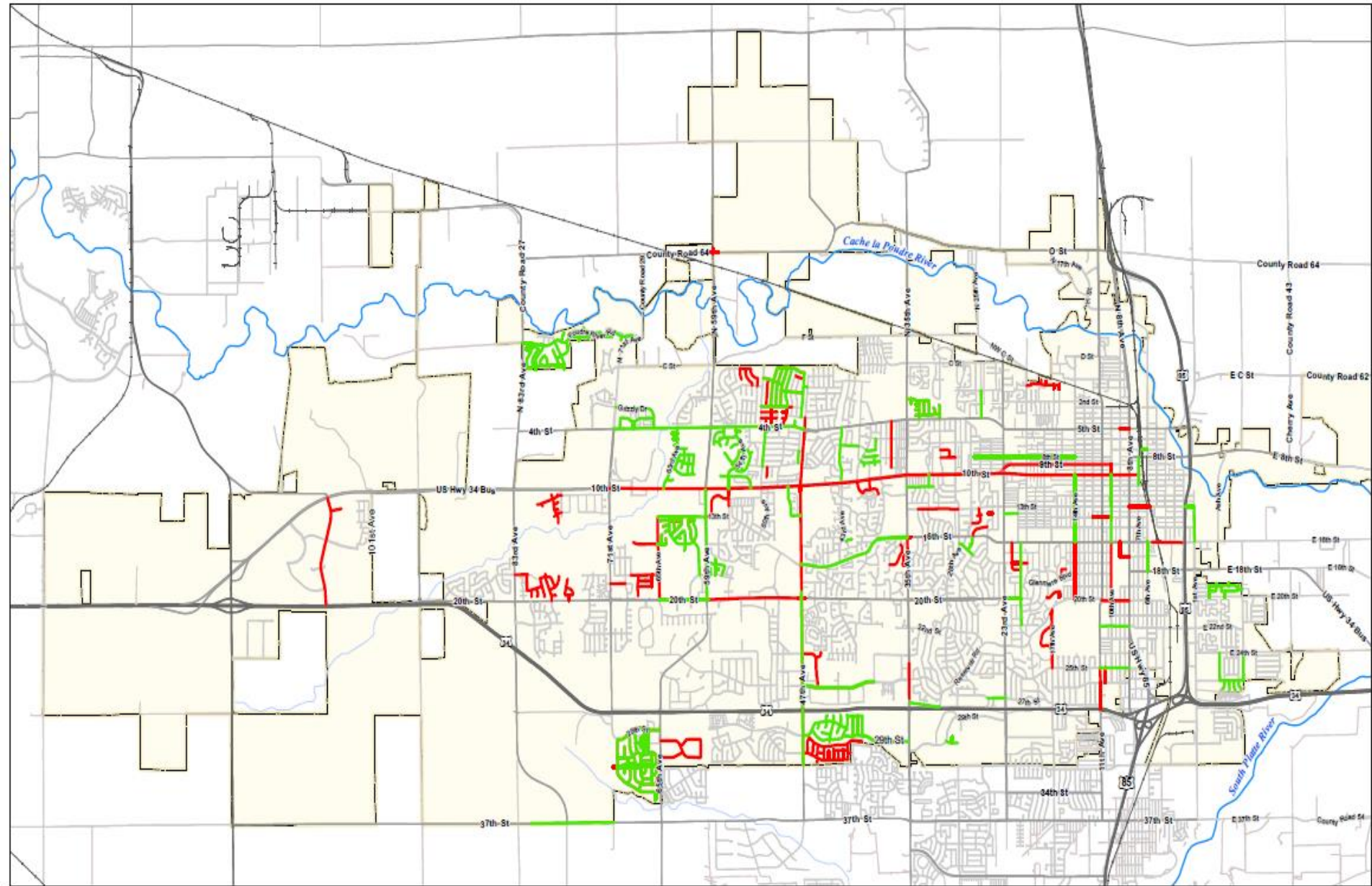







2010 Street Maintenance Program

-  Street Maintenance Projects 2010
-  Greeley City Limits

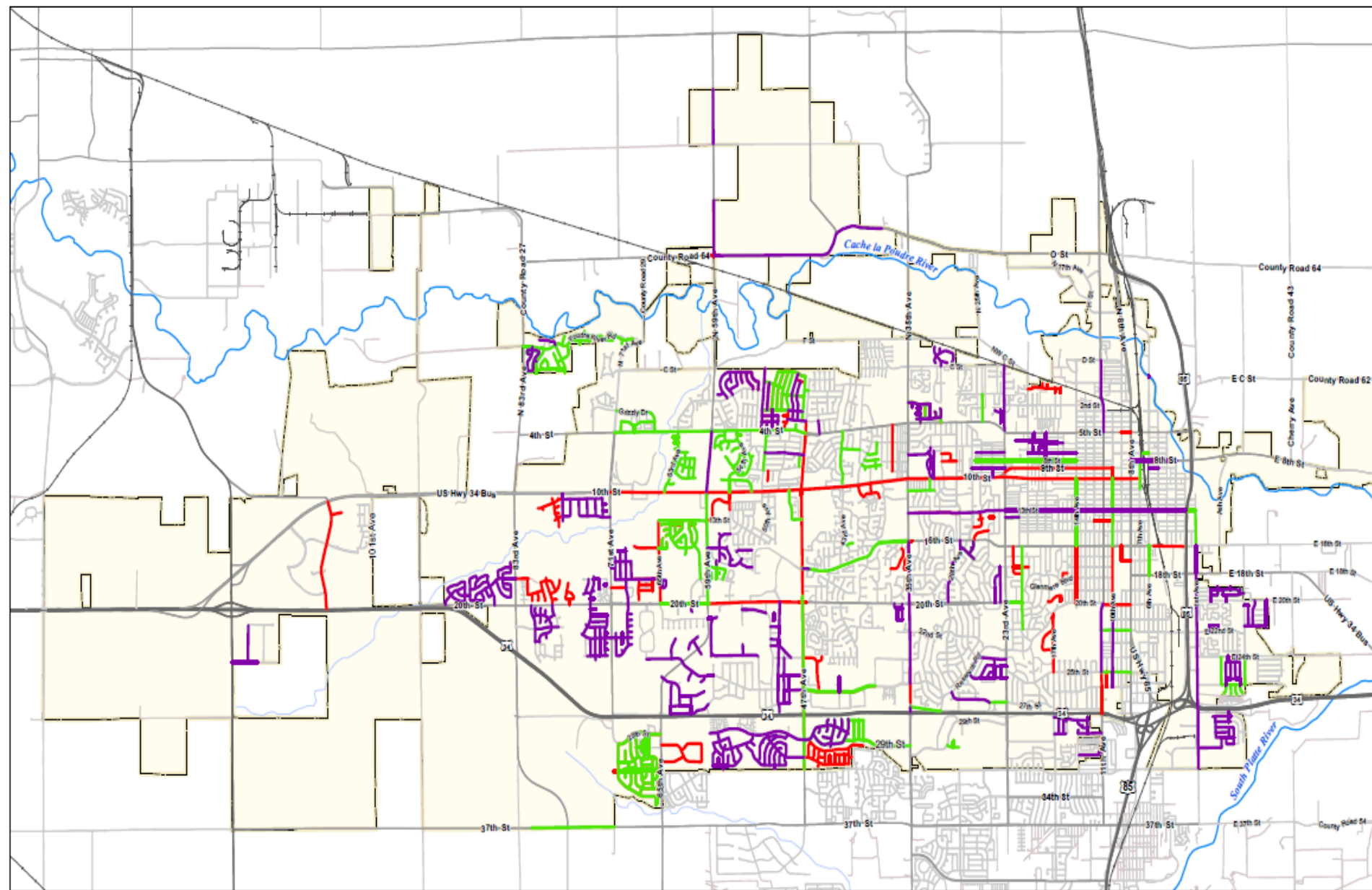







2010-2011 Street Maintenance Program

-  Street Maintenance Projects 2011
-  Street Maintenance Projects 2010
-  Greeley City Limits





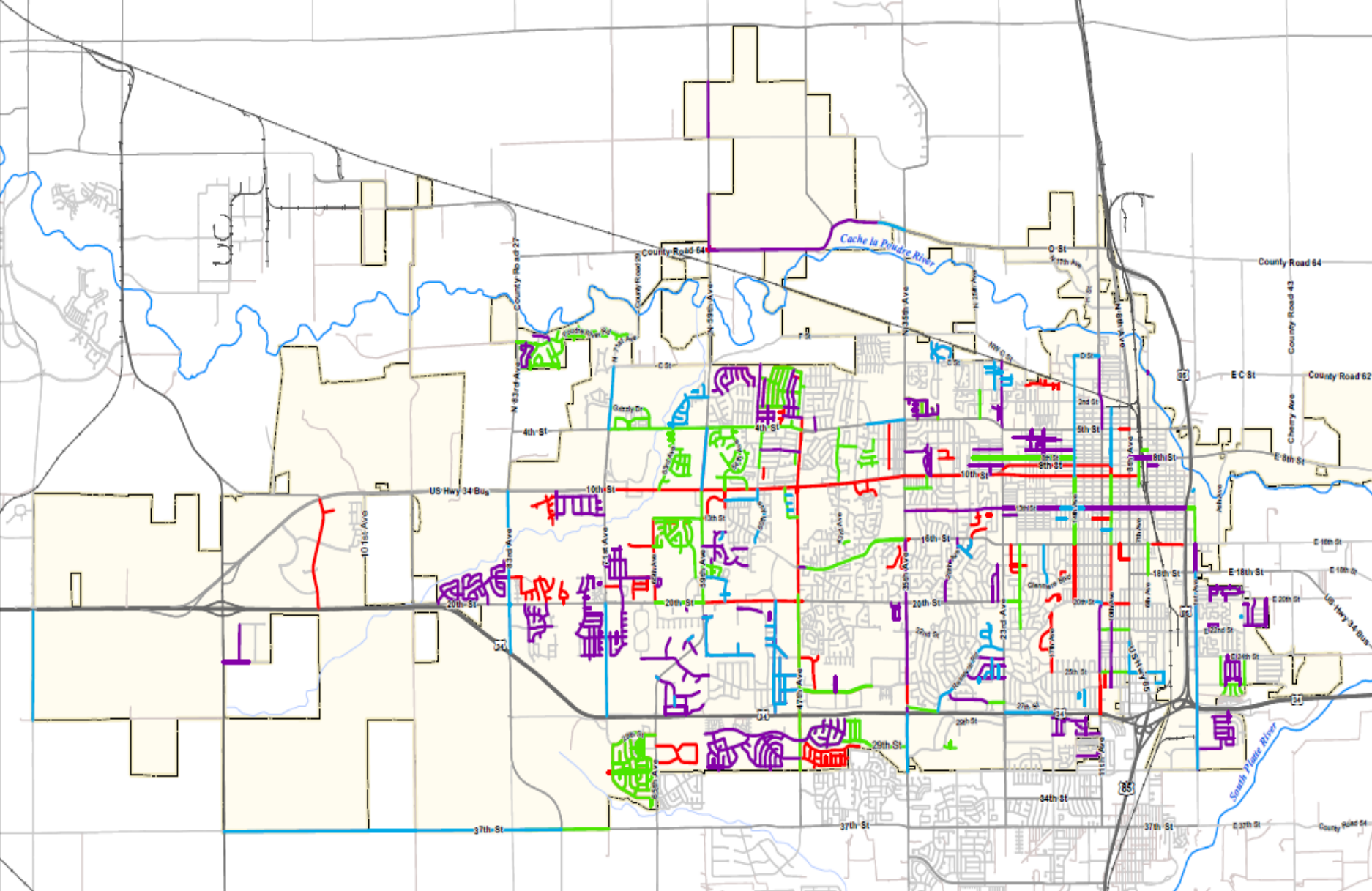
2010-2012 Street Maintenance Program

-  Street Maintenance Projects 2012
-  Street Maintenance Projects 2011
-  Street Maintenance Projects 2010



Greeley City Limits

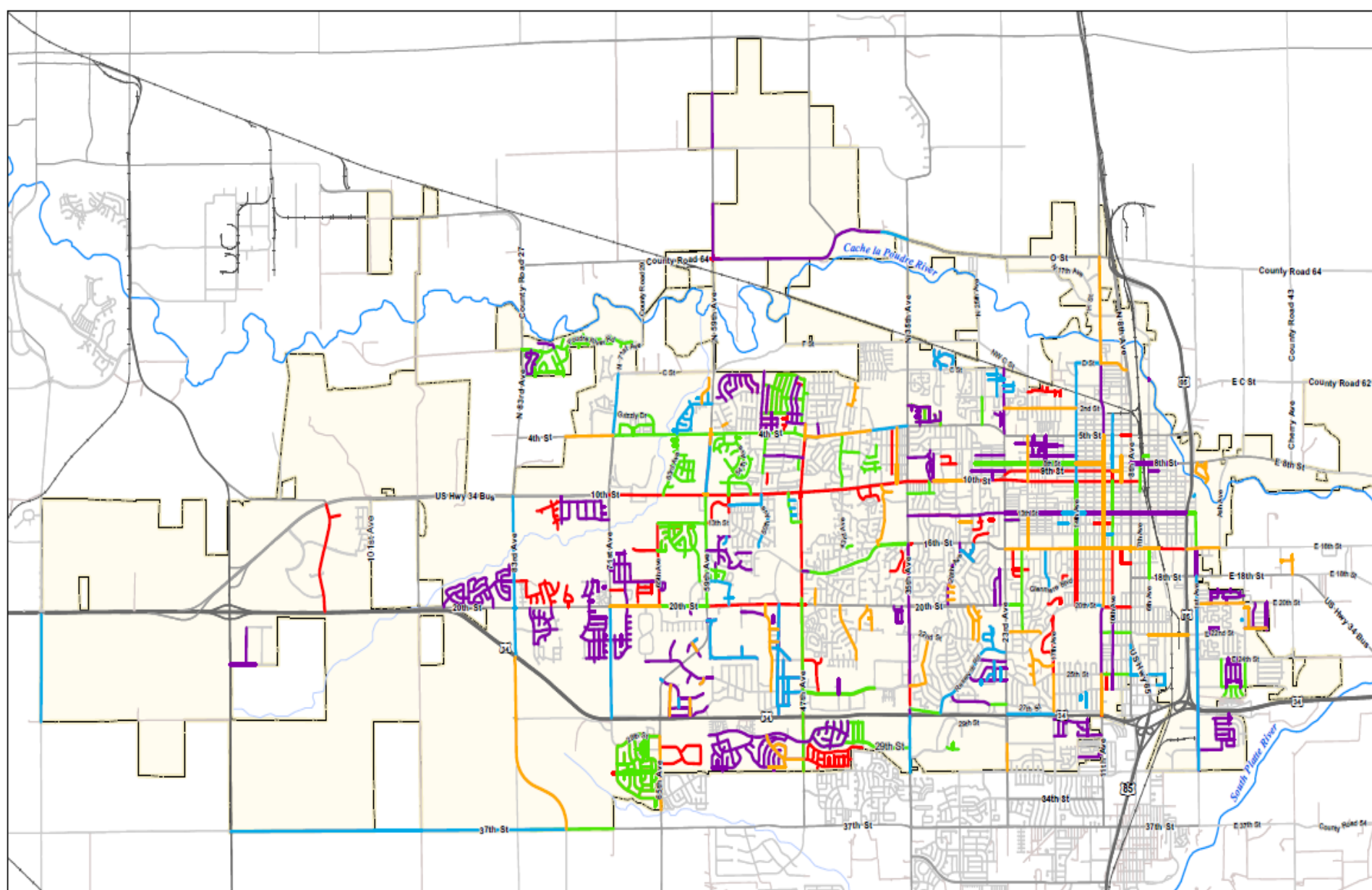




2010-2013 Street Maintenance Program

- Street Maintenance Projects 2013
- Street Maintenance Projects 2012
- Street Maintenance Projects 2011
- Street Maintenance Projects 2010
- Greeley City Limits





2010-2014 Street Maintenance Program

- Street Maintenance Projects 2014
- Street Maintenance Projects 2013
- Street Maintenance Projects 2012
- Street Maintenance Projects 2011
- Street Maintenance Projects 2010
- Greeley City Limits



Pavement Management Programs

- ▶ Review
- ▶ Program has a robust data collection infrastructure.
- ▶ Variable analyst methods.
- ▶ Many Reporting options which can be adjusted as needed.
- ▶ Catalog of our past and present Infrastructure.
- ▶ From this we are able to provide a variety of presentation data.
- ▶ Time to go to work!!!

Pavement Management Programs Questions?

