

Street Improvement Planning Update

Presentation to City Council

September 4, 2018



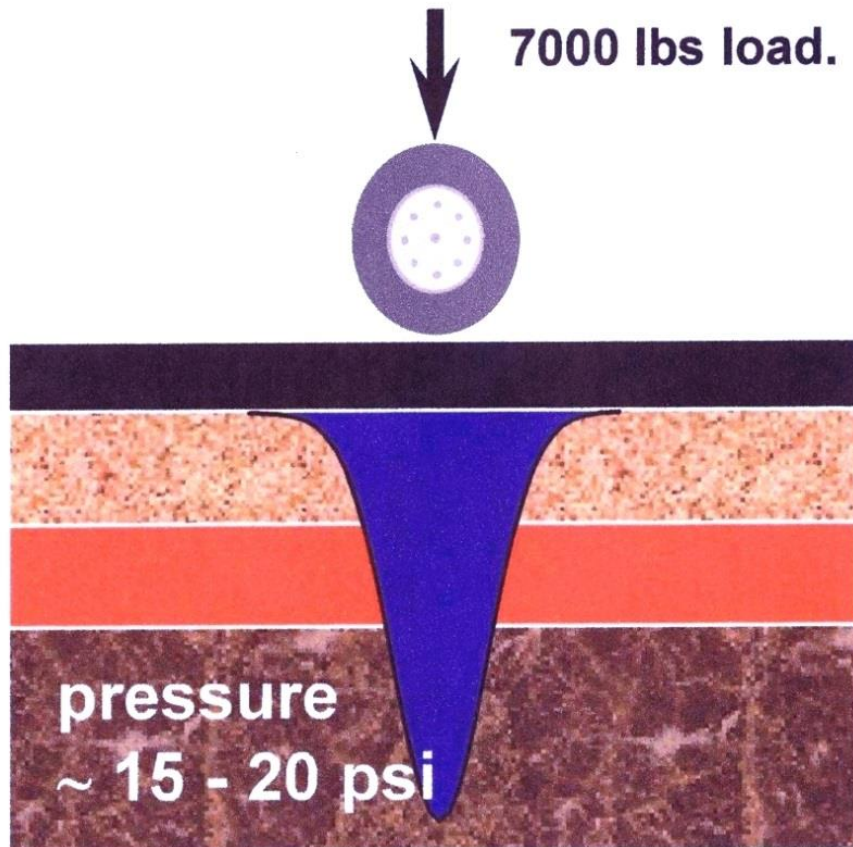
Asphalt in Pavement Maintenance

“Good drainage is absolutely essential for satisfactory pavement performance and long term trouble free service. The accumulation of excess water in the base or subgrade under a pavement surface may cause surface damage such as alligator cracking or upheaval”.

American Asphalt Institute

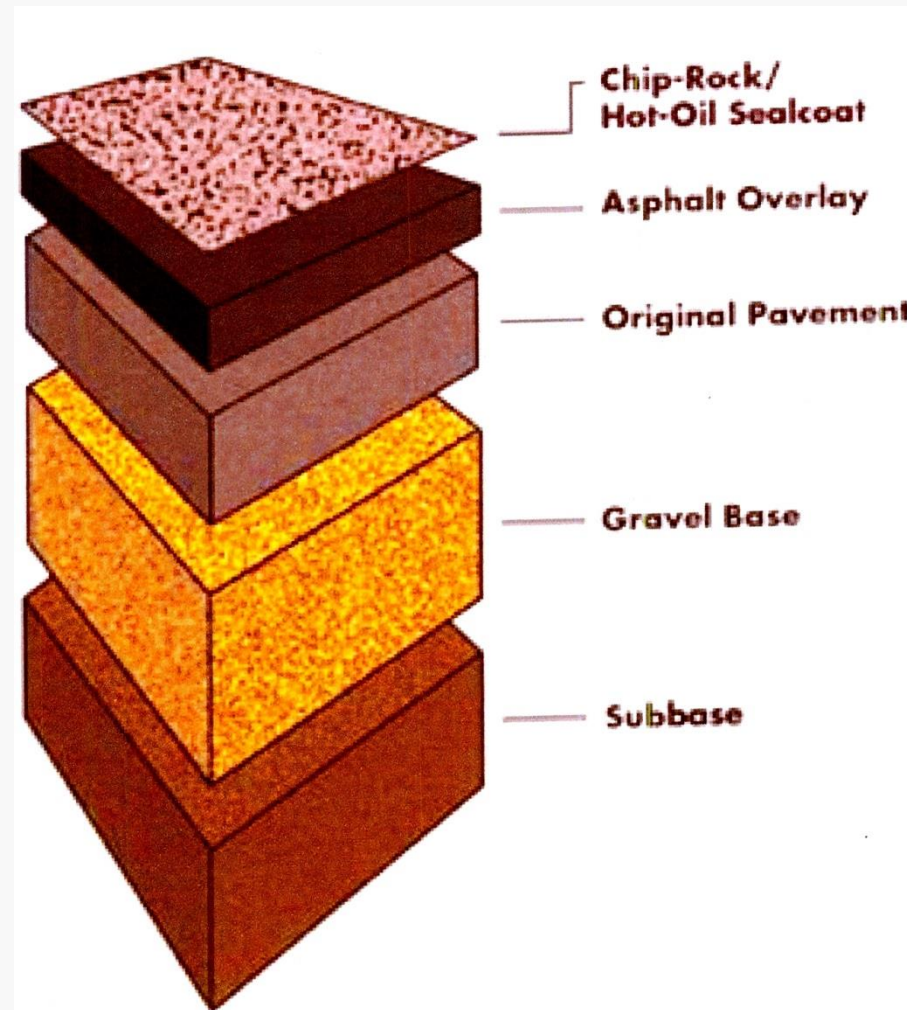


Asphalt Pavement are Flexible

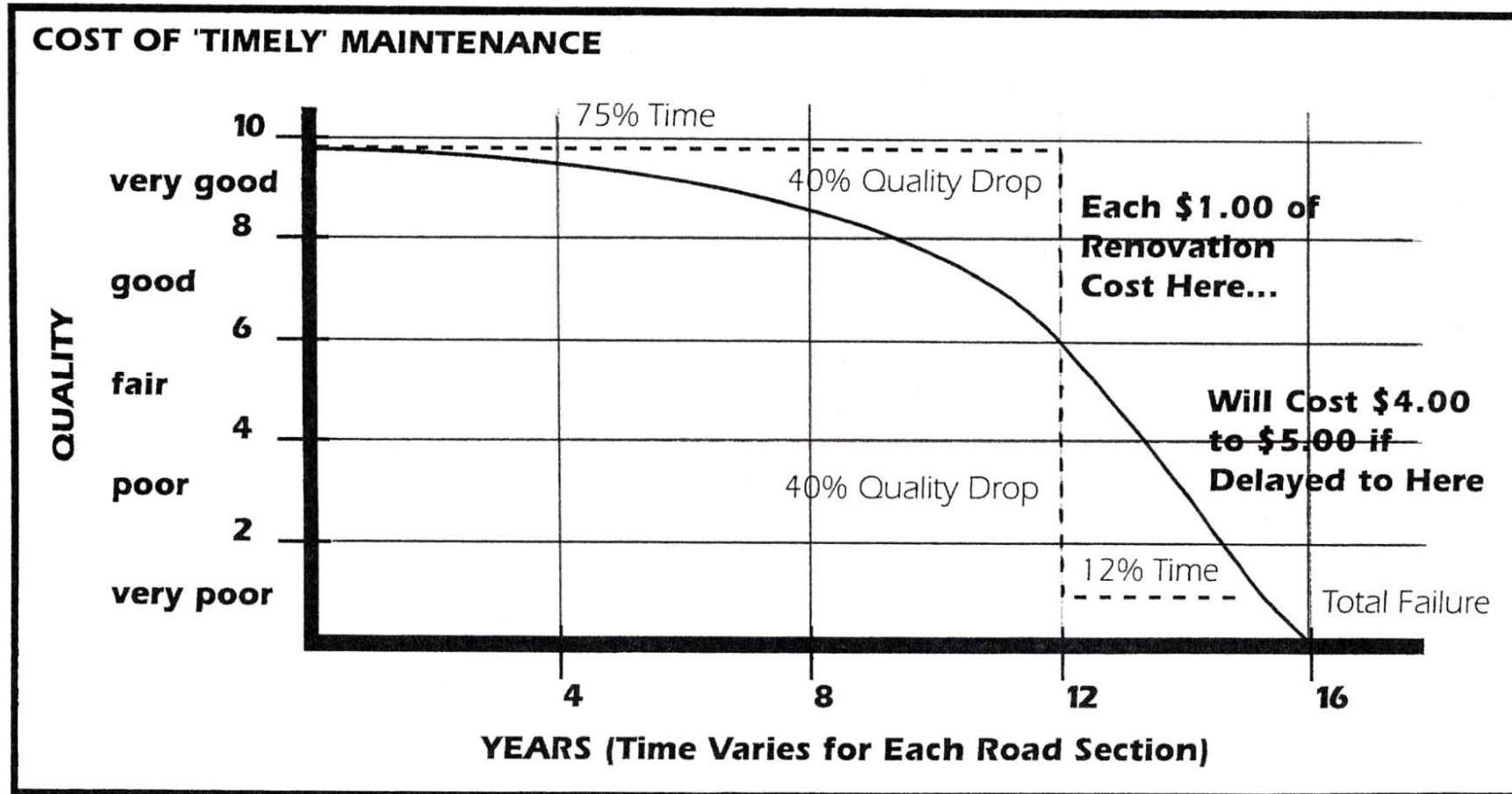


- ☐ Loads are concentrated.
- ☐ Deflections are higher.
- ☐ Subgrade, base and sub-base strength are very important.
- ☐ Usually require more layers and greater thickness for optimally transmitting load to the subgrade.

Layers



Cost of Timely Maintenance



**CAPITAL PROJECTS
& ENGINEERING₅**

Considerations on Street Selections

- Distribute around town (different districts)
- Types of Treatments (crack seal, chip seal, HA5, reclaim, reclaim and overlay, overlay rehab, reconstruction)
- Utility conflicts or scheduled utility projects

2016

Date: 12/20/2016 Branch Condition Report 1 of 29 Pavement Database: CITY OF SEGUIN NetworkID: COS								
Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
4th St	3	940.00	29.00	27,260.00	ROADWAY	46.67	4.19	46.36
6th St (6th St)	3	1,709.00	23.00	40,161.00	ROADWAY	64.00	9.27	64.77
7th St (7th St)	3	1,750.00	27.33	47,996.00	ROADWAY	65.00	12.83	67.32
8th St (8th St)	2	2,622.00	25.50	66,789.00	ROADWAY	81.00	13.00	80.47
Adams St (Adams St)	1	455.00	18.00	8,190.00	ROADWAY	61.00	0.00	61.00
Aguiar St (Aguiar St)	1	474.00	22.00	10,428.00	ROADWAY	31.00	0.00	31.00
Ajmalonedr (Aj Malone Dr)	1	1,498.00	27.00	40,446.00	ROADWAY	66.00	0.00	66.00
Aldama (Aldama St)	2	1,280.00	21.00	26,880.00	ROADWAY	70.00	13.00	73.70
Allendest (Allende St)	1	694.00	29.00	20,126.00	ROADWAY	54.00	0.00	54.00
Anderson (Anderson)	1	979.00	30.00	29,370.00	ROADWAY	69.00	0.00	69.00
Antelopein (Antelope Ln)	1	400.00	20.00	18,053.00	ROADWAY	56.00	0.00	56.00
Arbolascou (Arbolas Court)	1	131.00	29.00	3,799.00	ROADWAY	66.00	0.00	66.00
Arlingtons (Arlington St)	1	703.00	27.00	18,981.00	ROADWAY	91.00	0.00	91.00
Arvin (Arvin)	1	657.00	30.00	19,710.00	ROADWAY	86.00	0.00	86.00
Ashby (Ashby St)	1	1,083.00	45.00	48,735.00	ROADWAY	85.00	0.00	85.00
Augustadr (Augusta Dr)	1	788.00	15.00	11,820.00	ROADWAY	75.00	0.00	75.00

2018

Date: 8/28/2018 Branch Condition Report 1 of 30 Pavement Database: CITY OF SEGUIN 06132017 NetworkID: COS								
Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
6th St (6th St)	3	1,709.00	23.00	40,161.00	ROADWAY	79.33	14.70	84.17
7th St (7th St)	3	1,750.00	27.33	47,996.00	ROADWAY	67.33	9.18	68.98
8th St (8th St)	2	2,622.00	25.50	66,789.00	ROADWAY	73.50	8.50	73.16
Adams St (Adams St)	1	455.00	18.00	8,190.00	ROADWAY	66.00	0.00	66.00
Aguiar St (Aguiar St)	1	474.00	22.00	10,428.00	ROADWAY	100.00	0.00	100.00
Ajmalonedr (Aj Malone Dr)	1	1,498.00	27.00	40,446.00	ROADWAY	69.00	0.00	69.00
Aldama (Aldama St)	2	1,280.00	21.00	26,880.00	ROADWAY	82.00	3.00	82.95
Allendest (Allende St)	1	694.00	29.00	20,126.00	ROADWAY	46.00	0.00	46.00
Anderson (Anderson)	1	979.00	30.00	29,370.00	ROADWAY	77.00	0.00	77.00
Antelopein (Antelope Ln)	1	400.00	20.00	18,053.00	ROADWAY	94.00	0.00	94.00
Arbolascou (Arbolas Court)	1	131.00	29.00	3,799.00	ROADWAY	73.00	0.00	73.00
Arlingtons (Arlington St)	1	703.00	27.00	18,981.00	ROADWAY	97.00	0.00	97.00
Arvin (Arvin)	1	657.00	30.00	19,710.00	ROADWAY	74.00	0.00	74.00
Ashby (Ashby St)	1	1,083.00	45.00	48,735.00	ROADWAY	90.00	0.00	90.00
Augustadr (Augusta Dr)	1	788.00	15.00	11,820.00	ROADWAY	80.00	0.00	80.00
AustinPass (Austin Pass)	1	315.00	27.00	8,505.00	ROADWAY	100.00	0.00	100.00

2016

Date: 12 /20/2016 Branch Condition Report 8 of 29 Pavement Database: CITY OF SEGUIN NetworkID: COS								
Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
Elm (Elm St)	3	3,839.00	34.00	135,815.00	ROADWAY	51.67	9.10	55.17
Elmwood (Elmwood St)	1	2,513.00	31.00	77,903.00	ROADWAY	83.00	0.00	83.00
Elsik (Elsik St)	1	761.00	24.00	18,264.00	ROADWAY	79.00	0.00	79.00
Engbrockrd (Engbrock Rd)	1	174.00	22.00	3,828.00	ROADWAY	92.00	0.00	92.00
Entradaesp (Entrada Esplanada)	1	431.00	29.00	12,499.00	ROADWAY	74.00	0.00	74.00
Erkel (Erkel Ave)	3	2,137.00	20.33	47,048.00	ROADWAY	82.67	11.15	88.34
Ermeist (Ermei St)	1	1,050.00	28.00	29,400.00	ROADWAY	84.00	0.00	84.00
Erskinest (Erskine St)	6	2,952.00	20.00	63,796.00	ROADWAY	58.50	12.19	52.90
Erwinst (Erwin St)	1	213.00	16.00	3,408.00	ROADWAY	59.00	0.00	59.00
Falfaxcir (Fairfax Cir)	1	145.00	28.00	7,908.00	ROADWAY	70.00	0.00	70.00
Fair (Fair St)	1	105.00	22.00	2,310.00	ROADWAY	73.00	0.00	73.00
Feller (Feller St)	1	1,071.00	37.00	39,627.00	ROADWAY	78.00	0.00	78.00
Fisheman (Fisherman Ln)	1	360.00	23.00	8,280.00	ROADWAY	84.00	0.00	84.00
Fleming (Fleming Dr)	5	5,843.00	29.20	162,902.00	ROADWAY	62.60	6.28	64.11
Flores (Flores St)	1	730.00	17.00	12,410.00	ROADWAY	48.00	0.00	48.00
Forest (Forest Dr)	1	1,235.00	30.00	37,050.00	ROADWAY	77.00	0.00	77.00

2018

Date: 8/28/2018 Branch Condition Report 9 of 30 Pavement Database: CITY OF SEGUIN 06132017 NetworkID: COS								
Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
Falfaxcir (Fairfax Cir)	1	145.00	28.00	7,908.00	ROADWAY	82.00	0.00	82.00
Fair (Fair St)	1	105.00	22.00	2,310.00	ROADWAY	73.00	0.00	73.00
Feller (Feller St)	1	1,071.00	37.00	39,627.00	ROADWAY	84.00	0.00	84.00
Fisheman (Fisherman Ln)	1	360.00	23.00	8,280.00	ROADWAY	92.00	0.00	92.00
Fleming (Fleming Dr)	5	5,843.00	29.20	162,902.00	ROADWAY	84.00	19.61	79.35
Flores (Flores St)	1	730.00	17.00	12,410.00	ROADWAY	49.00	0.00	49.00
Forest (Forest Dr)	1	1,235.00	30.00	37,050.00	ROADWAY	57.00	0.00	57.00
Fourth (Fourth St)	3	940.00	29.00	27,260.00	ROADWAY	64.00	8.60	64.54
FoxRun (Fox Run St)	1	438.00	29.00	12,702.00	ROADWAY	59.00	0.00	59.00
Fred Byrd (Fred Byrd Ln)	1	1,396.00	35.00	48,860.00	ROADWAY	82.00	0.00	82.00
Freeportwa (Freeport Way)	1	1,055.00	38.00	40,090.00	ROADWAY	87.00	0.00	87.00
Friesenhah (Friesenhahn Rd)	2	3,316.00	10.50	36,118.00	ROADWAY	35.50	10.50	39.50
Fritz (Fritz St)	3	2,647.00	36.67	102,734.00	ROADWAY	80.33	4.64	80.66
Galvin (Galvin Dr)	1	1,180.00	30.00	35,400.00	ROADWAY	83.00	0.00	83.00
Gamecock (Gamecock Rd)	1	933.00	18.00	16,794.00	ROADWAY	74.00	0.00	74.00
Garcia (Garcia St)	1	570.00	16.00	9,120.00	ROADWAY	49.00	0.00	49.00

Average Condition Comparison

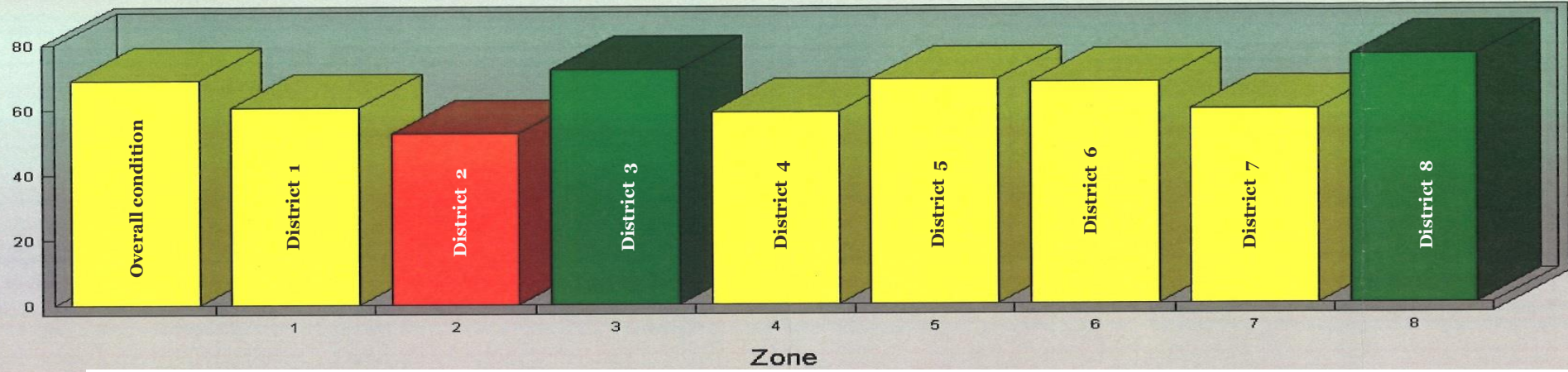
Three (3) years

2015 vs. 2018



2016

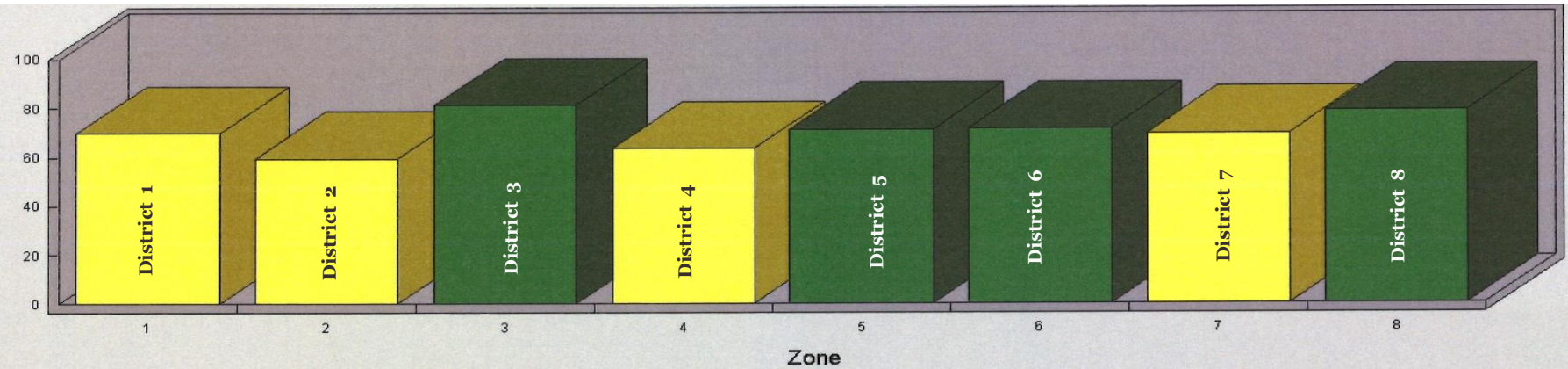
Avg Condition



Zone	Avg Condition	Pavement Area	Unit	Pct Area	Sections	Pct Sections	Age at Report	Wt Age	Wt Avg Condition	Avg Age at Insp	Wt Avg Age at Insp
	69.16	3,290,704	SqFt	17	131	10	19.6	19.54	71.6	19.1	19.54
1	60.7	2,592,077	SqFt	13	86	10	15.07	14.63	64.05	15.0	14.63
2	52.74	2,620,318	SqFt	14	109	13	22.05	17.84	63.85	22.05	17.84
3	72.5	1,299,105	SqFt	7	35	5	15.37	14.11	72.91	15.3	14.11
4	59.08	1,530,362	SqFt	8	75	9	20.61	19.74	64.33	20.61	19.74
5	69.06	2,126,588	SqFt	11	151	16	20.64	19.71	72.11	20.5	19.51
6	68.24	1,724,715	SqFt	9	70	9	23.07	20.2	69.91	23.07	20.2
7	59.9	2,427,017	SqFt	13	86	10	22.1	21.25	63.71	22.1	21.25
8	76.69	1,669,534	SqFt	9	67	8	14.4	15.41	78.71	14.4	15.41

2018

Avg Condition



Zone	Avg Condition	Pavement Area	Unit	Pct Area	Sections	Pct Sections	Age at Report	Wt Age	Wt Avg Condition	Avg Age at Insp	Wt Avg Age at Insp
1	69.94	2,581,947	SqFt	13	80	10	19.05	17.63	74.12	18.05	16.63
2	59.54	3,088,698	SqFt	15	129	16	23.98	20.57	65.71	22.98	19.55
3	81.48	1,976,379	SqFt	10	60	7	15.82	15.9	81.94	15.08	15.1
4	63.44	1,829,841	SqFt	9	94	11	23.79	22.8	67.97	22.2	20.98
5	71.44	2,198,839	SqFt	11	142	17	23.26	22.22	74.25	22.27	21.19
6	71.76	2,128,289	SqFt	10	84	10	26.86	24.09	75.1	25.89	23.11
7	69.77	2,732,318	SqFt	13	99	12	26.18	24.92	71.93	25.18	23.92
8	78.95	3,761,351	SqFt	19	141	17	17.34	17.7	78.55	16.36	16.74