

Five-Year Program for Annual Street Maintenance Years 2024 — 2028

Prepared for City Council by the Office of the City Engineer
April 2023



Executive Summary:

The City of DeKalb currently has a median Street rating in the upper range of “Poor”, based upon the 2022 Pavement Condition Index survey completed with State and DSATS partnership.

This Five-Year Programing serves as a guide to approach each scope of Annual Street Maintenance, typically Hot-Mix-Asphalt resurfacing. These are presented as “Zones” and the intent is to address clusters or significant stretches of the lowest rated streets (“Failing” category) while also using engineering efficiency to address as many adjacent “failing” or “poor” streets as practical. Such adjacents are also failing and in justified need but may not be the lowest rating overall Citywide; hopping around to target only streets in ascending rating order is impractical and very inefficient in a long-term, perpetual program.

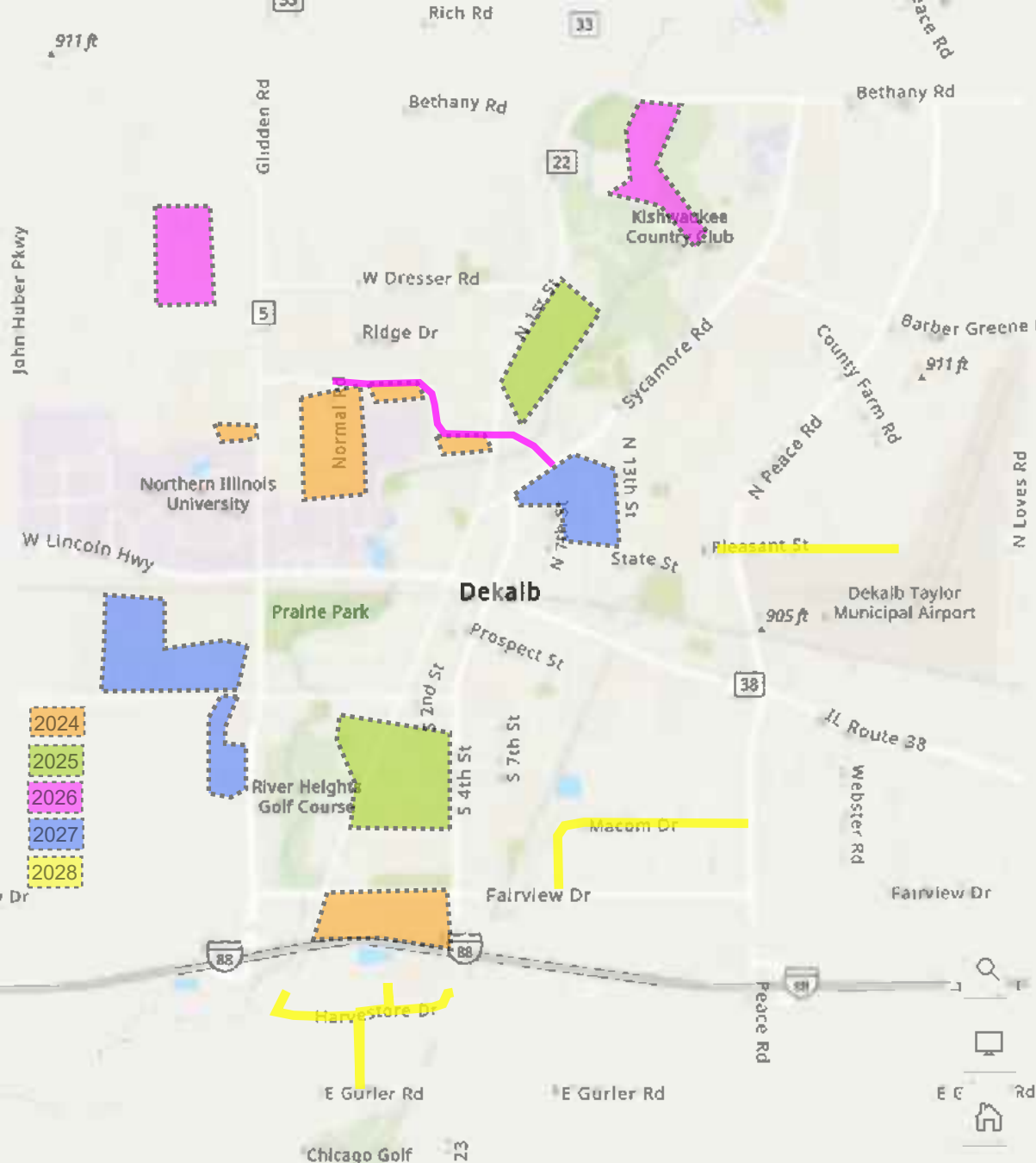
The Program as presented spends approximately \$12 million dollars over the years 2024-2028 servicing just over 26 miles (centerline). The attached cost breakouts and exhibits step any official or layperson through the program’s approach, and additional back-up information shows the varying degrees of need throughout the City which established the targeted zones and influenced their order.

Each year Engineering will propose a scope of work for bid; this will focus on these zones as a guide but may not service every inch of every street in a zone. Focus may shift between or even out of these zones if other priorities or opportunities arise in either real-world conditions or funding impacts. Other considerations such as the number of vehicle trips served, and large utility projects also play into programming. Again, this Program document is not a guarantee of any service date or scope to an individual resident, it is a guideline for an organized approach based on best-available understanding of current relative need and funding projections.

The current program does not sufficiently address actual need, as it is understood by rating designations of “Failing”. Every street included in this program across the Five-Year span is qualified for immediate attention/service, as are other streets not even addressed in this program or those projected to deteriorate to “failing” by its conclusion in Fall 2028. The program may allow the City to hover around or slip slightly down in rating (currently median “Poor”), but does not provide a likely path to climb and stabilize at a “Satisfactory” or perhaps even “Fair” designation. This Program is not proposed as a solution to the rating results, it is a program to best utilize available funding efficiently and equitably throughout the City.

NOTE: This program is for standard annual Capital Expenditures (mostly fuel-tax-based Revenue) and may not include service scopes for Streets that are part of other programs such as: Surface Transportation Urban funds administered through IDOT in a shared pool with our regional local agencies, Federal/State Budget earmarks, competitive grants, or public/private partnership with developers.

<u>Year</u>	<u>Description</u>	<u>Length (Ft)</u>	<u>Sq. Yards</u>	<u>\$/S.Y.</u>	<u>Cost</u>
2024	Fairview	3,600	10,400	\$ 20.00	\$ 208,000
	Heritage Res	12,000	42,667	\$ 23.00	\$ 981,333
	Hillcrest (S. loops)	4,460	15,858	\$ 23.00	\$ 364,729
	NIU (near north)	10,020	35,627	\$ 23.00	\$ 819,413
	Loren Loop	2,350	8,617	\$ 24.00	\$ 206,800
		32,430	113,168		\$ 2,580,276
2025	Tilton sidestreets/Hillcrest N.	13,860	43,120	\$ 24.00	\$ 1,034,880
	Barb Res1	15,080	55,293	\$ 24.00	\$ 1,327,040
			-		\$ -
			-		\$ -
			-		\$ -
		28,940	98,413		\$ 2,361,920
2026	GreenacresN & Fairway loop	8,120	27,067	\$ 25.00	\$ 676,667
	Eden	12,570	44,693	\$ 25.00	\$ 1,117,333
	Hillcrest	6,420	22,827	\$ 25.00	\$ 570,667
			-		\$ -
			-		\$ -
		27,110	94,587		\$ 2,364,667
2027	3rd Ward center*	13,420	35,787	\$ 26.00	\$ 930,453
	SW Res	16,200	54,000	\$ 26.00	\$ 1,404,000
			-		\$ -
			-		\$ -
			-		\$ -
		29,620	89,787		\$ 2,334,453
2028	Major Collectors/Industrial	18,750	70,833	\$ 30.00	\$ 2,125,000
	Sub-25 Sweep	3,000	10,667	\$ 27.00	\$ 288,000
			-		\$ -
			-		\$ -
			-		\$ -
		21,750	81,500		\$ 2,413,000
FINAL		139,850	477,454		\$ 12,054,316



PCI Feature Service



Failing (less than 40)



Poor (41-55)



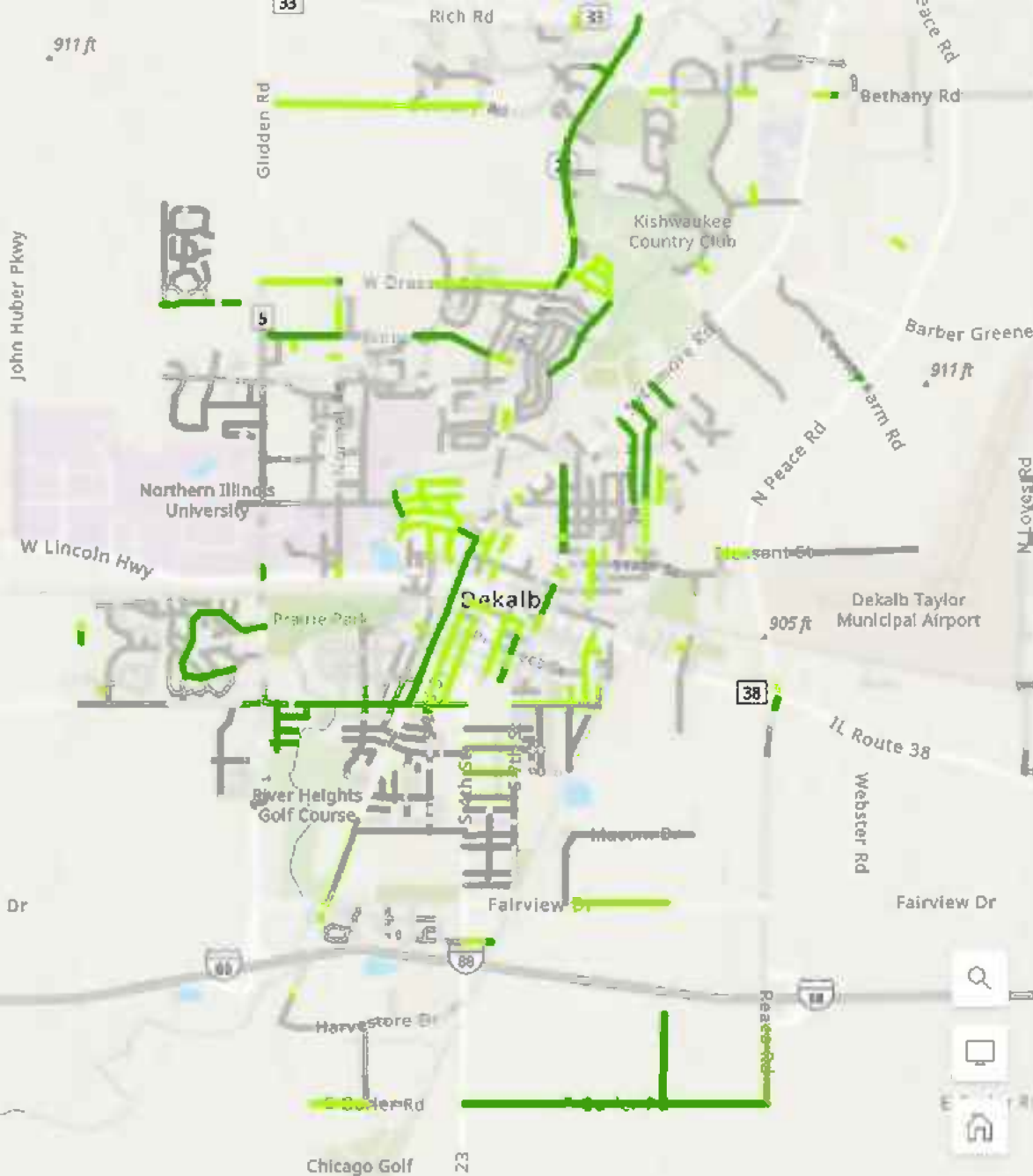
Fair (56-70)



Satisfactory (71-85)



Good (86-100)



Filter results match the following expression

Set

Progress of recent years.
All City Streets ranked "Satisfactory or above."

Note: Brick streets remain at a static 75, as rating is calibrated for Asphalt/PCC

Jur_Name

is

City of DeKalb

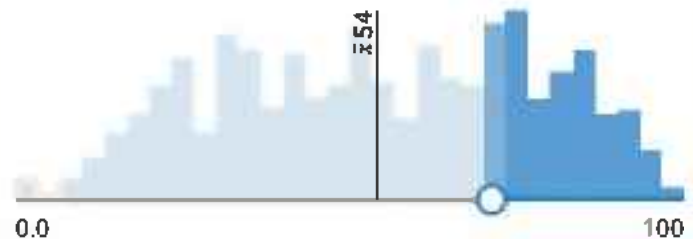
And

PCI_2022

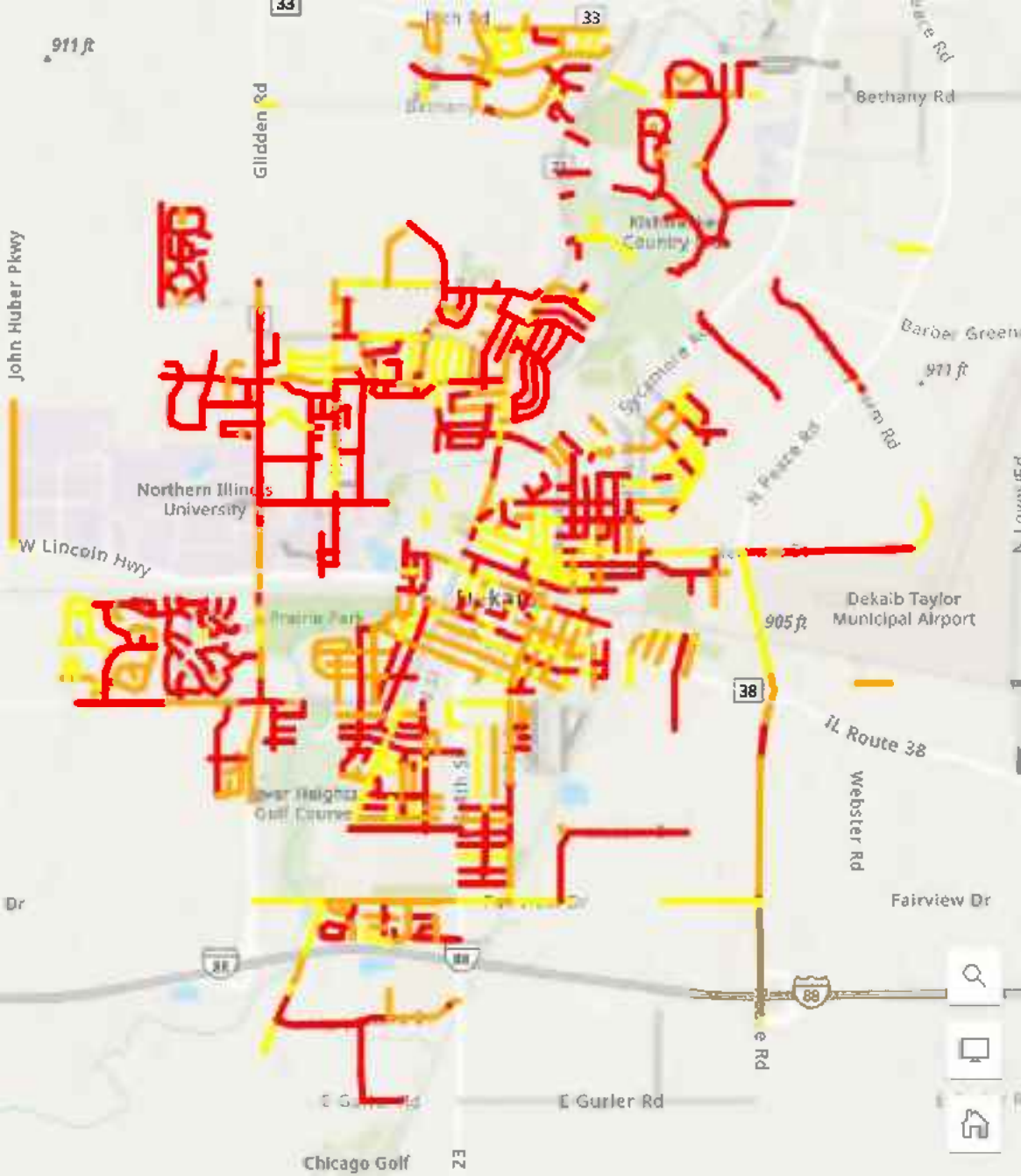
is at least

71

Histogram



+ Add expression



Filter results match the following expression.

Set

Current "Unsatisfactory", but not all "Poor".

Includes "Fair" (yellow) which may trend rapidly towards "poor"

Jur_Name

IS

City of DeKalb

And

PCI_2022

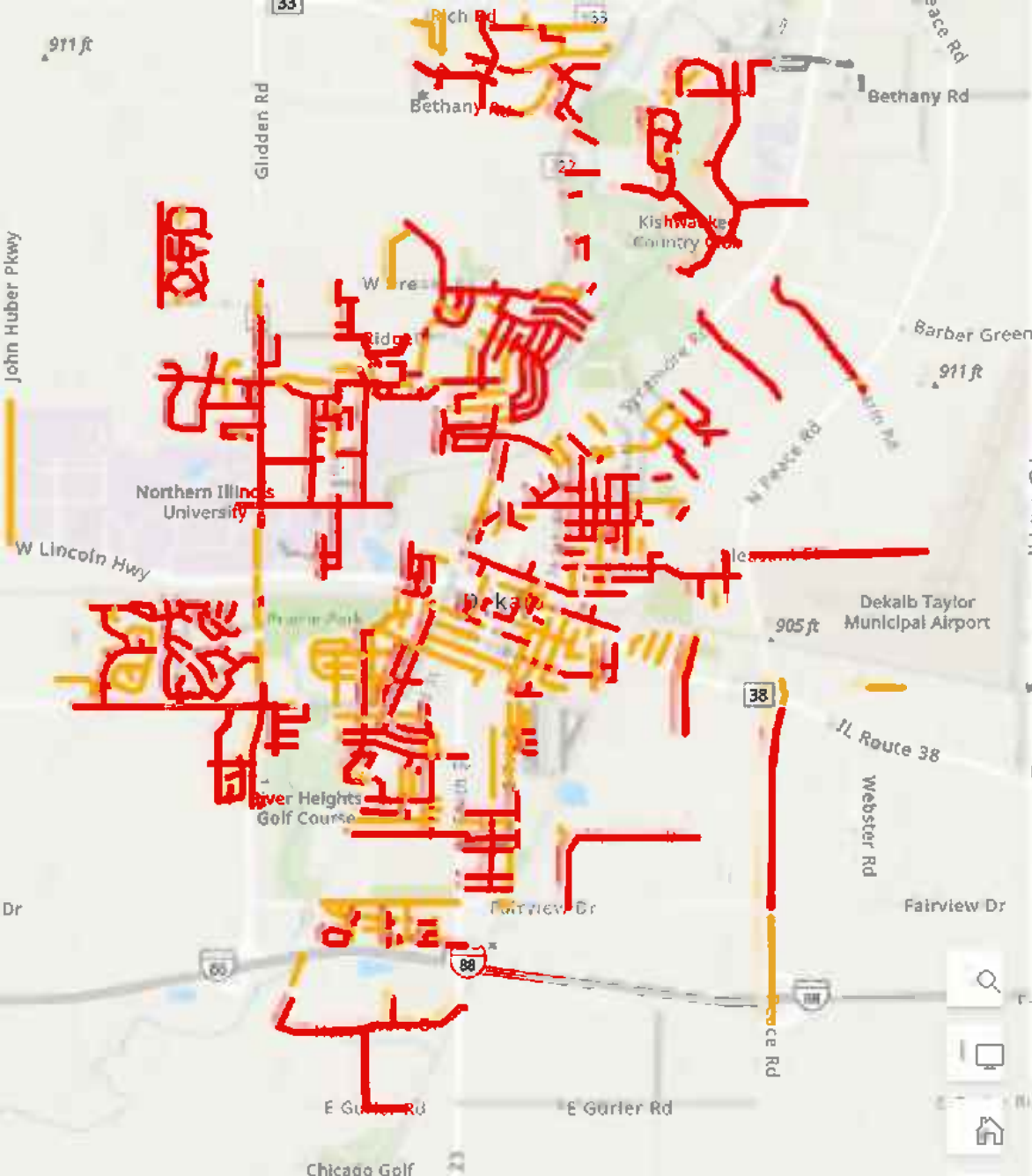
is at most

70

Histogram



+ Add expression



Filter results match the following expression.

Set

All in need, "Poor" and worse

Acceptable targets in comprehensive, perpetual programming

Jur_Name

is

City of DeKalb

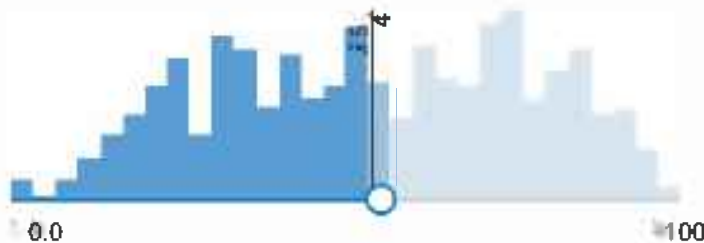
And

PCI_2022

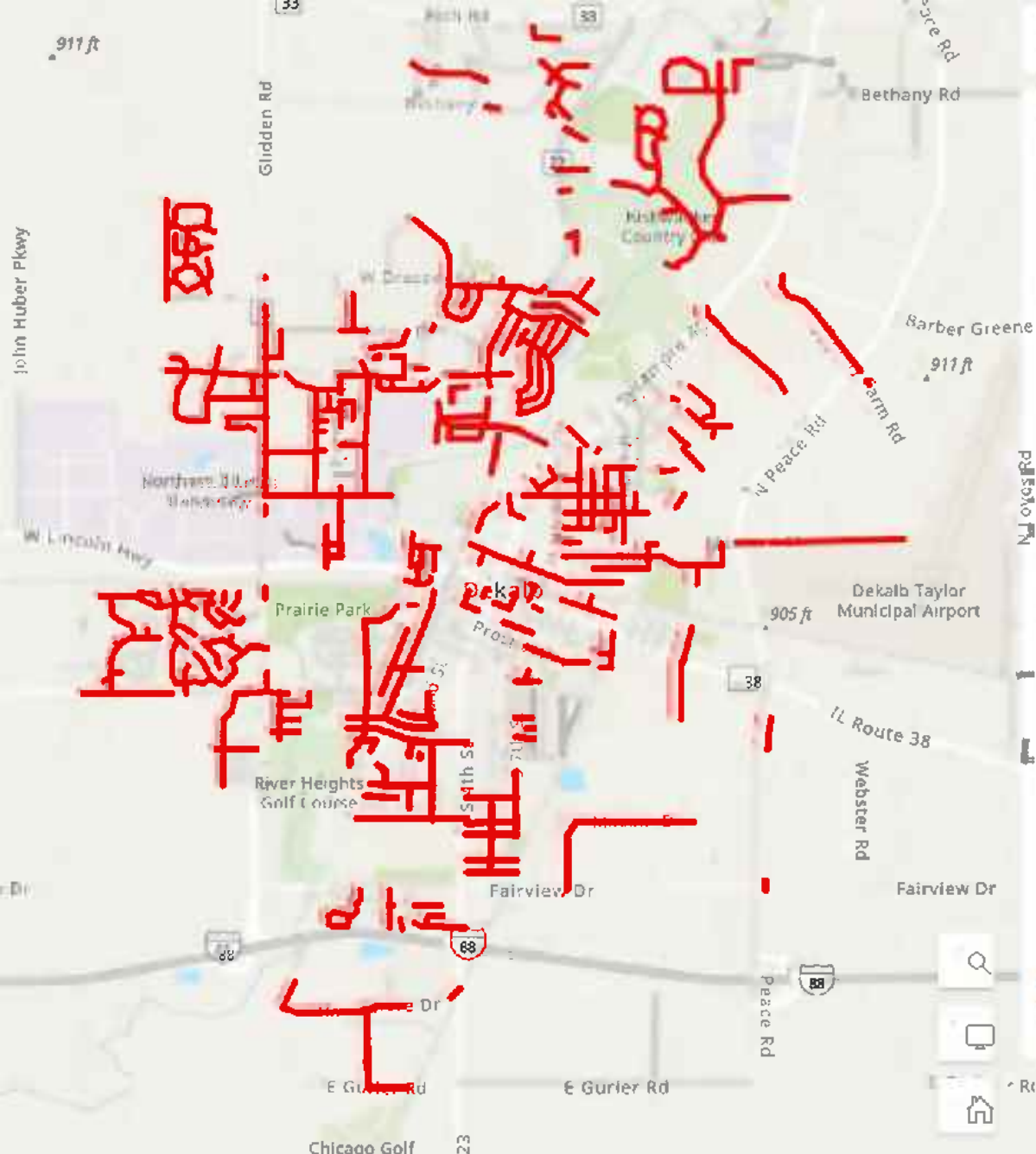
is at most

55

Histogram



+ Add expression



Filter results match the following expression

Set

Fully "Failing".

Should be targeted equal to any below/following.

Jur_Name

is

City of DeKalb

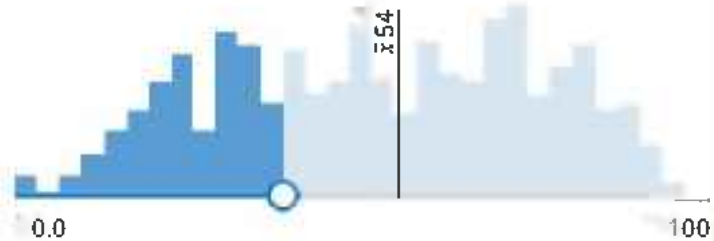
And

PCI_2022

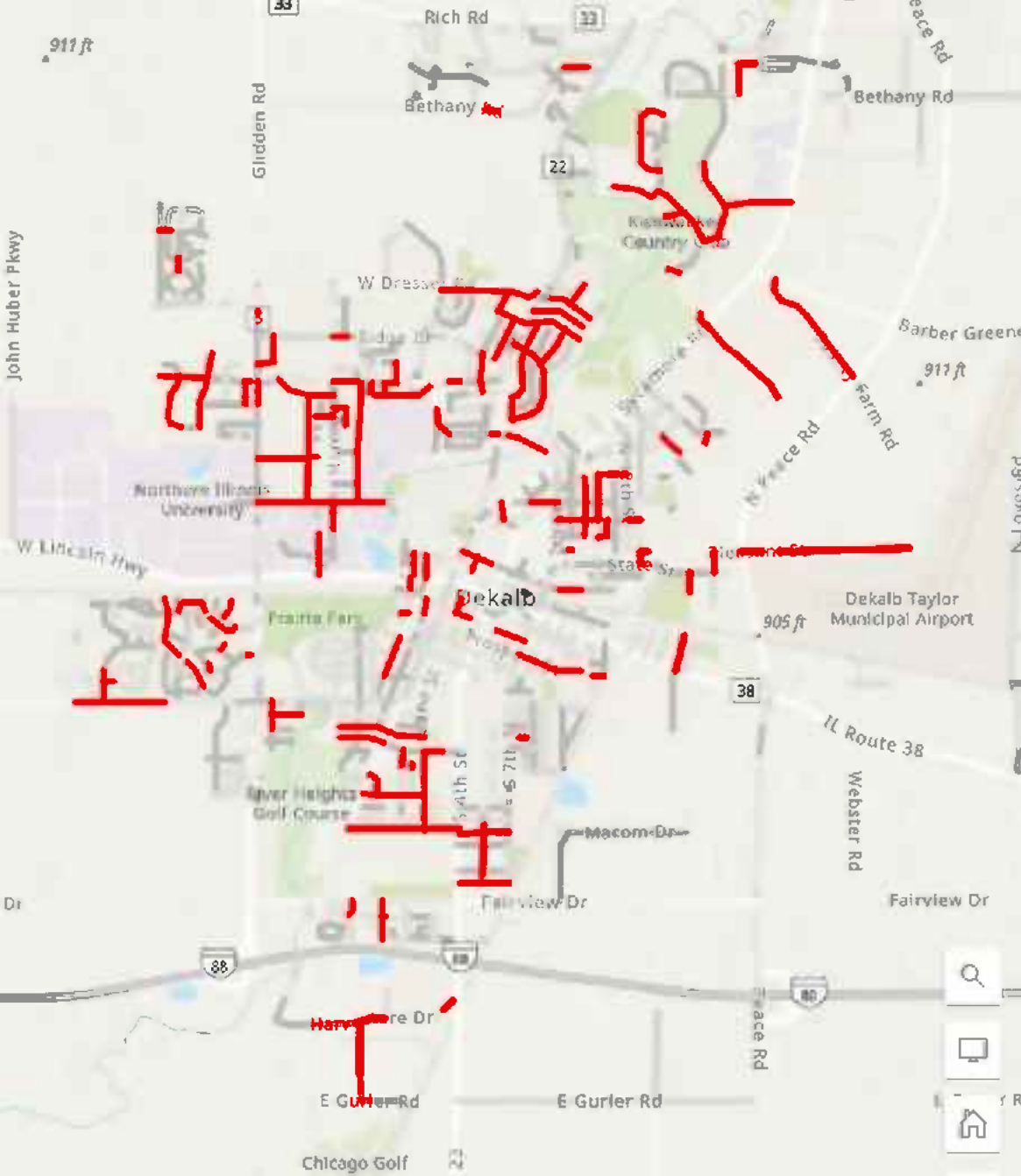
is at most

40

Histogram



+ Add expression



Filter results match the following expression.

Set

Bottom sub-set of "Failing"

Concentrations of them should be targeted, while including adjacents from preceding two category displays.

Jur_Name

is

City of DeKalb

And

PCI_2022

is at most

25

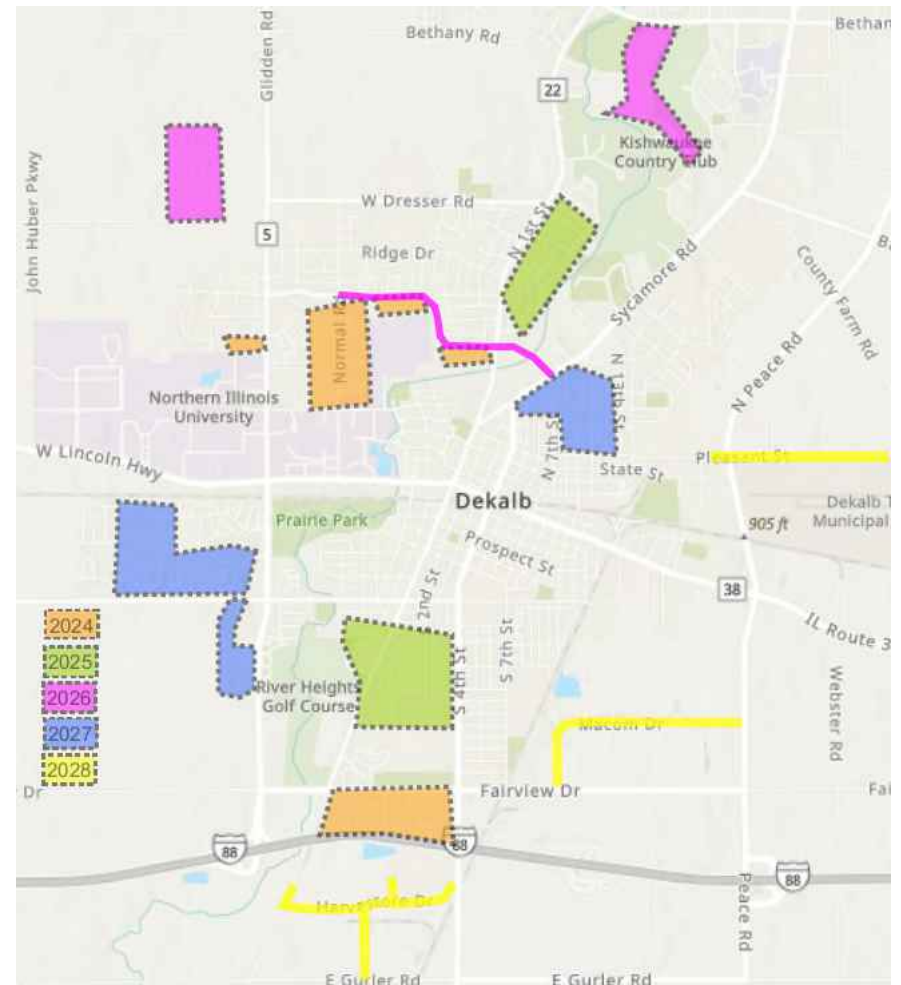
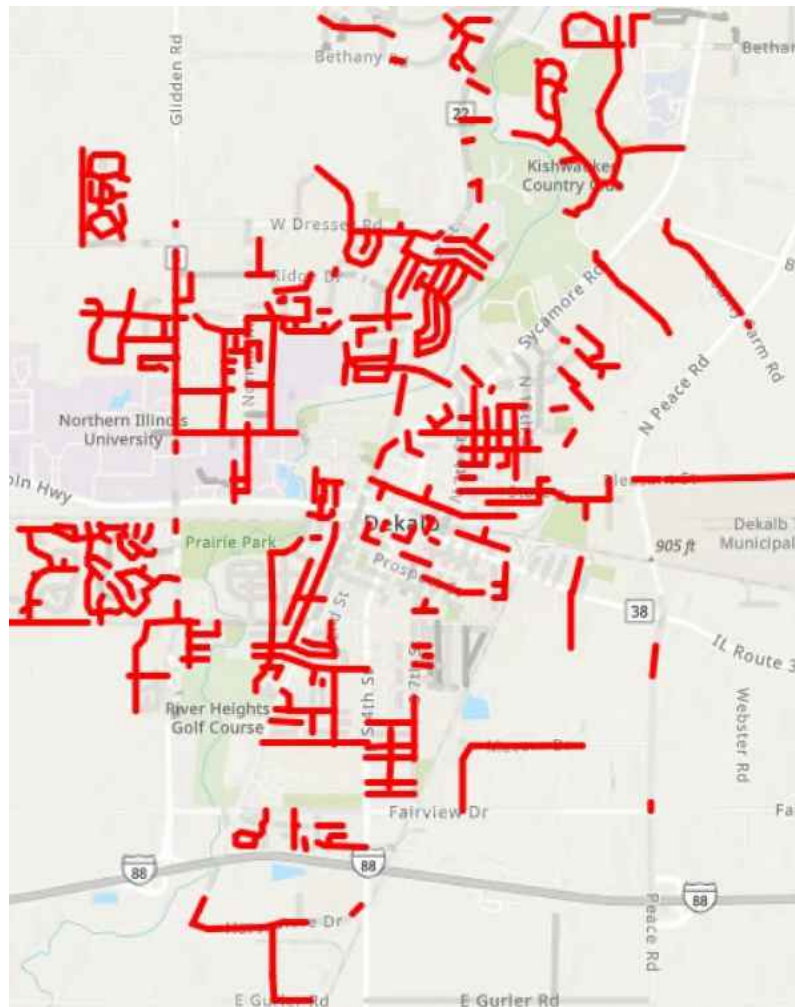
Histogram



+ Add expression

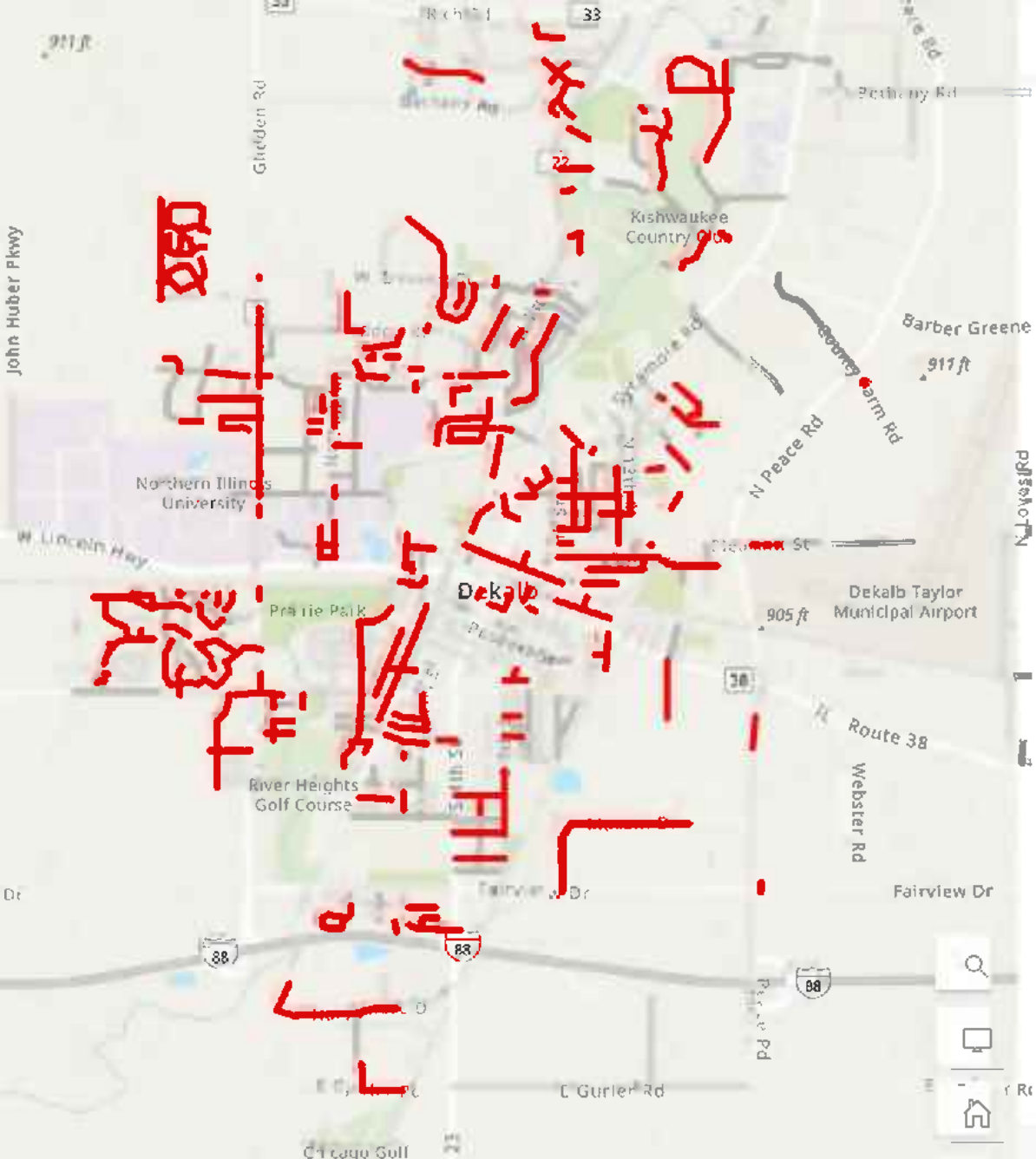
Appendix:

Failing Zones vs Target Zones



Appendix:

Rating “Windows” - shaping an idealized status & approach



Filter results match the following expression

Set

Ideally would not exist, ever.

Jur_Name

is

City of DeKalb

And

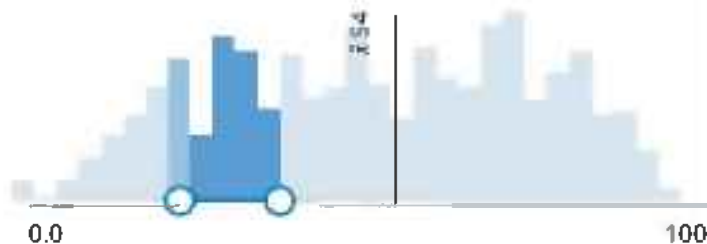
PCI_2022

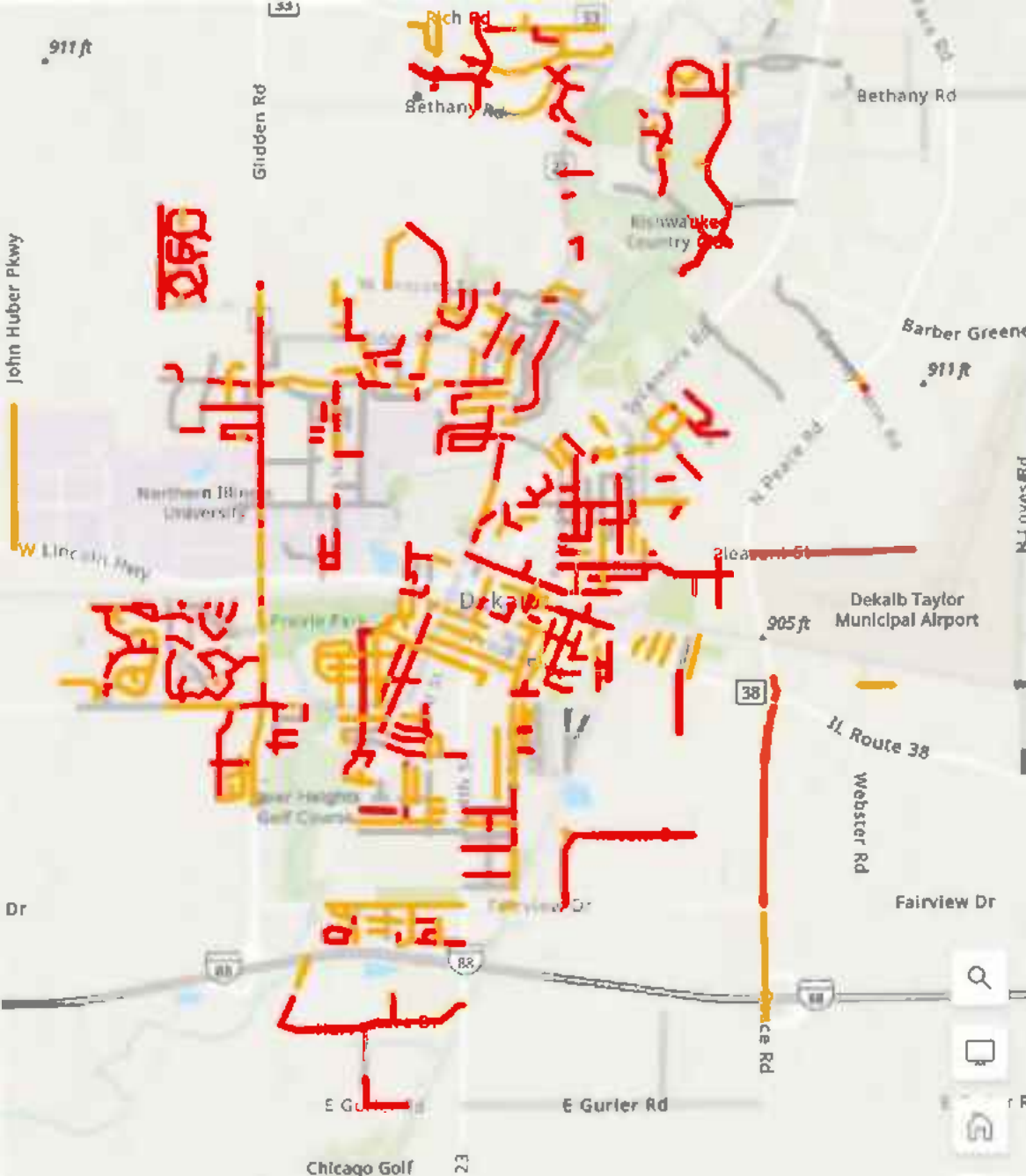
is between

25

40

Histogram





Filter results match the following expression.

Set

Ideally would be very limited and certain of attention within next two seasons or a program

Jur_Name

is

City of DeKalb

And

PCI_2022

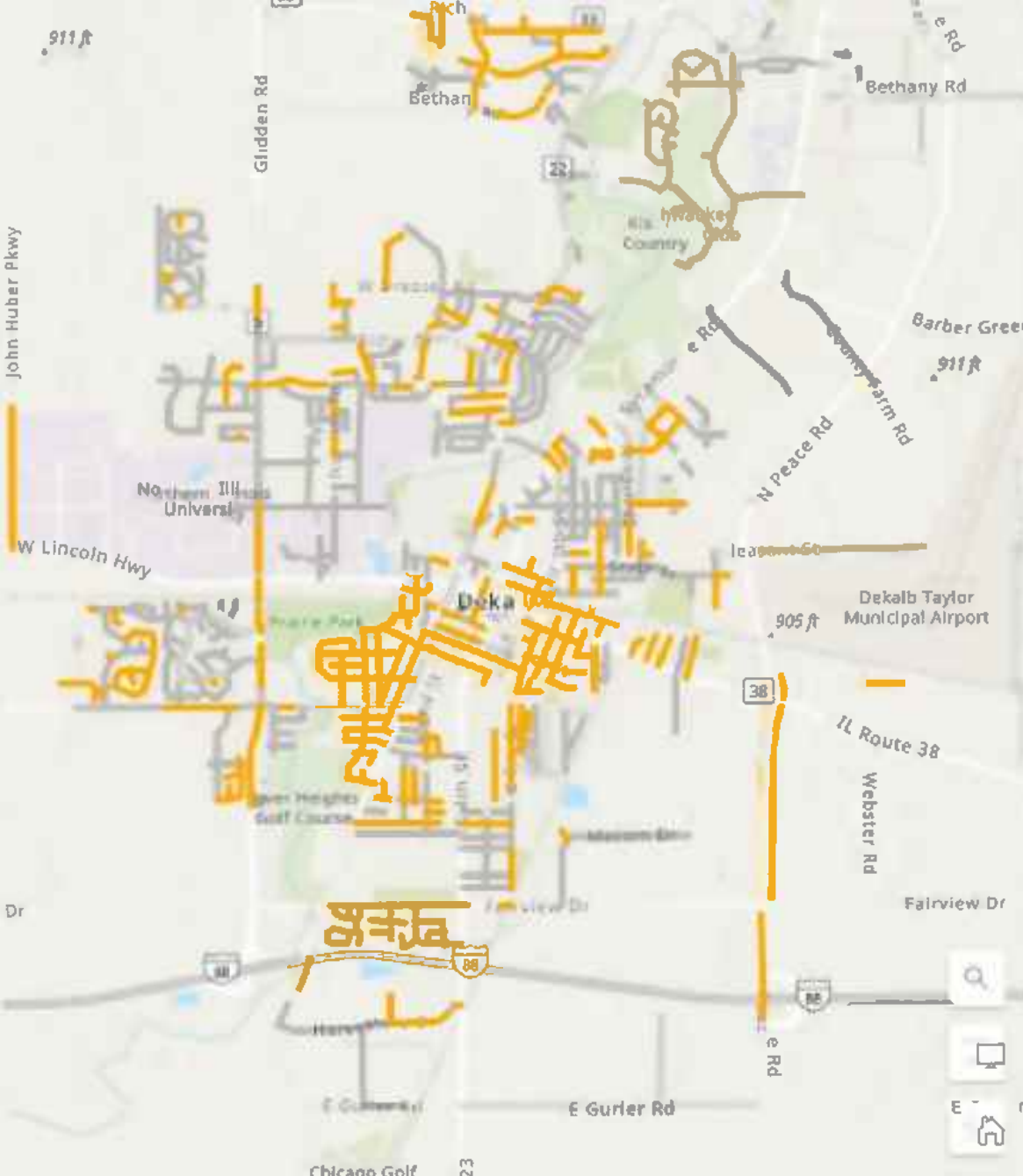
Is between

25

55

Histogram





Filter results match the following expression.

Set

Ideal scope to be addressed within a program as streets are fully serviced as they decline from "Fair" into "Poor" as program cycle expires.

Jur_Name

is

City of DeKalb

And

PCI_2022

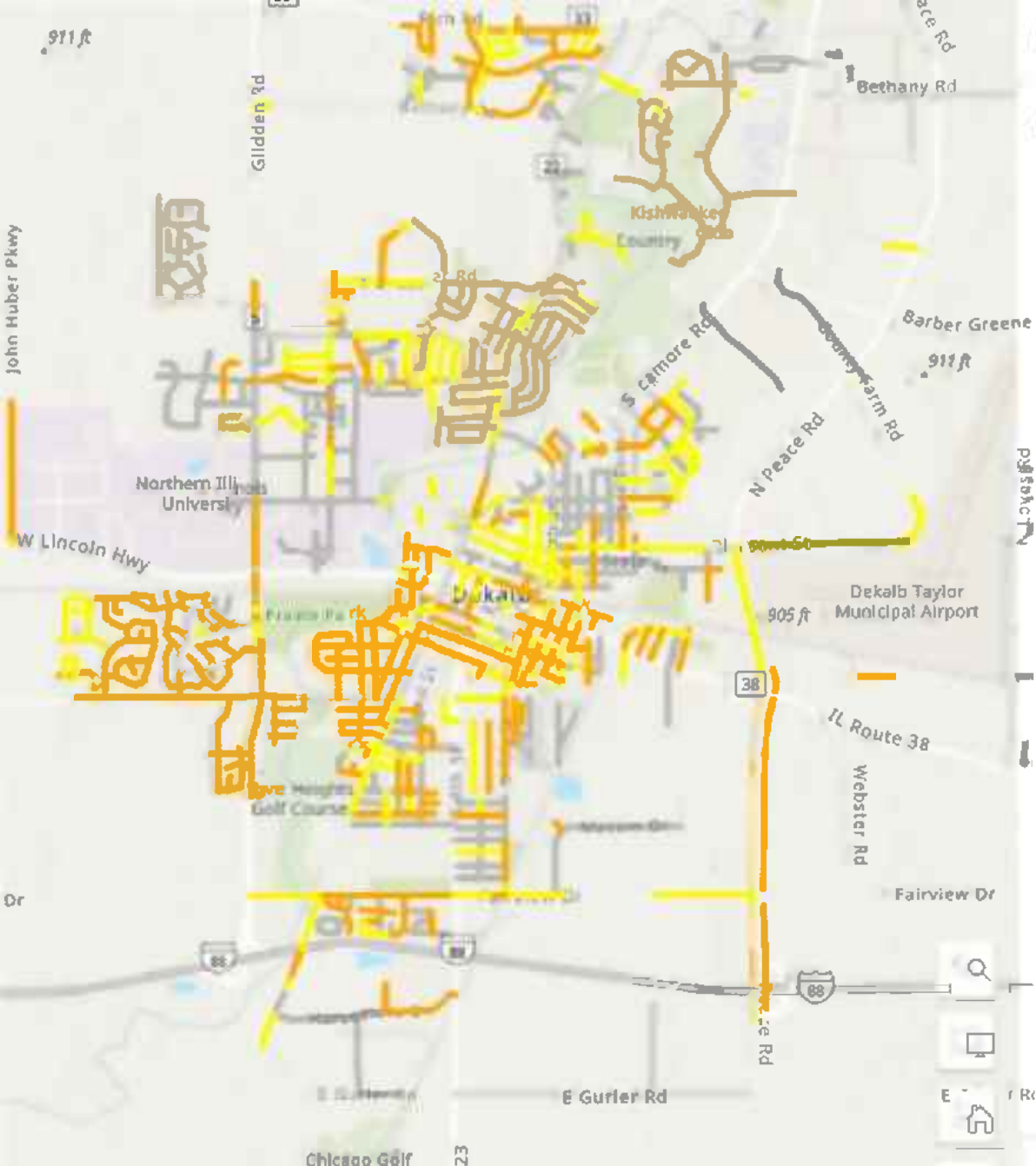
is between

41

55

Histogram





Filter results match the following expression.

Set

Most likely not a basis for targeting, besides those overlapping with previous group, unless a program was very aggressive & well funded.

Jur_Name

is

City of DeKalb

And

PCI_2022

is between

41

70

Histogram



