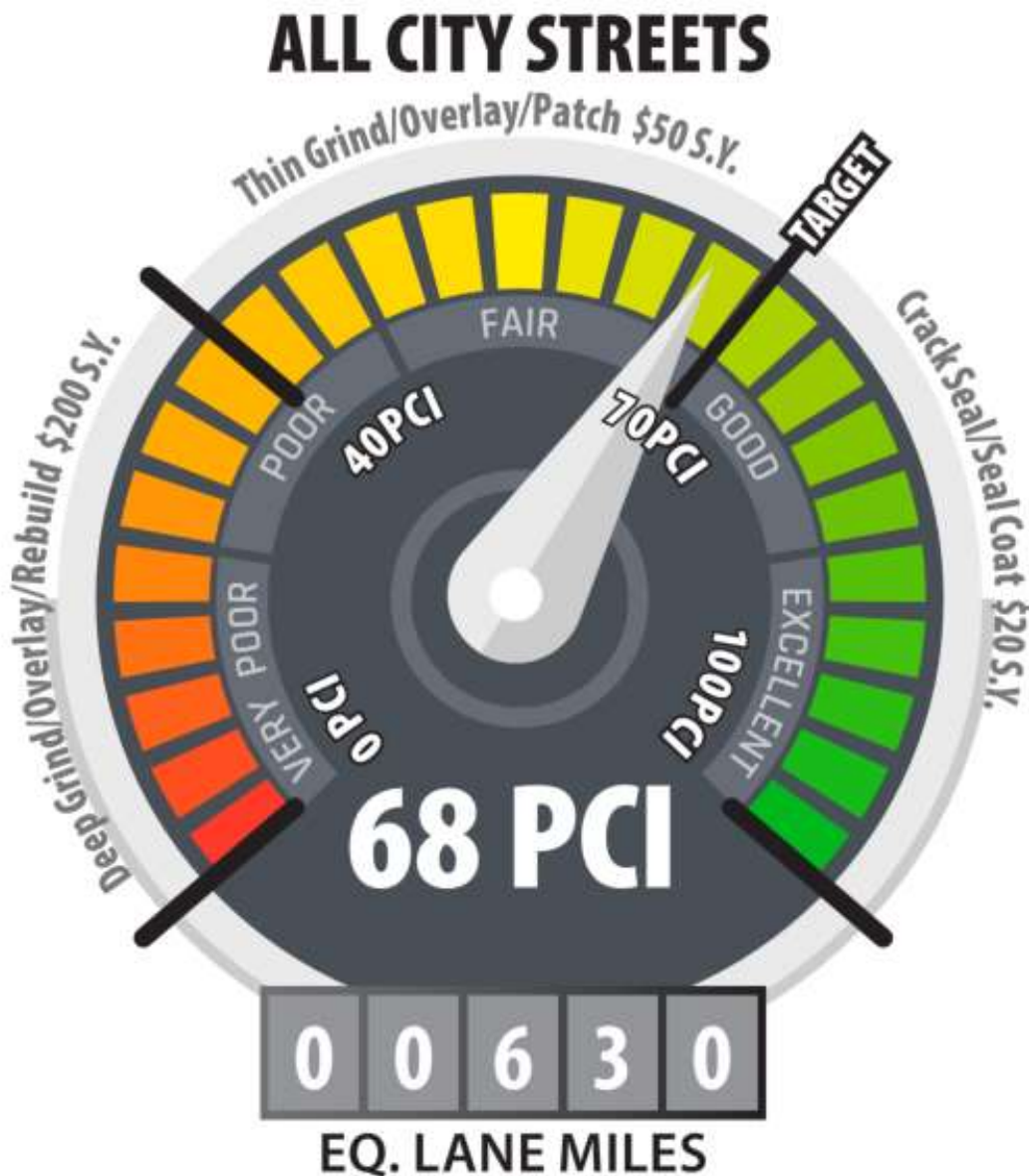


# 2020 STATE OF OUR STREETS DASHBOARD

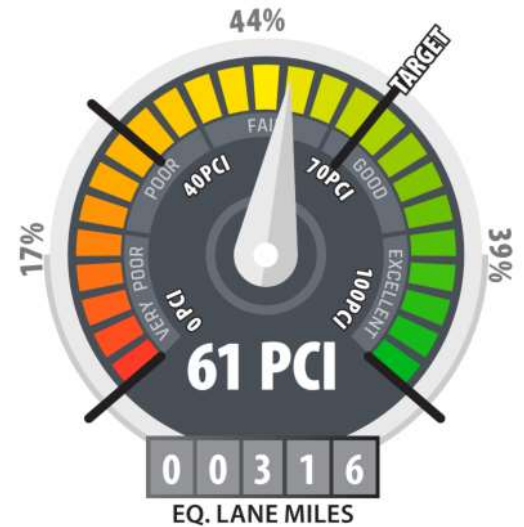
Overall Assessment: The paving projects completed in 2020 improved approximately 6.7 equivalent lane miles of roadway. Despite the impact of those projects, the overall condition of streets in the city degraded slightly from 2019 to 2020. The last physical inspection for pavement condition was performed in the summer of 2019. 2020 PCI values have been estimated by applying approximated deterioration rates, derived using actual historical condition data from past pavement condition surveys, and accounting for actual improvements from completed projects. The next physical inspection will take place this summer (summer 2021) and the pavement ratings and the predictive deterioration rates adjusted accordingly. Pavement projects for 2021 will improve another estimated 15 equivalent lane miles of road. Additional projects through 2024 are in varied stages of planning and design. Accounting for the predicted impact of these current and upcoming projects, modeling indicates a slow decline of the overall average roadway PCI over the coming years at the current anticipated funding amounts. The data suggests that additional funding is needed to prevent overall roadway conditions from declining further and to get the roadways back to the overall 70 PCI target and keep it there.



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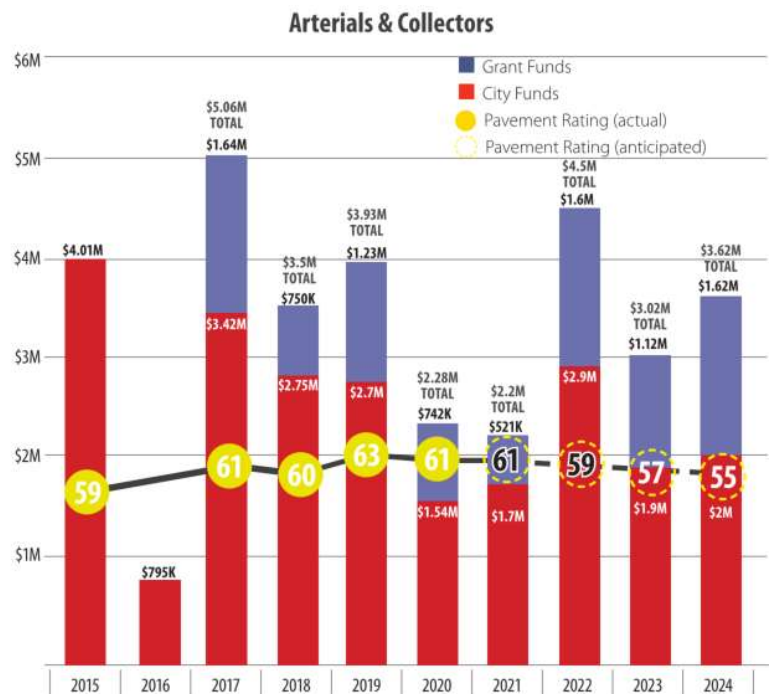
## Arterial and Collector Streets

Arterial and collector streets make up just over half of the total equivalent lane miles of roadways throughout the City. There are approximately 92 lane miles of collector streets that together have an overall average PCI of 64 (compared to 68 in 2019). There are roughly 224 lane miles of arterial streets that together have an overall average PCI of 59 (compared to 62 in 2019). The average condition rating for arterial and collector streets combined is 61 (compared to 63 in 2019). The average PCI for collector and arterials has been hovering around 60 since about 2015. This indicates that re-building and preservation efforts have been relatively successful at maintaining the status quo but are not yet sufficient to reach the target of 70 PCI. Over the next five years an estimated 60 lane miles of road are expected to deteriorate beyond the point where preservation treatments can restore them and they would require a more expensive full re-build. Based on the current funding levels shown in the City's Transportation Improvement Plan (TIP) and anticipated grant funding, there is only funding available to preserve approximately 15 lane miles. This leaves approximately 45 lane miles of arterial and collector road that will deteriorate past the point for preservation treatments. These roadways will eventually require reconstruction at a cost that is over 4 times higher than preservation treatments. Simulations indicate that approximately \$5 million per year for 15 years would be required to bring the overall PCI for arterials and collectors up to an average of 70 PCI.



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**Funding Note:** The arterial and collector preservation programs rely heavily on grant funding. Currently, no grant funding has been secured beyond 2024. Additionally, arterial streets are further classified as either principal or minor arterials. Typically, principal arterials are much more competitive in grant applications than minor arterials. As a result of this, principal arterials are in an overall better condition (63 PCI) than minor arterials (57 PCI). The city anticipates that many of the remaining streets that require preservation treatments now will not compete well for future grant funding. Over time it is likely that it will become increasingly difficult to depend on grant funding and additional funding sources would be needed.

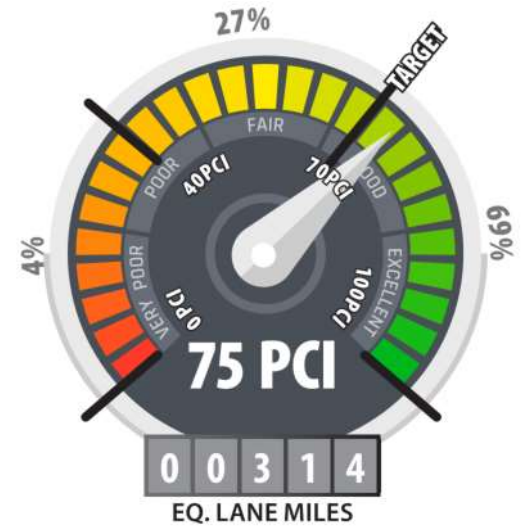


The planned 2021 and 2022 projects also include rebuilds of 2 streets (4th Street SE and 2nd Street SE), which is we see a predicted decline in the PCI despite the funding level in 2022 being higher. This is due to the greater expense of rebuilding streets rather than preserving them.

# 2020 STATE OF OUR STREETS DASHBOARD

## Local Streets

There are currently approximately 314 equivalent lane miles of local streets in the city, which is 1 more lane mile than in 2019 due to new roads constructed by development activity. Local streets have an overall average PCI of 75 (compared to 77 in 2019). Despite the City's target of 70 PCI being achieved there are still many local roads in need of repair and replacement. Roughly 69% of local roads are in good condition, 27% are in fair condition, and 4% are in need of a full re-build. Since 2015, the overall average PCI for local streets has increased from 69, due to the City's preservation and re-building projects as well as the addition of new local roads from development activity.



**Funding Note:** From 2013 to 2019, the local streets program was funded by new construction sales tax. Since 2019 the program has been spending down the fund balance, with some supplemental funding from Real Estate Excise Tax (REET) funds. The program has been funded at \$1.65M per year with the current biennial budget, but at this time no sustainable funding source has been identified beyond 2022. Simulations indicate that maintaining current funding levels results in the average PCI holding stable in the low 70's (assuming no other changes), but dropping below 70 in 10 years. If a sustainable funding source is not identified for 2023 and beyond, it is predicted that the average PCI for local streets will drop to the low 40's by 2040. Changes that may impact the average PCI (to be higher or lower than currently forecasted) include more or less of the development and utility work that build new roadways and restore existing roadways and refinement of the parameters used to predict PCI values based on additional data being collected.



## **PCI Further Explained:**

Pavement Condition Index (PCI) is a 0 to 100 score that reflects the overall condition of roadway pavement and what types and degrees of maintenance and repair (or preservation activities) are needed to maximize the pavement's overall service life. A PCI of 100 is brand new pavement and a PCI of 0 is a roadway where the pavement has turned into gravel and dirt. The most efficient approach towards prolonging the life of a roadway is to keep the PCI at 70 or above (considered to be "good condition") for as long as possible. This is achieved through good pavement design and periodic light maintenance activities like patching and crack sealing. Once the PCI of a roadway has dropped below 70 (or from "good condition" to "fair condition"), additional patching and replacement of the top layer of pavement (overlay or grind and overlay) is needed to bring the pavement back into "good condition" and extend the life of the pavement. Without these pavement preservation efforts, the PCI continues to decrease and the costs to bring the pavement back into "good condition" increases. Additionally, as the PCI decreases, more and more potholes form on the roadway which requires more and more temporary and permanent pothole repairs (by the City's Maintenance and Operations Street crew). Eventually, without preservation activities, the PCI will drop below 40 and the roadway is considered to be in "poor condition" and in need of a very expensive full re-build. With these considerations, the City targets an overall PCI of 70 in order to maximize pavement life and minimize maintenance and preservation costs. Periodically, the City performs citywide inspections to determine the pavement condition index (PCI) for each roadway it maintains. The PCI inspections were completed in 2013, 2017, and most recently in the summer of 2019. The PCI inspection data is used to plan pavement preservation activities and as a gauge to measure how overall roadway conditions have, and will, respond to different funding levels and other factors that impact roadway conditions such as new development, City and non-City utility work in roadways, truck traffic, pavement design (past and present), and weather conditions.