

MEMO

To: Joe Wilson, Public Works Director

From: Brent Soderlin, City Engineer

Subject: Pavement Management Program 2019

Date: April 5, 2019

Background

The City is responsible for maintaining approximately 261 miles of paved roadways. In previous years, the City used a rating system call an Overall Condition Index (OCI). The last OCI that was completed was in 2008. The past program divided the City into 7 areas that were roughly the same size. The old pavement management system used three maintenance types. First was routine maintenance, which is things such as filling potholes, and crack sealing. The second is preventative maintenance, which is slurry-sealing road. The third type is corrective, which is mill and overlay, full depth reclamation, and hot mix overlay. Routine, Preventive and Corrective repair strategies were applied in one area each year, on a cyclical basis.

In 2018, Public Works contracted with Transmap Corporation to drive and assess all paved streets in the City. The City received an evaluation of the streets based upon an overall Pavement Condition Index (PCI). The PCI uses a ratings system that is similar to the OCI. The good news is that the overall PCI for the City is a 79. The evaluation also provided recommendation on how to maintain our current PCI over the long term. This would be accomplished by using the PCI data to identify streets that need preventative maintenances, corrective maintenance and reconstruction. The PCI could then be used to identify future budget needs. Routine maintenance would be shifted to a citywide approach. As cracks and potholes are identified, street maintenance crews would repair them.

Discussion

In 2019, the Public Works approach would be to focus our resources on streets with the lowest PCI ratings. We have several roads with PCI's below 79 and the majority of those streets are located south of East 76th Avenue. This would mean that the newer parts of the City would not see



MEMO CONTINUED

corrective maintenance this year. Some preventative maintenance is proposed in the northern range to help maintain their high PCI ratings.

Recommendation

Public Works would recommend the following types of maintenance and areas:

Maintenance Type	Area	Average PCI	Estimated Cost	Fund
Corrective (Mill & Overlay)	*Dahlia to Magnolia, 56 th to 60 th	55.8	\$827,030.00	Pave Mgt.
Corrective (Mill & Overlay)	*Kearney to Quebec, 56 th to I-270	51.8	\$698,396.00	Pave Mgt.
Corrective (Mill & Overlay)	*Glencoe to Holly, 64 th to 66 th	60.6	\$276,103.00	Core City
Corrective (Mill & Overlay)	*Colorado, 72 nd to 74 th	33.5	\$134,298.00	Pave Mgt.
Corrective (Mill & Overlay)	*Highway 6 to Kearney, 60 th to 64 th	60.0	\$679,361.00	Core City
Corrective (Mill & Overlay)	**Irondale	39.6	\$266,820.00	Irondale
Hot-in-Place Recycling	#112 th Ave, Havana to Oakland	52.7	\$307,177.00	Pave Mgt.
Slurry Seal	#Villages at Buffalo Run West	81.8	\$102,303.00	Pave Mgt.
Slurry Seal	#Fronterra	82.7	\$42,636.00	Pave Mgt.
Slurry Seal	#River Run	80.8	\$315,109.00	Pave Mgt.
	Total Budget		\$3,649,233.00	

Note: *Core City, **Irondale, #Northern Range

MEMO CONTINUED

The pavement management budget is \$2,500,000. The Core City Infrastructure Improvements budget is \$1,500,000 and Irondale is \$620,000. Below is Public Works recommendation for using the three funds for pavement management.

Fund	Amount (\$)
Pavement Management	\$2,426,949.00
Core City Infrastructure	\$955,464.00
Irondale	\$266,820.00
Total	\$3,649,233.00

Public Works will be identifying other projects for the Core City and Irondale and will bring those to City Council for review later this month.

Thanks.

BRS

