CITY OF GONZALES
ANNUAL MEASURE X PROGRAM COMPLIANCE REPORT

The Annual Program Compliance Report should, at a minimum, describe the efforts of the local jurisdiction to comply with the policies of Measure X over the reporting period. The report should include a narrative of how the jurisdiction spent Measure X funds on local projects including the project title; brief description; discussion of the project benefits; and before and after pictures. A balance sheet should also be included with the report detailing the receipt and expenditure of Measure X funds, as shown in the example below.

CITY OF GONZALES - YEAR 2019/20 BALANCE SHEET

REVENUES	
Carryover from Previous Year	$0.00
Measure X Revenues	$219,852.00
Earning on Interest	$0.00
TOTAL REVENUES:	**$219,852.00**
EXPENDITURES	
DEBT SERVICE ON MEASURE X LOAN FOR ALTA STREET REHABILITATION PROJECT	
Principal on TAMC Loan	$163,051.00
Interest on TAMC Loan	$56,801.00
TOTAL EXPENDITURES:	**$219,852.00**
FUND BALANCE, END OF PERIOD:	$0.00

As attachments to the Annual Program Compliance Report, the jurisdiction should include the following additional reports:

ATTACHMENT 1: Independent Audit of Financial Statements for Measure X Funds, Prior Fiscal Year
ATTACHMENT 2: Five-Year Capital Improvement Program
ATTACHMENT 3: Pavement Management Program Report

ATTACHMENT 1

INDEPENDENT AUDIT OF FINANCIAL STATEMENTS

CITY OF GONZALES

TRANSPORTATION SAFETY AND INVESTMENT PLAN ACCOUNT FUND WITH INDEPENDENT AUDITORS' REPORT

JUNE 30, 2020

CITY OF GONZALES
TRANSPORTATION SAFETY AND INVESTMENT PLAN ACCOUNT FUND

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JUNE 30, 2020

BRYANT L. JOLLEY
CERTIFIED PUBLIC ACCOUNTANTS

Bryant L. Jolley C.P.A.
Ryan P. Jolley C.P.A.
Darryl L. Smith C.P.A.
Luis A. Perez C.P.A.
Lan T. Kimoto
John P. Burt

INDEPENDENT AUDITORS' REPORT

Honorable Mayor and City Council
City of Gonzales
City of Gonzales, California

We have audited the accompanying financial statements of the City of Gonzales Transportation Safety and Investment Plan Account Fund, as of and for the fiscal year ended June 30, 2020, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the City of Gonzales Transportation Safety and Investment Plan Account Fund, as of June 30, 2020, and the changes in financial position thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the Transportation Safety and Investment Plan Account Fund and do not purport to, and do not, present fairly the financial position of the City of Gonzales, as of June 30, 2020, the changes in its financial position, or, where applicable, its cash flows for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

December 4, 2020

CITY OF GONZALES

TRANSPORTATION SAFETY AND INVESTMENT PLAN ACCOUNT FUND
BALANCE SHEET
JUNE 30, 2020

ASSETS	
Cash and investments	$ -
Total assets	-
LIABILITIES AND FUND BALANCE	
Liabilities:	
Accounts payable	-
Total Liabilities	-
Fund Balance:	
Restricted	-
Total Fund Balance	-
Total Liabilities and Fund Balance	$ -

CITY OF GONZALES

TRANSPORTATION SAFETY AND INVESTMENT PLAN ACCOUNT FUND
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE
JUNE 30, 2020

REVENUES	
Transportation Safety and Investment Plan Account revenue	$ 219,852
Total revenues	219,852
EXPENDITURES	
Debt Service	
Principal	163,051
Interest	56,801
Total Expenditures	219,852
Net change in fund balance	-
Fund balance, beginning of fiscal year	-
Fund balance, end of fiscal year	$ -

CITY OF GONZALES

TRANSPORTATION SAFETY AND INVESTMENT PLAN ACCOUNT FUND
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE – BUDGET TO ACTUAL
JUNE 30, 2020

	Budgeted Amounts	Actual Amounts	Variance with Budget Positive (Negative)
REVENUES			
Transportation Safety and Investment Plan Account revenue	$ 233,147	$ 219,852	$ (13,295)
Total revenues	233,147	219,852	(13,295)
EXPENDITURES			
Debt service			
Principal	186,517	163,051	23,466
Interest	46,630	56,801	(10,171)
Total Expenditures	233,147	219,852	13,295
Net change in fund balance	-	-	-
Fund balance, beginning of fiscal year	-	-	-
Fund balance, end of fiscal year	$ -	$ -	$ -

CITY OF GONZALES

TRANSPORTATION SAFETY AND INVESTMENT PLAN ACCOUNT FUND
NOTES TO THE BASIC FINANCIAL STATEMENTS
JUNE 30, 2020

NOTE 1 – SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. The Transportation Safety and Investment Plan Account Fund of the City of Gonzales (the "City") is a governmental fund type. Governmental funds are accounted for using a current financial resources measurement focus. The application of this measurement focus provides that, in general, only current assets and current liabilities are present on the balance sheet. Operating statements of these funds present revenues and expenditures.

The modified accrual basis of accounting is used for the Transportation Safety and Investment Plan Account Fund. Under the modified accrual basis of accounting, revenues are recognized when they become susceptible to accrual (i.e., both measurable and available). Measurable means that the amount of the transaction can be determined. Available means the funds are collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period. For this purpose, the City considers revenues to be available if they are collected within 60 days of the end of the current fiscal period.

Expenditures of governmental funds are generally recognized when the related fund liability is incurred.

Reporting Entity

The financial statements present only the Transportation Safety and Investment Plan Account Fund and do not purport to, and do not present, the City's financial position and changes in financial position. The City of Gonzales's basic financial statements are available from the Finance Department at 147 Fourth Street, Gonzales, California 93926 and at www.gonzalesca.gov.

NOTE 2 – CASH DEPOSITS

The City follows the practice of pooling cash and investments for all funds (including the Transportation Safety and Investment Plan Account Fund) under its direct daily control. Interest earned on pooled cash and investments is allocated periodically to the various funds based on average cash balances. Detailed disclosure regarding the City's investments of cash is included in the notes to financial statements of the City.

NOTE 3 – MAINTENANCE OF EFFORT

The Measure X Master Programs Funding Agreement between the City of Gonzales and the Transportation Agency for Monterey County required that the City must expend each fiscal year from its general fund for street and highway purposes an amount not less than the annual average of its expenditures from its general fund during the preceding three fiscal years, as reported to the Controller pursuant to Streets and Highways Code section 2151 ("Maintenance of Effort"). For purposes of this calculation, an average of the prior three (3) years spent for local transportation purposes will be used. Exemptions from this calculation include one-time capital expenses, and expiration of any voter-approved fund sources that were used for local transportation purposes. In the case of expired voter-approved fund sources, the three-year average baseline would be recalculated in the next annual verification period without said expired fund sources. Revenues from a fee imposed or contribution first received by a local jurisdiction on or after January 1, 2016 which are used on or after July 1, 2016, by that local jurisdiction for maintenance or improvement purposes on its streets and highways shall be considered as general fund expenditures for the purposes of compliance with the provisions of this Section in the fiscal year in which such expenditures are made. The following eligible expenditures were made:

For the fiscal year ended June 30, 2017:	$ -
For the fiscal year ended June 30, 2018:	$ -
For the fiscal year ended June 30, 2019:	$ -
Three year average of above expenditures:	$ -

Total expenditures from the general fund for street and highway purposes for the fiscal year ended June 30, 2020 was $0. The City was in compliance with the Maintenance of Effort requirement of the Measure X Master Programs Funding Agreement between the City of Gonzales and the Transportation Agency for Monterey County.

BRYANT L. JOLLEY
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INDEPENDENT AUDITORS' COMPLIANCE REPORT WITH TAMC ORDINANCE NO. 2016- 01 TRANSPORTATION SAFETY AND INVESTMENT PLAN

Honorable Mayor and City Council
City of Gonzales
Gonzales, California

We have audited the financial statements of the City of Gonzales Transportation Safety and Investment Plan Account Fund's (the "City") compliance with the types of compliance requirements described in the Transportation Agency for Monterey County's (TAMC) Ordinance No. 2016-01 and in the Measure X Master Programs Funding Agreement between TAMC and the City of Gonzales applicable for the fiscal year ended June 30, 2020.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to the Transportation Safety and Investment Plan Account Fund.

Auditor's Responsibility

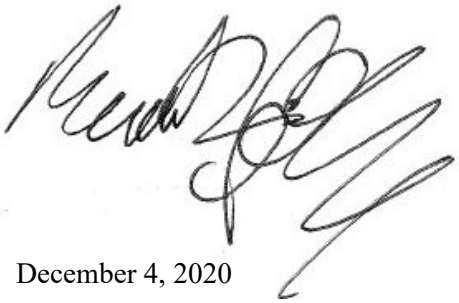
Our responsibility is to express an opinion on the City's compliance based on our audit in accordance with the compliance requirements described in the Transportation Agency for Monterey County's (TAMC) Ordinance No. 2016-01 and in the Measure X Master Programs Funding Agreement (the Agreement) between TAMC and the City of Gonzales. The Measure X Master Programs Funding Agreement requires that the independent auditor shall perform at least the following tasks: (1) determine whether the recipient expended all Measure X funds received in compliance with Measure X, the Measure X Investment Plan, and the Policies & Project Descriptions, as they may be adopted or amended by TAMC from time to time, and the Agreement, (2) determine whether the Measure X revenues received and expended were accounted for and tracked in its own separate budget and fund titled "Transportation Safety & Investment Plan Account" and were not be comingled with any other funds and that the accounting system provides adequate internal controls and audit trails to facilitate an annual compliance audit for each fund type and the respective usage and application of said funds, and (3) determine whether the City met the Maintenance of Effort requirements imposed by Measure X and State law. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a direct and material effect on the state laws and regulations applicable to the City occurred. An audit includes examining, on a test basis, evidence about the City's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance. However, our audit does not provide a legal determination of the City's compliance.

Opinion on Compliance with the Transportation Safety and Investment Plan Account Fund

In our opinion, the funds allocated to and received by the City of Gonzales Transportation Safety and Investment Plan Account Fund, complied, in all material respects, with the compliance requirements referred to above that are applicable in accordance to the compliance requirements described in the Transportation Agency for Monterey County's (TAMC) Ordinance No. 2016-01 and in the Measure X Master Programs Funding Agreement between TAMC and the City of Gonzales for the fiscal year ended June 30, 2020.

This report is intended solely for the information and use of City Council, management of the Transportation Agency of Monterey County and for filing with the appropriate regulatory agencies and is not intended to be and should not be used by anyone other than these specified parties.



December 4, 2020

ATTACHMENT 2

FIVE YEAR CAPITAL IMPROVEMENT PROGRAM

CITY of GONZALES
MEASURE X FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FOR YEARS 2019/20 – 2023/24

FY 2019/20

Project	Description & Phase	Total Cost	Measure X	PCI
Alta Street Pavement Rehab	Construction	$5.2 Million	$2.5 Million	100
	Totals:	**$5.2 Million**	**$2.5 Million**	

Next seven years will be paying back the $2.5 million loan from TAMC with Measure X monies for the Alta Street Pavement Rehabilitation Project

ATTACHMENT 3

PAVEMENT MANAGEMENT PROGRAM REPORT

PAVEMENT MANAGEMENT PROGRAM REQUIREMENTS

The approved ordinance for the Transportation Safety & Investment Plan (Measure X) outlines the requirements for the use of local road maintenance, pothole repair and safety funds. It includes a requirement for each jurisdiction to have a pavement management program. "Each city and the County of Monterey shall develop, or participate in the development of by TAMC, a pavement management program. They shall submit regular reports on the conditions of their streets, to ensure timely repairs and keep the public informed. Development of the pavement management program by TAMC is eligible to be funded out of this program prior to distribution of funds to the cities and the County."

SYSTEM REQUIREMENTS: In order to receive Measure X funds, the cities and the County shall utilize a pavement management program (PMP) and submit regular reports on the conditions of their streets, to ensure timely repairs and keep the public informed. The pavement management program should utilize an approved software-based tool for analyzing pavement conditions and reports findings on rehabilitation/maintenance strategies based on funding levels. The pavement management program used by the jurisdiction must contain, at a minimum, the following features:

- Store the inventory all roadways within a jurisdiction (in a compatible database with other jurisdictions).
- Assess the condition of the roadways (based on seven distresses and three severity levels).
- Provide the current Pavement Condition Index (PCI) for the roadways (as per ASTM D6433)
- Identify all pavement sections needing maintenance, rehabilitation, or replacement.
- Calculate budget needs for maintenance, rehabilitation or replacement of deficient pavement sections (for the current year and the next three years at various overall condition levels).
- Develop maintenance strategies for the most cost effective level of maintenance or repair appropriate at the time of the inspection.
- Generate pavement management program reports (in various formats).

All jurisdictions must implement and maintain an approved Pavement Management Program (“StreetSaver” or equivalent). The “StreetSaver” Pavement Management Program developed by Metropolitan Transportation Commission (MTC) is the most utilized program in the Bay Area and would be an excellent program for this region as well. The use of the “StreetSaver” Pavement Management Program is recommended (but not required) since it would allow good compatibility between local jurisdictions and also provide regional benefits. Jurisdictions may elect to use an alternative pavement management program provided it meets the above listed minimum requirements and receives written approval from TAMC.

The Agency will assist with the development of an overall pavement management implementation plan for this region with the participation and coordination of all the cities and the county. The Agency recommends the development of a regional system to benefit from a coordinated system. The regional system would be developed collaboratively between local jurisdictions. In order to have a regional database, it is recommended that all agencies utilize a

common pavement management program. This would allow compilation of information on a regional basis. It would also create opportunities for interagency coordination and to guide regional transportation investments and planning.

UPDATE REQUIREMENTS: The jurisdictions must complete the following updates:
.

- Review and update the pavement information for all roads every two years.
- Pavement conditions must be re-inspected every three years for arterials and collectors.
- Pavement conditions must be re-inspected every six years for residential streets and local/rural roads, unless otherwise approved by TAMC. Pavement condition surveys may be done by either automated or manual inspections, and may be done either individually or in conjunction with another agency. A percentage of the network can be scheduled each year so that the entire network is updated on a regular cycle.

REPORT REQUIREMENTS: All jurisdictions shall submit an annual Pavement Management Program Report Letter to TAMC no later than December 31 of each year the Measure X tax is in effect using the approved report letter format. It shall include all the highlighted information and shall be on local agency letterhead (see attached template).

All jurisdictions shall also participate in the biennial pavement needs survey conducted for the California Statewide Local Streets and Roads Needs Assessment and provide the requested roadway data for their jurisdiction.

City of Gonzales

P.O. BOX 647
PHONE: (831) 675-5000

147 FOURTH ST.
FAX: (831) 675-2644

GONZALES, CALIFORNIA 93926
www.gonzalesca.gov

December 23, 2020

Todd Muck, Deputy Executive Director
Transportation Agency for Monterey County
55-B Plaza Circle
Salinas, CA 93901

Subject: Pavement Management Program Annual Report Letter

The City has a Pavement Management Program (PMP) that conforms to the criteria established by the Transportation Agency for Monterey County as required in the Measure X Agreement with the city. Our PMP utilizes *StreetSaver*, version 9.0.0 as developed by the Metropolitan Transportation Commission. Harris & Associates did a full update of our PMP in May 2020 and it contains, at a minimum, the following elements:

1. Inventory of all streets under city jurisdiction:

Centerline miles:	20.4 miles
Total lane miles (or equivalent units):	40.7 miles
Last update of the inventory was completed:	May 2020

2. Average Pavement Condition Index (PCI) = 54

3. Identification of sections of roadways brought up to acceptable PCI levels for FY2019/20:

   - Alta Street was completely reconstructed in FY2017/18 and FY2018/19 (PCI = 100). This was a $5.2 million project that was 50% funded with Measure X monies.

   - Over the last two years, we coordinated a joint roadway project with Monterey County that reconstructed five miles of Gloria Road, Iverson Road and Johnson Canyon Road between US101 and the entrance to the SVSWA Landfill. Construction of the $7M project began in July and was completed last month. Funding was a combination of Measure X, SB1 funds and SVSWA Landfill Expansion Mitigation monies.

4. Amount spent to rehabilitate or replace deficient sections for Fiscal Year 2019/20 was $44,094.

Contact me with any questions regarding this information.

Sincerely,

PATRICK DOBBINS

Patrick M. Dobbins, PE
Public Works Director/City Engineer

City of Gonzales

2020 Pavement Management Program Update

May 12, 2020

Prepared by:

Harris & Associates

Harris & Associates

Program Managers
Construction Managers
Civil Engineers

May 12, 2020

Mr. Patrick Dobbins
City of Gonzales
147 Fourth Street
Gonzales, CA 93926

Subject: Pavement Management Program Update

Dear Mr. Dobbins:

As part of the development of the Pavement Management Program for the City of Gonzales, Harris & Associates hereby submits the 2020 Pavement Management Program Report.

The information contained in this report presents the findings from a pavement condition survey of the City's street network. The City has also been provided with the information that was used to develop the recommended improvement program. The report covers the following categories:

- Executive Summary of 2020 PMP Update
- Pavement Condition Index for all Streets
- Budget Analysis and Recommended Work Program based on various budgets
- Backup Data

It has been a pleasure working with you on this project. Do not hesitate to contact me at (925) 827-4900 ext. 1219 or vijay.pulijal@weareharris.com if you have any further questions.

Sincerely,

Harris & Associates

Vijay Pulijal, P.E.
Project Manager

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EXECUTIVE SUMMARY

In April of 2020, Harris & Associates updated the Pavement Management Program (PMP) for the City of Gonzales. The City had previously been using MicroPaver for their PMP but has since switched to the StreetSaver® PMP software. For this update, approximately 18 of the City's 20 centerline miles were surveyed. Streets that had maintenance within the last two years were not surveyed as part of this update and the PCI's were based on maintenance projections. The PMP provides a management tool to inventory street pavement, assess pavement condition, record historical maintenance, forecast budget needs, and view impacts of funding on Citywide pavement condition over time.

The PMP is also a software-based tool for analyzing pavement conditions and recommending rehabilitation strategies based on funding levels. The software focuses on providing cost effective recommendations that enhance the overall system's Pavement Condition Index (PCI)*. In general, asphalt concrete pavement deteriorates over time by both traffic loading and weathering. The Metropolitan Transportation Commission (MTC) software recommends that 4% of the budget be put towards preventive maintenance treatments† such as surface seals and or crack seals. The remaining budget is recommended to be allocated to more expensive asphalt concrete overlays and or reconstructions. Preventive maintenance treatments are important because they can sustain a street's PCI at a high level at a relatively low cost. Preventive maintenance treatments can be applied to many streets (large pavement area) for a fraction of the cost to overlaying/reconstructing a single asphalt street (small pavement area).

The City is now using MTC's Pavement Management System StreetSaver® online version. The City uses the software to help make cost-effective decisions related to the street network; maximizing the City's return on investment from available maintenance and rehabilitation funds. StreetSaver® also helps the City generate a prioritized plan and helps to identify specific areas in need of maintenance and rehabilitation.

For the City of Gonzales, the following six annual budget scenarios were generated with 4% of the annual budget applied towards preventative maintenance; with the exception of the $500 thousand and $1 million Expected Annual Budget scenarios. For these two scenarios, the budget was focused primarily on the streets to the west side of Highway 101.

1. No Funds ($0)
2. Expected Annual Budget ($500K)*
3. Maintain PCI of 54 ($850K)
4. Expected Annual Budget ($1M)*
5. Five Point Increase in PCI ($1.3M)
6. Budget Needs Average ($4.2M)

**Budget focused on the west side of Highway 101*

* Calculated by an algorithm developed by the Army Corps of Engineers.

† Preventive maintenance is a schedule of planned maintenance actions aimed at the prevention of failure of streets. These actions are designed to detect, preclude, or mitigate degradation of a streets segment. The goal of a preventive maintenance approach is to minimize degradation and thus sustain or extend the useful life of the street.

PURPOSE

The Pavement Management Program assists the City by providing current distress survey data used to evaluate current pavement conditions. This helps to maintain a City-defined desirable level of pavement performance while optimizing the expenditure of limited fiscal resources. A PMP system is also required to be eligible to apply and obtain federal funds.

Specifically, the program provides administrators and maintenance personnel with:

- A current inventory of all public roadways
- The current pavement condition for all public roadways
- A project list of all pavement segments in need of maintenance, rehabilitation, or replacement
- The most cost effective level of maintenance or repair appropriate at the time of the survey
- A forecast of budget needs for maintenance, rehabilitation, or replacement of deficient pavement sections for a selected time period, at various alternative overall condition levels

NETWORK DESCRIPTION

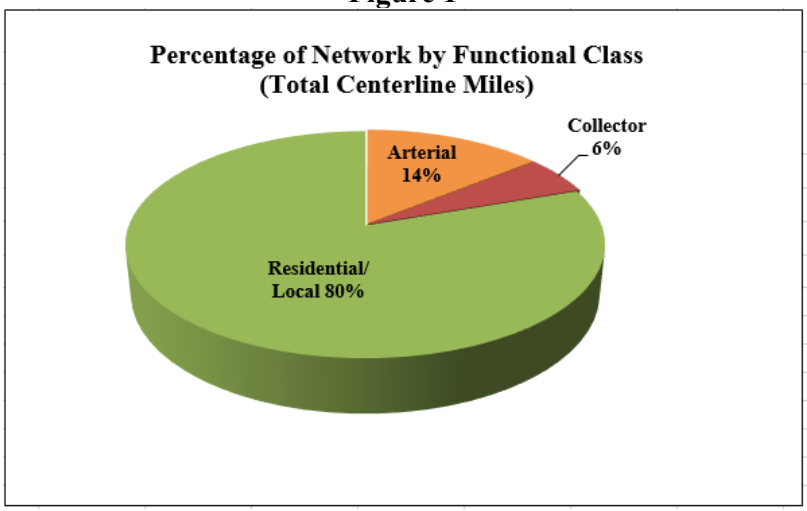
The City of Gonzales' pavement network is comprised of approximately 20 centerline miles and is divided into 149 pavement management segments. To assist in planning maintenance needs, the City's streets are grouped according to functional classification. Table 1 (below) shows the City's pavement mileage and PCI by functional classification.

Table 1

Pavement Mileage by Functional Class						
Classification	**Total Sections**	**Total Center Line Miles**	**Total Lane Miles**	**Total Area (sq.ft)**	**Percentage of Street Network**	**PCI**
Arterial	14	2.89	5.78	758,904	14%	68
Collector	6	1.12	2.24	256,725	6%	39
Residential/Local	129	16.36	32.72	3,279,975	80%	51
Totals	**149**	**20.37**	**40.74**	**4,295,604**	**100%**	**54**

Figure 1 (below) displays the percentage of each functional class in the overall network

Figure 1



The City's pavement network has a current reconstruction value of almost $177 million. The current network reconstruction value (consisting of moderate base failure repair, removal of existing surface, and pavement overlay) by functional class is displayed in Table 2 (below):

Table 2

Network Reconstruction Value					
Functional Class	**Surface Type**	**Lane Miles**	**Unit Cost/ Square Foot**	**Pavement Area (in SF)**	**Cost to Replace**
Arterial	AC	1.9	$9.61	269,031	$2,585,000
	AC/AC	3.9	$9.61	489,873	$4,708,000
Collector	AC	2.2	$9.61	256,725	$2,467,000
Residential/Local	AC	32.7	$9.61	3,279,975	$31,521,000
Grand Total		**40.7**		**4,295,604**	**$41,281,000**

Table 2 (above) provides network replacement costs sorted by Functional Class and Surface Type. For each combination of Functional Class and Surface Type, the number of Lane Miles, Unit Cost (sq.ft.), Pavement Area (sq.ft.), and the cost to replace is reported. The replacement cost is based on the Category V ("Very Poor") treatment cost provided in the Decision Tree for each functional class and surface type combination. Grand totals are provided at the bottom of applicable columns.

It is important to consider the overall investment the City has in its pavements. The unit cost to repair a PMP segment in very poor condition (consisting of moderate base failure repair, removal of existing surface, and pavement overlay to reconstruction) is from $9.61 per square foot or $86.49 per square yard. The cost to reconstruct all streets (full replacement of the pavement, base, and structure of the streets) is over $41 million.

EXISTING PAVEMENT CONDITION

The PCI is an overall measure of the condition of the street surface based on a scale of zero (0) (failed) to one hundred (100) (excellent). Table 3 (below) provides a brief description of the different distresses generally found in each PCI range.

Table 3

PCI Breakdown Descriptions		
PCI Range	**Condition**	**Description**
90-100	Excellent	Little or no distress.
70-89	Very Good	Little or no distress, with the exception of utility patches in good condition, or minor to moderate hairline cracks; typically lightly weathered.
50-69	Good	Light to moderate weathering, light load-related base failure, moderate linear cracking.
25-49	Poor	Moderate to severe weathering, moderate levels of base failure, moderate to heavy linear cracking.
0-24	Very Poor	Extensive weathering, moderate to heavy base failure, failed patches, extensive network of moderate to heavy linear cracking.

Upon completion of this survey, a Pavement Condition Index (PCI) was calculated for each PMP segment to reflect the overall pavement condition. A PCI of 0 would correspond to a badly deteriorated pavement with no remaining service life whereas a PCI of 100 would correspond to a pavement with no observed distresses. A summary of each segments representative PCI and remaining service life can be found in the Pavement Condition Index Report in Appendix I.

The network average Pavement Condition Index (PCI) for the City Gonzales is currently 54. ‡PCI's for the City's pavement network were based on a visual distress rating system. The overall condition of the City of Gonzales street network rests in the "Good" range. MTC's State of Repair report states that "Approximately 75 percent of a pavement's serviceable life has been expended by the time its PCI rating falls to 60." The City of Gonzales average PCI condition by functional class can be found in Table 4 (below).

Table 4

PCI By Functional Class	
CLASSIFICATION	**PCI**
Arterial	68
Collector	39
Residential	51
Overall Network	**54**

Figure 2 (below) shows the City's total pavement mileage by condition category:

‡Note: PCI weighted by area.

Figure 2

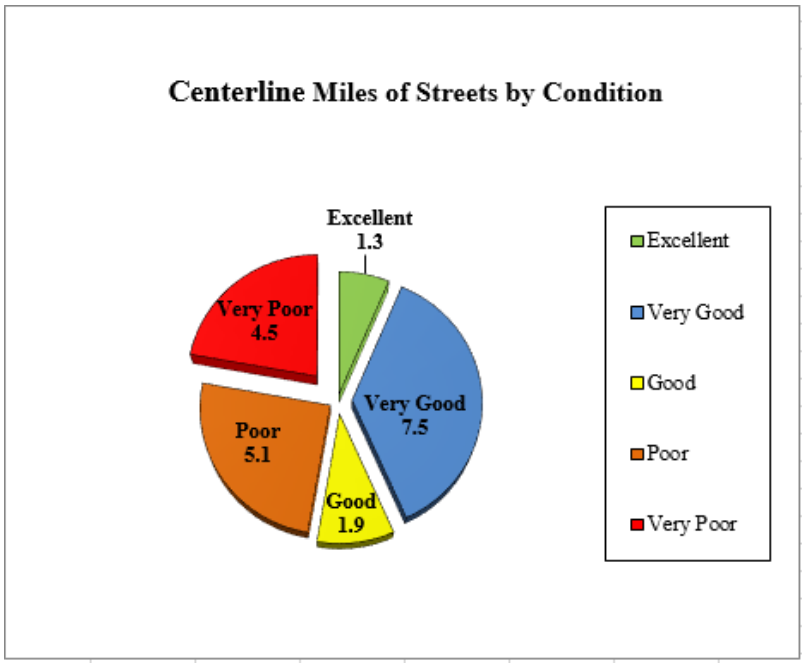


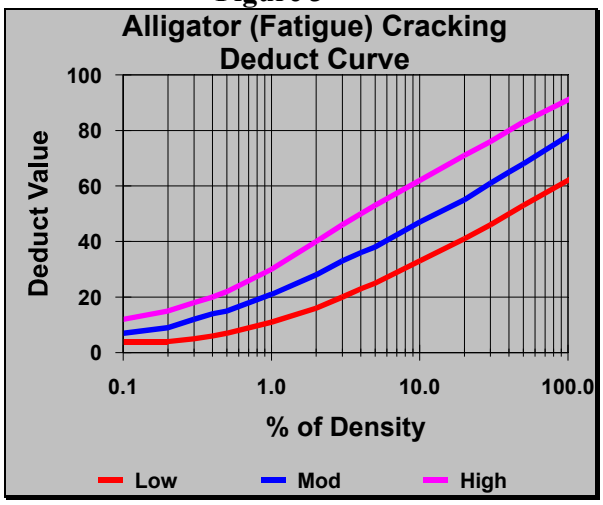
Table 5 (below) breaks down the percentage of the street network by functional class (by area) in each condition category. Approximately 43% of the City's network is in the "Excellent" & "Very Good" condition category and approximately 11% is in the "Good/Fair" condition category. About 27% is in the "Poor" condition category and about 19% is in the "Very Poor" condition category.

Table 5

Percentage of Network Area by Functional Class and Condition Category					
Condition Class	**PCI Range**	**Arterial**	**Collector**	**Residential**	**Total**
Excellent/Very Good (I)	70-100	11.40%	0.00%	31.85%	43.26%
Good/Fair (II/III)	50-69	0.00%	3.27%	7.40%	10.67%
Poor (IV)	25-49	4.91%	0.09%	22.07%	27.08%
Very Poor/Failed (V)	0-24	1.35%	2.61%	15.03%	18.99%
Totals		**17.67%**	**5.98%**	**76.36%**	**100.00%**

After the survey distress data was input into the StreetSaver® program, a distress rating was calculated for each PMP segment. The distress rating was calculated using MTC's developed algorithms. The algorithms initially assign each pavement segment a score of 100 and then deducts point values based on the pavement distresses found within the segment weighted by the quantity of each distress. The algorithms assign deduct values based on the severity and the density of each distress. Figure 3 (below) is an example of the alligator cracking distress deduct curve:

Figure 3



The algorithms weigh the total deduct value within a segment and then calculate a total distress rating between 0 (failed) and 100 (excellent).

PAVEMENT MANAGEMENT STRATEGY

A visual survey of approximately 18 of the City's 20 centerline miles of streets was conducted to assess the existing surface condition of each individual pavement segment within the street network. Data, including distress types and quantities, segment length and width, etc. were collected/verified for all surveyed streets. Data was categorized by street name and "pavement" segment. PMP segment limits were identified by determining the logical maintenance practices that would be applied to each street and could vary from street to street, i.e. intersection to intersection, change in pavement width, drainage conditions, crown of the roadway, etc.

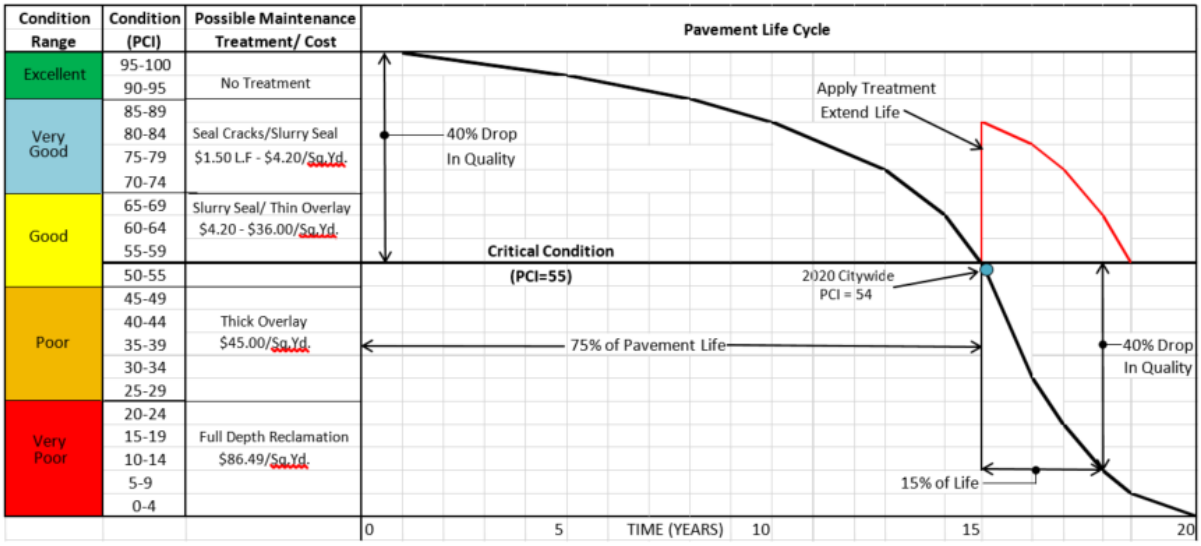
Once the PCI's were calculated for all the PMP segments, budget analyses and workload predictions commenced. Predictions of future pavement performances were based on a pavement deterioration curve developed by MTC. As a pavement ages, the system predicts the PCI of the pavement based on the deterioration curves.

Studies have shown that the life cycle of a pavement falls in a particular pattern over time (See Figure 4 below). Please note that this figure is not to scale. A street's pavement begins its life in excellent condition and generally remains in excellent condition for a few years without the need of any maintenance. Over time, however, the condition of the street starts to worsen and the rate at which its pavement condition deteriorates* will increase dramatically as the street passes the midpoint of its life. As a result of this continued deterioration, the quantity and cost of the maintenance activities needed to rehabilitate the pavement will increase in both scope and costs. It is at this half way point that pavement repair options must be weighed.

* A typical pavement section will deteriorate 40% in the first 75% of its lifespan. However, that same pavement section, if untreated, will experience another 40% reduction in overall quality in only the next 12% of lifespan, effectively deteriorating an equivalent amount in only one-sixth (1/6) of the time.

Figure 4

PAVEMENT MANAGEMENT – APPLYING A COST EFFECTIVE TREATMENT



Questions must be asked such as: Will the investment related to a preventive maintenance treatment be offset by the opportunity cost of not doing such a repair? Is the pavement in such a state that it would be better to simply wait until the pavement completely deteriorates before making the repair? The answers (and, indeed, the questions themselves) depend upon the individual pavement segment. Figure 4 (above) illustrates the benefit of addressing pavement concerns before the pavement condition reaches a poor or failed state. Maintenance activities increase the PCI value as they are applied to the segment and thus extend the pavements life. By allowing pavements to deteriorate, streets that once might cost $4.20/SY to slurry seal may soon cost $45.00/SY to overlay or $86.49/SY to reconstruct with Full Depth Reclamation. In other words, delays in repairs can result in very large cost increases. It is not simply "pay today or pay tomorrow" but rather a "pay today or pay more tomorrow" proposition. Overall pavement maintenance costs are greatly reduced by the timely application of crack seals and or slurry/micro seals before the subgrade fails and requires a total pavement reconstruction.

Table 6 (below) describes the condition categories, their equivalent PCI range, and typical prescribed maintenance treatments used by the agency:

Table 6

Agency's Maintenance Treatments By Condition Category		
Condition	**PCI Range**	**Typical Maintenance Treatment**
Excellent	90-100	Do Nothing.
Very Good	70-89	Crack Seals/Slurry Seal
Good	50-69	Slurry Seal/ Thin Overlay (1.5")
Poor	25-49	Thick Overlay (2.5")
Very Poor	0-24	Full Depth Reclamation

Table 6 created by Harris & Associates based on feedback from the City.

The maintenance strategy described above was based on PCI scores and the corresponding condition category. Streets with PCI scores from 90-100 are considered to be in "Excellent" condition and require no treatment. Streets with scores from 70 to 89 are considered to be in "Very Good" condition but may require crack seals or slurry seal. Streets with scores from 50 to 69 are considered to be in "Good" condition but may require a slurry seal or thin overlay (1.5"). Streets with scores from 25 to 49 are considered to be in "Poor" condition and generally require a thick overlay (2.5"). Streets with scores below 25 are in "Very Poor" condition and are in need of a full depth reclamation. After this update, approximately 1 mile of the City's streets are in the "Excellent" condition category, approximately 8 miles are in the "Very Good" condition category, approximately 2 miles are in the "Good" condition category, approximately 5 miles are in the "Poor" condition category and about 5 miles are in the "Very Poor" condition category.

BUDGET NEEDS

Following the treatment strategy described in Table 6 (above) the StreetSaver® software generated a Budget Needs analysis. The Budget Needs analysis projects the total budget needed to bring the City's pavement system to a condition where most pavement segments require only preventive maintenance (i.e., PCI = 70 or higher). In Gonzales's case, the software calculated the budget needs to be approximately $21 million over the 5-year analysis period (2020-2024). It is cost effective to keep pavement segments at or above a 70 PCI because the cost to maintain a high PCI is less than it costs to bring a low PCI up to a high PCI.

The Budget Needs Average is defined as the cumulative budget needs ($21 million) divided by the number of years in the analysis period (5 years). For this update, the Budget Needs Average was $4.2 million per year. After the Budget Needs was calculated, Budget Scenarios were run to determine the funding levels required to maintain and/or improve the current network PCI level and generate a list of street maintenance (work plan) for the next five (5) years. The software analyzed each pavement management segment and assigned each with a specific maintenance treatment (including do nothing) in order to maximize the improvement of the entire pavement network. Maintenance treatments were allocated to as many PMP segments as the annual budget would allow. The budget scenarios that were generated were calculated utilizing a 4% preventative-maintenance-split, 3% interest, and 3% inflation. The results of the budget needs analysis are summarized in Table 7 (below).

Table 7

Budget Needs Analysis				
Year	**PCI Treated**	**Preventative Maintenance**	**Rehab**	**Total Needs**
2020	78	$454,567	$10,223,902	$10,678,469
2021	81	$110,271	$2,935,335	$3,045,606
2022	79	$13,831	$624,048	$637,879
2023	83	$89	$3,223,301	$3,223,390
2024	87	$262,526	$3,002,471	$3,264,997
Totals	**N/A**	**$841,284**	**$20,009,057**	**$20,850,341**

Preventative Maintenance (PM) is a schedule of planned maintenance actions aimed at preventing the failure of streets. These actions are designed to detect, preclude, or mitigate degradation of a street segment. The goal of preventative maintenance is to minimize degradation and thus sustain or extend the useful life of the street. To reach that level of preventive maintenance for the entire network within the next 5 years (2020-2024), the Budget Needs analysis determined a total need of approximately $4.2 million per year. See Appendix II -A for the Needs - Projected PCI/Cost Summary.

The MTC PMP software recommended spending 4% of the budget toward preventive maintenance because it was the optimum level according to the specific conditions of the City's network. This meant that the program selected 4% of the annual budget towards crack seals and slurry seals while the remainder of the budget was spent towards overlays and reconstructions. These budgets do not account for stopgap maintenance repairs, such as emergency pothole repair.

BUDGET ANALYSIS/SCENARIOS

After the MTC PMP software analyzed the pavement system according to the specified annual budgets over the 5 year analysis period, trends were evident in the PCI and deferred maintenance backlog (the amount of necessary reconstruction and overlays not performed each year due to budget constraints). An increase in deferred maintenance showed that necessary rehabilitation is currently not being performed. The total deferred maintenance in 2019 was approximately $10.7 million.

> *Deferred maintenance consists of pavement maintenance that is needed but cannot be performed due to lack of funding. Shrinking budgets have forced many agencies to defer much needed street maintenance. Deferring maintenance not only increases the frequency of resident complaints about the network condition, but also increases the costs to repair the streets. It is cost effective to keep the pavement above a certain PCI because the cost to maintain a high PCI is less than the cost to bring a street segment with a low PCI to a high PCI.*

For this update, the following six annual budget scenarios were generated:

1. No Funds ($0)
2. Expected Annual Budget ($500K)*
3. Maintain PCI of 54 ($850K)
4. Expected Annual Budget ($1M)*
5. Five Point Increase in PCI ($1.3M)
6. Budget Needs Average ($4.2M)

**The budget for the Expected Annual Budget scenarios were focused primarily on the streets on the west side of Highway 101.*

The following terms are defined for each of the budget scenarios:

"Year" – Year of the program

"**Budget**" – The projected budget for the given year

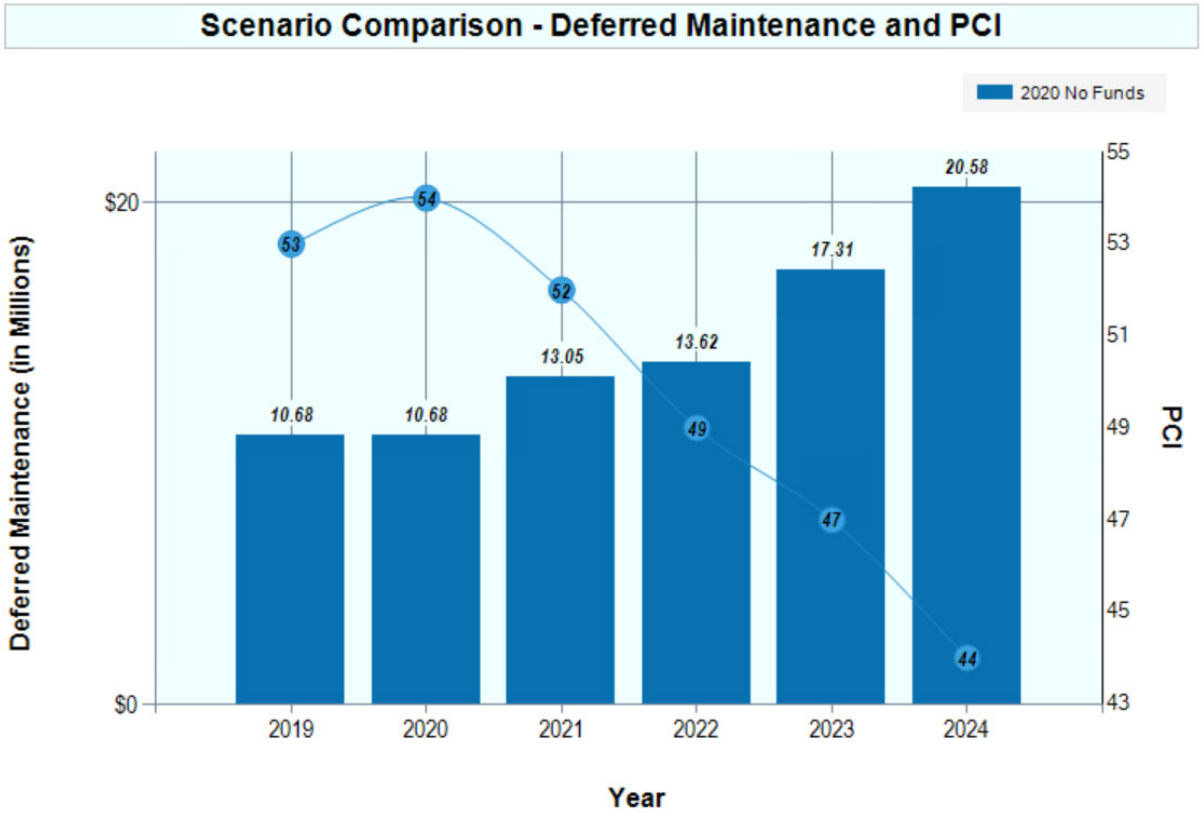
"**Work Program**" – The amount of money programmed to be expended; not to exceed the budget based on the pavement maintenance needs as prioritized.

"**Deferred**" or "**Deferred Maintenance**" – The amount of money projected for pavement maintenance that cannot be performed due to the lack of funding.

"**Average Condition**" – The projected average pavement Condition Index after completion of the Work Program.

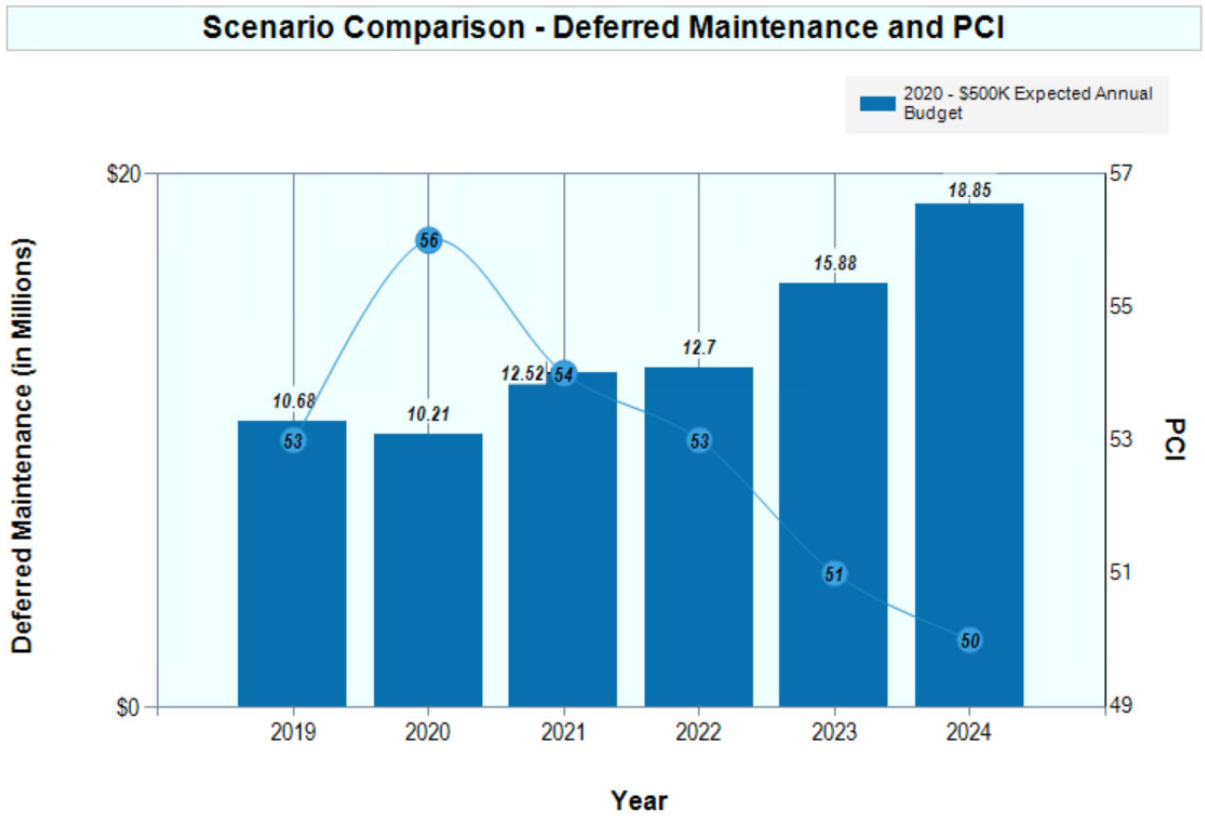
No Funds ($0) - If the City spent no money over the next 5 years on pavement maintenance needs, the amount of deferred maintenance (or "backlog") would increase from approximately $10.7 million to approximately $20.6 million and the average pavement condition index would decrease from 54 to 44.

No Funds ($0)				
Year	**Budget**	**Work Program**	**Deferred Maintenance**	**Average Network PCI**
2019 (Prior to Treatment)			$10,678,438	54
2020	$0	$0	$10,678,438	54
2021	$0	$0	$13,048,862	52
2022	$0	$0	$13,620,536	49
2023	$0	$0	$17,305,839	47
2024	$0	$0	$20,583,330	44
5-Year Total	$0	$0		
Annual Avg.		$0		



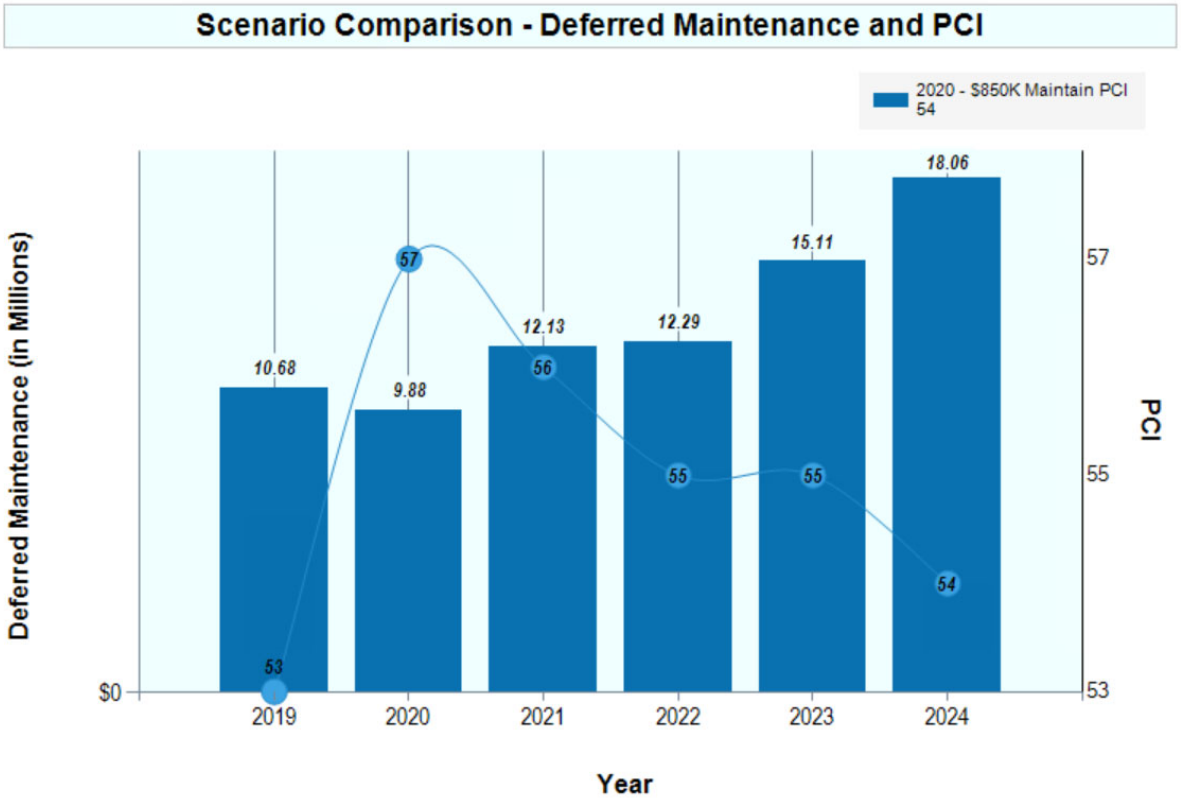
Expected Annual Budget ($500K) – The City has an expected annual maintenance budget over the next 5 years of $500,000 and wanted to utilize the budget on the streets to the westside of Highway 101. Based on this analysis, the PCI would decrease from 54 to 50 and the deferred maintenance would increase from about $10.7 million to $18.8 million at the end of the five year analysis period.

Expected Annual Budget ($500K)				
Year	**Budget**	**Work Program**	**Deferred Maintenance**	**Average Network PCI**
2019 (Prior to Treatment)			$10,678,438	54
2020	$500,000	$466,412	$10,212,026	56
2021	$500,000	$486,682	$12,518,508	54
2022	$500,000	$493,349	$12,697,156	53
2023	$500,000	$473,662	$15,880,590	51
2024	$500,000	$473,754	$18,848,095	50
5-Year Total	$2,500,000	$2,393,859		
Annual Avg.		$478,772		



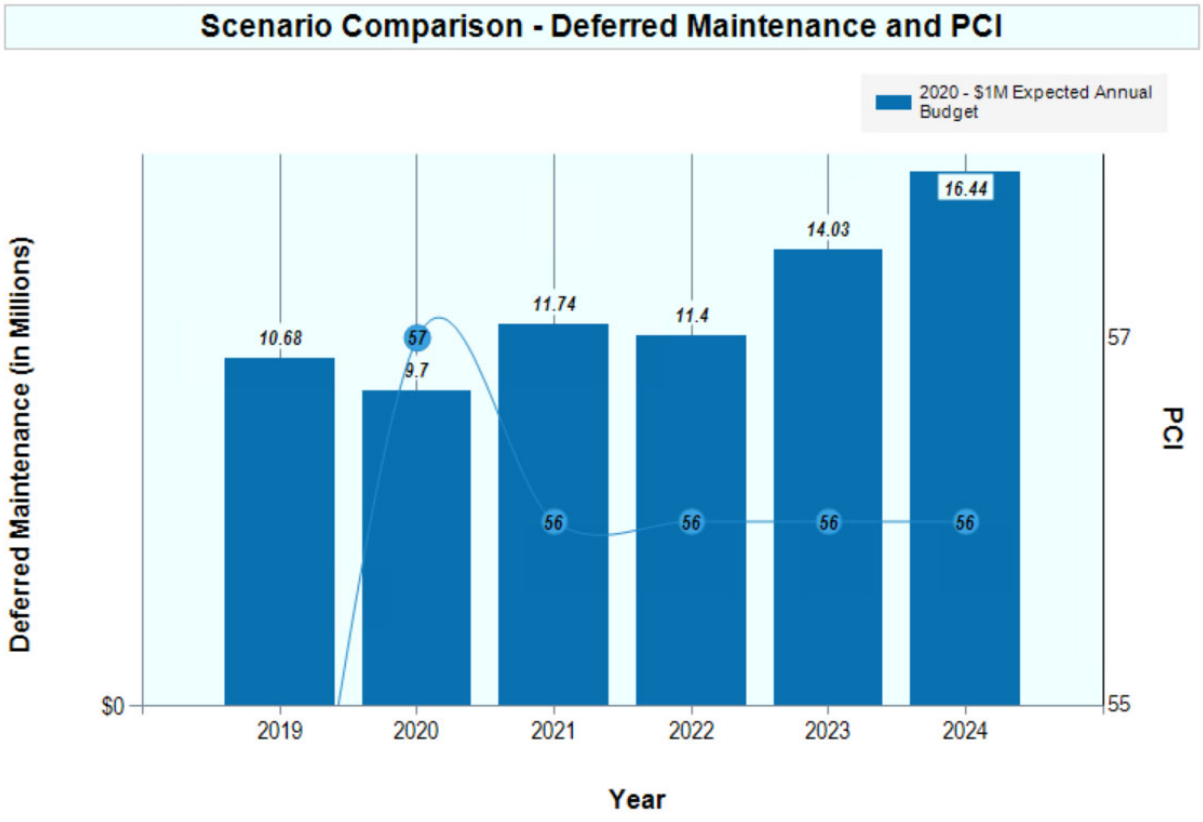
Maintain PCI of 54 ($850K) – In order to maintain the network PCI of 54 over the next 5 years, approximately $850 thousand per year would need to be budgeted. Using this budget, the deferred maintenance would increase from approximately $10.7 million in 2020 to approximately $18 million in 2024.

Maintain PCI of 54 ($850K)				
Year	**Budget**	**Work Program**	**Deferred Maintenance**	**Average Network PCI**
2019 (Prior to Treatment)			$10,678,438	54
2020	$850,000	$802,975	$9,875,464	57
2021	$850,000	$842,907	$12,130,636	56
2022	$850,000	$844,971	$12,287,466	55
2023	$850,000	$825,450	$15,106,820	55
2024	$850,000	$825,633	$18,055,142	54
5-Year Total	$4,250,000	$4,141,936		
Annual Avg.		$828,387		



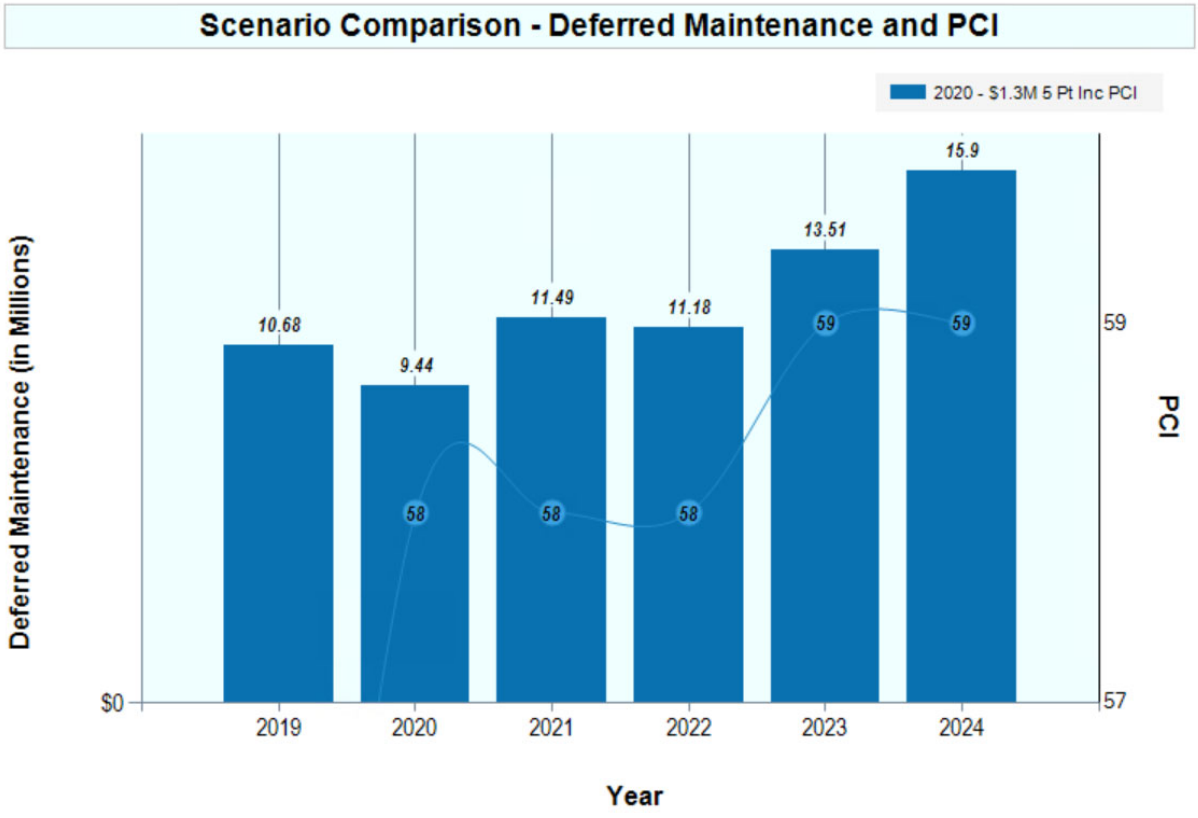
Expected Annual Budget ($1M) – The City has an expected annual maintenance budget over the next 5 years of $1 million and wanted to utilize the budget on the streets to the westside of Highway 101. Based on this analysis, the PCI would increase from 54 to 56 and the deferred maintenance would increase from about $10.7 million to $16.4 million at the end of the five year analysis period.

Expected Annual Budget ($1M)				
Year	**Budget**	**Work Program**	**Deferred Maintenance**	**Average Network PCI**
2019 (Prior to Treatment)			$10,678,438	54
2020	$1,000,000	$978,922	$9,699,516	57
2021	$1,000,000	$994,704	$11,744,381	56
2022	$1,000,000	$997,067	$11,396,692	56
2023	$1,000,000	$984,040	$14,030,733	56
2024	$1,000,000	$980,030	$16,436,584	56
5-Year Total	$5,000,000	$4,934,763		
Annual Avg.		$986,953		



Five Point Increase in PCI ($1.3M) – In order for the City to increase its network PCI by 5 points over the next 5 years, approximately $1.3 million per year would need to be budgeted. Using this budget the average amount of deferred maintenance would increase from approximately $10.1 million to approximately $15.9 million in 2024.

Five Point Increase in PCI ($1.3M)				
Year	**Budget**	**Work Program**	**Deferred Maintenance**	**Average Network PCI**
2019 (Prior to Treatment)			$10,678,438	54
2020	$1,300,000	$1,240,373	$9,438,066	58
2021	$1,300,000	$1,275,234	$11,491,574	58
2022	$1,300,000	$1,296,947	$11,177,262	58
2023	$1,300,000	$1,277,589	$13,511,177	59
2024	$1,300,000	$1,277,785	$15,898,811	59
5-Year Total	$6,500,000	$6,367,928		
Annual Avg.		$1,273,586		



Budget Needs Average ($4.2M) – In order to get the network to an optimal level in which only preventative maintenance is needed, approximately $4.2 million would need to be budgeted each year. This would increase the network PCI from a 54 to an 86 and decrease the deferred maintenance to approximately $700 thousand.

Budget Needs Average ($4.2M)				
Year	**Budget**	**Work Program**	**Deferred Maintenance**	**Average Network PCI**
2019 (Prior to Treatment)			$10,678,438	54
2020	$4,200,000	$4,142,741	$6,535,706	64
2021	$4,200,000	$4,179,154	$5,598,238	70
2022	$4,200,000	$4,194,079	$2,210,004	76
2023	$4,200,000	$3,999,208	$1,494,391	81
2024	$4,200,000	$4,100,037	$700,644	86
5-Year Total	$21,000,000	$20,615,219		
Annual Avg.		$4,123,044		

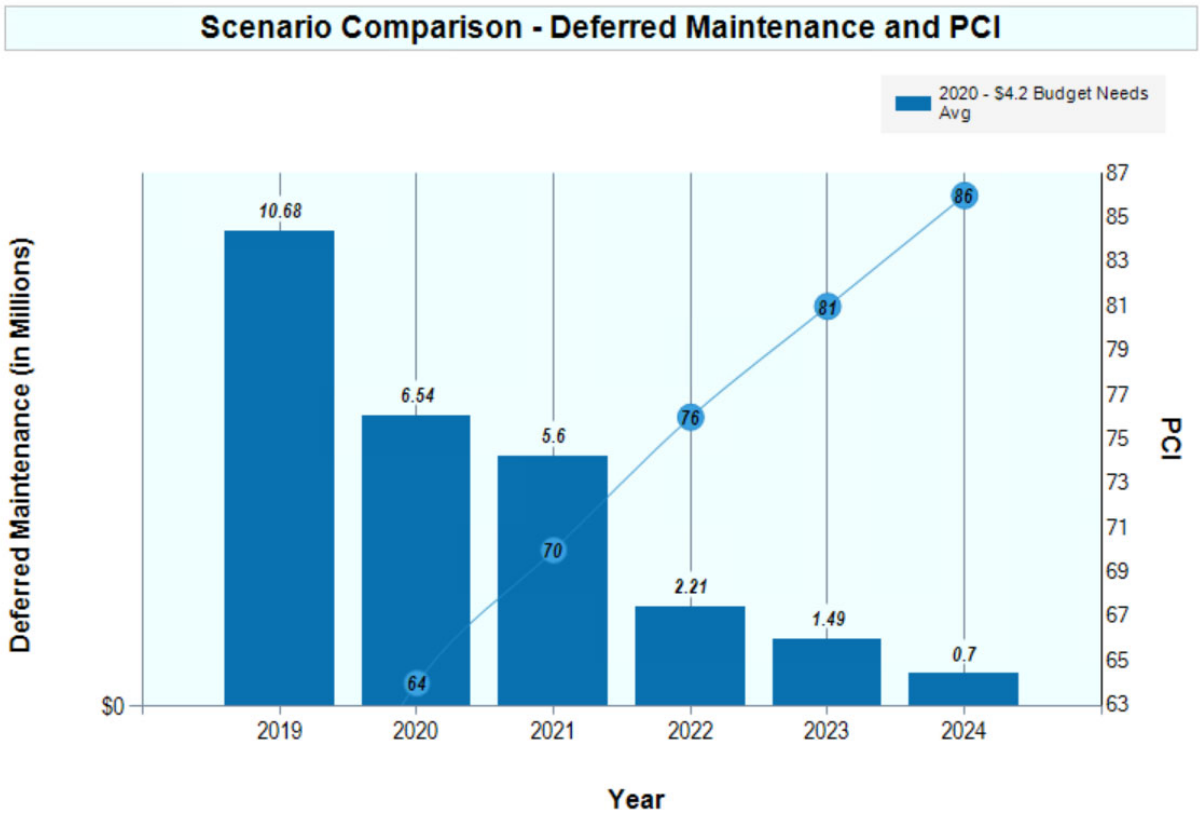


Figure 5 and 6 (below) show the impact each of the six budgets have on the PCI and deferred maintenance backlog. These charts can also be found in Appendix II-B & C. The Cost Summary Reports, which provide information on pavement funding distribution by pavement condition and the Network Condition Summary Reports, which project pavement condition trends, can be found in Appendix II-D.

Figure 5

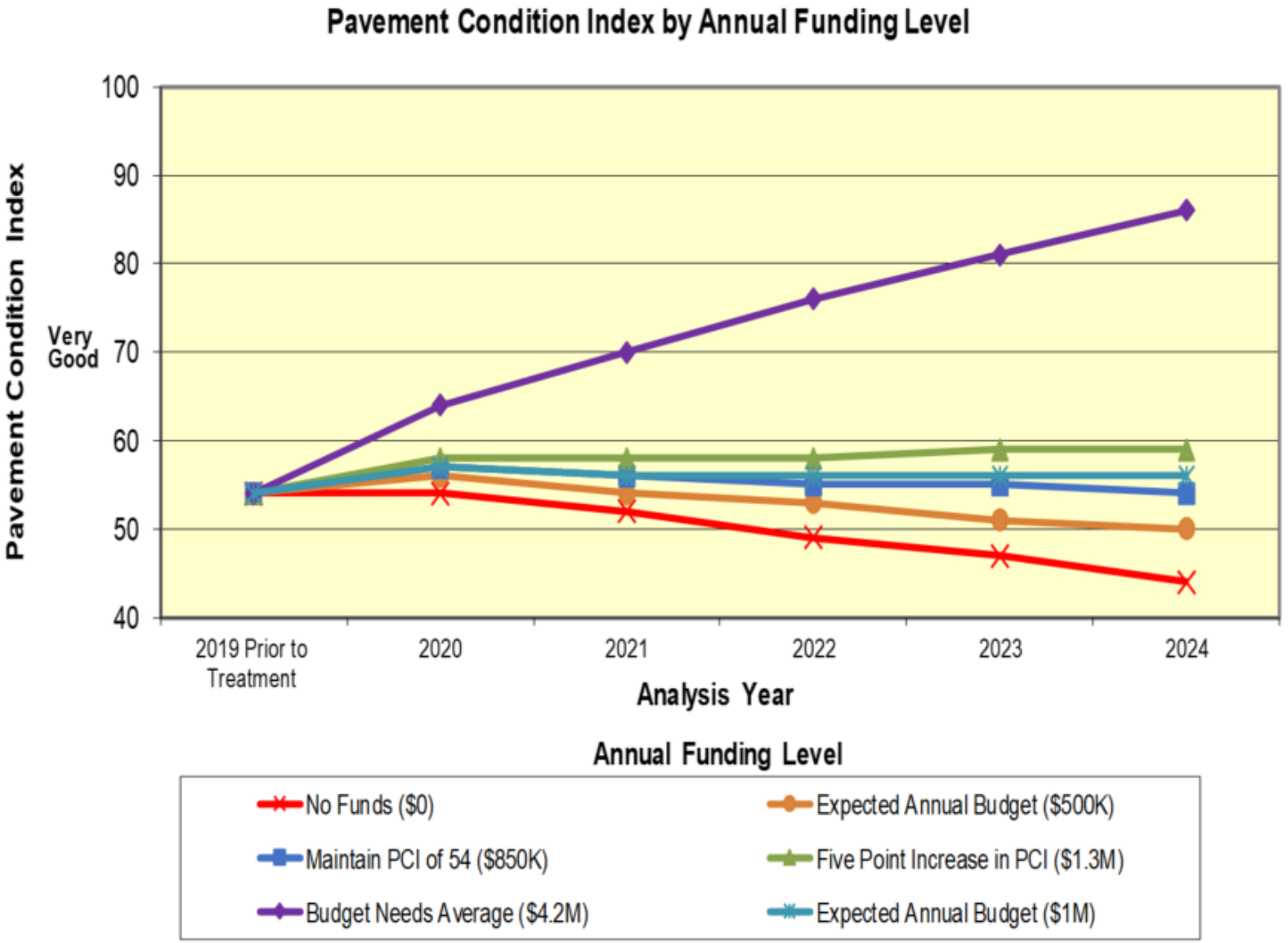

Pavement Condition Index by Annual Funding Level
Pavement Condition Index
100
90
80
Very Good
70
60
50
40
2019 Prior to Treatment
2020
2021
2022
2023
2024
Analysis Year
Annual Funding Level
No Funds ($0)
Expected Annual Budget ($500K)
Maintain PCI of 54 ($850K)
Five Point Increase in PCI ($1.3M)
Budget Needs Average ($4.2M)
Expected Annual Budget ($1M)

Figure 6

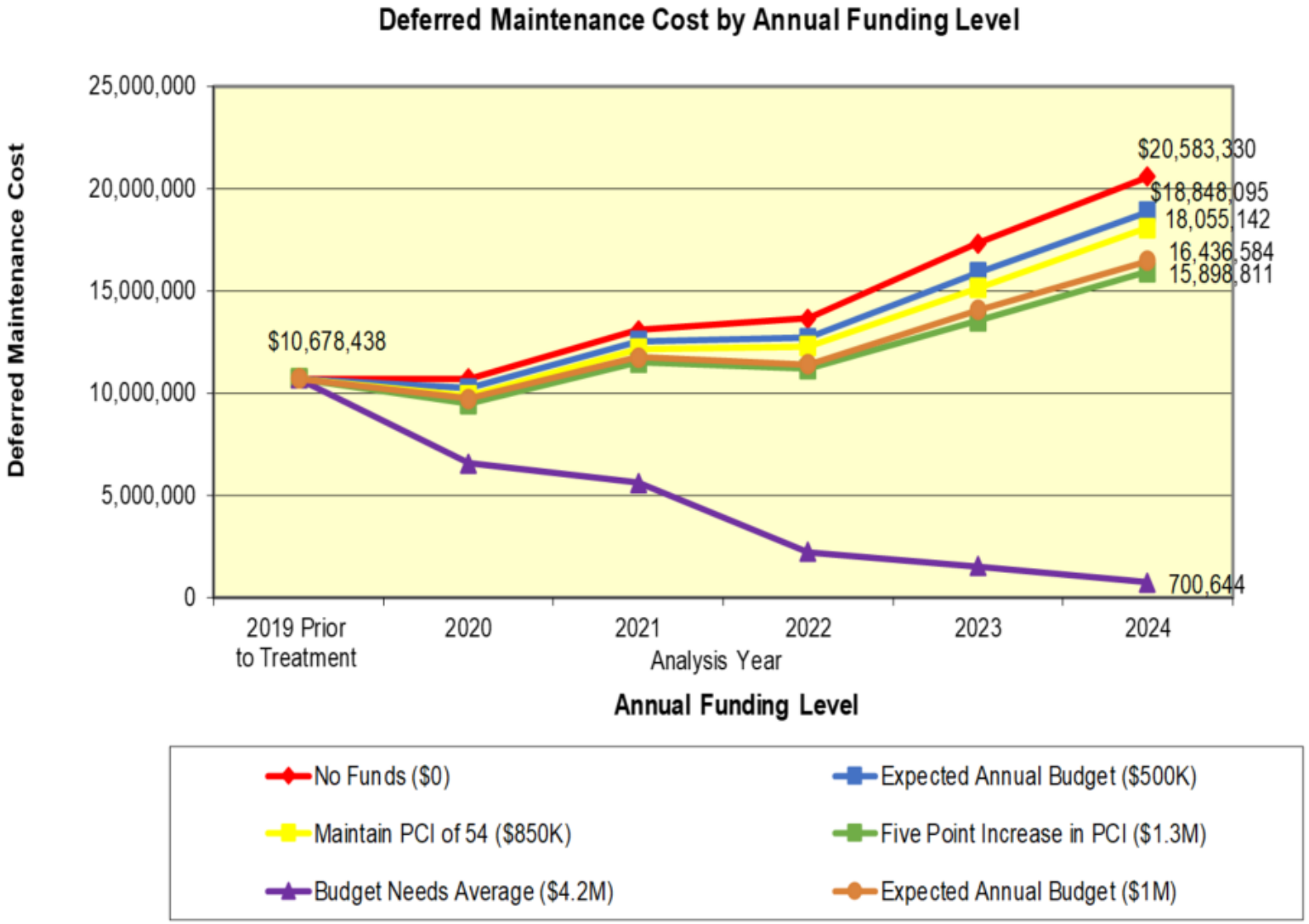

Deferred Maintenance Cost by Annual Funding Level
Deferred Maintenance Cost
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
$20,583,330
$18,848,095
18,055,142
16,436,584
15,898,811
$10,678,438
700,644
2019 Prior to Treatment
2020
2021
2022
2023
2024
Analysis Year
Annual Funding Level
No Funds ($0)
Expected Annual Budget ($500K)
Maintain PCI of 54 ($850K)
Five Point Increase in PCI ($1.3M)
Budget Needs Average ($4.2M)
Expected Annual Budget ($1M)

Figure 7

PCI & Deferred Maintainace Chart

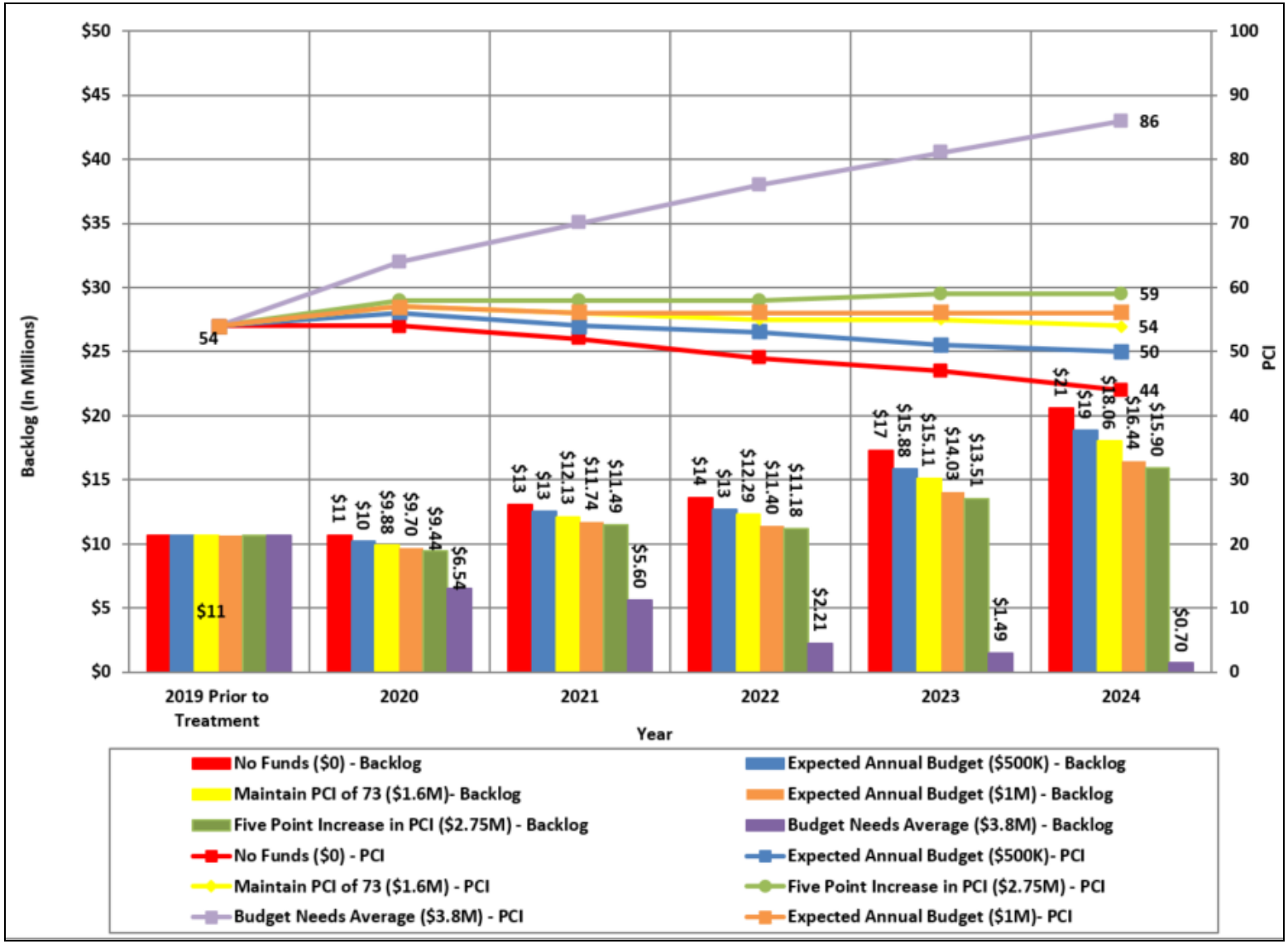
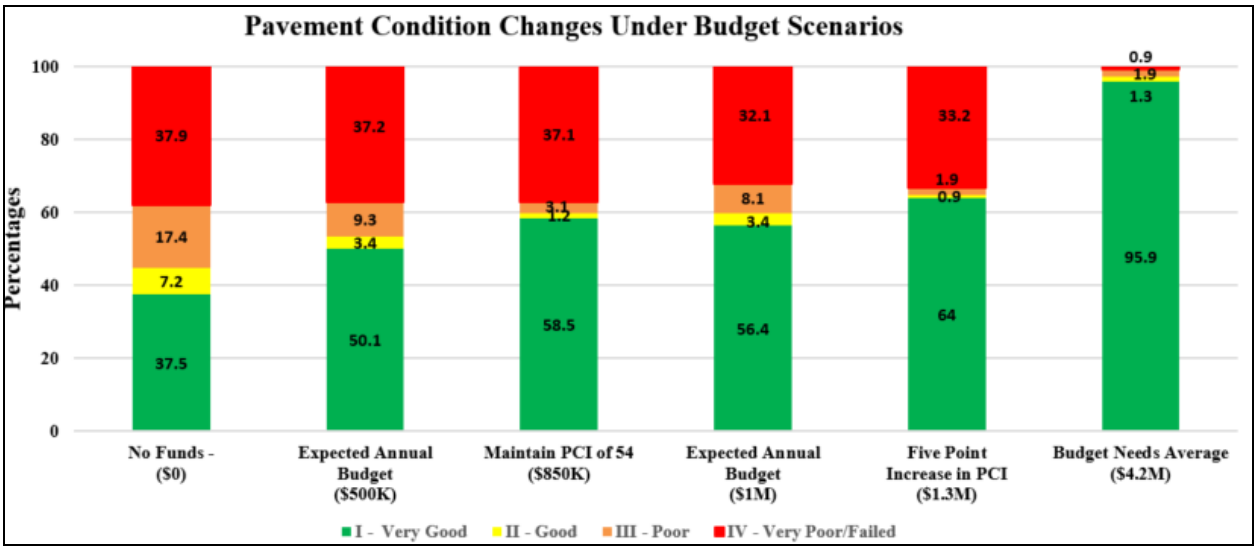


Figure 7 (above) shows the impacts of the City's network PCI and backlog for the 6 generated scenarios.

Figure 8 (below) contrasts the pavement changes under the analyzed budget scenarios. The percentage of streets in the "*Poor"* and "*Very Poor"* condition categories (shown in red and orange) should be closely monitored as these represent the greatest liability to the City in regards to expense and serviceability.

Figure 8



RECOMMENDATIONS

Harris & Associates recommends that the Agency spend an annual maintenance budget of $1 million. Spending this budget increases the PCI from a 54 to a 56 after 5 years and at the same time slows the growth of the deferred maintenance backlog. This budget can be utilitized on the priority streets that are on the westside of Highway 101.

The City should utilize cost effective treatments where appropriate, such as slurry/micro seals and crack seals and continue to evaluate emerging cost effective techniques such as thin-bonded wearing courses and rubberized overlays. Any maintenance and rehabilitation treatments that are performed should always be input into the MTC PMP software (Harris can do this at the agencies request).

Harris & Associates commends the City for its active participation in the pavement management program and recommends that the City continue to maintain its pavement management program in order to be eligible for federal grants and funding. Harris recommends that all arterial and collector streets be re-surveyed every two years and all residential streets every four years. The costs for the distress surveys should be included in the annual pavement management budget.

The City should also perform annual database updates that include:

- Reviewing and updating the decision tree (maintenance activities and unit costs)
- Updating the street network when streets are annexed or newly constructed
- Continuing to input maintenance and rehabilitation activities

The City should update its Finance Department with any changes or adjustments that have been made to the street network and subsystems (streets assets and pavement subsystems that have been acquired through annexation, deletion, etc.) for GASB-34 compliance.

The City should continue utilizing the StreetSaver Online GIS module or in-house GIS to assist in managing the streets within the City limits. GIS technology is very useful to spatially view tabular reports and data that are derived from the pavement management system including: scenarios, identification of maintenance and rehabilitation treatments, planning, maintenance and rehabilitation history, pavement condition index, etc.

The City of Gonzales's street network is currently in the range of MTC's "Good" condition category. To help maintain and or improve the current condition, certain projects have been recommended within the context of this report. Annual work program reports for the expected annual budgets can be found in Appendix II-E & F. These reports provide detailed listings of suggested maintenance projects for the City of Gonzales based on the overall PMP suggested needs funding and base annual budgets. The report also provides a first step in identifying segments to be treated under City of Gonzales's annual work programs.

LIMITS OF STUDY

It must be recognized that this report is limited to the existing pavement repairs. It does not include existing deficiencies for right-of-way concrete sidewalks, curb & gutter, drainage, trees, bus pads and non-structural improvements such as decorative crosswalks, medians, lighting and street furniture. Costs for these right-of-way repairs and improvements throughout the City would easily exceed the deferred maintenance costs (the cost of crucial maintenance work not performed in a specific year) identified in this report and can be identified and estimated separately in future reports.

The following recommendations generated by the Pavement Management Program are <u>for planning purposes only.</u> The resulting general recommendations are not intended to replace sound engineering judgment, which should dictate specific needs for an individual project. Draft project recommendations should be weighed against the actual approach the City wishes to utilize in scheduling the workloads for contracting purposes. Once a street segment is identified for repair by the program, a closer site visit and detailed project repair scope is required.

Maintenance and rehabilitation projects should be based on a combination of the system's recommendations weighed against the City's preferences, budget constraints, and other contributing factors. In addition, further refinements may be warranted from an engineering staff review of the pavement condition. For example, a particular pavement section may have been selected for a treatment in a given year but that work may need be postponed in order to coordinate activities with other planned work; such as utility replacement work.

MAINTENANCE STRATEGY DEVELOPMENT

Based on the results of the condition survey and input from the City, pavement maintenance/rehabilitation strategies were developed. A standard agreement at the outset was to identify the City's maintenance work program for the next five (5) years (2020-2024), showing resource alternatives that affect the maintenance backlog and increase the overall condition of the pavement network.

Strategies have been recommended to try to come up with the most cost-effective work programs. A listing of the maintenance activities utilized in the strategy development can be found in Appendix

III-C. Each activity represents the type of work that has been recommended for the long-term maintenance recommendations of the City's streets.

ANNUAL BUDGET PROJECTIONS

The budgeting process was approached with the following in mind: generate a work program for the next five (5) years based upon actual street pavement conditions and determine the funding levels required to maintain and/or improve the current level (PCI) of overall condition.

Based on current and projected pavement maintenance needs, annual work plan program alternatives have been prepared. A detailed work plan program for the City's expected annual can be found in Appendix II-E & F.

The following section provides a description of the methodology and rationale utilized in determining the recommended actions identified in this report.

MAINTENANCE STRATEGY ASSIGNMENTS

The PCI is used by the program to schedule maintenance activities for each pavement segment. The program recommends a specific maintenance activity based on the PCI and budget constraints. The City has selected a series of maintenance activities to apply to the pavement network. The unit costs for each maintenance activity account for various construction costs including labor materials, design, for construction inspection and for contingency. Definitions of each maintenance activity are defined as below:

1. **Crack Seals - A surface treatment generally utilized to prevent entry of water or other non compressible substances into the pavement**.
Crack seals are used to fill individual pavement cracks to prevent entry of water or other non-compressible substances such as sand, dirt, rocks or weeds. Crack sealant is typically used on early stage longitudinal cracks, transverse cracks and reflection cracks. It is placed over the existing pavement surface and is typically applied at three (3) year intervals

2. **Slurry Seals - A surface treatment generally utilized to provide new wearing surfaces and prevent water penetration of the pavement surface, thereby extending pavement life.**
Slurry seals are surface treatments applied to pavements with minimal surface distress to provide new wearing surfaces and extend pavement life. A slurry seal generally consists of a mixture of conventional or latex-modified emulsified asphalt, well-graded fine aggregate, mineral filler and water. It is placed over the existing pavement surface and is typically applied at eight (8) year intervals.

3. **Overlays - The application of treatments that are more cost-effective alternatives to reconstruction of the entire pavement surfaces, but provide the required structural support.**
An asphalt layer is placed over the existing pavement surface. Cold planing is typically performed prior to the overlay to provide a level surface for the overlay, reduce excessive crowning, and assure alignment with existing gutter line. This typically includes base repair and crack sealing prior to the application of an overlay. This treatment provides a new wearing surface and increased structural strength to the pavement section. An overlay is typically

designed for a ten to fifteen (10-15) year life.

4. <u>Full Depth Reclamation (FDR)</u> – The process of rebuilding worn out asphalt pavements by recycling the existing roadway.
The old asphalt and base materials are pulverized, mixed with cement and water, and compacted to produce a strong, durable base for either an asphalt or concrete surface. Full-depth reclamation uses the old asphalt and base material for the new road. There's no need to haul in aggregate or haul out old material for disposal. Truck traffic is reduced, and there is little or no waste. The road performance is improved through better stabilization, building a stronger, low-maintenance road that will last for many years. He typical cost for FDR is $75 per square yard.

MAINTENANCE DECISIONS

Once the City has selected the appropriate maintenance activities and calculated unit costs, the "Maintenance Decision Tree" (a StreetSaver application that lists all the treatments and corresponding unit costs; found in Appendix III-C) was updated. This decision tree assigns appropriate treatments by the specific needs of the streets.

The decision tree lists costs associated with treatments on specific types of pavement according to the jurisdiction. StreetSaver® uses a decision tree to model the decision-making process that agencies follow to select a maintenance or rehabilitation strategy. The decision tree contains "branches" for each functional classification, surface type, and condition category. Jurisdictions can outline their maintenance and rehabilitation strategy, choosing a treatment for each branch.

After the decision tree was established, selected budgets and work assignments were generated for each work program on an annual basis. Using the MTC recommended pavement deterioration curve for each pavement surface type and functional class, the program calculated the PCI based on the condition survey; then depending on what category the PCI was in, a preventative maintenance or rehab treatment was selected based on the weighted effectiveness and available budget. Both current and future work requirements for each pavement segment within the City were then determined.

PAVEMENT MANAGEMENT PROGRAM REPORTS

This report contains a comprehensive assemblage of pavement management reports ranging from summary reports to annual maintenance and rehabilitation scheduled reports. These reports represent reasonable projections of pavement maintenance needs and performance based on the visual condition assessment, unit cost estimates, and pavement deterioration models.

It is important to note that pavement segment dimensions and surface area, along with the recommended treatment and repair costs presented in this report, are for initial planning purposes only and will be subject to project level evaluation, design, and cost estimation. This is noteworthy due to the "implied" accuracy of reporting length and width to the nearest foot, surface area to the nearest square foot, and treatment and repair unit costs and project estimates to the nearest penny and dollar, respectively.

SYSTEM MAINTENANCE

Harris & Associates recommends that the City continue developing annual maintenance plans while also working towards reducing the present backlog of rehabilitation projects.

In order to ensure that report outputs are accurate and credible, it is essential that the integrity of all data files be maintained. Prior to generating scenarios, all necessary updates to unit cost information and treatment data should be complete. In addition, the entire pavement network will have to be re-surveyed at regular intervals, as noted earlier in this report. This not only allows future work to be scheduled based on the most current condition data available, but it also provides City personnel with a means to more accurately monitor rates of pavement deterioration.

APPENDIX I

PAVEMENT CONDITION INDEX (PCI) REPORT / REMAINING SERVICE LIFE (RSL) REPORT

Section PCI Listing Report

This report lists the Pavement Condition Index (PCI) for each pavement management section.

Street Name:	Street Name
Street ID:	Street Identifier - 6 characters
Section ID:	Section Identifier – 6 characters
From:	Beginning of Section
To:	End of Section
Length:	Length of Section (LF)
Width:	Width of Section (LF)
Functional Class:	Type of Functional Class for Section
Surface Type:	Type of surface for Section
PCI:	Pavement Condition Index (PCI) number at time of calculation
PCI Date:	Date of Inspection or PCI calculation

Section PCI/RSL Listing

Printed: 05/14/2020

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
10THST	100	10TH ST	E/S ALTA ST	E/S ELKO ST	1,660	34	56,440	R - Residential/Local	A - AC	83	33.26
1STST	100	1ST ST	E/S ALTA ST	W/S BELDEN ST	315	47	14,805	R - Residential/Local	A - AC	4	0
1STST	200	1ST ST	E/S BELDEN ST	E/S S CENTER ST	362	47	17,014	R - Residential/Local	A - AC	10	0
1STST	300	1ST ST	E/S CENTER ST	E/S ELKO ST	496	47	23,312	R - Residential/Local	A - AC	16	0
2NDST	100	2ND ST	E/S ALTA ST	CUL-DE-SAC	1,012	47	47,564	R - Residential/Local	A - AC	30	1.64
3RDST	100	3RD ST	E/S ALTA ST	E/S BELDEN ST	372	47	17,484	R - Residential/Local	A - AC	4	0
3RDST	200	3RD ST	E/S BELDEN ST	E/S CENTER ST	372	47	17,484	R - Residential/Local	A - AC	5	0
3RDST	300	3RD ST	E/S CENTER ST	W/S DAY ST	325	47	15,275	R - Residential/Local	A - AC	10	0
4THST	100	4TH ST	E/S ALTA ST	E/S BELDEN ST	310	47	14,570	R - Residential/Local	A - AC	58	12.58
4THST	200	4TH ST	E/S BELDEN ST	W/S CENTER ST	310	47	14,570	R - Residential/Local	A - AC	72	22.44
4THST	300	4TH ST	E/S CENTER ST	160' W/O ELKO ST	528	47	24,816	R - Residential/Local	A - AC	10	0
4THST	400	4TH ST	160' W/O ELKO ST	W/S ELKO ST	160	40	6,400	R - Residential/Local	A - AC	67	18.15
5THST	100	5TH ST	E/S ALTA ST	E/S DAY ST	1,122	50	56,100	C - Collector	A - AC	57	7.32
5THST	200	5TH ST	E/S DAY ST	W/S GABILAN CT	1,190	46	54,740	C - Collector	A - AC	19	0
5THST	300	5TH ST	W/S GABILAN CT	101 HWY	721	37	26,677	C - Collector	A - AC	16	0
5THST	400	5TH ST	HWY 101	FANOE RD	1,321	64	84,544	C - Collector	A - AC	58	7.61
5THST	500	5TH ST	FANOE RD	CITY LIMITS	161	24	3,864	C - Collector	A - AC	39	2.77
6THST	100	6TH ST	E/S ALTA ST	CUL-DE-SAC	1,430	47	67,210	R - Residential/Local	A - AC	51	9.96
7THST	100	7TH ST	E/S ALTA ST	W/S ELKO ST	1,450	47	68,150	R - Residential/Local	A - AC	34	3.05
7THST	200	7TH ST	W/S ELKO ST	W/S CIELO VISTA DR	683	37	25,271	R - Residential/Local	A - AC	19	0
8THST	100	8TH ST	E/S ALTA ST	W/S ELKO ST	1,450	47	68,150	R - Residential/Local	A - AC	38	4.54
8THST	200	8TH ST	E/S ELKO ST	CUL-DE-SAC	640	33	21,120	R - Residential/Local	A - AC	48	8.63
9THST	100	9TH ST	E/S ALTA ST	W/S ELKO ST	1,450	47	68,150	R - Residential/Local	A - AC	30	1.64
AST	100	A ST	E/S S ALTA ST	W/S S BELDEN ST	425	47	19,975	R - Residential/Local	A - AC	20	0
AST	200	A ST	E/S S BELDEN ST	W/S S CENTER ST	324	47	15,228	R - Residential/Local	A - AC	40	5.32
ALTAST	100	ALTA ST	CITY LIMITS	N/S 8TH ST	890	52	46,280	A - Arterial	O - AC/AC	89	27.67
ALTAST	200	ALTA ST	N/S 8TH ST	N/S 3RD ST	1,880	42	78,960	A - Arterial	O - AC/AC	89	27.67
ALTAST	300	ALTA ST	N/S 3RD ST	N/S 2ND ST	372	42	15,624	A - Arterial	O - AC/AC	89	27.67
ALTAST	400	ALTA ST	N/S 2ND ST	N/S GONZALES RIVER RD	582	42	24,444	A - Arterial	O - AC/AC	89	27.67
ALTAST	500	ALTA ST	N/S GONZALES RIVER RED	N/S C ST	920	72	66,240	A - Arterial	O - AC/AC	89	27.67
ALTAST	600	ALTA ST	N/S C ST	1348' S/O C ST	1,348	43	57,964	A - Arterial	O - AC/AC	89	27.67
ALTAST	700	ALTA ST	1348' S/O C ST	CITY LIMITS	4,263	47	200,361	A - Arterial	O - AC/AC	89	27.67

Section PCI/RSL Listing

Printed: 05/14/2020

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
ALTASTM	100	ALTA ST (MINOR)	S/S 10TH ST	N/S 8TH ST	700	37	25,900	A - Arterial	A - AC	16	0
ALTASTM	200	ALTA ST (MINOR)	N/S 8TH ST	N/S 5TH ST	1,122	58	65,076	A - Arterial	A - AC	34	2.27
ALTASTM	300	ALTA ST (MINOR)	N/S 5TH ST	N/S 4TH ST	363	47	17,061	A - Arterial	A - AC	17	0
ALTASTM	400	ALTA ST (MINOR)	S/S 4TH ST	N/S 3RD ST	318	47	14,946	A - Arterial	A - AC	20	0
ALTASTM	500	ALTA ST (MINOR)	N/S 3RD ST	N/S 2ND ST	378	60	22,680	A - Arterial	A - AC	30	1.21
ALTASTM	600	ALTA ST (MINOR)	N/S 2ND ST	N/S 1ST ST	378	60	22,680	A - Arterial	A - AC	38	3.39
AMORCT	100	AMORE CT	S/S CIPRIANI ST	SOUTH END	241	33	7,953	R - Residential/Local	A - AC	75	24.79
ANGUDR	100	ANGUS DR	S/S HOTEIN WAY	N/S MUSTANG WAY	506	36	18,216	R - Residential/Local	A - AC	50	9.64
ANGUDR	200	ANGUS DR	N/S MUSTANG WAY	N/S HEREFORD DR	1,089	36	39,204	R - Residential/Local	A - AC	85	29.26
APPAWY	100	APPALOOSA WAY	E/S LONGHORN DR	W/S AYRSHIRE WAY	256	36	9,216	R - Residential/Local	A - AC	88	31.03
AYRHWY	100	AYRSHIRE WAY	E/S LONGHORN DR	CUL-DE-SAC	927	36	33,372	R - Residential/Local	A - AC	91	32.56
BST	100	B ST	E/S S ALTA ST	W/S S BELDEN ST	465	47	21,855	R - Residential/Local	A - AC	27	0.62
BST	200	B ST	E/S S BELDEN ST	END	150	45	6,750	R - Residential/Local	A - AC	43	6.52
BARBWY	100	BARBERA WAY	W/S FANOE RD	E/S CHARDONAY DR	433	36	15,588	R - Residential/Local	A - AC	29	1.29
BELDST	100	BELDEN ST	S/S 10TH ST	N/S 9TH ST	325	47	15,275	R - Residential/Local	A - AC	30	1.64
BELDST	110	BELDEN ST	S/S 9TH ST	N/S 8TH ST	325	47	15,275	R - Residential/Local	A - AC	26	0.29
BELDST	120	BELDEN ST	S/S 8TH ST	N/S 7TH ST	325	47	15,275	R - Residential/Local	A - AC	35	3.42
BELDST	130	BELDEN ST	S/S 7TH ST	N/S 6TH ST	325	47	15,275	R - Residential/Local	A - AC	83	28.01
BELDST	140	BELDEN ST	S/S 6TH ST	N/S 5TH ST	325	47	15,275	R - Residential/Local	A - AC	74	22.31
BELDST	150	BELDEN ST	S/S 5TH ST	N/S 4TH ST	315	47	14,805	R - Residential/Local	A - AC	77	24.19
BELDST	160	BELDEN ST	S/S 4TH ST	N/S 3RD ST	372	47	17,484	R - Residential/Local	A - AC	56	12.32
BELDST	170	BELDEN ST	S/S 3RD ST	N/S 2ND ST	325	47	15,275	R - Residential/Local	A - AC	15	0
BELDST	180	BELDEN ST	S/S 2ND ST	S/S 1ST ST	372	47	17,484	R - Residential/Local	A - AC	11	0
BELDST	190	BELDEN ST	S/S 1ST ST	N/S C ST	1,074	47	50,478	R - Residential/Local	A - AC	12	0
BELDST	200	BELDEN ST	S/S C ST	END	534	37	19,758	R - Residential/Local	A - AC	7	0
BROCDR	100	BROCKMANN DR	E/S ELKO ST	S/S ELLIOTT AVE	1,042	31	32,302	R - Residential/Local	A - AC	41	5.71
BURGCT	100	BURGUNDY CT	E/S BURGUNDY WAY	CUL-DE-SAC	350	36	12,600	R - Residential/Local	A - AC	76	26.37
BURGWY	100	BURGUNDY WAY	W/S CHABLIS WAY	N/S CHIANTI WAY	1,277	36	45,972	R - Residential/Local	A - AC	80	31.05
BURGWY	200	BURGUNDY WAY	N/S CHIANTI WAY	W/S FANOE RD	1,960	36	70,560	R - Residential/Local	A - AC	82	27.37
CST	100	C ST	E/S S ALTA ST	W/S BELDEN ST	482	48	23,136	R - Residential/Local	A - AC	8	0
CST	200	C ST	W/S BELDEN ST	W/S CENTENNIAL DR	611	36	21,996	R - Residential/Local	A - AC	40	5.32
CABEDR	100	CABERNET DR	E/S ZINFADEL DR	E/S ZINFANDEL DR	1,963	36	70,668	R - Residential/Local	A - AC	47	8.38
CABEWY	100	CABERNET WAY	W/S FANOE RD	E/S CABERNET DR	113	36	4,068	R - Residential/Local	A - AC	87	30.46

Section PCI/RSL Listing

Printed: 05/14/2020

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
CENTDR	100	CENTENNIAL DR	N/S C ST	S/S FAIRVIEW DR	1,080	36	38,880	R - Residential/Local	A - AC	15	0
CENTST	100	CENTER ST	S/S 10TH ST	N/S 9TH ST	325	47	15,275	R - Residential/Local	A - AC	35	3.41
CENTST	110	CENTER ST	S/S 9TH ST	N/S 8TH ST	325	47	15,275	R - Residential/Local	A - AC	30	1.62
CENTST	120	CENTER ST	S/S 8TH ST	N/S 7TH ST	325	47	15,275	R - Residential/Local	A - AC	30	1.64
CENTST	130	CENTER ST	S/S 7TH ST	N/S 6TH ST	325	47	15,275	R - Residential/Local	A - AC	73	21.69
CENTST	140	CENTER ST	S/S 6TH ST	N/S 5TH ST	325	42	13,650	R - Residential/Local	A - AC	73	21.69
CENTST	150	CENTER ST	S/S 5TH ST	N/S 4TH ST	325	47	15,275	R - Residential/Local	A - AC	42	6.11
CENTST	160	CENTER ST	S/S 4TH ST	N/S 3RD ST	325	47	15,275	R - Residential/Local	A - AC	57	12.82
CENTST	170	CENTER ST	S/S 3RD ST	N/S 2ND ST	325	47	15,275	R - Residential/Local	A - AC	11	0
CENTST	180	CENTER ST	S/S 2ND ST	N/S 1ST ST	325	47	15,275	R - Residential/Local	A - AC	19	0
CENTST	190	CENTER ST	S/S 1ST ST	N/S A ST	317	24	7,608	R - Residential/Local	A - AC	18	0
CHABWY	100	CHABLIS WAY	S/S BURGUNDY WAY	E/S BURGUNDY WAY	1,207	36	43,452	R - Residential/Local	A - AC	79	29.47
CHAMWY	100	CHAMPAGNE WAY	S/S CHANTI WAY	E/S BURGUNDY WAY	1,276	36	45,936	R - Residential/Local	A - AC	85	29.26
CHARDR	100	CHARDONNAY DR	S/S GAMAY PL	W/S FANOE RD	1,865	36	67,140	R - Residential/Local	A - AC	25	0
CHRL	100	CHAROLAIS DR	E/S ANGUS DR	N/S HEREFORD DR	776	36	27,936	R - Residential/Local	A - AC	93	33.34
CHRL	200	CHAROLAIS DR	S/S HEREFORD DR	N/S HEROLD PKWY	913	36	32,868	R - Residential/Local	A - AC	85	29.26
CHIACT	100	CHIANTI CT	S/S CHIANTI WAY	CUL-DE-SAC	148	36	5,328	R - Residential/Local	A - AC	85	29.26
CHIAWY	100	CHIANTI WAY	E/S BURGUNDY WAY	W/S RHONE WAY	1,023	36	36,828	R - Residential/Local	A - AC	79	29.87
CIVIDR	100	CIELO VISTA DR	N/S 7TH ST	END	858	31	26,598	R - Residential/Local	A - AC	9	0
CIPRST	100	CIPRIANI ST	E/S CENTENNIAL DR	END	935	33	30,855	R - Residential/Local	A - AC	71	21.13
CLAUCR	100	CLAUSSEN CIR	E/S ANGUS DR	CUL-DE-SAC	122	36	4,392	R - Residential/Local	A - AC	88	31.03
COLMCR	100	COLOMBARO CIR	E/S CHARDONNAY DR	E/S CHARDONNAY DR	875	36	31,500	R - Residential/Local	A - AC	25	0
DAYST	100	DAY ST	S/S 10TH ST	N/S 9TH ST	325	47	15,275	R - Residential/Local	A - AC	36	3.79
DAYST	200	DAY ST	S/S 9TH ST	N/S 8TH ST	325	47	15,275	R - Residential/Local	A - AC	47	8.2
DAYST	300	DAY ST	S/S 8TH ST	N/S 7TH ST	325	47	15,275	R - Residential/Local	A - AC	40	5.32
DAYST	400	DAY ST	S/S 7TH ST	N/S 6TH ST	325	47	15,275	R - Residential/Local	A - AC	77	24.19
DAYST	500	DAY ST	S/S 6TH ST	N/S 5TH ST	325	47	15,275	R - Residential/Local	A - AC	76	23.55
DAYST	600	DAY ST	S/S 5TH ST	N/S 4TH ST	325	47	15,275	R - Residential/Local	A - AC	9	0
DAYST	700	DAY ST	S/S 4TH ST	N/S 3RD ST	325	47	15,275	R - Residential/Local	A - AC	11	0
DELMCR	100	DEL MONTE CIR	S/S DEL MONTE DR	CUL-DE-SAC	528	31	16,368	R - Residential/Local	A - AC	8	0
DELMDR	100	DEL MONTE DR	E/S CIELO VISTA DR	W/S DEL MONTE DR	595	31	18,445	R - Residential/Local	A - AC	10	0
DEVOWY	100	DEVON WAY	W. CUL-DE-SAC	E. CUL-DE-SAC	510	36	18,360	R - Residential/Local	A - AC	79	25.45
ELKST	100	ELKO ST	S/S 10TH ST	N/S 7TH ST	1,078	47	50,666	R - Residential/Local	A - AC	26	0.29

Section PCI/RSL Listing

Printed: 05/14/2020

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
ELKST	200	ELKO ST	S/S 7TH ST	END	330	47	15,510	R - Residential/Local	A - AC	24	0
ELKST	300	ELKO ST	S/S 5TH ST	N/S 4TH ST	325	59	19,175	R - Residential/Local	A - AC	88	31.03
ELKST	400	ELKO ST	N/S 4TH ST	588' S/O 4TH ST	588	37	21,756	R - Residential/Local	A - AC	57	12.82
ELKST	500	ELKO ST	588' S/O 4TH ST	N/S 1ST ST	565	33	18,645	R - Residential/Local	A - AC	14	0
ELLIAV	100	ELLIOTT AVE	E/S ELKO ST	END	1,097	25	27,425	R - Residential/Local	A - AC	77	24.19
FAIRDR	100	FAIRVIEW DR	E/S ELKO ST	S/S FREEDOM WAY	1,062	36	38,232	R - Residential/Local	A - AC	11	0
FAIRDR	200	FAIRVIEW DR	S/S FREEDOM WAY	W/S RINCON RD	783	36	28,188	R - Residential/Local	A - AC	27	0.62
FANORD	100	FANOE RD	S/S RHONE LN	N/O BURGUNDY WAY	1,250	22	27,500	R - Residential/Local	A - AC	83	28.01
FANORD	200	FANOE RD	N/S BURGUNDY WAY	2640' S/O BURGUNDY WAY	2,640	22	58,080	R - Residential/Local	A - AC	20	0
FANORD	300	FANOE RD	2640' S/O BURGUNDY WAY	N/O 5TH ST	1,121	60	67,260	R - Residential/Local	A - AC	60	12.73
FREDCR	100	FREDRICK CIR	S/S FREEDOM WAY	CUL-DE-SAC	450	27	12,150	R - Residential/Local	A - AC	67	18.14
FREEWY	100	FREEDOM WAY	E/S CENTENNIAL WAY	E/S FAIRVIEW DR	1,412	36	50,832	R - Residential/Local	A - AC	40	5.46
GABICT	100	GABILAN CT	S/S 5TH ST	END	535	25	13,375	R - Residential/Local	A - AC	53	10.89
GAMYPL	100	GAMAY PL	N/S BARBERA WAY	E/S CHARDONNAY DR	527	36	18,972	R - Residential/Local	A - AC	25	0
GLORRD	100	GLORIA RD	HWY 101	CITY LIMITS	1,400	22	30,800	C - Collector	A - AC	12	0
GONZCR	100	GONZALES CIR	E/S CHAROLAIS DR	CUL-DE-SAC	294	36	10,584	R - Residential/Local	A - AC	91	32.55
GORIRD	100	GONZALES RIVER RD	W/S S ALTA ST	CITY LIMITS	1,736	58	100,688	A - Arterial	A - AC	36	2.83
GRACCR	100	GRACE CIR	S/S FREEDOM WAY	CUL-DE-SAC	417	27	11,259	R - Residential/Local	A - AC	84	28.64
HEREDR	100	HEREFORD DR	E/S ANGUS DR	W/S HEROLD PKWY	1,150	36	41,400	R - Residential/Local	A - AC	86	29.87
HEREPK	100	HEROLD PKWY	S/S 5TH ST	N/S MUSTANG WAY	1,222	38	46,436	R - Residential/Local	A - AC	21	0
HEREPK	200	HEROLD PKWY	N/S MUSTANG WAY	N/S HEREFORD DR	1,050	38	39,900	R - Residential/Local	A - AC	78	24.82
HEREPK	300	HEROLD PKWY	N/S HEREFORD DR	W END	1,600	38	60,800	R - Residential/Local	A - AC	90	32.08
HOLSWY	100	HOLSTEIN WAY	E/S ANGUS DR	W/S LONGHORN DR	332	36	11,952	R - Residential/Local	A - AC	76	23.55
HOLSWY	200	HOLSTEIN WAY	E/S LONGHORN DR	W/S HEROLD PKWY	332	36	11,952	R - Residential/Local	A - AC	62	16.4
JERSDR	100	JERSEY DR	W/S CHAROLAIS DR	W/S CHAROLAIS DR	1,467	36	52,812	R - Residential/Local	A - AC	91	32.55
JURICR	100	JURI CIR	S/S PALOMINO WAY	CUL-DE-SAC	270	36	9,720	R - Residential/Local	A - AC	91	32.55
LONGDR	100	LONGHORN DR	S/S DEVON WAY	N/S MUSTANG WAY	690	36	24,840	R - Residential/Local	A - AC	58	13.93
LONGDR	200	LONGHORN DR	S/S MUSTANG WAY	N/S HEREFORD DR	1,046	36	37,656	R - Residential/Local	A - AC	88	31.03
MERLWY	100	MERLOT WAY	E/S ZINFANDEL DR	N/S ZINFANDEL DR	670	36	24,120	R - Residential/Local	A - AC	75	22.92
MEYECR	100	MEYER CIR	E/S ANGUS DR	CUL-DE-SAC	154	36	5,544	R - Residential/Local	A - AC	89	31.57
MICHCR	100	MICHAEL CIR	S/S FREEDOM WAY	CUL-DE-SAC	513	27	13,851	R - Residential/Local	A - AC	83	28.01
MURACT	100	MURANO CT	S/S CIPRIANI ST	S END	373	33	12,309	R - Residential/Local	A - AC	71	21.13

Section PCI/RSL Listing

Printed: 05/14/2020

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
MUSTWY	100	MUSTANG WAY	E/S ANGUS DR	W/S HEROLD PKWY	757	36	27,252	R - Residential/Local	A - AC	56	12.78
PALOWY	100	PALOMINO WAY	E/S CHAROLAIS DR	W/S SANTA GERTRUDIS WAY	497	36	17,892	R - Residential/Local	A - AC	91	32.55
RHONLN	100	RHONE LN	E/S RHONE WAY	W/S FANOE RD	130	36	4,680	R - Residential/Local	A - AC	85	29.26
RHONWY	100	RHONE WAY	E/S CHABLIS WAY	N/S BURGUNDY WAY	1,650	36	59,400	R - Residential/Local	A - AC	83	28.01
RIESPL	100	RIESLING PL	E/S CHARDONAY DR	N/S CHARDONAY DR	607	36	21,852	R - Residential/Local	A - AC	31	1.98
RINCCR	100	RINCON CIR	E/S RINCON RD	CUL-DE-SAC	140	33	4,620	R - Residential/Local	A - AC	10	0
RINCCT	100	RINCON CT	E/S RINCON RD	CUL-DE-SAC	72	75	5,400	R - Residential/Local	A - AC	34	3.05
RINCRD	100	RINCON RD	S/S 5TH ST	606' S/O RINCON RD	606	36	21,816	R - Residential/Local	A - AC	8	0
RINCRD	200	RINCON RD	606' S/O RINCON RD	CUL-DE-SAC	515	36	18,540	R - Residential/Local	A - AC	70	19.88
RINCRD	300	RINCON RD	N/S 5TH ST	S/S DEL MONTE DR	1,072	31	33,232	R - Residential/Local	A - AC	11	0
RIPLCR	100	RIPLEY CIR	S/S JERSEY DR	CUL-DE-SAC	285	36	10,260	R - Residential/Local	A - AC	91	32.55
SAGEWY	100	SANTA GERTRUDIS WAY	S/S HEREFORD DR	CUL-DE-SAC	748	36	26,928	R - Residential/Local	A - AC	91	32.56
SEMIWY	100	SEMILLON WAY	S/S CABERNET DR	E/S ZINFANDEL DR	811	36	29,196	R - Residential/Local	A - AC	77	24.18
SPUMWY	100	SPUMANTE WAY	S/S CHIANTI WAY	W/S CHAMPAGNE WAY	863	36	31,068	R - Residential/Local	A - AC	79	29.46
VENIWY	100	VENICEY WAY	S/S CIPRIANI ST	W/S VENICE WAY	708	33	23,364	R - Residential/Local	A - AC	79	29.09
VENIWY	200	VENICEY WAY	S/S CIPRIANI ST	S. END	710	33	23,430	R - Residential/Local	A - AC	82	32.85
WESTCR	100	WESTPHAL CIR	E/S ANGUS DR	CUL-DE-SAC	178	36	6,408	R - Residential/Local	A - AC	91	32.56
ZINFCR	100	ZINFADEL CIR	E/S ZINFANDEL DR	CUL-DE-SAC	142	36	5,112	R - Residential/Local	A - AC	75	22.92
ZINFDR	100	ZINFADEL DR	S/S CABERNET DR	W/S FANOE RD	1,757	36	63,252	R - Residential/Local	A - AC	43	6.6

Total Section Length:	107,540
Total Section Area:	4,295,604

APPENDIX II

BUDGET ANALYSIS REPORTS

A. Budget Needs Report - Five Year
B. Average PCI by Annual Funding Chart
C. Deferred Maintenance Cost Trend by Annual Funding Chart
D. Budget Scenario Cost and Network Summaries
E. Annual Work Program - $500K
F. Annual Work Program - $1M

A. NEEDS – PROJECTED PCI/COST SUMMARY

NEEDS - PROJECTED PCI/COST SUMMARY

This report highlights the impact of projected needs funding (and lack thereof) on pavement system condition. The report also provides a cost estimate of the funding needed to bring the streets to an optimal preventive maintenance level. Finally, an "Untreated PCI" is listed. This value is an accurate portrayal of average street condition.

Year:	Year of Projection
PCI Treated:	Average Street PCI with suggested treatments applied
PCI Untreated:	Present average untreated street PCI for year. This value is most accurate reflection of present PCI
Cost:	Cost per year to apply suggested treatments
PM Cost:	Total cost over the period of analysis spent on preventative maintenance
% PM:	Percent of total cost over the period of analysis spent on preventative maintenance
Total Cost:	Total cost over the period of analysis to bring streets to optimal maintenance level.

Needs - Projected PCI/Cost Summary

Inflation Rate = 3.00 %

Printed: 05/06/2020

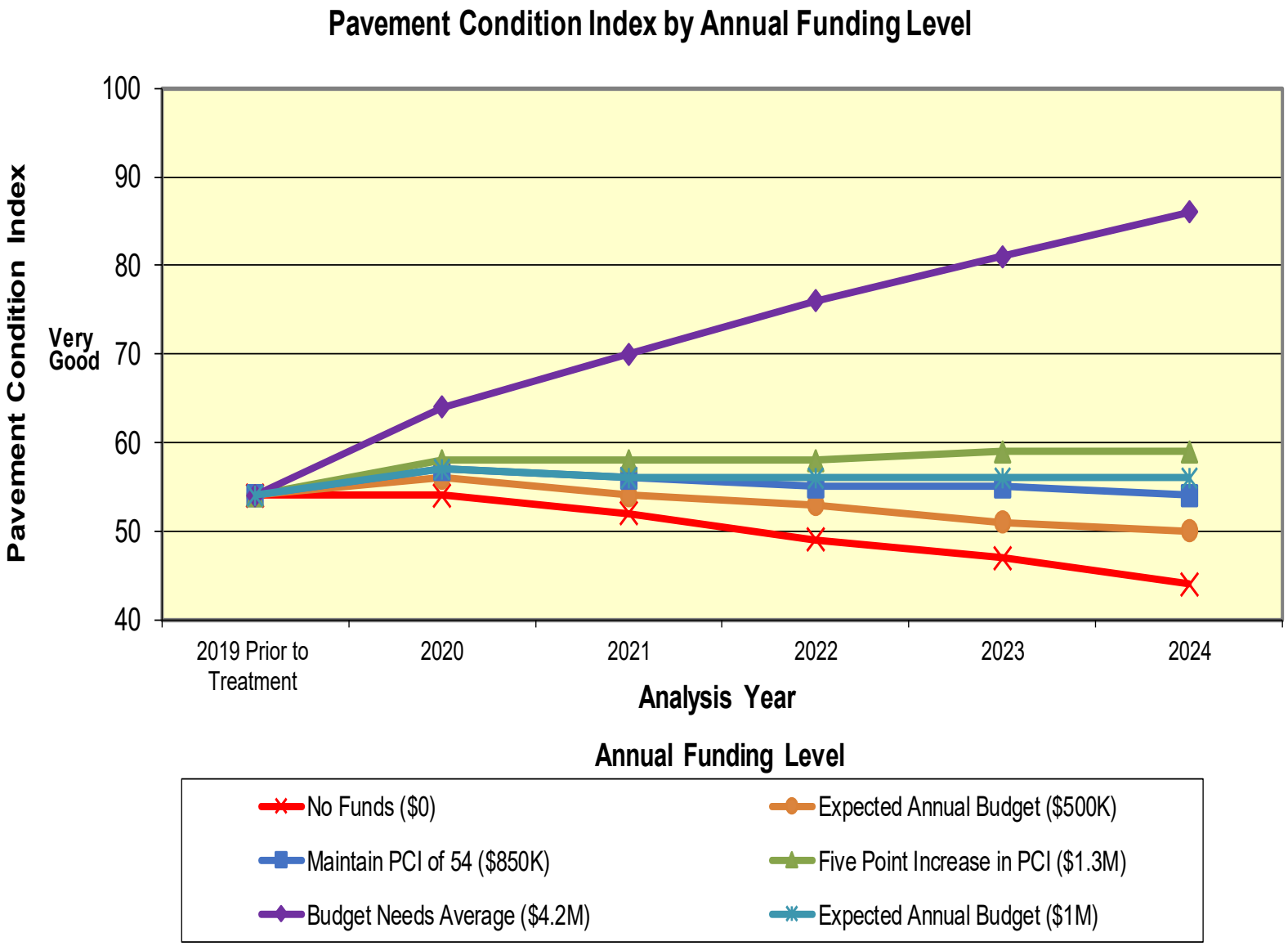
Year	PCI Treated	PCI Untreated	PM Cost	Rehab Cost	Cost
2020	78	54	$454,567	$10,223,902	$10,678,469
2021	81	52	$110,271	$2,935,335	$3,045,606
2022	79	49	$13,831	$624,048	$637,879
2023	83	47	$89	$3,223,301	$3,223,390
2024	87	44	$262,526	$3,002,471	$3,264,997

% PM	PM Total Cost	Rehab Total Cost	Total Cost
4.03%	$841,284	$20,009,057	$20,850,341

B. AVERAGE PCI BY ANNUAL FUNDING CHART

AVERAGE PAVEMENT CONDITION INDEX (PCI) BY ANNUAL FUNDING LEVEL

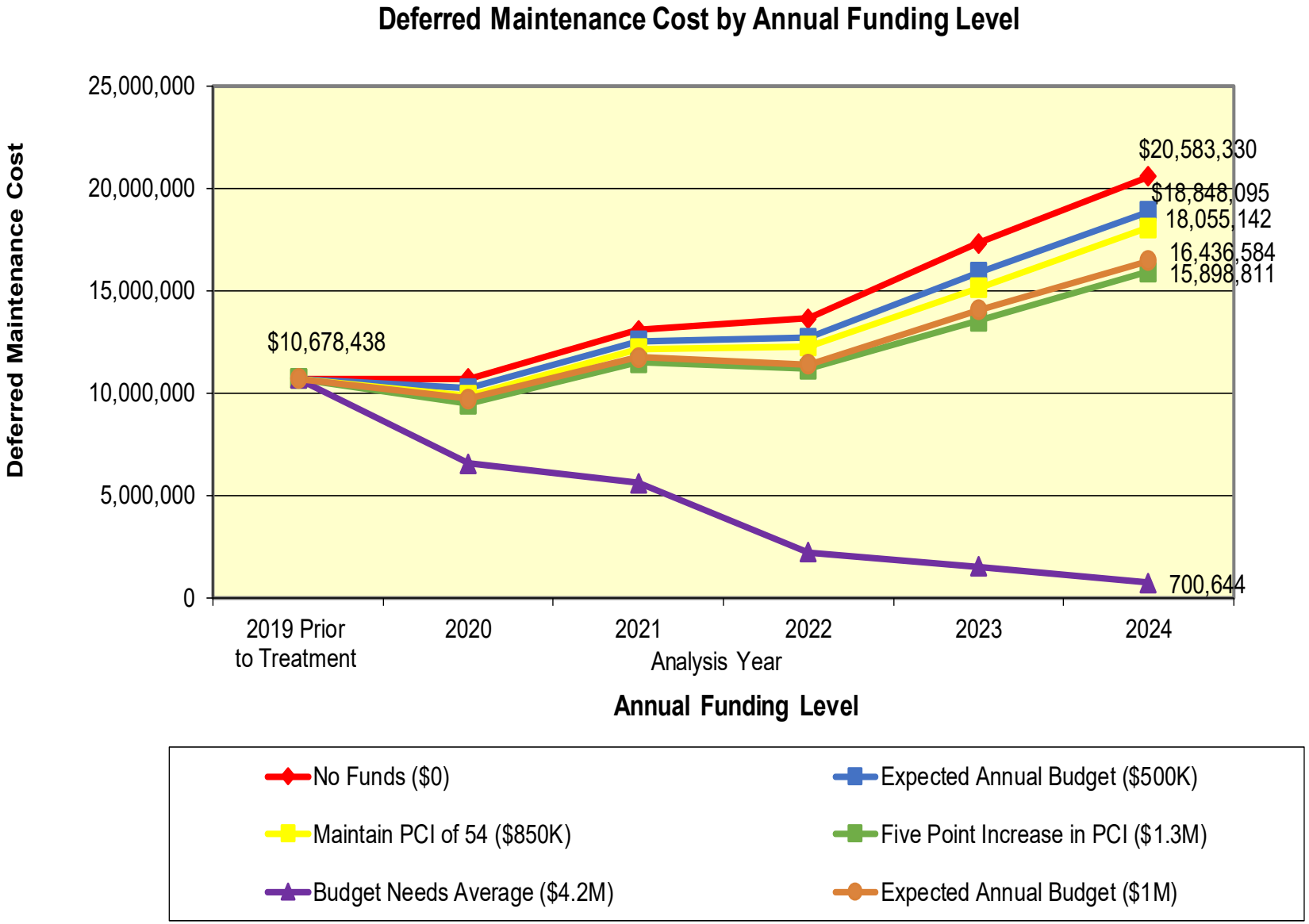
This graph compares 5 different annual budget scenarios and their impact over a ten year budget analysis period.


Pavement Condition Index by Annual Funding Level
Pavement Condition Index
100
90
80
Very Good
70
60
50
40
2019 Prior to Treatment
2020
2021
2022
2023
2024
Analysis Year
Annual Funding Level
No Funds ($0)
Expected Annual Budget ($500K)
Maintain PCI of 54 ($850K)
Five Point Increase in PCI ($1.3M)
Budget Needs Average ($4.2M)
Expected Annual Budget ($1M)

C. DEFERRED MAINTENANCE COST TREND BY ANNUAL FUNDING CHART

DEFERRED MAINTENANCE COST TREND VS. ANNUAL FUNDING LEVEL

This graph compares 5 different annual budget scenarios and their impact on deferred maintenance costs (maintenance backlog) over each year of the ten-year budget analysis period. Deferred maintenance is the amount of necessary rehabilitation not performed each year due to budget shortfalls


Deferred Maintenance Cost by Annual Funding Level
Deferred Maintenance Cost
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
$20,583,330
$18,848,095
18,055,142
16,436,584
15,898,811
$10,678,438
700,644
2019 Prior to Treatment
2020
2021
2022
2023
2024
Analysis Year
Annual Funding Level
No Funds ($0)
Expected Annual Budget ($500K)
Maintain PCI of 54 ($850K)
Five Point Increase in PCI ($1.3M)
Budget Needs Average ($4.2M)
Expected Annual Budget ($1M)

D. BUDGET SCENARIO COST AND NETWORK SUMMARIES

SCENARIOS – COST SUMMARY REPORT

A Cost Summary report is provided in this section for each annual budget level analyzed. This specific report indicates the distribution of pavement funding between various condition levels of streets. The top portion of this report shows the interest and inflation assumptions.

The central part of the report lists the analysis year, percentage of that budget that is assigned to preventive maintenance, annual budget, activities distribution of the budget between rehabilitation (by condition category within rehabilitation, preventative maintenance, stop gap, and deferred maintenance costs. Condition Category refers to the MTC defined pavement conditions –Excellent (I), Very Good (II), Good (III), Poor (IV), and Very Poor (V). "Stop Gap" is a factored cost applied for emergency repairs (i.e. pothole repair) needed to minimally maintain a section where a section's suggested rehabilitation maintenance is deferred. "Funded Stop Gap" refers to the budget amount allocated for stop gap and "Unmet Stop Gap" refers to any deferred stop gap costs. "Deferred" refers to the dollar cost of backlogged rehabilitation. "Surplus PM" values appear if the budget percentage split between rehabilitation and preventive maintenance is too heavily weighted to preventive maintenance. In such a case, the percentage of funding to rehabilitation would be increased.

The bottom part of the report shows a summary of the total costs spent on rehabilitation, preventative maintenance, and stop gap (funded and unmet) according to functional class.

SCENARIOS – NETWORK CONDITION SUMMARY REPORT

This report details present and projected network condition trends based on the annual budget set for an individual scenario. Perhaps the most important piece of information from this report is found on the first page of the report. The table under "Project Network Average PCI by Year" shows what the overall network condition trend is when the suggested treatments are applied in comparison to when the treatments are not applied.

THESE REPORTS ARE PROVIDED FOR EACH OF THE COMPARISON SCENARIOS

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 5/11/2020

Scenario: 2020 No Funds

Year	PM	Budget	Rehabilitation			Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2020	4%	$0	II	$0	Non-Project	$0	$0	$10,678,438	Funded	$0
			III	$0					Unmet	$83,471
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2021	4%	$0	II	$0	Non-Project	$0	$0	$13,048,862	Funded	$0
			III	$0					Unmet	$25,110
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2022	4%	$0	II	$0	Non-Project	$0	$0	$13,620,536	Funded	$0
			III	$0					Unmet	$5,462
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2023	4%	$0	II	$0	Non-Project	$0	$0	$17,305,839	Funded	$0
			III	$0					Unmet	$26,197
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2024	4%	$0	II	$0	Non-Project	$0	$0	$20,583,330	Funded	$0
			III	$0					Unmet	$25,645
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$0	$0	$0	$25,301
Collector	$0	$0	$0	$13,227
Residential/Local	$0	$0	$0	$127,358
Grand Total:	$0	$0	$0	$165,885

Scenarios Criteria:

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 05/11/2020

Scenario: 2020 No Funds

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2020	$0	4%	2022	$0	4%	2024	$0	4%
2021	$0	4%	2023	$0	4%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2020	54	54	0	0
2021	52	52	0	0
2022	49	49	0	0
2023	47	47	0	0
2024	44	44	0	0

Percent Network Area by Functional Class and Condition Category

Condition in base year 2020, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	30.4%	0.0%	41.8%
II / III	0.0%	3.3%	7.4%	0.0%	10.7%
IV	4.9%	0.1%	22.4%	0.0%	27.4%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2020 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	30.4%	0.0%	41.8%
II / III	0.0%	3.3%	7.4%	0.0%	10.7%
IV	4.9%	0.1%	22.4%	0.0%	27.4%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2024 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	26.1%	0.0%	37.5%
II / III	0.0%	0.0%	7.2%	0.0%	7.2%
IV	0.0%	3.3%	14.1%	0.0%	17.4%
V	6.3%	2.7%	29.0%	0.0%	37.9%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 5/11/2020

Scenario: 2020 - $500K Expected Annual Budget

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2020	0%	$500,000	II	$8,657	Non-Project	$0	$0	$10,212,026	Funded	$33,588
			III	$0					Unmet	$47,581
			IV	$457,755	Project	$0				
			V	$0						
			Total	$466,412						
			Project	$0						
2021	0%	$500,000	II	$29,660	Non-Project	$22,045	$0	$12,518,508	Funded	$13,276
			III	$0					Unmet	$10,916
			IV	$266,102	Project	$0				
			V	$168,875						
			Total	$464,637						
			Project	$0						
2022	0%	$500,000	II	$7,214	Non-Project	$11,568	$0	$12,697,156	Funded	$3,490
			III	$0					Unmet	$1,433
			IV	$427,464	Project	$0				
			V	$47,103						
			Total	$481,781						
			Project	$0						
2023	0%	$500,000	II	$14,751	Non-Project	$5,742	$0	$15,880,590	Funded	$20,015
			III	$66,766					Unmet	$4,122
			IV	$306,510	Project	$0				
			V	$79,893						
			Total	$467,920						
			Project	$0						
2024	0%	$500,000	II	$0	Non-Project	$16,205	$0	$18,848,095	Funded	$22,188
			III	$68,769					Unmet	$1,351
			IV	$388,780	Project	$0				
			V	$0						
			Total	$457,549						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$168,875	$8,535	$25,301	$0
Collector	$306,510	$0	$7,056	$4,808
Residential/Local	$1,862,914	$47,025	$60,200	$60,595
Grand Total:	$2,338,299	$55,560	$92,557	$65,403

Scenarios Criteria:

Criteria:

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 5/11/2020

Scenario: 2020 - $500K Expected Annual Budget

Year	Budget	PM
2020	$500,000	0%
2021	$500,000	0%

Year	Budget	PM
2022	$500,000	0%
2023	$500,000	0%

Year	Budget	PM
2024	$500,000	0%

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2020	54	56	0.58	1.16
2021	52	54	2.88	5.76
2022	49	53	0.59	1.18
2023	47	51	0.54	1.07
2024	44	50	1.14	2.28

Percent Network Area by Functional Class and Condition Category

Condition in base year 2020, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	30.4%	0.0%	41.8%
II / III	0.0%	3.3%	7.4%	0.0%	10.7%
IV	4.9%	0.1%	22.4%	0.0%	27.4%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2020 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	33.0%	0.0%	44.4%
II / III	0.0%	3.3%	7.0%	0.0%	10.2%
IV	4.9%	0.1%	20.3%	0.0%	25.3%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2024 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.8%	1.3%	37.0%	0.0%	50.1%
II / III	0.0%	0.0%	3.4%	0.0%	3.4%
IV	0.0%	2.0%	7.3%	0.0%	9.3%
V	5.9%	2.7%	28.7%	0.0%	37.2%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 5/11/2020

Scenario: 2020 - $850K Maintain PCI 54

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2020	4%	$850,000	II	$14,235	Non-Project	$0	$0	$9,875,464	Funded	$47,026
			III	$269,040					Unmet	$32,724
			IV	$519,700	Project	$0				
			V	$0						
			Total	$802,975						
			Project	$0						
2021	4%	$850,000	II	$29,660	Non-Project	$32,450	$0	$12,130,636	Funded	$23,775
			III	$0					Unmet	$0
			IV	$641,759	Project	$0				
			V	$121,038						
			Total	$792,457						
			Project	$0						
2022	4%	$850,000	II	$7,214	Non-Project	$35,434	$0	$12,287,466	Funded	$4,923
			III	$0					Unmet	$0
			IV	$802,323	Project	$0				
			V	$0						
			Total	$809,537						
			Project	$0						
2023	4%	$850,000	II	$14,751	Non-Project	$42,271	$0	$15,106,820	Funded	$22,325
			III	$0					Unmet	$0
			IV	$768,428	Project	$0				
			V	$0						
			Total	$783,179						
			Project	$0						
2024	4%	$850,000	II	$18,947	Non-Project	$11,240	$324	$18,055,142	Funded	$22,436
			III	$68,769					Unmet	$0
			IV	$542,142	Project	$0				
			V	$184,535						
			Total	$814,393						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$184,535	$8,508	$25,301	$0
Collector	$787,748	$5	$9,725	$0
Residential/Local	$3,030,258	$112,882	$85,459	$32,724
Grand Total:	$4,002,541	$121,395	$120,486	$32,724

Scenarios Criteria:

Criteria:

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 5/11/2020

Scenario: 2020 - $850K Maintain PCI 54

Year	Budget	PM
2020	$850,000	4%
2021	$850,000	4%

Year	Budget	PM
2022	$850,000	4%
2023	$850,000	4%

Year	Budget	PM
2024	$850,000	4%

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2020	54	57	0.92	1.84
2021	52	56	3.38	6.75
2022	49	55	1.19	2.39
2023	47	55	1.06	2.13
2024	44	54	1.72	3.44

Percent Network Area by Functional Class and Condition Category

Condition in base year 2020, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	30.4%	0.0%	41.8%
II / III	0.0%	3.3%	7.4%	0.0%	10.7%
IV	4.9%	0.1%	22.4%	0.0%	27.4%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2020 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.1%	35.0%	0.0%	46.5%
II / III	0.0%	3.3%	5.1%	0.0%	8.4%
IV	4.9%	0.0%	20.1%	0.0%	25.0%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2024 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.8%	3.4%	43.3%	0.0%	58.5%
II / III	0.0%	0.0%	1.2%	0.0%	1.2%
IV	0.0%	0.0%	3.1%	0.0%	3.1%
V	5.9%	2.6%	28.7%	0.0%	37.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Scenarios Criteria:

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 5/11/2020

Scenario: 2020 - $1M Expected Annual Budget

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2020	0%	$1,000,000	II	$8,657	Non-Project	$0	$0	$9,699,516	Funded	$21,078
			III	$0					Unmet	$57,813
			IV	$970,265	Project	$0				
			V	$0						
			Total	$978,922						
			Project	$0						
2021	0%	$1,000,000	II	$29,660	Non-Project	$0	$0	$11,744,381	Funded	$5,298
			III	$0					Unmet	$17,355
			IV	$346,132	Project	$0				
			V	$618,912						
			Total	$994,704						
			Project	$0						
2022	0%	$1,000,000	II	$7,214	Non-Project	$52,022	$0	$11,396,692	Funded	$1,404
			III	$0					Unmet	$1,433
			IV	$70,948	Project	$0				
			V	$866,883						
			Total	$945,045						
			Project	$0						
2023	0%	$1,000,000	II	$14,751	Non-Project	$0	$0	$14,030,733	Funded	$15,963
			III	$66,766					Unmet	$8,174
			IV	$306,510	Project	$0				
			V	$596,013						
			Total	$984,040						
			Project	$0						
2024	0%	$1,000,000	II	$4,178	Non-Project	$30,558	$0	$16,436,584	Funded	$19,449
			III	$68,769					Unmet	$1,351
			IV	$388,780	Project	$0				
			V	$487,745						
			Total	$949,472						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$1,049,721	$25,311	$21,003	$0
Collector	$1,144,737	$0	$7,056	$4,808
Residential/Local	$2,657,725	$57,269	$35,134	$81,318
Grand Total:	$4,852,183	$82,580	$63,194	$86,126

Scenarios Criteria:

Criteria:

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 5/11/2020

Scenario: 2020 - $1M Expected Annual Budget

Year	Budget	PM
2020	$1,000,000	0%
2021	$1,000,000	0%

Year	Budget	PM
2022	$1,000,000	0%
2023	$1,000,000	0%

Year	Budget	PM
2024	$1,000,000	0%

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2020	54	57	1.09	2.18
2021	52	56	0.90	1.81
2022	49	56	3.04	6.08
2023	47	56	0.65	1.31
2024	44	56	2.16	4.33

Percent Network Area by Functional Class and Condition Category

Condition in base year 2020, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	30.4%	0.0%	41.8%
II / III	0.0%	3.3%	7.4%	0.0%	10.7%
IV	4.9%	0.1%	22.4%	0.0%	27.4%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2020 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	35.4%	0.0%	46.8%
II / III	0.0%	3.3%	7.0%	0.0%	10.2%
IV	4.9%	0.1%	17.9%	0.0%	22.9%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2024 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	13.8%	3.2%	39.4%	0.0%	56.4%
II / III	0.0%	0.0%	3.4%	0.0%	3.4%
IV	0.0%	2.0%	6.1%	0.0%	8.1%
V	3.9%	0.8%	27.4%	0.0%	32.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 5/11/2020

Scenario: 2020 - $1.3M 5 Pt Inc PCI

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2020	4%	$1,300,000	II	$14,235	Non-Project	$0	$0	$9,438,066	Funded	$59,628
			III	$269,040					Unmet	$17,843
			IV	$883,985	Project	$0				
			V	$73,113						
			Total	$1,240,373						
			Project	$0						
2021	4%	$1,300,000	II	$29,660	Non-Project	$51,207	$0	$11,491,574	Funded	$23,775
			III	$0					Unmet	$0
			IV	$892,270	Project	$0				
			V	$302,097						
			Total	$1,224,027						
			Project	$0						
2022	4%	$1,300,000	II	$7,214	Non-Project	$153,778	$0	$11,177,262	Funded	$2,838
			III	$0					Unmet	$0
			IV	$427,464	Project	$0				
			V	$708,491						
			Total	$1,143,169						
			Project	$0						
2023	4%	$1,300,000	II	$14,751	Non-Project	$147,505	$0	$13,511,177	Funded	$22,084
			III	$66,766					Unmet	$0
			IV	$768,428	Project	$0				
			V	$280,139						
			Total	$1,130,084						
			Project	$0						
2024	4%	$1,300,000	II	$0	Non-Project	$31,771	$0	$15,898,811	Funded	$22,188
			III	$0					Unmet	$0
			IV	$542,142	Project	$0				
			V	$703,872						
			Total	$1,246,014						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$1,517,788	$24,650	$23,215	$0
Collector	$1,067,887	$5	$9,725	$0
Residential/Local	$3,397,992	$359,606	$97,572	$17,843
Grand Total:	$5,983,667	$384,261	$130,513	$17,843

Scenarios Criteria:

Criteria:

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 5/11/2020

Scenario: 2020 - $1.3M 5 Pt Inc PCI

Year	Budget	PM
2020	$1,300,000	4%
2021	$1,300,000	4%

Year	Budget	PM
2022	$1,300,000	4%
2023	$1,300,000	4%

Year	Budget	PM
2024	$1,300,000	4%

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2020	54	58	1.34	2.67
2021	52	58	3.94	7.88
2022	49	58	2.39	4.77
2023	47	59	2.31	4.63
2024	44	59	2.30	4.61

Percent Network Area by Functional Class and Condition Category

Condition in base year 2020, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	30.4%	0.0%	41.8%
II / III	0.0%	3.3%	7.4%	0.0%	10.7%
IV	4.9%	0.1%	22.4%	0.0%	27.4%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2020 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.1%	36.9%	0.0%	48.4%
II / III	0.0%	3.3%	5.1%	0.0%	8.4%
IV	4.9%	0.0%	18.4%	0.0%	23.3%
V	1.3%	2.6%	15.9%	0.0%	19.9%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2024 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	14.8%	4.0%	45.2%	0.0%	64.0%
II / III	0.0%	0.0%	0.9%	0.0%	0.9%
IV	0.0%	0.0%	1.9%	0.0%	1.9%
V	2.9%	2.0%	28.3%	0.0%	33.2%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 5/11/2020

Scenario: 2020 - $4.2 Budget Needs Avg

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2020	4%	$4,200,000	II	$14,235	Non-Project	$112,812	$0	$6,535,706	Funded	$55,860
			III	$269,040					Unmet	$0
			IV	$1,659,185	Project	$0				
			V	$2,087,469						
			Total	$4,029,929						
			Project	$0						
2021	4%	$4,200,000	II	$29,660	Non-Project	$243,899	$0	$5,598,238	Funded	$18,922
			III	$0					Unmet	$0
			IV	$439,945	Project	$0				
			V	$3,465,650						
			Total	$3,935,255						
			Project	$0						
2022	4%	$4,200,000	II	$7,214	Non-Project	$238,767	$0	$2,210,004	Funded	$0
			III	$0					Unmet	$0
			IV	$70,948	Project	$0				
			V	$3,877,150						
			Total	$3,955,312						
			Project	$0						
2023	4%	$4,200,000	II	$0	Non-Project	$89	$165,842	$1,494,391	Funded	$2,069
			III	$0					Unmet	$0
			IV	$768,428	Project	$0				
			V	$3,230,691						
			Total	$3,999,119						
			Project	$0						
2024	4%	$4,200,000	II	$0	Non-Project	$153,748	$14,252	$700,644	Funded	$0
			III	$0					Unmet	$0
			IV	$542,142	Project	$0				
			V	$3,404,147						
			Total	$3,946,289						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$2,805,455	$152,454	$0	$0
Collector	$1,866,154	$296	$0	$0
Residential/Local	$15,194,295	$596,565	$76,851	$0
Grand Total:	$19,865,904	$749,315	$76,851	$0

Scenarios Criteria:

Criteria:

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 5/11/2020

Scenario: 2020 - $4.2 Budget Needs Avg

Year	Budget	PM
2020	$4,200,000	4%
2021	$4,200,000	4%

Year	Budget	PM
2022	$4,200,000	4%
2023	$4,200,000	4%

Year	Budget	PM
2024	$4,200,000	4%

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2020	54	64	4.48	8.96
2021	52	70	6.97	13.94
2022	49	76	4.47	8.94
2023	47	81	2.23	4.45
2024	44	86	6.99	13.98

Percent Network Area by Functional Class and Condition Category

Condition in base year 2020, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	11.4%	0.0%	30.4%	0.0%	41.8%
II / III	0.0%	3.3%	7.4%	0.0%	10.7%
IV	4.9%	0.1%	22.4%	0.0%	27.4%
V	1.3%	2.6%	16.1%	0.0%	20.1%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2020 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	12.8%	2.7%	41.4%	0.0%	56.9%
II / III	0.0%	3.3%	5.1%	0.0%	8.4%
IV	4.9%	0.0%	14.8%	0.0%	19.7%
V	0.0%	0.0%	15.0%	0.0%	15.0%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Condition in year 2024 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	17.7%	6.0%	72.3%	0.0%	95.9%
II / III	0.0%	0.0%	0.9%	0.0%	0.9%
IV	0.0%	0.0%	1.9%	0.0%	1.9%
V	0.0%	0.0%	1.3%	0.0%	1.3%
Total	17.7%	6.0%	76.4%	0.0%	100.0%

Scenarios Criteria:

E. ANNUAL WORK PROGRAM – $500K

SECTIONS SELECTED FOR TREATMENT

This list is generated from the budget scenario that reflects the most likely annual budget to be achieved. It basically tells you which sections can be treated each year given a constrained budget.

The header portion of the report tells you interest rate, inflation rate, budget level, and preventive maintenance allocation assumptions.

In the top left in bold on the first page you will find the following: **Year: 2020**
A similar type header will be found at the start of each year's suggested treatments for each year of the analysis.

The following are descriptions of fields in this report:

Street Name:	Street Name
Beginning Location:	Beginning location of section
Ending Location:	End location of section
Street ID:	Street Identifier
Section ID:	Section Identifier
FC:	Functional Class (A-Arterial, C-Collector, R-Residential, O - Other)
Surface:	Surface Type - Original Pavement (AC), Overlay (AC/AC), Surface Treatment (ST), and Portland Cement Concrete (PCC)
PCI:	An approximation of what the PCI would be if the recommended treatment was done
Cost:	Cost for entire treatment (based on unit costs defined in decision tree)
Rating:	This number is a ranking of cost-effectiveness by treatment. The number is for ranking purposes only
Treatment:	Suggested treatment for each section with total cost for the type of treatment
Year Total:	At the end of each year's section you will find a total of the treatment costs for that year.

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $500K Expected Annual Budget

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2020	$500,000	0%	2022	$500,000	0%	2024	$500,000	0%
2021	$500,000	0%	2023	$500,000	0%			

Year: 2020

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
4TH ST	160' W/O ELKO ST	W/S ELKO ST	4THST	400	160	40	6,400	R	AC	WS 101 - Streets on Westside of 101	66	67	76	$2,987	24,871	SLURRY SEAL
FREDRICK CIR	S/S FREEDOM WAY	CUL-DE-SAC	FREDCR	100	450	27	12,150	R	AC	WS 101 - Streets on Westside of 101	66	67	76	$5,670	28,034	SLURRY SEAL
												Treatment Total		$8,657		
A ST	E/S S BELDEN ST	W/S S CENTER ST	AST	200	324	47	15,228	R	AC	WS 101 - Streets on Westside of 101	39	40	100	$76,140	10,170	THICK AC OVERLAY(2.5 INCHES)
BROCKMANN DR	E/S ELKO ST	S/S ELLIOTT AVE	BROCDR	100	1,042	31	32,302	R	AC	WS 101 - Streets on Westside of 101	40	41	100	$161,510	10,125	THICK AC OVERLAY(2.5 INCHES)
B ST	E/S S BELDEN ST	END	BST	200	150	45	6,750	R	AC	WS 101 - Streets on Westside of 101	42	43	100	$33,750	10,021	THICK AC OVERLAY(2.5 INCHES)
C ST	W/S BELDEN ST	W/S CENTENNIAL DR	CST	200	611	36	21,996	R	AC	WS 101 - Streets on Westside of 101	39	40	100	$109,980	10,170	THICK AC OVERLAY(2.5 INCHES)
DAY ST	S/S 8TH ST	N/S 7TH ST	DAYST	300	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	39	40	100	$76,375	10,169	THICK AC OVERLAY(2.5 INCHES)
												Treatment Total		$457,755		
					Year 2020 Area Total		110,101					Year 2020 Total		$466,412		

Year: 2021

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
ALTA ST (MINOR)	N/S 5TH ST	N/S 4TH ST	ALTASTM	300	363	47	17,061	A	AC	WS 101 - Streets on Westside of 101	16	13	100	$168,875	8,535	FULL DEPTH RECLAMATION

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $500K Expected Annual Budget

											Treatment Total				$168,875		
AMORE CT	S/S CIPRIANI ST	SOUTH END	AMORCT	100	241	33	7,953	R	AC	WS 101 - Streets on Westside of 101	74	74	82	$3,823	33,421	SLURRY SEAL	
CIPRIANI ST	E/S CENTENNIAL DR	END	CIPRST	100	935	33	30,855	R	AC	WS 101 - Streets on Westside of 101	70	69	79	$14,831	30,299	SLURRY SEAL	
MICHAEL CIR	S/S FREEDOM WAY	CUL-DE-SAC	MICHCR	100	513	27	13,851	R	AC	WS 101 - Streets on Westside of 101	82	81	89	$6,658	24,964	SLURRY SEAL	
MURANO CT	S/S CIPRIANI ST	S END	MURACT	100	373	33	12,309	R	AC	WS 101 - Streets on Westside of 101	70	69	79	$5,917	30,299	SLURRY SEAL	
RINCON RD	606' S/O RINCON RD	CUL-DE-SAC	RINCRD	200	515	36	18,540	R	AC	WS 101 - Streets on Westside of 101	69	68	78	$8,912	24,331	SLURRY SEAL	
VENICEY WAY	S/S CIPRIANI ST	S. END	VENIWY	200	710	33	23,430	R	AC	WS 101 - Streets on Westside of 101	81	81	88	$11,263	39,824	SLURRY SEAL	
											Treatment Total				$51,404		
ALTA ST	CITY LIMITS	N/S 8TH ST	ALTAST	100	890	52	46,280	A	AC/AC	WS 101 - Streets on Westside of 101	89	87	88	$29	8,708,506	SEAL CRACKS	
ALTA ST	N/S 8TH ST	N/S 3RD ST	ALTAST	200	1,880	42	78,960	A	AC/AC	WS 101 - Streets on Westside of 101	89	87	88	$48	8,708,506	SEAL CRACKS	
ALTA ST	N/S 3RD ST	N/S 2ND ST	ALTAST	300	372	42	15,624	A	AC/AC	WS 101 - Streets on Westside of 101	89	87	88	$10	8,708,506	SEAL CRACKS	
ALTA ST	N/S 2ND ST	N/S GONZALES RIVER RD	ALTAST	400	582	42	24,444	A	AC/AC	WS 101 - Streets on Westside of 101	89	87	88	$15	8,708,506	SEAL CRACKS	
ALTA ST	N/S GONZALES RIVER RED	N/S C ST	ALTAST	500	920	72	66,240	A	AC/AC	WS 101 - Streets on Westside of 101	89	87	88	$41	8,708,506	SEAL CRACKS	
ALTA ST	N/S C ST	1348' S/O C ST	ALTAST	600	1,348	43	57,964	A	AC/AC	WS 101 - Streets on Westside of 101	89	87	88	$36	8,708,506	SEAL CRACKS	

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $500K Expected Annual Budget

Year: 2021

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
ALTA ST	1348' S/O C ST	CITY LIMITS	ALTAST	700	4,263	47	200,361	A	AC/AC	WS 101 - Streets on Westside of 101	89	87	88	$122	8,708,506	SEAL CRACKS
													Treatment Total	$301		
8TH ST	E/S ELKO ST	CUL-DE-SAC	8THST	200	640	33	21,120	R	AC	WS 101 - Streets on Westside of 101	47	46	100	$108,768	9,574	THICK AC OVERLAY(2.5 INCHES)
CENTER ST	S/S 5TH ST	N/S 4TH ST	CENTST	150	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	41	40	100	$78,667	9,895	THICK AC OVERLAY(2.5 INCHES)
DAY ST	S/S 9TH ST	N/S 8TH ST	DAYST	200	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	46	45	100	$78,667	9,635	THICK AC OVERLAY(2.5 INCHES)
													Treatment Total	$266,102		
					Year 2021 Area Total		665,542				Year 2021 Total			$486,682		

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
RINCON CIR	E/S RINCON RD	CUL-DE-SAC	RINCCR	100	140	33	4,620	R	AC	WS 101 - Streets on Westside of 101	9	3	100	$47,103	5,152	FULL DEPTH RECLAMATION
													Treatment Total	$47,103		
4TH ST	E/S BELDEN ST	W/S CENTER ST	4THST	200	310	47	14,570	R	AC	WS 101 - Streets on Westside of 101	71	69	78	$7,214	28,894	SLURRY SEAL
VENICEY WAY	S/S CIPRIANI ST	W/S VENICE WAY	VENIWY	100	708	33	23,364	R	AC	WS 101 - Streets on Westside of 101	78	77	85	$11,568	35,779	SLURRY SEAL
													Treatment Total	$18,782		
6TH ST	E/S ALTA ST	CUL-DE-SAC	6THST	100	1,430	47	67,210	R	AC	WS 101 - Streets on Westside of 101	50	47	100	$356,516	9,244	THICK AC OVERLAY(2.5 INCHES)

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $500K Expected Annual Budget

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
GABILAN CT	S/S 5TH ST	END	GABICT	100	535	25	13,375	R	AC	WS 101 - Streets on Westside of 101	52	49	100	$70,948	9,098	THICK AC OVERLAY(2.5 INCHES)
													Treatment Total	$427,464		
					Year 2023 Area Total		123,139						Year 2023 Total	$493,349		

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
CENTER ST	S/S 1ST ST	N/S A ST	CENTST	190	317	24	7,608	R	AC	WS 101 - Streets on Westside of 101	17	8	100	$79,893	5,002	FULL DEPTH RECLAMATION
													Treatment Total	$79,893		
CENTER ST	S/S 7TH ST	N/S 6TH ST	CENTST	130	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	72	68	77	$7,790	22,923	SLURRY SEAL
CENTER ST	S/S 6TH ST	N/S 5TH ST	CENTST	140	325	42	13,650	R	AC	WS 101 - Streets on Westside of 101	72	68	77	$6,961	22,923	SLURRY SEAL
GRACE CIR	S/S FREEDOM WAY	CUL-DE-SAC	GRACCR	100	417	27	11,259	R	AC	WS 101 - Streets on Westside of 101	83	79	87	$5,742	24,949	SLURRY SEAL
													Treatment Total	$20,493		
5TH ST	E/S ALTA ST	E/S DAY ST	5THST	100	1,122	50	56,100	C	AC	WS 101 - Streets on Westside of 101	56	47	100	$306,510	10,561	THICK AC OVERLAY(2.5 INCHES)
													Treatment Total	$306,510		
BELDEN ST	S/S 6TH ST	N/S 5TH ST	BELDST	140	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	73	69	100	$66,766	8,048	THIN AC OVERLAY(1.5 INCHES)
													Treatment Total	$66,766		
					Year 2023 Area Total		119,167						Year 2023 Total	$473,662		

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $500K Expected Annual Budget

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
ALTA ST	N/S 3RD ST	N/S 2ND ST	ALTAST	300	372	42	15,624	A	AC/AC	WS 101 - Streets on Westside of 101	89	84	91	$8,207	36,149	SLURRY SEAL
BELDEN ST	S/S 5TH ST	N/S 4TH ST	BELDST	150	315	47	14,805	R	AC	WS 101 - Streets on Westside of 101	76	71	79	$7,777	22,483	SLURRY SEAL
												Treatment Total		$15,984		
4TH ST	160' W/O ELKO ST	W/S ELKO ST	4THST	400	160	40	6,400	R	AC	WS 101 - Streets on Westside of 101	66	70	73	$53	413,628	SEAL CRACKS
ALTA ST (MINOR)	N/S 5TH ST	N/S 4TH ST	ALTASTM	300	363	47	17,061	A	AC	WS 101 - Streets on Westside of 101	16	86	87	$27	1,651,061	SEAL CRACKS
A ST	E/S S BELDEN ST	W/S S CENTER ST	AST	200	324	47	15,228	R	AC	WS 101 - Streets on Westside of 101	39	87	88	$7	3,061,888	SEAL CRACKS
BROCKMANN DR	E/S ELKO ST	S/S ELLIOTT AVE	BROCDR	100	1,042	31	32,302	R	AC	WS 101 - Streets on Westside of 101	40	87	88	$15	3,061,888	SEAL CRACKS
B ST	E/S S BELDEN ST	END	BST	200	150	45	6,750	R	AC	WS 101 - Streets on Westside of 101	42	87	88	$4	3,061,888	SEAL CRACKS
C ST	W/S BELDEN ST	W/S CENTENNIAL DR	CST	200	611	36	21,996	R	AC	WS 101 - Streets on Westside of 101	39	87	88	$11	3,061,888	SEAL CRACKS
DAY ST	S/S 8TH ST	N/S 7TH ST	DAYST	300	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	39	87	88	$8	3,061,888	SEAL CRACKS
FREDRICK CIR	S/S FREEDOM WAY	CUL-DE-SAC	FREDCR	100	450	27	12,150	R	AC	WS 101 - Streets on Westside of 101	66	71	74	$96	607,768	SEAL CRACKS
												Treatment Total		$221		
4TH ST	E/S ALTA ST	E/S BELDEN ST	4THST	100	310	47	14,570	R	AC	WS 101 - Streets on Westside of 101	57	49	100	$81,994	8,598	THICK AC OVERLAY(2.5 INCHES)

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $500K Expected Annual Budget

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
BELDEN ST	S/S 4TH ST	N/S 3RD ST	BELDST	160	372	47	17,484	R	AC	WS 101 - Streets on Westside of 101	55	48	100	$98,392	8,661	THICK AC OVERLAY(2.5 INCHES)
CENTER ST	S/S 4TH ST	N/S 3RD ST	CENTST	160	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	56	49	100	$85,961	8,587	THICK AC OVERLAY(2.5 INCHES)
ELKO ST	N/S 4TH ST	588' S/O 4TH ST	ELKST	400	588	37	21,756	R	AC	WS 101 - Streets on Westside of 101	56	49	100	$122,433	8,588	THICK AC OVERLAY(2.5 INCHES)
													Treatment Total	$388,780		
DAY ST	S/S 6TH ST	N/S 5TH ST	DAYST	500	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	75	69	100	$68,769	7,727	THIN AC OVERLAY(1.5 INCHES)
													Treatment Total	$68,769		
													Year 2024 Total	$473,754		
							Year 2024 Area Total	241,951					Grand Total	$2,393,859		
							Total Section Area:	1,259,900								

F. ANNUAL WORK PROGRAM – $1M

SECTIONS SELECTED FOR TREATMENT

This list is generated from the budget scenario that reflects the most likely annual budget to be achieved. It basically tells you which sections can be treated each year given a constrained budget.

The header portion of the report tells you interest rate, inflation rate, budget level, and preventive maintenance allocation assumptions.

In the top left in bold on the first page you will find the following: **Year: 2020**
A similar type header will be found at the start of each year's suggested treatments for each year of the analysis.

The following are descriptions of fields in this report:

Street Name:	Street Name
Beginning Location:	Beginning location of section
Ending Location:	End location of section
Street ID:	Street Identifier
Section ID:	Section Identifier
FC:	Functional Class (A-Arterial, C-Collector, R-Residential, O - Other)
Surface:	Surface Type - Original Pavement (AC), Overlay (AC/AC), Surface Treatment (ST), and Portland Cement Concrete (PCC)
PCI:	An approximation of what the PCI would be if the recommended treatment was done
Cost:	Cost for entire treatment (based on unit costs defined in decision tree)
Rating:	This number is a ranking of cost-effectiveness by treatment. The number is for ranking purposes only
Treatment:	Suggested treatment for each section with total cost for the type of treatment
Year Total:	At the end of each year's section you will find a total of the treatment costs for that year.

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $1M Expected Annual Budget

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2020	$1,000,000	0%	2022	$1,000,000	0%	2024	$1,000,000	0%
2021	$1,000,000	0%	2023	$1,000,000	0%			

Year: 2020

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
4TH ST	160' W/O ELKO ST	W/S ELKO ST	4THST	400	160	40	6,400	R	AC	WS 101 - Streets on Westside of 101	66	67	76	$2,987	24,871	SLURRY SEAL
FREDRICK CIR	S/S FREEDOM WAY	CUL-DE-SAC	FREDCR	100	450	27	12,150	R	AC	WS 101 - Streets on Westside of 101	66	67	76	$5,670	28,034	SLURRY SEAL
											Treatment Total			$8,657		
8TH ST	E/S ELKO ST	CUL-DE-SAC	8THST	200	640	33	21,120	R	AC	WS 101 - Streets on Westside of 101	47	48	100	$105,600	9,699	THICK AC OVERLAY(2.5 INCHES)
A ST	E/S S BELDEN ST	W/S S CENTER ST	AST	200	324	47	15,228	R	AC	WS 101 - Streets on Westside of 101	39	40	100	$76,140	10,170	THICK AC OVERLAY(2.5 INCHES)
BROCKMANN DR	E/S ELKO ST	S/S ELLIOTT AVE	BROCDR	100	1,042	31	32,302	R	AC	WS 101 - Streets on Westside of 101	40	41	100	$161,510	10,125	THICK AC OVERLAY(2.5 INCHES)
B ST	E/S S BELDEN ST	END	BST	200	150	45	6,750	R	AC	WS 101 - Streets on Westside of 101	42	43	100	$33,750	10,021	THICK AC OVERLAY(2.5 INCHES)
CENTER ST	S/S 5TH ST	N/S 4TH ST	CENTST	150	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	41	42	100	$76,375	10,073	THICK AC OVERLAY(2.5 INCHES)
C ST	W/S BELDEN ST	W/S CENTENNIAL DR	CST	200	611	36	21,996	R	AC	WS 101 - Streets on Westside of 101	39	40	100	$109,980	10,170	THICK AC OVERLAY(2.5 INCHES)
DAY ST	S/S 9TH ST	N/S 8TH ST	DAYST	200	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	46	47	100	$76,375	9,769	THICK AC OVERLAY(2.5 INCHES)
DAY ST	S/S 8TH ST	N/S 7TH ST	DAYST	300	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	39	40	100	$76,375	10,169	THICK AC OVERLAY(2.5 INCHES)

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $1M Expected Annual Budget

Year: 2020

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
FREEDOM WAY	E/S CENTENNIAL WAY	E/S FAIRVIEW DR	FREEWY	100	1,412	36	50,832	R	AC	WS 101 - Streets on Westside of 101	39	40	100	$254,160	10,161	THICK AC OVERLAY(2.5 INCHES)
													Treatment Total	$970,265		
					Year 2021 Area Total		212,603						Year 2021 Total	$978,922		

Year: 2021

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
ALTA ST (MINOR)	S/S 10TH ST	N/S 8TH ST	ALTASTM	100	700	37	25,900	A	AC	WS 101 - Streets on Westside of 101	15	12	100	$256,366	8,535	FULL DEPTH RECLAMATION
ALTA ST (MINOR)	N/S 5TH ST	N/S 4TH ST	ALTASTM	300	363	47	17,061	A	AC	WS 101 - Streets on Westside of 101	16	13	100	$168,875	8,535	FULL DEPTH RECLAMATION
ALTA ST (MINOR)	S/S 4TH ST	N/S 3RD ST	ALTASTM	400	318	47	14,946	A	AC	WS 101 - Streets on Westside of 101	19	17	100	$147,940	8,535	FULL DEPTH RECLAMATION
RINCON CIR	E/S RINCON RD	CUL-DE-SAC	RINCCR	100	140	33	4,620	R	AC	WS 101 - Streets on Westside of 101	9	7	100	$45,731	5,307	FULL DEPTH RECLAMATION
													Treatment Total	$618,912		
CIPRIANI ST	E/S CENTENNIAL DR	END	CIPRST	100	935	33	30,855	R	AC	WS 101 - Streets on Westside of 101	70	69	79	$14,831	30,299	SLURRY SEAL
MURANO CT	S/S CIPRIANI ST	S END	MURACT	100	373	33	12,309	R	AC	WS 101 - Streets on Westside of 101	70	69	79	$5,917	30,299	SLURRY SEAL
RINCON RD	606' S/O RINCON RD	CUL-DE-SAC	RINCRD	200	515	36	18,540	R	AC	WS 101 - Streets on Westside of 101	69	68	78	$8,912	24,331	SLURRY SEAL
													Treatment Total	$29,660		
6TH ST	E/S ALTA ST	CUL-DE-SAC	6THST	100	1,430	47	67,210	R	AC	WS 101 - Streets on Westside of 101	50	49	100	$346,132	9,358	THICK AC OVERLAY(2.5 INCHES)
													Treatment Total	$346,132		

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $1M Expected Annual Budget

Year 2021 Area Total 191,441 Year 2021 Total $994,704

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
ALTA ST (MINOR)	N/S 3RD ST	N/S 2ND ST	ALTASTM	500	378	60	22,680	A	AC	WS 101 - Streets on Westside of 101	29	23	100	$231,229	8,286	FULL DEPTH RECLAMATION
CENTER ST	S/S 1ST ST	N/S A ST	CENTST	190	317	24	7,608	R	AC	WS 101 - Streets on Westside of 101	17	12	100	$77,566	5,152	FULL DEPTH RECLAMATION
											Treatment Total			$308,795		
10TH ST	E/S ALTA ST	E/S ELKO ST	10THST	100	1,660	34	56,440	R	AC	WS 101 - Streets on Westside of 101	82	81	88	$27,943	34,862	SLURRY SEAL
4TH ST	E/S BELDEN ST	W/S CENTER ST	4THST	200	310	47	14,570	R	AC	WS 101 - Streets on Westside of 101	71	69	78	$7,214	28,894	SLURRY SEAL
VENICEY WAY	S/S CIPRIANI ST	W/S VENICE WAY	VENIWY	100	708	33	23,364	R	AC	WS 101 - Streets on Westside of 101	78	77	85	$11,568	35,779	SLURRY SEAL
VENICEY WAY	S/S CIPRIANI ST	S. END	VENIWY	200	710	33	23,430	R	AC	WS 101 - Streets on Westside of 101	81	80	87	$11,600	38,794	SLURRY SEAL
											Treatment Total			$58,325		
ALTA ST	CITY LIMITS	N/S 8TH ST	ALTAST	100	890	52	46,280	A	AC/AC	WS 101 - Streets on Westside of 101	89	86	87	$86	3,233,187	SEAL CRACKS
ALTA ST	N/S 8TH ST	N/S 3RD ST	ALTAST	200	1,880	42	78,960	A	AC/AC	WS 101 - Streets on Westside of 101	89	86	87	$147	3,233,187	SEAL CRACKS
ALTA ST	N/S 3RD ST	N/S 2ND ST	ALTAST	300	372	42	15,624	A	AC/AC	WS 101 - Streets on Westside of 101	89	86	87	$29	3,233,187	SEAL CRACKS
ALTA ST	N/S 2ND ST	N/S GONZALES RIVER RD	ALTAST	400	582	42	24,444	A	AC/AC	WS 101 - Streets on Westside of 101	89	86	87	$46	3,233,187	SEAL CRACKS
ALTA ST	N/S GONZALES RIVER RED	N/S C ST	ALTAST	500	920	72	66,240	A	AC/AC	WS 101 - Streets on Westside of 101	89	86	87	$123	3,233,187	SEAL CRACKS

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $1M Expected Annual Budget

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
ALTA ST	N/S C ST	1348' S/O C ST	ALTAST	600	1,348	43	57,964	A	AC/AC	WS 101 - Streets on Westside of 101	89	86	87	$108	3,233,187	SEAL CRACKS
ALTA ST	1348' S/O C ST	CITY LIMITS	ALTAST	700	4,263	47	200,361	A	AC/AC	WS 101 - Streets on Westside of 101	89	86	87	$372	3,233,187	SEAL CRACKS
												Treatment Total		$911		
5TH ST	E/S DAY ST	W/S GABILAN CT	5THST	200	1,190	46	54,740	C	AC	WS 101 - Streets on Westside of 101	18	8	100	$558,088	5,752	RECONSTRUCT STRUCTURE (AC)
												Treatment Total		$558,088		
GABILAN CT	S/S 5TH ST	END	GABICT	100	535	25	13,375	R	AC	WS 101 - Streets on Westside of 101	52	49	100	$70,948	9,098	THICK AC OVERLAY(2.5 INCHES)
												Treatment Total		$70,948		
					Year 2022 Area Total		706,080					Year 2022 Total		$997,067		

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
1ST ST	E/S ALTA ST	W/S BELDEN ST	1STST	100	315	47	14,805	R	AC	WS 101 - Streets on Westside of 101	3	0	100	$155,469	5,002	FULL DEPTH RECLAMATION
3RD ST	E/S CENTER ST	W/S DAY ST	3RDST	300	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	9	0	100	$160,405	5,002	FULL DEPTH RECLAMATION
												Treatment Total		$315,874		
CENTER ST	S/S 7TH ST	N/S 6TH ST	CENTST	130	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	72	68	77	$7,790	22,923	SLURRY SEAL
CENTER ST	S/S 6TH ST	N/S 5TH ST	CENTST	140	325	42	13,650	R	AC	WS 101 - Streets on Westside of 101	72	68	77	$6,961	22,923	SLURRY SEAL
												Treatment Total		$14,751		

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $1M Expected Annual Budget

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
5TH ST	W/S GABILAN CT	101 HWY	5THST	300	721	37	26,677	C	AC	WS 101 - Streets on Westside of 101	15	0	100	$280,139	5,584	RECONSTRUCT STRUCTURE (AC)
													Treatment Total	$280,139		
5TH ST	E/S ALTA ST	E/S DAY ST	5THST	100	1,122	50	56,100	C	AC	WS 101 - Streets on Westside of 101	56	47	100	$306,510	10,561	THICK AC OVERLAY(2.5 INCHES)
													Treatment Total	$306,510		
BELDEN ST	S/S 6TH ST	N/S 5TH ST	BELDST	140	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	73	69	100	$66,766	8,048	THIN AC OVERLAY(1.5 INCHES)
													Treatment Total	$66,766		
					Year 2023 Area Total		157,057						Year 2023 Total	$984,040		

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
1ST ST	E/S BELDEN ST	E/S S CENTER ST	1STST	200	362	47	17,014	R	AC	WS 101 - Streets on Westside of 101	9	0	100	$184,026	4,857	FULL DEPTH RECLAMATION
ALTA ST (MINOR)	N/S 2ND ST	N/S 1ST ST	ALTASTM	600	378	60	22,680	A	AC	WS 101 - Streets on Westside of 101	37	23	100	$245,311	7,810	FULL DEPTH RECLAMATION
RINCON CT	E/S RINCON RD	CUL-DE-SAC	RINCCT	100	72	75	5,400	R	AC	WS 101 - Streets on Westside of 101	33	23	100	$58,408	4,857	FULL DEPTH RECLAMATION
													Treatment Total	$487,745		
ALTA ST	CITY LIMITS	N/S 8TH ST	ALTAST	100	890	52	46,280	A	AC/AC	WS 101 - Streets on Westside of 101	89	84	91	$24,308	35,386	SLURRY SEAL
AMORE CT	S/S CIPRIANI ST	SOUTH END	AMORCT	100	241	33	7,953	R	AC	WS 101 - Streets on Westside of 101	74	69	78	$4,178	29,565	SLURRY SEAL
GRACE CIR	S/S FREEDOM WAY	CUL-DE-SAC	GRACCR	100	417	27	11,259	R	AC	WS 101 - Streets on Westside of 101	83	78	86	$5,914	24,869	SLURRY SEAL

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $1M Expected Annual Budget

										Treatment Total			$34,400			
4TH ST	160' W/O ELKO ST	W/S ELKO ST	4THST	400	160	40	6,400	R	AC	WS 101 - Streets on Westside of 101	66	70	73	$53	413,628	SEAL CRACKS
8TH ST	E/S ELKO ST	CUL-DE-SAC	8THST	200	640	33	21,120	R	AC	WS 101 - Streets on Westside of 101	47	87	88	$10	3,061,888	SEAL CRACKS
ALTA ST (MINOR)	S/S 10TH ST	N/S 8TH ST	ALTASTM	100	700	37	25,900	A	AC	WS 101 - Streets on Westside of 101	15	86	87	$41	1,651,061	SEAL CRACKS
ALTA ST (MINOR)	N/S 5TH ST	N/S 4TH ST	ALTASTM	300	363	47	17,061	A	AC	WS 101 - Streets on Westside of 101	16	86	87	$27	1,651,061	SEAL CRACKS
ALTA ST (MINOR)	S/S 4TH ST	N/S 3RD ST	ALTASTM	400	318	47	14,946	A	AC	WS 101 - Streets on Westside of 101	19	86	87	$24	1,651,061	SEAL CRACKS
A ST	E/S S BELDEN ST	W/S S CENTER ST	AST	200	324	47	15,228	R	AC	WS 101 - Streets on Westside of 101	39	87	88	$7	3,061,888	SEAL CRACKS
BROCKMANN DR	E/S ELKO ST	S/S ELLIOTT AVE	BROCDR	100	1,042	31	32,302	R	AC	WS 101 - Streets on Westside of 101	40	87	88	$15	3,061,888	SEAL CRACKS
B ST	E/S S BELDEN ST	END	BST	200	150	45	6,750	R	AC	WS 101 - Streets on Westside of 101	42	87	88	$4	3,061,888	SEAL CRACKS
CENTER ST	S/S 5TH ST	N/S 4TH ST	CENTST	150	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	41	87	88	$8	3,061,888	SEAL CRACKS
C ST	W/S BELDEN ST	W/S CENTENNIAL DR	CST	200	611	36	21,996	R	AC	WS 101 - Streets on Westside of 101	39	87	88	$11	3,061,888	SEAL CRACKS
DAY ST	S/S 9TH ST	N/S 8TH ST	DAYST	200	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	46	87	88	$8	3,061,888	SEAL CRACKS
DAY ST	S/S 8TH ST	N/S 7TH ST	DAYST	300	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	39	87	88	$8	3,061,888	SEAL CRACKS
FREDRICK CIR	S/S FREEDOM WAY	CUL-DE-SAC	FREDCR	100	450	27	12,150	R	AC	WS 101 - Streets on Westside of 101	66	71	74	$96	607,768	SEAL CRACKS

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 05/14/2020

Scenario: 2020 - $1M Expected Annual Budget

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
FREEDOM WAY	E/S CENTENNIAL WAY	E/S FAIRVIEW DR	FREEWY	100	1,412	36	50,832	R	AC	WS 101 - Streets on Westside of 101	39	87	88	$24	3,061,888	SEAL CRACKS
													Treatment Total	$336		
4TH ST	E/S ALTA ST	E/S BELDEN ST	4THST	100	310	47	14,570	R	AC	WS 101 - Streets on Westside of 101	57	49	100	$81,994	8,598	THICK AC OVERLAY(2.5 INCHES)
BELDEN ST	S/S 4TH ST	N/S 3RD ST	BELDST	160	372	47	17,484	R	AC	WS 101 - Streets on Westside of 101	55	48	100	$98,392	8,661	THICK AC OVERLAY(2.5 INCHES)
CENTER ST	S/S 4TH ST	N/S 3RD ST	CENTST	160	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	56	49	100	$85,961	8,587	THICK AC OVERLAY(2.5 INCHES)
ELKO ST	N/S 4TH ST	588' S/O 4TH ST	ELKST	400	588	37	21,756	R	AC	WS 101 - Streets on Westside of 101	56	49	100	$122,433	8,588	THICK AC OVERLAY(2.5 INCHES)
													Treatment Total	$388,780		
DAY ST	S/S 6TH ST	N/S 5TH ST	DAYST	500	325	47	15,275	R	AC	WS 101 - Streets on Westside of 101	75	69	100	$68,769	7,727	THIN AC OVERLAY(1.5 INCHES)
													Treatment Total	$68,769		
										Year 2024 Area Total	465,456		Year 2024 Total	$980,030		
										Total Section Area:	1,732,637		Grand Total	$4,934,763		

APPENDIX III

BACKUP DATA

A. Section Description Inventory Report
(Available on thumb drive due to size constraints)

B. Inventory of Applied Maintenance

C. Maintenance Treatment Decision Tree