

FIVE YEAR ROAD MAINTENANCE PLAN

PREVIOUS PLAN

- ✓ FY 2018/2019
- ✓ FY 2019/2020
- ✓ FY 2020/2021
- ✓ FY 2021/2022

FY 2022/2023

GOALS

- Treatment for all Roads
- Stabilize Pavement Conditions Citywide and slow Deterioration

PROPOSED PLAN

- FY 2023/2024
- FY 2024/2025
- FY 2025/2026
- FY 2026/2027
- FY 2027/2028

GOALS

- Address Neighborhoods removed from Previous Plan
- Continue to Provide City Wide Maintenance



Types of Roadway Improvements

Crack Sealing

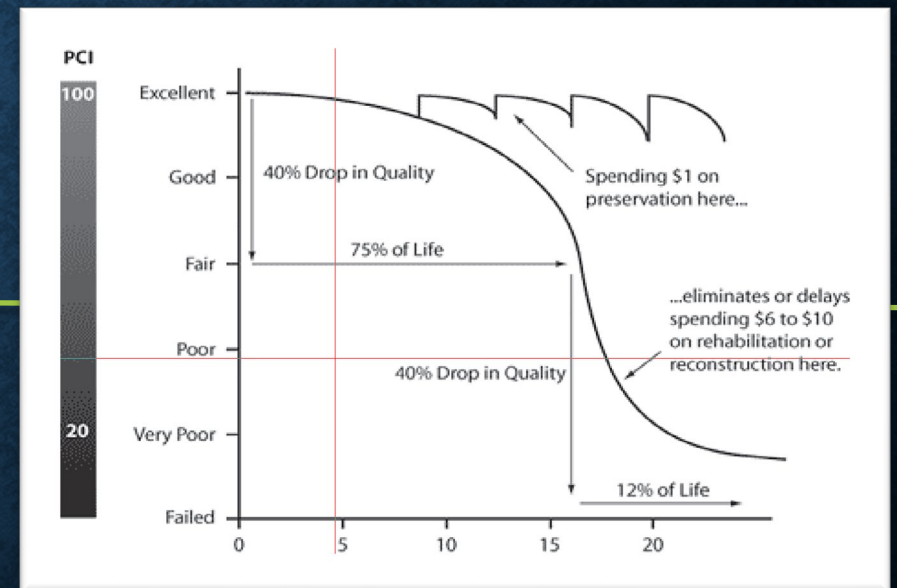
Slurry Sealing

Chip Seals

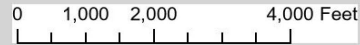
Mill and Overlay

Complete Reconstruction

MAINTENANCE



RECONSTRUCTION



SLURRY SEAL

60%

CHIP SEAL

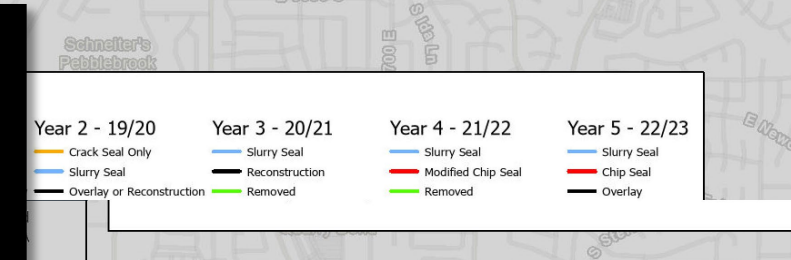
10%

MILL / OVERLAY & RECONSTRUCTION

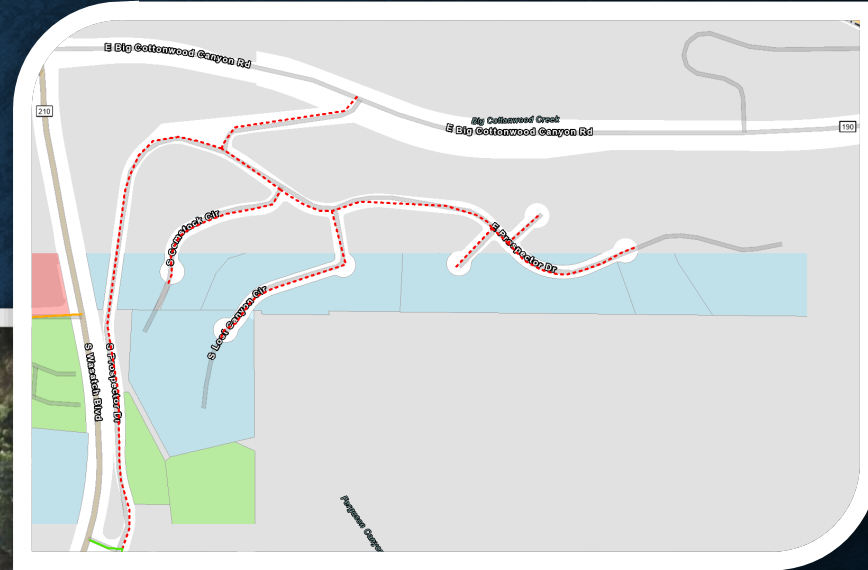
4.5%

IMPROVEMENTS OUTSIDE 5yr PLAN

10%



Prospector Drive Area



- Determined that a surface treatment would be a waste of taxpayer dollars
- Moved to FY 23/24
- Asphalt Reconstruction Required

Towne Drive Area



Determined that a surface treatment would be a waste of taxpayer dollars

Moved to FY 23/24

Asphalt Reconstruction Required

YEAR ONE FY 23/24

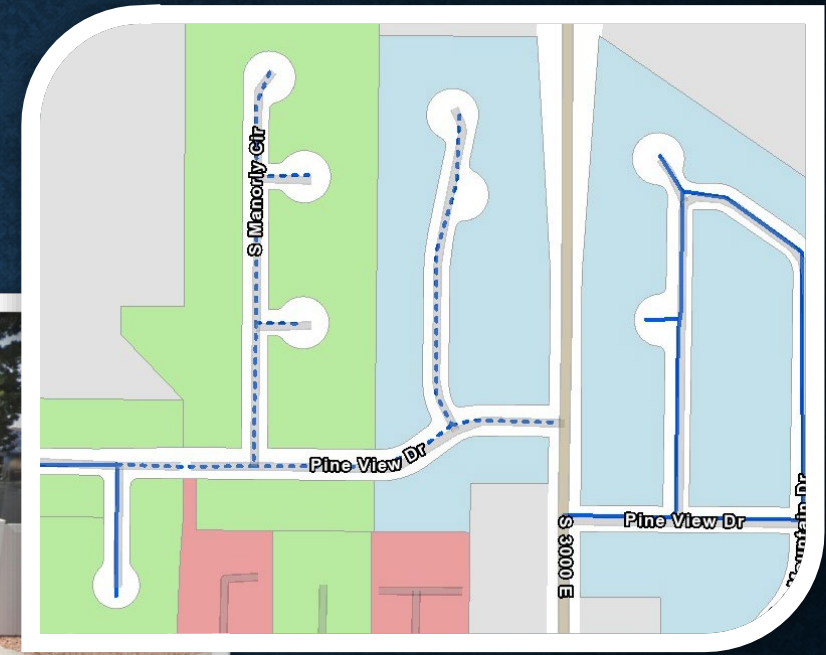
Assumptions:

No Concrete Replacement for Surface Maintenance such as slurry seals, chip seals, crack seals:

- No sidewalk replacement
- No waterway changes
- No drive approaches (unless part of curb replacement)
- No ADA ramps

2023 - 2024 Pavement Recommendations					
Neighborhood Area		Recommended Improvements	Quantity	Unit Cost	Cost
A	Prospector Drive Area	4-inch Mill & Overlay	33,000 SF	\$ 2.88	\$ 95,090
		4-inch Road Reconstruction	127,000 SF	\$ 5.37	\$ 681,673
		Curb & Gutter (Only Homes)	6,200 LF	\$ 40.68	\$ 252,216
		Waterway with ADA	4 EA	\$ 28,250.00	\$ 113,000
		ADA Ramps	2 EA	\$ 6,215.00	\$ 12,430
		Drive Approach	57 EA	\$ 2,260.00	\$ 128,820
					\$ 1,283,228
B	Towne Drive Area	Full Roadway Reconstruction	59,000 SF	\$ 10.05	\$ 592,819
Sub Total				\$	1,876,047
Other Roadway Projects		Recommended Improvements	Quantity	Unit Cost	Cost
Main Road Maintenance	Bengal Boulevard	Chip Seal	660,000 SF	\$ 0.63	\$ 417,648
Maintenance Projects for all other Roads in FY 23/24					\$ 500,000
Sub Total				\$	917,648
TOTAL				\$	2,793,700

Pine View Drive Area



- Determined that a surface treatment would be a waste of taxpayer dollars
- Moved to FY 24/25
- Mill & Overlay Required

YEAR TWO FY 24/25

Assumptions:

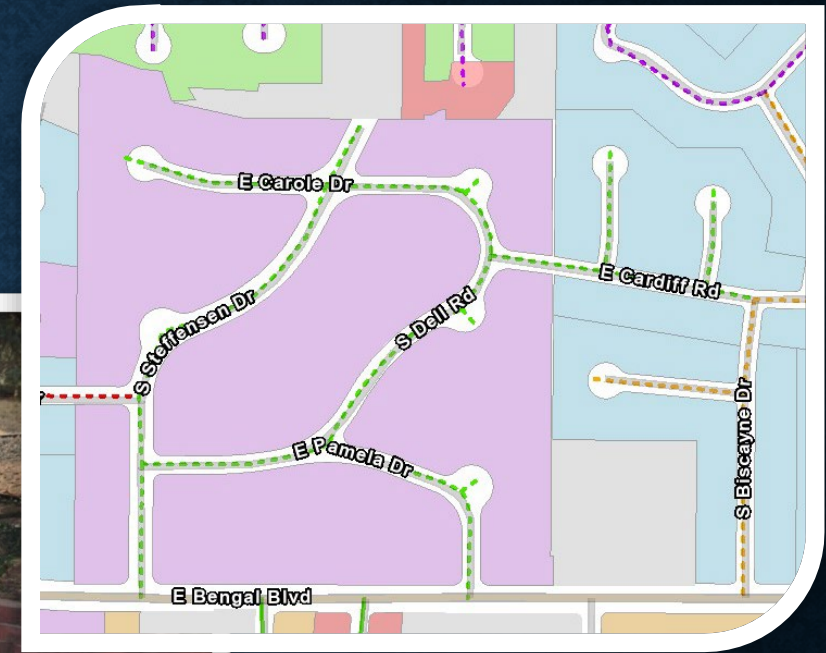
For Surface Maintenance such as slurry seals, chip seals, crack seals:

- No sidewalk replacement
- No waterway changes
- No drive approaches (unless part of curb replacement)
- No ADA ramps

2024 - 2025 Pavement Recommendations					
Neighborhood Area		Recommended Improvements	Quantity	Unit Cost	Cost
A	Pine View Drive Area	4-inch Mill & Overlay with Soft Spot Repair	86,000 SF	\$ 3.49	\$ 300,182
		Curb & Gutter	946 LF	\$ 53.39	\$ 50,509
		ADA Ramps	8 EA	\$ 6,525.75	\$ 52,206
		Waterway Reconstruction w/ ADA	6 EA	\$ 29,662.50	\$ 177,975
		Waterway	1 EA	\$ 17,797.50	\$ 17,798
Sub Total				\$	598,670
Other Roadway Projects		Recommended Improvements	Quantity	Unit Cost	Cost
Main Road Maintenance	Fort Union Blvd - (Union Park Ave to 3000 East)	Chip & Crack Seal	960,000 SF	\$ 0.74	\$ 706,205
Main Road Reconstruction	Highland Drive - (Bengal Blvd to Fort Union Blvd)	2.5" Mill & Overlay with Fabric	370,100 SF	\$ 2.33	\$ 860,682
Maintenance Projects for all other Roads in FY 24/25				\$	600,000
Sub Total				\$	2,166,887
TOTAL				\$	2,765,600

Steffensen Drive Area

7682 Steffensen Dr
Cottonwood Heights, Utah
Google Street View
Oct 2022 See more dates



- Determined that a surface treatment would be a waste of taxpayer dollars
- Moved to FY 25/26
- Asphalt Reconstruction Required

YEAR THREE

FY 25/26

Assumptions:

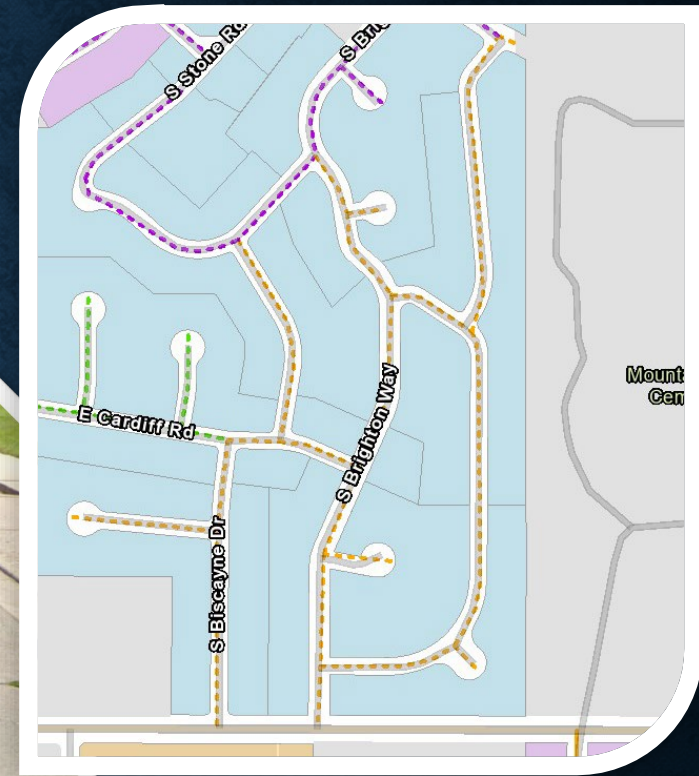
For Surface Maintenance such as slurry seals, chip seals, crack seals:

- No sidewalk replacement
- No waterway changes
- No drive approaches (unless part of curb replacement)
- No ADA ramps

2025 - 2026 Pavement Recommendations					
Neighborhood Area		Recommended Improvements	Quantity	Unit Cost	Cost
A	Bridgewater, Steffensen, Brighton Area	Full Roadway Reconstruction	224,000 SF	\$ 10.97	\$ 2,457,765.33
Sub Total				\$	2,457,765
Maintenance Projects for all other Roads in FY 25/26				\$	300,000
Sub Total					300,000
TOTAL				\$	2,757,765

Brighton Way Area

← 7746 Brighton Way
Cottonwood Heights, Utah
Google Street View
Aug 2022 See more dates



- Determined that a surface treatment would be a waste of taxpayer dollars
- Moved to FY 26/27
- Asphalt Reconstruction Required

YEAR FOUR FY 26/27

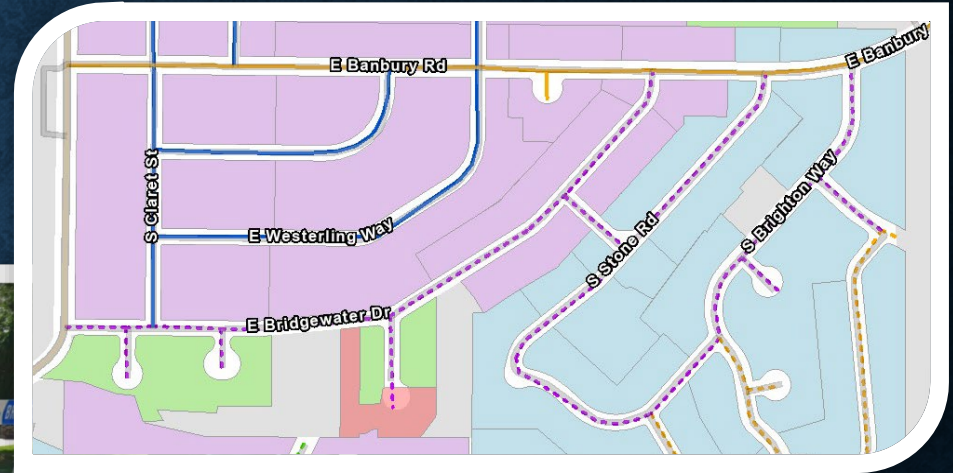
Assumptions:

For Surface Maintenance such as slurry seals, chip seals, crack seals:

- No sidewalk replacement
- No waterway changes
- No drive approaches (unless part of curb replacement)
- No ADA ramps

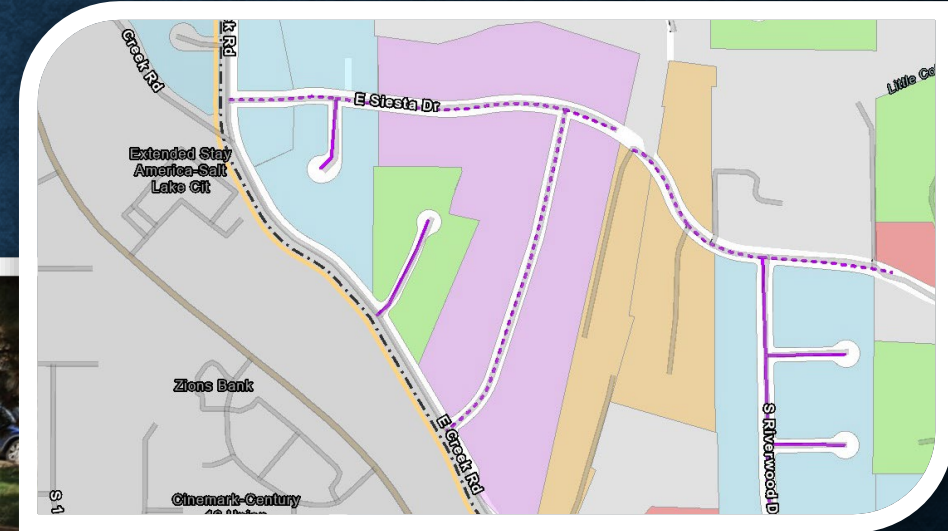
2026 - 2027 Pavement Recommendations					
Neighborhood Area		Recommended Improvements	Quantity	Unit Cost	Cost
A	Bridgewater, Steffensen, Brighton Area	Full Roadway Reconstruction	224,000 SF	\$ 11.30	\$ 2,531,498.29
Sub Total			224,000	\$	2,531,498
Other Roadway Projects		Recommended Improvements	Quantity	Unit Cost	Cost
Main Road Maintenance	3500 East	Slurry Seal	219,000 SF	\$ 0.24	\$ 52,885
	2300 East	Crack & Chip Seal	318,000 SF	\$ 0.71	\$ 226,336
Sub Total				\$	279,221
TOTAL				\$	2,810,720

Bridgewater Drive Area



- Determined that a surface treatment would be a waste of taxpayer dollars
- Moved to FY 27/28
- Asphalt Reconstruction Required

Lower Siesta Drive Area



- Determined that a surface treatment would be a waste of taxpayer dollars
- Moved to FY 27/28
- Mill & Overlay Required

YEAR FIVE FY 27/28

Assumptions:

For Surface Maintenance such as slurry seals, chip seals, crack seals:

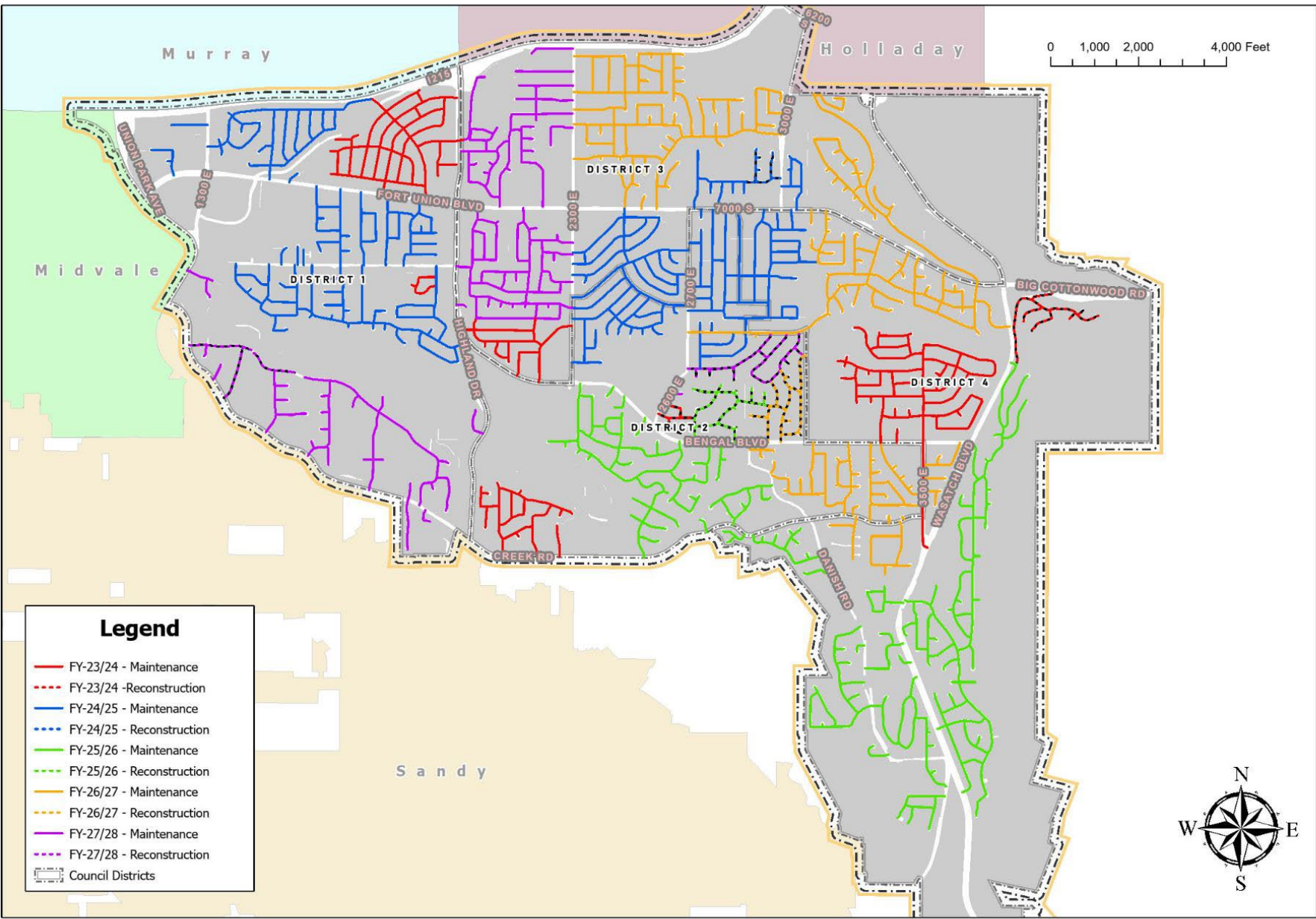
- No sidewalk replacement
- No waterway changes
- No drive approaches (unless part of curb replacement)
- No ADA ramps

2027 - 2028 Pavement Recommendations					
Neighborhood Area		Recommended Improvements	Quantity	Unit Cost	Cost
A	Lower Section of Siesta Drive Area	2-inch Overlay	125,000 SF	\$ 1.94	\$ 243,075
		Curb & Gutter	688 LF	\$ 58.34	\$ 40,107
		Waterway Reconstruction with ADA	3 EA	\$ 32,409.96	\$ 97,230
		ADA Ramps	4 EA	\$ 7,130.19	\$ 28,521
					\$ 408,933
B	Bridgewater, Steffensen, Brighton Area	Full Roadway Reconstruction	203,000 SF	\$ 11.53	\$ 2,340,053.73
Sub Total				\$	2,748,986
Other Roadway Projects		Recommended Improvements	Quantity	Unit Cost	Cost
Main Road Maintenance	2700 East	Chip Seal	200,220 SF	\$ 0.65	\$ 129,782
Maintenance Projects for all other Roads in FY 27/28					\$ 300,000
Sub Total				\$	429,782
TOTAL				\$	3,178,769

Cottonwood Heights Local Roads FY 23-28 Pavement Plan

Cottonwood Heights
2277 E Bengal Boulevard
Cottonwood Heights, UT 84121
801-944-7000

Published: January, 2023
Sources: Utah State AGRC
Cottonwood Heights
Salt Lake County



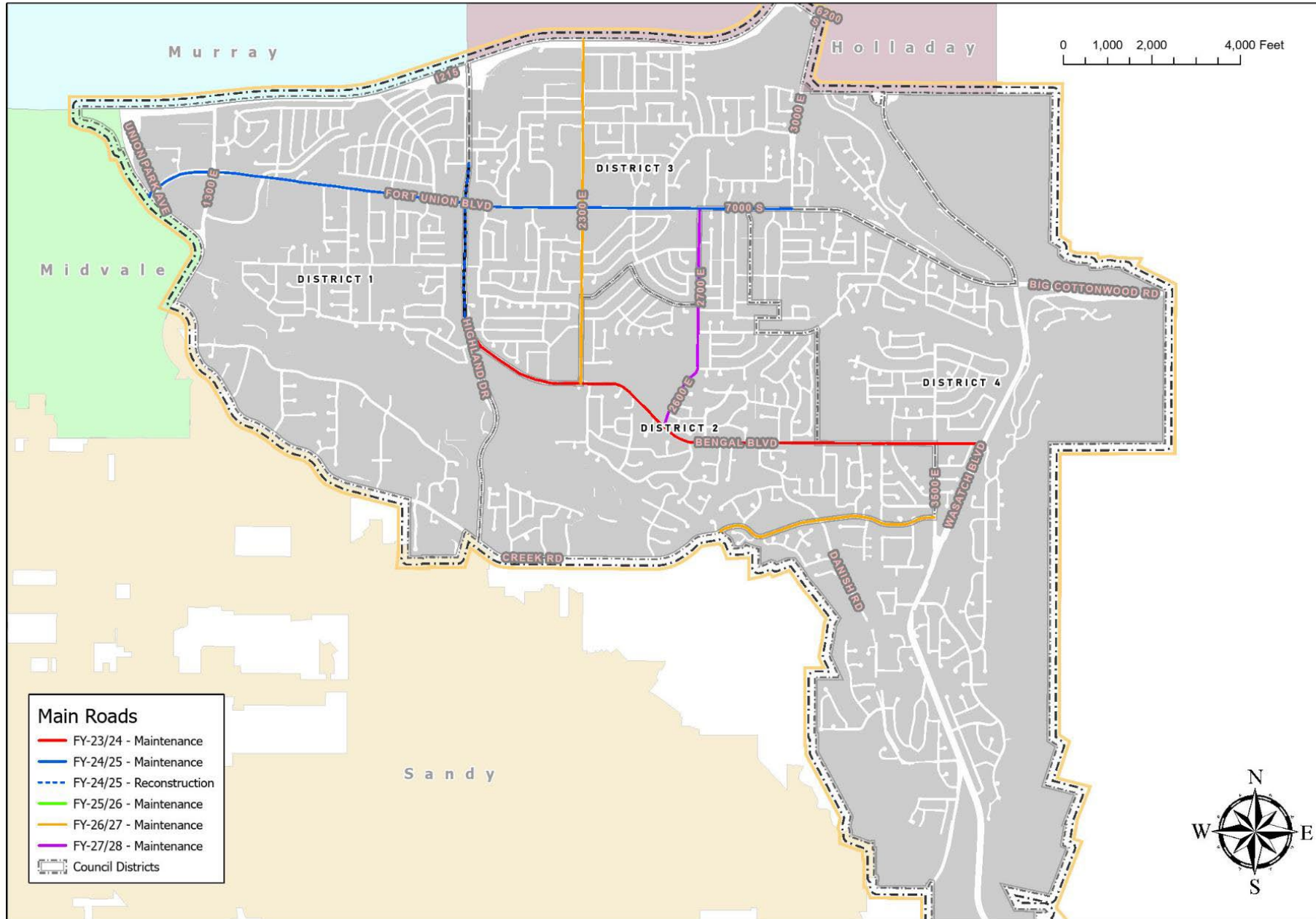
LOCAL ROADS



Published: January, 2023
Sources: Utah State AGRC
Cottonwood Heights
Salt Lake County

Cottonwood Heights
2277 E Bengal Boulevard
Cottonwood Heights, UT 84121
801-944-7000

Cottonwood Heights Main Roads FY 23-28 Pavement Plan



MAIN ROADS

NEW FIVE-YEAR MAINTENANCE PLAN

- Have moved focus to include neighborhood reconstruction projects to address roads with low pavement conditions.
- These reconstruction projects will include the required ADA Improvements, curb & waterway improvements, but will not include sidewalk replacement.
- Will continue to provide roadway maintenance to all city roads with an emphasis on maintaining the pavement condition of the main roads.
- Proposed pavement recommendations are based on a flat \$2.8 Million Dollars a year
- Estimated Costs are based on actual bid pricing from 2021-2022 with an inflation rate built in.

Utah Department of Transportation - Central Preconstruction Construction Cost Outlook and Recommended Inflation Projections - June 2022

Executive Summary - Construction Item Inflation (CY = Calendar Year)

	CY 2023	CY 2024	CY 2025	CY 2026
High	11%	9%	8%	8%
Recommended	8%	7%	6%	6%
Low	6%	5%	4%	4%

These percentage recommendations are approved to use in the UDOT Concept Cost Estimate Spreadsheet

Contributors to Inflation Forecast

General

- The year 2022 should be another year of substantial economic expansion in Utah.
- The 2020 census data identified Utah as the fastest-growing state in the nation between 2010 and 2020.
- The pandemic caused supply chain challenges and labor shortages, and currently China COVID related lockdowns and the war in Ukraine have created new sources of inflationary pressures.
- Consumer price inflation has significantly increased and is near a four-decade high.
- The Federal Reserve is raising interest rates as part of its most aggressive effort in decades to curb upward price pressures. The Federal Reserve faces a difficult task of slowing growth enough to bring down inflation without triggering a recession.

Labor

- Utah's unemployment rate has fallen to a near low of 2.0%.
- Utah had the highest state construction employment change in the nation at 13.5% from February 2020 to March 2022.
- The worker shortage in construction is generally more severe than in most other industries.
- Construction workers (nonsupervisory) saw their earnings climb 6.3% year over year as of May 2022.

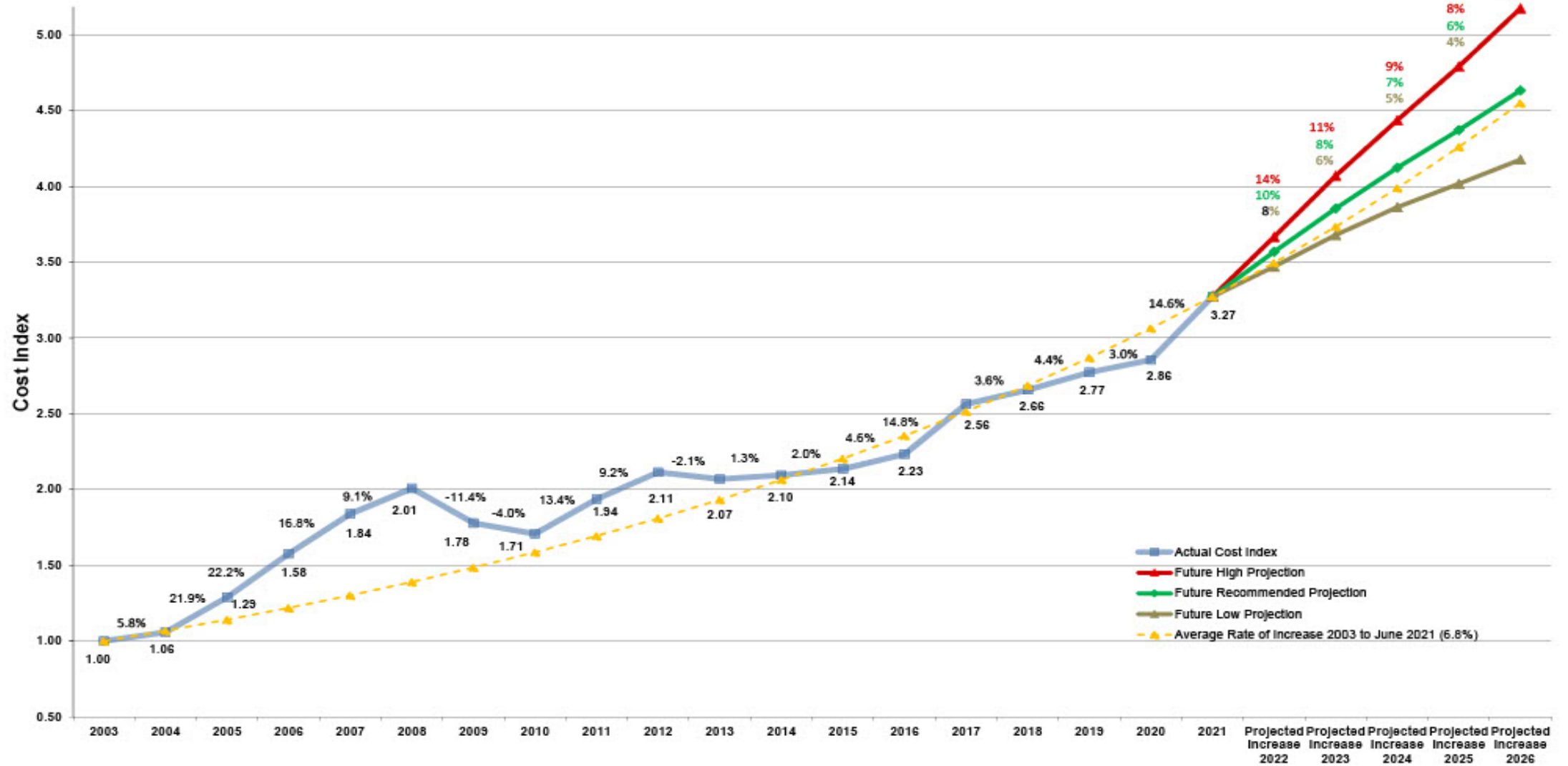
Materials

- The producer price index for inputs to highways and streets was up 19.6% for the past year.
- Commodities important to construction including steel, asphalt binder, and diesel fuel have had significant price increases during 2021 and 2022.
- The U.S. Energy Information Administration (EIA) forecasts crude oil, gasoline, and diesel prices will decline from current levels in 2022 and 2023.
- As a barometer for construction costs, consumer price increases have been elevated during the first half of 2022. However, those increases are expected to cool somewhat during the second half of the year.

Funding

- Sizeable federal and state infrastructure funding may put increased pressure on resources and prices.
- The Cumming Construction Spending Index for Utah is forecast to decline 8% in 2022 and another 4% in 2023.
- The value of permit-authorized construction in Utah in 2022 is forecast to increase 1.0% from 2021.

Future Projections for UDOT Construction Cost Index (2003-2026)
(Based on UDOT Average Unit Bid Prices Index*)



* The All Average Unit Bid Prices Index is a consistent measurement of all standard bid items. The index does not reflect all bid data because it excludes all non-standard bid items. Producer Price Index - Net Inputs to Highways and Streets data is used beginning July 2021 in place of the All Average Unit Bid Prices Index.