

# City of Clearlake Road Strategy Discussion

City Of Clearlake

April 13, 2022

# Agenda:



Staff Overview of Strategy Options



Staff Recommendations



Financial Consultant NHA Follow Up Discussion



Discussion of Projects



Questions and Discussion

# Road Projects:

- \$15 Million- \$18 Million
- Large Projects in Concentrated Areas
- High Density of Homes
- Public Streets
- Combination of Chip Seal, Full Depth Reclamation (FDR), and Maintenance
- Neighborhood Transformative Projects

# Benefits of this Project:



Adding paved  
roads to over  
2,000 residents



Adds investment  
interest to new  
businesses and  
developers



Improves overall  
reputation of the  
City



Provides better  
access to  
existing  
businesses



Increases road  
safety







## Two Strategies to Complete Road Projects using Measure V funds:

Pay – Go  
(Pay as you go)

Bond Program-  
Debt Financing

# Pay-Go:

Average of \$1.5 Million in projects per year

Smaller Projects

Piecemeal larger projects

Completed over 13 to 15 years

Harder to complete maintenance projects

## Debt Financing:

Street Projects completed in 1-3 years

Repayment over 10-15 years

Use of Measure V resources tied to debt financing

Current annual revenue: \$2.5 mil

Annual debt service: \$1.5 mil

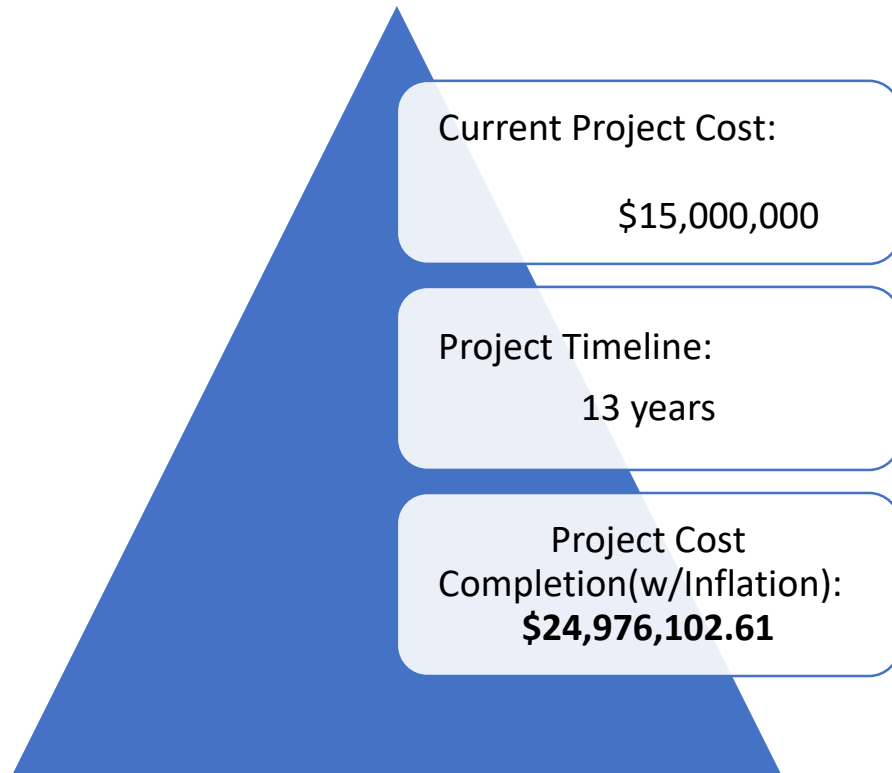
# Assumptions:

Project Cost (Current price):	\$15 Million
Annual debt service (per year):	\$1.5 Million
Bond amortization:	13 years
Bond rate:	2.75%
Inflation Rate	4.00%

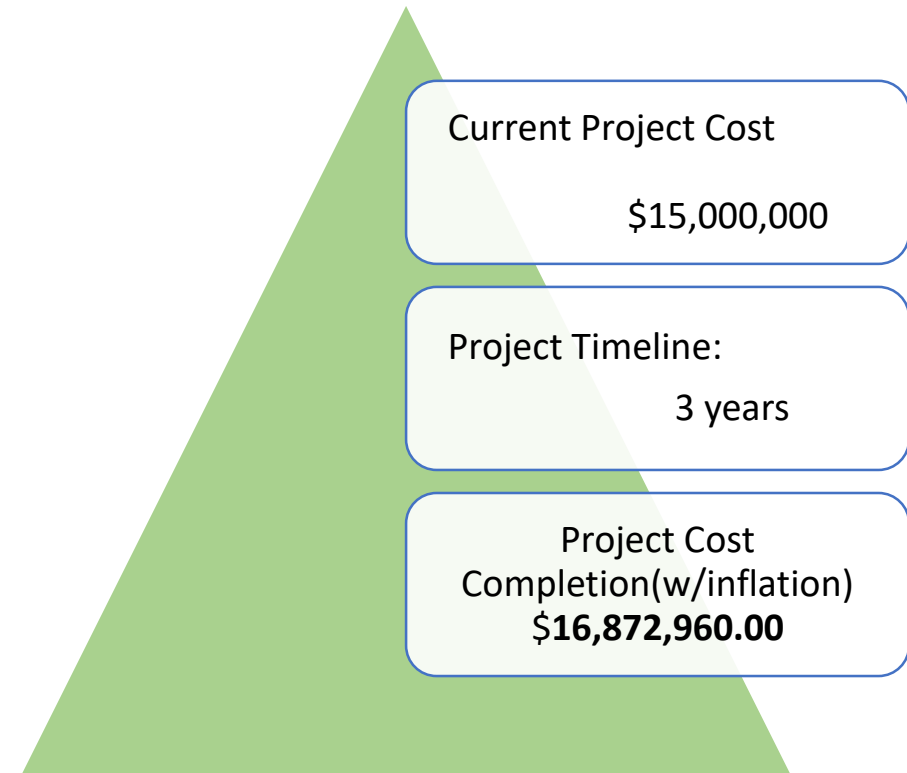


# Cost Comparison

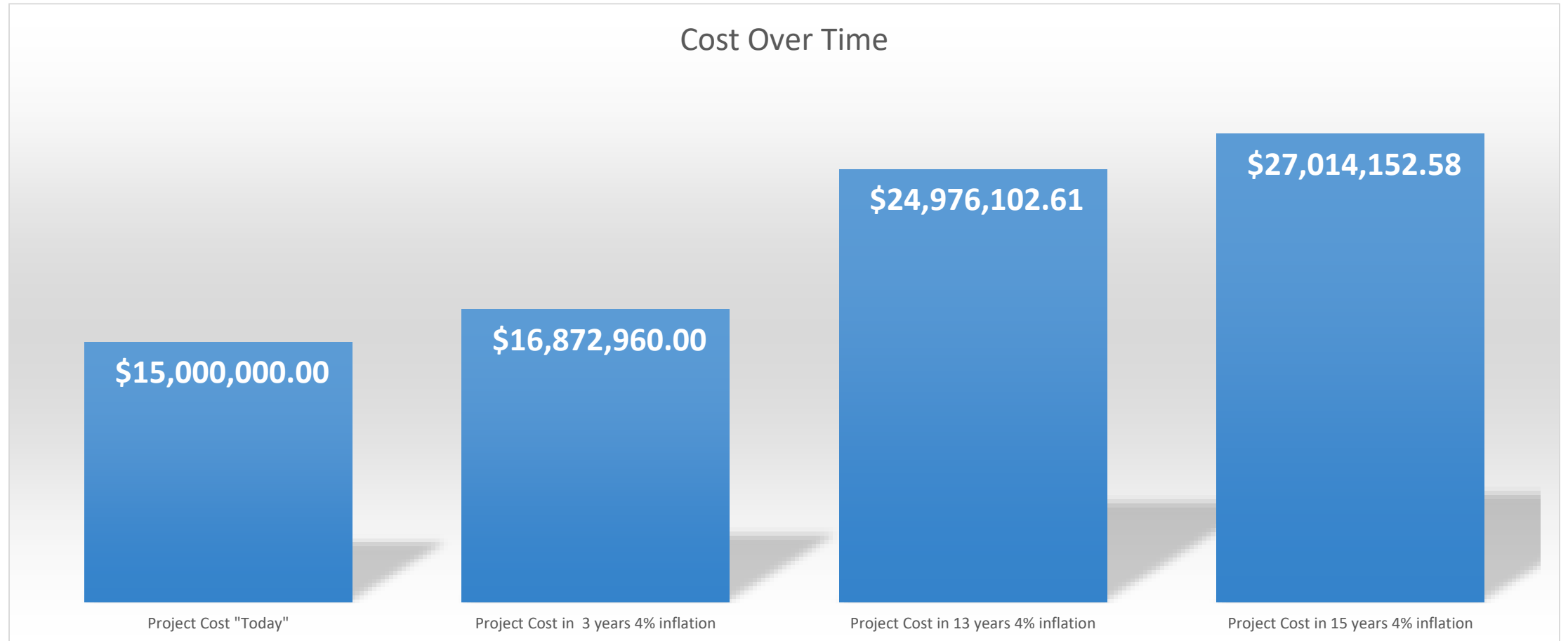
## Pay - Go



## Financing:



# Project Cost Increase from Inflation



# Financing Cost vs Pay – Go Cost



A bar chart comparing two project cost scenarios. The left bar, representing a financing cost, is shorter and labeled '\$21 Million'. The right bar, representing a pay-go cost, is taller and labeled '\$25 Million'. Both bars are blue and have a slight 3D effect with a shadow. The chart is set against a light gray background.

Scenario	Cost (\$ Million)
Project Cost in 3 years 4% inflation and 2.75% interest	21
Project Cost in 13 years 4% inflation	25

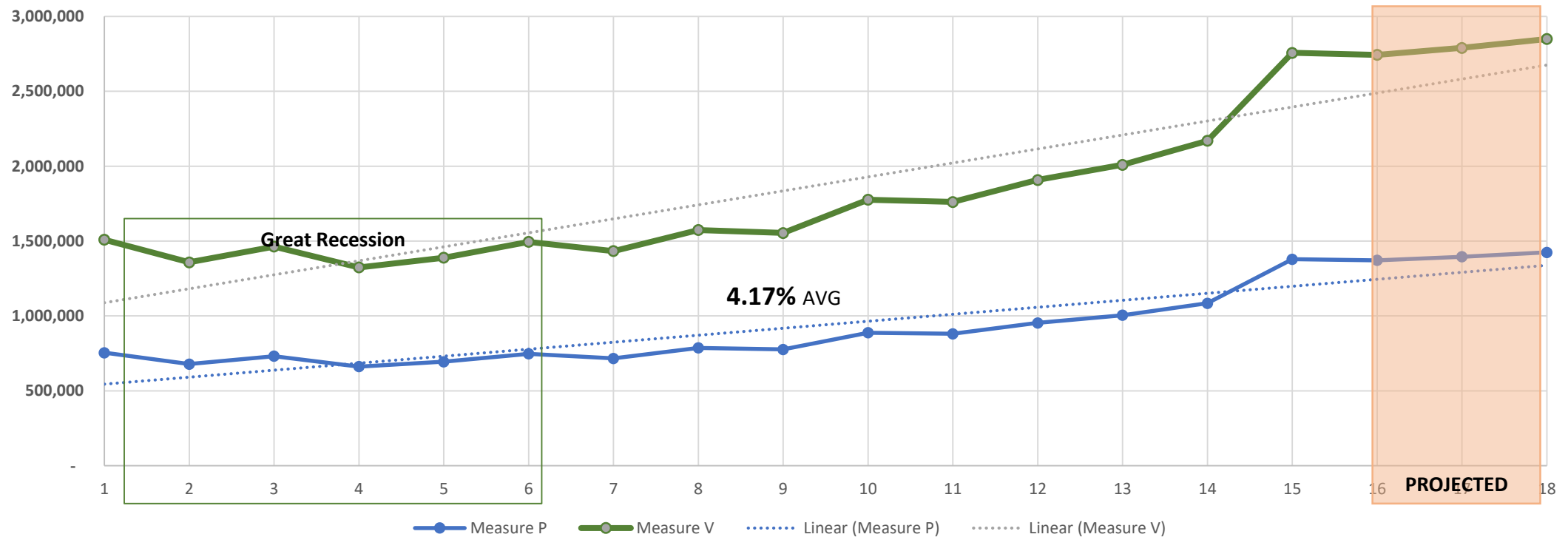
**\$21 Million**

Project Cost in 3 years 4% inflation and 2.75% interest

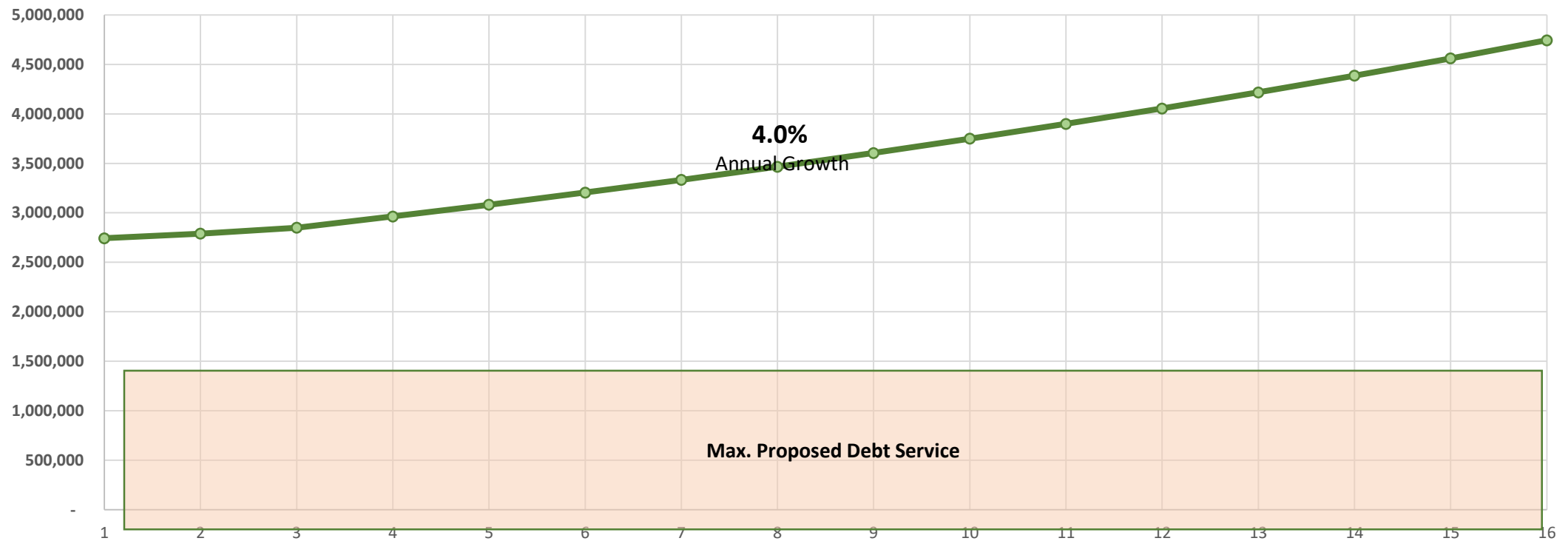
**\$25 Million**

Project Cost in 13 years 4% inflation

# Measure P and Measure V FY 06-07 through FY 23-24




# Projected Annual Growth through FY 36-37





# Maintenance Estimate Assumptions:

A thick yellow horizontal bar spanning the width of the slide, with a vertical yellow bar on the right side.

- Average cost to maintain roads equals 10% of road rehab cost
  - Optimal maintenance is every 5 - 7 years
  - Consistent maintenance increases road life expectancy by 10-15 years
- 
- A thin grey horizontal bar at the bottom of the slide.

# Maintenance

- Saves money by protecting the asphalt and base course materials from water infiltration and solar radiation
- Extends road life and maintains safety and ride quality

Maintenance Options & Costs		
Treatment	Cost per Block	RSL Increase
High-density Mineral Bond (HA5)	\$5,280	7.5 yrs
Micro Surfacing	\$5,940	5 yrs
Chip Seal	\$7,260	7.5 yrs
Cape Seal	\$21,120	7.5 yrs
Thin Overlay	\$22,968	10 yrs
Thick Overlay	\$28,512	13 yrs
<b>Reconstruct</b> (for comparison only)	<b>\$145,200</b>	<b>20 yrs</b>



# Cost of Maintenance

- 10% of \$15 million
- \$1.5 million every 5 years
- \$4.5 million total over 15 years
- With no maintenance road would need to be rehabilitated every 15 years
- Completion of road projects quickly with ongoing maintenance, \$19.5 million investment would last approximately 30 years



# Staff Time for 1 construction contract per year

Average	Average Bid – 30 days
Contract	Contract Negotiation and Process- 20 Days
Staff	Staff time- 64 hours on average per solicitation/contract

Combining 13 contracts into 1 equates to savings of:

- 768 hours (over 19 weeks) in staff time
- 600 (Just under 2 years) days in contract delays
- This results in more efficiency and more opportunity for staff to work on other items





# Contract Consolidation

- Provides Economies of Scale
- Less Mobilization Costs
- Bulk Material Pricing
- Attractive to larger construction companies
- More bidding competition which leads to lower pricing

# Draft Reserve Policy

Would recommend a reserve of Measure V be held for the first three years:

10% first year

7.5% second year

5% third year



Required reserve period can be extended after if desired

# Recommended Strategy: Financing

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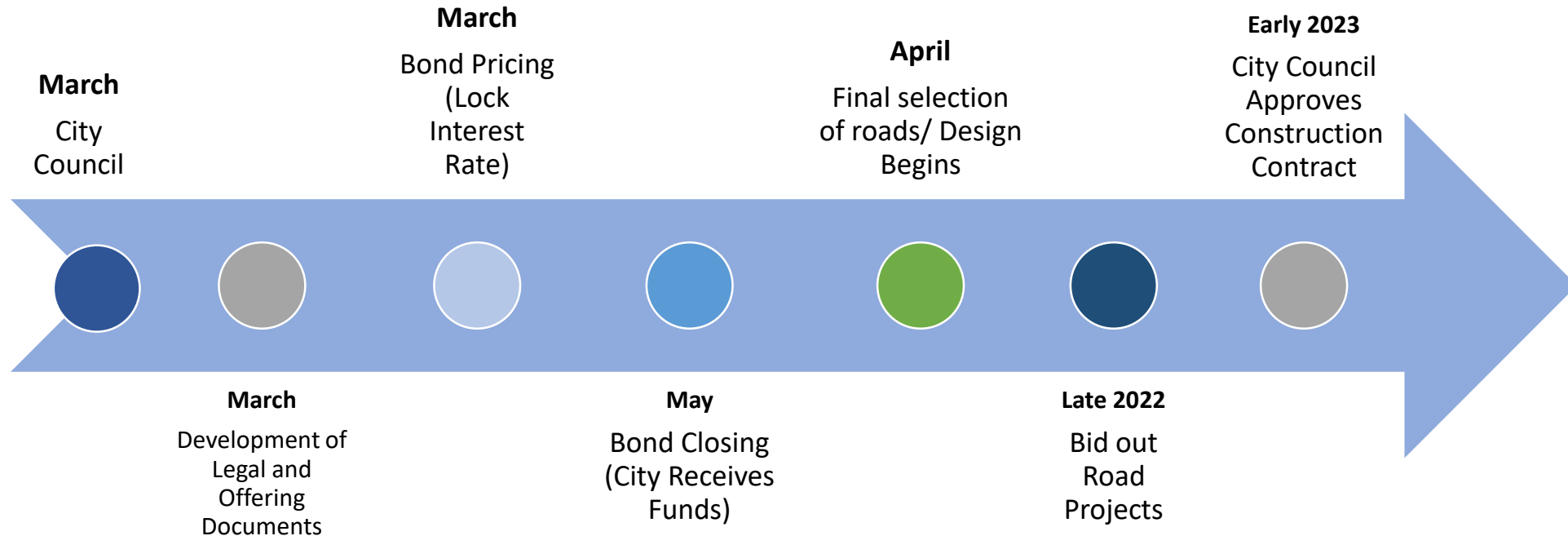
- **Risks:**
  - Sacrifice budgetary flexibility
  - Economic downturn
    - Loss of revenues
    - Debt payments

# Recommended Strategy: Financing

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- **Potential Benefits:**
  - Lower cost
    - Historically low borrowing costs
  - Hedge against inflationary pressure
    - Using, not chasing, inflation to our benefit
  - Known budgetary costs
  - Complete significant projects now

# Financing Estimated Timeline:





# CITY OF CLEARLAKE

## *STREETS FUNDING DISCUSSION – FOLLOW UP*

**NHA | ADVISORS**  
Financial & Policy Strategies.  
Delivered.



March 17, 2022

# Cost / Benefit Analysis of Bonding vs. Pay-Go

## Interest Costs on 15-Year Bond vs. Cost of Inflation

- Interest and financing costs on bond projected between \$3.0M and \$4.4M depending on bond sizing option
- Cost of Inflation (less projects funded using Pay-Go) is significantly higher
  - 4% Inflation
    - \$3.9M to \$5.8M
  - 6% Inflation
    - \$5.3M to \$7.9M
  - 8% Inflation
    - \$6.4M to \$9.6M

Proceeds Generated <sup>1</sup> with Funding Options			
	\$1 Million Annual Debt Service	\$1.25 Million Annual Debt Service	\$1.5 Million Annual Debt Service
15 Year Term; 2.75% Rate			
Financing Project Funding	\$11,975,000	\$15,010,000	\$18,050,000
Total Payments for Financing	\$14,961,350	\$18,706,125	\$22,457,550
Financing Interest+COI	\$2,986,350	\$3,696,125	\$4,407,550
Interest Costs on Bond			
Projects Pay-Go (Inflation @ 4%)	\$11,089,233	\$13,865,061	\$16,645,242
Total Payments for Pay-Go	\$14,961,350	\$18,706,125	\$22,457,550
Inflation Reduction of Proceeds	\$3,872,117	\$4,841,064	\$5,812,308
Net Benefit / (Cost) of Pay-Go	(\$885,767)	(\$1,144,939)	(\$1,404,758)
Cost of Inflation			
Projects Pay-Go (Inflation @ 6%)	\$9,686,551	\$12,111,413	\$14,539,713
Total Payments for Pay-Go	\$14,961,350	\$18,706,125	\$22,457,550
Inflation Reduction of Proceeds	\$5,274,799	\$6,594,712	\$7,917,837
Net Benefit / (Cost) of Pay-Go	(\$2,288,449)	(\$2,898,587)	(\$3,510,287)
Projects Pay-Go (Inflation @ 8%)	\$8,536,626	\$10,673,779	\$12,813,589
Total Payments for Pay-Go	\$14,961,350	\$18,706,125	\$22,457,550
Inflation Reduction of Proceeds	\$6,424,724	\$8,032,346	\$9,643,961
Net Benefit / (Cost) of Pay-Go	(\$3,438,374)	(\$4,336,221)	(\$5,236,411)

# Cost / Benefit Analysis of Bonding vs. Pay-Go

## Interest Costs on 10-Year Bond vs. Cost of Inflation

- Interest and financing costs on bond projected between \$1.4M and \$2.0M depending on bond sizing option
- Cost of Inflation (less projects funded using Pay-Go) is significantly higher
  - 4% Inflation
    - \$1.9M to \$2.8M
  - 6% Inflation
    - \$2.6M to \$4.0M
  - 8% Inflation
    - \$3.3M to \$4.9M

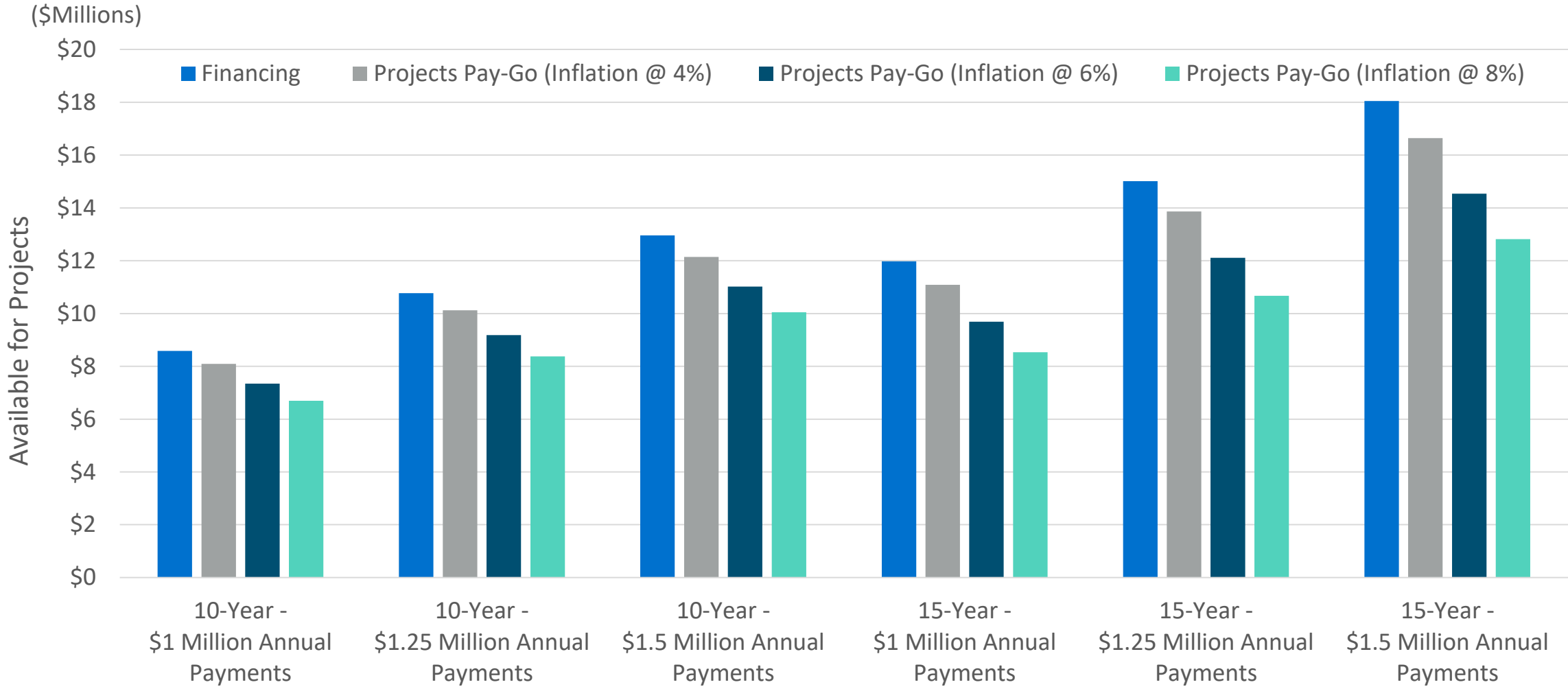
Proceeds Generated <sup>1</sup> with Funding Options			
	\$1 Million Annual Debt Service	\$1.25 Million Annual Debt Service	\$1.5 Million Annual Debt Service
<b>10 Year Term; 2.50% Rate</b>			
Financing Project Funding	\$8,585,000	\$10,770,000	\$12,955,000
Total Payments for Financing	\$9,980,375	\$12,476,500	\$14,973,250
<b>Financing Interest+COI</b>	<b>\$1,395,375</b>	<b>\$1,706,500</b>	<b>\$2,018,250</b>
Projects Pay-Go (Inflation @ 4%)	\$8,095,152	\$10,120,265	\$12,145,111
Total Payments for Pay-Go	\$9,980,375	\$12,476,500	\$14,973,250
<b>Inflation Reduction of Proceeds</b>	<b>\$1,885,223</b>	<b>\$2,356,235</b>	<b>\$2,828,139</b>
Net Benefit / (Cost) of Pay-Go	(\$489,848)	(\$649,735)	(\$809,889)
Projects Pay-Go (Inflation @ 6%)	\$7,345,892	\$9,183,745	\$11,021,066
Total Payments for Pay-Go	\$9,980,375	\$12,476,500	\$14,973,250
<b>Inflation Reduction of Proceeds</b>	<b>\$2,634,483</b>	<b>\$3,292,755</b>	<b>\$3,952,184</b>
Net Benefit / (Cost) of Pay-Go	(\$1,239,108)	(\$1,586,255)	(\$1,933,934)
Projects Pay-Go (Inflation @ 8%)	\$6,697,229	\$8,372,930	\$10,047,920
Total Payments for Pay-Go	\$9,980,375	\$12,476,500	\$14,973,250
<b>Inflation Reduction of Proceeds</b>	<b>\$3,283,146</b>	<b>\$4,103,570</b>	<b>\$4,925,330</b>
Net Benefit / (Cost) of Pay-Go	(\$1,887,771)	(\$2,397,070)	(\$2,907,080)

Interest Costs  
on Bond

Cost of Inflation

# Cost / Benefit Analysis of Bonding vs. Pay-Go

## Comparison of Funds Available for Projects with Financing vs. Inflation Costs



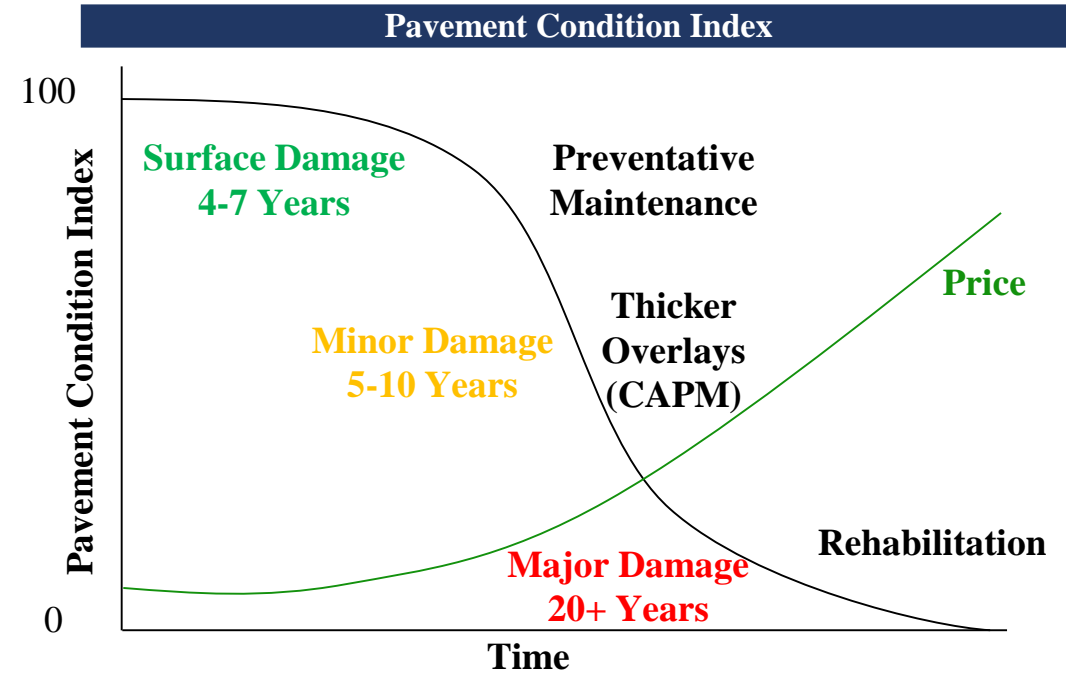
# Summary of Considerations for Bonding vs. Pay-Go

- Inflation
  - The cost of waiting (inflation) is projected to be significantly higher than the cost of borrowing (bond interest costs) for projects today
- Rising Interest Rate Environment
  - Rates have been on the rise and projected to continue rising; locking in low rates in an inflationary environment is financially beneficial
- Economies of Scale
  - Aggregating projects will produce lower costs in a highly competitive construction environment
- Cost of Street Repair Exponentially Increases the Longer you Wait
  - Once streets fall below certain PCI, it becomes exponentially more expensive to repair them (reconstruction vs. maintenance/repair)



# How Streets Deteriorate and Repair Costs Increase...

- Pavement Condition Index (PCI)  
= “Health of a Street Network”
  - Target PCI Score = 65-75
  - Avg. Street Life = 20 years
- Street Repair Methods Vary Depending on PCI Score
  - High PCI scores  
Less Expensive to Repair
  - Low PCI Scores  
More Expensive to Repair



Fixing streets before the PCI score falls below “fair condition” saves money



# Review of Projects And Questions and Discussion