Study Session: Citywide Infrastructure Needs and Funding Strategies

City Council Study Session - September 7, 2021

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Citywide Infrastructure Needs

- Streets and Alleys
- Sidewalks and Curb Ramps
- Stormwater Infrastructure and Treatment
- Bridges
- Traffic Signals and Signage
- Street Lighting
- Bicycle Master Plan
- Urban Forest

- Public Safety Facilities
- Parks
- Community Facilities
- Parking Facilities
- Libraries
- Other City Assets

Recently Updated Plans Outlining Infrastructure Needs

- Pavement Management Plan (PMP) for streets and alleys
- Self Evaluation and Transition Plan for pedestrian facilities
- Facilities Condition Assessments (FCAs) for public safety, park, library, parking, and community center facilities

- **Measure A** - historic investment enabled the City to conduct valuable, detailed studies relying on data
- Data leads to better-informed decisions

Continuous Need to Update Plans and Develop New Ones

- Storm Drain Master Plan
- Storm Water Master Plan
- Bridge Master Plan
- Bicycle Master Plan
- Urban Forest Plan

Focus on Pavement Management Plan

- The PMP plans for the maintenance and repair of the City's street and alley network to optimize pavement conditions with limited funds
- The PMP is guided by recurring evaluations of the pavement network based on surveyed pavement structural integrity, cracks, roughness, and surface distress
- Each surveyed roadway is assigned a Pavement Condition Index (PCI) score ranging from 0-100 for each street segment
- Maintaining streets in the "Good to Very Good" and "Fair to Marginal" categories provides the greatest value and extends pavement life at the lowest cost… however, our backlog of roadways in "Poor" or "Very Poor" condition is too high

Focus on Pavement Management Plan

PCI Range	Rating	Relative Avg. Cost per Sq. Foot	Repair Approach	Streets in This Condition
85-100	Excellent	$0-2 per sq. foot	Like new condition. Little to no maintenance required. Routine maintenance as-needed.	13%
70-85	Very Good	$2-3 per sq. foot	Routine maintenance such as patching and crack sealing with surface treatments such as seal coats or slurries.	21%
60-70	Good	$3-10 per sq. foot	Heavier surface treatments and thin overlays. Localized panel replacements.	13%
40-60	Fair to Marginal	$10-17 per sq. foot	Optimum timing for thin to moderate overlay. Early lower costs to repair with greater returns.	27%
30-40	Poor	$17-25 per sq. foot	Partial structural failure. Sections will require very thick overlays, surface replacement, base reconstruction, and possible subgrade stabilization.	17%
0-30	Very Poor	$25-30 per sq. foot	Structural failure. Requires reconstruction which is the most expensive and impactful repair method.	9%

*Avg. cost is provided as references for asphalt concrete roadway only, actual costs vary greatly depending on actual field conditions and associated concrete improvements required to be improved.

Focus on Pavement Management Plan

- Backlog is expressed as the percentage of poor and very poor streets/alleys requiring reconstruction (PCI 0-40) as compared to network totals
- Backlog above 20% becomes very difficult to sustain without significantly more investment
- $58M per year to maintain PCI still does not address Backlog of poor and very poor streets/alleys

2021 PMP *	
PCI	58
Backlog	26%
Steady State (Maintain PCI)	$58M/yr

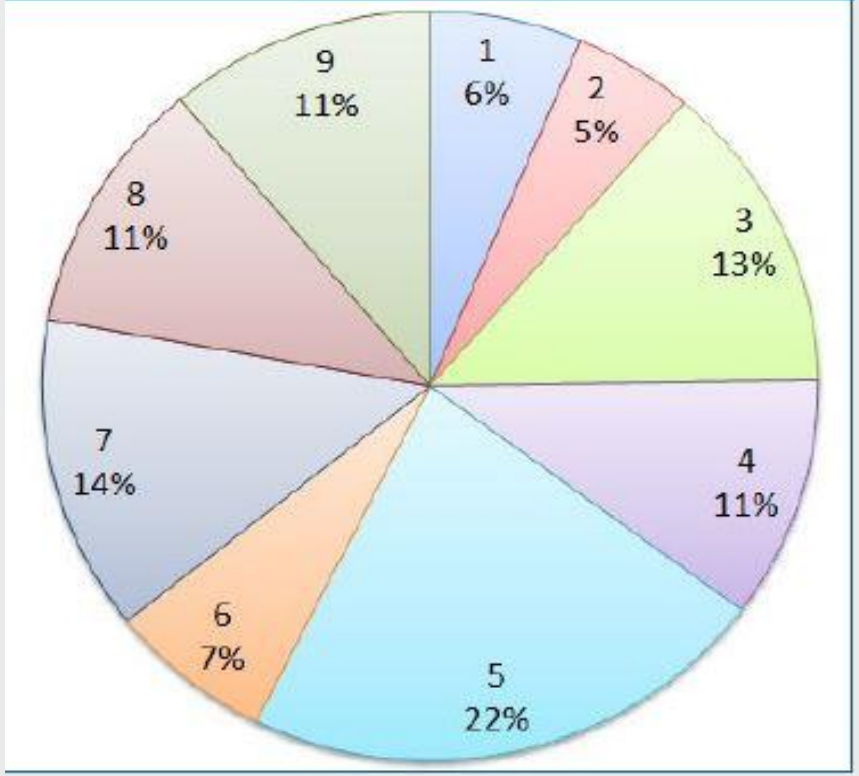
* Data based on preliminary 2021 analysis

Focus on Pavement Management Plan

Required Investment to achieve PCI of 85 in 5 years*	
Major	$559M
Minor	$1,083M
Alley	$128M
Total Fix All Cost	**$1.77B**

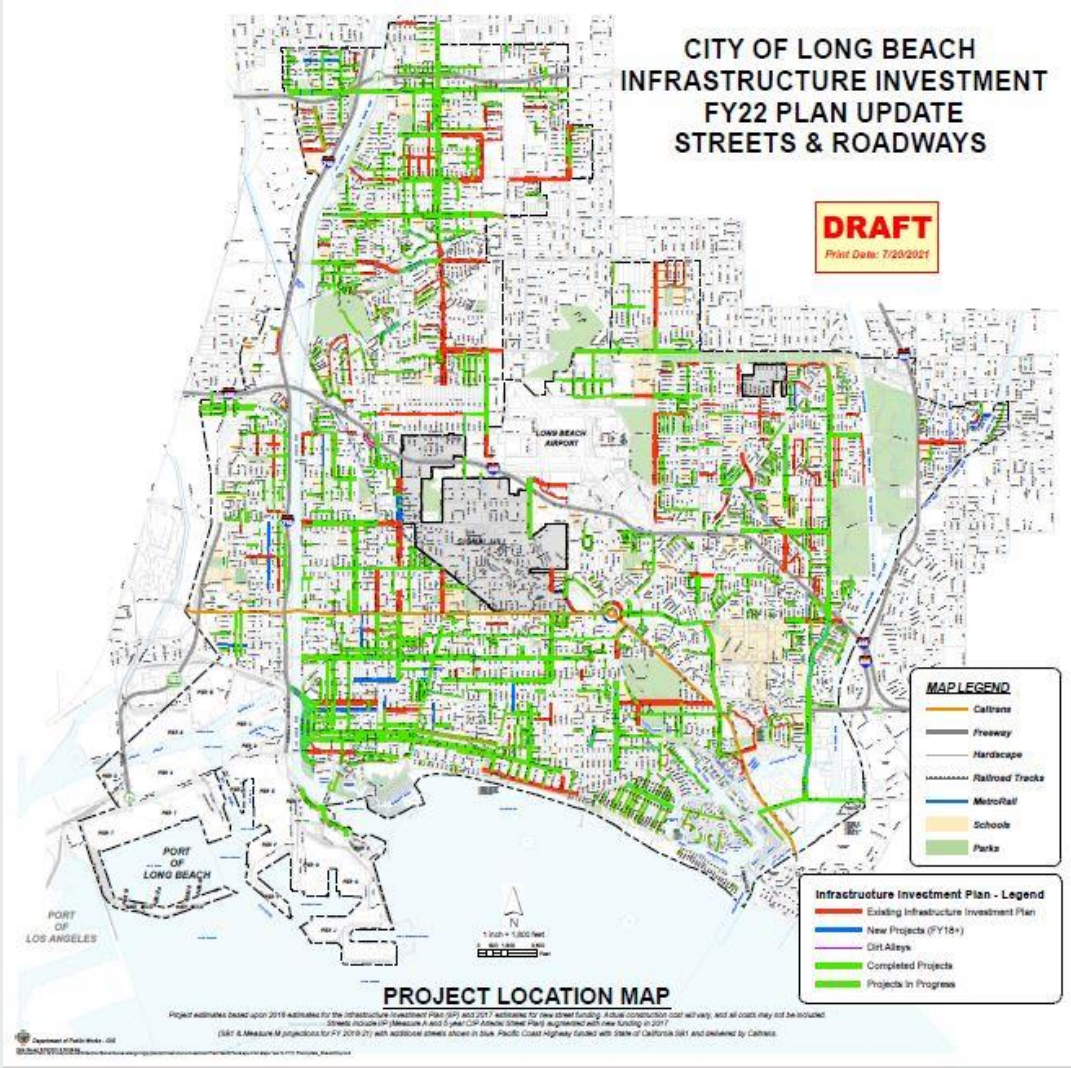
* Costs based on preliminary 2021 analysis

% Need per District (Minor Roads)
Breakdown of the required budget to fix all Minor roads per district



Existing 5-Year Infrastructure Investment Plan

- Commitments shown on current Infrastructure Investment Plan (IIP) Map located on the City's Measure A website
- Our progress with the Measure A Map (as of July 2021):
  - Major = 66% complete
  - Residential = 74% complete
  - Alleys = 83% complete
- 230 Lane Miles Remaining on Measure A Map
  - Estimate to Complete = $145M at current value
  - Complex Federal/State Funding Sources Supports Majors



5-Year Street Investment History

	FY17	FY18	FY19	FY20	FY21	FY22 *	TOTALS
Arterial Street Rehab	$15,740,000	$18,527,624	$12,000,000	$15,996,033	$12,700,000	$14,149,599	$89,113,256
Residential Street Rehab	$4,900,000	$12,107,058	$17,073,000	$18,949,093	$10,899,000	$13,099,000	$77,027,151
Alleys	$300,000	$1,800,000	$1,800,000	$1,100,000	$1,200,000	$400,000	$6,600,000
Slurry Sealing	$13,080,000	$2,670,000	n/a	n/a	n/a	n/a	$15,750,000
Worst Streets & Alleys Program	n/a	n/a	n/a	n/a	$5,600,000	n/a **	$5,600,000
TOTAL	**$34,020,000**	**$35,105,682**	**$30,873,000**	**$36,045,126**	**$30,399,000**	**$27,648,599**	**$194,090,407**

*Proposed

**Funds still available to support worst streets/alleys from FY21 appropriation

FY21 PMP Update Next Steps

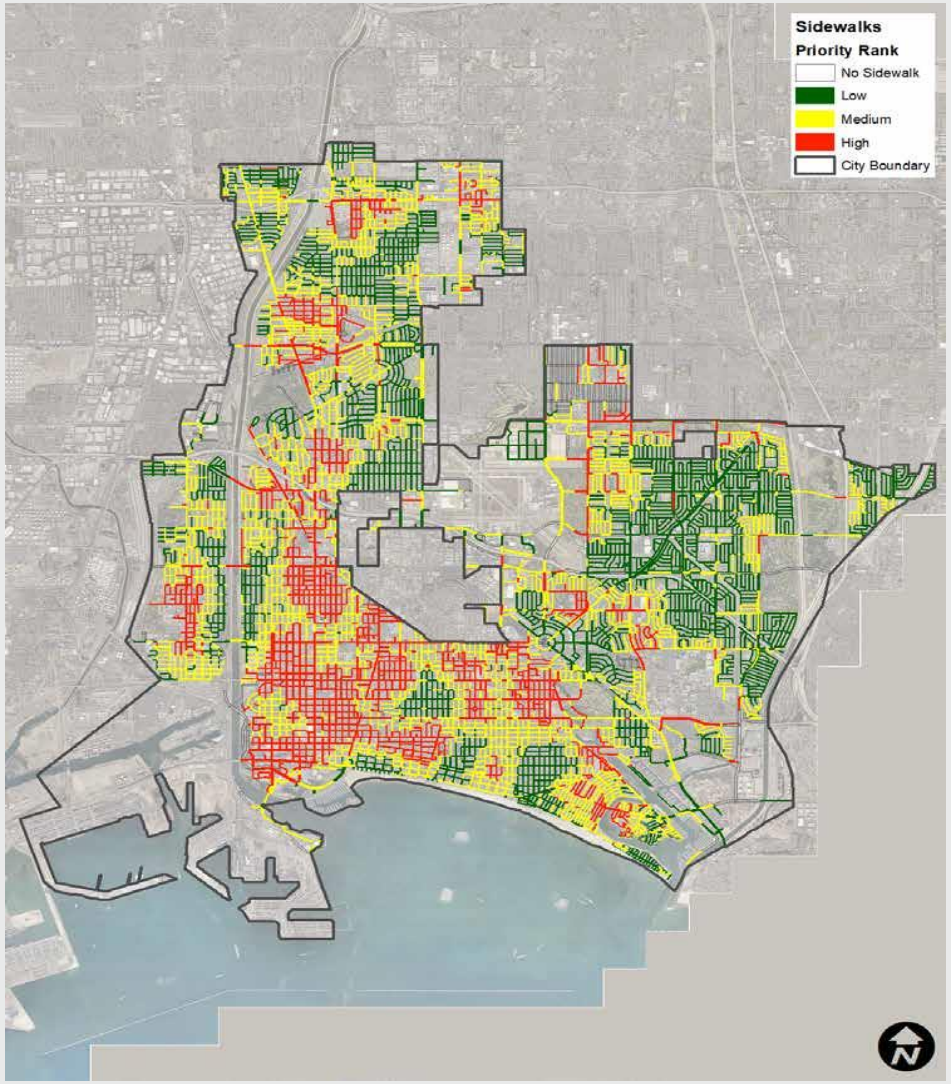
- Creating a public-facing GIS tool which will show details of each street segment, its condition, last paving date, and when it is programmed for paving if applicable
- Plan and GIS tool will be released before Fall 2021 on City's website
- Public Works staff will review PMP street improvement recommendations with each City Council district

Focus on ADA Self Evaluation & Transition Plan

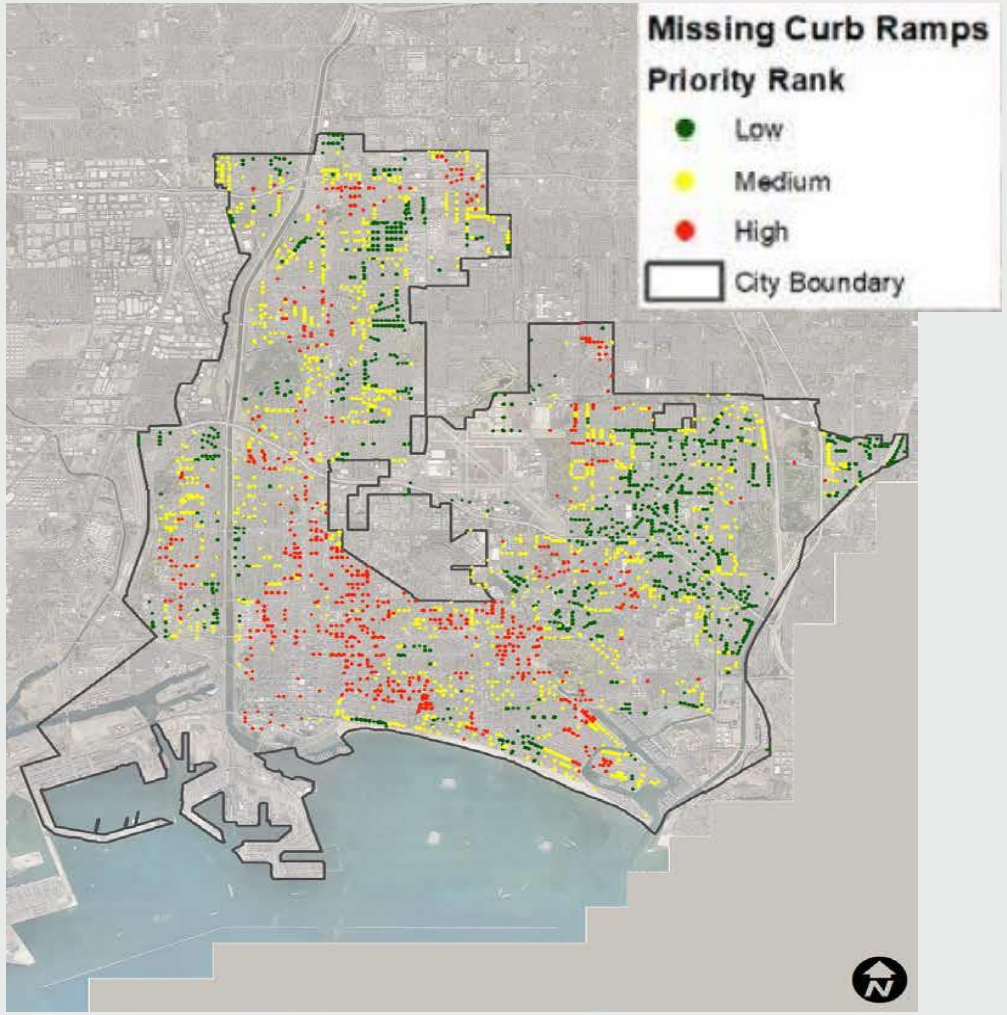
- ADA Self-Evaluation and Transition Plan
  - Identifies pedestrian facility non-compliance
  - Rates deficiencies
  - Communicates an action plan for improving accessibility.
- Long Beach conducted a citywide Self-Evaluation of sidewalks (1,215 miles), curb ramps (12,091) and other pedestrian paths of travel from 2017 through 2019
- Long Beach Transition Plan was completed in 2019; updates are as-needed only, not regularly scheduled

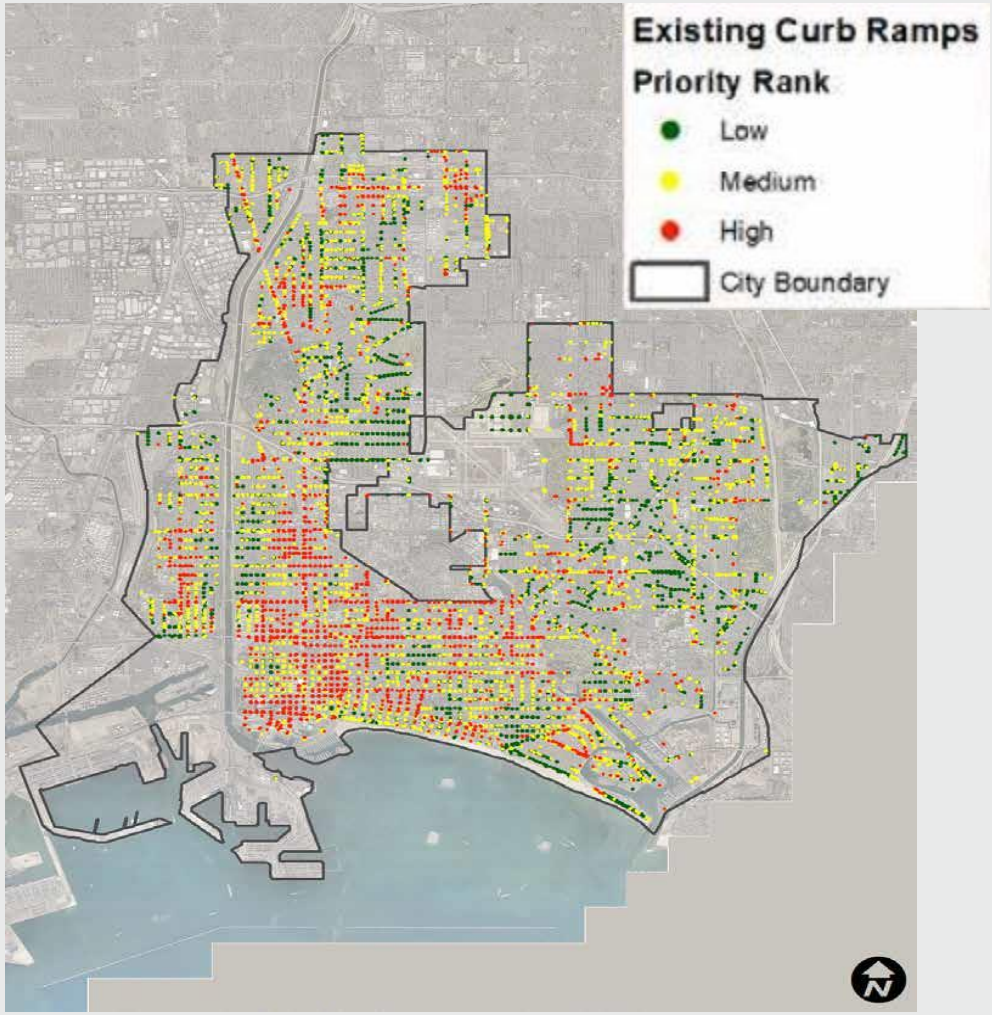
Focus on ADA Self Evaluation & Transition Plan

- A severity score was established based on the level of non-compliance with respect to sidewalk displacements and slopes
- An activity score was established based on public use and proximity to schools, government buildings, medical/senior centers, hospitals, transit, etc.
- Severity and activity rankings were combined to develop a final ranking score that was used to identify locations of high, medium and low priority
- Public outreach was conducted
- With this data, the City can plan better and address areas with the most egregious problems balanced with areas of highest use and importance



Focus on ADA Self Evaluation & Transition Plan





Missing curb ramps (left) followed by non-compliant curb ramps (right)

Settlement Agreement Terms

- Self-Evaluation (completed)
- Create Applicable Accessibility Standards (completed)
- Updated Transition Plan (UTP) (completed)
- Conduct two public meetings with ADA stakeholders (completed)
- Access Request Program, through FY 27 (in-progress, on-track)
- Install 1,000 new plaintiff-selected curb ramps, completion by Oct 2019 (99% complete)
- Install 3,500 additional new ramps (total 4,500) by Oct 2022 (in-progress; prioritized over sidewalk repairs)
- $50m plus inflation for non-compliant curb ramps between FY 23 and FY 37 (not due yet)
- $125m plus inflation for sidewalks and crosswalks, between FY 18 and FY 47 (not due yet)

Focus on ADA Investment Summary

All dollar amounts reflected in Millions	Spent FY18-FY21	Proposed Budget FY22	Settlement Requirement	Total Estimated Cost w/Inflation
Missing Ramps	$24.4	$15.0	n/a	$50.0 (FY18-22)
Retrofit Ramps	n/a	n/a	$50.0	$69.2 (FY23-37)
Sidewalks	$10.3	n/a	$125.0	$189.5 (FY18-47)
Access Request Program	$2.5	$0.5	$5.3	$5.3 (FY18-27)
TOTAL	**$37.2**	**$15.5**		**$314.0**

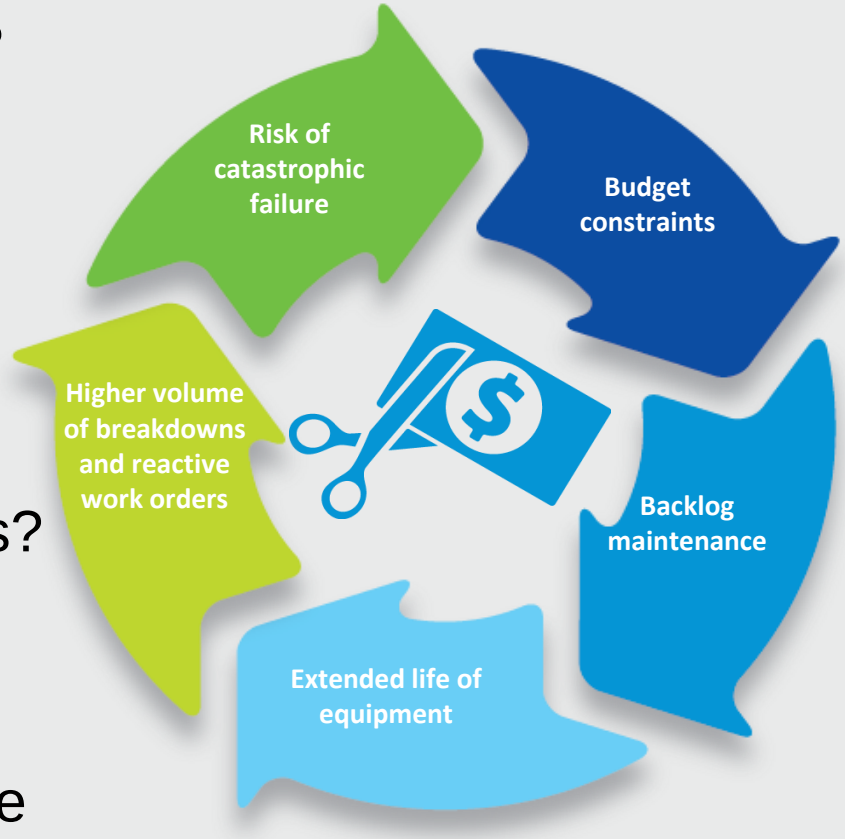
- **$261M** additional investment needed to meet Settlement Agreement requirements
- Missing 4,500 curb ramps do not have a cost limit
- No sidewalk funding next couple years, reprioritized for curb ramps to meet Settlement Agreement requirements

Recommendation: Use Measure A to annually fund curb and sidewalk infrastructure improvements reduced by other allowable sidewalk funding and one-time or structural sources if and when they are available

Focus on Facility Condition Assessments

Questions the FCA Helps Address

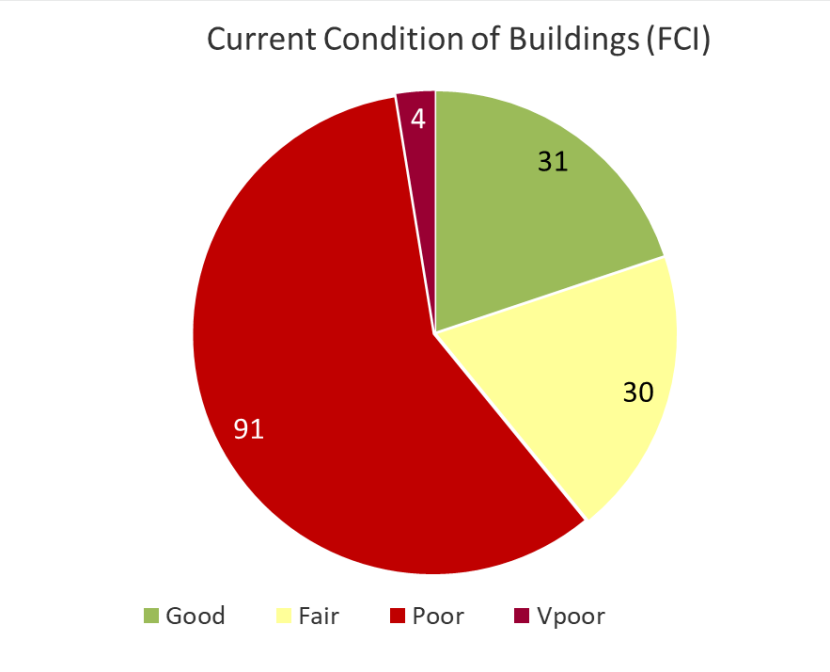
- What assets do we have? What condition are they in?
- Are those assets being used to their full potential?
- Are they compliant with applicable legislation and/or standards?
- How much funding do we need in order to maintain or improve the current conditions?
- When do we need to complete recommended projects?
- Where can we achieve cost savings?
- How do we prioritize the reduced funding allocation?
- How can we reduce the growing deferred maintenance list?

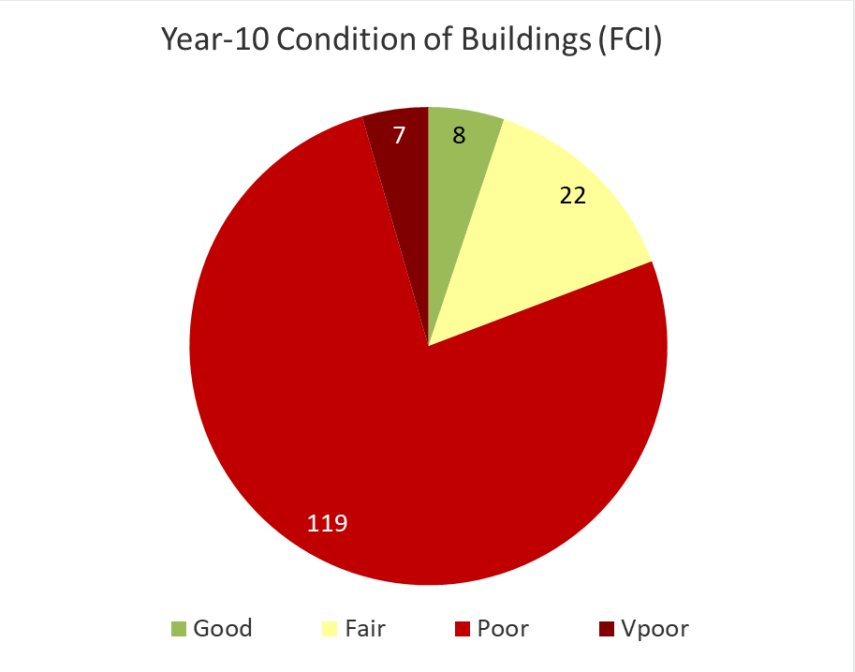


Focus on Facility Condition Assessments

Summary of Findings

Facility Condition Needs Index (FCI)





Value of Current Need **$292,801,681**

Need will grow to **$429,617,865** over 10-years

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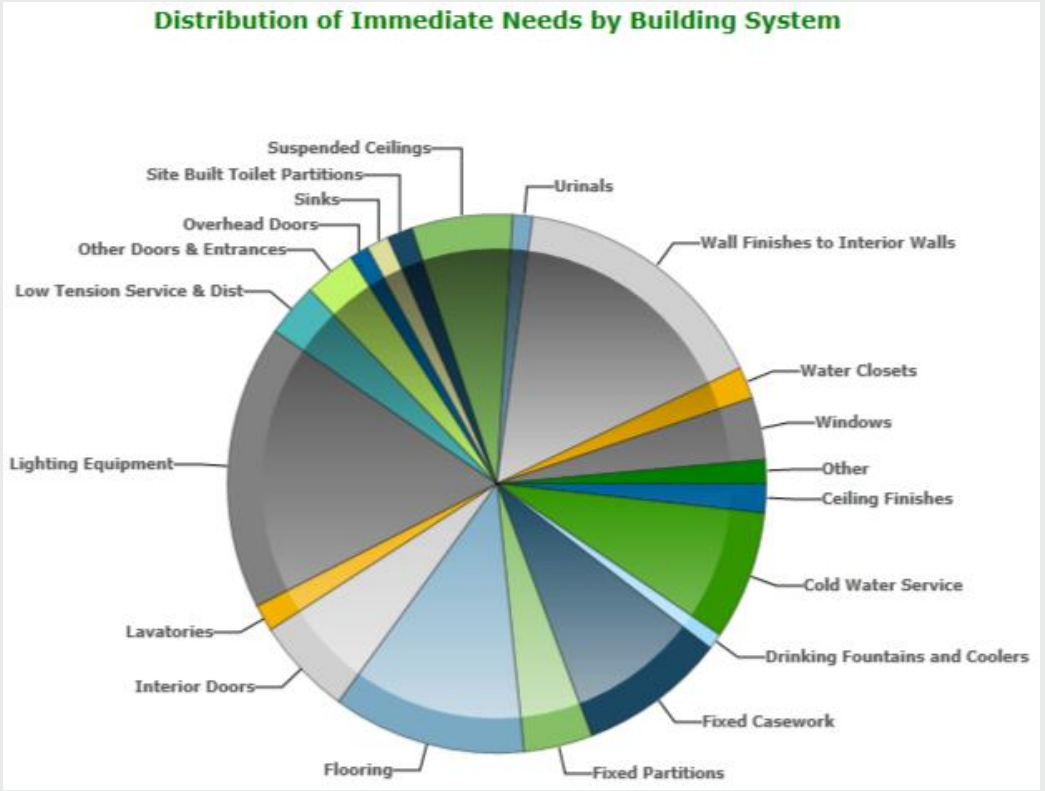
Citywide Facility Condition Assessments Summary

Conclusions

- The City of Long Beach portfolio consists of 156 primary structures located across the city
- There is a total of $429,617,865 in anticipated expenditures over the study period
- There is an immediate capital need of $292,801,681 (like for like repairs)
  - 31 Buildings are rated in good condition
  - 30 Buildings are rated in fair condition
  - 91 Buildings are rated in poor condition (Parks facilities, Fire Stations and public restrooms)
  - 4 Buildings are rated in very poor condition (all Parks facilities)
- Over the next 10 years the facilities will deteriorate further if there is no capital investment
  - 7 Building will be rated in very poor condition
  - 119 Buildings will be rated in poor condition
  - 22 Buildings will be rated in fair condition
  - 8 Buildings will be rated in good condition

Example: Drake Park FCA Summary

Address:	951 Maine Ave.
Year Built:	1949
Gross Building Area:	6,450 gsf
Onsite Date:	5/3/18
FCNI:	23.98%
Facility Condition:	Poor
Immediate Capital Needs:	$951,121
Future Capital Needs:	$310,854
Council District:	1



Building Sys	Est Cost	% of Total Cost
Lighting Equip	$172,231	17.1%
Wall Finishes (Interior)	$159,338	15.8%
Flooring	$117,046	11.6%
Fixed Casework	$88,959	8.8%

Competing and Vast Needs and Funding Sources

Vast need across the City likely $3B-$4B in total cost

How do we fund our needed infrastructure improvements?

- Federal Funding
- State Funding
- Local City Funding
- Measure A
- Federal Infrastructure Plan Funding
- Potential Bond Funding
- Other grant opportunities

- Internal funding sources versus external
- Funding strategy for current Infrastructure Investment Plan (IIP)
  - Measure A and direct State funding are major part of funding infrastructure improvements including street rehabilitation, public facilities, parks, and mobility improvements

Competing and Vast Needs and Funding Sources

- Competing interests for various funding sources
- Funding strategy for next IIP will be different
  - Prioritization will be key using improved data and selective criteria
  - Federal infrastructure plan is still materializing
  - Potential bond funding
  - Measure A extension
  - Decreased Measure A in short-term
  - Changing Operations and Maintenance costs and impact on operating budgets

Focus on Measure A Investments

Measure A Funding to Date (FY 17 - FY 22)

Categories	Original Estimated Budget*1	FY 17-FY 22 Budget*
Mobility	60.95	78.47
Park and Recreation	20.50	33.15
Public Facilities	12.95	43.09
Utilities- Stormwater Protection	5.00	5.00
Beaches and Marinas	0.65	0.15
Total	**$100.05**	**$159.9**

*All dollar amounts reflected in Millions

- Measure A Infrastructure funding for FY 23 – FY 27 projected to decrease.
- Decrease required to not exceed State cap on local tax rates (LA County Measure H)
- FY28 – Measure A should increase towards FY17-FY22 levels, pending Council approval

State FY 22 Adopted Budget: Infrastructure Spending

Climate

- $5.1 billion over four years for water resilience and drought preparedness
- $3.7 billion over three years for climate resilience in disadvantaged communities
- $3.5 billion over four years for zero-emission vehicle and charging infrastructure

Transportation

- $4.2 billion in bond funds for high-speed rail
- $3.5 billion for transit projects, active transportation, and climate adaptation investments
- $2.3 billion to repair state highways, local roads, bridges, and rail

State FY 22 Adopted Budget: Infrastructure Spending

Digital Inclusion

- $6 billion multi-year investment in broadband infrastructure and access

Housing

- $10 billion over two years for Project Homekey and other programs to build permanent housing for people experiencing homelessness
- $534 million for critical infrastructure for affordable housing

Library

- $439 million for an equity-focused matching grant program to support library projects and maintenance

State FY 22 Adopted Budget: Long Beach Projects

Parks and Open Space

- $8.5 million: MacArthur Park rehabilitation
- $4.3 million: Walking trail along San Gabriel River
- $3.3 million: Open space around the LA River
- $1.2 million: El Dorado Regional Park softball and baseball fields
- $850,000: Bixby Park improvements

Community Partnerships

- $5 million: Center for Inclusive Business and Workforce Development
- $1 million: The Children's Clinic Family Health and Wellness site

Education

- $20.6 million: Music and theatre complex at LBCC Liberal Arts Campus
- $14.8 million: Construction at LBCC Pacific Coast Campus

Federal Earmarks Requests: Long Beach Projects

Community Projects

- *Located in FY 22 appropriations bills*
- $1.5 million: Silverado Park Signature Playground
- $1.2 million: Public Safety Training
- $250,000: Michelle Obama Library services and equipment

Highways and Transit Projects

- *Located in the House-passed INVEST in America Act to reauthorize transportation infrastructure for the next five years*
- $12 million: Anaheim Street Corridor
- $8 million: Artesia Great Boulevard Project
- $1.45 million: ADA Curb Ramps and Sidewalks

Overview: Federal Infrastructure Negotiations

Biden Plans—proposals released Spring 2021

- American Jobs Plan: $2.25 trillion over 8 years for physical infrastructure investments
- American Families Plan: $1.8 trillion for human infrastructure and social supports

5-Year Reauthorization Bill—House passed on July 1

- INVEST in America Act: $715 billion for transportation and water over five years
- Includes the City's highways and transit earmarks requests

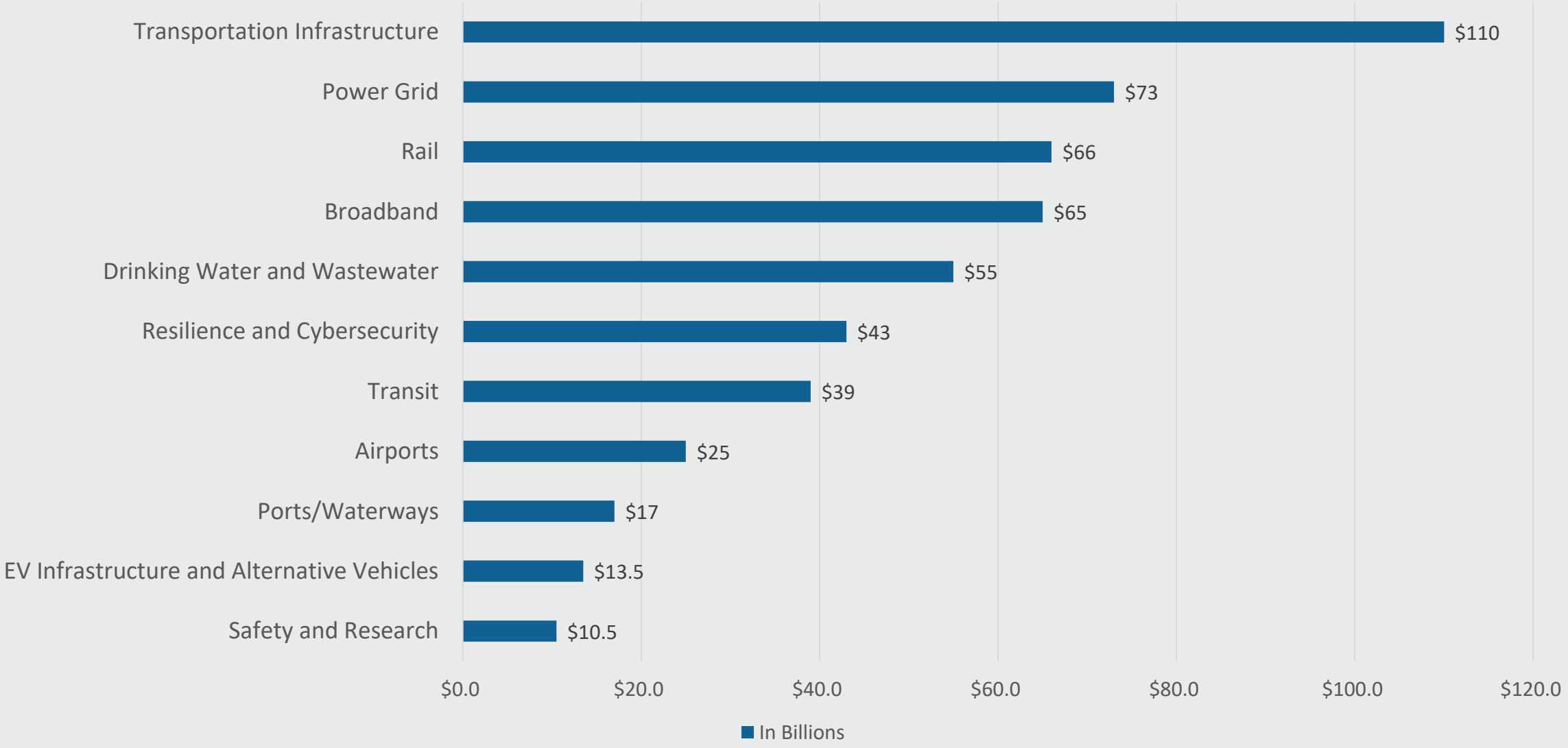
Senate Bipartisan Act—Senate passed on August 10

- $550 billion in new spending for infrastructure
- Nearly $400 billion for 5-year reauthorization
- Does not include the City's highways and transit earmarks requests

Budget Reconciliation—deal announced July 13; legislation expected in September

- $3.5 trillion budget resolution unlocking reconciliation process

What's in the Bipartisan Act?



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What's Not in the Bipartisan Act?

Direct City Allocations

- The City's highways and transit earmarks in the House-passed INVEST in America Act are not included in the Bipartisan Act
- Unlike recent COVID-19 relief legislation, the Bipartisan Act does not include direct City allocations for infrastructure
- Rather, the bill outlines various State apportionments, block grants, and competitive grant programs for which the City can apply

Next Steps for the Federal Infrastructure Package

Bicameral Alignment

- The House and Senate versions of transportation reauthorization differ in overall amount (from $715 billion to $400 billion) and certain policy proposals
- Some want a conference committee to address differences
- House Speaker Pelosi and other Democrats have said they won't move forward with the Bipartisan Act until they have a larger infrastructure package

Reconciliation

- Democrats unveiled a budget resolution framework outlining what will be included in a $3.5 trillion reconciliation package (i.e., broader categories of human infrastructure proposed in the Biden Administration's plans)
- Only requires 50 votes in the Senate, instead of 60 like most legislation
- Legislation expected mid- to late-September

Proposed Staff Prioritization Criteria

- Public Health and Safety – The extent to which the project impacts maintaining and improving public health and safety.
- Number of Long Beach Residents Impacted – The number of users of the project/facility and/or Long Beach residents impacted; higher use rates for certain projects by greater California residents will lead to additional consideration.
- Urgency – The urgency of the project; the extent to which there are adverse ramifications if the project is not done in the near term.
- Poor Condition/High Need – The extent to which an existing facility is in poor repair or condition, or alternatively for a non-existing facility, the degree of an unmet identified need (i.e., Project Recommended by Strategic or Master Plan).
- Jobs – Degree to which a project creates a significant number of jobs and local hiring opportunities.

Selection and Prioritization of Specific Projects

- Investment Area – Regional distribution of projects, while also ensuring investment in disadvantaged and/or low-income community.
- Ability to Attract Additional Funding and/or Leverage Internal Funds – extent to which funding this project will result in additional funding or allow the City to better leverage internal funds.
- Operational Cost Savings and Revenue Generation – The extent to which the project will reduce annual cost savings over the lifetime of project or program, and/or generate revenue.
- Shovel Ready – Projects that have been planned and/or entitled will be prioritized over projects that have not, and projects with minimal planning/entitlement requirements will receive additional consideration over those with lengthy or complex planning requirements.

What is Shovel Ready?

"Shovel Ready" is based on 6, 12 and 18-month buckets:

- Six-Month Shovel Ready:
  - Design complete, or minimal. Permitting process minimal or not required
- Twelve-Month Shovel Ready:
  - Design needed. Permitting process minimal or not required. For large projects, permitting in process
- Eighteen-Month Shovel Ready:
  - Significant design needed, permitting (Environmental, Building and Safety), required

Bonding to Fund Street Repairs - The Big Picture

- Much higher investments in recent years
  - Due in large part to Measure A - higher pavement condition index
- Investment is not enough to maintain street condition -
  - Average spending is about $33 m annually (and Measure A revenue is decreasing in FY 23)
  - Need to likely spend over $58 million a year to maintain PCI at/near current levels. $58M still does not include a major investment in poor streets/alleys
- More streets are in poor condition
  - Difficult to address and still prevent good/fair streets from failing and going to poor condition
- Poor condition streets are dramatically more expensive to repair
  - Unlike good/fair streets, poor condition streets don't get much more expensive over time
- A cost-effective street program requires most attention to good/fair streets
  - Repairing poor streets soaks up large resources and potentially diverts funding from preventing good/fair streets from becoming poor condition streets
- November 2020 – City Council requested analysis on a bond issuance

Bonding to Fund Street Repairs – Bonding Overview

- A bond can provide immediate funds for street repairs and maintenance
  - Bonds add interest costs, but save on construction inflation and street deterioration
- A bond will require est. annual debt service of $0.95 m for each $10 m
  - About $3 million in interest for each $10 m over the assumed 15-year bond term
  - Not all proceeds available for actual construction
  - Some of the proceeds will be needed for issuance costs, design costs, construction management, and administrative costs
- Funding street bonds can be budgetarily problematic
  - May reassign funds away from other priority needs (including annual street maintenance); as a result, a street bond needs to be weighed against other priorities in accordance with City Council policies

Bonding to Fund Street Repairs – Paying the Debt Service

Three Ways to Pay Debt Service (Annual Cost of Borrowing)

- New tax or assessment
  - Most common approach - requires a vote with voters indicating streets are a high priority

- Existing revenue source that becomes available
  - Example – an old bond gets paid off leaving funding available for new debt service
  - Measure A could be used as it is not fully planned/allocated beyond FY 22. Measure A is not as certain a long-term revenue source as many other revenues

- Reductions in lower priority service/infrastructure
  - Use of Measure A for debt service will require even more reductions in historical infrastructure/one-time spending
    - Due to the tax rate reduction, Measure A revenue will be significantly lower for five years beginning in FY 23
    - Due to expected significant budget shortfalls, it may also be appropriate to consider using more Measure A to help maintain police and fire services
  - General Fund monies could also be reallocated to street bond debt service, if other, lower-priority spending is identified and cut from the budget

Bonding to Fund Street Repairs - Budget Priority

Impact on Other Priorities

- Many infrastructure issues/priorities
  - Streets, legal requirement for sidewalk work, Fire Station 9 and other stations, HVAC systems that have shut down facilities, police crime lab and property storage, park restrooms, community centers, failing roofs, etc.
- Would debt issuance for streets impact other requirements and what is the appropriate mix of projects?
- What effect does bonding today have on the availability of future Council's to also fund important street and infrastructure projects?
- A broader analysis and discussion of future Measure A funds is important to determine how much for capital vs. other priorities
  - Other priorities may include: Funding Fire Station 9, Police Neighborhood Safe Streets Funding, Playgrounds and parks, Sidewalk ADA work, maintaining operations for public safety, normal annual street repair, matching funds for federal dollars, etc.

Bonding to Fund Street Repairs - What Streets Are Included

Selected Streets will Impact Long-Term Pavement Condition

- Emphasizing repairing the worst streets - most positive short-term impact for street condition
- Emphasizing repairing the good-fair streets - most positive long-term impact for street condition
- Mix of worst/good-fair streets funded by a bond issue is likely a key to whether long-term impact on street condition is positive or negative
  - Is an issue only if street maintenance funds are diverted and used for debt service
  - Would need a special PCI study to determine the impact of the mix of streets
  - Complex analysis: cost inflation, interest on debt, less money for annual maintenance, and costly poor streets versus good/fair streets impact on PCI

Bonding to Fund Street Repairs - Actions

Action to be Taken Depending on Comments from City Council

- Staff to develop an example street bond using $5 million annually (about $50 million in street funding) from Measure A
  - Will assume $1.5 m in Measure A will be diverted from street/alley maintenance (amount in the FY 22 budget) and $3.5 m in Measure A diverted from other historical normal infrastructure/one-time funding
  - Will incorporate more poor condition streets than will maximize the PCI
  - At this time, will not do a PCI study to see if such a bond will help or hurt the long-term pavement condition, but would be desirable if City Council wishes more information.
- Review the results with City Council early next year to proceed, pause, or modify
  - Would be reviewed after the FY 23 budget status update
  - Review will include an update on other critical capital funding needs and potential sources.
  - Review will also include updates on federal/state funding that may become available

Next Steps for Citywide Infrastructure Plan

- Wish list to short list
- Seek input from City Council on top infrastructure criteria and priorities
- Link strategic plans with fiscal capacity
- Obtain more details on Federal Infrastructure package
- Staff will compile a list of shovel-ready projects using the input on priorities and criteria
- Return to City Council with new infrastructure investment plan
- Inform the public about the infrastructure investment plan
- Explore bond financing, pending federal funding disbursements

Thank you

Eric Lopez
Director of Public Works