Residential Street Funding Allocation Models

June 9, 2026



FY 26 Adopted Budget

The Department of Public Works was directed to return to City Council with three alternative residential street allocation formulas, separate from the current and previously used models.



Overview of Report Back

- Current Pavement Condition Index (PCI) of the City's streets
- Residential Street Backlog Update
- Overview of the pre-2017 residential street funding allocation model
- The current residential street funding allocation model
- Three alternative models that incorporate traffic, transit, population density, business activity, safety, and risk factors for each Council District.



Pavement Management Plan (PMP) Overview

What is Pavement Management?

- Pavement management is the process of planning, budgeting, designing, evaluating, and rehabilitating the City's pavements to provide maximum benefit with available funds.

- A pavement management system is a set of tools or methods that assist decision makers in finding optimal strategies for providing and maintaining pavements in a serviceable condition over a given time period.

- The intent is to identify the optimum level of long-term funding to sustain the City's roads at a predetermined level of service while incorporating local conditions and constraints.

Understanding the Pavement Performance

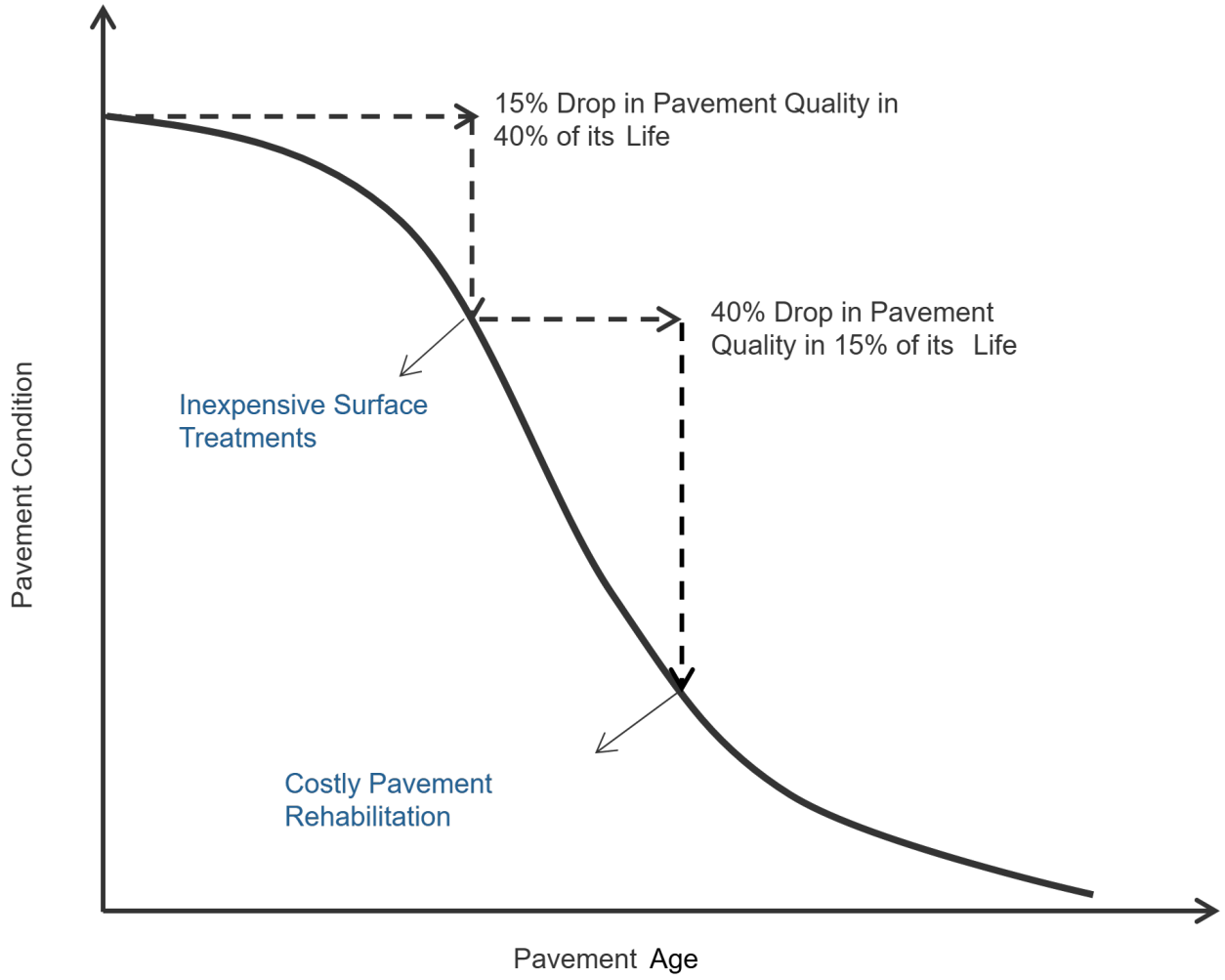
- When properly designed and constructed, pavements start at a Pavement Condition Index (PCI) of 100 and deteriorate over time due to vehicular traffic and environmental conditions.

Pavement Management Plan (PMP) Overview



Excellent	Very Good	Good	Fair	Marginal	Poor	Very Poor
100 - 85	84 - 70	69 - 60	59 - 50	49 - 40	39 - 30	29 - 0
No work needed	Candidate for cost-effective, preventative surface treatments		Street overlay treatments required		More costly street reconstruction required	
Streets are in excellent condition and don't require work, though crack seal may be applied as preventative maintenance.	Preventative street maintenance costs a fraction of more extensive repairs, which can be five to 10 times more expensive. Preventative treatments include pothole repairs, crack and slurry seal applications, and pavement markings. To qualify for the street maintenance program, streets must be in good condition. Streets rated fair or below require significantly greater investment. Preserving streets in good condition and preventing a backlog of deteriorated roadways is critical to a successful Pavement Management Program (PMP).		This level of deterioration is generally past the point of qualifying for cost-effective surface treatments and instead requires more costly and work intensive localized repairs and asphalt overlay. Localized repairs that are involved in this level of work include repairing unstable layers beneath the roadway; repairing compromised pavement base layers, which can lead to cracks, potholes, and uneven surfaces; and replacing portions of asphalt pavement that have deteriorated beyond their useful life.		This level of deterioration requires significant repairs, such as localized repairs, thicker asphalt overlays, or full reconstruction. In many cases, deep excavation is needed to rebuild the roadway foundation, particularly where underground utility issues have weakened the street and increased the risk of sinkholes or more costly damage. Included as part of the City's Capital Improvement Program (CIP), these projects are scheduled as funding becomes available. To learn more about the current CIP, visit lbcity.info/cip.	

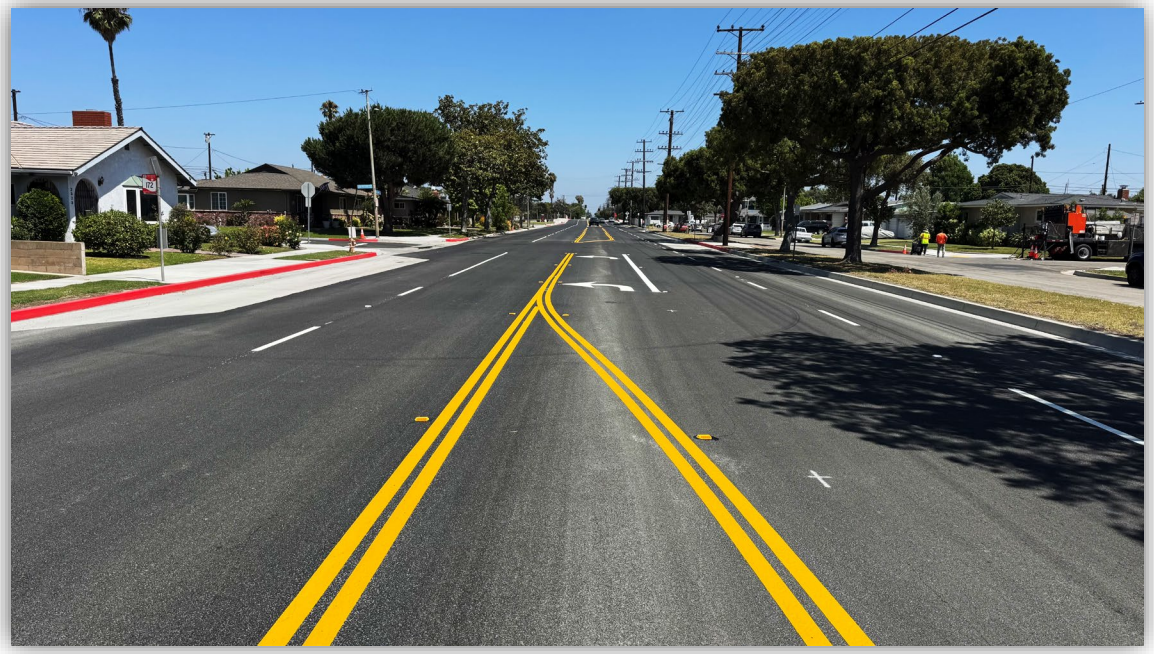
Pavement Management Plan (PMP) Overview



(Values shown for illustrative purposes only)

Pavement Management Plan (PMP) and Pavement Condition Index (PCI)

- Since 2006, the City of Long Beach has implemented a comprehensive PMP to guide street rehabilitation funding and project selection.
- In 2014, the City began utilizing automated pavement condition surveys to more accurately monitor roadway conditions across the network.
- Maintaining a minimum network average PCI of 60 and backlog below 15% is preferred to avoid long-term costly repair, unsustainable funding requirements and to maintain the city's road network in a serviceable condition.
- The PMP analyzes funding scenarios prioritizing PCI, backlog, council district's need, and clustering road segments for greater efficiencies and lower costs.



2025 Pavement Condition Index (PCI) Results

- In 2025, every street in the City was inspected and the average PCI score was updated.
- The updated street network average PCI is **61**, which is up **9%** from the previous score of 56 (2023) and **exceeds the target PCI rating** of 60.
- **15% is in excellent condition**, requiring only routine maintenance.
- **38% is in good to very good condition** (PCI of 60 to 85) and benefit the most from preventive maintenance such as slurry seal.
- **26% is in the marginal to fair range** (PCI of 40 to 60) and in need of resurfacing.
- **20% is in poor or very poor condition** (PCI rating below 40) and in need of partial or full reconstruction. This represents a **13 point decrease** from 2023 scoring.
- An investment of $1.4 billion over 5 years is required to fix all the City's major and minor street deficiencies, or **$280 million annually**.
- From FY 23 to FY 25 an average of **$63 million** has been allocated annually, which is the largest investment in recent history, but represents only **22%** of the needed annual investment.

2025 Pavement Condition Index (PCI) Results

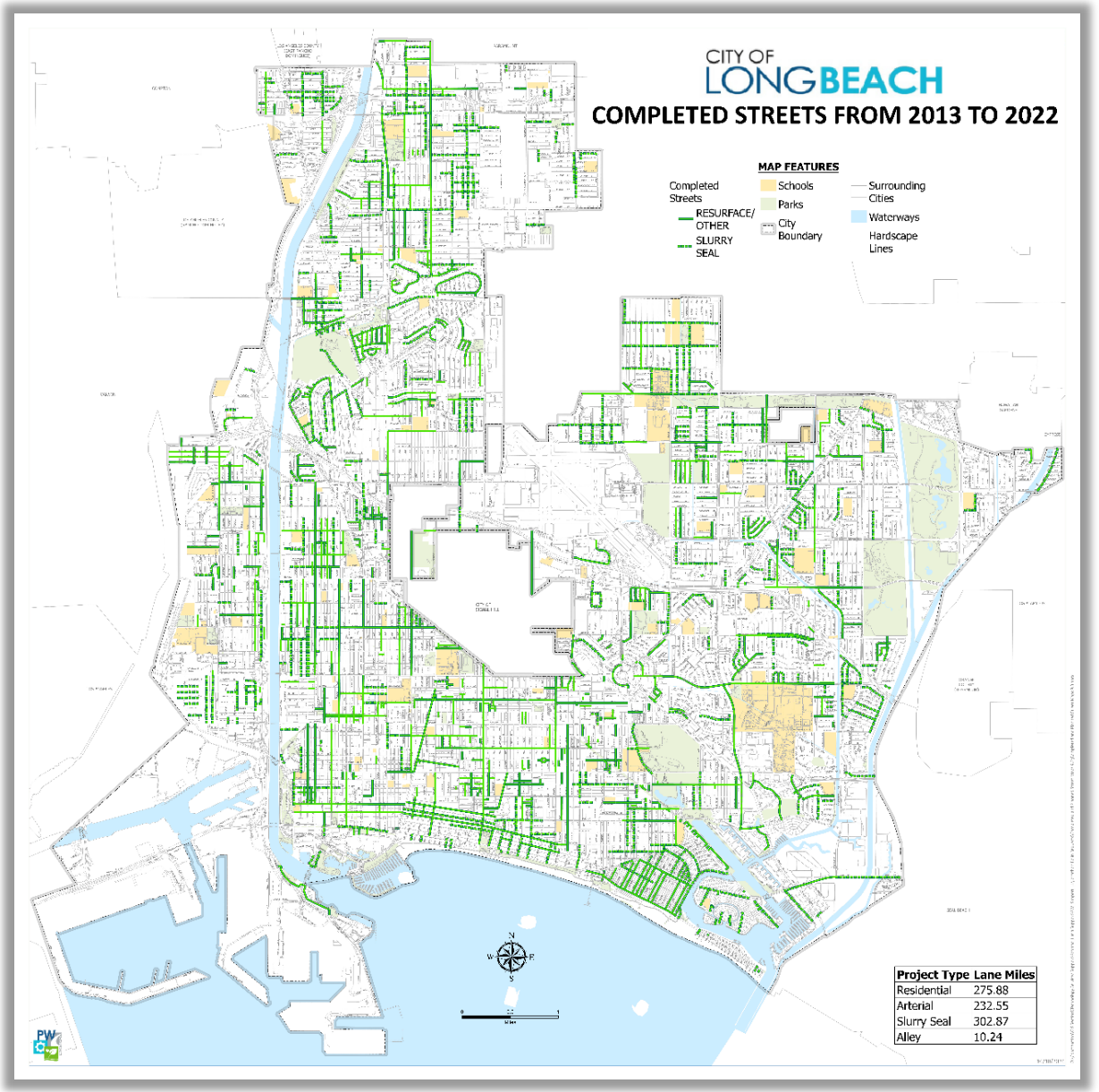
- Major Streets (**Arterials**) overall PCI rating is 66, which is **up 8%** from the previous 2023 score of 61 and exceeds the target PCI rating of 60.

- Minor Streets (**Residentials**) overall PCI rating is 60, which is **up 11%** from the previous 2023 score of 54 and meets the target PCI rating of 60.

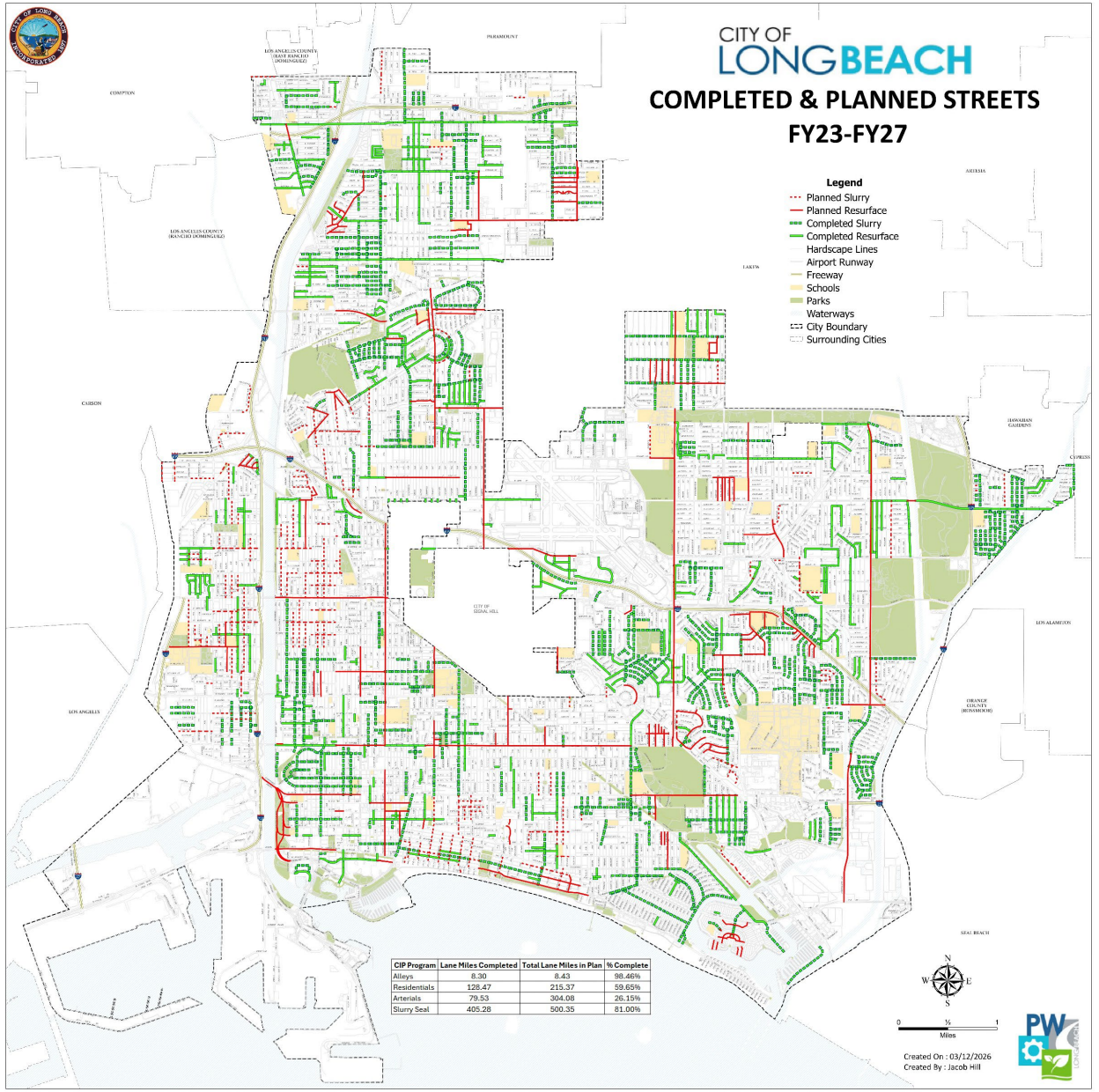
- **Alleys** overall PCI rating is 41, which is **down 18%** from the previous 2023 score of 50. This decrease is primarily attributed to accelerated degradation caused by recent historic storm seasons, compounded by long-standing underinvestment in alley infrastructure.

- While the Department has made notable progress, investing $4.2 million in alley improvements from FY 2023 through FY 2025 and completing nearly 23 lane miles of rehabilitation, additional funding is essential to meaningfully improve the overall condition of the City's alley network.

Streets CIP Overview: Completed Streets from 2013 to 2022



Streets CIP Overview: Planned / Completed Streets FY 23 – FY 27



Residential Street Needs

- Estimates show a total investment of $1.1 billion is needed to address all residential street deficiencies citywide.
- Residential street and alley funding increased significantly between FY 23 and FY 27 through the Elevate ‘28 Infrastructure Investment Plan and Measure A bond funding, resulting in historically high annual infrastructure investment levels.
- Increased roadway investment has contributed to positive shifts in pavement conditions across the City.



Residential Street Needs

Council District	% Need (Previous PMP Data)	% Need (2025 PCI Data)	Difference
CD1	4%	5%	1%
CD2	6%	6%	0%
CD3	12%	13%	1%
CD4	17%	16%	-1%
CD5	22%	22%	0%
CD6	7%	8%	1%
CD7	12%	11%	-1%
CD8	10%	9%	-1%
CD9	10%	11%	1%

The figures represent the percentage of total residential street funding need attributable to each City Council District, based on both previous and current data.

Residential Street Funding Allocation Model

- Prior to 2017,
  - 50% of residential street funding was distributed equally across the nine Council Districts
  - The remaining 50% was allocated based on pavement condition as identified through the PMP.

- In 2017, the City Council revised this policy, directing that 100% of residential street infrastructure funds be allocated based solely on need, as determined by the PMP

- The 2017 policy has continued since

Current Residential Street Funding Allocation Model

- Continuing the current model with a hypothetical $20M investment would allocate FY 28 – FY 32 Residential Street funding as follows:

Council District	% Need (From PMP)	Mock Breakdown of $20M
CD1	5%	$918,166
CD2	6%	$1,147,882
CD3	13%	$2,550,740
CD4	16%	$3,237,718
CD5	22%	$4,367,026
CD6	8%	$1,618,699
CD7	11%	$2,154,143
CD8	9%	$1,877,668
CD9	11%	$2,127,959

Overview of Three Alternative Residential Street Funding Allocation Models

Public Works developed three alternative residential street funding allocation models based directly on feedback received from the Budget Oversight Committee. These models include:

- **Traffic & Transit**, which prioritizes high-volume, high-mobility districts;
- **People & Community**, which prioritizes districts with higher activity levels, population density, business and employment activity, and transit reliance; and,
- **Safety & Risk**, which prioritizes districts with higher traffic safety risks and vulnerable populations.

All three alternative models include a 50 percent allocation based on PCI need within each district, coupled with an additional 50 percent allocation based on the inputs and metrics outlined within each respective model.

Traffic & Transit Focused Alternative Allocation Model

- The Traffic & Transit Allocation Model is designed to direct a greater share of residential street funding toward high-traffic volume, high-mobility districts that experience elevated levels of vehicle activity, transit usage, and multimodal transportation demand.

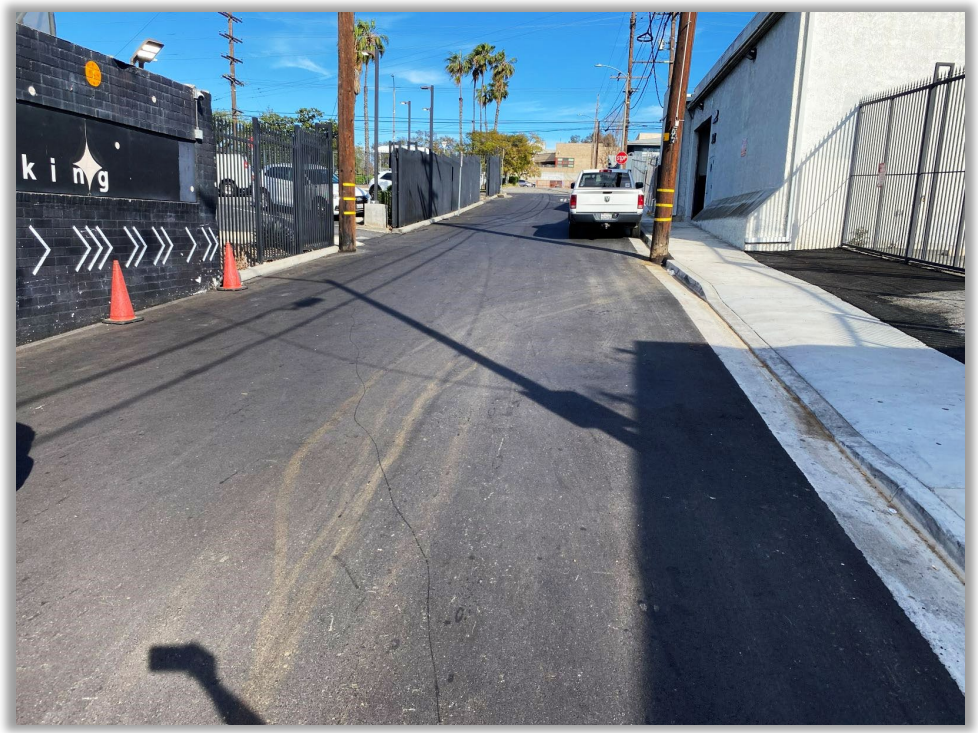


Data Metrics Included in Model:

- Average Annual Daily Traffic (AADT) Index / Count
- Peak volumes
- Lane-miles by functional class (arterial, local)
- Number of Transit Stops per district
- Public Transit Boarding counts per Council District
- Bikeway Network % of total network in District
- Fatal and serious injury crashes (KSI) per District in last five years
- Crash density
- High-Injury Network (HIN) mileage within each district

People & Community Focused Alternative Allocation Model

- The People & Community Allocation Model is designed to prioritize residential street investment in districts with higher levels of activity, population density, employment concentration, business activity, and reliance on transit and active transportation infrastructure.



<u>Data Metrics Included in Model:</u>

- Total population by district
- Employment counts (job density per district)
- # of businesses in each council district
- Population Density
- Number of Transit Stops per district
- Boardings or ridership counts per Council District
- Bikeway Network % of total network in District
- # of schools, senior centers, parks, and community hubs

Safety & Risk Focused Alternative Allocation Model

- The Safety & Risk Allocation Model is designed to prioritize residential street investment in areas with elevated traffic safety risks, including corridors identified as part of the City's High-Injury Network, school-adjacent areas, districts experiencing higher rates of severe traffic collisions, and districts with a larger concentration of vulnerable populations.



Data Metrics Included in Model:

- Fatal and serious injury crashes (KSI) per District in last five years
- Crash density
- High-Injury Network (HIN) mileage within each district
- School site adjacency (# of schools in district / total)
- Population of children, seniors, or persons with disabilities by district
- # of senior centers, parks, and community centers
- Population Density

Mixed Model of all Three Alternative Models

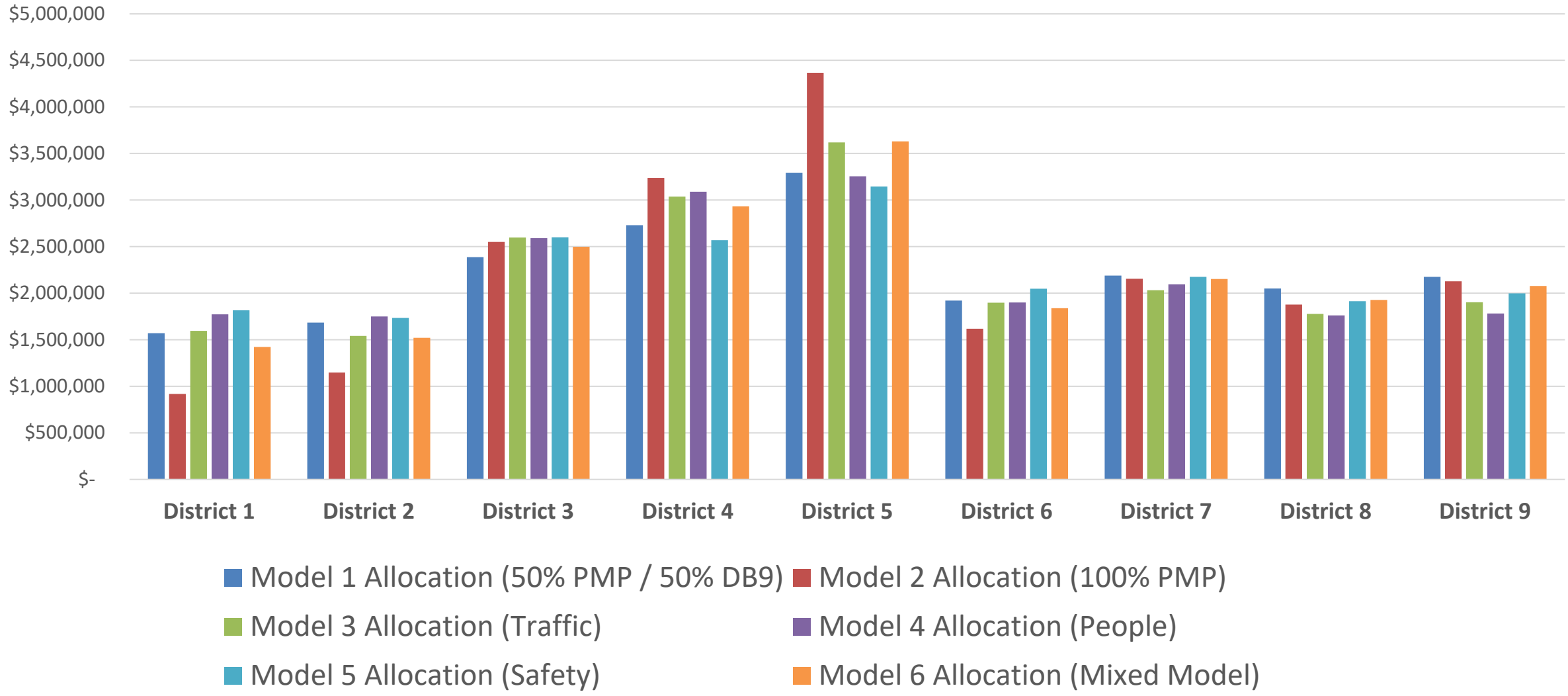
- A sixth allocation model, which is a blended model that combines elements of all three alternative funding models into a single methodology.

- Under this model, 50 percent of funding would continue to be allocated based on documented pavement need identified through the Pavement Management Program (PMP).

- An additional 30 percent would be allocated across the three alternative models, with 10 percent weighting assigned respectively to the Traffic & Transit model, the People & Community model, and the Safety & Risk model.

- The remaining 20 percent would be distributed evenly across all nine Council Districts to provide a baseline level of geographic equity citywide.

Comparison of all Residential Street Funding Allocation Models



NOTE: This hypothetical $20 million allocation is intended to simulate the difference between the two allocation methods. Specific funding levels for the FY 28 through FY 32 Pavement Management Plan are still being formulated.

Staff Recommendation

Staff recommend maintaining the existing 100% needs-based allocation model

- Most equitable distribution of roadway funding based on data driven documented need by council district.
- Factors in both the amount and the overall condition of roadway infrastructure within each district as a proportion of the overall citywide need.
- The existing allocation model has allowed the City to achieve historic improvements in overall pavement condition citywide.
- Provides a clear and transparent nexus between roadway condition, infrastructure need, and annual residential street funding allocations.
- Consistent with most municipalities that utilize a needs based allocation framework

Other Factors to Consider

- In 2025, a streets CIP audit confirmed:
  - The current 100% needs-based residential street allocation model is equitably directing funding toward Equity Focus Areas (EFAs) at rates exceeding their proportional share of the City.
  - Audit findings showed higher concentrations of street projects within EFA communities, including areas identified by BIPOC, limited income, LEP, and senior population metrics.
- Alternative models would not significantly change the overall funding distribution, but would introduce additional complexity and reduce transparency in how residential street funding is allocated.
- Metrics such as crash history, transit activity, High Injury Network corridors, and bikeway connectivity are more appropriately addressed through the Arterial Street Program, which is specifically designed to incorporate critical data points, prioritize multimodal mobility and safety improvements on major corridors.

FY 28 – 32 Pavement Management Plan - Next Steps

- A PMP is being developed utilizing the latest PCI data to assess and prioritize roadway investments.

- Any planed residential street not completed under the current Elevate ’28 plan will be prioritized in the next five-year PMP (these are anticiapted to be minimal).

- The PMP will incorporate geospatial analysis, life-cycle cost modeling, and funding scenario forecasting to evaluate impacts on PCI and backlog reduction.

- Funding models will account for inflation, market conditions, and labor availability.
- Future PMP outcomes will depend heavily on available capital funding levels for street infrastructure.

- Stable PCI levels may be maintained under baseline funding scenarios, though major backlog reduction will remain limited.

FY 28 – 32 Capital Improvement Plan - Next Steps

- The PMP will be utilized along with forecasted available capital funding to develop the next five year CIP

- The FY 27 Proposed CIP Budget presentation will include an FY 28 – FY 32 “Draft look ahead” for residential street improvements based on preliminary funding assumptions

- Fall 2026 the preliminary funding assumptions will be further reviewed and determined
- Throughout 2027 the plan will be refined and public outreach will be conducted

- The next five-year plan will be presented as part of the FY28 CIP budget with a focus on preserving recent pavement gains, minimizing deferred maintenance, and ensuring equitable infrastructure investment citywide.

Thank you!