

K LINE NORTHERN EXTENSION (KNE)

Metro Cost Benefit Analysis (CBA)

In July 2025, the Board adopted a CBA framework for evaluating project alternatives, including assessing the regional economic impacts of investment and identifying benefits relative to the costs of investment. The CBA includes two components – Weighted Benefits Analysis and Benefit-Cost Ratio – as described below. The CBA was used to evaluate the three full alignments studied in the Draft Environmental Impact Report (EIR) for the K Line Northern Extension (Project) prepared by the Los Angeles County Metropolitan Transportation Authority (Metro) – the San Vicente-Fairfax, Fairfax and La Brea alignments, excluding the Hollywood Bowl extension (Figure 1). The evaluation is based on data collected during the environmental review process, including capital cost estimates and ridership data.

Figure 1. Map of Alignments Studied in the Draft EIR



Weighted Benefits Analysis: A points-based evaluation comparing the alignments across five goals that are weighted per Metro-adopted CBA methodology. This considers relevant quantitative and qualitative performance indicators (KPIs) within each of the five goals that are scored relative to each other on a 7-point scale with seven being the highest/best performing.

The Weighted Benefits Analysis component of the CBA finds that the Project provides significant benefits locally and regionally for all alignment options. San Vicente-Fairfax performs best, followed by Fairfax, and then La Brea (Table 1). However, the spread between the highest and lowest total weighted score is small – only 0.5 points. This implies that the benefits across alternatives are relatively similar. This is because while San Vicente-Fairfax scored highest in some goal categories, La Brea scored highest in others. Meanwhile, Fairfax scored in the middle. Even after weighting, this led to a balancing out of cumulative scores and a relatively small difference in how each alignment performed.

Table 1. Weighted Benefits Analysis Scores

Goals	San Vicente- Fairfax	Fairfax	La Brea	Key Performance Indicators Evaluated
	Average Score by Goal (Unweighted)			
Mobility & Accessibility (Weight: 40%)	6.7 / 7	6.1 / 7	5.5 / 7	Daily trips, new trips, trips per new station, number of residents near proposed stations, travel time savings, direct connections to transit, change in transit mode share, Equity Focused Communities (EFC) population near proposed stations, daily project trips made by low-income individuals, travel time, EFC travel time savings, number of nearby educational facilities
Safety & Health (Weight: 15%)	7 / 7	6.1 / 7	5.3 / 7	Number of nearby parks and recreational facilities, improved transit access to Cedars-Sinai Medical Center, improved transit access to Pan Pacific Park, number of grocery stores nearby, average walk score of new stations, existing bike infrastructure near proposed stations, proximity to Healthy Places Index (HPI) less healthy conditions
Environmental Sustainability (Weight: 15%)	5.2 / 7	5.8 / 7	6 / 7	Number of significant and unavoidable impacts to cultural resources, VMT reduction, changes in emissions due to Project, construction-related energy consumption, number of Recognized Environmental Concern sites nearby, proximity to CalEnviroScreen 4.0 communities
Operational Sustainability & Delivery (Weight: 15%)	3.1 / 7	4.1 / 7	4.8 / 7	Estimated project costs, potential to obtain Enhanced Infrastructure Financing District (EIFD) funding from City of West Hollywood, geotechnical considerations (fault crossings, liquefaction zones), oil and gas well encounters, anticipated utility conflicts, construction approach, construction duration, transfer station feasibility and design complexity, number of subsurface easements, potential full and partial acquisitions required, West Hollywood Sheriff site relocation need, anticipated construction disruption to traffic and parking, need for NEPA
Economic Impact (Weight: 15%)	6.6 / 7	5.8 / 7	5.2 / 7	Number of jobs near proposed stations, number of affordable housing near proposed stations, construction jobs generated, planned developments near proposed stations, number of businesses permanently affected, Transit Oriented Community capacity score, estimated regional jobs created, estimated regional economic output
Total Weighted Score*	5.9 / 7	5.7 / 7	5.4 / 7	All alternatives offer significant benefits. San-Vicente Fairfax performs best.

*7-point scale with 7 as the highest/best performing

Benefit-Cost Ratio (BCR): Compares monetized costs of the Project, including capital and operating costs, to the monetized benefits of the Project, including travel time savings, traffic safety, active transportation health benefits, and regional economic benefits over a 20-year operating period. A higher ratio of benefits to costs means that there are more monetized benefits for every dollar spent. However, it is important to note that many costs and benefits cannot be monetized. The results of this analysis are presented in Table 2.

Table 2. Benefit-Cost Ratio Findings

Alignment	Benefit Cost Ratio (BCR)*
San Vicente-Fairfax	3.4
Fairfax	3.7
La Brea	3.7

** BCRs are unique to each project and not to be compared across projects, due to specific construction and operation years being considered, travel demand modeling years, and other factors.*

The BCR analysis assumes a 30-year construction period for San Vicente-Fairfax and 20 years for Fairfax and La Brea, with all alternatives starting construction in 2041 (Measure M schedule). Standard BCR methodology calculates benefits and costs in terms of today's purchasing power (present value). Although some alternatives generate higher total benefits in future years (measured in constant dollars), benefits that occur later are worth less in present value terms. As a result, the alternative with the largest future benefits is not always the alternative with the highest present value of benefits.

When calculating total benefits for each alignment, San Vicente-Fairfax presents the highest constant dollar value due to better-performing indicators like travel time savings, vehicle miles traveled (VMT) savings, new transit trips and project boardings when compared to Fairfax and La Brea. However, once total benefits are converted to present dollar value, Fairfax presents the highest total benefits, followed by San Vicente-Fairfax, then La Brea.

The Fairfax and La Brea alignments present the highest BCRs (both 3.7). In terms of present value, Fairfax has the highest monetized benefits, while La Brea has the lowest costs. Because these differences are proportional, the benefit-over-cost ratios end up being nearly identical. San Vicente-Fairfax has the lowest BCR (3.4) due to presenting less monetized benefits than Fairfax in present value terms, and the highest life cycle cost among all three alternatives.

Overall, the BCR analysis finds that all three alternatives offer significant benefits compared to costs. When all monetized benefits, including GDP benefits, are evaluated relative to costs, the Project is expected to produce between \$3.40 and \$3.70 in monetized benefits per dollar invested over a 20-year operating period.