

# The 2022 Westwood Neighborhood Greenway Cost-Benefit Executive Summary



Photo courtesy of Urbanize Los Angeles.

## Introduction

The Westwood Neighborhood Greenway (“Westwood Greenway”) was constructed using Proposition O and Proposition 84 funds to capture dry weather flow and improve water quality in the Overland storm drain<sup>1</sup>. In addition to providing essential hydrological services, the Westwood Greenway was landscaped with exclusively Southern California native plants that serve critical ecological functions. [The 2022 Westwood Neighborhood Greenway Cost-Benefit Summary](#) presents a detailed overview of the Westwood Greenway’s impacts on biodiversity, hydrology, and health and wellness. These services position the Westwood Greenway as an archetypal model for the future construction of greenways across Los Angeles County.

# Greenways promote biodiversity, reduce pollution, and improve residents' wellbeing in Los Angeles.

Greenways are linear green spaces that run alongside natural or constructed infrastructure to create recreational areas, reserves, ecological corridors, or buffer zones<sup>2</sup>. Greenways offer both environmental and public health benefits, which can improve the quality of life for local residents and greenway visitors<sup>3</sup>. These benefits include providing habitat for native species, combating the heat island effect, sequestering carbon, enhancing biodiversity, reducing water pollution, and improving people's physical and mental health<sup>2,4,5</sup>.

Los Angeles lies in the California Floristic Province, one of thirty-six global biodiversity hotspots, making the city home to many species that cannot be found anywhere else in the world<sup>6</sup>. However, climate change and industrialization have degraded and destroyed these critical habitats, putting many species at risk of extinction if no action is taken to protect the environment. When landscaped with locally-sourced plants, greenways have the potential to protect the diverse Southern California flora and fauna. By promoting biodiversity, greenways can also provide critical ecosystem services that can help combat the global climate crisis, such as carbon sequestration<sup>7</sup>, urban cooling<sup>4</sup>, and soil stabilization<sup>8</sup>.

In Los Angeles, where most natural waterways have been rechanneled into underground storm drains and aboveground concrete channels, polluted urban runoff enters drainage systems and eventually empties into coastal waters<sup>9</sup>. The Westwood Greenway and similar projects use green infrastructure Best Management Practices (BMPs) such as "daylighting," or the resurfacing of once natural streams, to combat runoff pollution and restore historic stream ecosystems. Daylit streams can reduce flooding threats, filter and decrease pollutant loads, and act as restored aquatic and riparian habitat<sup>10</sup>. Other BMPs, such as bioswales, rain gardens, and permeable pavements, have been shown to effectively slow and reduce runoff volumes, facilitate groundwater infiltration, and sequester urban pollutants<sup>12,13</sup>. A more thorough explanation of the eco-hydrological services that daylighting and other BMPs offer can be found in our full report.

Additionally, greenways in urban areas promote widespread access to green spaces<sup>14</sup>. The Westwood Greenway's location adjacent to a Metro station allows people from many parts of the city and of various backgrounds to access its social, physiological, and educational benefits. In interviews, Westwood Greenway

visitors highlighted their appreciation for close access to a place they could gather, exercise, and socialize. Greenways can also act as educational spaces for visitors of all ages. Signage around the Westwood Greenway covers topics ranging from local watershed history to the food chain ecology of native species. In particular, educating younger generations through hands-on engagement and direct immersion into the natural world can spark interest in protecting nature<sup>10</sup>.

## Greenway Health Outcomes

~ improving the quality of life ~

- Promotes Physical Activity**  
The linear spaces offer a safe space for people to engage in more movement, such as walking or biking.
- Builds Community**  
People from all backgrounds can connect with other visitors and socialize.
- Improves Mental Wellbeing**  
The calm nature of greenways provides people with a peaceful environment in which they can unwind and relax.
- Reduces Pollutants**  
The natural filtration system of plants filter out many environmental stressors.

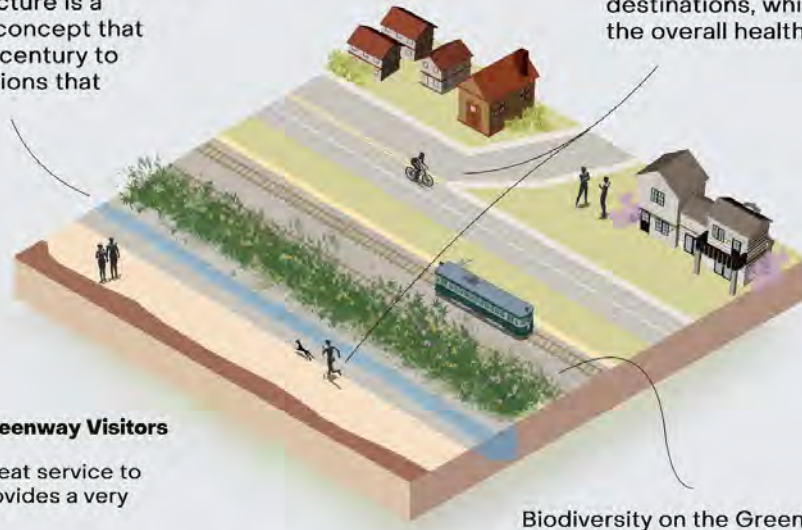
"I love the sound of running water, the aspects of nature, the sights of the birds. It's like being in the country in the city. It's like our little central park."

This infographic by Letty Liu outlines the health and social benefits of a greenway.

# Benefits of the Westwood Greenway

A type of green infrastructure known as "daylighting," the resurfacing of a natural stream, is used to combat runoff pollution. Green infrastructure is a watershed management concept that has evolved over the last century to prioritize ecological solutions that also benefit humanity.

The Westwood Greenway encourages more people to walk or bike to short-distance destinations, which improves the overall health of residents.



## Comments from Westwood Greenway Visitors

"This kind of project does a great service to the environment as well as provides a very pleasant place to walk."

"...[Greenways] can be a component of a resilient city that offers people ways to just be outside. Education on plants, water, and other natural elements of an environment is another important thing that greenways can offer."

Biodiversity on the Greenway can help counteract the urban heat island effect, which describes the increased temperatures and pollution that is often associated with urbanization. Its diverse native plant community is suited both for adapting to and combating climate change.

This infographic by Mercy Eme provides a visualization of the Westwood Greenway's components.

## Furthering Governmental Goals and Initiatives

The decision to build more greenways lies in the hands of various local and regional governmental agencies. The Los Angeles County Metropolitan Transportation Authority (Metro) should spear-head these efforts, as the linear landscape elements of Metro railway lines often provide ideal spaces for greenway construction<sup>15</sup>. Allocating funding for these projects would support various governmental goals and initiatives.

The biodiversity enhancement promoted by a greenway's native plants support the goals of the "Our County" LA Countywide Sustainability Plan and 2017 Biodiversity Motion to enhance native biodiversity and habitat quality throughout Los Angeles<sup>16, 17</sup>. Greenways landscaped with native plants would also help reach the Los Angeles 2015 Green New Deal's goal of "no net loss" of biodiversity by 2035<sup>18, 19</sup>. This target aligns with both President Biden and Governor Newsom's 30x30 Initiatives, which seek to designate 30% of natural areas to conservation and habitat protection by 2030<sup>20</sup>.

Additionally, greenways with properly maintained native landscapes eliminate the need for pesticides and fertilizers<sup>21</sup>. This minimizes continuous material expenses and reduces pollution from chemical runoff,

which directly aligns with Measure W's aim to decrease the amount of contaminated stormwater flowing into Los Angeles County watersheds<sup>22</sup>.

Finally, developing outdoor education programs is especially important considering the isolating impacts of the COVID-19 pandemic on school systems<sup>23</sup>. In 2021, The LA Unified Board of Education passed Board Member Nick Melvoin's initiative to make outdoor learning more accessible for LA Unified School District students<sup>23</sup>. The initiative calls for more resources and funding for existing programs as well as developing new methods of educational engagement with nature<sup>23</sup>. Allocating funding to greenway construction would be an impactful way for LA Metro to support this initiative, along with a multitude of others with similar goals.

## Conclusion

In the face of rapid biodiversity loss, climate change, watershed pollution, and increasing threats to public health, the need for ecologically regenerative solutions is greater than ever. The wide-ranging benefits of greenways on biodiversity, hydrology, human health, and education significantly outweigh their costs, warranting increased funding for future projects in Los Angeles County.

## References

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