SCALE

The LA Metro light rail network spans over 105 miles throughout Los Angeles County, with 7 lines serving 93 total stations

The Metrolink rail network in Southern California encompasses approximately 437.5 route miles and 545.6 total service line miles, serving 67 stations across seven lines.

The **Amtrak rail** system Amtrak operates a nationwide rail network, serving more than 500 destinations in 46 states, the District of Columbia and two Canadian provinces, on more than 21,400 miles of routes.

The Los Angeles Metro light rail system is estimated to use around 163,500 cubic yards of concrete (\approx 392,400 metric tons) for its embedded slab track segments. Across the full 109-mile double-track network, the steel rail usage totals approximately 49.9 million pounds, or 22,624 metric tons

CITATION

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INFRASTRUCTRE





Jindal Stainless Limited, the leading stainless steel manufacturer for metro, headquartered in New Delhi, India. It is India's largest stainless steel producer and ranks among the top global manufacturers





IMPORTANT DATES TIMELINE

RIDERSHIP SCALE COMPARISON

METROLINK

Annual riders: 7,033,780 City of Los Angeles: 3.9 million people Metrolink carries nearly double the population of LA each year

AMTRAK

Annual riders: 32.8 million Texas population: 31.29 million The amount of people in the U.S. who ride Amtrak can be catagorizes as the population of Texas and more.

980x

METRO Annual riders: 68,658,479 SoFi Stadium seating : 70,000 The amount of people in Los Angeles who use Metro is equivalent to 980 full crowd game

CITATION

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SAN BERNARDINO

SANTA ANA

Key Indian ports like Deendayal to efficiently transport stainless steel products for international metro projects.

Assembly is then carried out at specialized facilities to meet local manufacturing requirements and support transit infrastructure.For instance, Sacramento and Palmdale

At the end of their life cycle, trains are then dismantled for salvage at Division 20

NAMES ADDRESS ADDRESS

METRO E LINE MARERIAL CALCULATION (EAST OF UNION STATION)

1.5 MILES

De

The E Line's Eastside Extension, which runs from Union Station to Atlantic Station in East Los Angeles, spans approximately 6.0 miles. Within this extension, about 1.8 miles are constructed as twin sub-surface tunnels. This underground section includes two underground stations: Mariachi Plaza and Soto. The remaining 4.2 miles of the extension are at-grade, running in the center median of arterial streets

Steel Rail Weight: Light rail systems in the U.S. commonly use rails weighing 115 pounds per yard

SUBWAY PORTION (1.8 miles)

Concrete:

Total Volume for Twin Tunnels: 33,350 m³ / 80,040 metric tons

Reinforced Steel: 3,925 tons

DOUBLE RAIL LINE (4.2 miles)

Double Steel Rail Line : Total weight of steel track: 1,213.41 tons

Double Embedded Concrete Slab: 18,136.06 tons

CITATION

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METROLINK BURBANK STATION



METRO MARAVILLA STATION



METRO FILLMORE STATION



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HISTORIC CARS



METRO CARS



SIEMENS ACS-64 / ELECTRIC / 2014

2.7 MILES

INFRASTRUCTURE // PROPOSAL THE SEAM

OVERVIEW

This proposal reconceptualizes the train station as a permeable, site-responsive intervention, dissolving traditional boundaries Ingels Group (BIG), given their expertise in palette of heavy materials such as concrete a large-scale urban exhibition in Copenhagen and steel, the design prioritizes a lighter, more tactile materiality through the use of wood, fostering a stronger dialogue with the surrounding landscape. By softening the station's presence, the project promotes a seamless integration between built form and **COULD BE DESIGN** environment, enhancing both experiential quality and contextual sensitivity

WEIGHT

While weight is traditionally understood in terms of physical mass, this proposal also weight of presence. It considers how the presence of people, activities, and environmental context contributes to the perception of space. By addressing the current condition of passenger stations, the project reinterprets "weight" as both a material and experiential phenomenon, seeking to transform these spaces from isolated infrastructures into vibrant, integrated extensions of their surroundings

PARTNERSHIP

BJARKE INGELS GROUP

A considered partnership for this project is Bjarke between transit infrastructure and the urban activating vacant lots through vibrant, community fabric. Rather than relying on the conventional centered interventions. Their project Superkilen exemplifies their ability to transform underutilized spaces into dynamic, culturally rich public environments, making them an ideal collaborator for this proposal

A considered partnership for this project is Could Be Design, whose practice specializes in creative placemaking through sectional and experiential interventions. Their work, such as the carousel project featuring graphic elements that sync into and out of optical alignment as the structure spins or as visitors move around it, demonstrates explores the concept of intangible weight the a sophisticated understanding of dynamic spatial perception — making them a valuable collaborator for this proposal.





EFC DESIGNATION

This proposal systematically identifies areas within Los Angeles where the presence of transportation infrastructure is most critically lacking. By layering spatial data sets including demographics, land use patterns, existing transit lines, and pedestrian connectivity the mapping process reveals zones of high need and latent potential. These insights not only guide the siting of future interventions but also reinforce a data-driven approach to urban design, ensuring that proposed developments respond directly to measurable gaps in accessibility. In doing so, the project positions transportation infrastructure as a catalyst for equitable urban growth, targeting areas where improved connectivity can generate the greatest social, economic, and environmental benefits.

VACANT LOTS

The urban fabric of Los Angeles is punctuated by numerous vacant lots, many of which are positioned adjacent to train stations. Rather than allowing these spaces to remain dormant, this proposal advocates for their strategic incorperation as extensions of the transit environment. By integrating programmatic elements these zones can serve as transitional thresholds between the station and the city. This approach not only amplifies the spatial and experiential presence of the stations but also fosters a more porous, dynamic relationship between infrastructure and community life. In doing so, the proposal reimagines train stations not as isolated nodes, but as catalysts for urban revitalization and social engagement.



3545 Pasadena Ave, Los Angeles

- Zoning: PF-1 , Public Facility
- Height limit: 75ft
- Site : 89,584 sqft

FUTURE IMPLEMENTATION

YEAR 5 : COMMUNITY IMPLEMENTATION

In the early phases of the project, community driven programming can be introduced, ranging from local markets to curated bicycle infrastructure initiatives. These activations would foster early engagement, promote sustainable mobility, and help embed the project within the daily rhythms of the surrounding community

YEAR 25 : PROGRAM IMPLEMENTATION

The next phase of the project focuses on the strategic implementation of commercial programs to expand the spatial grandeur of the site and reinforce its role as a vibrant urban anchor. By integrating curated retail spaces, cafes, and flexible community-oriented vendors, the intervention aims to generate continuous activity, attract diverse users, and blur the boundaries between transit, commerce, and public life. These commercial activations not only enhance the functional capacity of the station environment but also elevate its experiential quality, positioning it as both a mobility hub and a civic destination

YEAR 50 : SPATIAL TAKEOVER

Finally, the proposal considers adapting the surrounding street network to respond to the station's evolving role, envisioning a future where traditional streetcars are no longer required. This approach reclaims adjacent streets as pedestrian-prioritized corridors, integrating them more seamlessly with the station's public realm and enhancing overall urban connectivity





