Transportation

Housing

Transportation

<---->

Housing







Transportation

Land-Use

Housing

Research Question

If land use is the intersection of transportation and housing.

How do varying policies affect land use in the Inland Empire?



History "The root of our land use"



A History of Redlining, 1930's to Present

National Housing Act in 1934:

It was intended to promote homeownership

 It improved housing conditions, made mortgages more accessible and affordable, and reduced the foreclosure rate on homes during the Great Depression

Rebinnica:

Office of Policy Development and Research (PD&R),

https://www.huduser.gov/portal/pdredge/pdr.edge_frm_asst_sec_081114.html# - sect-Among%20its%20many%20achievements%2C%20FHA.u%20modestly%20priced%20renta %20units

Brina Ameida, A History of Bacist Federal Housing Policies, 2021.

https://massbudget.org/2023/08/06/a history-of-racist-federal-housing-

policies/# - txet=The%20Federal%20Housing%20Administration%20(FHA;homebuyer/%20in%20predominantly%20Black%20mightorhoods.





A History of Redlining, 1930's to Present

However, the Federal Housing Administration began insuring home mortgages but required that the properties be in Whiteonly neighborhoods.

• This institutionalizes the industry standard practice of redlining on a federal level, which systematically withdrew credit from homebuyers in a predominantly Black neighborhood



Office all Policy Development and Research (POAR), https://www.huduser.gov/portality.dredge/pdr_edge.fm.aut_sec_081234.html#~text=Among%20tts%20muny%20achievementz%20%30PisA,aP%20modestly%20priced%20restal%20units Brine Atmesia, A History of Recist Federal Housing Policies, 2021. https://mesabudget.org/2021/08/06/a-history-of-racist-federal-housing: policies/# -text=The%20rederal%20Housing%20Administration%20(PHA.homebuyers%20m%20predominantly%20Black%20reighborhoods.



Mapping Inequality Redining in the New Deal America (http://bit.richmunit.adu/sanotama/adiniog/Hoc=8/03.002/118.743 Map and notes from Herne Owner's Loan Corporation

The term "redlining" comes from the literal drawing of a red line on a map around neighborhoods that would not invest in based on demographic alone

 Various areas that were considered hazardous were generally populated by Blacks and other minorities



Los Angeles



Reference: Mapping Inequality Realising in the New: Deal America <u>Islan Odol indexend edutationation/incodition/8/33.8/32/118.7A3</u> Map and ontex from Hame Generic Loan Corporation

"Redlining" in the IE

According to Professor Jennifer Tilton from the University of Redlands, <u>unofficial</u> redlining took place in the IE.



Map of the Intand Empire Black population in the 1970s highlighted in blue. The dorker blue hues indicate more density in Black populations of the area. (Source: courtesy of University of Rediands. Professor and Author of the Building a movement on San Bernardina's Westside. Jennifer Tiltani.



Map of the Black population in the zplics highlighted in blue. The durine blue hues indicate more density in Black populations of the area. (Source: courtery of University of Redlands Professor and Author of the Building a movement on San Bernardino's Westside. Jennifer Tilton/



Legacy of Redlining in the IE

Housing segregation and redlining restricted many minority homeowners from permanent ownership or even being able to repair or improve their properties.

- Resulted in crime and poverty
- The lack of economic mobility
- decline in their neighborhood
- created a decrease in home value

The problem persists today. In the Inland Empire, African Americans <u>experience the greatest</u> <u>impact.</u>

Reference:Langley, Blaire (2023) Black Voice News Part 1: The Line Begins Here: A History of Redlining in Southern California's Inland Empire https://blackvoicenews.com/2023/05/12/the-line-begins-here-a-history-of-redlining-in-southern-californias-inland-empire/



Legacy of Redlining

Fair Housing Act of 1968

The Act protects people from discrimination when they are renting or buying a home, getting a mortgage, etc.

• Prohibits discrimination based on: race, color, national origin, religion, etc.

Adverce

U.S. Department of Housing and Urban Development

https://www.hud.gov/progrien_iffices/far_housing_equal_opp/fair_housing_act_overview



Reference:

Legacy of Redlining

Many assumed that the issue of redlining would be resolved. Unfortunately, "the gap in homeownership rates between white and black families is larger today than before the passage of the Fair Housing Act of 1969" (Source: National Community Reinvestment Coalition).

Langley, Blain (2023) Black Voice News Part 1: The Line Begins Here A History of Redining in Southern California's Indand Empire https://blackyoicenews.com/2023/05/12/the line begins here a history of redining in southern california's indand empire/ Homeownership Rates by Race Since 1940



**Footnote – Callection of Hispanio/Latino data began in 1970. ** Source – 2010 and 2015 estimates are from Canaus Housing Vacancies and Ownership Surviv) tetrieved from

Https://www.oensus.gov/housing/tvs/index.titriti, 2019 data is from tederal reserve analysis of Census House Vecancies and Ownership: https://tvsi.sticulited.org/graphv7g-zaOf. Data from 1940 - 1000 is from Decensition Census, as clied by:

Https://www.huduaier.gov/publications/pdf/homeownenthipggpaamonglow.incomeandminority.pdf.p. 85



Evaluating the Concept of Location Affordability: Recent Data on the Relationship Between Transportation, Housing, and Urban Form Ann M. Hartell, 2016

Objective	To evaluate location affordability as a concept for policy and practice by investigating the relationship between transportation cost burdens and negative housing outcomes	
Data	Analysis of default and foreclosure data for 70 metropolitan areas. It included transportation and housing cost burdens and demographic data, as well as multidimensional measures of urban form	
Findings	There is a positive relationship between rates of high auto mobility and estimated rates of foreclosure and mortgage default. It indicates that transportation cost burdens are a relevant factor in shaping housing outcomes. In addition, there is a positice and significant relationship between the estimated foreclosure rate and percentage of Hispanic and Black homeowners.	

"This relationship may reflect housing-related inequities that parallel patterns of race/ethnicity that housing scholars have given considerable attention.

The results presented here suggest a need for ongoing attention to the equity dimension in both the housing and transportation sectors."

Transportation Affordability: Evaluation and Improvement Strategies

Todd Litman, 2021

Objective	Identifies the various strategies for improving transportation affordability	
Data Method	The Ginzen's Budget Commission (CBC) compared data of housing and transportation costs as a percentage of income collected by the Department of Housing and Urban Development (HUD) for different types of household in 20 peer cities with the largest economics in 2016 (CBC 2020)	
Findings	Since households often face tradeoffs between housing and transport costs, one unintended consequence of focusing on housing costs alone is that many household are encourage to choose cheaper but more isolated housing in which lower housing costs are more than offset by higher transportation costs.	

Smart Growth" development policies may increase land costs per acre, but by increasing density can reduce costs per housing units, and by allowing more accessible development, can provide significant transportation savings (Makarewicz, Dantzler, and Adkins 2020; Wassner and Baass 2005; Quednau 2016; Tomalty and Haider 2008) (p. 19)

Location-efficient development, which locates affordable housing in areas with good travel options and reduces residential parking costs, can increase overall affordability (CTOD and CNT 2006; CNU 2008; ULI 2009; CHP 2009).

Travel and Housing Costs in the Greater Toronto Area; 1986-1996 Eric Miller, 2004

Objective	Compare bousing and transportation costs for residents for various location in the Toronto region.	
Data Method	Used census consumer expenditure data and transportation survey information	
Findings	They found that suburban locations tend to cost more overall than city locations. In 1996, the study estimates that a family with or car living 30 miles outside downtown Toronto, spent \$1,600 more a year on travel. For households with two vehicles - the norm fo most suburban families - the annual cost rises to about \$5,800 more. The same house in the suburbs would cost about \$1,000 a year more in mortgage, property taxes, utilities and maintenance to run than a similarly valued home downtown.	

" It is generally believed that many households choose to live in suburban locations either because housing costs are lower there or because households can obtain 'more house for a given expenditure.

But housing and travel costs tend to increase as one moves away from the central areas of the region's cities, particularly from (downtown) Toronto. The idea that city living is too expensive does not seem to hold up."

Present Day

What do we currently know about how Land Use affects transportation?



Land use factors have impacts on transportation.

Litman, T. (2023). How Land Use Factors Affect

Travel Behavior. Victoria Transport Policy

Institute.



Factor	Definition	Travel Impacts
Regional accessibility	Location of development relative to regional urban center.	Reduces per capita vehicle mileage. More central area residents typically drive 10-40% less than at the urban fringe
Density	People or jobs per unit of land area (acre or hoctare).	Reduces vehicle ownership and travel, and increases use of alternative modes. A 10% increase typically reduces VMT 0.5-1% as an isolated factor, and 1-4% including associated factors (regional accessibility, mix, etc.).
Mix	Proximity between different land uses (housing, commercial, institutional)	Tends to reduce vehicle travel and increase use of alternative modes, particularly walking. Mixed-use areas typically have 5-15% less vehicle travel.
Centeredness (centricity)	Portion of jobs and other activities in central activity centers (e.g., downtowns)	Increases use of alternative modes. Typically 30-60% of commuters to major commercial centers use alternative modes compared with S- 15% at dispersed locations
Network Connectivity	Degree that walkways and roads are connected	Increased roadway connectivity can reduce vehicle travel and improved walkway connectivity increases non-motorized travel
Roadway design	Scale, design and management of streets	Multi-modal streets increase use of alternative modes. Traffic calming reduces VMT and increases non-motorized travel
Active transport (walking and cycling) conditions	Quantity, quality and security of sidewalks, crosswalks, paths, and bike lanes.	Improved walking and cycling conditions tends to increase nonmotorized travel and reduce automobile travel. Residents of more walkable communities typically walk 2-4 times more and drive 5-15% less than in more automobile-dependent areas.
Transit quality and accessibility	Quality of transit service and access from transit to destinations	Increases ridership and reduces automobile trips. Residents of transit oriented neighborhoods tend to own 10-30% fewer vehicles, drive 10- 30% fewer miles, and use alternative modes 2-10 times more than in automobile-oriented areas.
Parking supply and management	Number of parking spaces per building unit or acre, and how parking is managed and priced	Tends to reduce vehicle ownership and use, and increase use of alternative modes. Cost-recovery pricing (users finance parking facilities) typically reduces automobile trips 10-30%.
Site design	Whether oriented for auto or multi-modal accessibility	More multi-modal site design can reduce automobile trips, particularly if implemented with improvements to other modes.
Mobility management	Strategies that encourage more efficient travel activity	Tends to reduce vehicle ownership and use, and increase use of alternative modes. Impacts vary depending on specific factors.
Integrated Smart Growth programs	Travel impacts of integrated programs that include a variety of land use management strategies	Reduces vehicle ownership and use, and increases alternative mode use. Smart Growth community residents typically own 10-30% fewer vehicles, drive 20-40% less, and use alternative mode 2-10 times more than in automobile-dependent locations, and even larger reductions are possible if integrated with regional transit improvements and pricing reforms.

Factor:

Centeredness (centricity)

Definition:

Portion of jobs and other activities in central activity centers





Travel Impact:

Increases use of alternative modes. ~30-60% of commuters use alternative modes to major commercial centers compared with 5-15% to dispersed locations

(Litman, 2023)

Scag's "Job Center" map



Factor:

Transit Quality/Accessibility



Quality of transit service and access from transit to destinations





Travel Impact:

Increases ridership and reduces automobile trips.

Residents own 10-30% fewer vehicles, and drive 10-30% less

They also **use alternative modes 2-10x** more than in automobile-oriented areas.

Scag's Transit Map (Inland Empire)



Factor:

Mixed-Use Land

Definition:

Proximity between different land uses (housing, commercial, institutional)







Travel Impact:

Reduces VMT

Increases use of alternative modes, particularly walking.

Mixed-use areas typically have 5-15% less VMT.

Factor:

Roadway Design

Definition:

Scale, design, and management of streets



Travel Impact:



- Connected road network provides better accessibility.
- Increased connectivity can reduce vehicle travel by reducing travel distances between destinations.
- Better walking and cycling infra = more direct routes
- Traffic Calming, Streetscaping and Walking and Cycling Improvements reduce VMT

Factor:

Density and Clustering

Definition:

Number of people and jobs in an area. Related activities located close together.



Scag's Local Land Use (San Bernardino)



- Land Use Accessibility: The # of potential destinations located within an area tends to :
 - a. Increase population and employment density.
 - b. Reduce travel distances and the need for automobile travel.
- 2. Transportation Diversity:
 - **a. Increase** the # of transportation options.
 - b. To have a **better** sidewalk, bicycle facilities, and transit service
- 3. Reduced Automobile Accessibility:
 - a. Reduce traffic speed, increase traffic congestion
 - **b.** Reduce parking supply
 - c. Driving would be less attractive

Travel Impact:

Reduce per capita
automobile ownership and

use.

- Increasing use of alternative modes.
- Reducing automobile travel by 25% if we switch from an automobile-dependent city to a more centralized city.

Policy Decision Tree

Policy Decision Tree for transportation and land use coordination using the LEND Framework with the Smart Mobility Calculator and working in concert with LA MTA's CSPP and Caltrans' Smart Mobility Framework.



Sources: Full article: Designing transportation and land use coordination: frameworks for measuring, understanding, and realizing sustainability, livability, and equity (tandfonline.com)

Yash's Data Presentation Geo-Spatial Insights

Future

Land use initiatives for the next generation

Innovation Ecosystems

Innovation Ecosystem: "loosely interconnected network of capabilities around a shared set of technologies, knowledge, or skills, and work cooperatively and competitively to develop new products and services." (Center for Social Innovation - UCR, 2021)





Innovation Ecosystems Encourages Economic Development

In economic development, innovation ecosystems are important because they not only facilitate and support new development, but they can ultimately benefit the local community living in the region as well through.

- Opportunities
- Increasing revenues and resources
- Contribute to a region's sense of place

Jobs for the Future (JFF)'s placed-based research on inclusive economic development (IED) offers (4)



Sources:

<u>The State of Innovation in the Inland Empire (CSIUCR)</u>

Inclusive Economic Development (JFF

SCAG's Smart Cities & Mobility Innovation (SCMI) Projects

Program Goals & Community Benefits:

- 1. Reduce motorized VMT and GHG emissions, particularly in areas with the highest risk for unhealthy air.
- 2. Promote, address, and ensure health and equity in regional land use and transportation planning and close the gap of racial injustice to better serve the POC communities.
- 3. Encourage jurisdictions to plan for innovative solutions to challenges associated with parking, freight and last-mile deliveries, and e-commerce.
- 4. Create dynamic, connected, build environments that support multimodal mobility.
- 5. Employ strategies to mitigate the negative impacts associated with congestions, GHGs, and others that stem from outdated systems.



SCAG's Future Communities Initiative (Pilot Program)

In 2018, SCAG and the Mobile Source Air Pollution Reduction Committee (MSRC) made available a new **\$2.7 million grant** opportunity that would allow local cities and counties to implement new technology and data solutions, while also reducing (VMT) and implementing SCAG's 2016 RTP/SCS.



Source: Future Communities Initiative (SCAG)



By implementing energy conserving technologies, the city will initiate a more sustainable future.



Increased EV sales > Increased # of Charging Stations

<u>California's National Electric Vehicle</u> <u>Infrastructure (NEVI) Funding</u> <u>Program</u>

Background:

Sources:

- The **\$5 billion NEVI Program** is part of the \$1.2 trillion Infrastructure Investment and Jobs Act (IIJA) signed into law by President Biden in November 2021.
 - Caltrans is the designated lead agency for NEVI & the California Energy Commission (CEC) is their designated state energy partner.





Two initiatives relating to transportation and housing

the HART DISTRICT

CUCAMONGA STATION







"a transit oriented, mixed-use district, that elevates the area into a walkable, culture-rich experience embracing economic opportunity."

-CityofRC

The Hart District. Rancho Cucamonga, https://www.cityofrc.us/hart-district. Accessed 11 July 2023.



"Cucamonga Station is a multi-modal transportation hub in the heart of the Inland Empire with planned projects that will further elevate the region as a travel and economic destination."

-CityofRC

Cucamonga Station. Rancho Cucamonga, https://www.cityofrc.us/hart-district. Accessed 11 July 2023.







Conceptual illustration of intensification in the HART District



TRANSPORTATION

Rancho Cucamonga and SBCTA Approve Sale of Property for Development of Brightline West Full-Service Transit Station



Published 4 months ago on October 7, 2022 By Inland Empire Business Journal







Conceptual illustration of intensification in the HART District





Conceptual illustration of intensification in the HART District

• Scale of the Issue



• Current Solutions







- Solutions
 - Zoning
 - Height Restriction Laws
 - Mixed Land Use
 - Affordability



• Putting together points from last slide would amount to....

