

RIVERSIDE'S CLEAN ENERGY FUTURE

Kate Meis, Local Government Commission



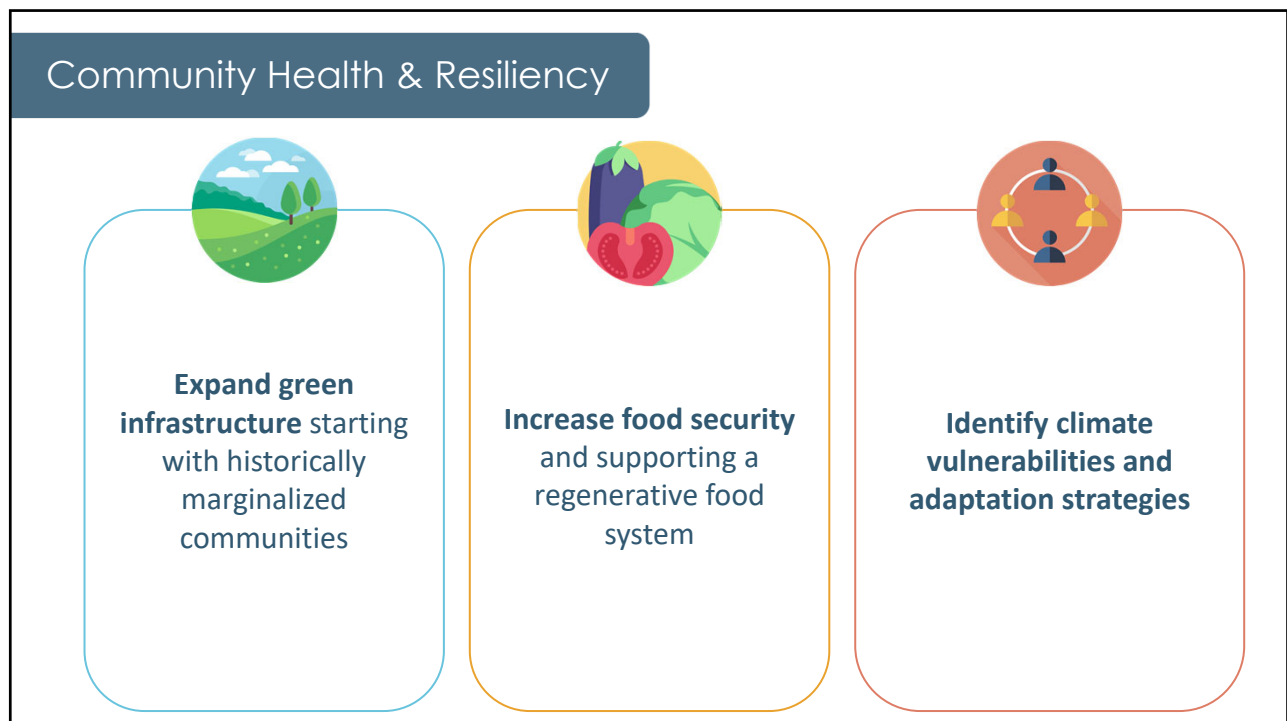
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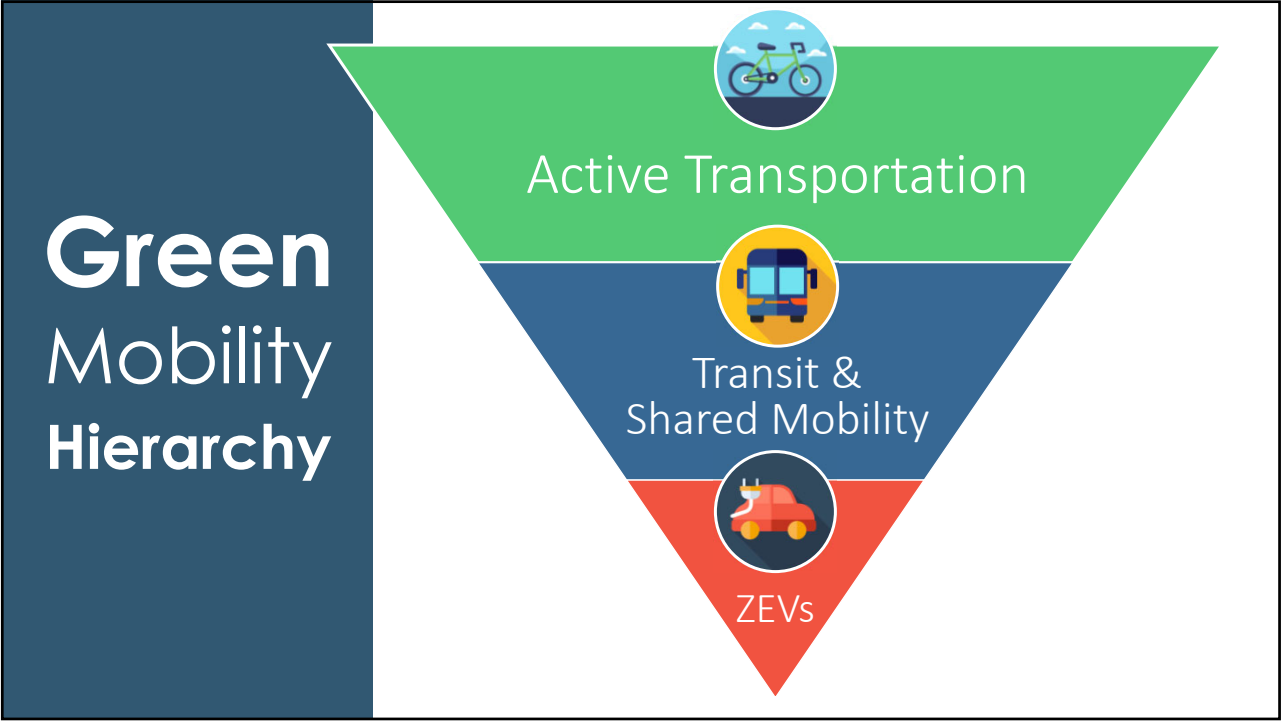
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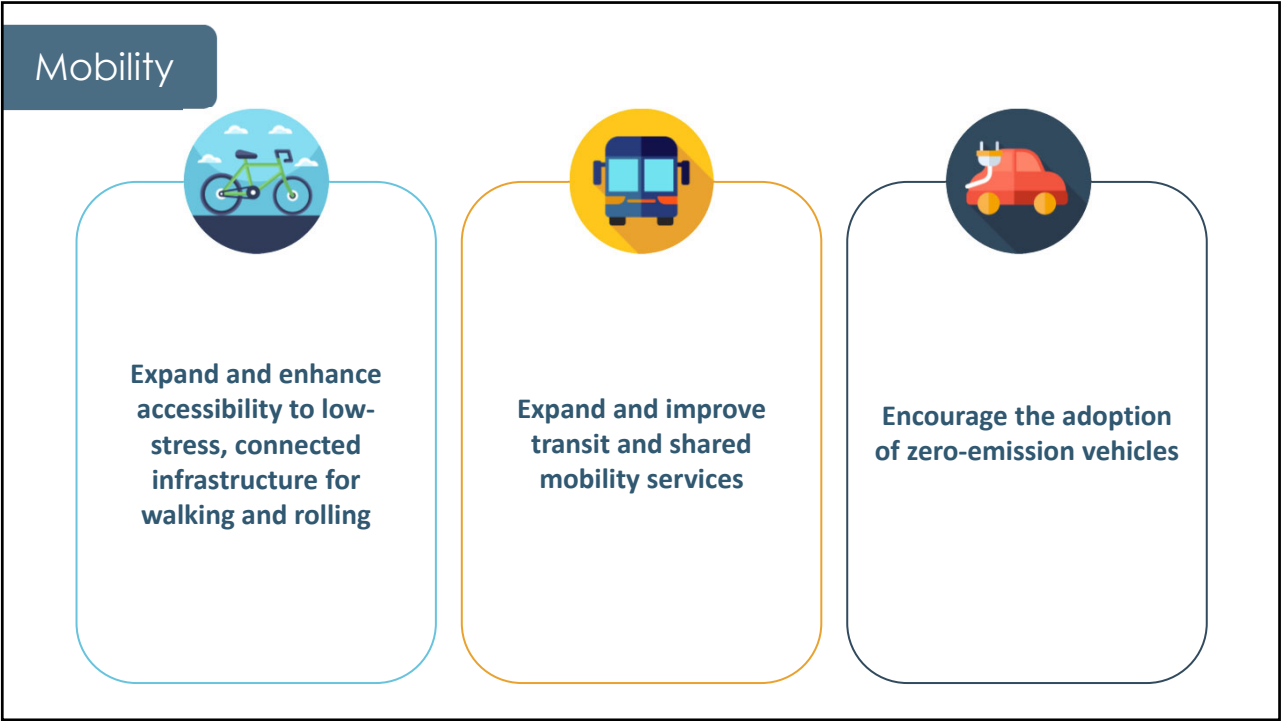
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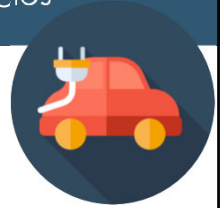
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What your community can do now to increase zero-emission vehicles

1. Update **zoning and parking policies**
2. Update **local building codes**
3. Streamline **permitting and inspection** processes
4. Participate in **training and education** programs for local officials
5. Conduct outreach and education to local businesses and residents
6. Provide **charging** opportunities for people who live in **multi-family** dwelling units
7. Encourage local employers to install **workplace charging**
8. Include electric vehicles in **local fleets**



Source: The California Plug-In Electric Vehicle Collaborative's "Toolkit for Community Plug-In Electric Vehicle Readiness"

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Built Environment

Support infill growth
consistent
with the regional
Sustainable Communities
Strategy

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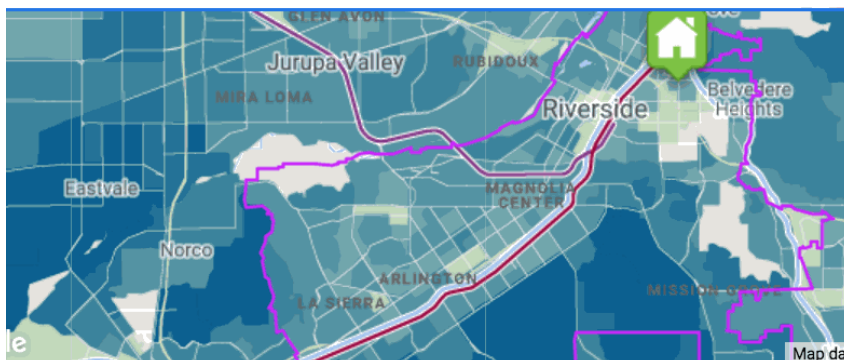
Mandate all-electric construction



Transition existing residential and
commercial **buildings to all electric.**

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Affordable Living: Housing + Transportation Costs, Riverside



Housing + Transportation Cost % Income

< 24% 24-36% 36-45% 45-54% 54-66% 66-78% 78-87% 87%+

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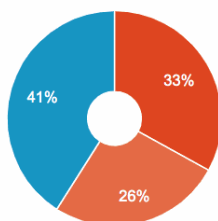
Affordable Living: Housing + Transportation Costs, Riverside



Average Housing + Transportation Costs % Income

Factoring in both housing *and* transportation costs provides a more comprehensive way of thinking about the cost of housing and true affordability.

- Housing
- Transportation
- Remaining Income



Transportation Costs

In dispersed areas, people need to own more vehicles and rely upon driving them farther distances which also drives up the cost of living.



\$14,262

Annual Transportation Costs



1.86

Autos Per Household



21,228

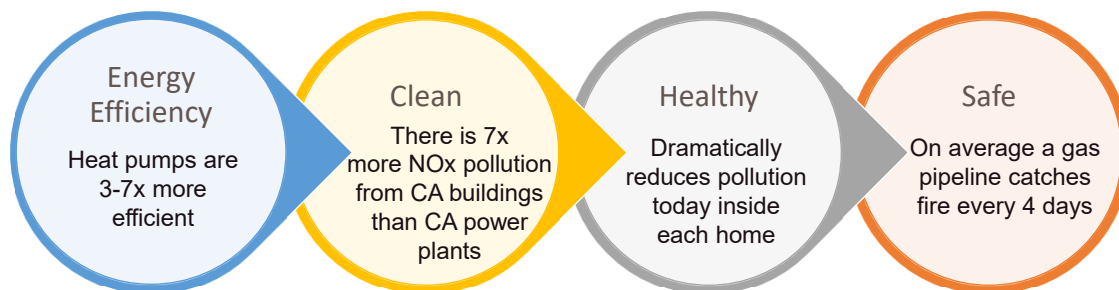
Average Household VMT

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Building decarbonization



Electrification is:



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60+ CA Local Governments Developing Zero-Emissions Codes

Northern California

Bay Area

- **Alameda County:** Albany, Berkeley, Dublin, Fremont, Hayward, Oakland
- **Marin County**
- **Santa Clara County:** Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San Jose, Sunnyvale
- **San Mateo County:** Brisbane, Burlingame, East Palo Alto, Menlo Park, Millbrae, Portola Valley, Redwood City, San Mateo City and County
- **San Francisco**
- **Sonoma County:** Cloverdale, Petaluma, Santa Rosa, Sebastopol, Sonoma, Windsor, Healdsburg

Central Valley

- Sacramento, Davis

Humboldt:

Arcata

Mendocino: Fort Bragg, Point Arena, Willits

Santa Cruz: City of Santa Cruz

Southern California

Central Coast

- City of San Luis Obispo

Santa Barbara

- Santa Barbara, Goleta

Ventura

- Ojai, Thousand Oaks

Los Angeles

- City and County of LA, Santa Monica, West Hollywood, Malibu

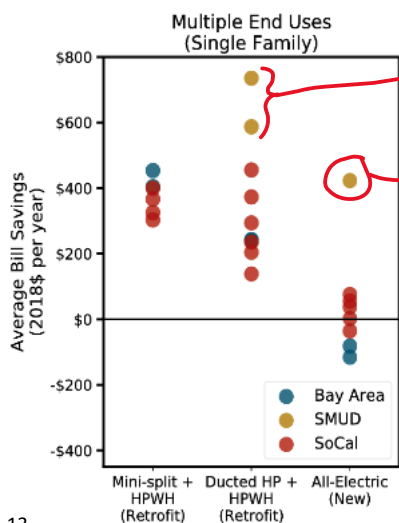
San Diego

- Carlsbad (adopted!), Chula Vista, Encinitas, Escondido



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Lower customer bills



- >\$600* annual energy bill savings for existing homes
- >\$400 annual energy bill savings for new homes
- Lifetime Savings even after cost of conversion from gas

* Existing homes only include space and water heating; however, with the inclusion of cooking and water heating the net savings is still >\$550/year

Source: <https://www.smud.org/-/media/Documents/Corporate/About-Us/Energy-Research-and-Development/E3-Residential-Building-Electrification-in-California-April-2019.ashx>

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Lower construction costs



Single Family

Electrification

3 Cost-Effective Packages

Packages	Incremental Cost	TDV Benefit to Cost Ratio	On-Bill Benefit to Cost Ratio	Emissions Savings (MTCO ₂ e/year)
Electrification	-\$5,349	1.89	∞	1.17 (50.2%)
Electrification + PV (Neutral Cost)	\$0.00	∞	∞	1.49 (64.0%)
Electrification + EE + PV	\$6,172	∞	1.99	1.76 (75.8%)

Multifamily

Electrification

3 Cost-Effective Packages

Packages	Incremental Cost	TDV Benefit to Cost Ratio	On-Bill Benefit to Cost Ratio	Emissions Savings (MTCO ₂ e/year)
Electrification	-\$2,337	1.66	7.19	0.391 (42.5%)
Electrification + PV (Neutral Cost)	\$0.00	∞	∞	0.556 (60.5%)
Electrification + EE + PV	\$1,498	∞	2.51	0.631 (68.7%)

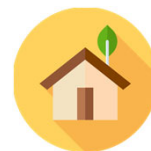
<https://explorer.localenergycodes.com/studies/city-sacramento/results?studies=2&cz=12-SMUD>

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Lower construction costs



Office Buildings

Packages	Incremental Cost	TDV Benefit to Cost Ratio	On-Bill Benefit to Cost Ratio	Emissions Savings (MTCO2e/year)
Electrification	-\$68,343	1.93	13.4	4.07 (2.99%)

Retail Buildings

Packages	Incremental Cost	TDV Benefit to Cost Ratio	On-Bill Benefit to Cost Ratio	Emissions Savings (MTCO2e/year)
Electrification	-\$32,504	70.4	∞	7.28 (9.72%)

Hotel Buildings

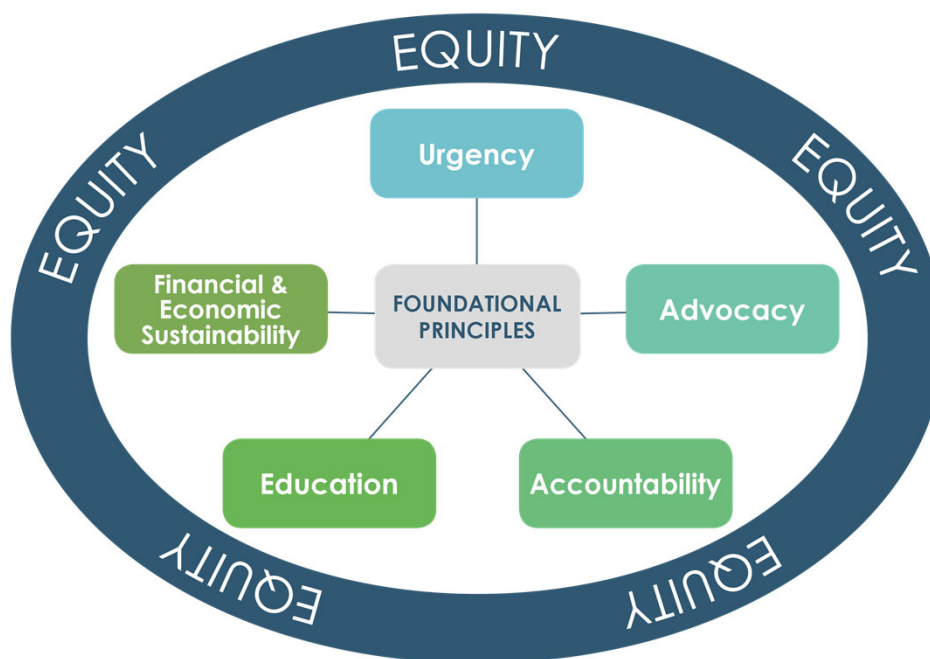
Packages	Incremental Cost	TDV Benefit to Cost Ratio	On-Bill Benefit to Cost Ratio	Emissions Savings (MTCO2e/year)
Electrification	-\$1,297,425	29.3	∞	32.2 (26.3%)

<https://explorer.localenergycodes.com/studies/city-sacramento/results?studies=2,3&cz=12-SMUD>

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Equity Recommendations

1. Operationalize equity
2. Authentically and inclusively involve marginalized communities
3. Expand the capacities of cultural brokers and community-based organizations



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Year One : Addressing Climate Change in the Era of COVID-19

Overarching Priorities

Establish a senior level position with regular reporting to council

Establish an Environmental Justice Collaborative Governance Committee

COVID-19 Climate Connections

Mandate all-electric construction to eliminate fossil-fuel use in new low-rise* buildings by 2023 and all buildings by 2026**

Enact policies and education initiatives to **support telecommuting**

Establish a "food recovery to food security" network

Adopt a policy to **prioritize bicycle and pedestrian travel**

Invest in green, innovative, entrepreneurial and inclusive **workforce training programs**

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Questions?