Turn-key electrification and weatherization of 200 income-qualified homes

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Healthy Electric Efficient Homes Program

Two Contracts, both over three year term:

- \$2 Million for BlocPower to electrify and weatherize 100 multi-family units
 - Subconsultants include: FBS, Arus Consulting
- \$4 Million for Energy Outreach Colorado to electrify and weatherize 100 singlefamily homes
 - Subcontractors include: Groundwork Denver, Clinica Tepeyac, Children's Hospital of Colorado, African American Trade Association, Empowercom, Group 14 Engineering, and the Colorado Clean Energy Fund



Healthy Electric Efficient Homes Program

- Implement turn-key upgrades in 100 single-family and 100 multi-family homes
- Electrify using heat pump technology, provide efficiency cooling, weatherize, insulate, complete air sealing, conduct energy efficiency as well as health and safety upgrades
- Conduct workforce development with focus on BIPOC individuals and MWBE contractors and trades
- Complete thorough written and video case studies to capture program
- Focus on improving health outcomes and pollutant exposure, conduct pre and post intervention surveys and data collection



Health Impacts of Indoor Gas Combustion

- National Center for Healthy Housing: Mechanical ventilation did not reduce NO₂ from gas stoves
- Medical Journal of Australia: 12.3% of childhood asthma burden is from gas stove pollution (similar penetration of gas stove between the US and Australia)
- Modeling Study found that weatherization efforts alone led to 20% more serious asthma events, but bundling weatherization with eliminating indoor sources of combustion (stoves, furnaces, etc) mitigated this impact



Denver – home air quality conditions

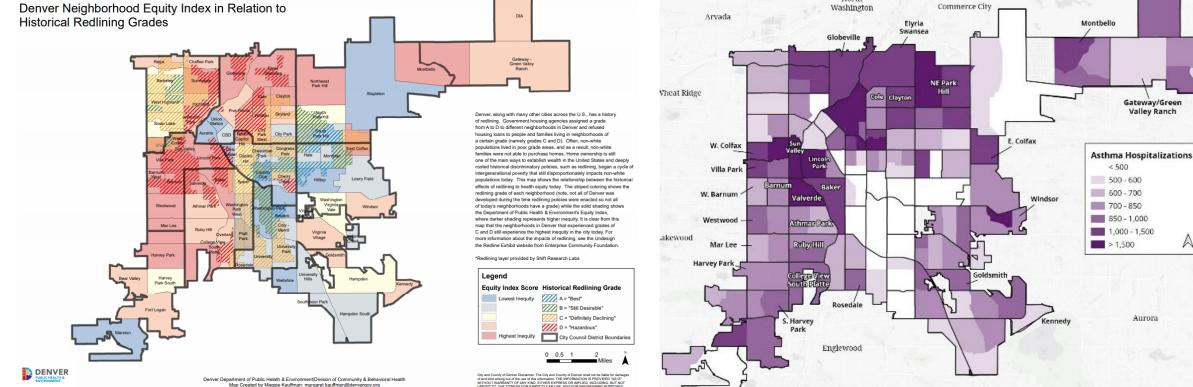
ERC and CEO have provided some statistics from 389 low-income homes they've served in Denver over the past year, for homes below 80% AMI:

- 42% of homes revealed elevated CO produced by combustion appliances
- 95% of homes served had missing or inoperable CO detectors
- 45% of homes required gas line repair
- 75% of homes required some sort of health and safety repair related to natural gas or CO

By comparison, only 5% of market rate homes have gas equipment that fails carbon monoxide tests



Asthma hospitalization patterns heavily mirror historically redlined neighborhoods



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LIMATE ACTION

SUSTAINABILITY 8 RESILIENCY

Heat Vulnerability follows similar patterns

Denver Neighborhood Equity Index in Relation to Historical Redlining Grades

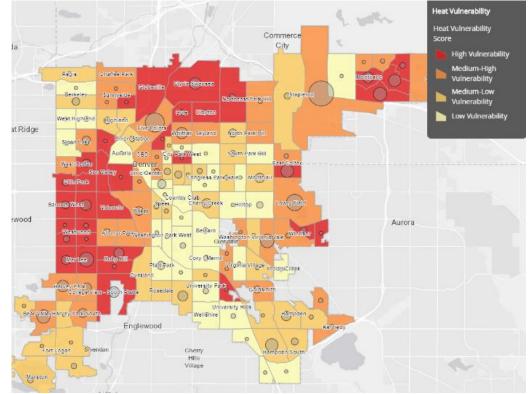
> Northeast Park Hill

Denver Department of Public Helath & Environment/Division of Community & Behavioral Health Map Created by Maggie Kauffman: margaret.kauffman@denvergov.org Denver, along with many other cities across the U.S., has a history of redlining. Government housing agencies assigned a grade from A to D to different neighborhoods in Denver and refused housing loans to people and families living in neighborhoods of a certain grade (namely grades C and D). Often, non-white populations lived in poor grade areas, and as a result, non-white families were not able to purchase homes. Home ownership is still one of the main ways to establish wealth in the United States and deeply rooted historical discriminatory policies, such as redlining, began a cycle of intergenerational poverty that still disproportionately impacts non-white populations today. This map shows the relationship between the historical effects of redlining to health equity today. The striped coloring shows the redlining grade of each neighborhood (note, not all of Denver was developed during the time redlining policies were enacted so not all of today's neighborhoods have a grade) while the solid shading shows the Department of Public Health & Environment's Equity Index, where darker shading represents higher inequity. It is clear from this map that the neighborhoods in Denver that experienced grades of C and D still experience the highest inequity in the city today. For more information about the impacts of redlining, see the Undesign the Redline Exhibit website from Enterprise Community Foundati

*Redlining layer provided by Shift Research Labs



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Resolution Request for Energy Outreach Colorado and BlocPower

Approves respective contracts through 8-31-2025 to run turnkey home electrification programs for income-qualified homes, focusing on health and safety and including but not limited to program outreach, education, enrollment, implementation, and assessment, citywide.

- 22-0889: Energy Outreach Colorado Efficiency, LLC for \$4,000,000; 100 single-family homes
- 22-0890: BlocPower, LLC for \$2,000,000; 100 multi-family homes

