Pitkin County Vision 2050

Workgroup Meeting

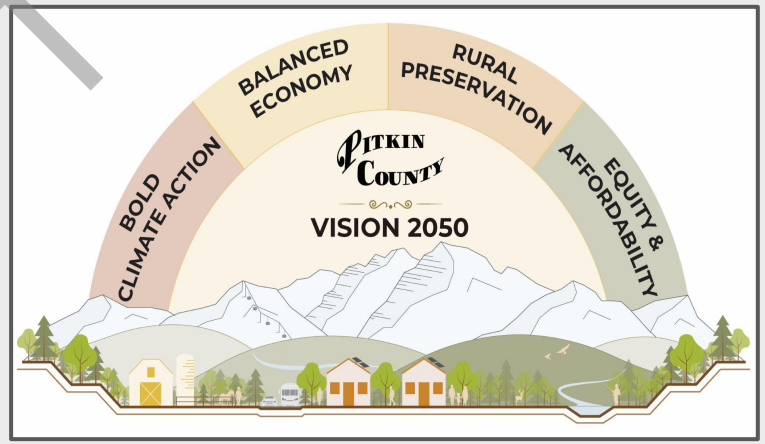
May 7, 2025

Meeting Purpose & Agenda Review

Purpose: *Review Intensity Studies, relationship to CGAC Recommendations, Caucus Master Plans, and Comprehensive Plan Policy Implications*

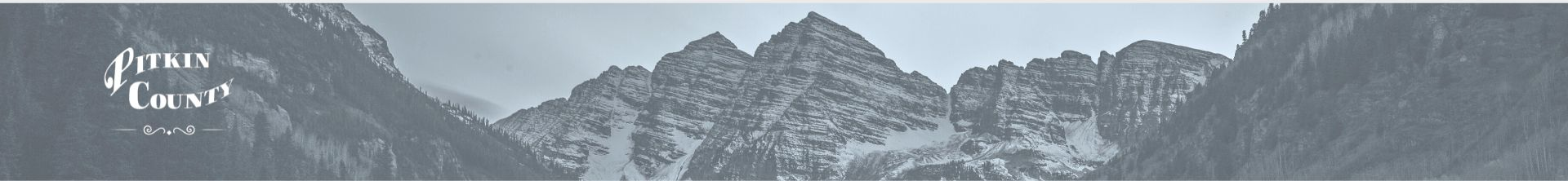
Agenda:

- Welcome & Intros
- Understanding Intensity in Pitkin County
- White Paper Review and Discussion
- Policy and Land Use/Code Implications
- Next Steps

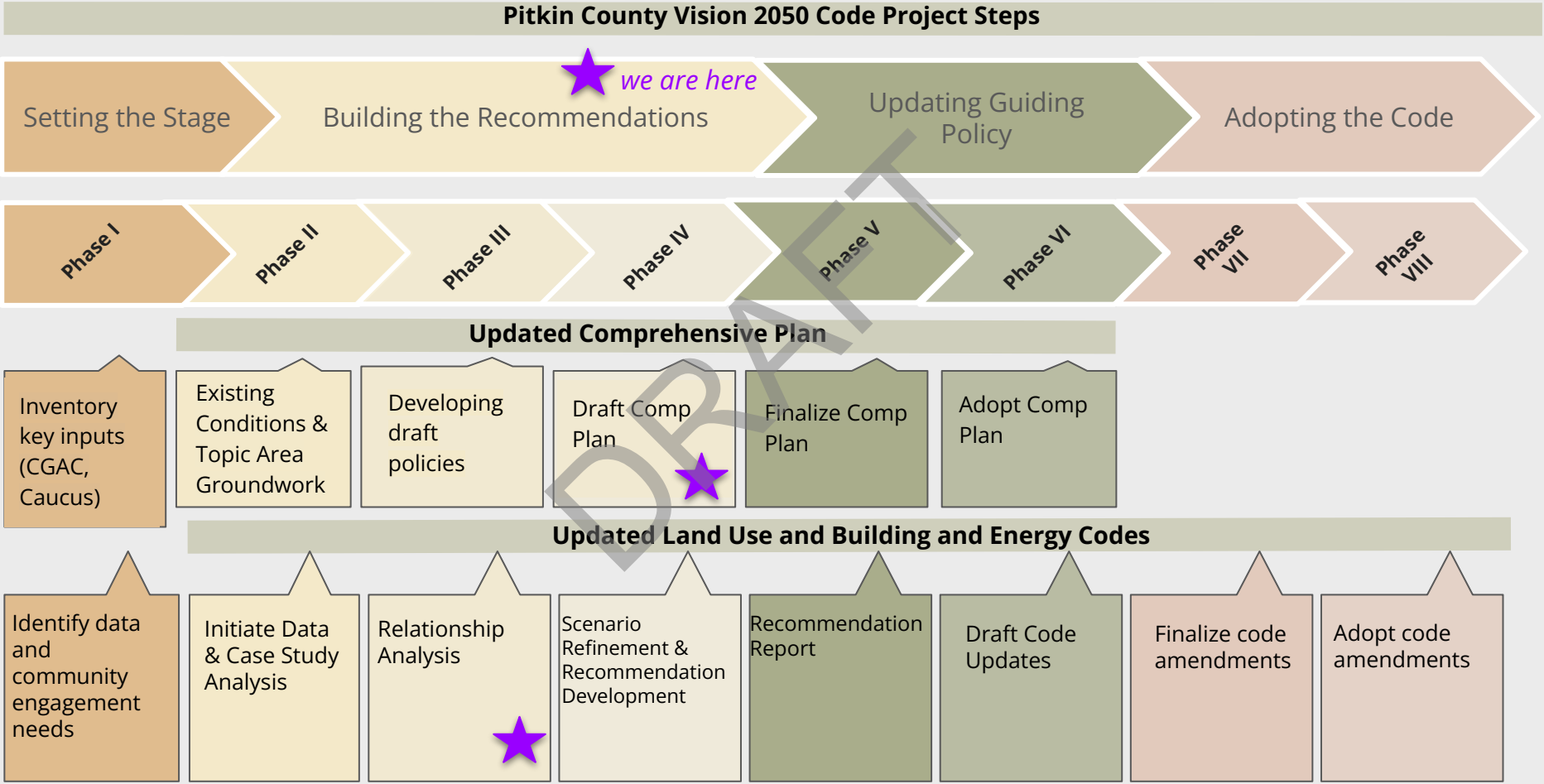


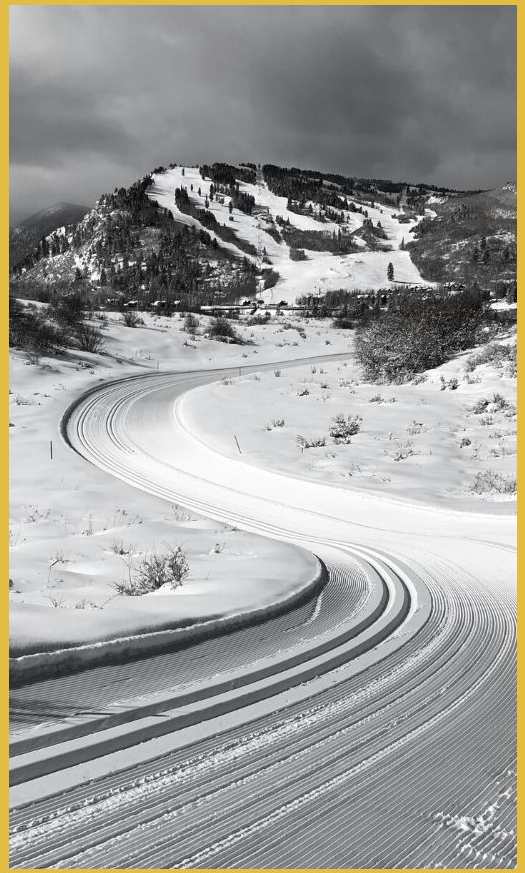
Introductions

- **Kimley-Horn** (Michael Schmitt, Ayberk Kocatepe)
- **RPI Consulting** (Gabe Preston)
- **REG** (August Hasz)
- **EPS** (Andrew Knudtsen, Avery Weiss)
- **RRC** (David Becher)



Summary of Implementation & Timeline





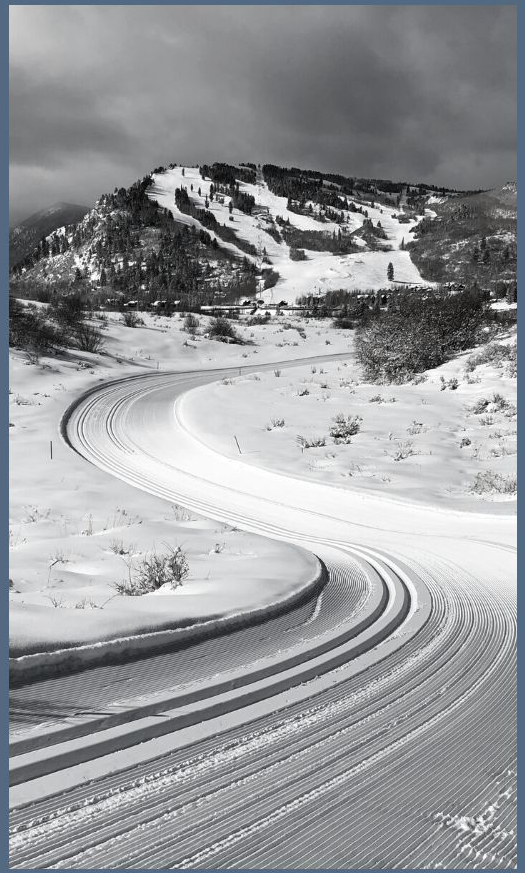
Discussion Question Preview

Preview Questions

- What clarifications would be helpful? What questions do you have about the Draft Intensity White Paper?

- Do the findings track with your experience? What is missing or surprising from the analysis and key takeaways?

- What creative new ideas do these findings spark? How do we use our tools to mitigate intensities (relocating, refocusing, redistributing, or reducing)?
  a. *For example, is intensity appropriate in all parts of our county?*
  b. *If not, where can and should we focus intensity to preserve our rural lands?*



Intensity in Pitkin County: Overview & Key Findings

CGAC Background and Context

The findings in the following studies evaluate the assumptions made by the Community Growth Advisory Committee (CGAC) Final Report:

- Large homes have an outsized impact on unincorporated Pitkin County
- Growth is no longer defined simply as density, but also as intensity and activity.
- The rise in activity/service generated by large homes in our rural areas, there is misalignment between Pitkin County infrastructure and nodes of activity.
- These trends have direct impacts on our climate and environmental values.
- The Land Use Code can be used to influence our community values and directly shape the land use pattern we want to see in unincorporated Pitkin County.

Problem Statement

- **The CGAC identified intensity as a qualitative phenomenon impacting our community values and quality of life. The following analyses seek to <u>define and quantify intensity</u> to better understand its drivers, impacts, and dynamics.**
    - *What do we mean by intensity and how do we measure it?*
    - *How much economic activity do large homes drive relative to overall economic activity in Unincorporated Pitkin County (UPC)?*
    - *What's the relationship, if any, between large homes and traffic congestion?*
    - *How does home size relate to the county's greenhouse gas emissions?*
    - *What else is driving intensity or is intensity impacting that we haven't understood?*

Intensity Studies

- ➔ Economic
- ➔ Transportation
- ➔ Climate

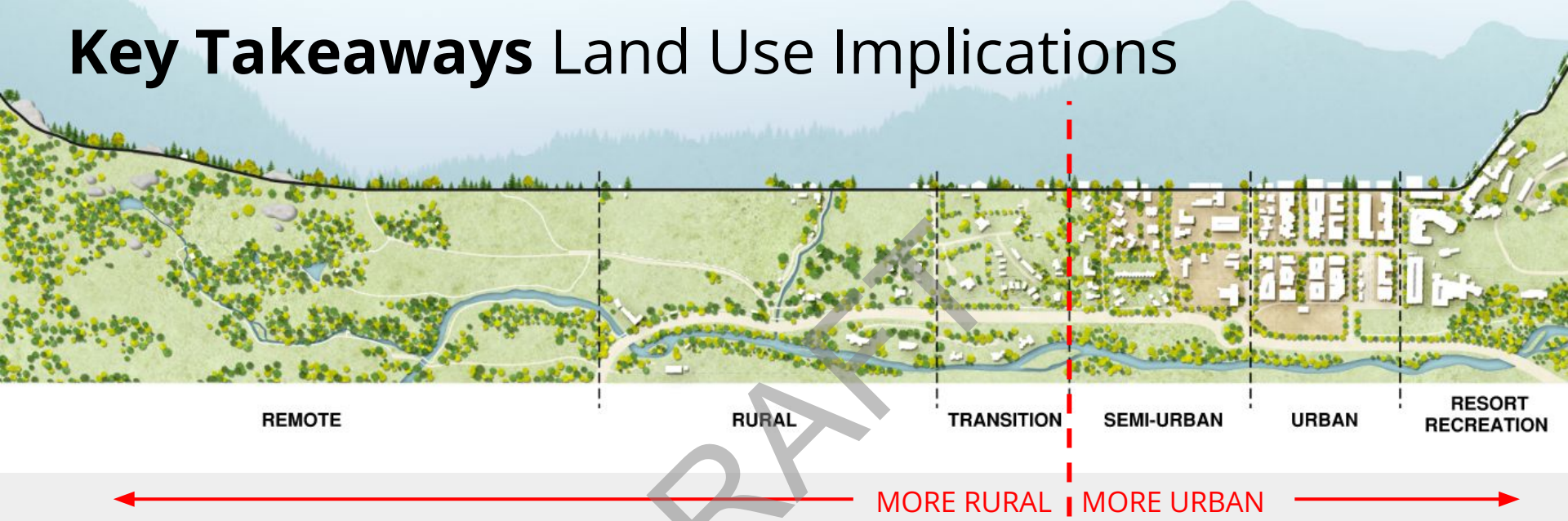
Defining Intensity

1. Describe intensity
2. Measure it using metrics & proxies
3. Establish a baseline
4. Understand its dynamics (drivers, inflection points, levers, etc.)

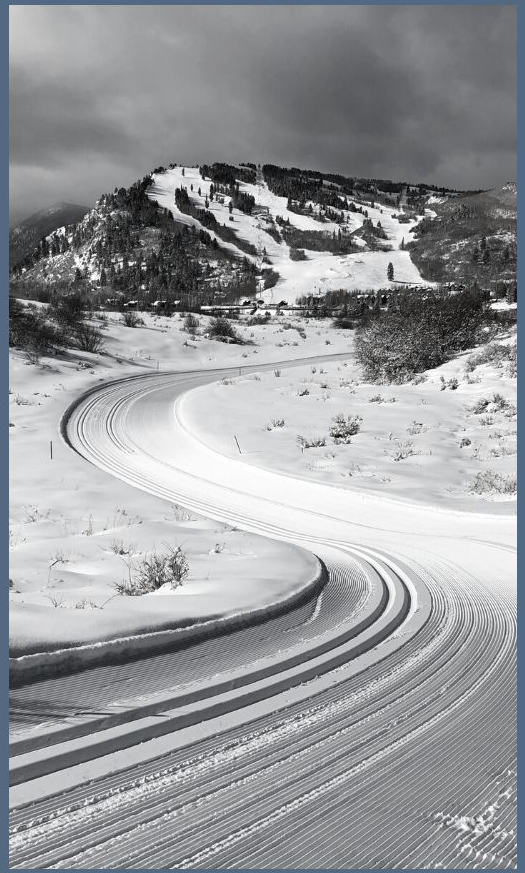
Key Takeaways

- Intensity in Pitkin County is a **real and quantifiable** phenomenon, distinct from growth.
- **Large homes drive disproportionate impact**: Economic, transportation, and climate intensity rise sharply with home size—separate from traditional growth patterns.
- The occupancy, construction, redevelopment, and service of homes over 5750 SF is **driving activity and intensity in rural areas, misaligned with current infrastructure**, community services, and rural character.

Key Takeaways Land Use Implications



- Land use patterns and infrastructure have been historically based upon a **rural/urban** landscape.
- Our community infrastructure & services is built assuming workforce & activity is focused in urban areas.
- ***While we have managed <u>growth</u> in rural areas, we need to reframe our approach to include <u>managing and mitigating intensity</u>.***



White Paper Review and Discussion

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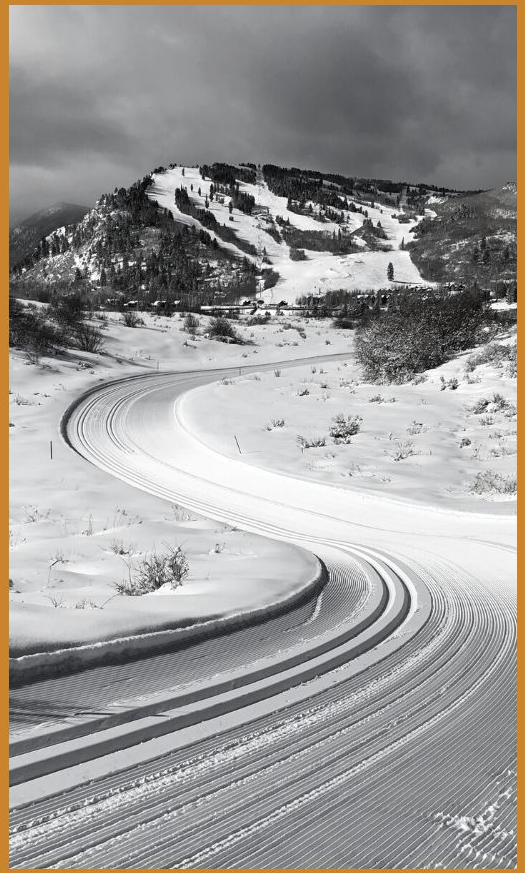


Economic Intensity in Pitkin County

Economic Intensity Definition

The economic activity originating from the development, occupancy, operations and maintenance of high end, larger homes in Pitkin County. One portion of intensity originates from the residences themselves - i.e., the onsite jobs generated to build, operate and maintain a house. The other portion of economic intensity centers around the offsite real estate, development and wealth management businesses that service the residential sector and that grow as homes get bigger.

Measured based on the level of financial inputs and outputs in the County.

Data Sources: Employment generation (RRC 2025), Construction jobs; Pitkin and Garfield Counties, DOLA; Building permits and value by type, Pitkin County; Output per construction employee, RIMS II, BEA; Operations and maintenance NAICS group, RRC, 2025

Metrics / Proxies

- **Onsite jobs** generated by home size to construct, remodel, operate and maintain homes in Unincorporated Pitkin County

- Rates of **employment and personal income in offsite sectors** related to residential development

Employment Generation Associated with New Residential Units in Unincorporated Pitkin County

Heated Square Feet	Employment (current workers)		
	Construction	Operations & Maintenance	Total
1,000	0.091	0.064	0.155
2,000	0.182	0.128	0.310
3,000	0.273	0.192	0.465
4,000	0.364	0.256	0.620
5,000	0.455	0.320	0.775
6,000	0.546	0.384	0.930
7,000	0.637	0.448	1.085
8,000	0.728	0.512	1.240
9,000	0.819	0.576	1.395
10,000	0.910	0.640	1.550
Each additional 1,000 sqft	0.091	0.064	0.155
3,250	0.296	0.208	0.504
5,750	0.523	0.368	0891
9,250	0.842	0.592	1.434

Source: EPS & RRC

What the Data Shows

- As of 2022, onsite home-related construction, operations and maintenance jobs account for 13% of PC's economy (a decline of 13% from 2010).
- Using 2022 data, offsite jobs related to the residential economy accounted for 37% of jobs.
- In the same period, offsite jobs in the real estate, development and wealth management sectors have grown by 37.5% generating 148.5% increase ($319.8 million) in labor earnings.

Job Growth by Sector, Pitkin County, 2010 and 2022

Sector	2010 Jobs	2022 Jobs	Job Growth (2010-2022)	Percentage of Job Growth (2010 - 2022)
Tourism	7,994	9,055	1,061	13.3%
Real Estate, Development and Wealth Management Group	6,789	9,334	2,545	37.5%
All Else	7,526	8,112	586	7.8%

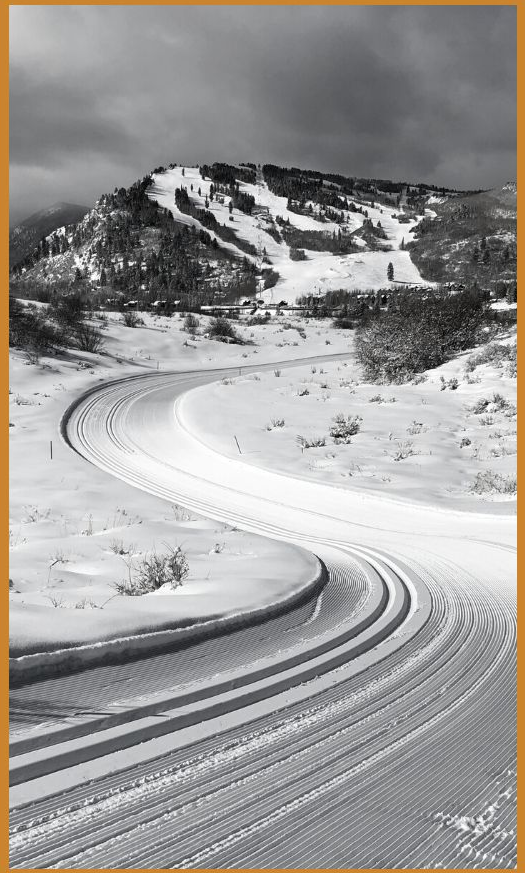
Source: Economic Profile System by Headwaters Economics, RPI Consulting

Key Takeaways

- **Large homes have an outsized impact on job generation.** Large homes make up just over 14% of the single-family homes in Unincorporated Pitkin County but they generate more jobs than the remaining 86% of smaller homes in the county.

- **Construction jobs are moving down valley.** Construction jobs generated by larger homes in Pitkin County have declined by 13% since 2010. At the same time, these jobs have increased by 27% and 25% in Garfield and Eagle Counties.

Change in Select Industries (2010 - 2022)			
Industry	Pitkin	Garfield	Eagle
Real Estate	+10%	+1%	+16%
Construction	-13%	+27%	+25%
While construction activity is taking place in Pitkin County, many firms have relocated their headquarters downvalley and commute up to job sites in Pitkin County.			
Source: CO State Demography Office			



Transportation Intensity in Pitkin County

Transportation Intensity Definition

The transportation activity originating and resulting from homes in Pitkin County. One portion of this intensity originates from day-to-day trips from a home that are typical for any community member, such as to work, school, or to run errands. The other portion of intensity centers around trips made to a home by workers to construct, operate and maintain a home.

Measured based on daily Vehicle Miles Traveled (VMT) and total trips in the County.

Data Sources: Resident Home-based Other Trip Generation (Replica – 2023), Resident Home-based Work Trip Generation (Census Datasets – 2023), Employment Generation (Peer Research – 2025)

Metrics/ Proxies

- **Home-Based Work (HBW) trips,** work-related trips made by residents who are commuting to work outside their homes;

- **Home-Based Other (HBO) trips,** trips made by residents unrelated to work such as for recreating, grocery shopping or other errands; and,

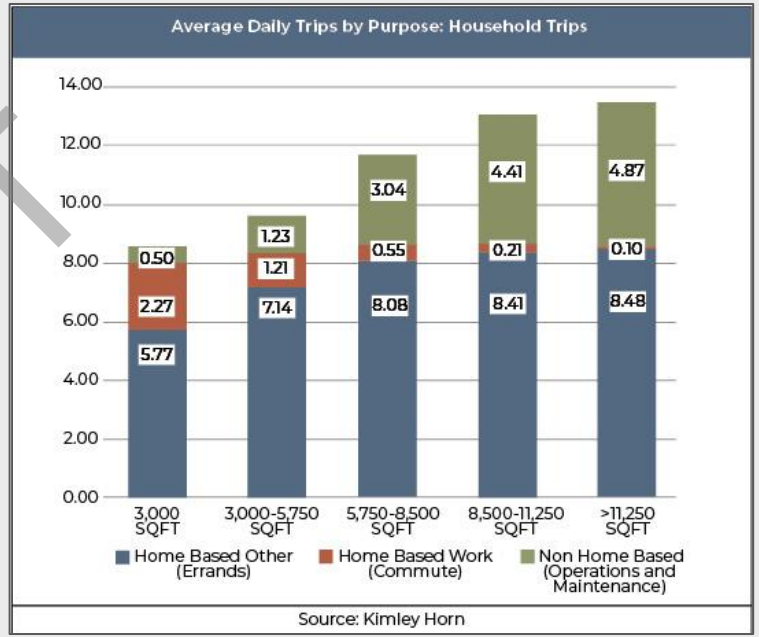
- **Non-Home-Based (NHB) trips,** trips made by employees of a residence to provide services related to that home's operations and maintenance.

What the Data Shows

- Of the nearly 44,000 daily vehicle trips made in UPC, **57.01% (24,988 trips) are related to residential land uses**.

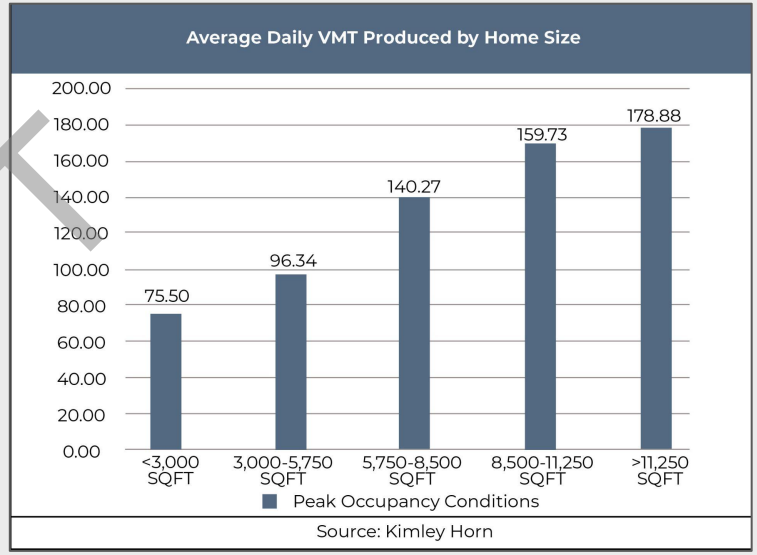
- Trips by residents are relatively consistent across house sizes. However, **employee trips—rise significantly with increases in home size.**

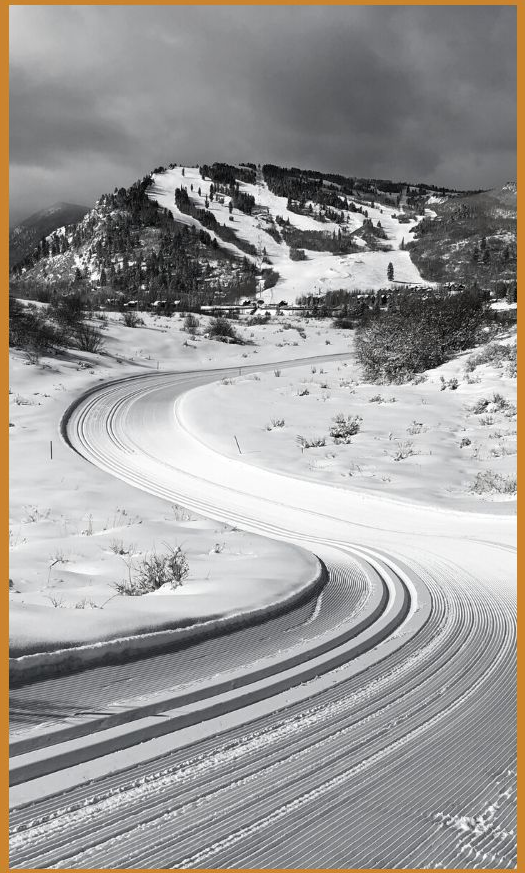
- These **employee-related trips are longer and persist year-round**, regardless of whether the home is seasonally occupied.



Key Takeaways

- **Employee trips grow considerably as home size increases.** While resident trips do not dramatically vary between different home sizes, the largest homes generate nearly ten times more employee trips (4.87) compared to smaller homes (0.5).
- **Large homes have an outsized impact on daily trips and VMT.** Large homes represent only 14.36% of the housing stock, but they account for 19.51% of all daily residential trips and 24.26% of all residential VMT.





Climate Intensity in Pitkin County

Climate Intensity Definition

The climate-related impacts from operating and maintaining residences in Pitkin County.

Measured by the amount of energy used and greenhouse gases (GHG) required to operate residential buildings, and coming from vehicle trips required to maintain and service homes in Pitkin County.

Data Sources: Pitkin County GHG Inventory (2023), Pitkin County Energy Use Utility Data Analysis (2023)

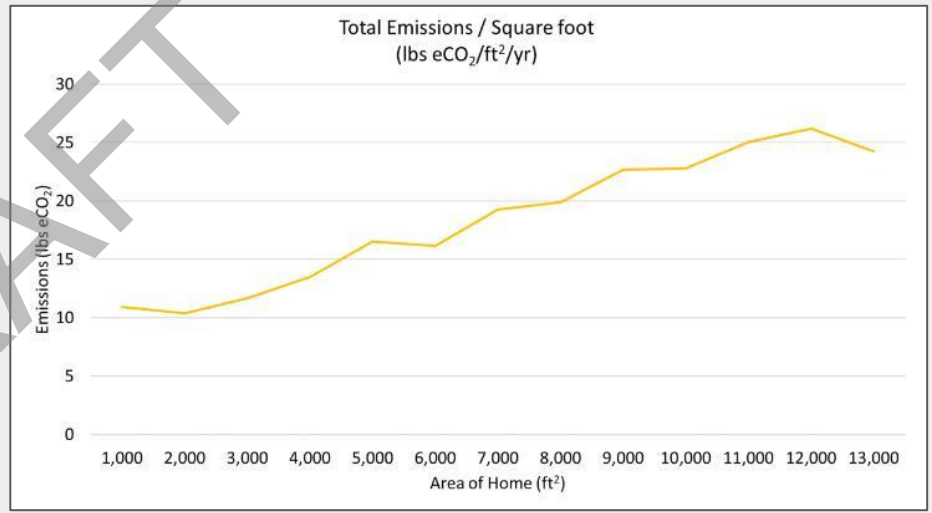
Metrics / Proxies

- **Electric GHG Emissions (eCO_2)** per square foot
- **Gas GHG Emissions (eCO_2)** per square foot
- **Total energy use GHG Emissions (eCO_2)** per square foot
- **Exterior Energy/Amenity Loads:**
  - Avg. Snowmelt Area
  - % of Homes with Spas
  - Avg. Pool Area
  - Avg. Heat Tape Watts
  - Avg. Exterior Energy and Renewable Energy (kBtu/yr)

What the Data Shows

- **Energy use and home size is correlated.** The 2023 study established a positive correlation between annual energy use and home size; as homes in Pitkin County get bigger, their GHG emissions from electric power and natural gas consumption increase.

- **GHG emissions are multiplicative as homes get larger.** Total annual GHG emissions per square foot more than doubled, from an average of 10.9 lbs eCO2/ ft2 /yr to 24.2 lbs eCO2/ft2/yr as home size increased from 1,000 sq ft (the smallest homes studied) to 14,000 sq ft (largest in the study).



Key Takeaways

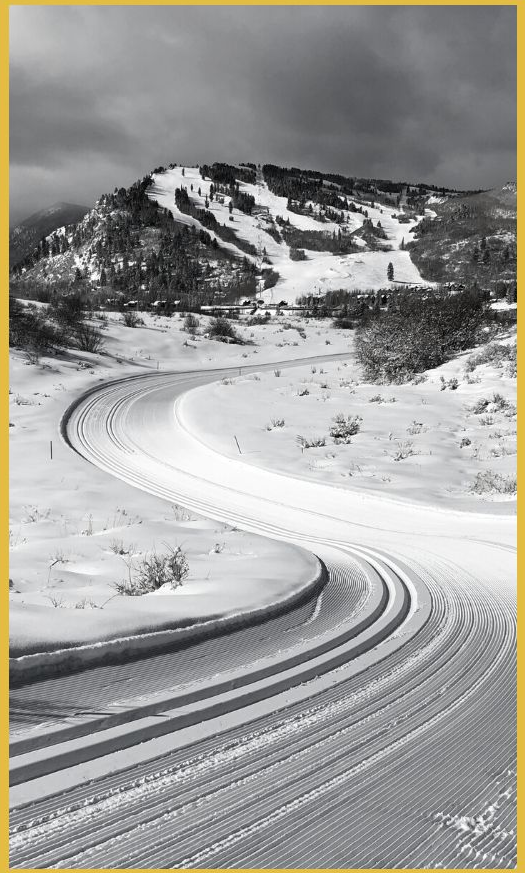
- **Large homes have a disproportionate impact on building emissions.** Unincorporated Pitkin County contains about 26.4% of all housing units in the county while generating 44.6% of residential building emissions.

- **Large homes are one of the largest impacts, but also the greatest opportunity for addressing emissions.** Limiting home size to 5,750 sq ft max could result in over four times lower annual emissions.

- **“Amenity loads” impact emissions**. Higher energy use per area with large homes is primarily driven by “amenity loads.”

Overall Key Takeaways

- **Measured Intensity Validates Policy:** Quantifying intensity confirms qualitative insights and supports informed policy, code, and program updates.
- **Large Homes Drive Disproportionate Impact:** Economic, transportation, and climate intensity rise sharply with home size—separate from traditional growth patterns.
- **Infrastructure & Equity Challenges:** Rural intensity strains infrastructure and highlights the need for equitable, affordable housing closer to jobs.
- **Targeted Tools Needed:** Nonlinear "intensity curves" reveal where County tools can be most effective in managing economic impacts.



Where is Intensity?

Managing for Growth AND Intensity

Workgroup Discussion

First…

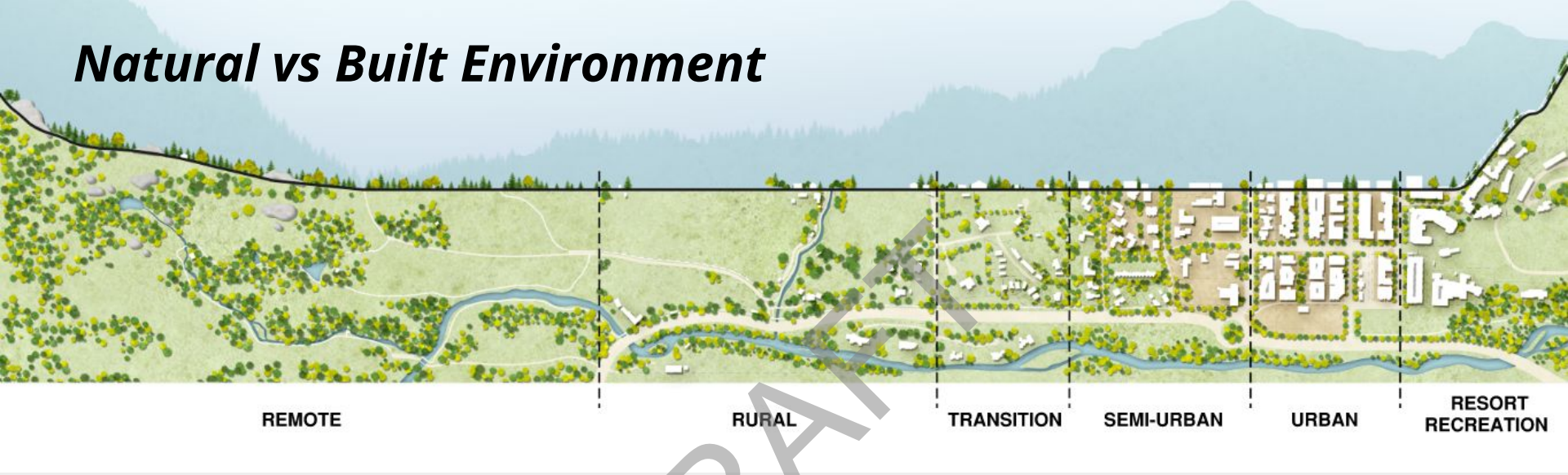
- Any other insights or surprises from the analysis and key takeaways?

Next Up…

- What creative ideas do these findings spark? *(beyond CGAC recommendations and Caucus Master Plans)*

- How do we best use our land use/code tools to mitigate intensities more appropriately (relocating, refocusing, redistributing, or reducing)?
  a. *For example, is intensity appropriate in all parts of our county?*
  b. *If not, where can and should we focus intensity to preserve our rural lands?*

Natural vs Built Environment



DECREASES

BUILT ENVIRONMENT
Level of density & development
Access to utilities, transportation, roads, job centers, commerce, services

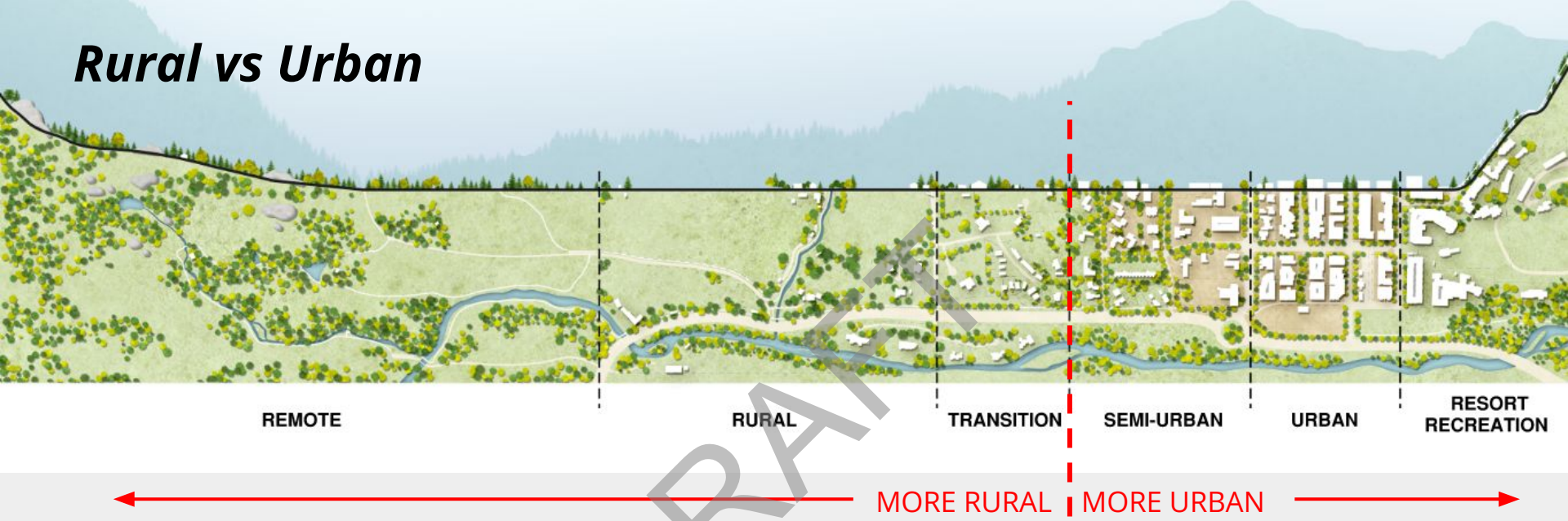
INCREASES

INCREASES

NATURAL ENVIRONMENT
Public lands & open space
Rural & agricultural lands
Wildlife habitat & migration

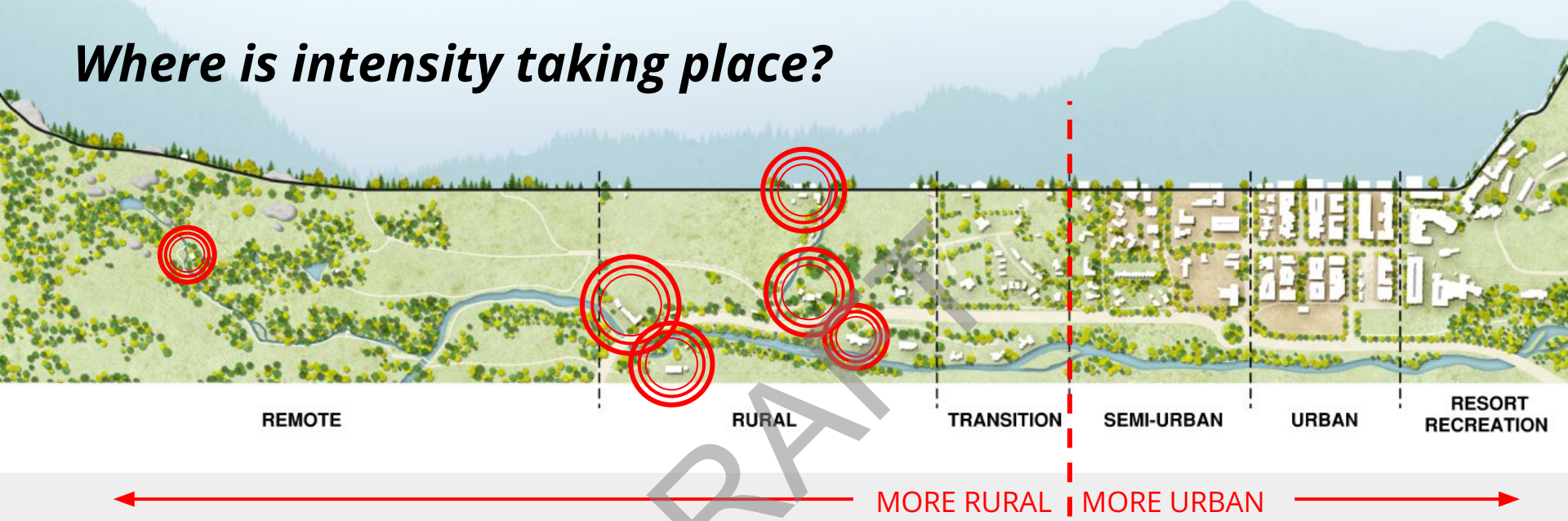
DECREASES

Rural vs Urban



- Land use patterns and infrastructure have been historically based upon a rural/urban landscape.
- Our community infrastructure & services is built assuming workforce & activity is focused in urban areas.
- *While we have managed the pace of growth in rural areas, we are now understanding the impacts of large home intensity in rural areas.*

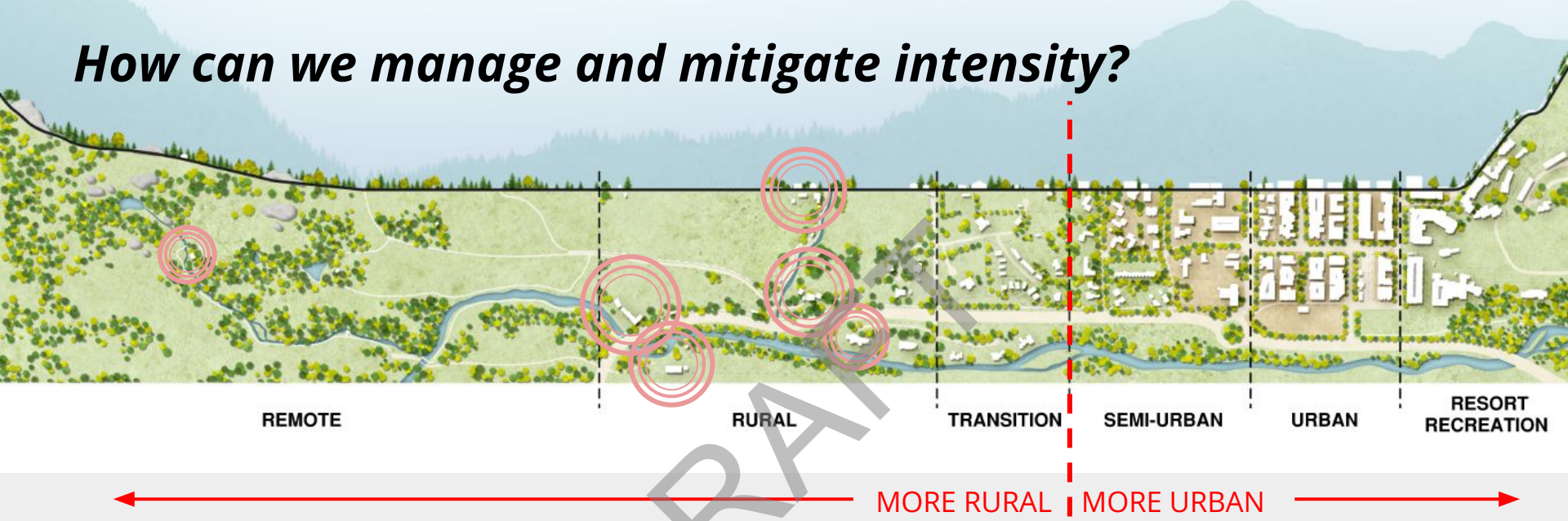
Where is intensity taking place?



- Large homes in rural areas create a level of activity & intensity (climate, economic, transportation) **inconsistent with their rural locations** and **misaligned with our community infrastructure & services.**

- *So what can we do?*

How can we manage and mitigate intensity?



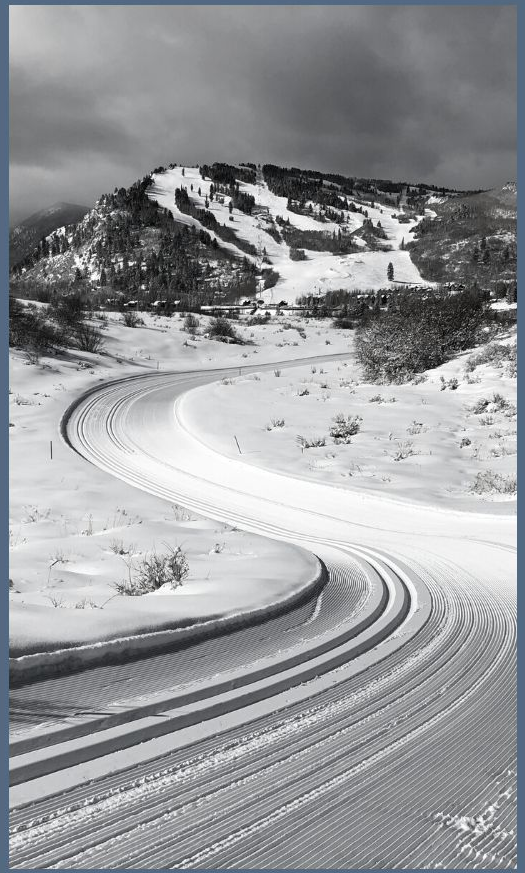
- Where is intensity appropriate?
- How should we manage intensity: *redistribute*, *relocate*, *refocus*, *reduce*?
- How can we use our Land Use tools to manage & mitigate intensity?

Expanding the CGAC Outcomes Table

Solving for ***Intensity*** in order to address Quality of Life Outcomes

Land Use/Building Code Tools

Model Scenario Components	Intensity	Quality of Life Outcomes (Goals & Values)					
		Climate		Balanced Economy		Community Character	
	Economic, Climate, Transportation	Reduction of GHG emissions by 90% by 2050	Residential net zero by 2030	Workforce/housing imbalance	Pacing of development	Rural/wild preservation	Rural traffic & highway congestion
Floor Area Ratio		✓✓		✓		✓	✓
Square Footage Cap (8,000 - 10,000)		✓✓		✓		✓	✓
Tiering System		✓	✓	✓	✓	✓	✓
Performance Standards		✓✓	✓✓✓				
Development Standards		✓✓	✓✓			✓	
GMQS		✓		✓	✓✓	✓✓	✓
Square Footage Quota System		✓✓			✓✓	✓✓	✓✓
TDRs		✓			✓	✓✓	✓
Expanded TDR Concept		✓	✓	✓	✓	✓	✓
Zoning Overlay/Rural Area		✓		✓	✓	✓✓✓	✓✓
Administrative Policies		✓✓	✓✓	✓	✓✓✓	✓	✓
Affordable Housing Solutions		✓	✓	✓✓	✓	✓	✓✓
Mitigation/Impact Fees		✓	✓	✓			✓
Redevelopment		✓	✓✓	✓✓	✓	✓	✓✓



What's Next

- June Workgroup (June 4th): Location TBD
- Summer Comprehensive Plan Outreach Activities

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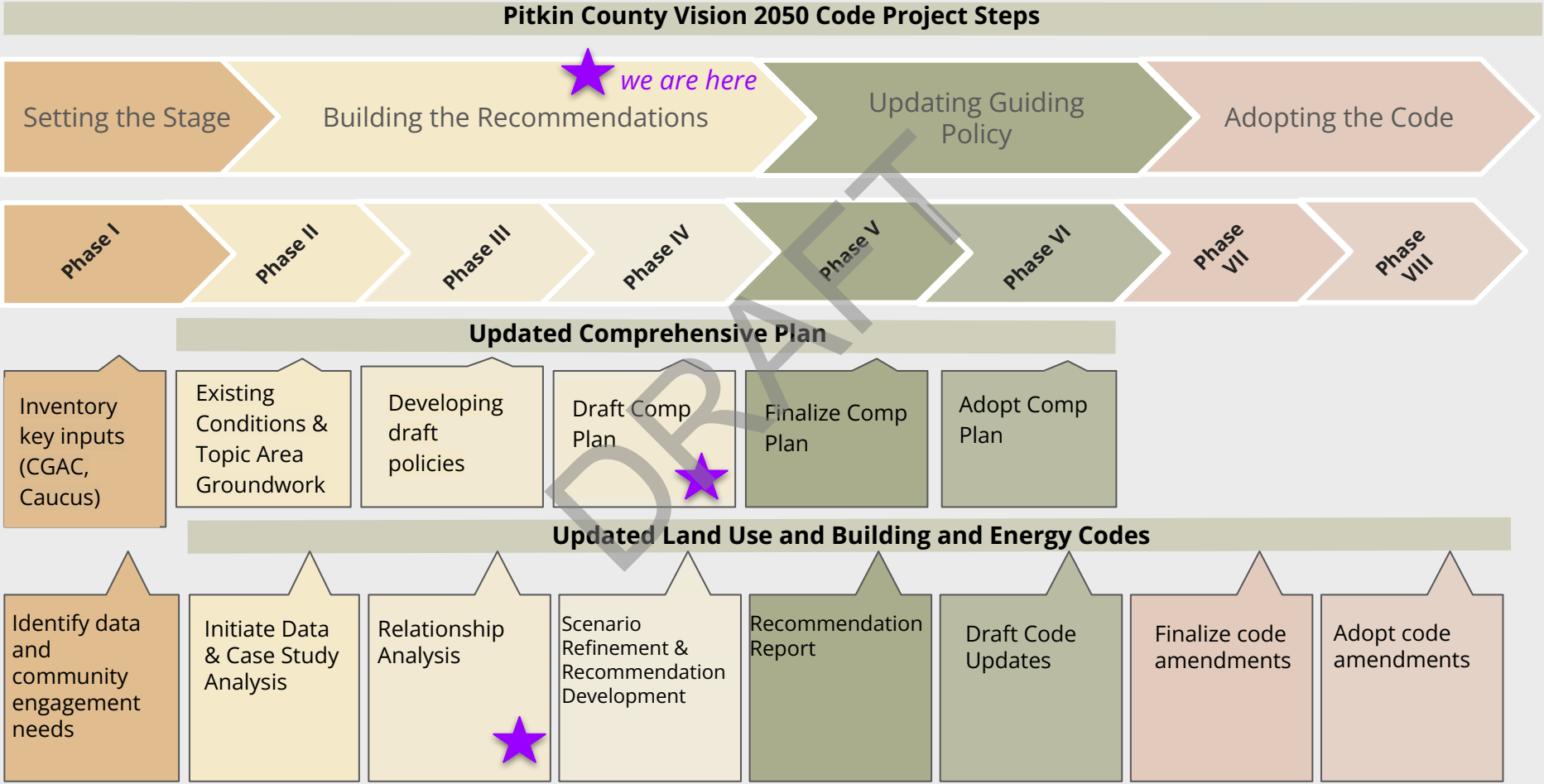

Project Schedule

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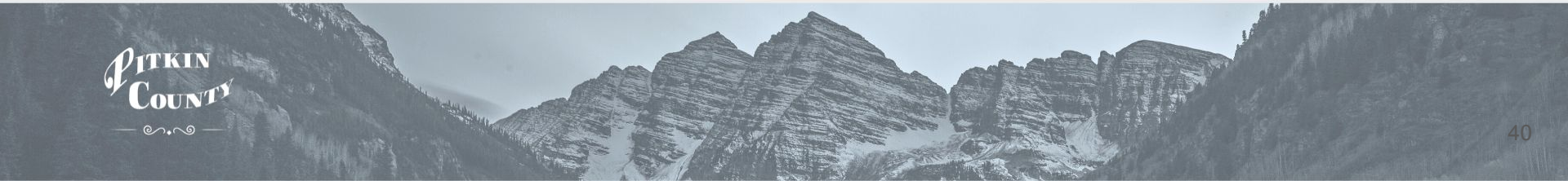
- Summer Comprehensive Plan Outreach Activities



Thank You!

PITKIN COUNTY