

Location Efficient Affordable Housing for a More Sustainable Asheville



Center for Neighborhood Technology
in cooperation with The City of Asheville
April 2012





Overview

- Project Background
- About the H+T Index
- Key Findings
- Recommendations
- Q & A

Center for Neighborhood Technology

- Non-profit applied research “think and do tank” based in Chicago
- Develop and implement strategies that benefit the environment and the economy
- Bridge information gaps
- Areas: Energy efficiency, transportation efficiency, green infrastructure





Key Concept: Location Efficiency

A measure of the extent to which people can meet their needs with fewer cars and fewer miles.

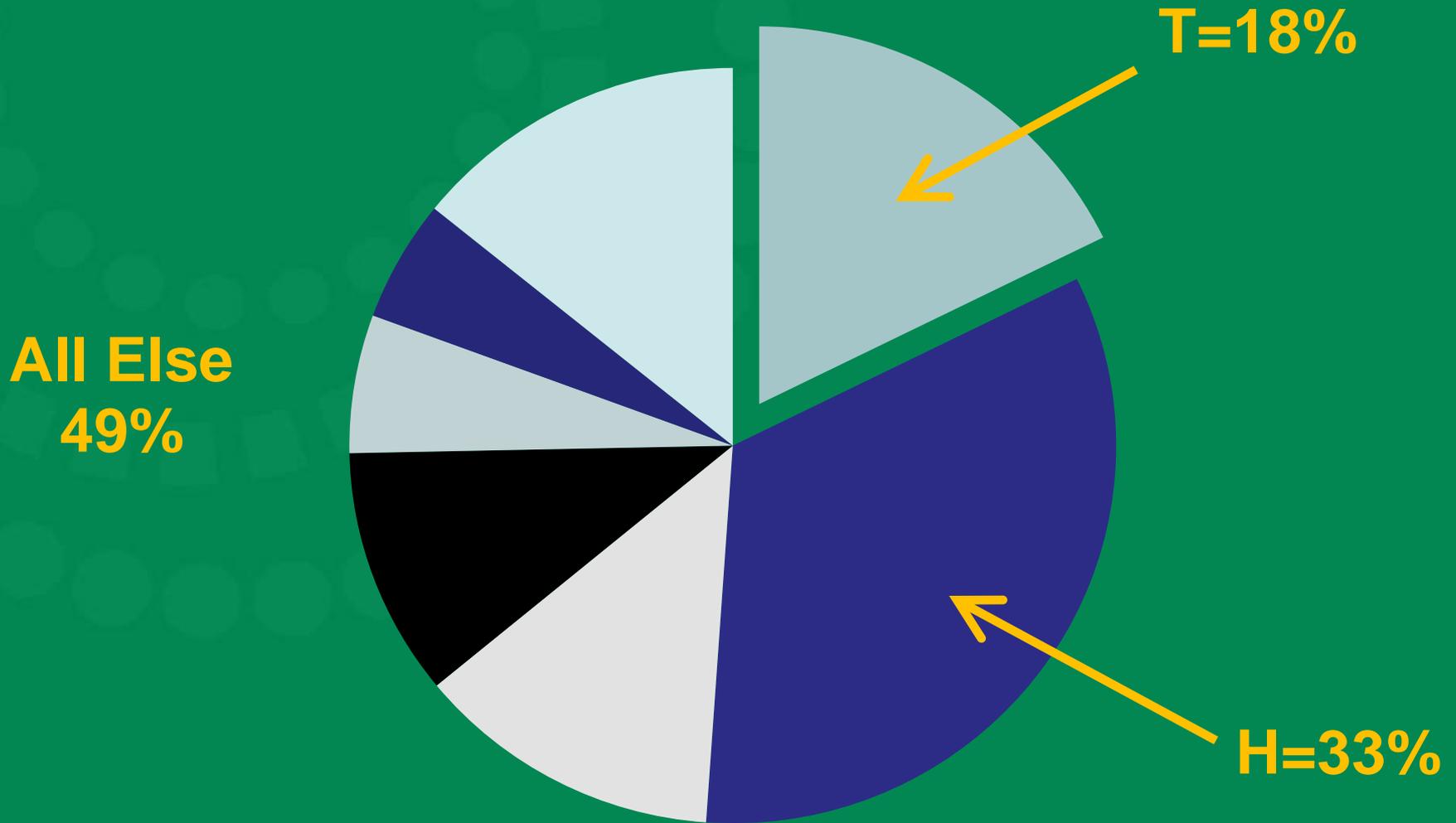


Project Goals

- What are transportation costs like in places where affordable housing is being placed?
- Do current policies encourage LE affordable housing ?
- Can the H+T Index help?
- How can transportation costs be reduced for residents at all income levels?



Household Expenditures, 2001-2010





Regular
Gasoline

499 $\frac{9}{10}$

Plus
Gasoline

519 $\frac{9}{10}$

V-Power
Gasoline

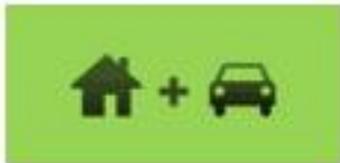
539 $\frac{9}{10}$



A New Standard

- 30% housing + 15% transportation = 45% H+T affordability benchmark
- Local benchmarks may be appropriate

$$\text{Affordability} = \frac{\text{Housing Costs} + \text{Transportation Costs}}{\text{Income}}$$



True Affordability and Location Efficiency

H+T[®] Affordability Index

6 Neighborhood Variables

Residential Density

Gross Density

Average Block Size in Acres

Transit Connectivity Index

Job Density

Average Time Journey to Work

3 Household Variables

Household Income

Household Size

Commuters per Household



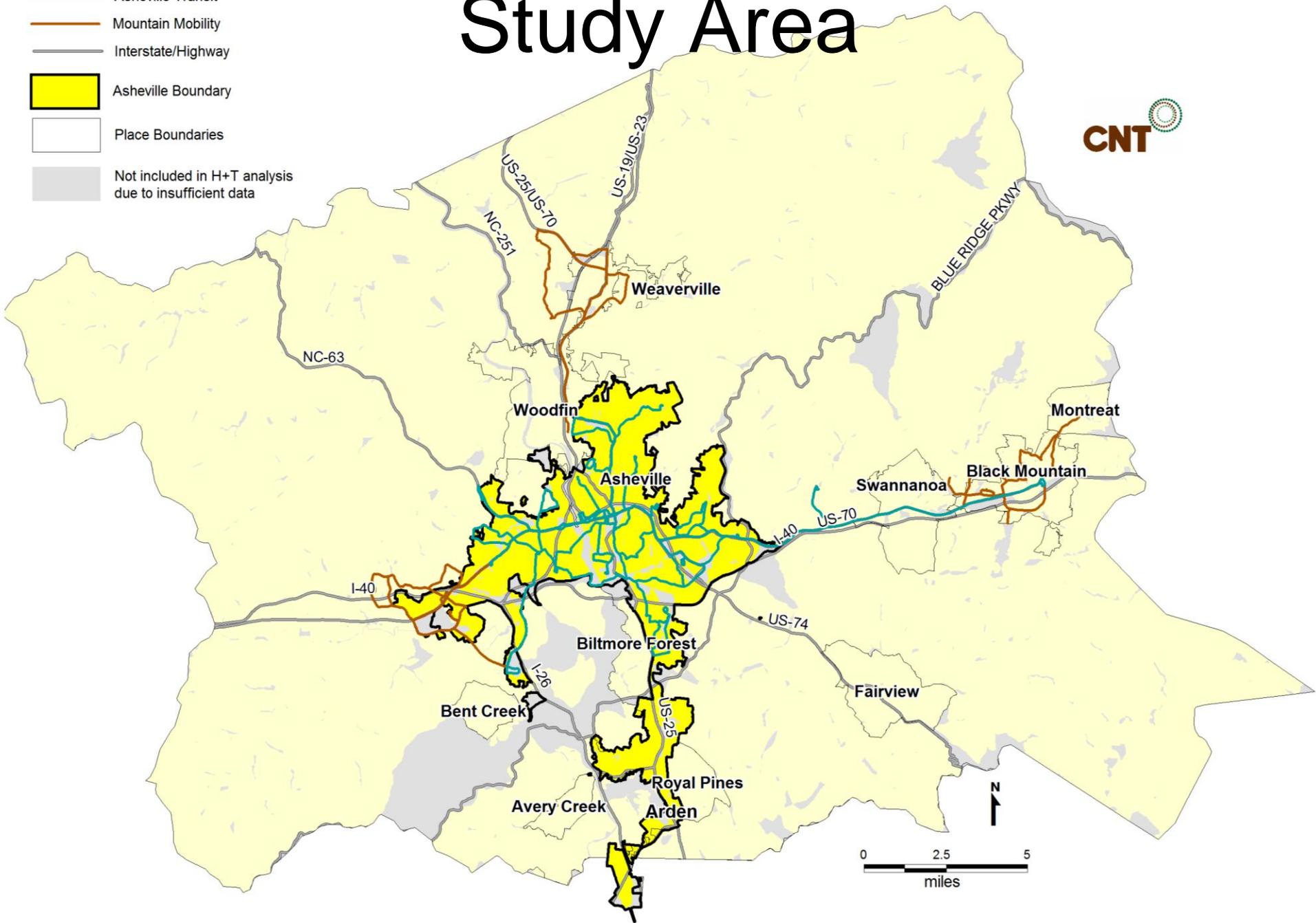
Car Ownership
+
Car Usage
+
Public Transit Usage



**TOTAL
TRANSPORTATION
COSTS**

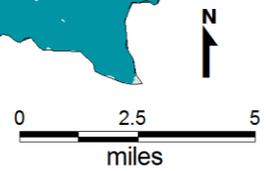
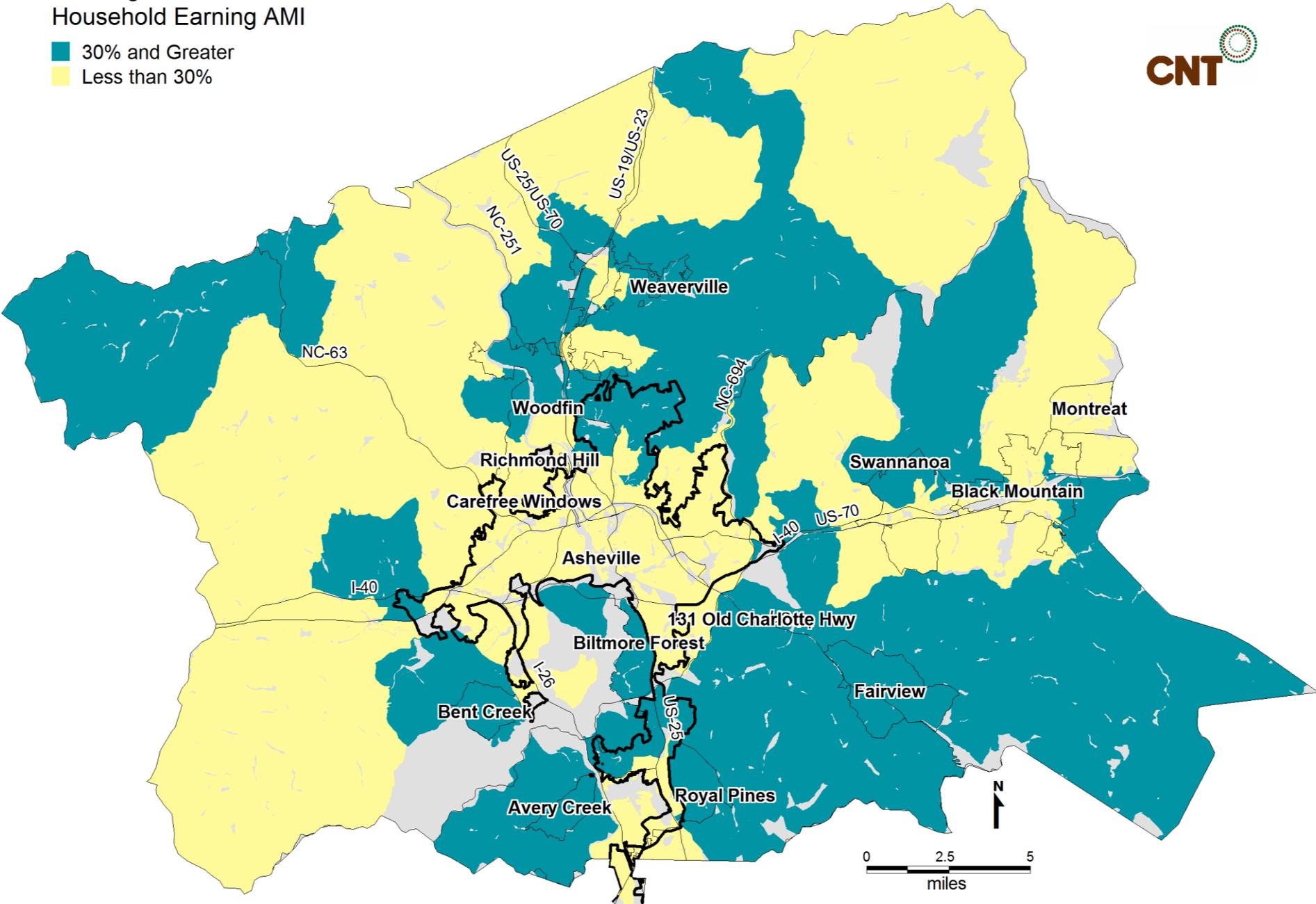
Study Area

- Asheville Transit
- Mountain Mobility
- Interstate/Highway
- Asheville Boundary
- Place Boundaries
- Not included in H+T analysis due to insufficient data



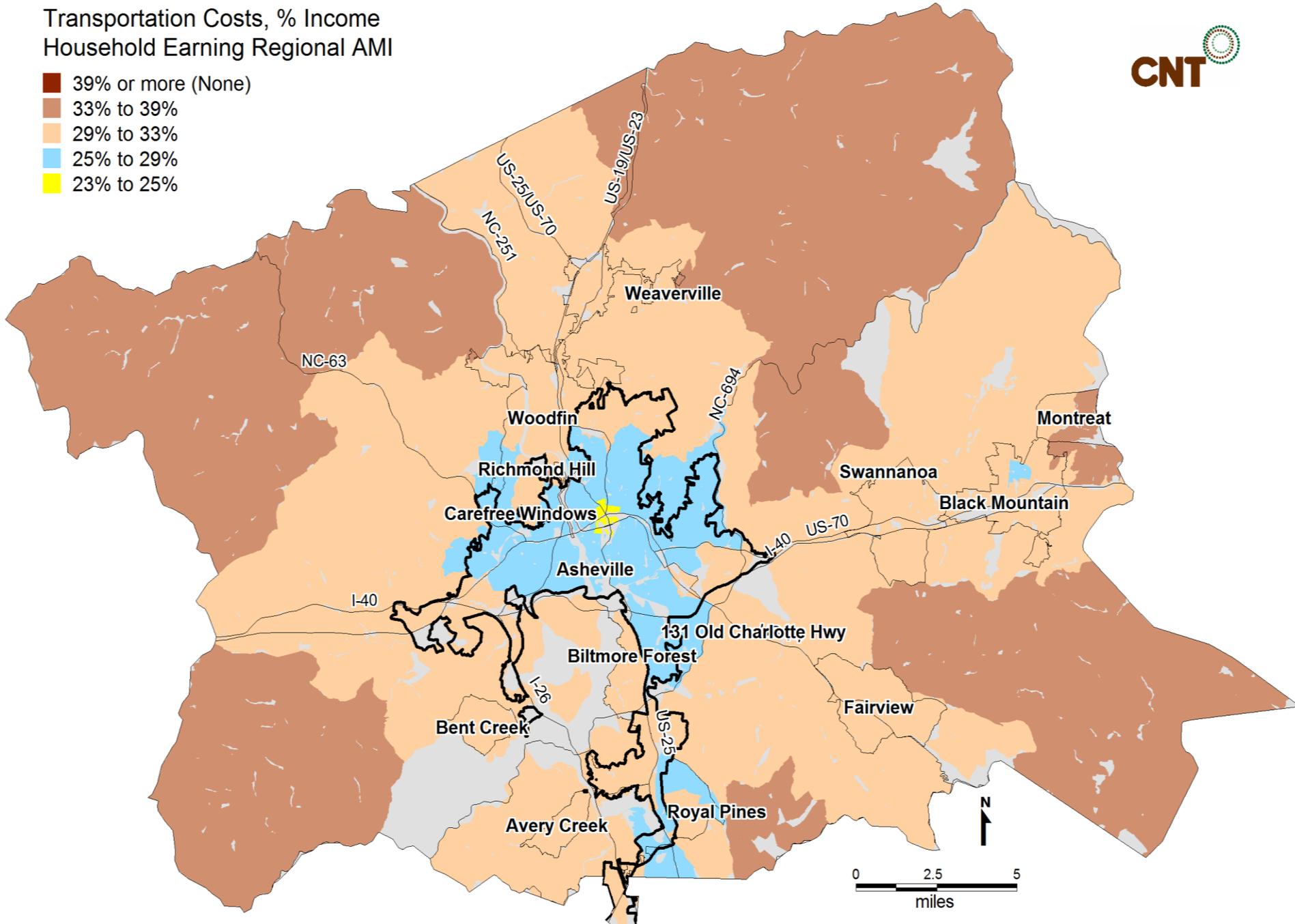
Housing Costs % of Income Household Earning AMI

- 30% and Greater
- Less than 30%



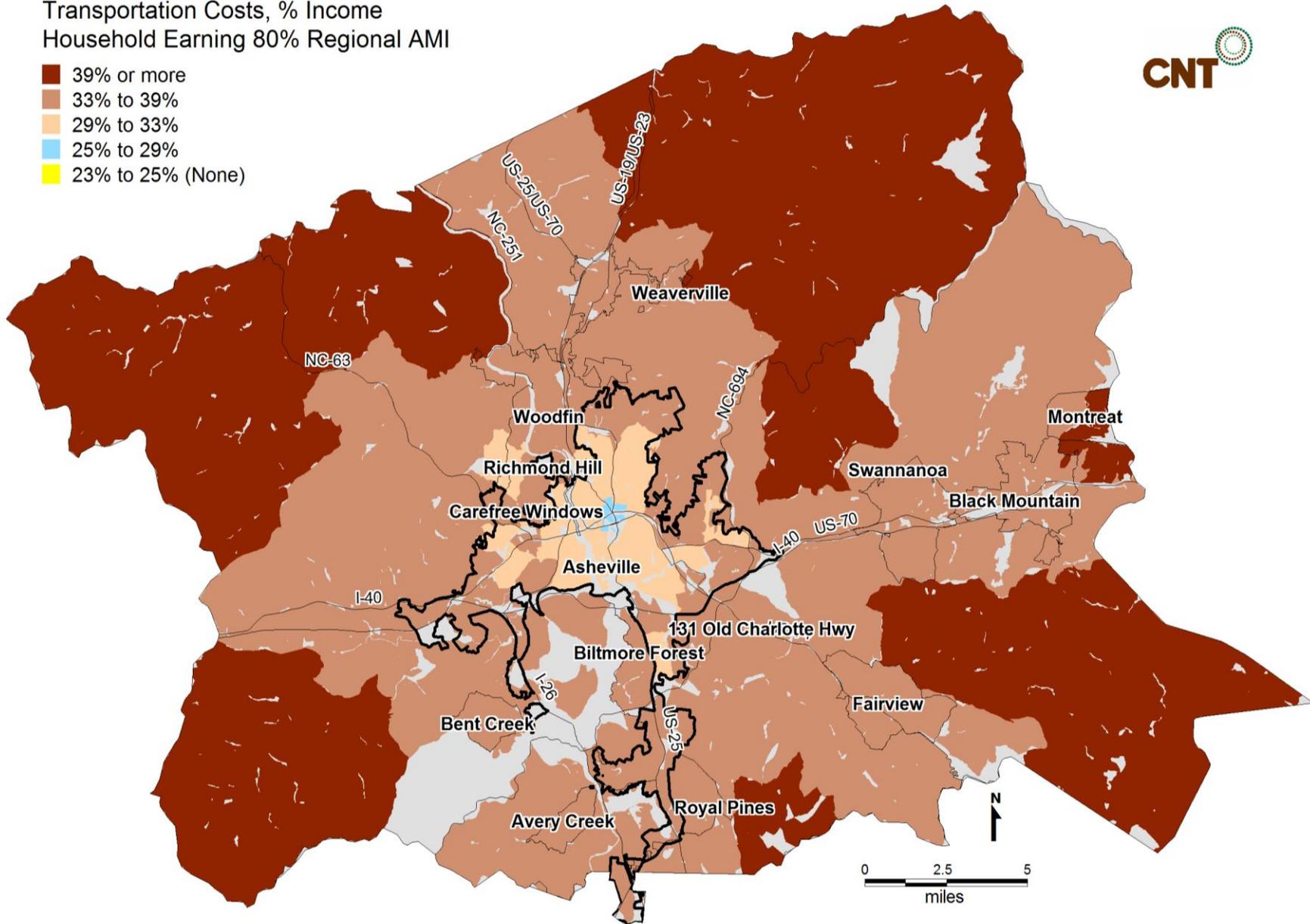
Transportation Costs, % Income Household Earning Regional AMI

- 39% or more (None)
- 33% to 39%
- 29% to 33%
- 25% to 29%
- 23% to 25%



Transportation Costs, % Income
Household Earning 80% Regional AMI

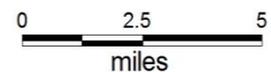
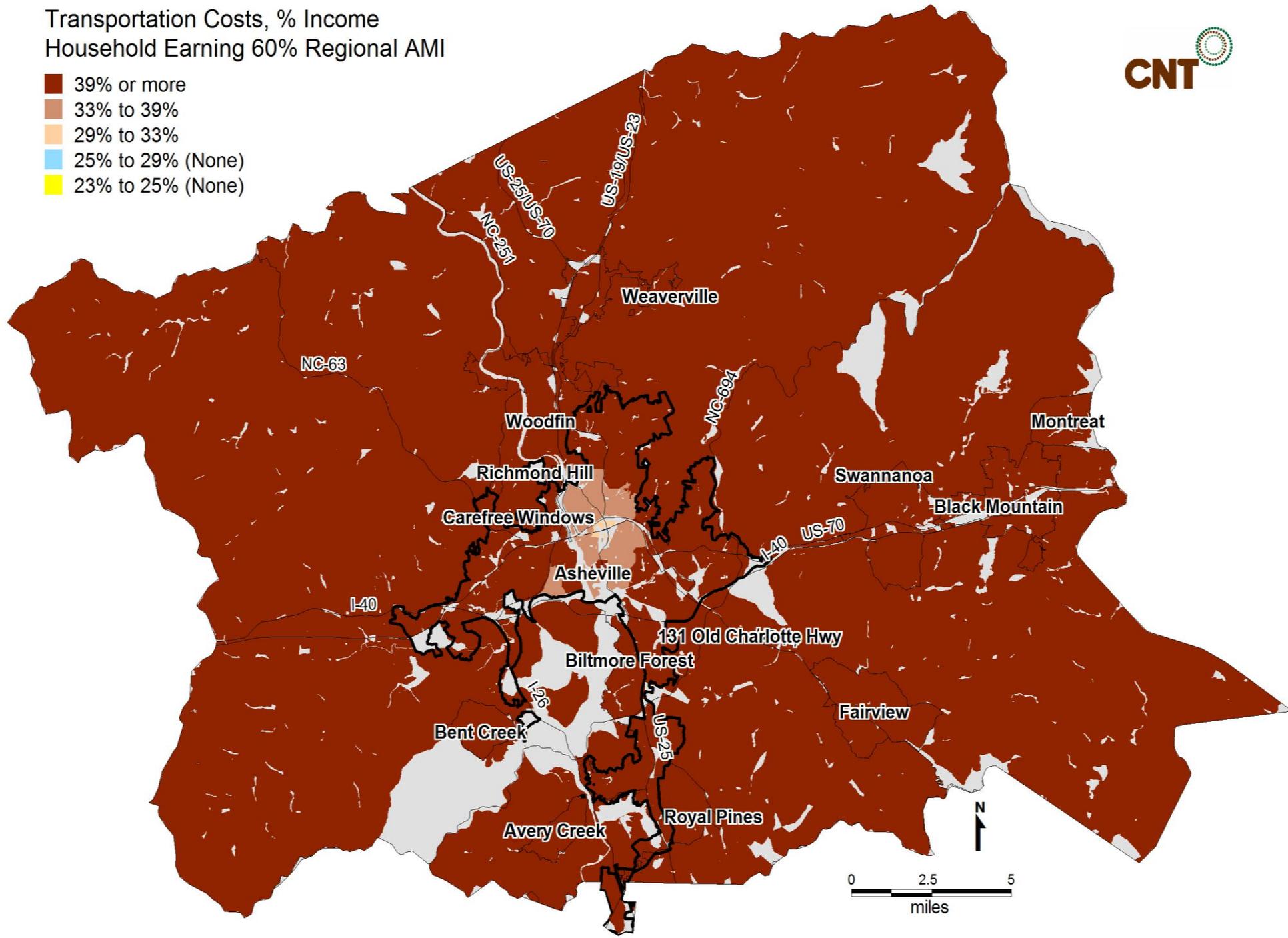
- 39% or more
- 33% to 39%
- 29% to 33%
- 25% to 29%
- 23% to 25% (None)



Transportation Costs, % Income Household Earning 60% Regional AMI



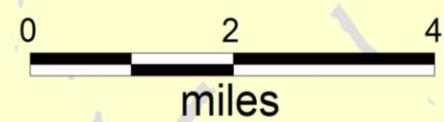
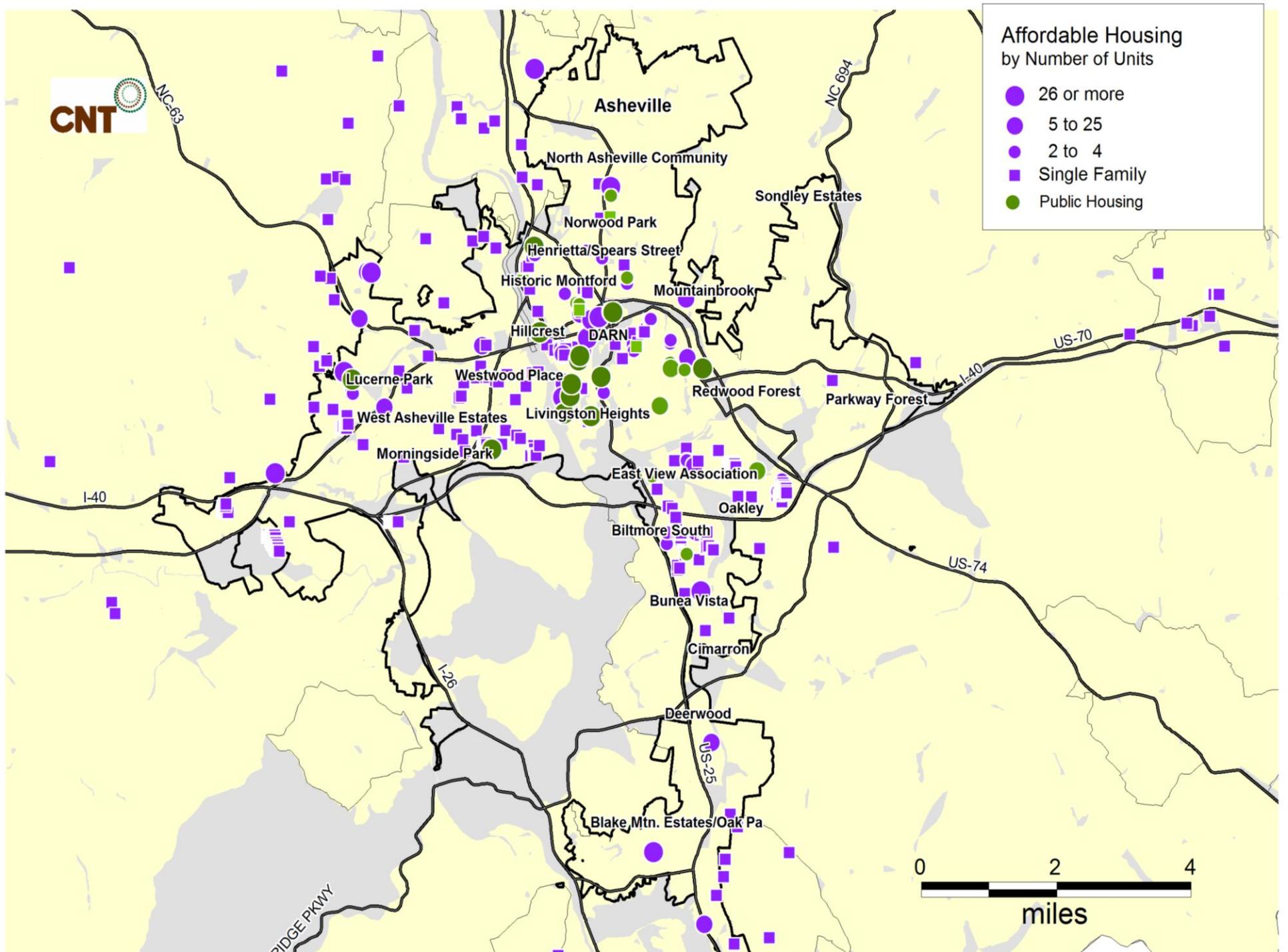
- 39% or more
- 33% to 39%
- 29% to 33%
- 25% to 29% (None)
- 23% to 25% (None)





Affordable Housing by Number of Units

- 26 or more
- 5 to 25
- 2 to 4
- Single Family
- Public Housing

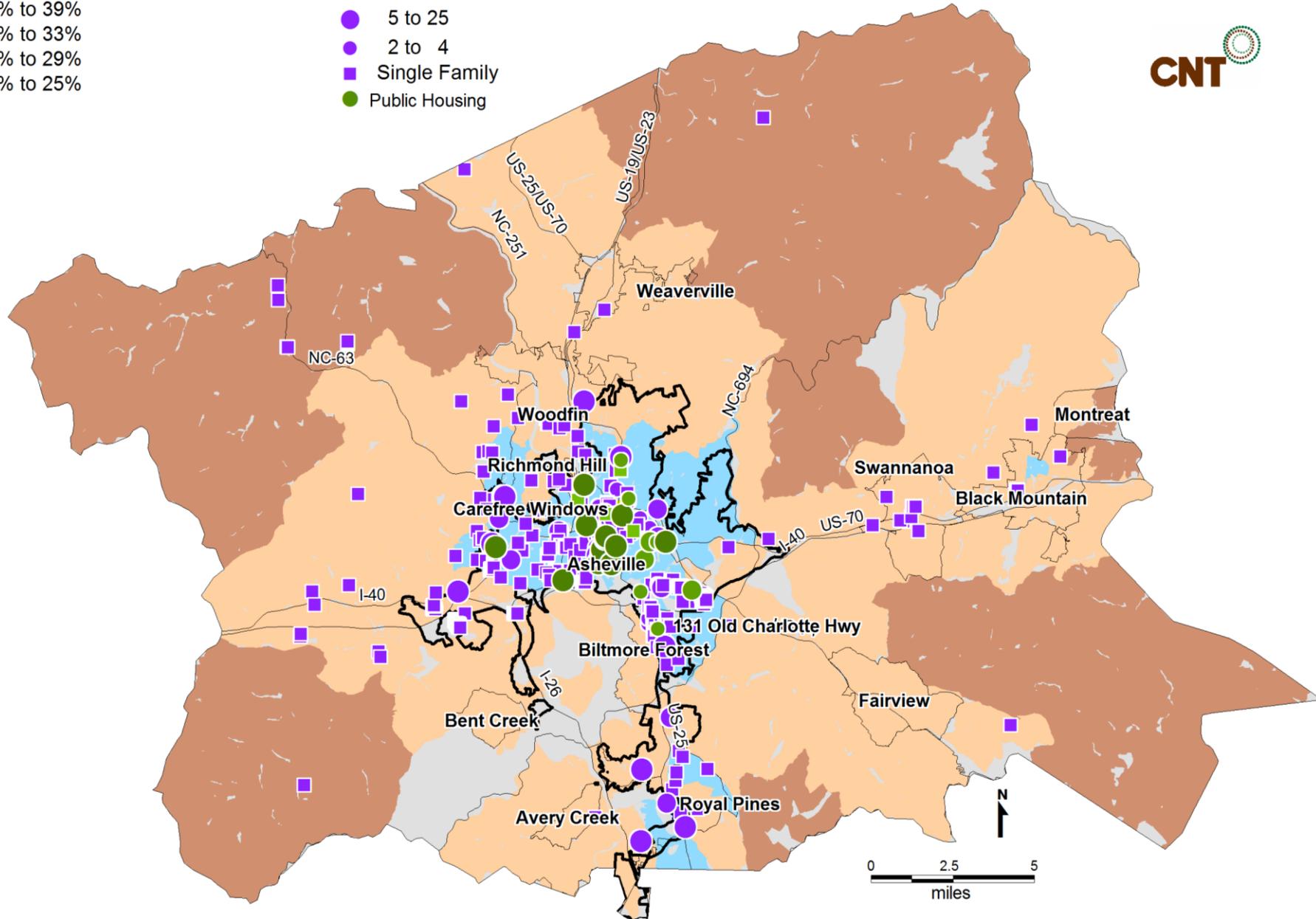


Transportation Costs, % Income Household Earning Regional AMI

- 39% or more (None)
- 33% to 39%
- 29% to 33%
- 25% to 29%
- 23% to 25%

Affordable Housing by Number of Units

- 26 or more
- 5 to 25
- 2 to 4
- Single Family
- Public Housing



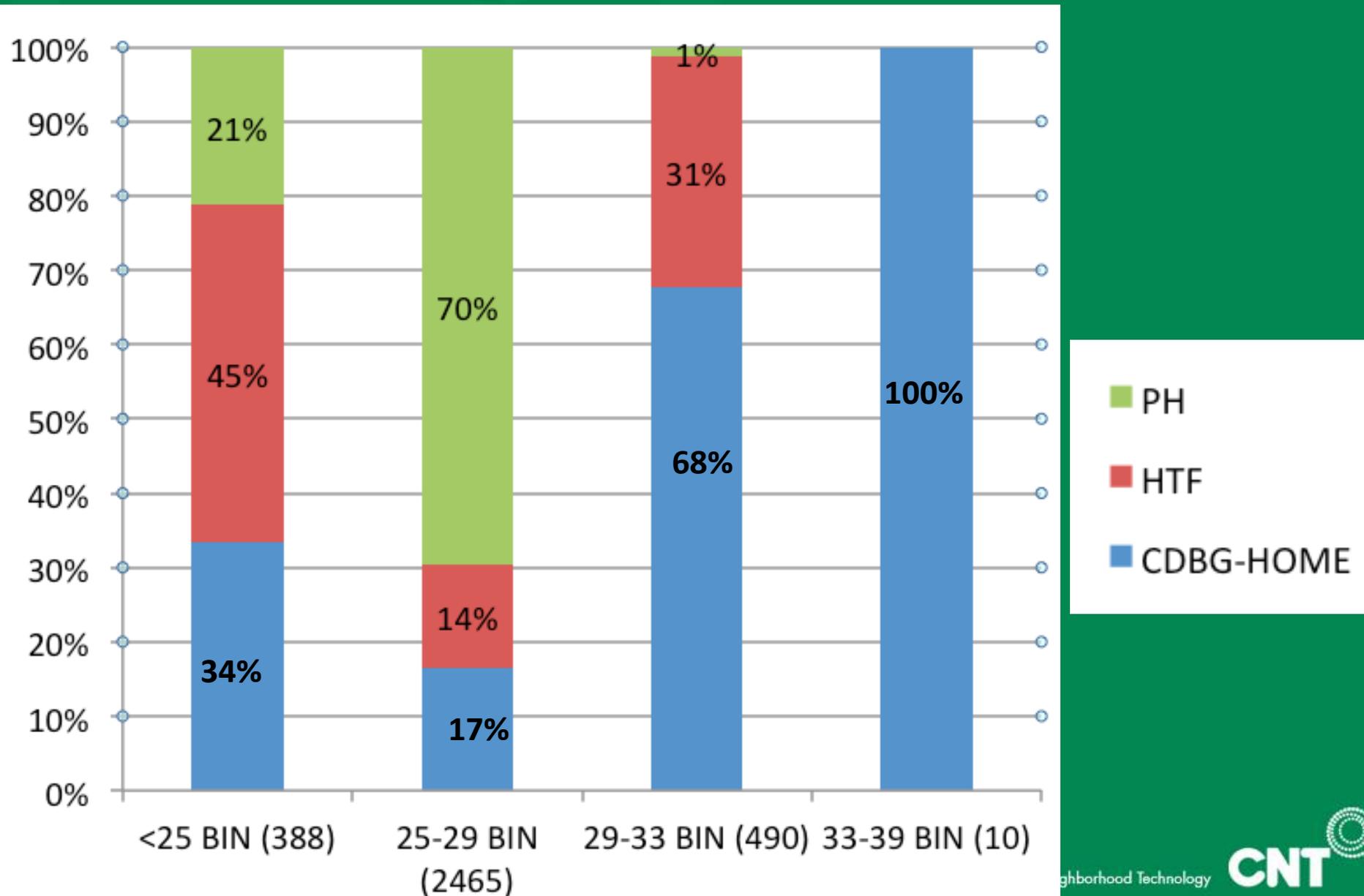
Location Efficiency of Affordable Housing

Transp. Cost Ranges (% of income)	# Units	% of Units	Cars (per HH)*	VMT (mi/ HH/yr)*	Transp. Costs (% of income)*	Transp. Costs (\$/month)*
<25	388	12%	1.42	11,811	23	\$697
25-29	2465	74%	1.61	17,186	27	\$816
29-33	490	15%	1.77	22,445	31	\$921
33-39	10	0%	1.92	26,874	34	\$1,022

Location Efficiency of Affordable Housing

% of Units	Cars (per HH)	VMT (mi/ HH/yr)*	Transp. Costs (\$/month)*
12%	1.42	11,811	\$697
74%	1.61	17,186	\$816
15%	1.77	22,445	\$921
0%	1.92	26,874	\$1,022

Relative Contribution by Program



LE by Type of Project

Estimated Household Transportation Behavior and Costs in Areas with Affordable Housing, by Project Type

Project Type and Size	# Projects	# Units	Cars (per HH)*	VMT (mi/ HH/yr)*	Transp. Costs (% of income)*	Transp. Costs (\$/month)*
SF (1 unit)	410	410	1.71	19,536	29	\$876
MF (> 1 unit)	51	1141	1.61	17,306	27	\$818
Public Housing	31	1802	1.59	16,901	27	\$805

→ Multi-family has slight advantage over single-family (\$876/mo vs \$818/mo)

LE by Size of Unit (HTF only)

Transp. Cost Ranges (% of income)	# Projects	# Units	% of Total	OBR	1BR	2BR	3BR
<25	5	176	26%	32%	55%	12%	1%
25-29	66	342	51%	0%	39%	31%	29%
29-33	22	152	23%	0%	44%	32%	24%
Totals	93	670	100%	57	297	175	139
<i>% of total HTF-funded units of each size</i>				9%	44%	26%	21%

→ Smaller units have an advantage over larger units

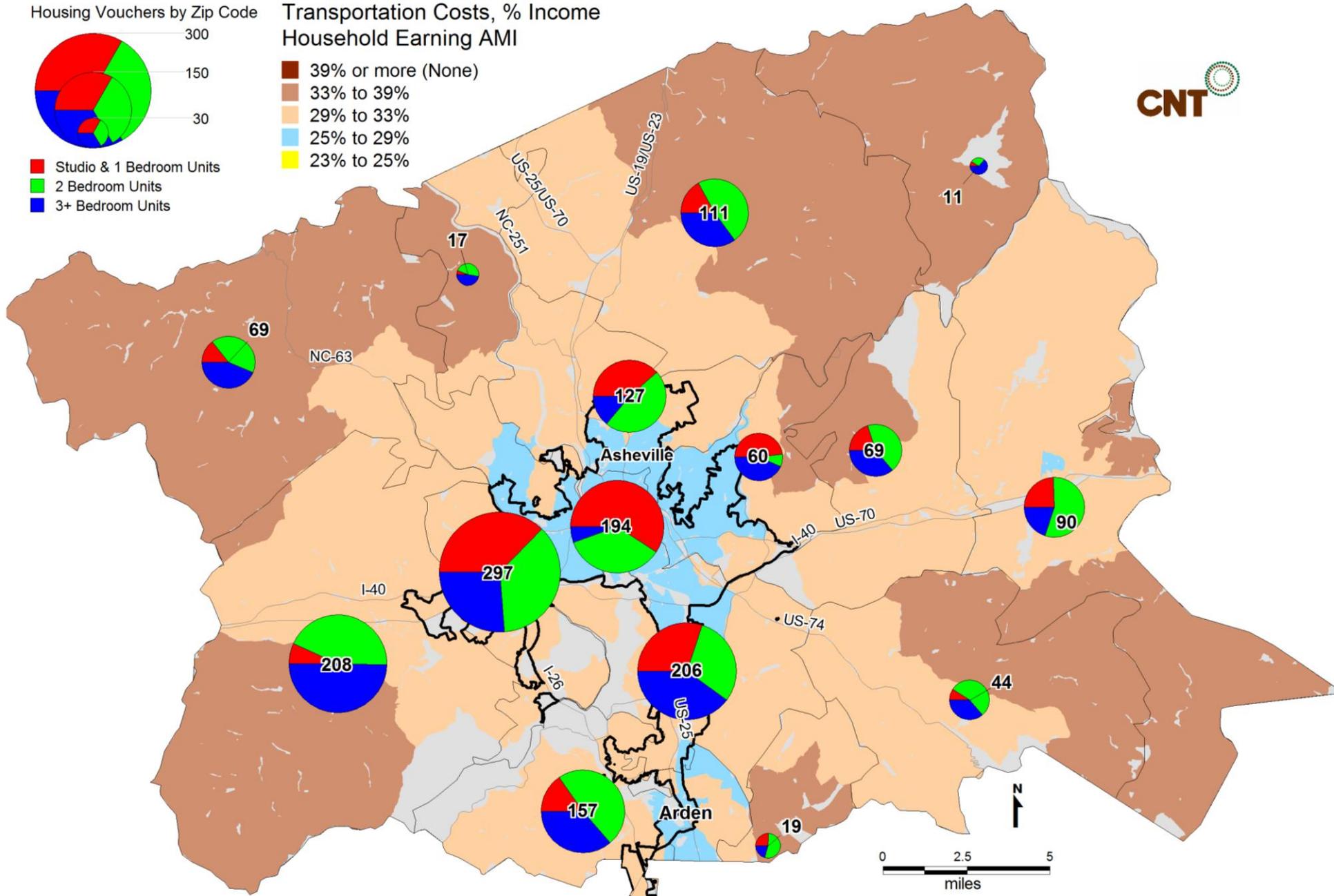
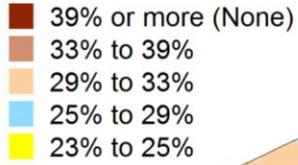
LE by Period of Funding (PH not included)

Transp. Cost Ranges (% of income)	1998-2004 (622 units)	2005-2010 (794 units)	Point Gain (Loss)	
<25	10%	31%	+21	% of Period
25-29	64%	36%	(28)	
29-33	27%	32%	+5	
33-39	0%	1%	+1	
Total	100%	100%		

→ More LE gains than setbacks

Housing Vouchers by Zip Code

Transportation Costs, % Income Household Earning AMI



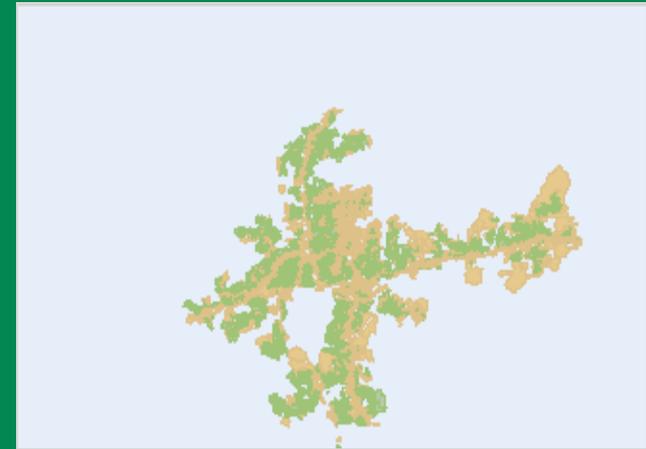
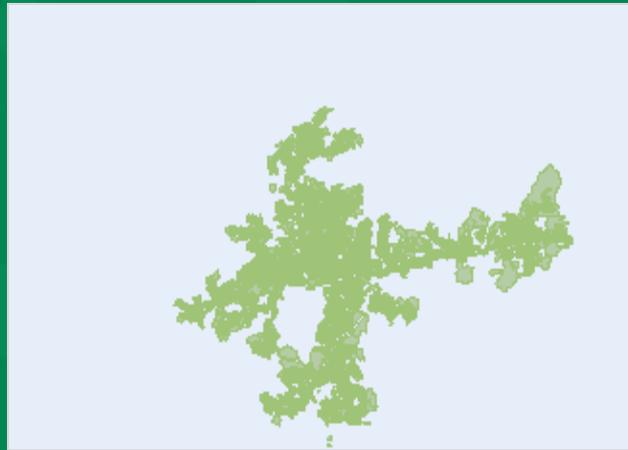
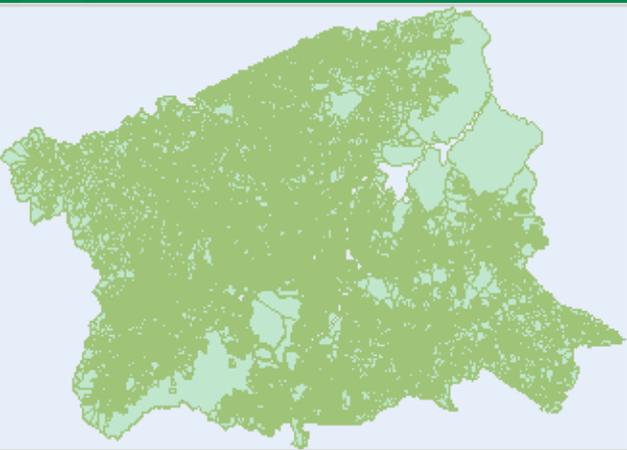
Project Goal #1: Findings

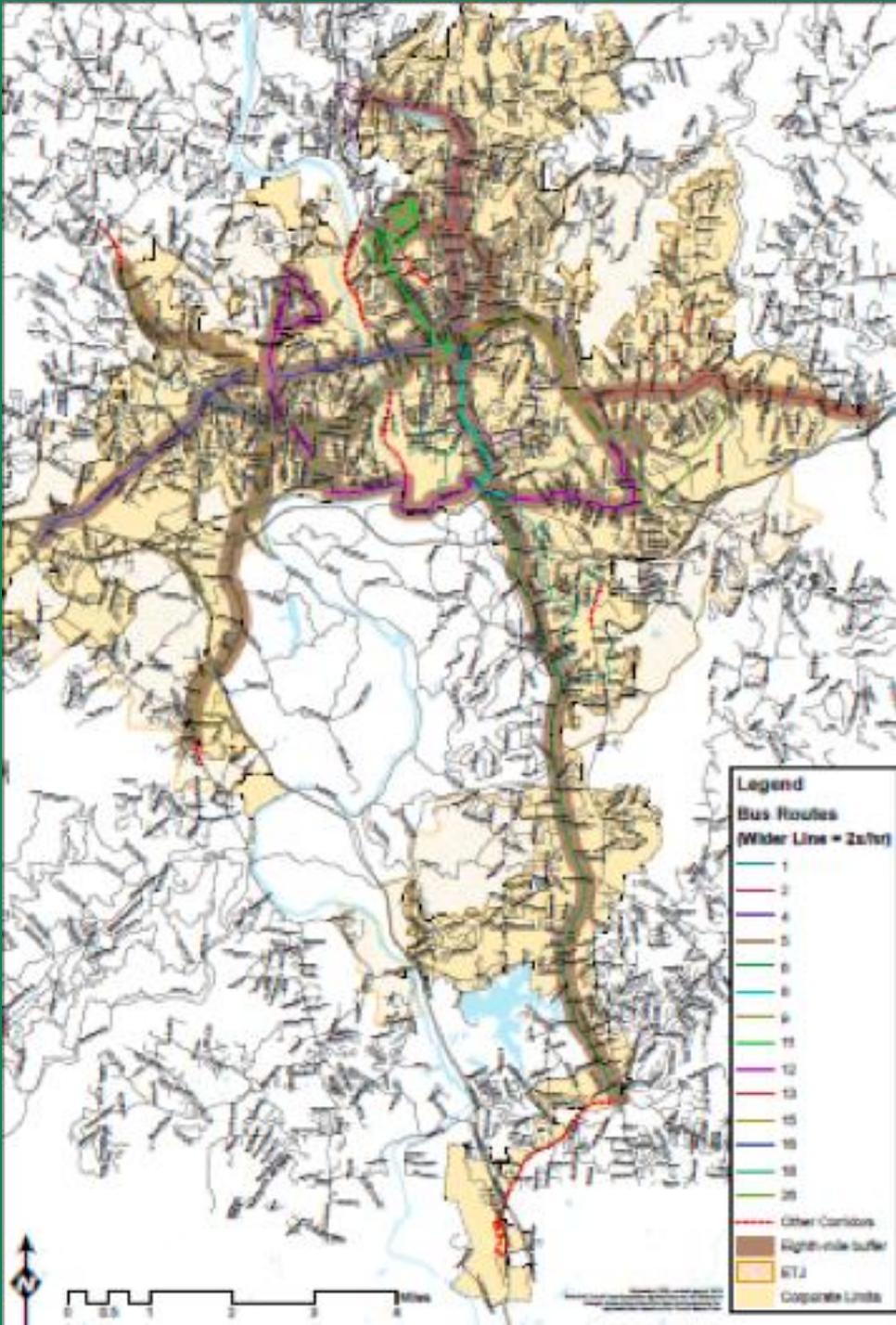
- Transportation costs are very high relative to regional income
- Areas of *relative location efficiency* exist
- HTF program effective in producing units in relatively LE areas
- Over 2/3 of HCV holders are in relatively location inefficient ZIP codes
- Emphasis on multifamily rental projects and smaller units may improve LE, but constrained by zoning.

Project Goals

- What are transportation costs like in places where affordable housing is being placed?
- Do current policies encourage LE affordable housing ?
- Can the H+T Index help?
- How can transportation costs be reduced for residents at all income levels?

Project Goal #2: Do current policies encourage LE affordable housing in developable areas?





Do current policies encourage LE affordable housing in developable areas?

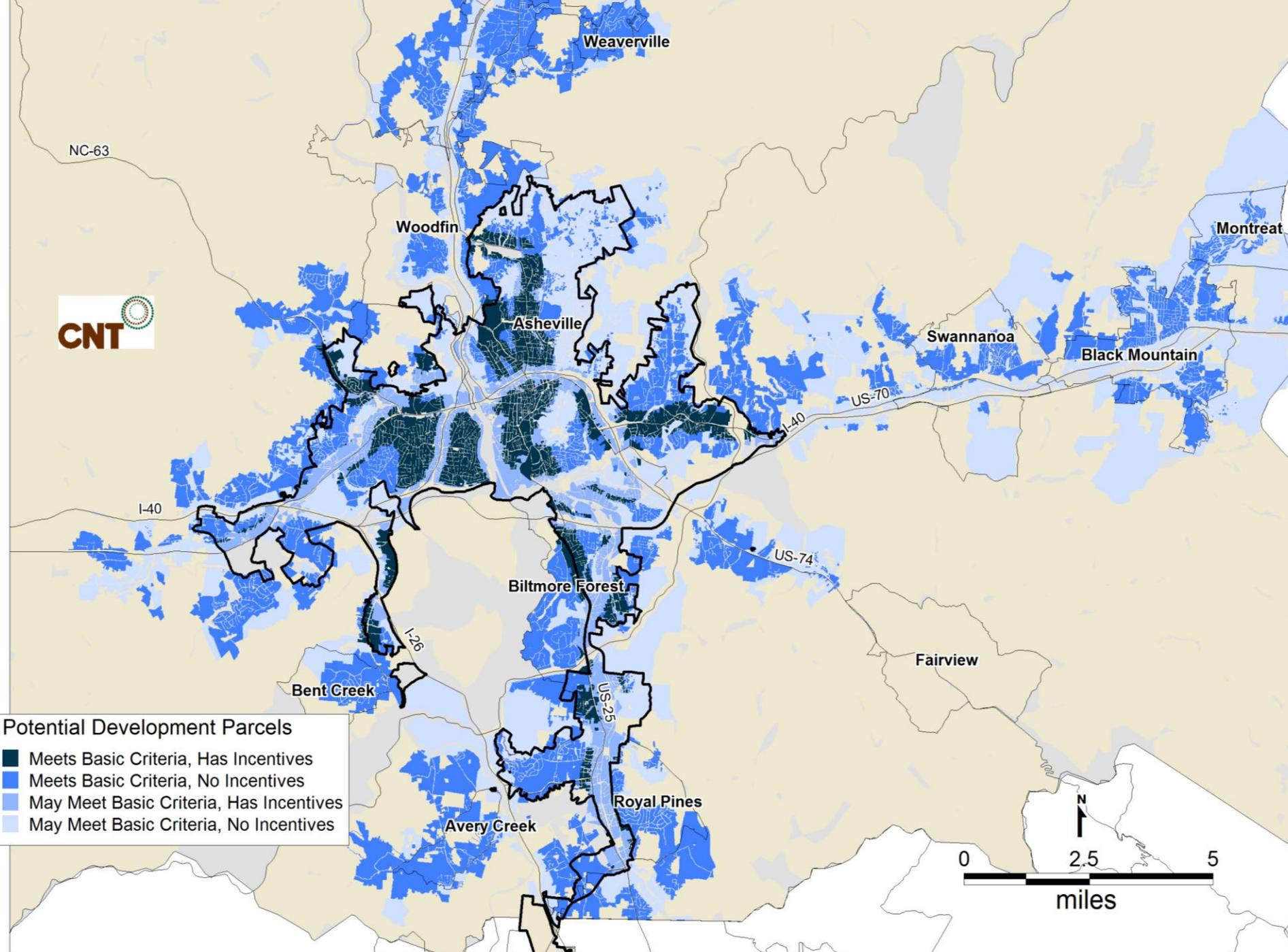
Sustainability Ordinance (left)

Also:

LUI policy

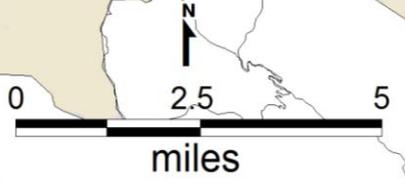
East of Riverway

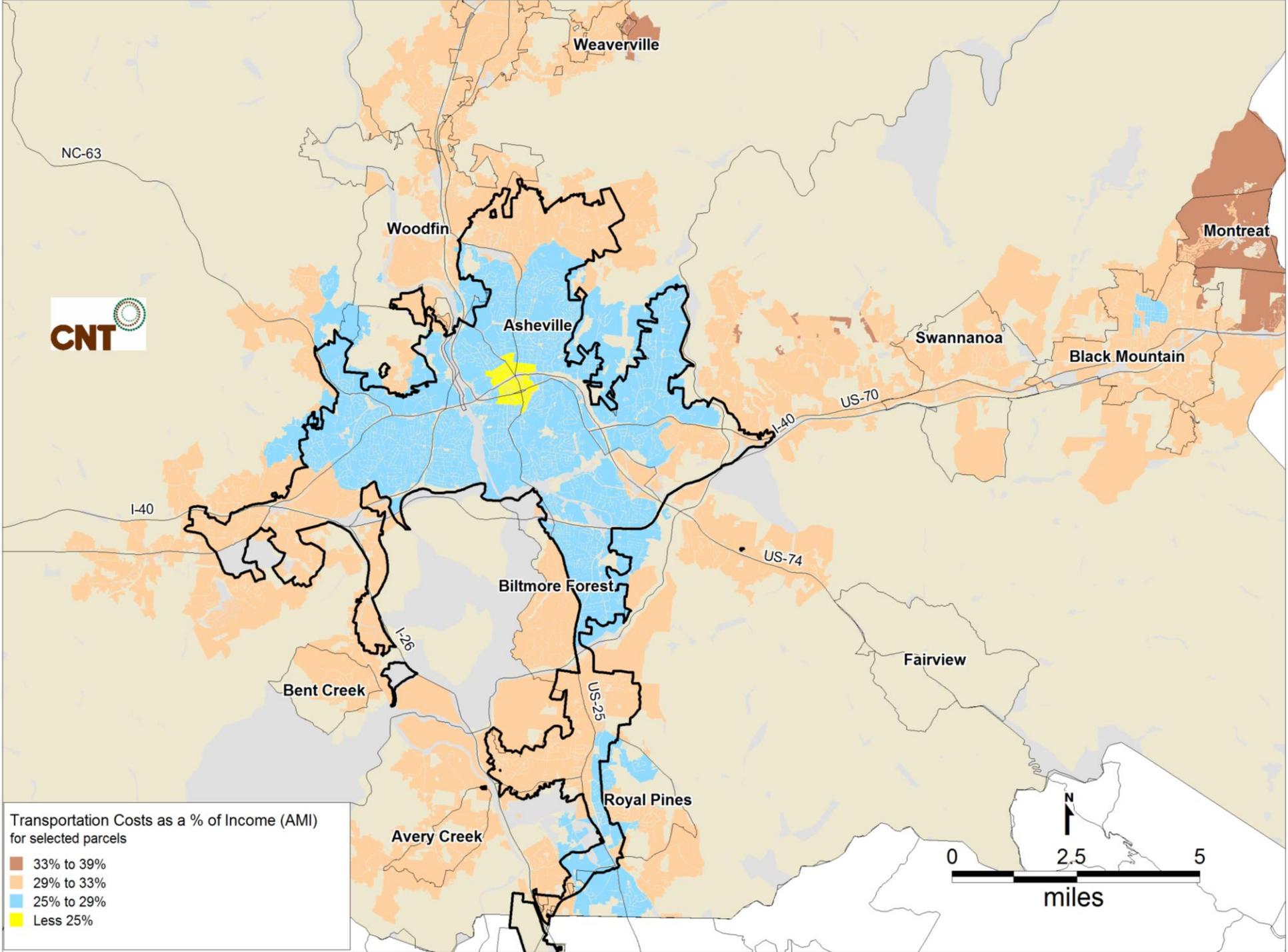
West Asheville



Potential Development Parcels

- Meets Basic Criteria, Has Incentives
- Meets Basic Criteria, No Incentives
- May Meet Basic Criteria, Has Incentives
- May Meet Basic Criteria, No Incentives





Acreage and Parcel Sizes

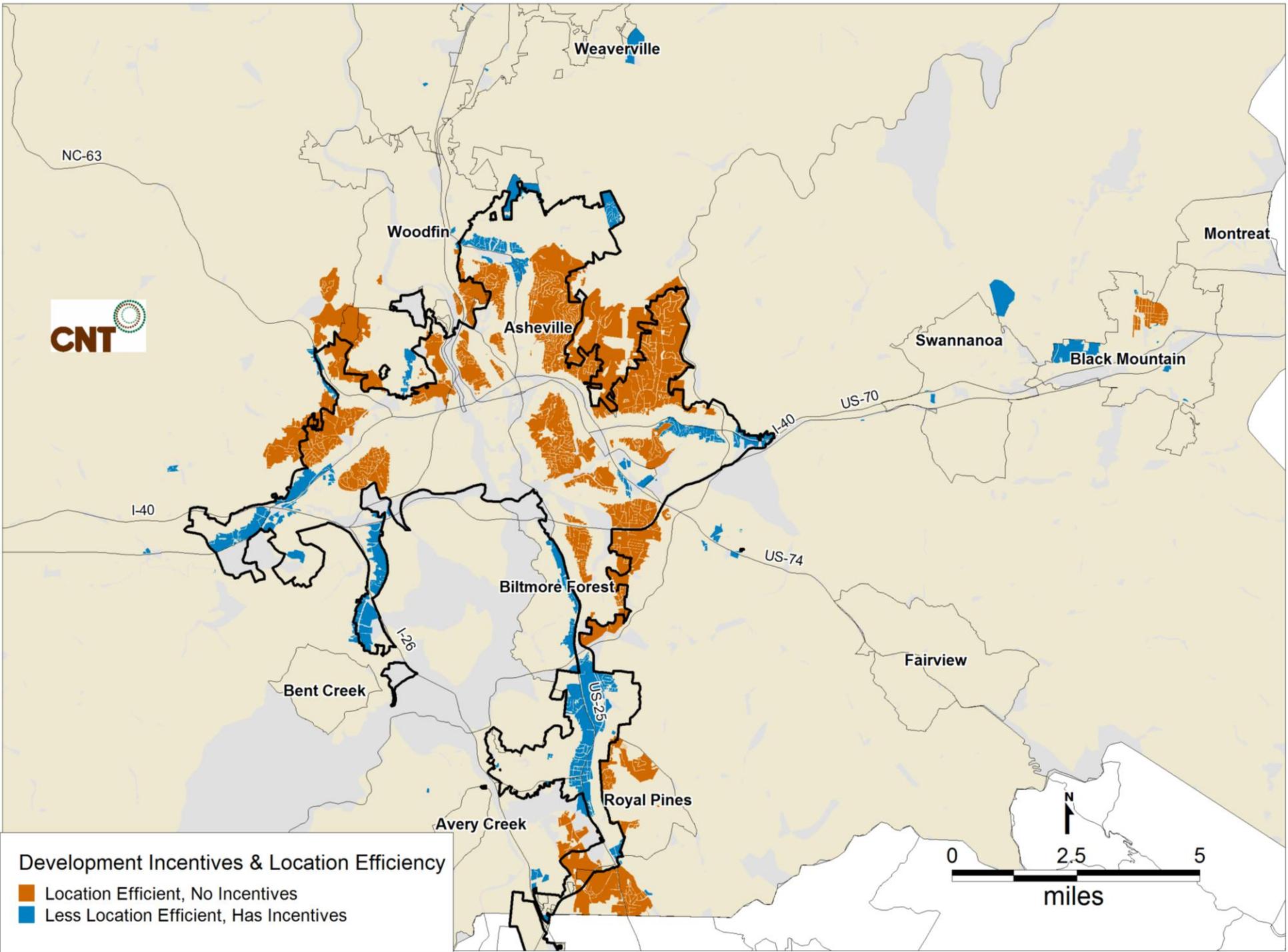
Transp. Cost Ranges (% of income)	Parcels	Acres	Meets Basic Criteria	May Meet Basic Criteria	Scale of Opportunity	Average Parcel Size
<25	1,135	309	68%	32%	9,508 ac. meets criteria	0.27 ac.
25-29	27,236	17,881	52%	48%		0.66 ac.
29-33	31,031	48,392	48%	52%	23,704 ac. meets criteria	1.56 ac.
33-39	888	3,967	12%	88%		4.47 ac.

Acreage and Parcel Sizes

Transp. Cost Ranges (% of income)	Parcels	Acres	Meets Basic Criteria	May Meet Basic Criteria	Scale of Opportunity	Average Parcel Size
<25	1,135	309	68%	32%	9,508 ac. meets criteria	0.27 ac.
25-29	27,236	17,881	52%	48%		0.66 ac.
29-33	31,031	48,392	48%	52%	23,704 ac. meets criteria	1.56 ac.
33-39	888	3,967	12%	88%		4.47 ac.

Acreage and Parcel Sizes

Transp. Cost Ranges (% of income)	Parcels	Acres	Meets Basic Criteria	May Meet Basic Criteria	Scale of Opportunity	Average Parcel Size
<25	1,135	309	68%	32%	9,508 ac. meets criteria	0.27 ac.
25-29	27,236	17,881	52%	48%		0.66 ac.
29-33	31,031	48,392	48%	52%	23,704 ac. meets criteria	1.56 ac.
33-39	888	3,967	12%	88%		4.47 ac.



NC-63

Weaverville

Woodfin

Montreat



Asheville

Swannanoa

Black Mountain

US-70

I-40

I-40

US-74

Biltmore Forest

Fairview

Bent Creek

I-26

Avery Creek

Royal Pines

US-25

Development Incentives & Location Efficiency

- Location Efficient, No Incentives
- Less Location Efficient, Has Incentives



Recommendations (partial)

1. Incorporate H+T as a measure of LE into program selection criteria, award levels, and/or policies (LUI)
2. Prioritize underutilized LE land for redevelopment
3. Consider amendments to better align UDO, LUI, Sustainability Ordinance

(See report for more detailed recommendations)



Thank you!

Stefanie Shull -- sshull@cnt.org

<http://www.cnt.org>

<http://htaindex.cnt.org>

<http://abogo.cnt.org>

H+T Newsletter: <http://htaindex.cnt.org/subscribe.php>