



Urban Revitalization: Changing Atlanta's Land Use Intensities

**12th IUPEA Symposium
SESSION T2.7**

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Agenda

Background

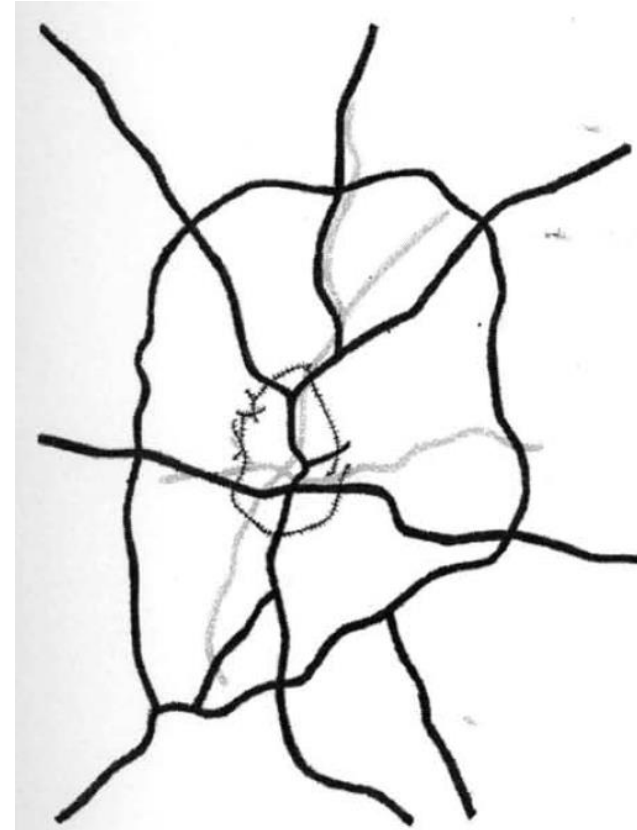
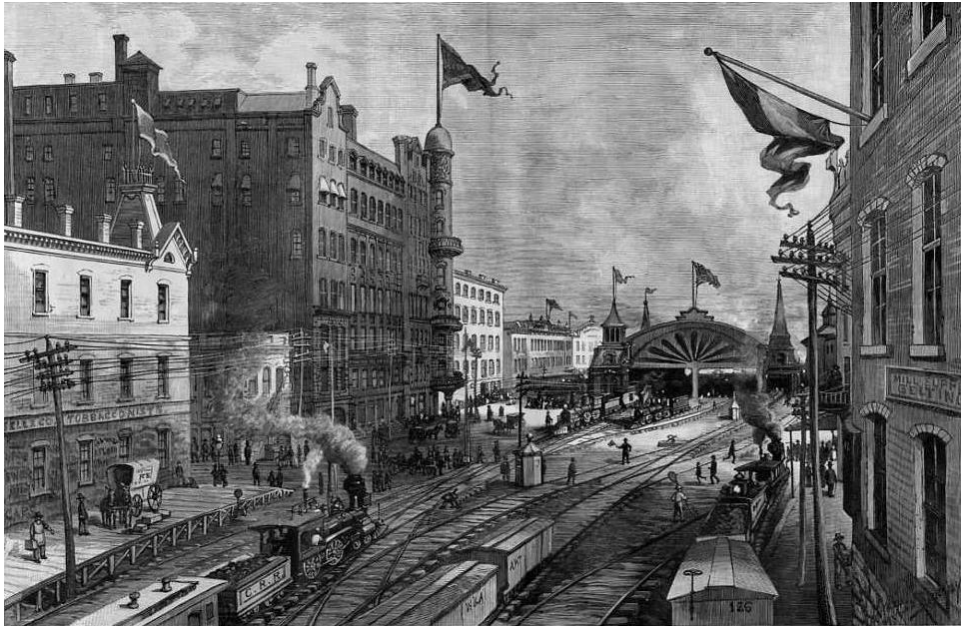
Approach

Results

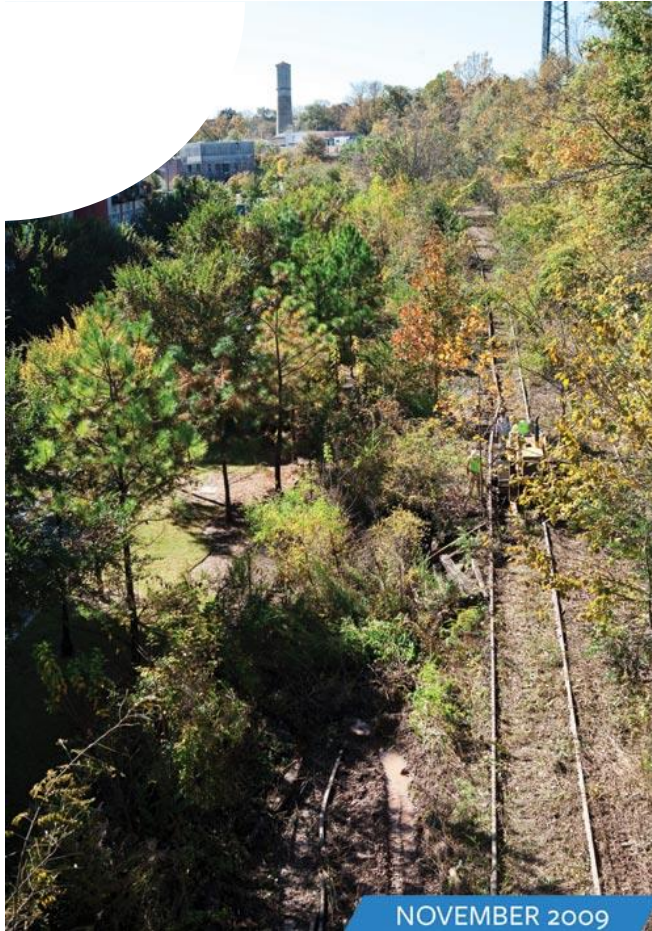
Conclusions

Background

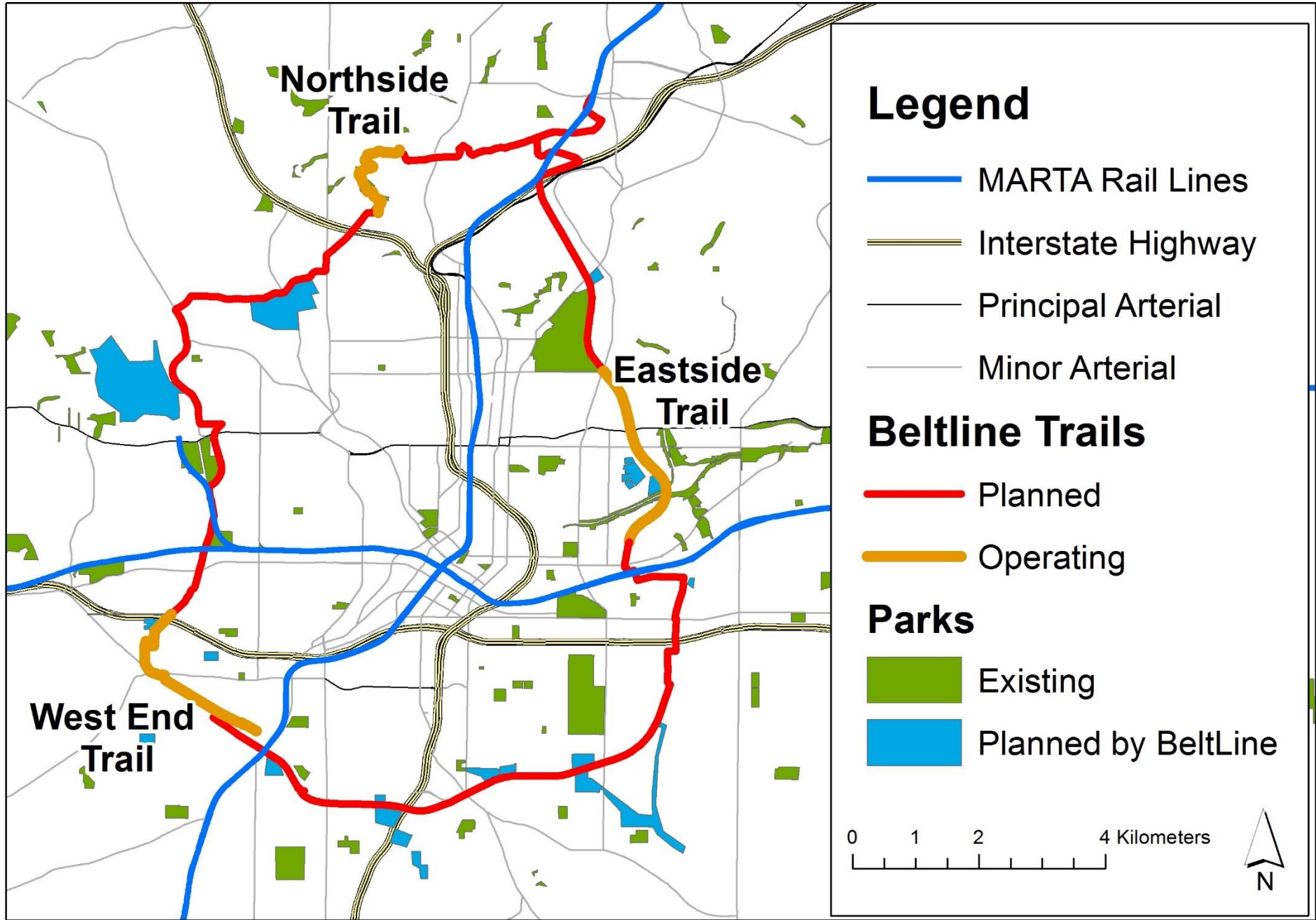
Beltline History



Atlanta BeltLine



Atlanta Beltline Eastside Trail Before (left) and After (right) Rail-to-Trail Conversion



Urban Regeneration

Tax increment financing (TIF)

- **Positive effects on dev't:** severe blight, low density, large area, near CBD, industrial focus (Byrne, 2006)
- **Negative effects:** Retail focus (Byrne, 2009)

Speculative housing price increases around the BeltLine before construction (Immergluck, 2009)

Research Question: Is the Atlanta BeltLine generating revitalization around its completed sections?

Approach

Approach

Step 1

Designate study groups
(operating, planned,
inside, outside)

Step 2

Designate multiple
revitalization metrics

Step 3

Collect data for metrics

Step 4

Perform paired t-test
to examine absolute
growth

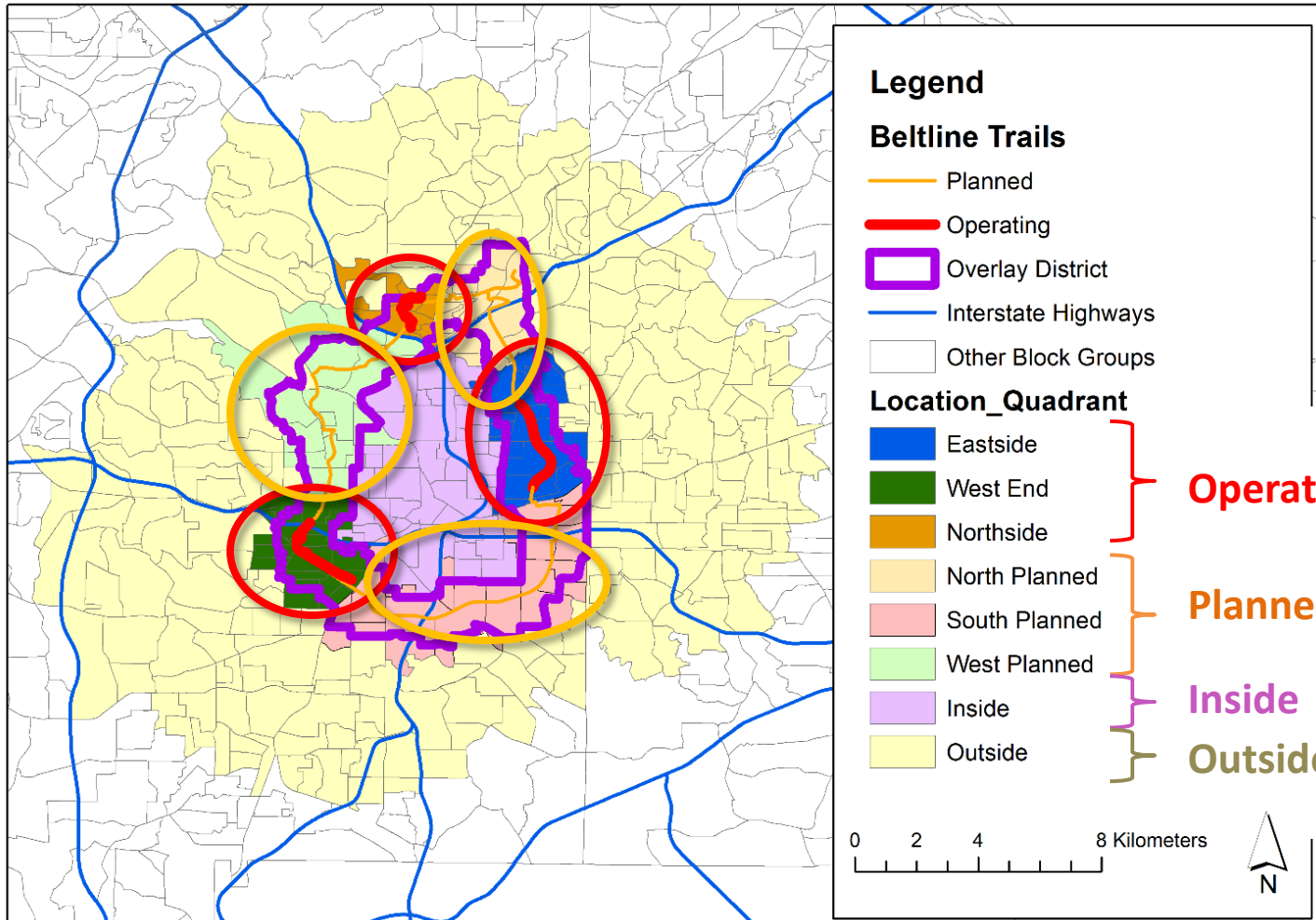
Step 5

Perform one-way
ANOVA to examine
differences

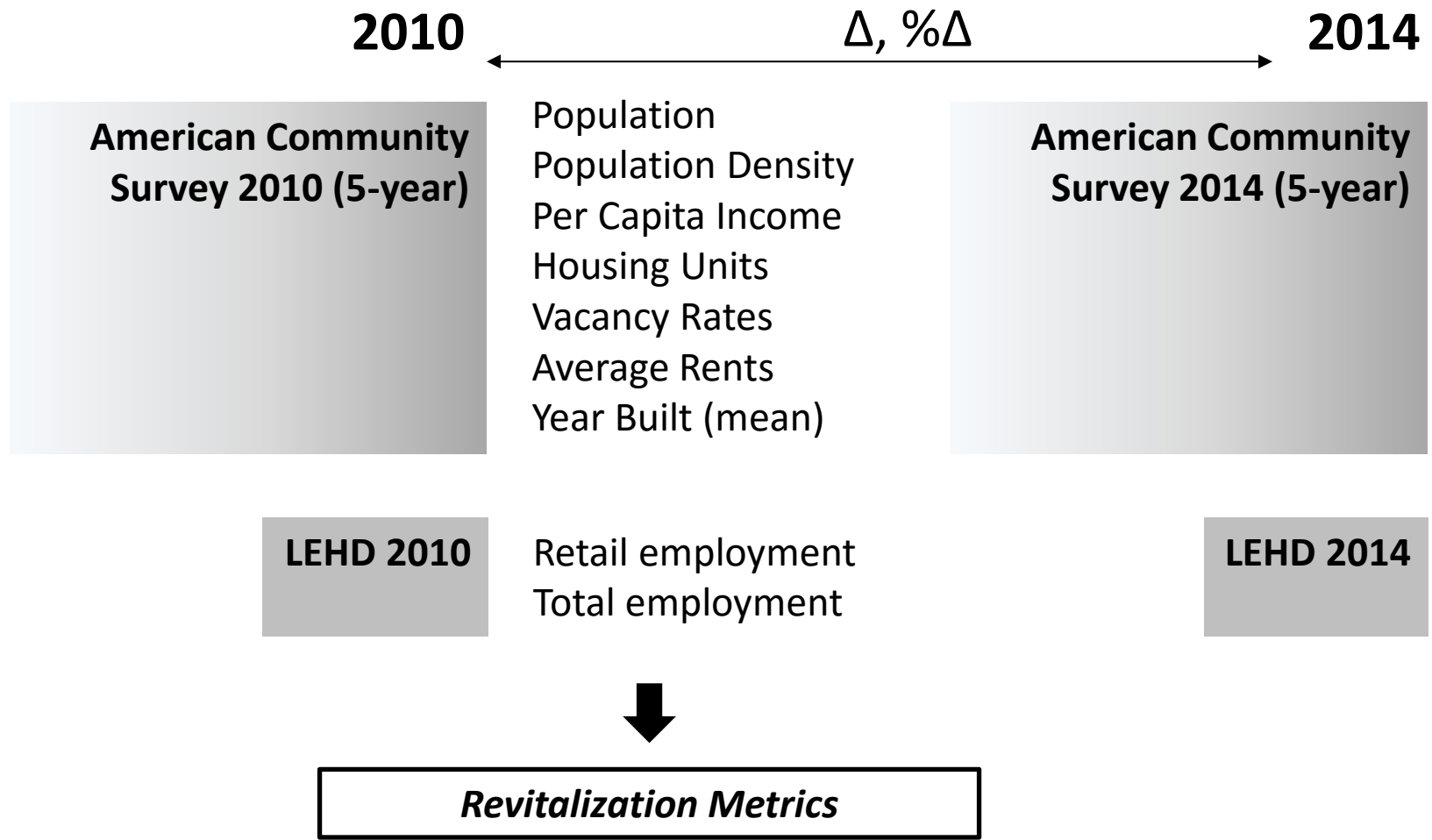
Step 6

Synthesize findings for
conclusions

Step 1: Study Zones



Steps 2 and 3: Metrics and Data



Steps 4 and 5: Tests

PAIRED T-TEST

Absolute change

$$P \leq 0.05$$

yes   no

Change H_0
(+/-)

ONE-WAY ANOVA

Relative change

$$P \leq 0.05$$

yes   no

Change H_0
(+/-)

Results

Step 4: Absolute Change

p-values from Paired t-tests

Grouping	N	% Δ, Pop.	% Δ, Pop. Density	% Δ, Per Capita Income	% Δ, Housing Units	Δ, Vacancy Rate (% points)	Δ, Median Year Built	% Δ, Average Rent
All block groups	356	0.015 (+)	0.380	0.003 (-)	0.802	0.932	0.172	0.000 (+)
Operating	41	0.005 (+)	0.035 (+)	0.008 (-)	0.755	0.075	0.357	0.246
Planned	47	0.309	0.471	0.031 (-)	0.313	0.518	0.271	0.005 (+)
Inside	44	0.136	0.501	0.104	0.086	0.563	0.140	0.380
Outside	224	0.397	0.422	0.390	0.041 (-)	0.399	0.001 (+)	0.006 (+)

'Operating' includes 'Eastside,' 'West End,' and 'Northside'
'Planned' includes 'North Planned,' 'South Planned,' and 'West Planned'
 (+) indicates a positive change, and (-) indicates a negative change.
 Bolded values : $p \leq 0.05$

Step 5: Relative Change

One-way ANOVA Comparing Operating and Planned Segments

Variable		Sum of Squares	df	F	Sig.
% Δ, Pop.	Between Grp	0.32	1	1.27	0.26
Δ, Pop. Density	Between Grp	2.E+06	1	2.00	0.16
Δ, Per Capita Income	Between Grp	8.E+07	1	0.51	0.47
Δ, Housing Units	Between Grp	1.E+04	1	0.42	0.52
Δ, Vacancy Rate (% points)	Between Grp	0.05	1	3.21	0.08
Δ, Median Year Built	Between Grp	5.E+04	1	1.01	0.32
Δ, Average Rent	Between Grp	8.E+03	1	0.07	0.80

Conclusions

Conclusions

Lack of confirmation of BeltLine-induced growth

Possible Explanations

- No effect
- Statistics
- Temporal precedence or lag
- Spatial concentration

Future Research Directions

Thank you

References

References

- Atlanta Beltline, Inc. (2016a). Eastside Trail. Retrieved May 7, 2016, from <http://beltline.org/trails/eastside-trail>
- Byrne, P. F. (2006). Determinants of property value growth for tax increment financing districts. *Economic Development Quarterly*, 20(4), 317–329.
- Byrne, P. F. (2009). Does tax increment financing deliver on its promise of jobs? The impact of tax increment financing on municipal employment growth. *Economic Development Quarterly*. Retrieved from <http://edq.sagepub.com/content/early/2009/12/03/0891242409350887.short>
- Ewing, R. (1997). Is Los Angeles-Style Sprawl Desirable? *Journal of the American Planning Association*, 63(1), 107–126. <http://doi.org/10.1080/01944369708975728>
- Ewing, R., Pendall, R., & Chen, D. (2002). Measuring sprawl and its impact: The character and consequences of metropolitan expansion. *Washington, DC: Smart Growth America*.
- Gravel, R. A. (1999). *Belt line - Atlanta : design of infrastructure as a reflection of public policy* (Thesis). Georgia Institute of Technology. Retrieved from <https://smartech.gatech.edu/handle/1853/7400>
- Immergluck, D. (2009). Large redevelopment initiatives, housing values and gentrification: The case of the Atlanta Beltline. *Urban Studies*, 46(8), 1723–1745. <http://doi.org/10.1177/0042098009105500>
- Jepson, E. J. (2001). Sustainability and Planning: Diverse Concepts and Close Associations. *Journal of Planning Literature*, 15(4), 499–510. <http://doi.org/10.1177/088541220101500401>
- Leigh, N. G., & Hoelzel, N. Z. (2012). Smart Growth's Blind Side. *Journal of the American Planning Association*, 78(1), 87–103. <http://doi.org/10.1080/01944363.2011.645274>
- Ross, C. L., Nie, K. L. de, Barringer, J., Hashas, M., Benjamin, S., Doyle, J. H., & Pierce, D. (2007). *Atlanta BeltLine Health Impact Assessment*. Center for Quality Growth and Regional Development.

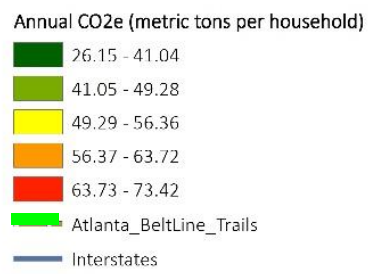
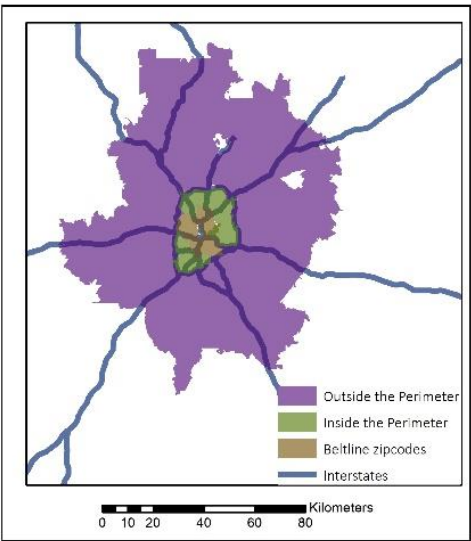
Backup

Sustainable Development

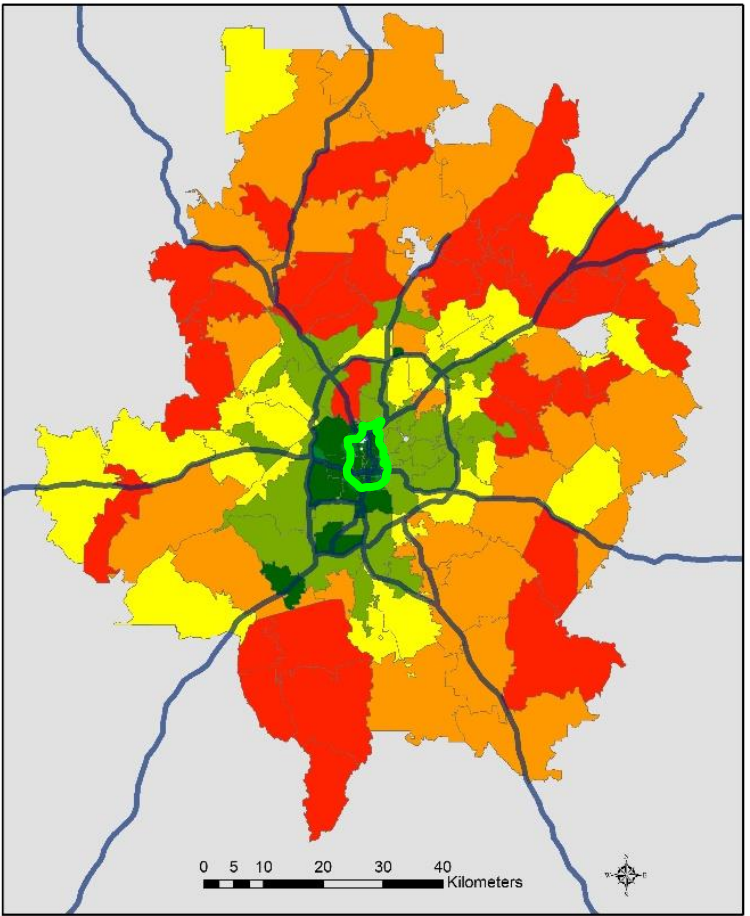
Sustainable Development
economic, technical
(Bugliarello, 2000)

Compact development

- Energy and transportation
Goldstein, & F
- Characteristic
Chen, 2002; F



Map produced on March 28, 2016:
Center for Quality Growth and Regional Development,
Georgia Institute of Technology
Data from: Berkeley Cool Climate



Land Value

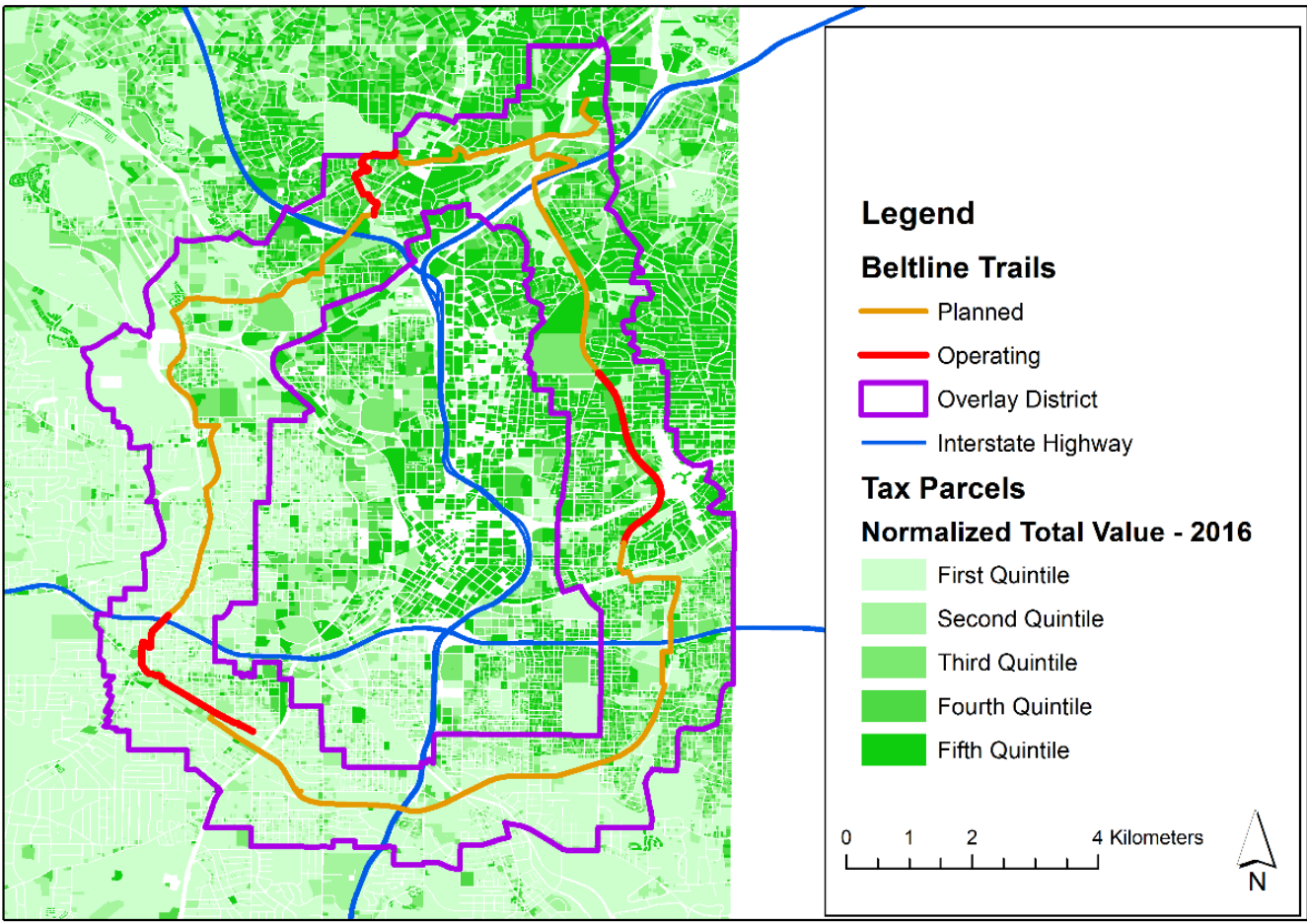
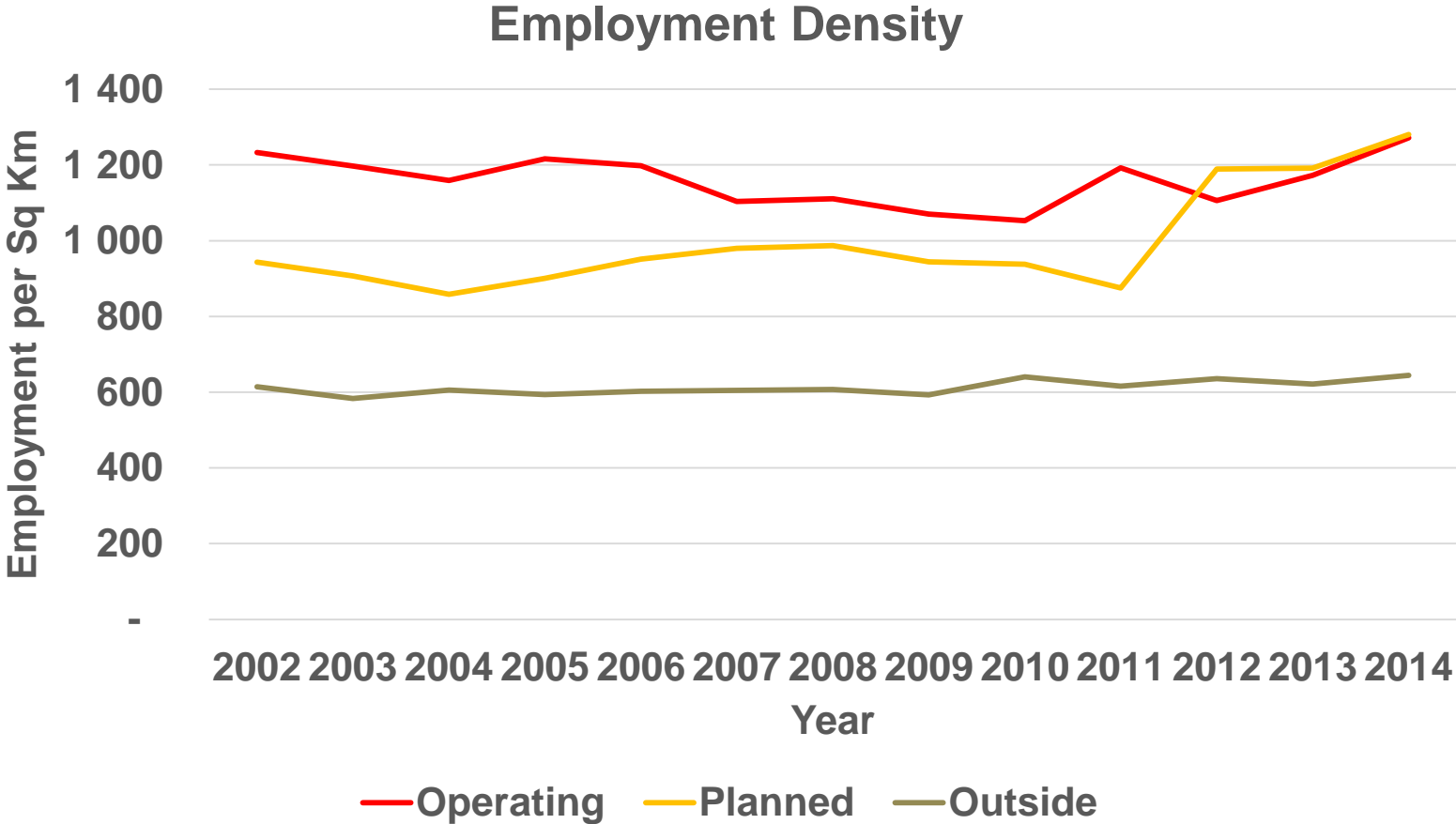


Figure 3: Normalized Assessed Taxable Property Values – 2016
Source: Created by the authors from data available from the Fulton County Government (2016)

Retail Employment



All Employment



For legibility, 'Inside' is omitted because values are several times higher than for other categories.