

Understanding Commuting Flows in Larimer County and Fort Collins

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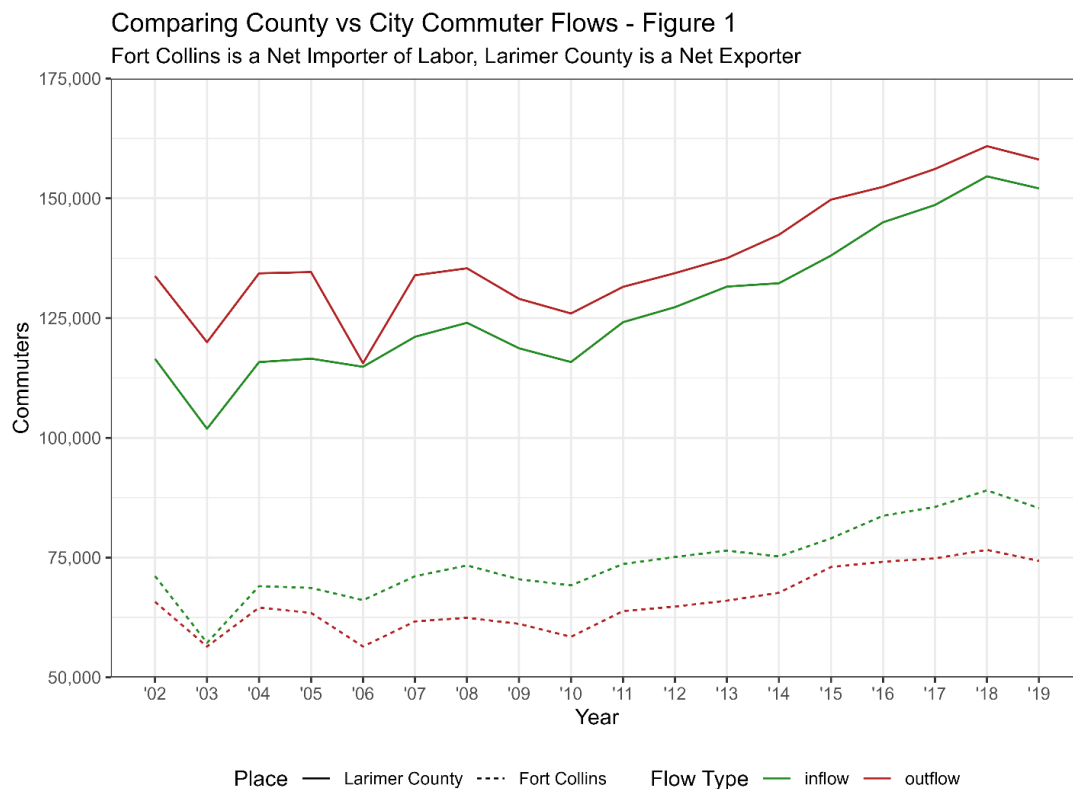
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- Using Census Bureau’s LODES data, local governments and communities can better understand commuting patterns since 2002.
- Exploring different levels of geography exhibit interesting commuting dynamics.
- Fort Collins and Larimer County provide an interesting case to illustrate several measures and visualizations of commuting dynamics

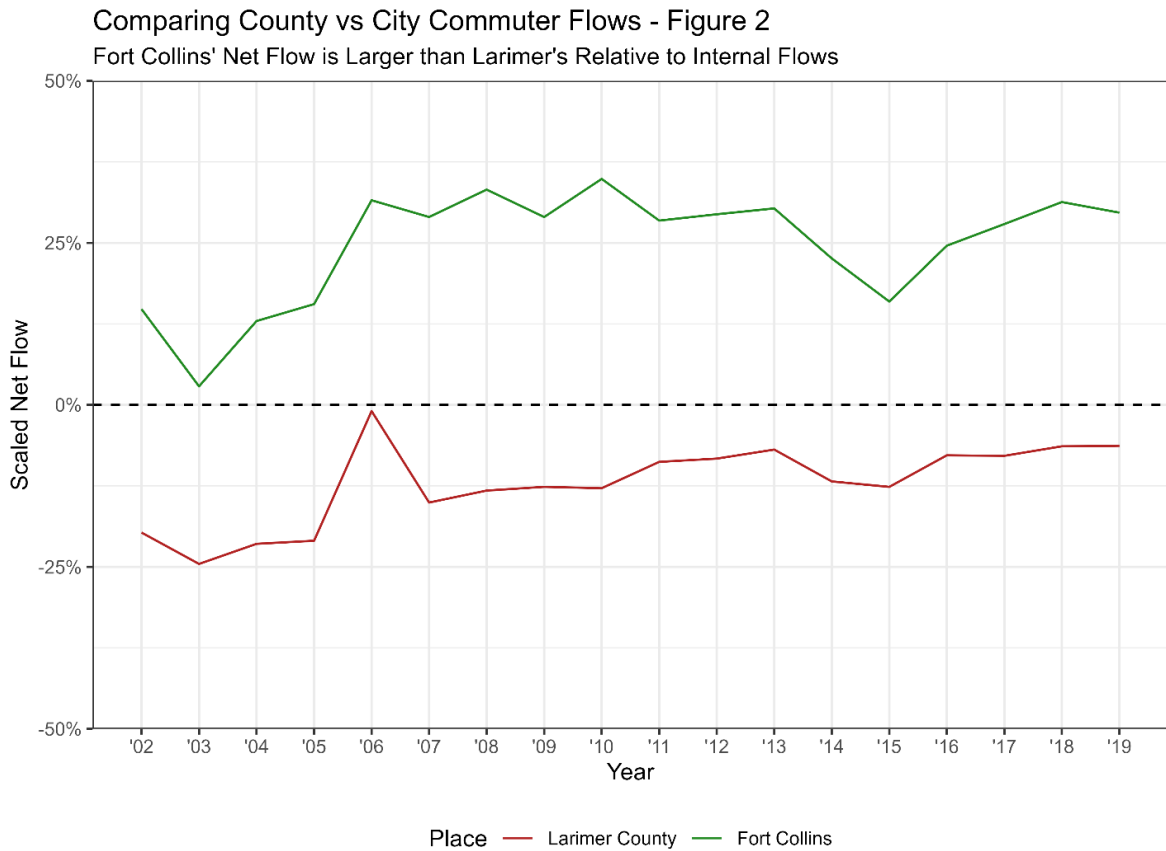
The physical and virtual commuting of workers deeply impacts local area workforce dynamics and is foundational to the economic integration of larger regions. Using the Census Bureau’s LEHD Origin-Destination Statistics (LODES) commuting data enables extremely detailed geographic analysis of commuting patterns.¹ This report will exploit this level of geographic detail and coverage period to explore how the dynamics of commuting can differ at the county and city levels by focusing on Larimer County and the City of Fort Collins in particular.

We start by considering the aggregated inflows and outflows of commuters for each locality/government entity in Figure 1. Larimer’s larger inflows and outflows as compared to Fort Collins are almost exactly proportionate to the difference in population size between the county and the city. However, the most interesting distinction



¹ The fundamental geographic units of analysis in LODES are 2010 census blocks.

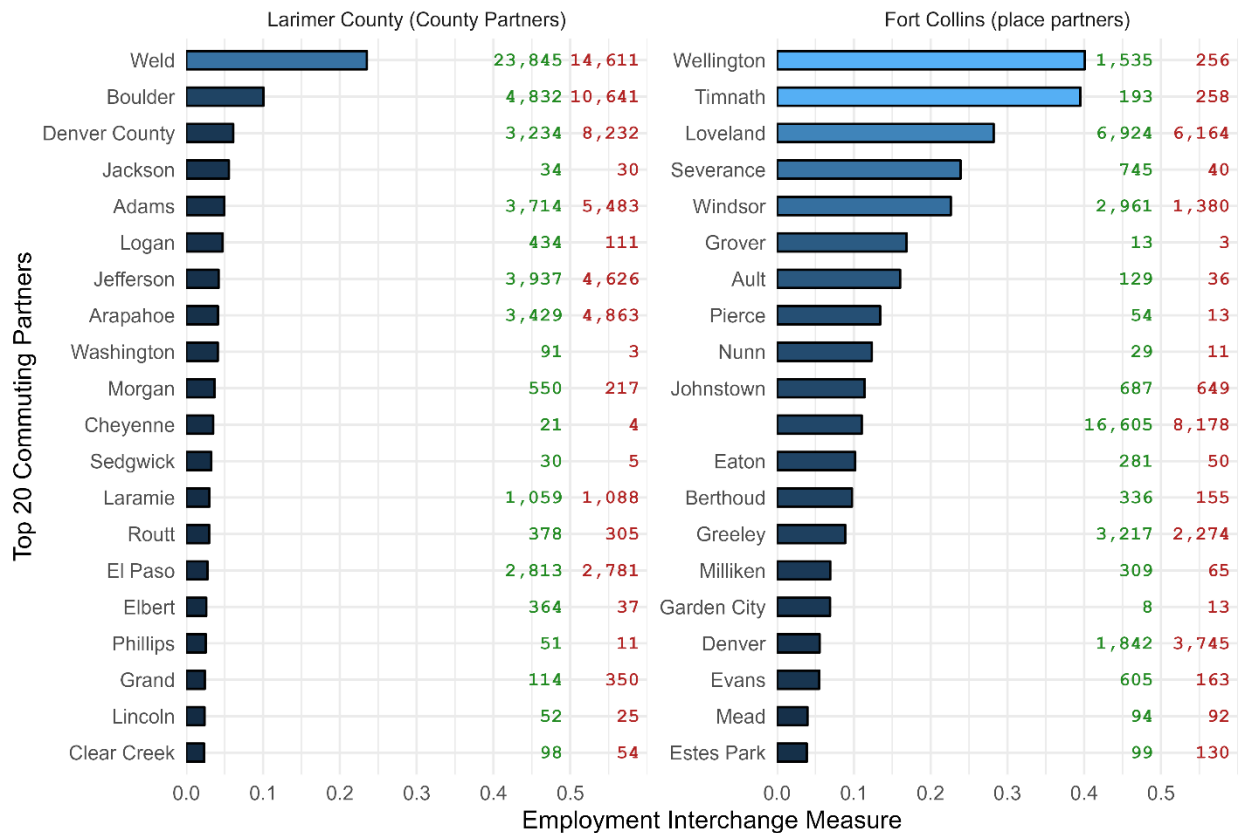
between the two sets of flows is that the county is persistently a net exporter of labor (and therefore importer of wages & salaries), while the city is a net importer of labor. Along Interstate 25, only Arapahoe, Boulder, Broomfield, and Denver counties are net importers of labor as core locales in the regional economy. In spite of the gravitational pull of the Denver metro area though, we can see that Fort Collins continues to offer enough amenities and jobs to pull in more commuters than it sends out.



Scaling the net flow of commuters into or out of the locality by the number of commuters that both live and work in the locality (i.e. internal commuters/flows) provides another perspective on the importance and type of relationship the local economy has with the wider region’s workers and businesses. Values closer to zero, do not mean that commuting is not important to a locality, but it does suggest that it may be easier for local firms and workers to adjust to disruptions that would interfere with extant commuting patterns (e.g. fuel price spikes, congestion or damage to transportation infrastructure). In Figure 2, it becomes clear that the City of Fort Collins has a more imbalanced relationship with commuting than the does the county, and this imbalance is growing in importance as compared to the county. This imbalance may be a result of increasingly expensive housing within the city combined with increasing employment opportunities, which would necessitate that workers commute in from cheaper locations. There are likely policy and planning implications for both economic development strategies (recruitment of firms), transportation planning and affordable housing programs.

In fact, as the Fort Collins housing market has continued to rapidly appreciate over the period we consider, the average distance travelled to work by commuters working in Fort Collins has increased from roughly 15.8 miles in 2002 to 19.2 miles in 2019. This naturally leads to the question of where these workers are coming to or going from? This is an area where LODES’ geographic detail is especially enlightening.

Comparing County vs. City Commuter Flows - Figure 3
 Bar length is EIM, while inflows & outflows are green & red text, respectively



The Employment Interchange Measure (EIM) is a scaled, gross flow measure² of labor/workforce interconnection. The scaling eases comparisons of localities with vastly different population sizes, while the gross flow element means that nearly equivalent inflows/outflows do not hide otherwise strong commuting ties (e.g. the Fort Collins-Loveland connection). In Figure 3 above, we can see that neighboring northern Colorado counties and Front Range Corridor counties dominate Larimer County’s top 20 commuting partners. On the other hand, Fort Collins top 20 EIMs with other cities, towns, and places are much more geographically constrained and much higher/stronger than the Larimer County’s level EIMs. In fact, by also reviewing the inflows and outflows to the right of the EIM bars it becomes very clear that even though Fort Collins is substantially smaller than Denver, it still acts as a core city for this region in Colorado.³ Hopefully, this brief analysis has conveyed that LODES is invaluable to local governments and community stakeholders to better understand how commuting shapes their communities, with their own commuting in turn affecting their fit as an economic player into broader regional economies.

² For two counties or places, A and B, it is the share of all commuters in A who commute to B plus the share of all commuters in B who commute to A. The EIM between A and B will always in the interval from 0 to 2 (inclusive). An EIM of 0 indicates that no commuting in either direction occurs between A and B. An EIM of 2 means that all of the commuters in residing A commute to work in B, and all of the commuters residing in B commute to work in A.

³ The blank line on the Fort Collins graph is not a typo. It represents data from all Census blocks not located within a Census place (e.g. cities, town, boroughs, etc.), such as unincorporated county land, and therefore does not have a name.