



# Technical Memorandum

**To:** Jared Austin, Forward Pinellas; and Caitlin Johnson, SB Friedman

**From:** Randy Deshazo, Tampa Bay Regional Planning Council

**Date:** June 16, 2022

**Re:** Economic Trade-Offs in Employment Land Conversion facing Pinellas County

Through an Economic Development Administration grant under the 2020 Coronavirus Aid, Relief, and Economic Security Act (CARES Act) the Tampa Bay Regional Planning Council (TBRPC) is providing technical assistance to partner governments with their COVID-19 economy recovery efforts. At the request of Forward Pinellas and Pinellas County Economic Development, TBRPC submits the following information for consideration in the Pinellas Target Employment and Industrial Land Study (TEILS) update, drawing on lessons learned from TBRPC's Industrial Land Strategy for Pasco County (2022), In summary, those lessons are as follows.

1. Maintaining the County's existing one-to-one balance between jobs and employed residents can help sustain Pinellas County's relatively low average commute times and make County businesses more competitive; and
2. Decision-makers may benefit from a better understanding of the economic and fiscal implications of **incremental** changes in the total supply of Employment Land

## A Balanced Jobs Approach to Land Use Decisions as Plan Performance

Linking Job growth targets to specific community goals, such as in housing, can provide planners with an objective and quantifiable basis for balancing the mix of allowed land uses in a community's long-range plan. Moreover, when policymakers face difficult decisions about how many jobs or housing units to plan for with limited land availability, plans that build upon the interdependencies of jobs and housing can clarify the stakes of each decision to stakeholders in economic development, housing, and transportation policy.

Planners have long used jobs-housing balance in a prescriptive sense—if a community supports some quantity of jobs, then plans must account for how many housing units should be built to ensure the regional transportation system is not overwhelmed by in-commuters.<sup>1</sup> Articulated as a ratio of jobs, or more accurately, employed residents, to housing units, research findings have found that where **job** gains occur when the ratio is less than 1.2 or when **housing** gains occur when the ratio is greater than 2.8 average commute times decrease, and therefore productivity losses and driver costs decrease.<sup>2</sup> This is because “job-rich” communities tend to attract in-commuters from surrounding “jobs-poor” communities. In a large

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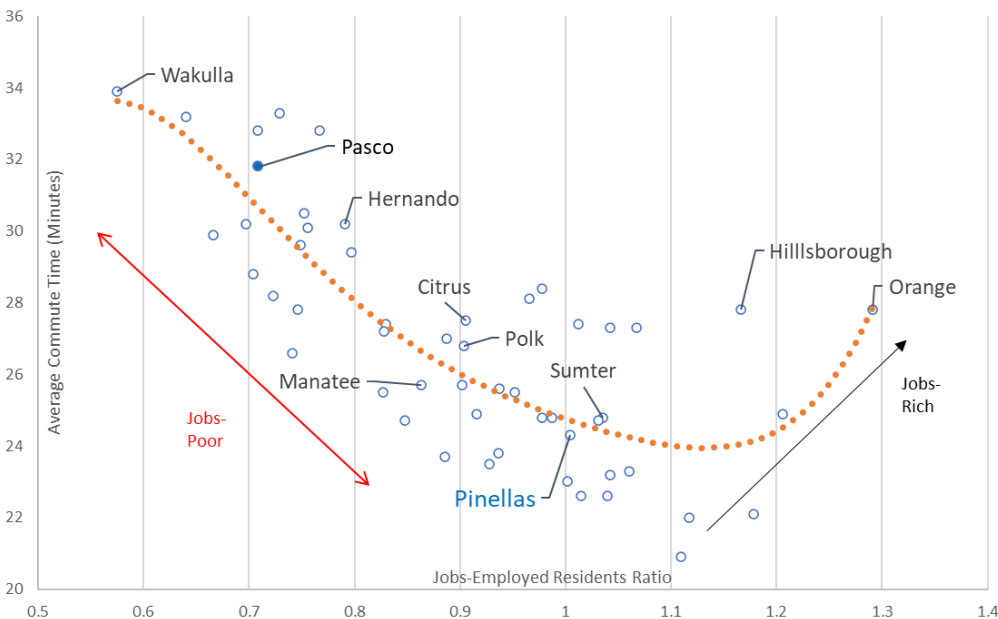
<sup>1</sup> Cervero, Robert. 1989. Jobs-Housing Balance and Regional Mobility. *Journal of the American Planning Association*, Vol. 55, No. 2, 1989, pp. 136-150. Cervero is usually credited with introducing the concept of jobs-housing balance.

<sup>2</sup> Peng, Zhong-Ren. 1997. The Jobs-Housing Balance and Urban Commuting. *Urban Studies* 34 (8), 1215-1235.

metropolitan area, such as Tampa Bay, local land use decisions revertebrate throughout the regional commute-shed.<sup>3</sup>

Figure 1 depicts the relationship between the average commute time reported by workers driving alone and the Job-Employed Ratio of selected Florida counties using American Community Survey Census and Bureau of Labor Statistics data for 2019.<sup>4</sup> Consistent with research findings, the data show that there is an inverse relationship between commuting times and jobs-employment ratios, where commute times increase as the job-employed resident ratio falls in “jobs-poor” counties, and commute times rise again as that ratio increases beyond 1.1, as in-commuters contribute to rising commute times in “jobs-rich” counties. Generally, the lowest average commute times are in counties with a “jobs-balanced” ratio of 1.0.

Figure 1: Jobs-Balanced Counties Average Shorter Commutes than Jobs-Poor or Jobs-Rich Counties



Source: TBRPC analysis of U.S. Census Bureau, Mean Commuting Time for Workers (5-year estimate) in Pinellas County, FL [B080ACS012101], retrieved from FRED, Federal Reserve Bank of St. Louis; fred.stlouisfed.org/series/B080ACS012101, other selected Counties; Retrieved March 24, 2022. REMI 2.5

Since there is a close relationship between commute duration and congestion, a **conceptual job growth target** that ties together the need to address congestion, the importance of the target industry jobs, and the relationship of those jobs to evaluating how much Employment Land land is needed, can be instrumental in using land-use planning to “multitask” the adequate provision of land for all of the public’s needs. Communities with enough jobs for employed residents are **jobs-balanced**. Table 1 identifies the

<sup>3</sup> Of course, results do vary with systemwide transportation efficiency and personal decisions as two-worker households balance the housing choice implications of different job locations, job turnover and family activities. See Giuliano, G.1991. Is Jobs-Housing Balance a Transportation Issue? Transportation Research Record, 1305.

<sup>4</sup> 2019 data are used because 2019 was the sample year for the 5 year community survey and the last year prior to COVID-19 in which widespread disruption to long-term patterns makes reliable jobs-related analysis unreliable.

existing and projected employment growth in Pinellas County, as well as the change in jobs needed to maintain the balanced jobs ratio that Pinellas currently has.

Table 1: Pinellas County Projected Population and Employed Residents, and Jobs Needed for Balance

Units (in Thousands)	2020	2030	2040	2050
Population	984.9	1070.5	1133.6	1178.8
Employed Residents	583.9	652.5	675.9	717.4
Jobs Needed to Maintain Jobs Balance	586.4	655.3	678.8	720.5
Additional Jobs		69	92	134
<b>Jobs: Employed Residents Ratio</b>	1.004	1.004	1.004	1.004

Source: REMI PI+ 2.5 (2021); TBRPC calculation of jobs to maintain a 1.0 ratio of Jobs-to-Employed Residents

Depending on the County’s growth projections, the actual number of jobs Pinellas County should plan for in order to maintain balanced jobs may be as much as 134 thousand by 2050. County planners can then assess the square footage of Employment Land needed to support that job growth.

### The Next Decision: Considering the Impacts of Incremental Changes to Land Use

In contrast to plan build-out analysis of comprehensive plans, which present the final disposition of land uses in light of a distant planning horizon, policymakers are often challenged to consider land use amendments on a case-by-case basis. Since it is difficult to fit the implications of the next and incremental decision on a single future land-use amendment into a completed build-out “puzzle” of future land use, comprehensive plans do not always contextualize the impacts of that decision.

Instead, an alternative way to think of the trade-off decisions facing Pinellas County is to consider what the economic impacts are of selecting different land uses on a single parcel or group of parcels. In attachment 1, TBRPC has prepared a graphic depiction of the economic impacts of different development patterns on a single 8-acre tract of land. Attachment 1 includes a thumbnail description of the development type, how many direct jobs are employed on the site, how many indirect jobs that are created from supply chain effects and induced household spending in Pinellas County, the site-specific taxes, total County personal income generated from the maximum intensity of each use of the property, and Value Added, a metric describing the incremental effect of the total value of industry output less intermediate inputs.<sup>5</sup>

Attachment 1, however, only shows the impacts of different land uses on an example tract in one year. Since converting employment-supporting land to non-employment uses is usually permanent, so are the potential jobs lost permanently. Consequently, a statistic that takes into account the “long-view” of a decision on a single tract of land helps to frame the costs of the irreversible losses incurred when that land cannot be used to attract target industry jobs.

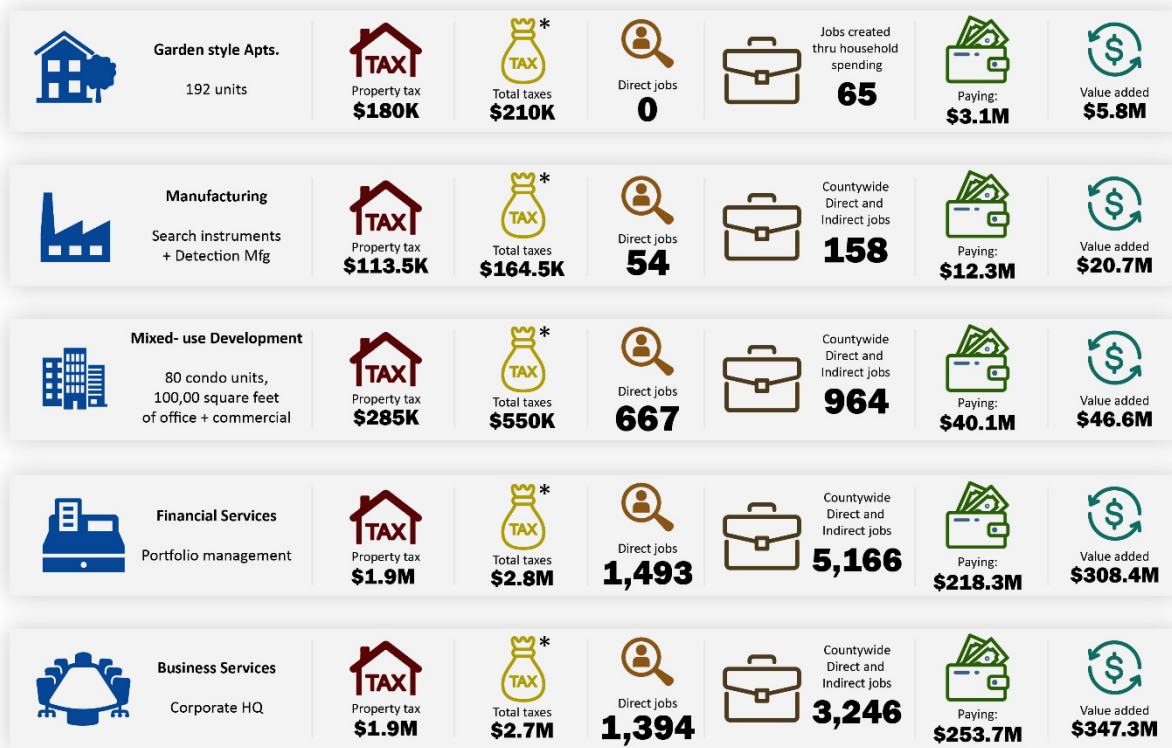
As an example, a single 8-acre tract of land could support a Countywide annual impact of \$253.7 million in personal income from the full development of the site with a corporate headquarters and the indirect countywide impacts from supply chain and personal consumption expenditures. Converting that land to

<sup>5</sup> For practical purposes, Value Added is comparable to Gross County Product.

other uses could mean a cumulative loss of up to \$1.6 billion in personal income to the County through 2032.<sup>6</sup>

## Attachment

Attachment 1: Graphic Depiction of Land Use Trade-Offs (\*Total tax in the graphic includes: sales, motor vehicle, licenses, special assessments, excise; and property),



<sup>6</sup> Present value impacts, discounted at 10 percent. Assumes full build-out in 2022 and does not include public service costs or costs from negative externalities.