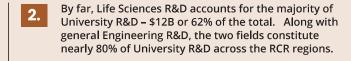
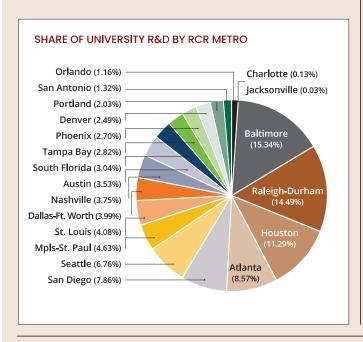
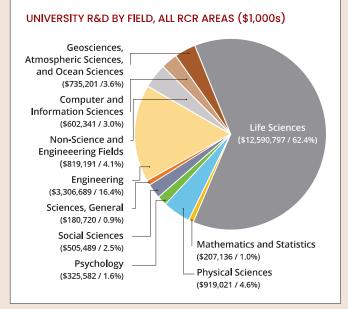
DEEPER DIVE: UNIVERSITY R&D EXPENDITURES

HIGHLIGHTS OF THIS DEEPER DIVE:

- Tampa Bay's university research and development expenditures cross a variety of fields, with Life Sciences accounting for 62% in line with the Regional Competitiveness Report average - of the region's nearly \$570M of R&D.
- · Areas of strength, measured as the regional share of research dollars allocated for each field, divided by the average share for the comparison regions, include Social Sciences (279% of average) and Non-Science and Engineering Fields (275% of average).
- · Fields where Tampa Bay conducts significantly less R&D, relative to the aggregate portfolio, include Engineering (50%), Computer and Information Sciences, Mathematics and Statistics, and Sciences, General (each 43% of average). These fields, in particular, typically generate high-wage spinoff companies and valuable intellectual property.
- Of the \$20.2B of University R&D across the RCR comparison areas, the top five markets -
- Baltimore, Raleigh-Durham, Houston, Atlanta, and San Diego - account for \$11.6B of the total.







Tampa Bay's University R&D portfolio is diverse - all fields saw some sort of expenditure in FY2017. Life Sciences at 62% of the regional total tracks the RCR cohort well. Key divergences, measured by the regional share of research dollars allocated for each field, divided by the average share for the comparison regions, include Social Sciences (7.0%: 2.5%, 279% of average) and Non-Science and Engineering Fields (11.1%: 4.1%, 275% of average).

Conversely, Tampa Bay conducts significantly less R&D, relative to the aggregate portfolio, in Computer and Information Sciences (1.3%: 3.0%) Mathematics and Statistics (0.4% : 1.1%) and Sciences, General (0.4% : 0.9%) each 43% of the average. At \$46.7M, Engineering, 16.4% of the typical region's R&D portfolio, accounts for half as much - 8.2% - of Tampa Bay's R&D expenditures. These fields have great opportunity for spinning off high-wage companies and developing technologies commanding high license fees, each of which contribute to regional prosperity.

