When comparing economic impact study results to previous years, there are three areas that can cause differences in results. The first is a change in college data. The second is a change in data Lightcast gathers from external sources, such as the Census Bureau. The third is a change in methodology as better practices and data become available. The differences in results are usually a product of changes in all three of these areas; however, some changes may have more of an effect than others.

Economic impact analysis

In Fiscal Year (FY) 2021-22, Kirtland Community College (Kirtland) added $38.7 million in income to the Kirtland Service Area. This is a decrease of 39% or $24.3 million from FY 2017-18.

Operations spending impact

- Decreased by $1.5 million. Kirtland's total expenditures increased in FY 2021-22 compared to FY 2017-18; however, the salaries, wages, and benefits decreased, ultimately decreasing the impact. In addition, revenues slightly increased, increasing the alternative impact that could have been created without the college, meaning the impact attributable to the college decreased.

Construction spending impact

- In FY 2021-22, Kirtland spent $145.7 thousand on construction activities, whereas in FY 2017-18, Kirtland spent $1.4 million on construction activities. In FY 2021-22, construction expenditures were included in the operations spending impact.
because the expenditures were minimal, and the impact from these expenditures was relatively unsubstantial.

**Student spending impact**

- Increased by $263.2 thousand. Even though Kirtland's student enrollment decreased, a greater proportion of students relocated to the region and average student expenditures increased, increasing the impact from student spending.

**Alumni impact**

- Decreased by $22.7 million. This impact decreased in part because of changes in the regional earnings by education level. However, most of the decrease is due to changes in out-migration from the region. Out-migration rates for the region have increased over the last three years. In addition, Lightcast is now more aggressive and realistic when applying migration rates to the different cohorts of Kirtland alumni.

- It should be noted that this impact is conservative since we are not including alumni from years prior to FY 1988-89 because data is unavailable. If we were to include all Kirtland alumni active in the regional workforce (using estimates as needed), the alumni impact would be $3.8 million higher.

**Investment analysis**

**Student perspective**

- The benefit-cost ratio decreased from 5.6 to 4.5. The overall cost per student increased because there were higher tuition rates per student, this is partly offset by higher residual aid received by students. In addition, students are forgoing more earnings because they are entering Kirtland in FY 2021-22 with higher levels of education. Finally, benefits to students decreased slightly because the earnings by education level in the state changed.

**Taxpayer perspective**

- The benefit-cost ratio decreased from 1.5 to 1.1. Benefits to taxpayers decreased slightly from changes in state earnings and higher out-migration rates for Michigan. Most of the difference stems from the higher state and local government revenues received per student in FY 2021-22.

**Social perspective**

- The benefit-cost ratio decreased from 9.1 to 7.2. Similar to the taxpayer perspective, the benefits decreased because of changes in state earnings and state out-migration rates. Costs increased because student costs increased and Kirtland operational expenditures were higher in FY 2021-22, resulting in a lower benefit-cost ratio.