

Student team estimates the economic impact of a Wingate Aquatic Center

Since the construction of the Monroe Bypass near the Wingate University campus, there has been community speculation on what will be built next to it. One of these theories discusses the possible effects of the construction and operation of an aquatic center. In ECON 412 (taught in Spring 2021), students analyzed the costs of construction and operation compared to other areas to get an accurate estimate of the various aspects of this project. They used IMPLAN to simulate the effect to which both the construction process and the operations would have on Union County. Comparing the data from other aquatic facilities, research on operation and construction, and the IMPLAN program the students were able to generate the following results.

Construction: This part of the project was based on a two-year timeline for the construction process to be complete. Therefore, the inputs in IMPLAN would utilize "dollar data" from 2021 and 2022 while using the most recent "data year" of 2019. Before estimating the costs of construction, students decided which additions they wanted to calculate. Aquatic centers need to attract a variety of groups, as found in the report for Louisville KY Aquatics. This generated the construction costs of the aquatic center to be around \$7,125,000. Furniture, fixtures, and equipment estimates were also estimated in comparison to similar aquatic centers in Mecklenburg County.

Operations: When taking into consideration the operations of the Mecklenburg County Aquatic Center, weekend meets generate \$12,000 to \$20,000. Large meets can generate \$50,000 to the aquatic center. In the simulation, the students used three small meets and one large meet in the first year of operation. To conclude the extent of the impact, students also used concepts such as event resource demand (ERD) and city resource supply (CRS) in comparison to existing aquatic centers, such as in Guilford County and Mecklenburg County. Events require human resources (paid staff and/or volunteers) and physical resources (venue, hotel rooms, etc.). Depending on the size of the county, there will be more CRS provided, and the number of events the county can hold will change the amount of impact. Multiple small events can be better than one big event, influencing the choice in meets for the simulation.

Results:

- 103 jobs supported in the two years of construction and first year of aquatic center operations
- \$11.4 million added to Union County GDP in three years*
- \$123k Union County tax revenue generated in three years*
 - Although a non-profit University does not pay taxes, revenue is generated through visitor and employee spending via the sales tax and residential property taxes.
- Five industry sectors see significant growth during the first three years: Construction (commercial), Fitness & recreation centers, Retail, Real estate. Restaurants

