

Quarterly
Reports
Board of Trustees

April 24, 2019

Research AND INNOVATION



Accelerating Discovery

DISTINCTION

- NSF 2026 Big Idea Machine: 800 ideas were submitted nationally to the National Science Foundation, 100 were judged and only, 30 were selected to submit videos. **Three of 30 selected nationally to submit videos were WMU faculty and administrators:** The STEM Teaching and Learning Incubator, Todd Ellis; Reversibility: Future of Life on Earth, Bilinda Straight; and, #WhyNotMe: STEM Diversity Drivers, Terri Goss Kinzy and Lori Wingate.
- WMU community members who also submitted their NSF ideas to the internal **Bronco Big Idea** were reviewed by a committee of junior faculty and graduate students, who are the future of STEM. The winners were Todd Ellis (faculty), who receives a \$6,000 research award; and two undergraduate students, Patrick Leny and Marsad Zoardar, who each will receive a \$1,000 scholarship, and an additional \$5,000 research award to conduct research

HIGHLIGHTED NEW GRANTS

- Kimberly Adams, School of Music, College of Fine Arts. "Honegger's King David – A Presentation by the WMU Grand Chorus and Detroit Chamber Winds," Michigan Council for Arts and Cultural Affairs, \$21,465.
- Dae Kim, Blindness and Low Vision Studies, College of Health and Human Services. "Better Long Cane Design and Biomechanics for Blind Cane Users," NIH, \$432,165, extended over three years.
- Muralidhar Ghantasala, Mechanical and Aerospace Engineering, College of Engineering and Applied Sciences. "Virtual Torque Sensor for Automotive Applications," NSF I-Corp, \$50,000.
- Germán Zárate-Sáenz, Spanish, College of Arts and Sciences. "Implementation and Assessment of a Pronunciation instruction Training Module for Second Language Teachers," *Language Learning's* Early Career Research Grants Program, \$9,743.

RECENT BOOKS, PUBLICATIONS and EXHIBITIONS

- Bill Davis has an exhibition, [*No Dark in Sight*](#), at the Richmond Center for Visual Art, scheduled April 4 (opening night) through 28. The exhibition examines light pollution in Kalamazoo, Las Vegas, and Machu Picchu in Peru. View [Portfolio](#)

- J. McMahon, [R.S.W. Emerson](#), P. Ponchillia, & [A. Curtis](#) (2019). Physical Performance of Participants of Sports Education Camps for Children with Visual Impairments. *Journal of Visual Impairment & Blindness*, 113(1), 32–42
- Erika Calvo-Ochoa and Christine A. Byrd-Jacobs (2019). The Olfactory System of Zebrafish as a Model for the Study of Neurotoxicity and Injury: Implications for Neuroplasticity and Disease (cover of journal). *International Journal of Molecular Sciences*, 20(7), 1639.
- Straight, B., Needham, B.L., Onicescu, G. et al. *Hum Nat* (2019). Prosocial Emotion, Adolescence, and Warfare: DNA Methylation Associates with Culturally Salient Combat Variables.

KEY NUMBERS (YTD compared to YTD previous FY)

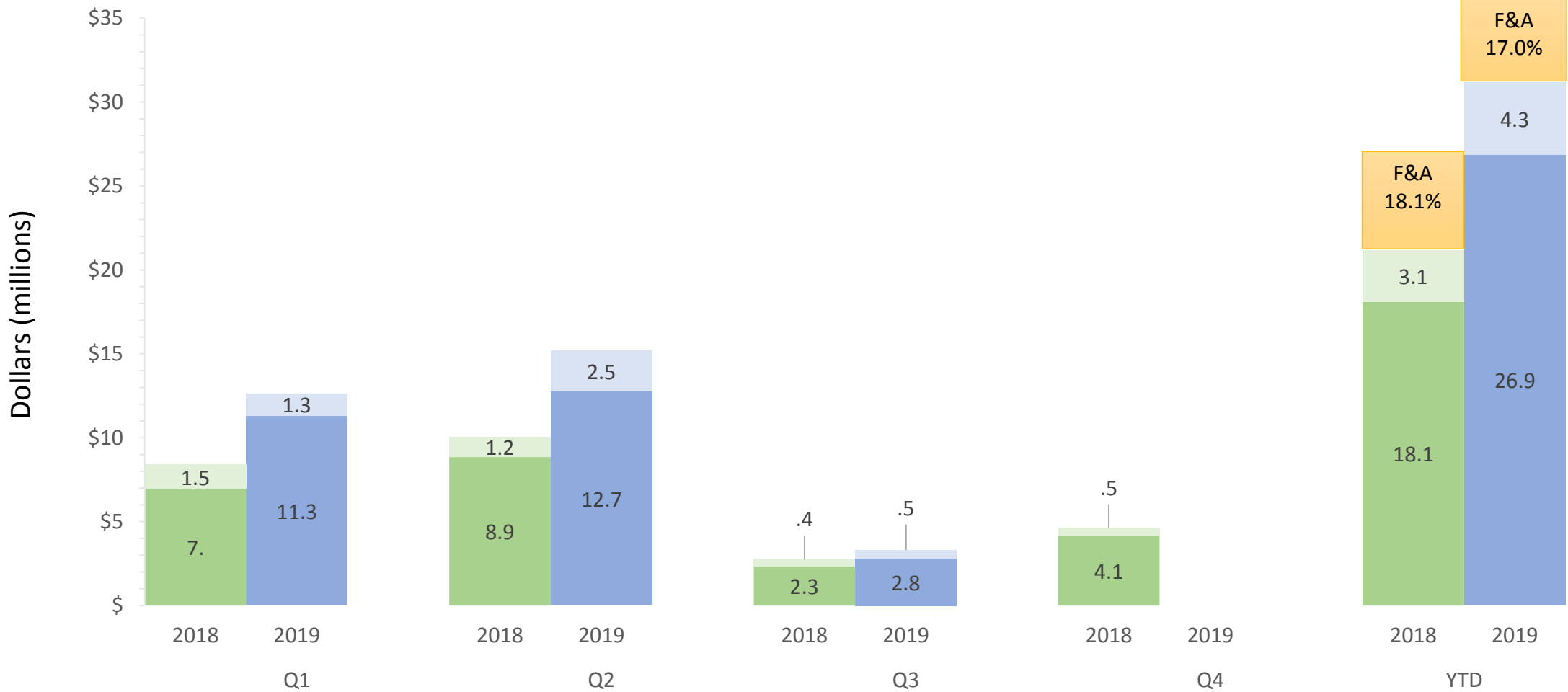
- **YTD Submissions:** \$81,402,627 (259); FY 18: \$88,991,906 (276)
 - **Snapshot:** CFA \$545,275 up 2000%
- **YTD Awards:** \$31,160,524 (192) as compared to FY 18 awards: \$21,180,481 (149) UP 51% in dollars and 29% in number of awards
 - **Snapshot:** CAS \$7,227,940 up 85%
- **YTD Expenditures:** \$19,889,537; FY 18: \$17,454,880
 - **Snapshot:** CEHD FY 19: \$5,524,800 up 74%

COLLABORATION / INTERNAL DEVELOPMENT

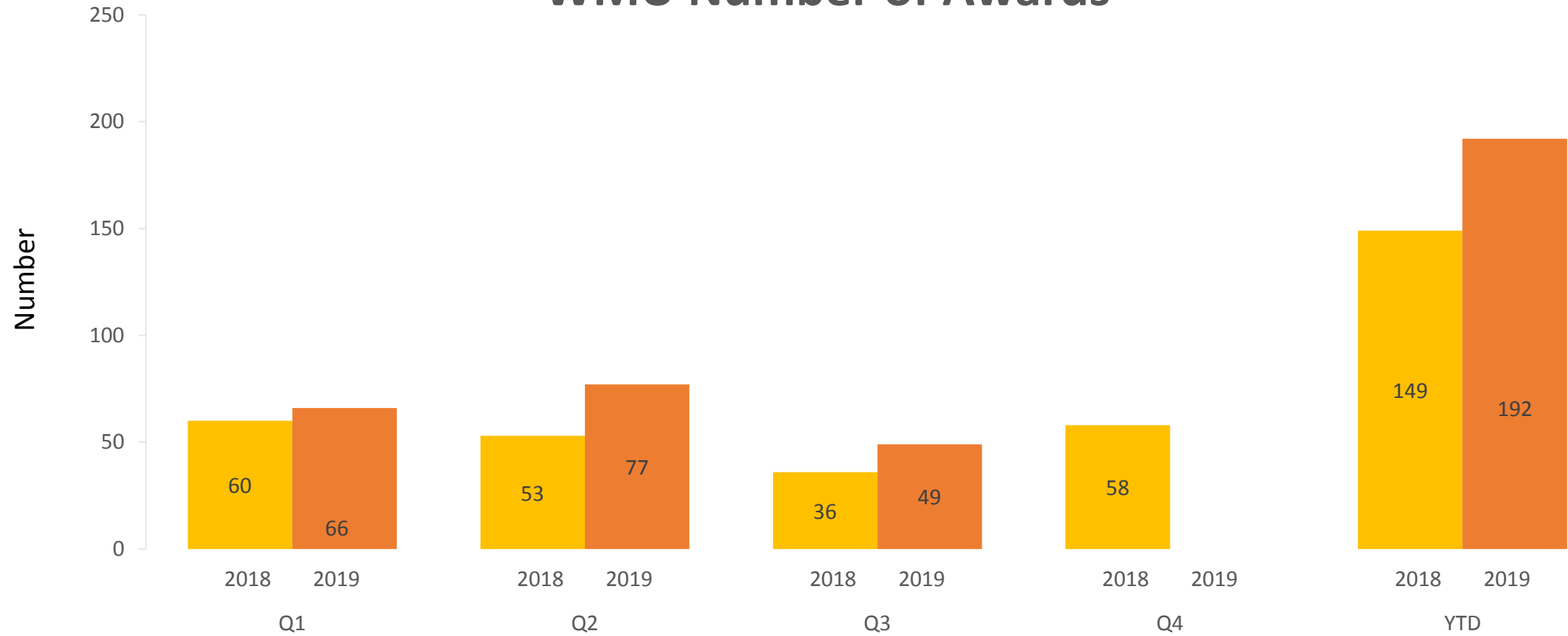
- Spring Convocation was March 26 from 9 a.m. to 2 p.m. Research excellence was celebrated:
 - 34 individuals were recognized with research funding or patent awards at the luncheon
 - Dr. Susan Pozo, 2018 Distinguished Faculty Scholar from Economics was the keynote speaker
 - Discovery Symposia on Education and Sustainability drew researchers across campus together to share their scholarship
 - FRACAA poster presentations involved 23 faculty sharing the results of their proposals from their internally-funded research endeavors

WMU Award Dollars

F & A -
Direct -

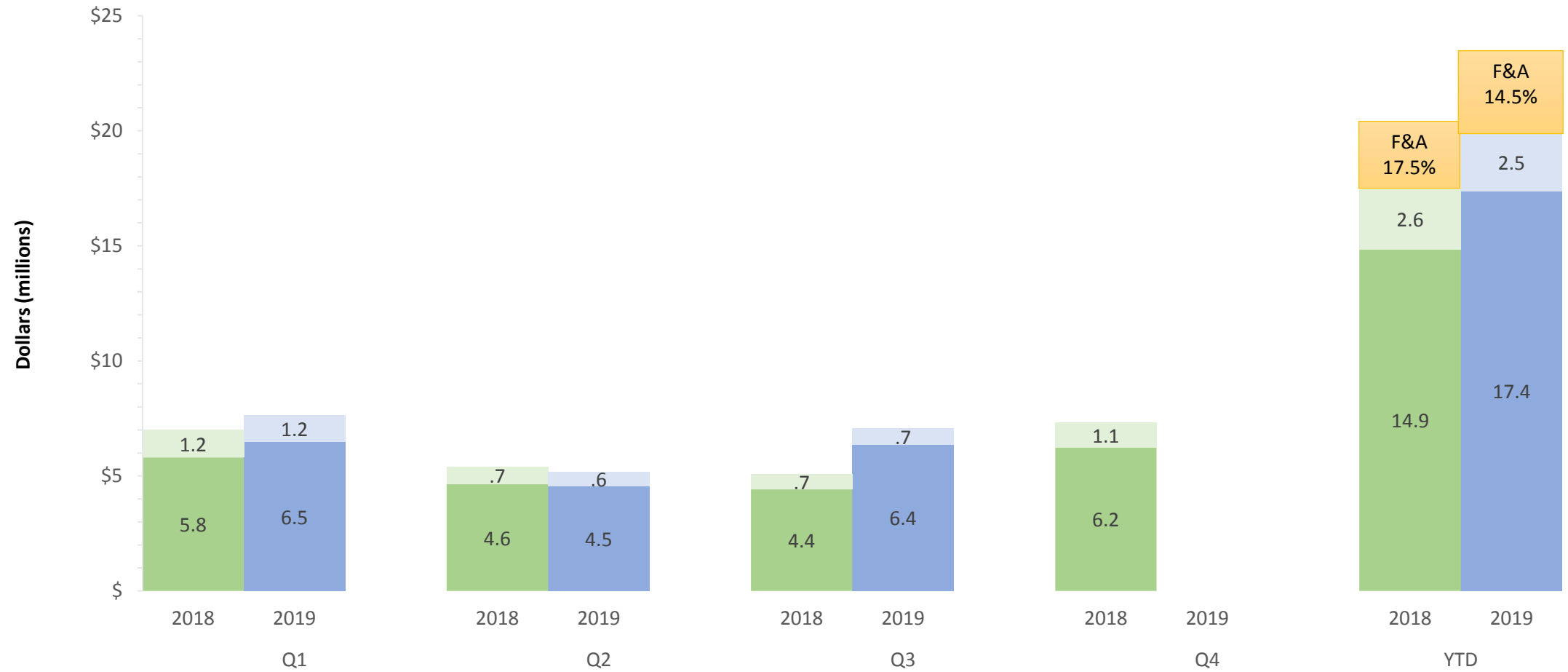


WMU Number of Awards

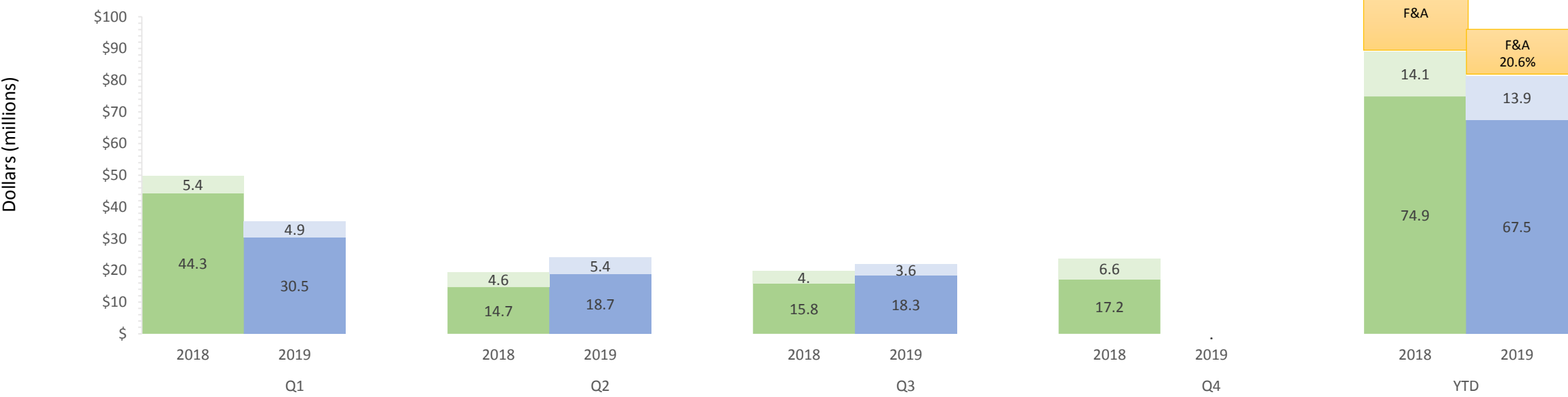


WMU Expenditure Dollars

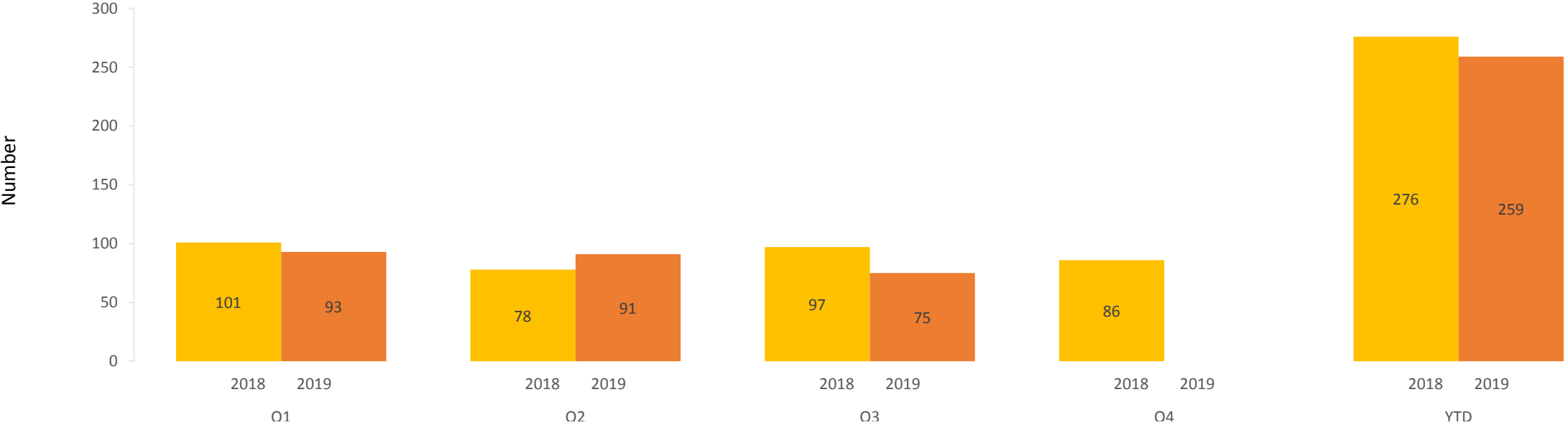
F & A -  
Direct -  



WMU Submission Dollars

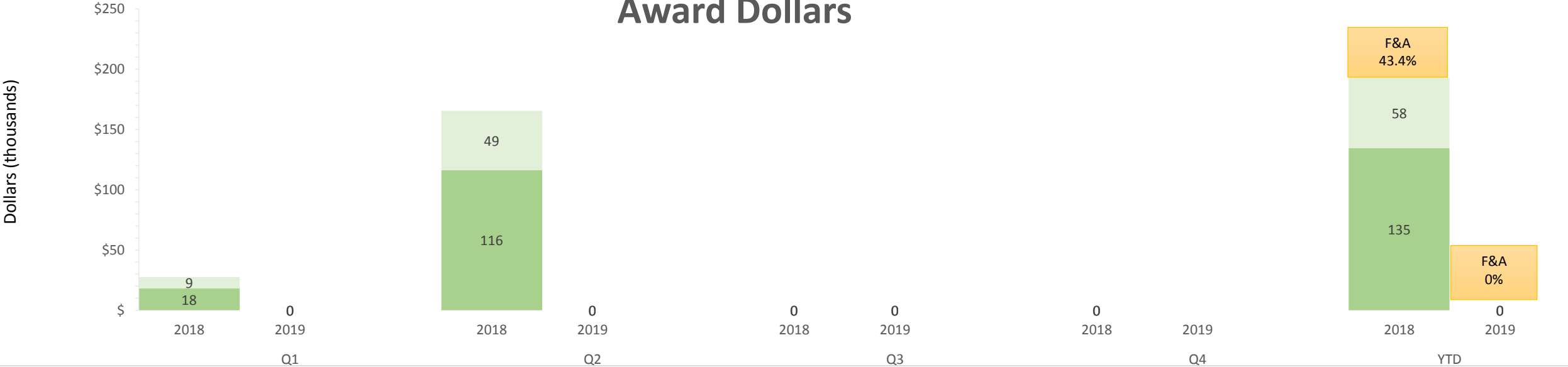


WMU Number of Submissions

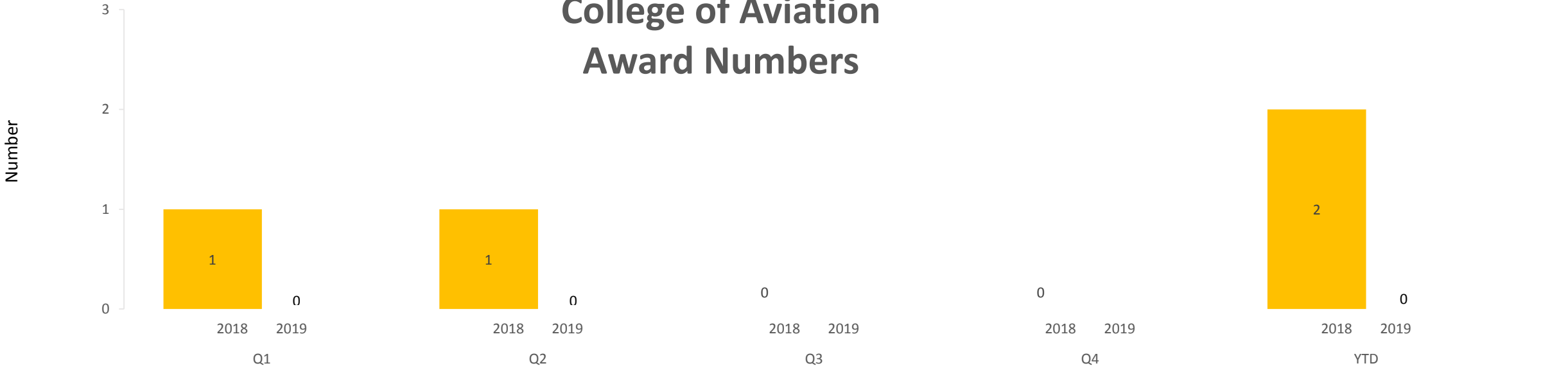


College of Aviation Award Dollars

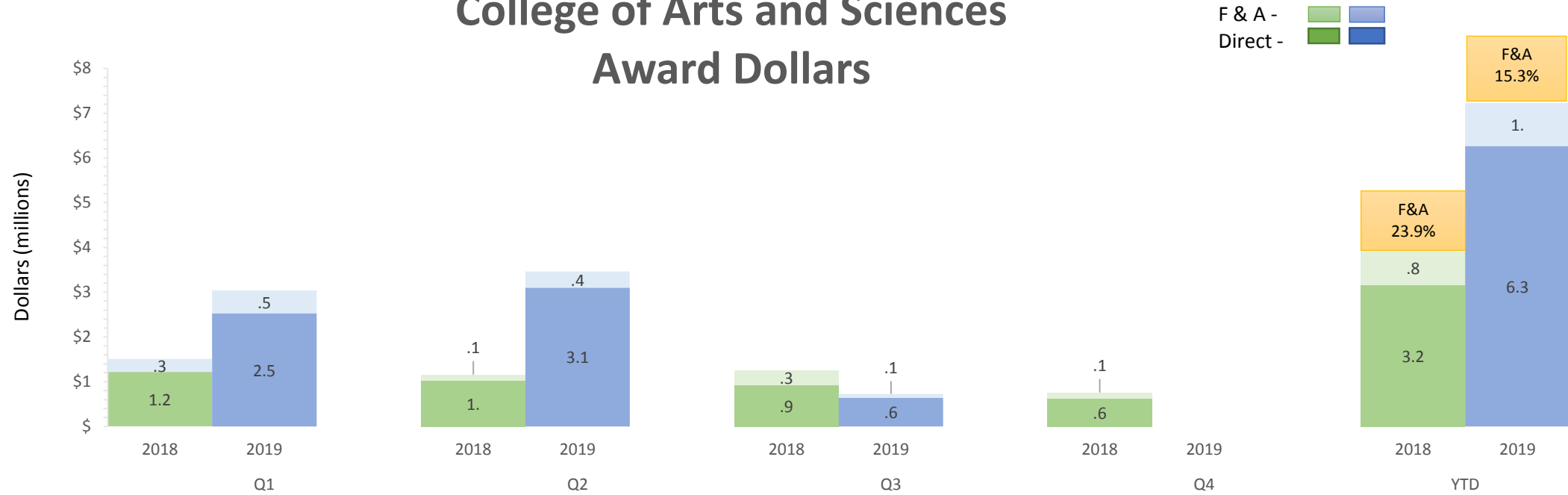
F & A -
Direct -



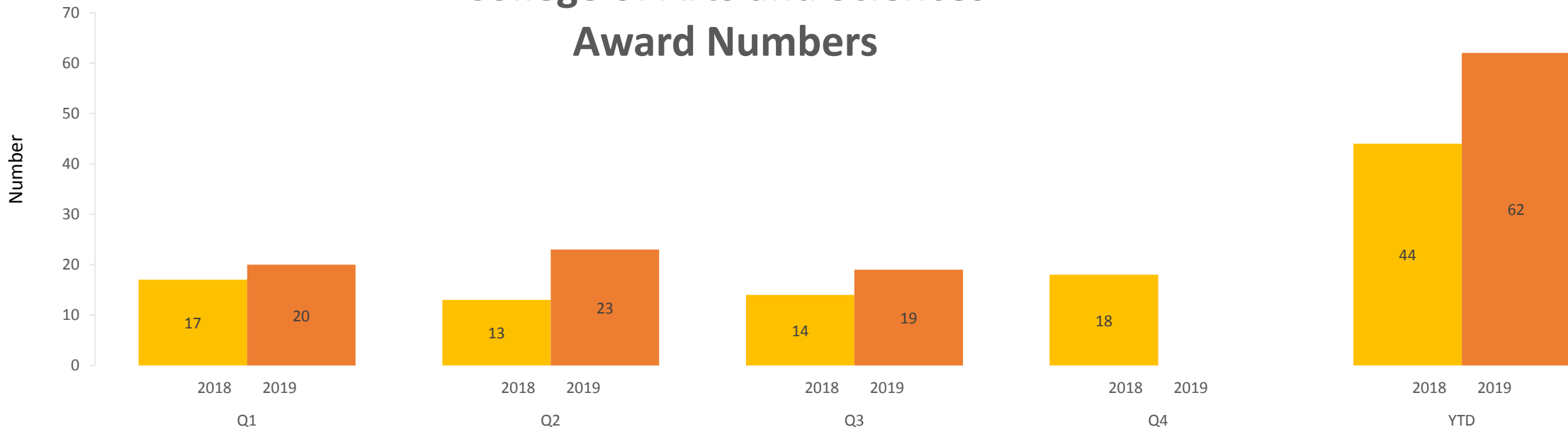
College of Aviation Award Numbers



College of Arts and Sciences Award Dollars

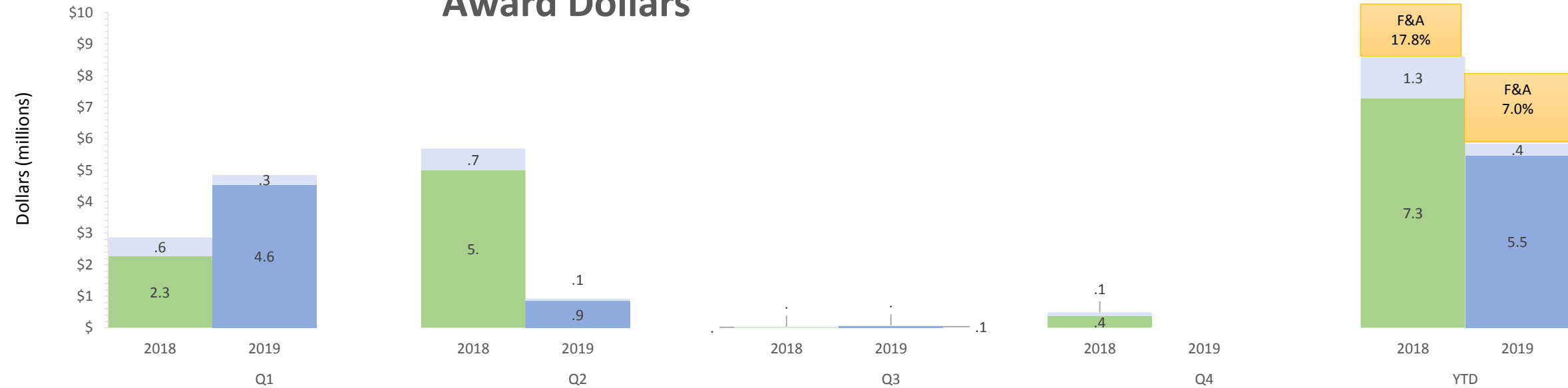


College of Arts and Sciences Award Numbers



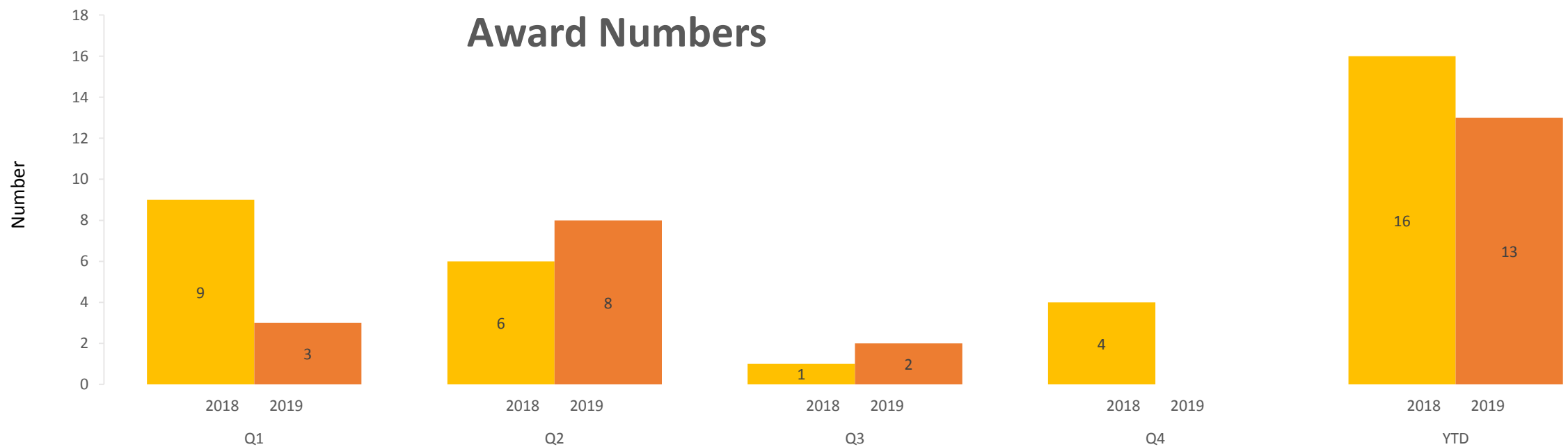
College of Education & Human Development

Award Dollars

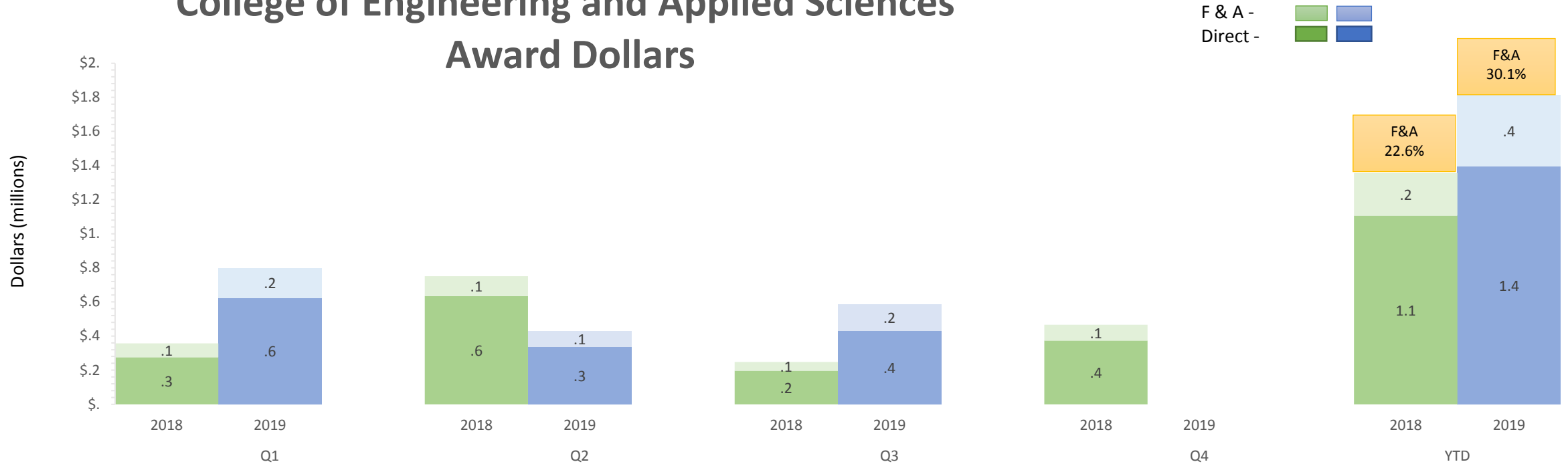


College of Education & Human Development

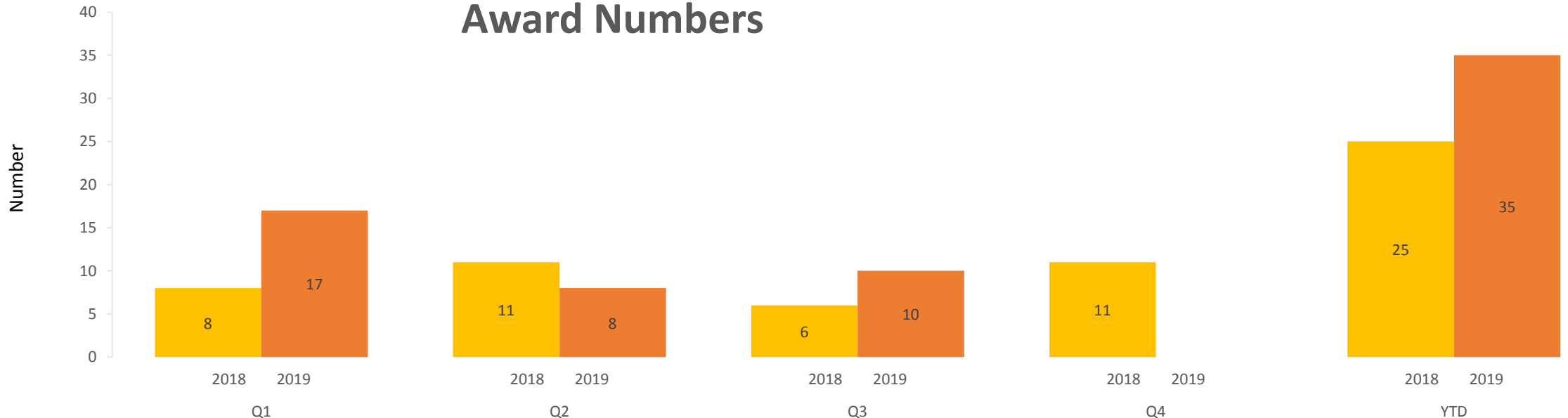
Award Numbers



College of Engineering and Applied Sciences Award Dollars

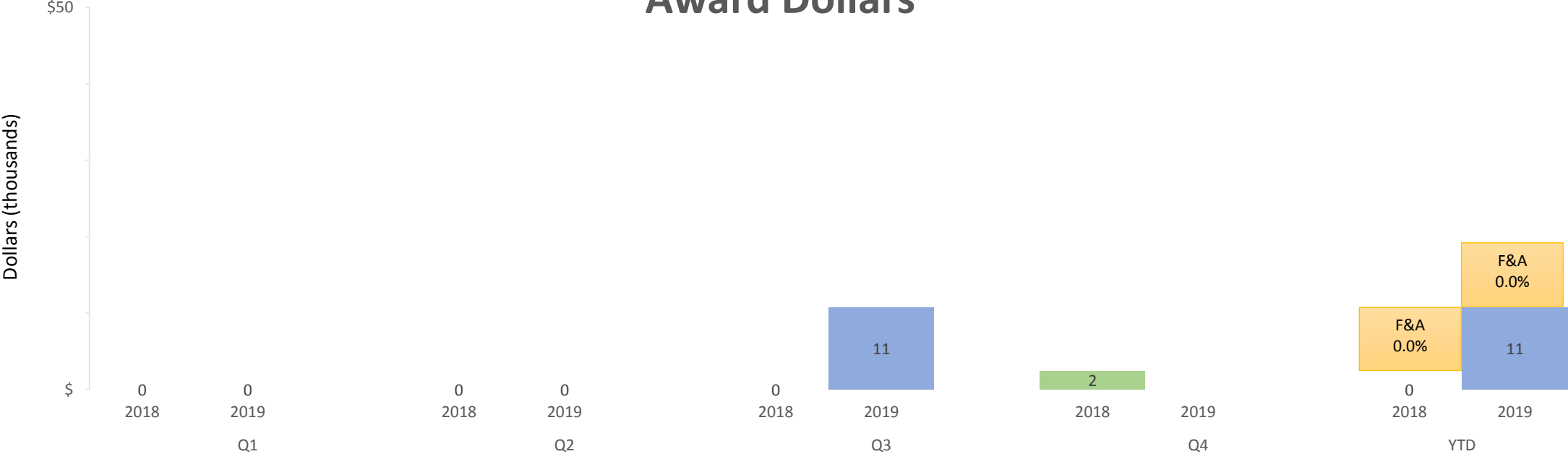


College of Engineering and Applied Sciences Award Numbers

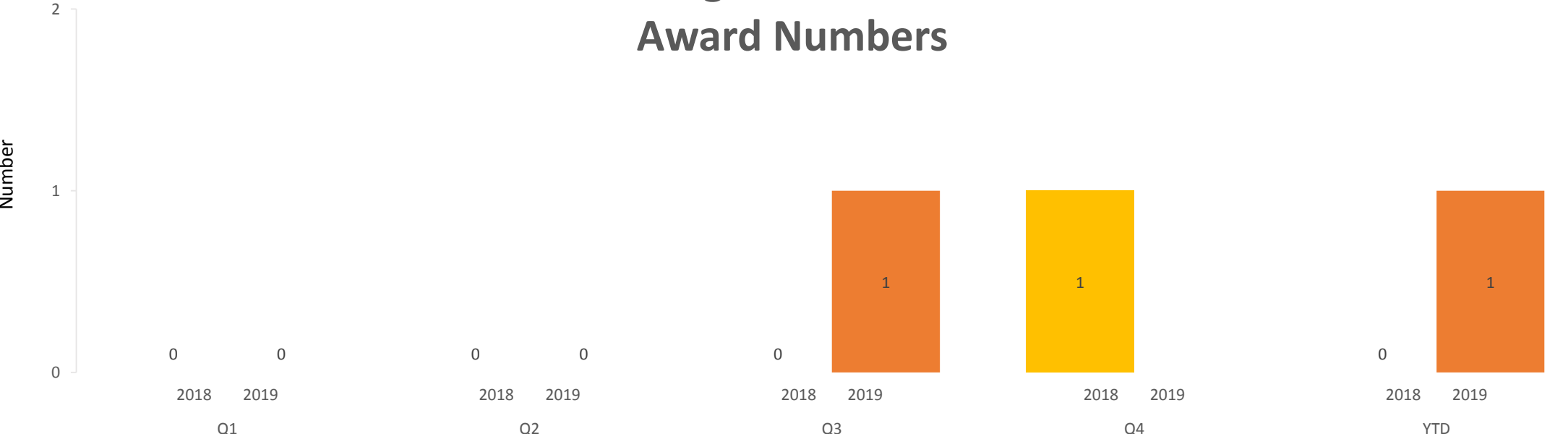


College of Fine Arts Award Dollars

F & A - ■ ■
Direct - ■ ■

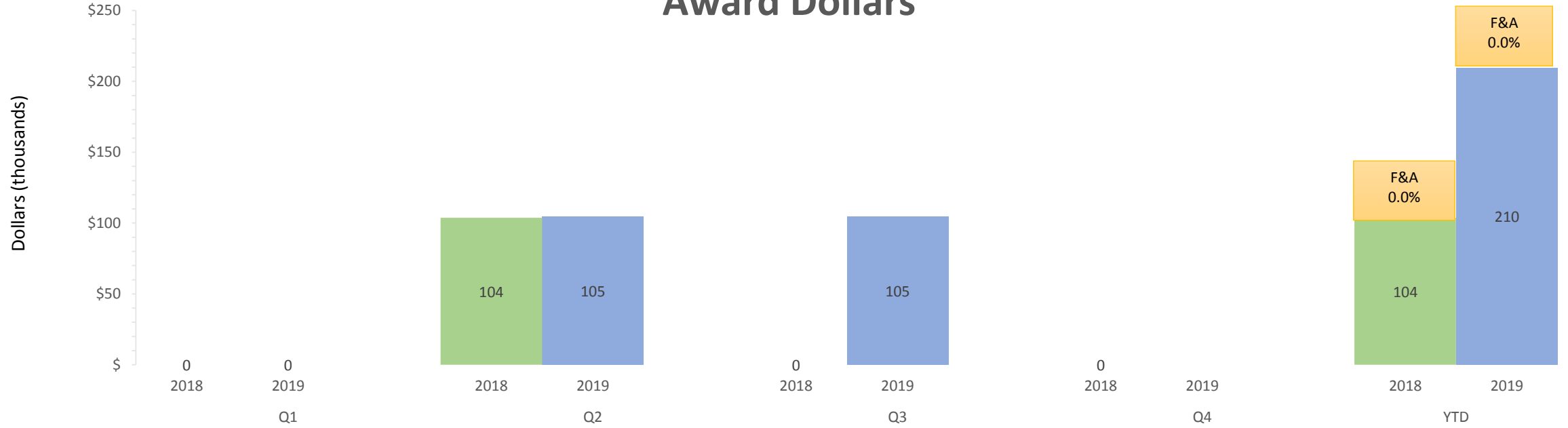


College of Fine Arts Award Numbers

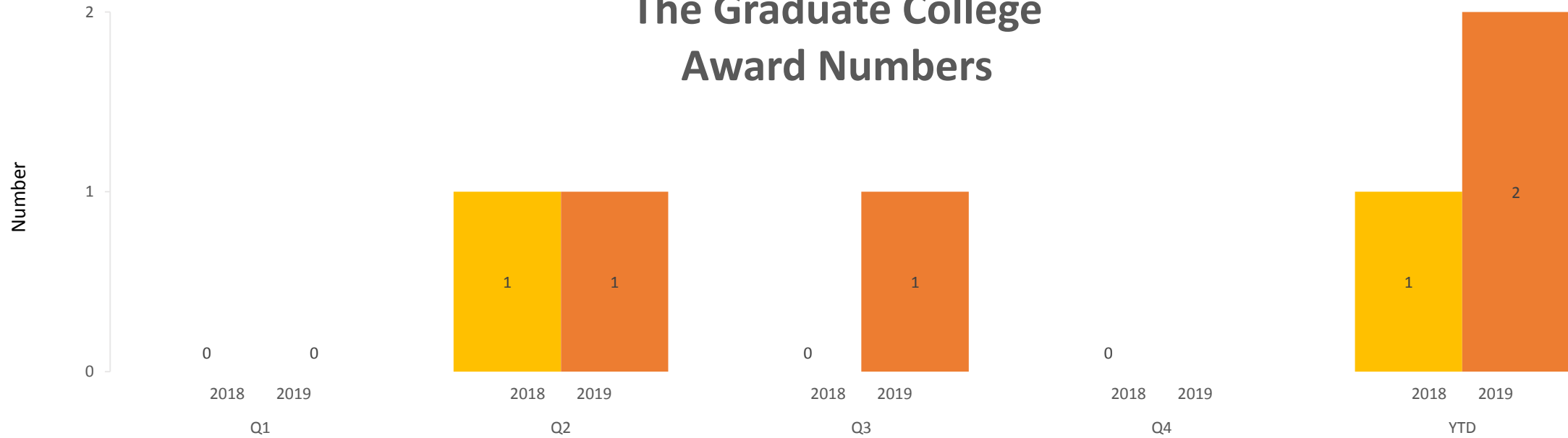


The Graduate College Award Dollars

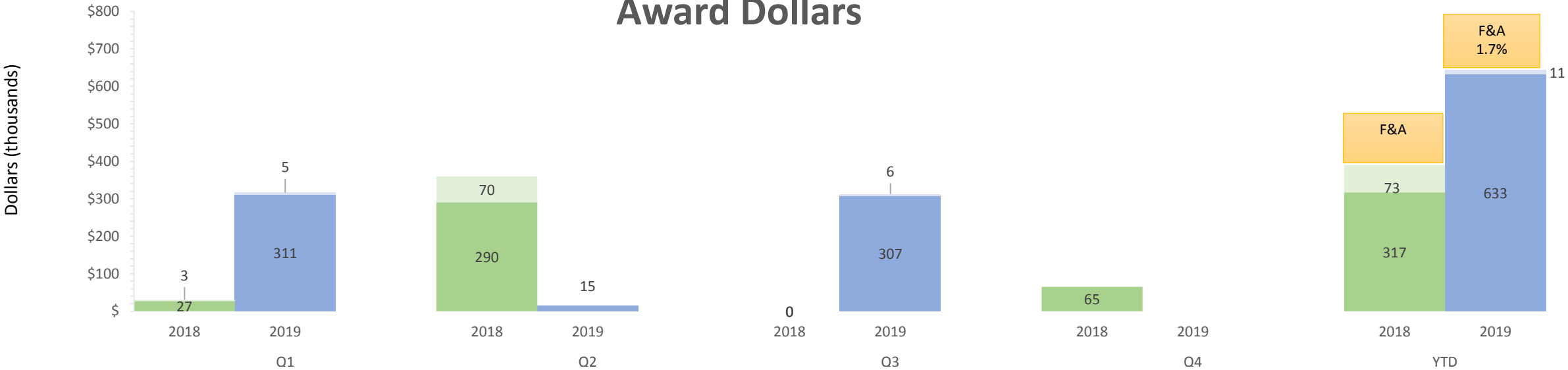
F & A - ■ ■
Direct - ■ ■



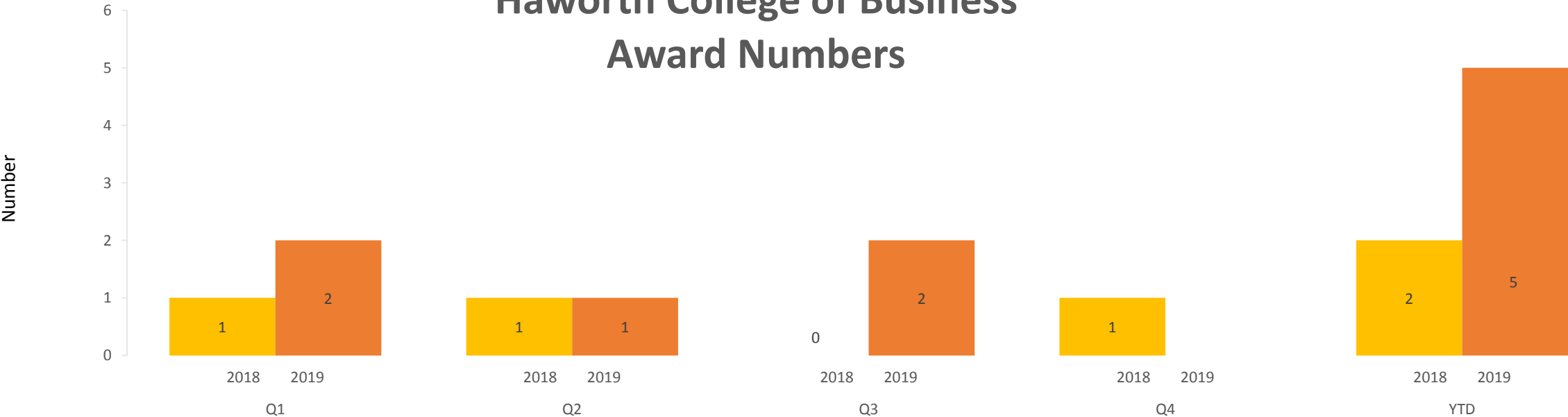
The Graduate College Award Numbers



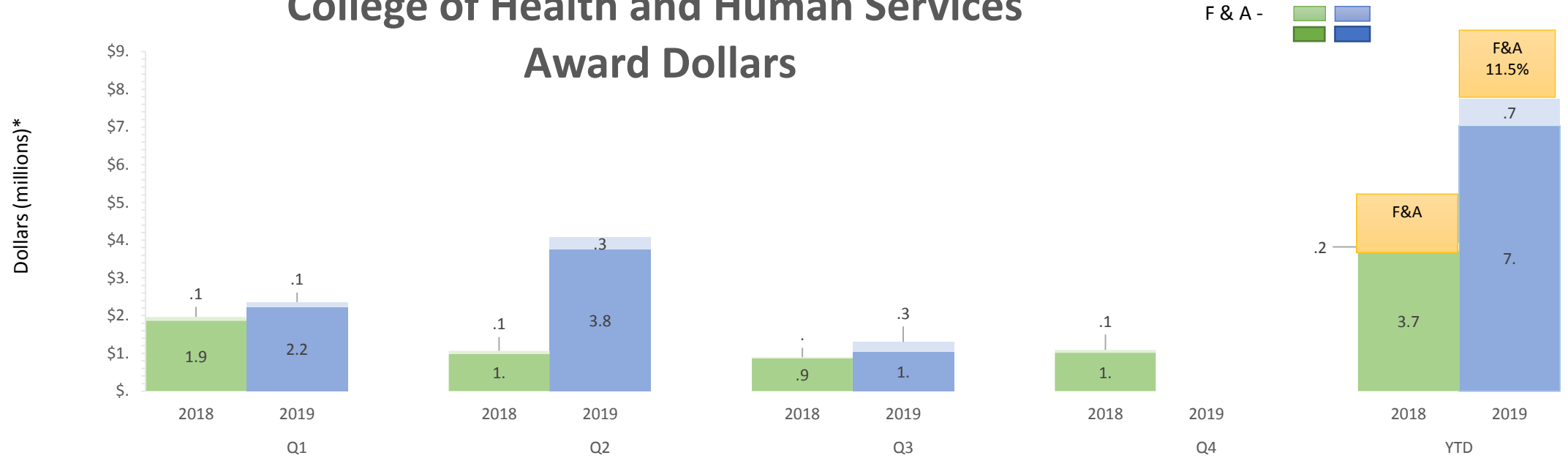
Haworth College of Business Award Dollars



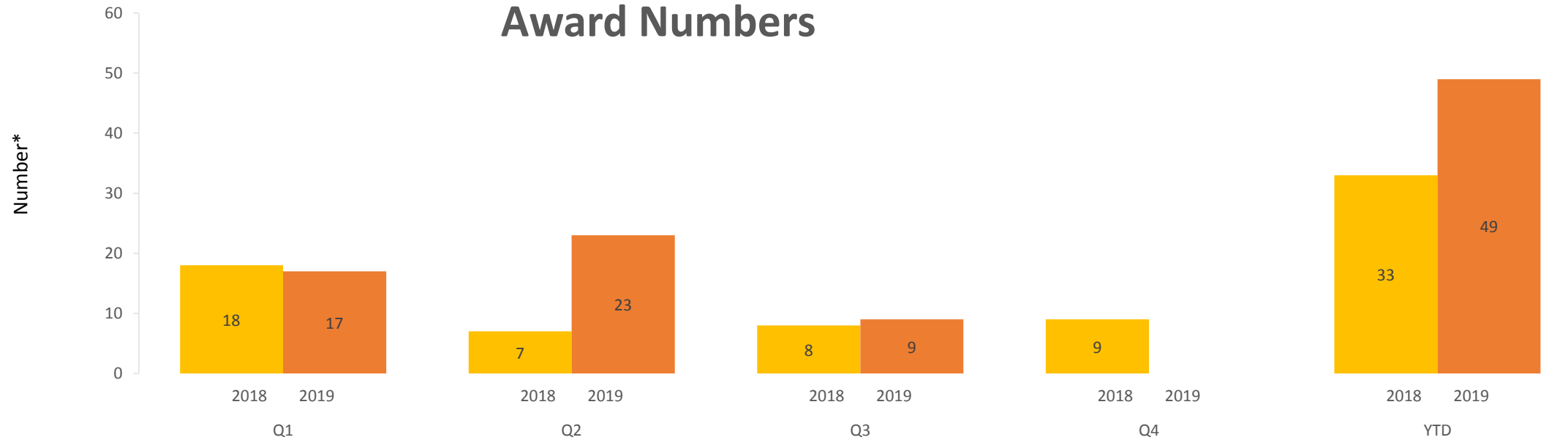
Haworth College of Business Award Numbers



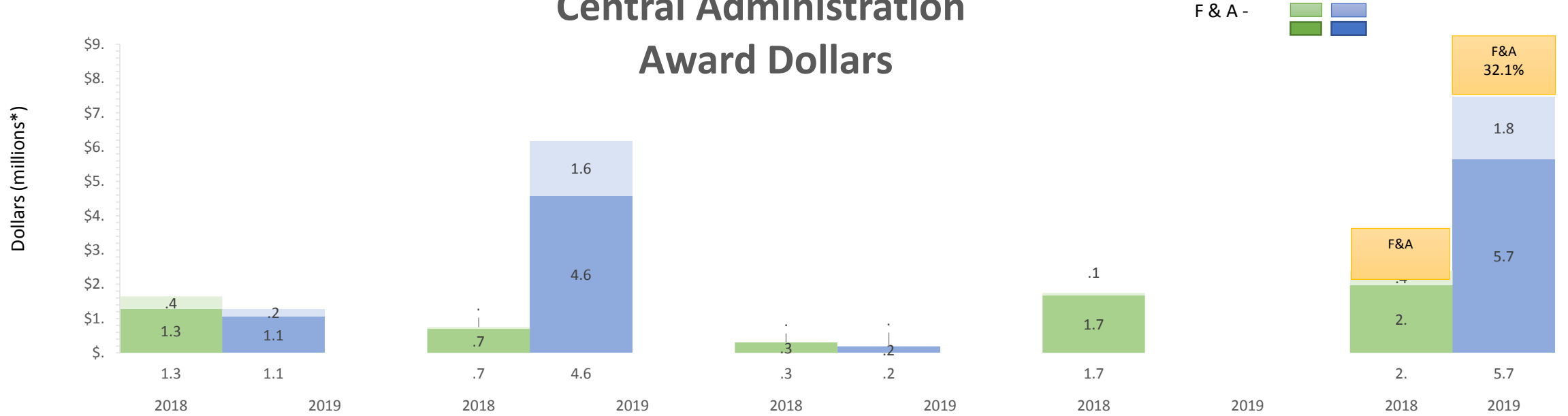
College of Health and Human Services Award Dollars



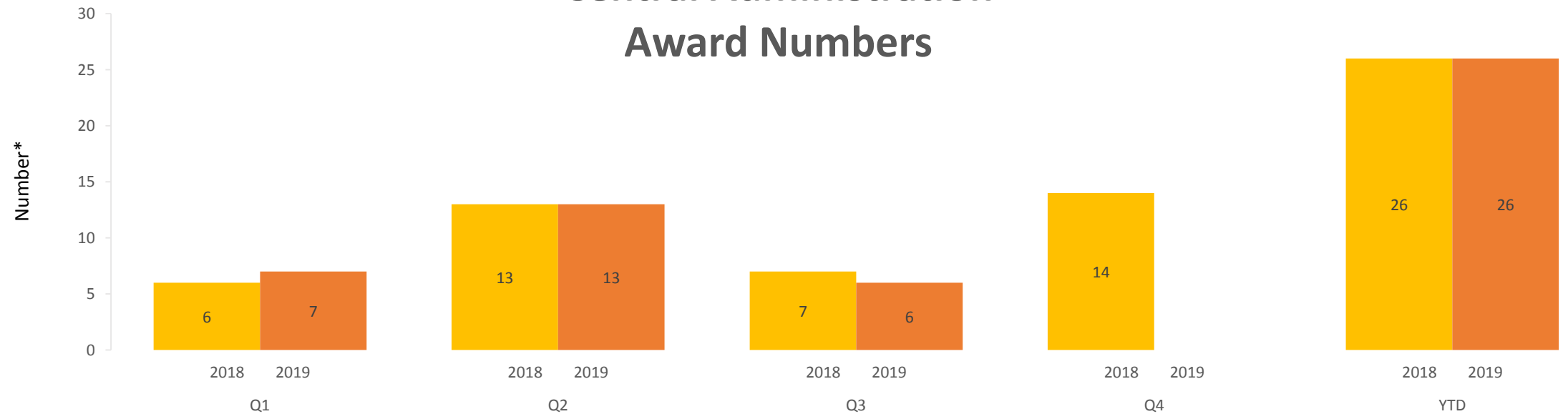
College of Health and Human Services Award Numbers



Central Administration Award Dollars

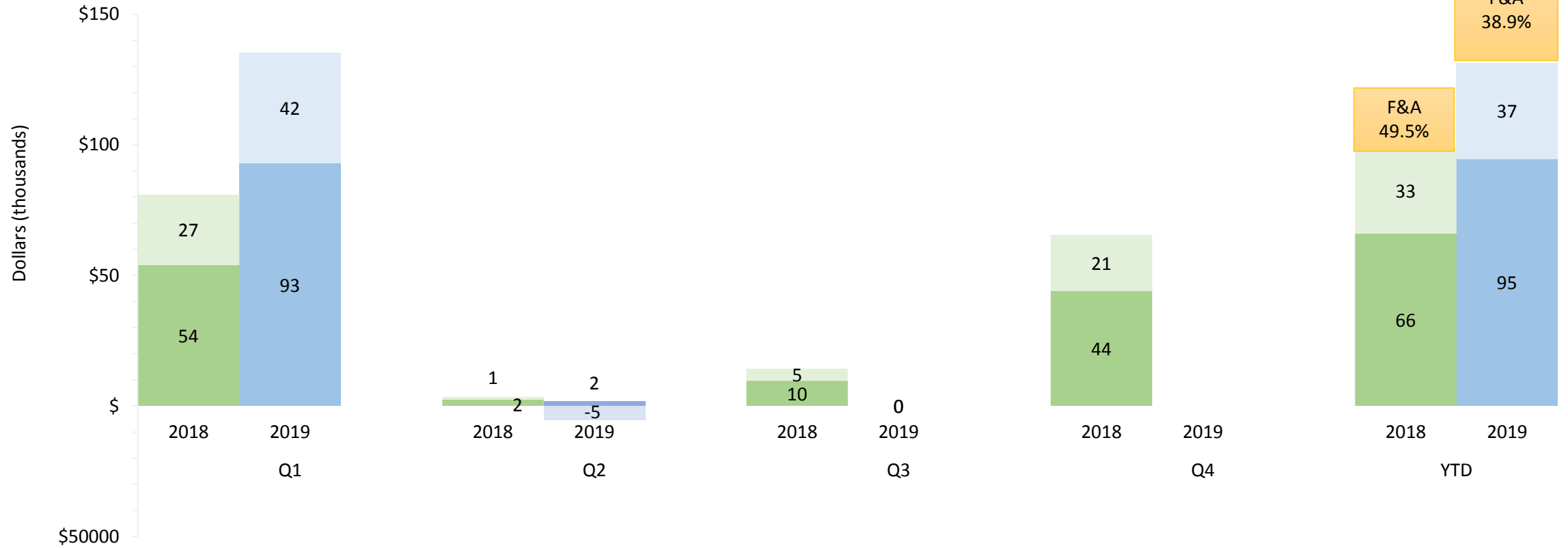


Central Administration Award Numbers

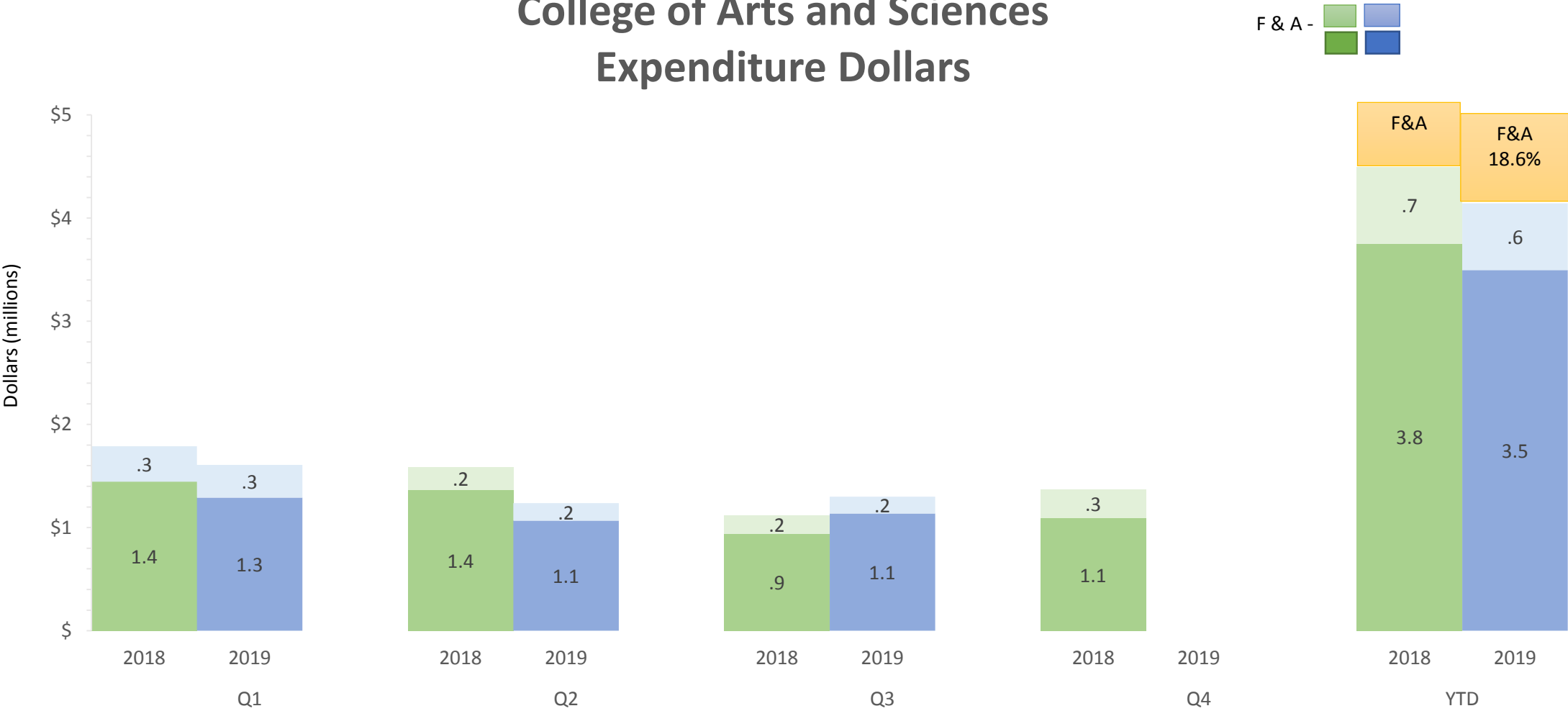


College of Aviation Expenditure Dollars

F & A - ■ ■
Direct - ■ ■

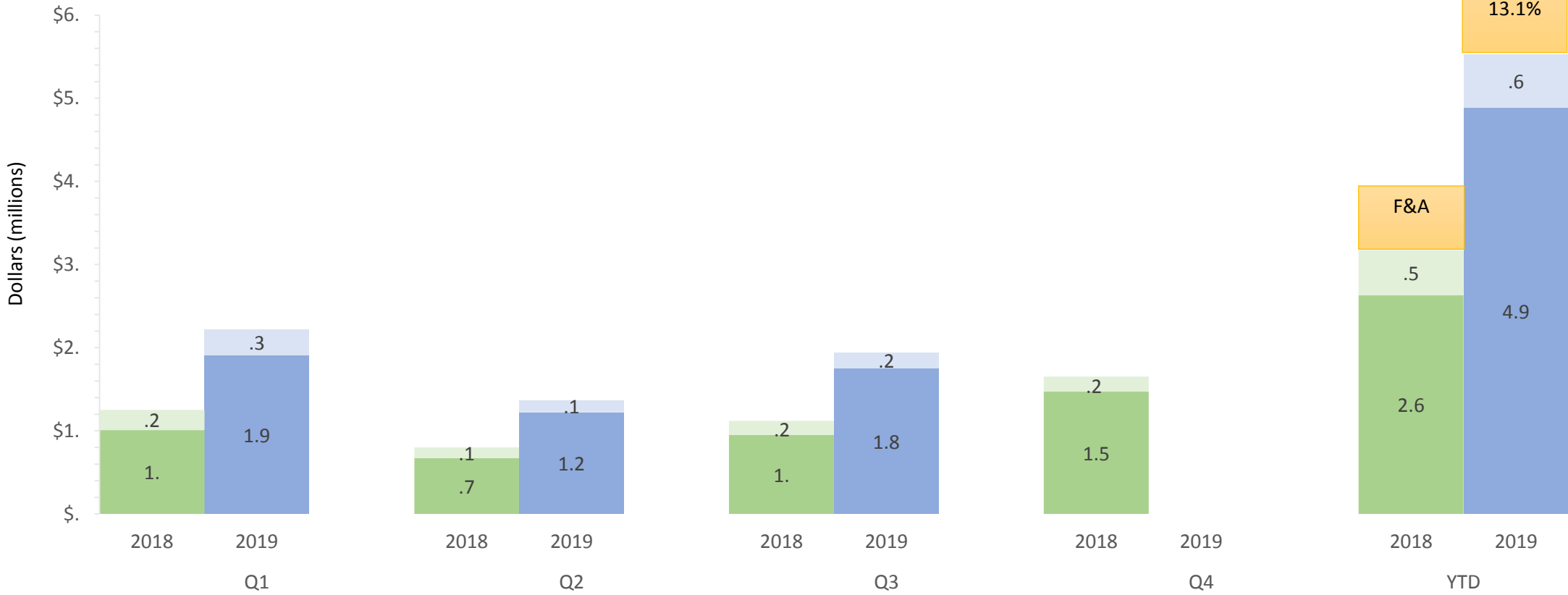


College of Arts and Sciences Expenditure Dollars

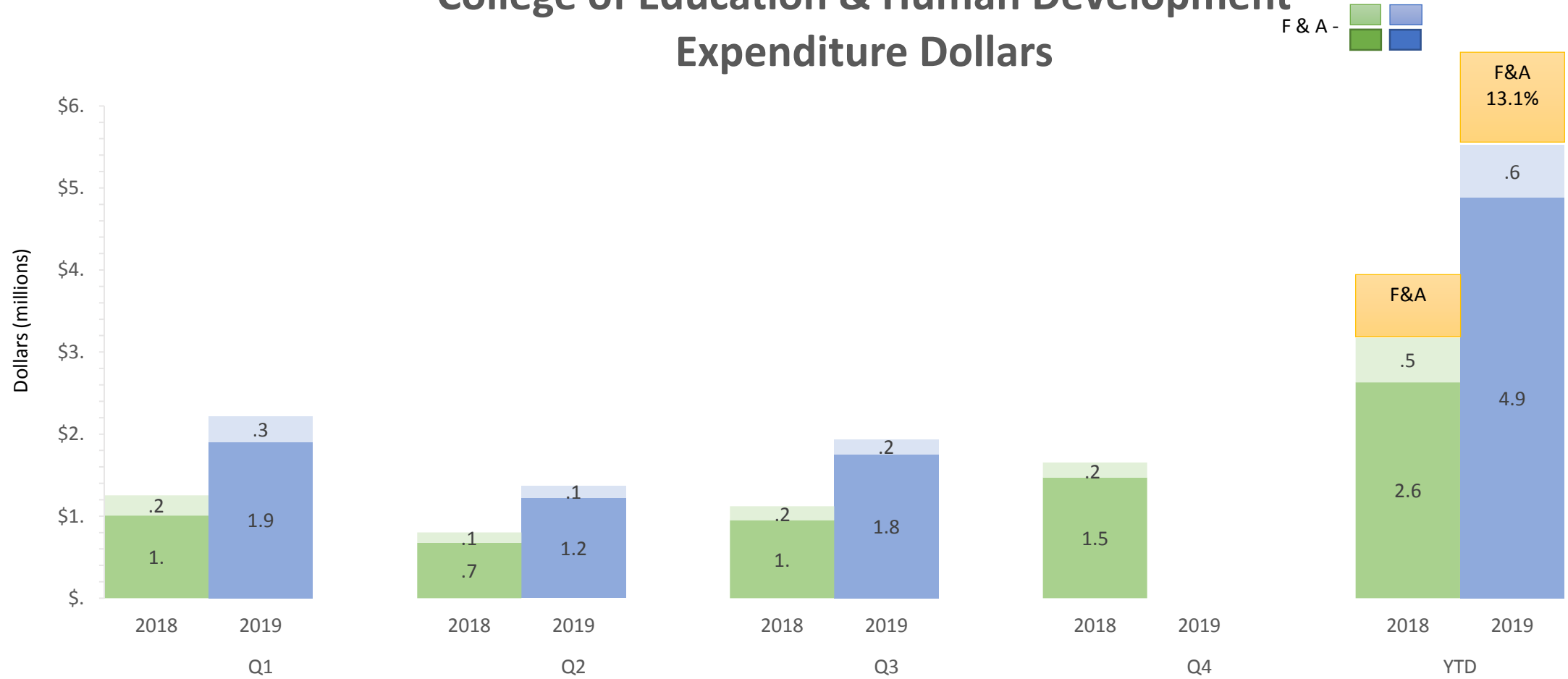


College of Education & Human Development Expenditure Dollars

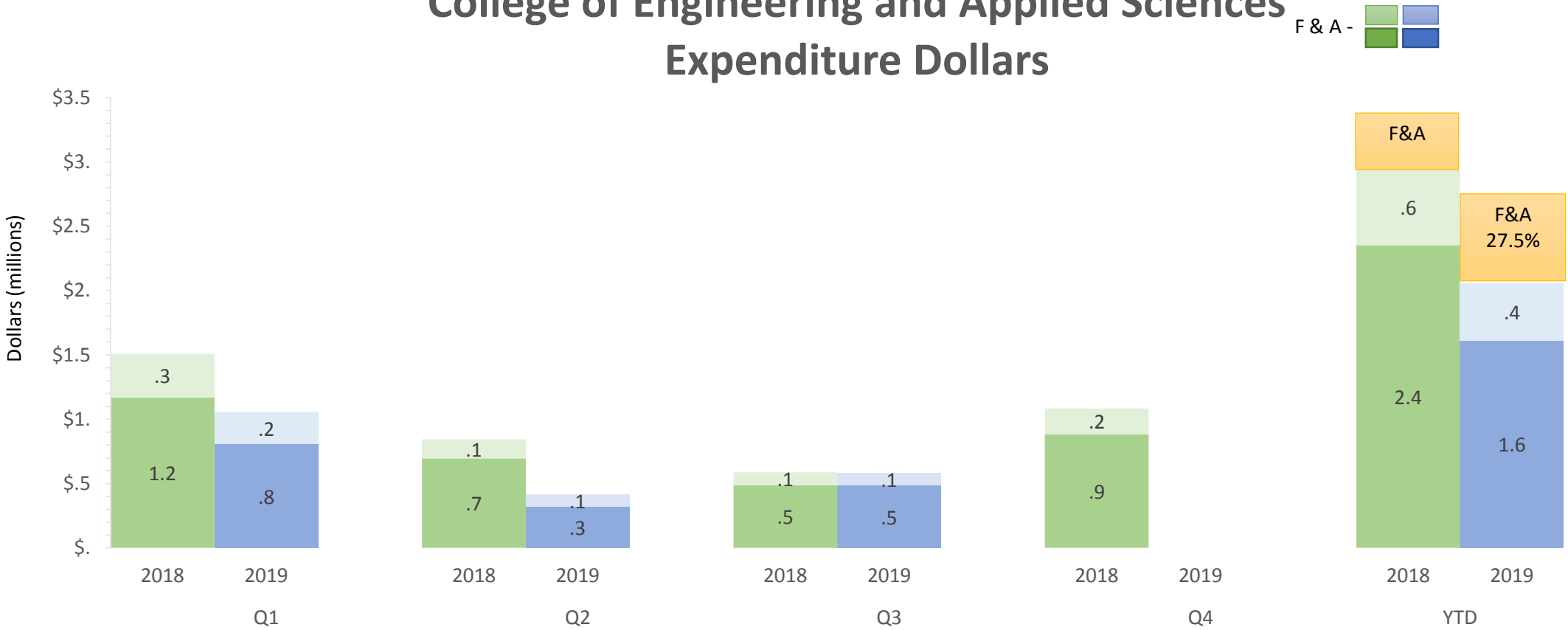
F & A -



College of Education & Human Development Expenditure Dollars

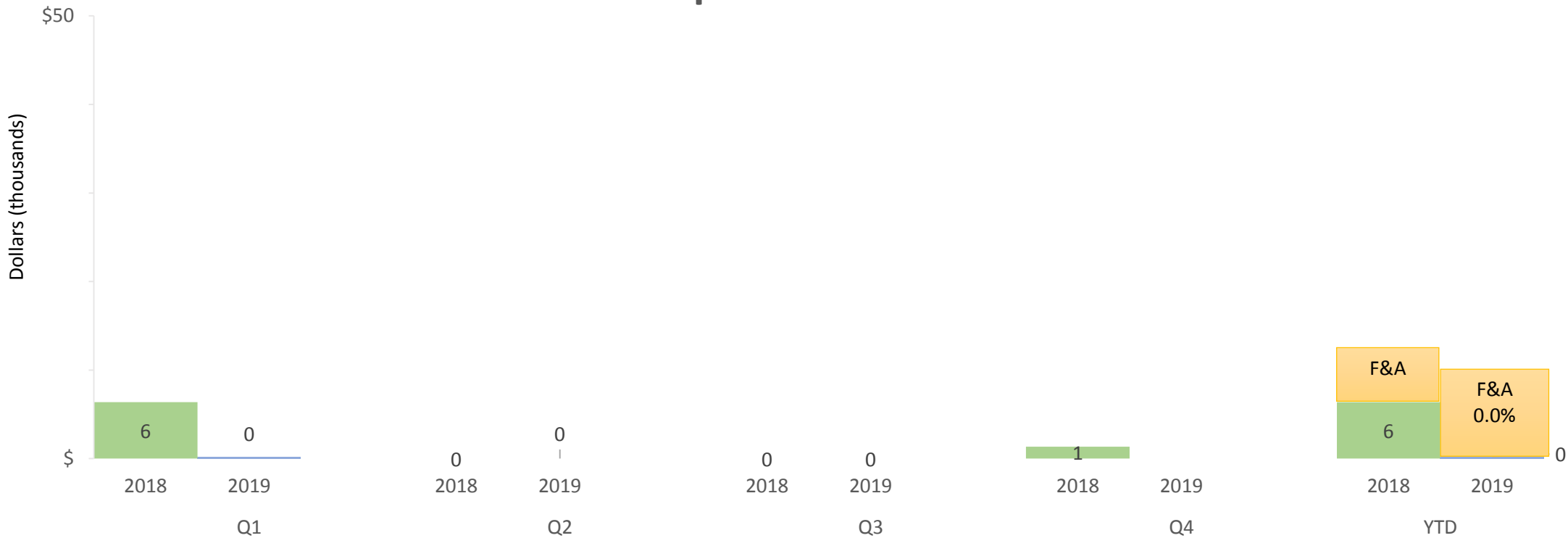


College of Engineering and Applied Sciences Expenditure Dollars

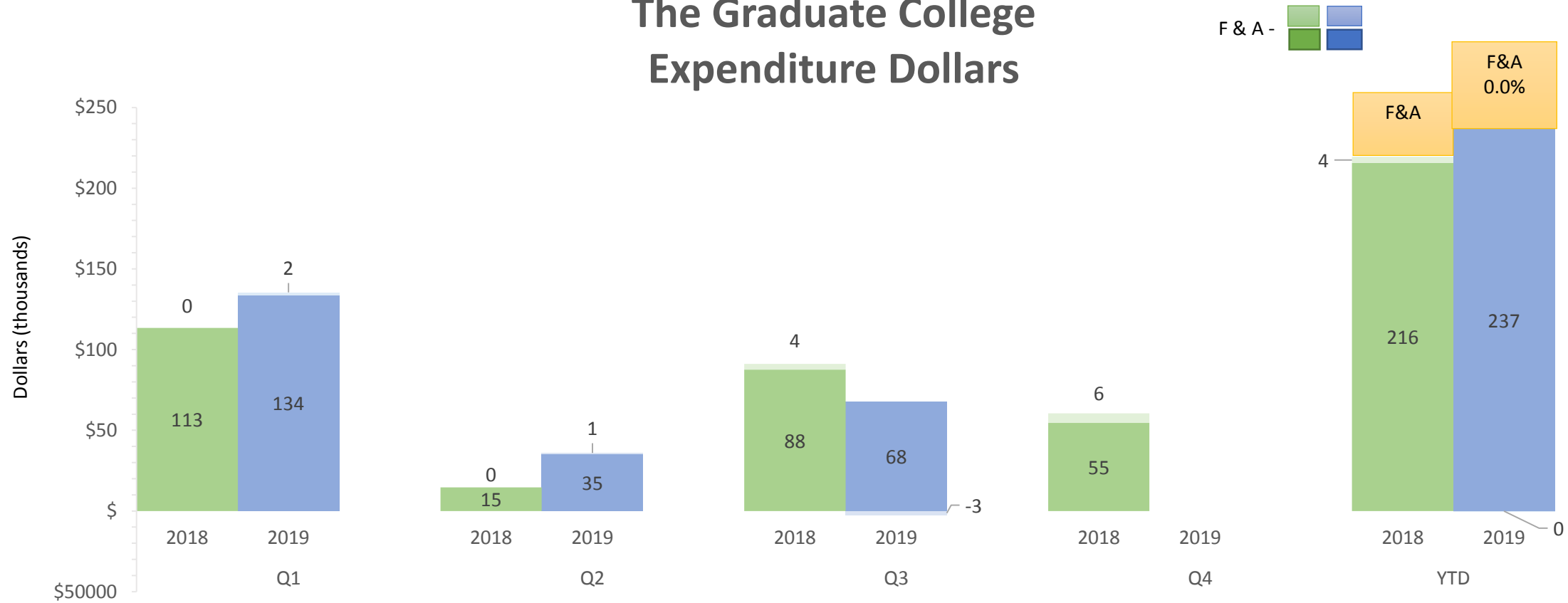


College of Fine Arts Expenditure Dollars

F & A -

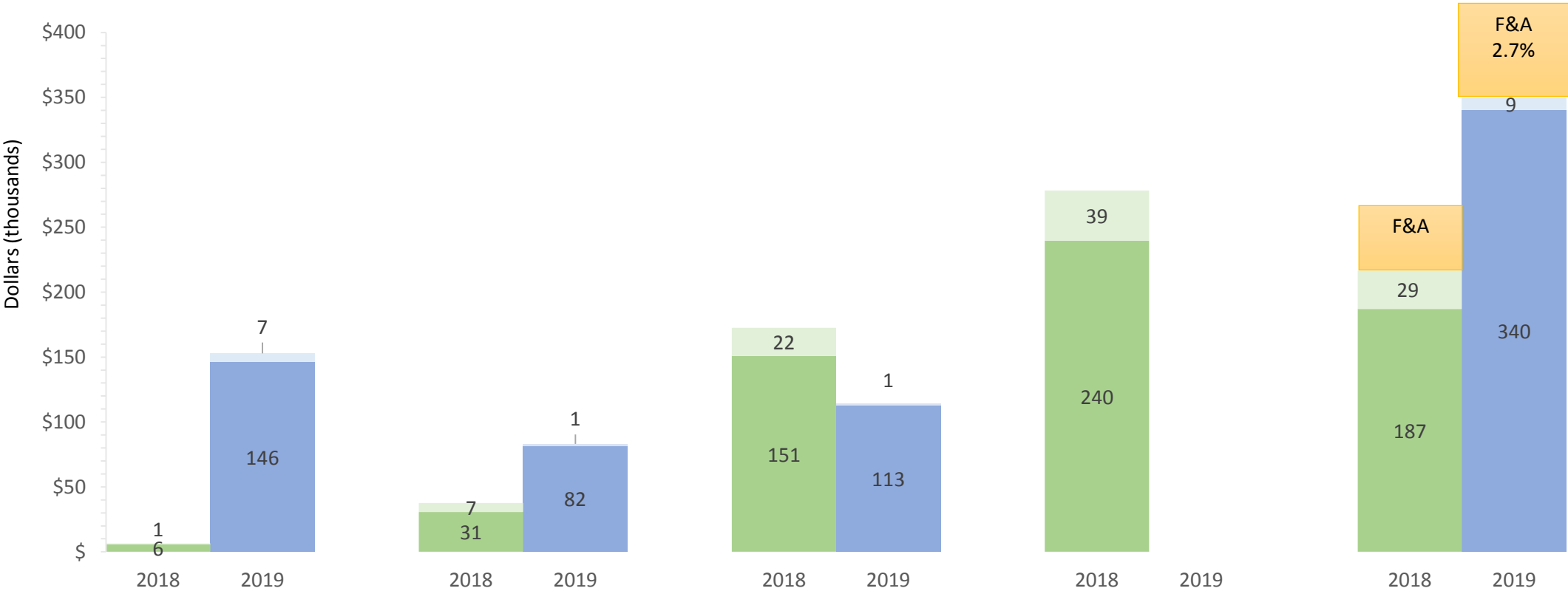


The Graduate College Expenditure Dollars

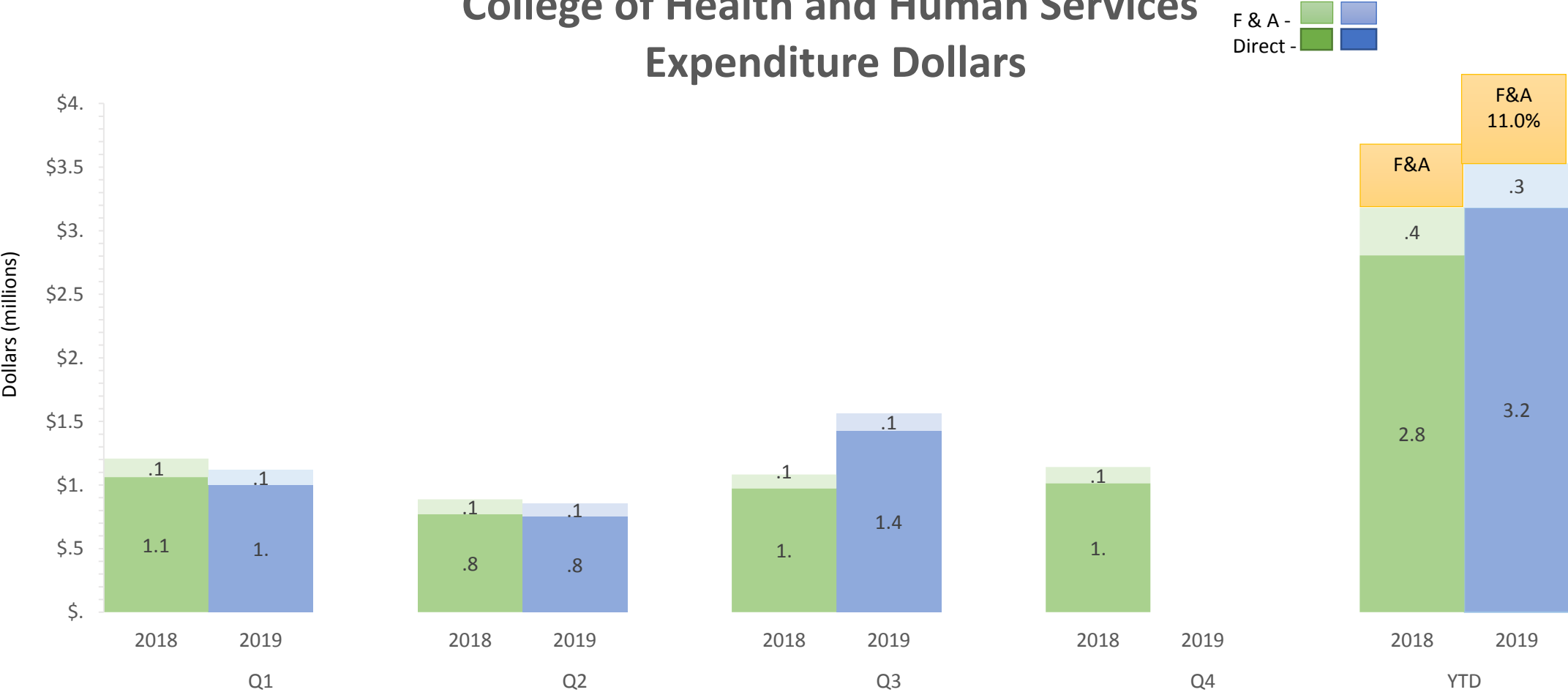


Haworth College of Business Expenditure Dollars

F & A - █ █
Direct - █ █



College of Health and Human Services Expenditure Dollars



Central Administration Expenditure Dollars

