

BACK TO BACK BATTLE

Women's 100 Back Trials 2016 vs 2021

59s

Four swimmers under 59s in 2021

-13%

Distance per cycle decreased 12.8%

15%

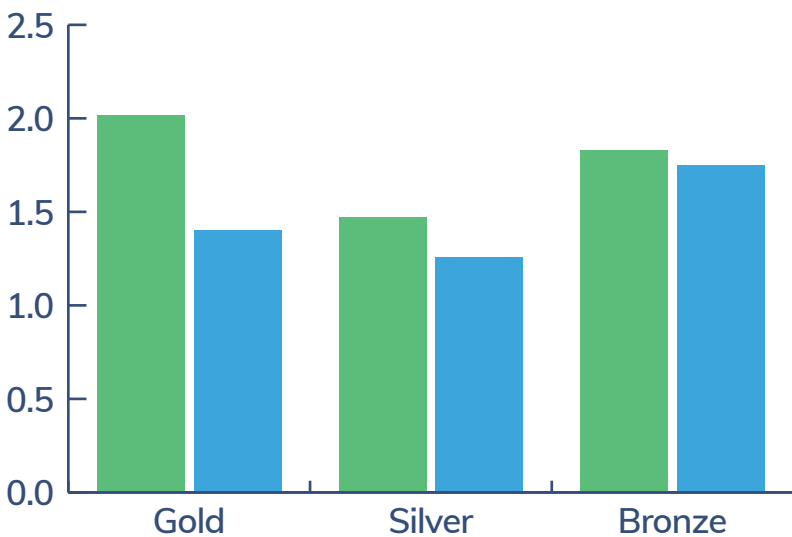
Average Stroke Rate Cycle was 15% faster in 2021

2016 Gold: Olivia Smoliga - 59.02
Silver: Kathleen Baker - 59.29
Bronze: Amy Bilquist - 59.37

2021 Gold: Regan Smith - 58.35
Silver: Rhyan White - 58.60
Bronze: Olivia Smoliga - 58.72

Transitions

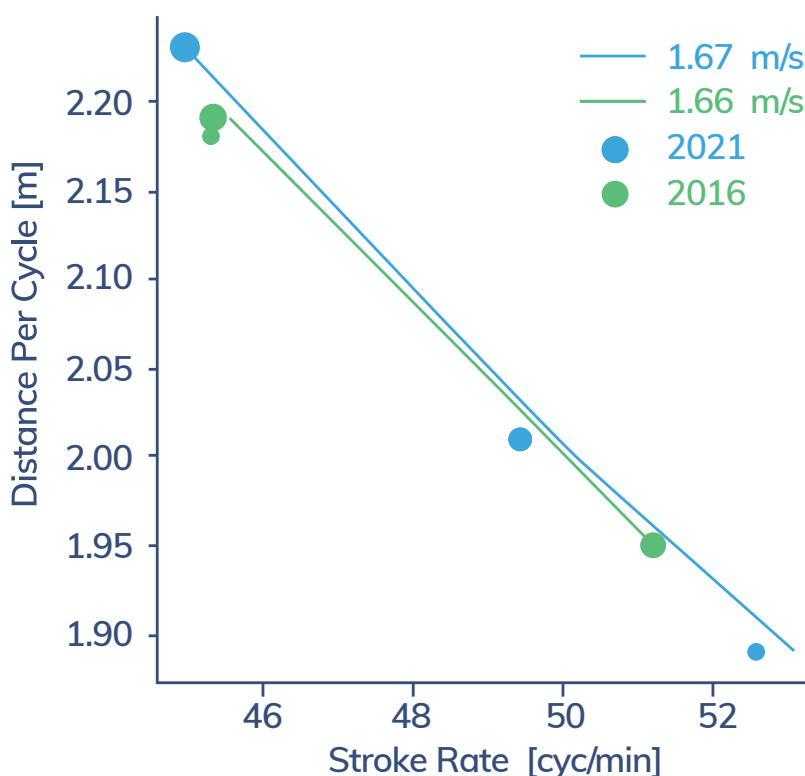
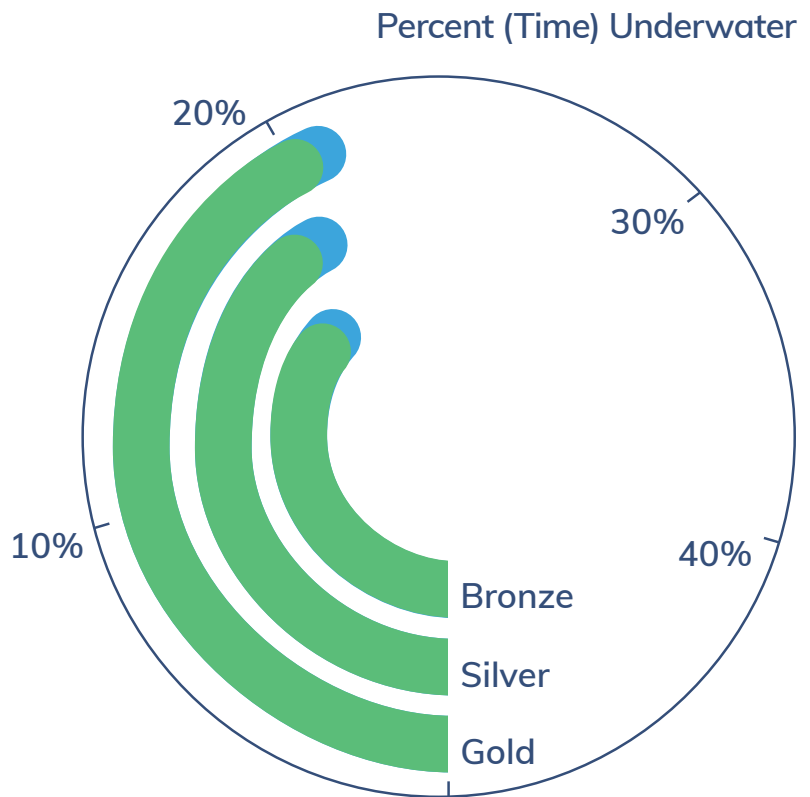
Transition Time



- Overall, Transition Times were 9.28% faster in 2021.
- Smoliga improved by nearly 0.3s in this quadcycle, but still slowest in the top three.
- 2021 Gold Medal Swimmer's Transition Time was 0.62s faster than Gold in 2016.

Underwater

- Speed Underwater was an average of 0.03m/s slower across the top three in 2021.
- The top three benefited from an average Time Underwater increase of 0.25s in 2021.
- Top three in 2021 spent an average of 0.94% more of their total swim Time Underwater.



Overwater

- Overall Stroke Rate was 15% faster in 2021 compared to 2016, with a decrease in Distance Per Cycle of 12.8%.
- Despite her slow stroke rate, Smoliga dominated the Overwater speed by producing the highest DPC in the top three.
- Even accounting for height, Smith had the lowest DPC in the field, but offsets it with by far the fastest stroke rate.

Takeaways

- Transitions are significantly faster, helping speed up the entire race.
- Underwaters are slightly slower, but also longer, allowing them to take advantage of faster underwater speeds compared to overwater swimming.
- Despite Smoliga's Overwater Speed, it was Smith's Underwaters that got her the win. Its normal to see these trade-offs as each athlete races to their strengths.