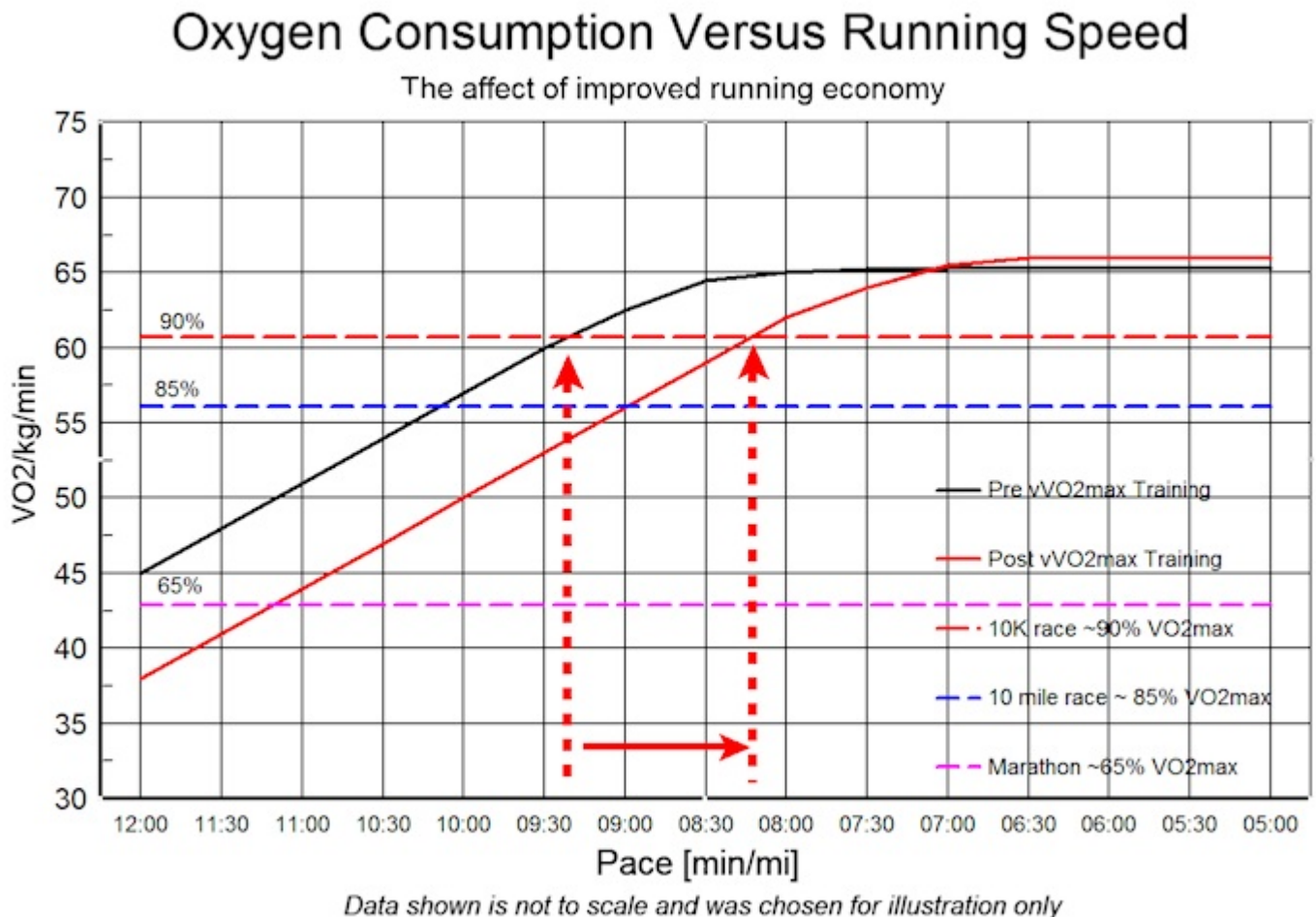


## Performance Improvement Gained From vVO2max Increase

The following is an idealized chart depicting the performance advantage gained from an improved vVO2max.

Note, the runner's vVO2max pace has increased from about 8:30 to 7:00min/mi. [Remember, this is an idealized chart purposely exaggerated to illustrate the point.]. The 3 horizontal lines show average VO2 utilizations, for typical runners, during 10K [90%], 10 mile [85%], and marathon [65%] races. In general, most runners race at about the same VO2 percentages after improving their vVO2max. So, the runner shown here would experience a 10K pace improvement of 9:25 to 8:10. A 58:30 to a 50:45 10K. 10 mile and marathon races likewise improve.



As a practical matter, most very experienced, well-trained racers can expect to see an improvement on the order of a few percent, e.g., 1%, 2% or 3%. However, this is not trivial. For example, assume a 45:30 10K; a 2% improvement is 44:25. That's a major improvement.