

Bike to Work Day Scoring the Business Challenge

The Business Challenge is not scored on a straight percentage basis. Rather, we use a formula that compensates for the size of the company. We do this because it is much easier for a company of five employees to have 100% participation than for a company of 50 to hit the same percentage. Therefore, we factored in variables to calculate the winning status. We separate companies into different size classes so you can compete against other companies of similar size.

Since that does not compensate for the size discrepancy, we have developed a formula to provide the statistics we need. On the average, participation decreases with the square root of company size. For instance, companies with 10 employees average 60% participation, while those with 1,000 employees average 6%.

The Business Challenge is scored on a formula called the “effort index” which compensates for this expected difference in participation. This allows the Commuter Challenge to be fair to the efforts of larger companies while recognizing the high participation levels of smaller companies.

$$\textit{Effort Index} = \frac{\textit{Number of Company Participants}}{\sqrt{2 * \textit{Number of Company Employees}}}$$

When graded on this index, winners from previous years had an effort index between two and four, meaning their participation was two to four times higher than expected participation for a company of that size.

To help level the playing field, Business Challenge teams will contend for first place recognition based on size. Companies will compete in the following business size categories:

- Class A (1-29 employees)
- Class B (30-99 employees)
- Class C (100-299 employees)
- Class D (300-1000+ employees)

Please contact us with any suggestions/comments at btwd@drcog.org.