Understanding the
WisDOT Chained Fisher Construction Cost Index

The WisDOT Chained Fisher Construction Cost Index (WisDOT CCI) provides an indicator of construction cost escalation over time and provides inflation rates to convert past bid history into current year dollars. This index has a base year of 2010 and uses a basket of about 100 bid items. Lump sum and special provision items are not included in the WisDOT CCI.

A Fisher Index is the geometric mean of Laspeyres and Paasche Indices. A Laspeyres Index calculates the change in cost of the same basket of bid items in the current period from the base period. A Paasche Index calculates the change in cost of the same basket of bid items in the base period from the current period.

The chained index approach is when the current construction cost index (CCI) value relies upon the previous CCI value. The current CCI value is the product of the current relative composite index and the previous CCI value. The relative composite index indicates how prices have changed from the previous time period. As long as the basket of bid items remains the same, the relative composite index values for each quarter remain the same no matter what the base year is.

The WisDOT CCI accounts for changes in the basket and weight of bid items and performs better than fixed-weight indices when prices and quantities are volatile. The base date for the WisDOT CCI does not require updating when there is a large spread between the base date and current date compared to using fixed-weight, Laspeyres, or Paasche Indices. The WisDOT CCI uses the same methodology as the Federal Highway Administration's National Highway Construction Cost Index (NHCCI). More information about the NHCCI can be found at the following site:
https://www.fhwa.dot.gov/policy/otps/nhcci/