Chemical abundances are an essential tool for untangling the Milky Way's enrichment history. However, the evolution of the interstellar medium abundance gradient with cosmic time is lost as a result of radial mixing processes; the gradients with age appear flatter, and are not representative of the environment that the stars formed in. Fitting chemical evolution models to the Milky Way disk using current or guiding radii may explain some of the discrepancy found between what is expected with these models and what is observed. In this talk, I will unveil the time evolution of many chemical abundances in the Milky Way disk recovered using stellar birth radii found with a recent empirical approach. In the first part of the talk, I will review the method in recovering the disk's metallicity profile evolution with radius and time, and discuss potential influences from mergers. In the second part of this talk, I will discuss the chemical features lost to radial migration, and the need for data-driven approaches in constraining Galactic chemical evolution models.