It's about time

Before train travel became commonplace, time was strictly a matter between each town and the sun. Towns would hire a surveyor to draw an exact north-south line on the ground. When the shadow of a vertical post met the line, the town hall clock would be set to noon.

Trips by train between towns took hours rather than days, making the time of arrival take on a new significance. Forced to rely on complex charts to determine the local time at each stop, travelers and shippers alike grew insistent with the confusion and with the possibility of two trains unexpectedly occupying the same bit of track at the same instant.

In 1848, facing a similar problem, Britain established a nationwide time standard based on Greenwich local time. But Britain occupies only eight degrees of longitude, so the discrepancy between standard time and local time was negligible. Almost twenty-five years later, North Americans were still struggling to synchronize time across their nearly seventy-degree spread.

In 1872, Canadian railway engineer, Sanford Fleming, divided the globe into twenty-four equal strips, starting at Greenwich. Each zone contained a single standard time and was precisely one hour later than the zone to the east. His attempts to petition Congress, however, were met with resistance.

Eleven years later, the American railroads took matters into their own hands. They agreed to adopt four zones of Fleming’s system as of noon on November 18, 1883. On that day, the adjusted standard time was relayed by telegram to each train depot. Although the standard time convention quickly spread even from the railroads to daily life, it would be fully thirty-five years before Congress would see the benefit, and write standard time into law.

A Diagram Exhibiting the Difference of Time Between the Places Shown & Washington.

A: J. Johnson, site, New York.

In an attempt to reduce the complexity of communicating between cities before the advent of standard time, American engineer and cartographer, A. J. Johnson, designed concentric rings of clocks showing the local time at each city when Washington’s clock read noon. The distance from Washington is shown inside each dial.

A Diagram of the United States Shewing the Bearings and Distances of the Principal Places from Washington, and from Each Other, with a Scale of Time.

John Melish, site, Philadelphia.

The cities in this map are placed in no other context than latitude, longitude, and direct mileage distance. A second measurement scale along the bottom of the map shows local time at each meridian of longitude, in relation to the local time in Washington.