

Hubway Data Visualization Challenge
Hubway Bicycle & Dock Inventory Dynamics

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A major challenge for Boston's Hubway is bicycle inventory management, i.e. ensuring bicycles are available at *origin* stations where and when riders want them, and that there are open docks at *destination* stations. This animation shows the averaged net cumulative bicycle depletion across stations in hour-long time steps throughout a weeklong period (starting at Saturday midnight), with no rebalancing applied. Stations are shown with their id numbers. Each trip beginning at a specific station adds to its count, while each trip ending at that station subtracts from its count. The high activity around commuting times is clearly evidenced, as is the natural cycle of rebalancing between mornings and evenings. The major challenges in bicycle distribution emerge throughout the sequence on timescales of both hours and days, with major depletions occurring at Central Square, Charlestown, North Station, Government Center, Faneuil Hall, and Tremont Street, and major accumulations occurring at South Station, the Convention Center, Boston University area, and MIT. I would have loved to superimpose a map but did not know how to do it!

URL: <http://www.youtube.com/watch?v=Plu2K8STTpQ>