“Some researchers have proposed to use radio frequency identification (RFID) or barcodes to collect data relating to labor, e.g., see Jaselskis and El-Misalami [[23]](https://www.sciencedirect.com/science/article/pii/S0926580504001232#bib23); others have suggested spreadsheet or electronic forms [[24]](https://www.sciencedirect.com/science/article/pii/S0926580504001232#bib24), [[25]](https://www.sciencedirect.com/science/article/pii/S0926580504001232#bib25). The common denominator of these approaches is that they all rely on the workers or foremen to enter the data into the computerized systems. As a result, all these methods suffer from most or all of the drawbacks of the customary manual methods of data collection.

Echeverry and Beltran [[26]](https://www.sciencedirect.com/science/article/pii/S0926580504001232#bib26) proposed a system for labor inputs and materials tracking comprised of three modules: (i) a database which includes the project's plans, (ii) data collection using barcodes and manual inputting and (iii) an analysis modu≈W#le. This model was neither validated nor tested.

Another approach to labor inputs/productivity measurement uses a full-time observer(s) and a hand-held computer [[27]](https://www.sciencedirect.com/science/article/pii/S0926580504001232#bib27). The observer tours the site at regular time intervals and records tasks being undertaken, as well as what each worker does at the time of observation. The activity of the worker is classified as productive, nonproductive, productive support and standby. These data are downloaded to the central computer and processed to give a report for each workgroup relating to the percentage of their added value vs. nonadded value times.”



Citations:

<https://www.bigrentz.com/blog/construction-safety-statistics>