The usual standard used for reference in pill counting time is the time it takes to fill a script manually using a counting tray. These times vary depending upon the operator. The following times are based upon averaging the results of many operators and are for pill counting only (do not include fetching the supply bottle from its storage place or any drug verification); The general form of an equation for this operation would be P = nV + C, where P is the number of pills counted, n is the number of 5 pill sweeps made with the counting spatula, V is the time per sweep in seconds, and C is the time spent in setting up the counting (opening the supply bottle, pouring an adequate amount out on the tray, pouring the counted pills into the customers vial, pouring the excess back into the supply bottle, and screwing the cap back on the supply bottle)

We find that V = 3.3 seconds, and C = 7.2 seconds. This produces the following pill counting times;
for 30 pills… 6(3.3) +7.2 = 27.0sec.
for 60 pills…12(3.3) + 7.2 = 46.8 sec.

for 90 pills…18(3,3) + 7.2 = 66.6sec.
This correlates closely with the empirical times that were measured. If we assume that out of every 10 scripts filled 6 are for 30 pills, 3 are for 60 pills, a one is for 90 pills, then the average pill counting time per script = (6*27.0 + 3*46.8 +1*66.6)/10 = 36.9sec.

Lots of assumptions, such as the supply bottle has enough pills to fill the script, no interruption ns, no desiccant containers, no pills roll off the tray, etc.
These are the types of times that automation suppliers use to produce the economic justification for their systems. This is usually the largest single time expenditure per script, but it may not be after automation.

Another area in which time is spent is in fetching the supply bottle containing the required drug from its storage area to the drug counting work station(s), and then returning it after the script is filled. This time varies with the pharmacy layout, the operator's physical capability, and memory. Drugs are typically stored alphabetically by drug name. Some of our assumptions; walking speed is 3.0 miles per four = 4.4 feet per second, average distance to a drug in normal shelf type storage area from the pill counting work station = 25 feet, average time to locate specific drug upon arrival = 3 seconds, average time to replace the drug in original place = 2 seconds. This produces the following round trip time; 25ft/4.4fps + 3sec + 25/4.4 + 2sec = 2(5.7) + 5 = 16.4sec. We recommend you substitute numbers that more accurately reflect your pharmacy here. We hope our example shows the way.

Fetching the printed label pack and an empty customer's vial are chores, but they should consume very little time. Applying the customer's label to the customer' vial is a simple task and requires very little time. These can only be estimated if the pharmacy layout is known. A fixed total time of 8 seconds is generous for these chores.

Pharmacist's inspection time must be added to all scripts, whether done by automation or by hand. Some systems provide pictures of the scripted drug, but ascribing a time saving to this feature is questionable. Our guess is 5.0sec per script.
Delivering the finished packed script to the pickup area involves a round trip from the workstation to the pickup station. The time depends upon the pharmacy layout. We think that 14 seconds is probably representative, but calculate your own.
Using our numbers the average script (that can be filled by pill counting) takes 36.9sec (pill counting) + 16.4sec (supply bottle fetch / return) + 8sec (vial / label) + 5.0sec (pharmacist inspection)+ 14sec (to / from pickup station) = 80.3sec.
A 2,000 script (pill counting) per day pharmacy spends 2000*80.3sec = 160,600sec/day = 2,676.7minutes/day = 44.6 hours per day filling scripts (manually). This implies that based upon an 8 hour work day 6 people are required and one of them must be a pharmacist.
We did not address entering the scripts into the PMS at the front end of the system. We only required the PMS to print the label pack. Automation will require more from the PMS, and probably a direct interface.
The present state of the art in pharmacy automation tends to focus on the most popular drugs only, because the economic justification requires a high number of scripts per drug. You have to focus on the entire formulary.
All we have presented is the start of a way to evaluate automation and what it can do for your pharmacy