**Decision Models**

**Phone Survey**

For a phone survey, a marketing research group needs to contact at least 1500 young women,

1400 young men, 1100 older women, and 1000 older men. It costs $0.20 to make a call to a landline and $0.50 to make a call to a cell phone since, for regulatory reasons, cell phone numbers need to be dialed manually. The table below lists the typical demographics for people answering landline and cell phones calls. Because of a limited staff, at most half of all phone calls can be cell phone calls.

**Person Responding Percentage of Landline Calls Percentage of Cell Phone Calls**

|  |  |  |
| --- | --- | --- |
| Young Woman | 8 | 20 |
| Young Man | 8 | 18 |
| Older Woman | 20 | 20 |
| Older Man | 20 | 18 |
| No Answer | 44 | 24 |

Data for Phone Problem

Determine how to minimize the cost of completing the survey.