

## **Random Selection Methodology**

### Basic Objective

Dr. Jake Hoskins will randomly select from the 104 schools that applied for funding to meet the target of 2,550 junior students.

### Methodological Approach

There are an estimated 13,061 juniors across the 104 schools. A random number generator is set up with 5 values (the integers of 1, 2, 3, 4, 5), with a 20% expected probability of any of those values being selected on each random draw. This random number generator is created for each individual school in the list. It is then specified that schools whose drawn number was 5 will be included in the selection group, while those schools whose drawn number was 1, 2, 3, or 4 will be excluded from the selection group.

The state funding is provided for 2,550 (out of 13,061) students, or 19.52%. Jumpstart Test Prep is willing to contribute additional funding up to an additional 400 students, depending on the outcome of the random draw.

The excel sheet is set to manual calculation only. It will be manually recalculated until one of the draws yields the following predetermined criteria:

- A minimum of 2,550 students are included in the selection group.
- A maximum of 2,950 students are included in the selection group.
- A minimum of 21 schools are included in the selection group.
- The school level average composite ACT score among the selection group will be at or below the average among the 104 possible schools.

Dr. Hoskins will perform the random draws within the sheet until a matching set is yielded. The resulting sheet will be frozen and the selected schools will be highlighted. The frozen results sheet will then be saved on Dr. Hoskins' private computer and a copy will be shared with Sha Walker for implementation. Dr. Hoskins will also record the number of draws taken to achieve the results.

### Results

Six random draws were taken before the seventh draw yielded a selection of schools that fulfilled the identified criteria.

The selected group has the following overall characteristics:

- 2,884 estimated Junior students
- 22 schools
- Average 2018 ACT composite score of 16.52

The full list of schools selected for inclusion in the 2019-2020 pilot program are provided in Table 1 below.

| <b>School</b>                 | <b># of Juniors</b> | <b>Avg. 2018 ACT Composite</b> |
|-------------------------------|---------------------|--------------------------------|
| Baldwyn High School           | 52                  | 17.5                           |
| Bay Springs High School       | 49                  | 15.9                           |
| Canton High School            | 187                 | 15.4                           |
| Charleston High School        | 55                  | 15.2                           |
| Desoto Central High School    | 463                 | 19.9                           |
| Enterprise Attendance Center  | 46                  | 17.0                           |
| Forest Hill High School       | 255                 | 15.0                           |
| Forrest County Agricultural   | 134                 | 17.9                           |
| Franklin County High School   | 91                  | 17.5                           |
| Lumberton High School         | 37                  | 15.9                           |
| Okolona High School           | 37                  | 15.2                           |
| Pearl High School             | 273                 | 18.8                           |
| Ray Brooks High School        | 14                  | 14.3                           |
| Shaw High School              | 24                  | 15.7                           |
| South Pike High School        | 107                 | 15.0                           |
| Starkville High School        | 380                 | 18.0                           |
| Sumrall High School           | 127                 | 18.9                           |
| Vardaman High School          | 39                  | 16.5                           |
| Vicksburg High School         | 198                 | 14.8                           |
| West Bolivar High School      | 33                  | 15.3                           |
| West Harrison High School     | 235                 | 18.7                           |
| West Tallahatchie High School | 48                  | 15.0                           |
| <b>TOTALS</b>                 | <b>2,884</b>        | <b>16.52</b>                   |