



Experiment No. 4

June 12, 2013, 12:19 pm

Trip Distribution : Growth Factor Distribution Model  
Singly Constrained Growth Factor Method

Input Values :

| Origin-Destination Matrix For Base Year |    |    |    |    |    |               |
|---|----|----|----|----|----|---------------|
| Zone                                    | 1  | 2  | 3  | 4  | 5  | Origin Totals |
| 1                                       | 10 | 15 | 20 | 5  | 0  | 50            |
| 2                                       | 5  | 2  | 32 | 12 | 32 | 83            |
| 3                                       | 2  | 3  | 3  | 14 | 20 | 42            |
| 4                                       | 1  | 5  | 1  | 4  | 5  | 16            |
| 5                                       | 0  | 4  | 3  | 5  | 5  | 17            |
| Destination Totals                      | 18 | 29 | 59 | 40 | 62 |               |

| Origin Totals For Future Year |   |   |   |   |   |
|-------------------------------|---|---|---|---|---|
| Zone                          | 1 | 2 | 3 | 4 | 5 |



---

|  |     |     |    |    |     |
|--|-----|-----|----|----|-----|
|  | 150 | 120 | 75 | 45 | 120 |
|--|-----|-----|----|----|-----|

#### Growth Factor Calculations

| Zone | Future year Origin total | Base year Origin total | Growth Factor For Each Originating Zone |
|------|--------------------------|------------------------|---|
| 1    | 150                      | 50                     | 3                                       |
| 2    | 120                      | 83                     | 1.446                                   |
| 3    | 75                       | 42                     | 1.786                                   |
| 4    | 45                       | 16                     | 2.813                                   |
| 5    | 120                      | 17                     | 7.059                                   |

#### Singly Constrained Growth Factor Matrix For Future Year

| Zone | 1 | 2 | 3 | 4 | 5 | Origins Total Base year | Origins Total Future year |
|------|---|---|---|---|---|-------------------------|---------------------------|
|------|---|---|---|---|---|-------------------------|---------------------------|



## Urban Transportation Systems Engineering Lab

by IIT Bombay - [www.iitb.ac.in](http://www.iitb.ac.in)

|                              |    |    |     |     |     |     |     |
|------------------------------|----|----|-----|-----|-----|-----|-----|
| 1                            | 30 | 45 | 60  | 15  | 0   | 150 | 150 |
| 2                            | 7  | 3  | 46  | 17  | 46  | 119 | 120 |
| 3                            | 4  | 5  | 5   | 25  | 36  | 75  | 75  |
| 4                            | 3  | 14 | 3   | 11  | 14  | 45  | 45  |
| 5                            | 0  | 28 | 21  | 35  | 35  | 119 | 120 |
| Destination Totals Base year | 44 | 95 | 135 | 103 | 131 |     |     |