| Scenario             | TAZ (zones of<br>San Francisco)<br>involved wrt<br>event | Traffic generation policy | Traffic speed policy                                      | Driver generation policy | Driver<br>personality<br>policy         | Driver acceptance policy based on personality and surge multiplier                                                                                                                                                                                             | Workshift policy                                                                                       | Passenger<br>generation policy | Route length distribution                             | Passenger personality policy            |
|----------------------|----------------------------------------------------------|---------------------------|-----------------------------------------------------------|--------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------|-----------------------------------------|
| Normal               |                                                          |                           | Mean: ~40 km/h<br>Min: ~20 km/h<br>Max: ~50km/h<br>(Hour) | 100%                     | Hurry 21%,<br>Greedy 24%,<br>Normal 55% | Hurry: (-inf,1]: 80% [1,1.2]: 90% [1.2,1.4]: 95% [1.4,+inf): 100% Greedy: (-inf,1]: 5% [1,1.2]: 30% [1.2,1.4]: 40% [1.4,1.6]: 50% [1.6,1.8]: 70% [1.8,2]: 80% [2,+inf): 100% Normal: (-inf,1]: 70% [1,1.2]: 80% [1,2,1.4]: 90% [1,4,1.6]: 95% [1.6,+inf): 100% | Exponentially growing from 0.0001%, when the driver starts working, to 3% after 4 hours (average time) | 100%                           | Short 36%,<br>Normal 22%,<br>Long 18%,<br>Extreme 24% | Hurry 37%,<br>Greedy 18%,<br>Normal 45% |
| Underground<br>alarm | All zones                                                | Normal                    | -90%                                                      | -80%                     | 55%-15%-30%                             | Normal                                                                                                                                                                                                                                                         | 50% (in 30 min)                                                                                        | -40%                           | 55%-30%-<br>10%-5%                                    |                                         |
|                      | Central area                                             | +25%                      | -80%                                                      | -50%                     | Normal                                  | Dynamic<br>greediness                                                                                                                                                                                                                                          | Normal                                                                                                 | Normal                         | Normal                                                | Normal                                  |
|                      | City center                                              | +50%                      | Normal                                                    | Normal                   | 5%-80%-15%                              |                                                                                                                                                                                                                                                                |                                                                                                        | +70%                           | 1%-4%-<br>10%-85%                                     | 5%-80%-15%                              |
|                      |                                                          | +70%                      | +50%                                                      | +25%                     |                                         |                                                                                                                                                                                                                                                                |                                                                                                        | +100%                          |                                                       |                                         |
|                      |                                                          |                           |                                                           |                          |                                         |                                                                                                                                                                                                                                                                |                                                                                                        |                                |                                                       |                                         |
| Flash mob            | All zones                                                | Normal                    | -90%                                                      | -80%                     | 55%-15%-30%                             | Normal                                                                                                                                                                                                                                                         | 50% (in 30 min)                                                                                        | -40%                           | 55%-30%-<br>10%-5%                                    |                                         |
|                      | Central area                                             | +25%                      | -80%                                                      | -50%                     | Normal                                  | Dynamic<br>greediness                                                                                                                                                                                                                                          | Normal                                                                                                 | Normal                         | Normal                                                | Normal                                  |
|                      | City center                                              | +50%                      | Normal                                                    | Normal                   | 5%-80%-15%                              | greediness                                                                                                                                                                                                                                                     |                                                                                                        | +70%                           | 1%-4%-<br>10%-85%                                     | 5%-80%-15%                              |
|                      |                                                          | +70%                      | +50%                                                      | +25%                     |                                         |                                                                                                                                                                                                                                                                |                                                                                                        | +100%                          | 10%-05%                                               |                                         |
|                      |                                                          |                           |                                                           |                          |                                         |                                                                                                                                                                                                                                                                |                                                                                                        |                                |                                                       |                                         |
| Wildcat strike       | All zones                                                | Normal                    | -90%                                                      | -80%                     | 55%-15%-30%                             | Normal                                                                                                                                                                                                                                                         | 50% (in 30 min)                                                                                        | -40%                           | 55%-30%-                                              |                                         |
|                      | Central area                                             | +25%                      | -80%                                                      | -50%                     | Normal                                  | Dynamic                                                                                                                                                                                                                                                        | Normal                                                                                                 | Normal                         | 10%-5%<br>Normal                                      | Normal                                  |
|                      | City center                                              | +50%                      | Normal                                                    | Normal                   | 5%-80%-15%                              | greediness                                                                                                                                                                                                                                                     |                                                                                                        | +70%                           | 1%-4%-                                                | 5%-80%-15%                              |
|                      | Oity certici                                             | +70%                      | +50%                                                      | +25%                     | 070 0070 1070                           |                                                                                                                                                                                                                                                                |                                                                                                        | +100%                          | 10%-85%                                               | 070 0070 1070                           |
|                      |                                                          | +1070                     | 10070                                                     | T2370                    |                                         |                                                                                                                                                                                                                                                                |                                                                                                        | +10070                         |                                                       |                                         |
| Long rides           | All zonco                                                | Normal                    | 000/                                                      | 900/                     | 550/ 150/ 200/                          | Marmal                                                                                                                                                                                                                                                         | 500/ (in 20 min)                                                                                       | 4006                           | 55%-30%-                                              |                                         |
|                      | All zones                                                | Normal                    | -90%                                                      | -80%                     | 55%-15%-30%                             | Normal<br>Dynamic                                                                                                                                                                                                                                              | 50% (in 30 min)                                                                                        | -40%                           | 10%-5%                                                | N. I                                    |
|                      | Central area                                             | +25%                      | -80%                                                      | -50%                     | Normal                                  | greediness                                                                                                                                                                                                                                                     | Normal                                                                                                 | Normal                         | Normal<br>1%-4%-                                      | Normal                                  |
|                      | City center                                              | +50%                      | Normal                                                    | Normal                   | 5%-80%-15%                              |                                                                                                                                                                                                                                                                |                                                                                                        | +70%                           | 10%-85%                                               | 5%-80%-15%                              |
|                      |                                                          | +70%                      | +50%                                                      | +25%                     |                                         |                                                                                                                                                                                                                                                                |                                                                                                        | +100%                          |                                                       |                                         |
|                      |                                                          |                           |                                                           |                          |                                         |                                                                                                                                                                                                                                                                |                                                                                                        |                                | FF0/ 000/                                             |                                         |
| Greedy<br>drivers    | All zones                                                | Normal                    | -90%                                                      | -80%                     | 55%-15%-30%                             | Normal                                                                                                                                                                                                                                                         | 50% (in 30 min)                                                                                        | -40%                           | 55%-30%-<br>10%-5%                                    |                                         |
|                      | Central area                                             | +25%                      | -80%                                                      | -50%                     | Normal                                  | Dynamic<br>greediness                                                                                                                                                                                                                                          | Normal                                                                                                 | Normal                         | Normal                                                | Normal                                  |
|                      | City center                                              | +50%                      | Normal                                                    | Normal                   | 5%-80%-15%                              |                                                                                                                                                                                                                                                                |                                                                                                        | +70%                           | 1%-4%-<br>10%-85%                                     | 5%-80%-15%                              |
|                      |                                                          | +70%                      | +50%                                                      | +25%                     |                                         |                                                                                                                                                                                                                                                                |                                                                                                        | +100%                          |                                                       |                                         |
|                      |                                                          |                           |                                                           |                          |                                         |                                                                                                                                                                                                                                                                |                                                                                                        |                                |                                                       |                                         |
| Budget<br>passengers | All zones                                                | Normal                    | -90%                                                      | -80%                     | 55%-15%-30%                             | Normal                                                                                                                                                                                                                                                         | 50% (in 30 min)                                                                                        | -40%                           | 55%-30%-<br>10%-5%                                    |                                         |
|                      | Central area                                             | +25%                      | -80%                                                      | -50%                     | Normal                                  | Dynamic<br>greediness                                                                                                                                                                                                                                          | Normal                                                                                                 | Normal                         | Normal                                                | Normal                                  |
|                      | City center                                              | +50%                      | Normal                                                    | Normal                   | 5%-80%-15%                              |                                                                                                                                                                                                                                                                |                                                                                                        | +70%                           | 1%-4%-<br>10%-85%                                     | 5%-80%-15%                              |
|                      |                                                          | +70%                      | +50%                                                      | +25%                     |                                         |                                                                                                                                                                                                                                                                |                                                                                                        | +100%                          |                                                       |                                         |
|                      |                                                          |                           |                                                           |                          |                                         |                                                                                                                                                                                                                                                                |                                                                                                        |                                |                                                       |                                         |
| Boycott Uber         | All zones                                                | Normal                    | -90%                                                      | -80%                     | 55%-15%-30%                             | Normal                                                                                                                                                                                                                                                         | 50% (in 30 min)                                                                                        | -40%                           | 55%-30%-<br>10%-5%                                    |                                         |
|                      | Central area                                             | +25%                      | -80%                                                      | -50%                     | Normal                                  | Dynamic<br>greediness                                                                                                                                                                                                                                          | Normal                                                                                                 | Normal                         | Normal                                                | Normal                                  |
|                      | City center                                              | +50%                      | Normal                                                    | Normal                   | 5%-80%-15%                              | J. 2041000                                                                                                                                                                                                                                                     |                                                                                                        | +70%                           | 1%-4%-<br>10%-85%                                     | 5%-80%-15%                              |
|                      |                                                          | +70%                      | +50%                                                      | +25%                     |                                         |                                                                                                                                                                                                                                                                |                                                                                                        | +100%                          | 10/0-03/0                                             |                                         |
|                      |                                                          |                           |                                                           |                          |                                         |                                                                                                                                                                                                                                                                |                                                                                                        |                                |                                                       |                                         |
|                      |                                                          |                           |                                                           |                          |                                         |                                                                                                                                                                                                                                                                |                                                                                                        |                                |                                                       |                                         |