



Following shows the source code for the Borough Distribution pie chart. I have used 5 calculated fields to create the visualization:

1. **borough1_calc:**

```
SCRIPT_REAL(")
```

```
    print('_arg1', _arg1)
    print('_arg2', _arg2)
```

```
    if _arg1[0] == 'BK':
        BK_count = _arg2[0]
    if _arg1[1] == 'BX':
        BX_count = _arg2[1]
    if _arg1[2] == 'M':
        M_count = _arg2[2]
    if _arg1[3] == 'Q':
        Q_count = _arg2[3]
    if _arg1[4] == 'SI':
        SI_count = _arg2[4]
```

```
total_count_borough = BK_count + BX_count + M_count + Q_count + SI_count
```

```

BK_percentage = BK_count / total_count_borough * 100
BX_percentage = BX_count / total_count_borough * 100
M_percentage = M_count / total_count_borough * 100
Q_percentage = Q_count / total_count_borough * 100
SI_percentage = SI_count / total_count_borough * 100

print('BK_percentage', BK_percentage)

return BK_percentage

```

```

", ATTR([Borough]), SUM([Ridership]))

```

2. borough2_calc:

```

SCRIPT_REAL("

print('_arg1', _arg1)
print('_arg2', _arg2)

if _arg1[0] == 'BK':
    BK_count = _arg2[0]
if _arg1[1] == 'BX':
    BX_count = _arg2[1]
if _arg1[2] == 'M':
    M_count = _arg2[2]
if _arg1[3] == 'Q':
    Q_count = _arg2[3]
if _arg1[4] == 'SI':
    SI_count = _arg2[4]

total_count_borough = BK_count + BX_count + M_count + Q_count + SI_count

BK_percentage = BK_count / total_count_borough * 100
BX_percentage = BX_count / total_count_borough * 100
M_percentage = M_count / total_count_borough * 100
Q_percentage = Q_count / total_count_borough * 100
SI_percentage = SI_count / total_count_borough * 100

#print('BK_percentage', BK_percentage)

```

```
print('BX_percentage', BX_percentage)
```

```
return BX_percentage
```

```
", ATTR([Borough]), SUM([Ridership]))
```

3. **borough3_calc:**

```
SCRIPT_REAL(")
```

```
print('_arg1', _arg1)
```

```
print('_arg2', _arg2)
```

```
if _arg1[0] == 'BK':
```

```
    BK_count = _arg2[0]
```

```
if _arg1[1] == 'BX':
```

```
    BX_count = _arg2[1]
```

```
if _arg1[2] == 'M':
```

```
    M_count = _arg2[2]
```

```
if _arg1[3] == 'Q':
```

```
    Q_count = _arg2[3]
```

```
if _arg1[4] == 'SI':
```

```
    SI_count = _arg2[4]
```

```
total_count_borough = BK_count + BX_count + M_count + Q_count + SI_count
```

```
BK_percentage = BK_count / total_count_borough * 100
```

```
BX_percentage = BX_count / total_count_borough * 100
```

```
M_percentage = M_count / total_count_borough * 100
```

```
Q_percentage = Q_count / total_count_borough * 100
```

```
SI_percentage = SI_count / total_count_borough * 100
```

```
print('M_percentage', M_percentage)
```

```
return M_percentage
```

```
", ATTR([Borough]), SUM([Ridership]))
```

4. **borough4_calc:**

```
SCRIPT_REAL("

    print('_arg1', _arg1)
    print('_arg2', _arg2)

    if _arg1[0] == 'BK':
        BK_count = _arg2[0]
    if _arg1[1] == 'BX':
        BX_count = _arg2[1]
    if _arg1[2] == 'M':
        M_count = _arg2[2]
    if _arg1[3] == 'Q':
        Q_count = _arg2[3]
    if _arg1[4] == 'SI':
        SI_count = _arg2[4]

    total_count_borough = BK_count + BX_count + M_count + Q_count + SI_count

    BK_percentage = BK_count / total_count_borough * 100
    BX_percentage = BX_count / total_count_borough * 100
    M_percentage = M_count / total_count_borough * 100
    Q_percentage = Q_count / total_count_borough * 100
    SI_percentage = SI_count / total_count_borough * 100

    print('Q_percentage', Q_percentage)

    return Q_percentage

", ATTR([Borough]), SUM([Ridership]))
```

5. **borough5_calc:**

```
SCRIPT_REAL("

    print('_arg1', _arg1)
    print('_arg2', _arg2)

    if _arg1[0] == 'BK':
        BK_count = _arg2[0]
    if _arg1[1] == 'BX':
```

```

        BX_count = _arg2[1]
    if _arg1[2] == 'M':
        M_count = _arg2[2]
    if _arg1[3] == 'Q':
        Q_count = _arg2[3]
    if _arg1[4] == 'SI':
        SI_count = _arg2[4]

    total_count_borough = BK_count + BX_count + M_count + Q_count + SI_count

    BK_percentage = BK_count / total_count_borough * 100
    BX_percentage = BX_count / total_count_borough * 100
    M_percentage = M_count / total_count_borough * 100
    Q_percentage = Q_count / total_count_borough * 100
    SI_percentage = SI_count / total_count_borough * 100

    print('SI_percentage', SI_percentage)

    return SI_percentage

", ATTR([Borough]), SUM([Ridership]))

```