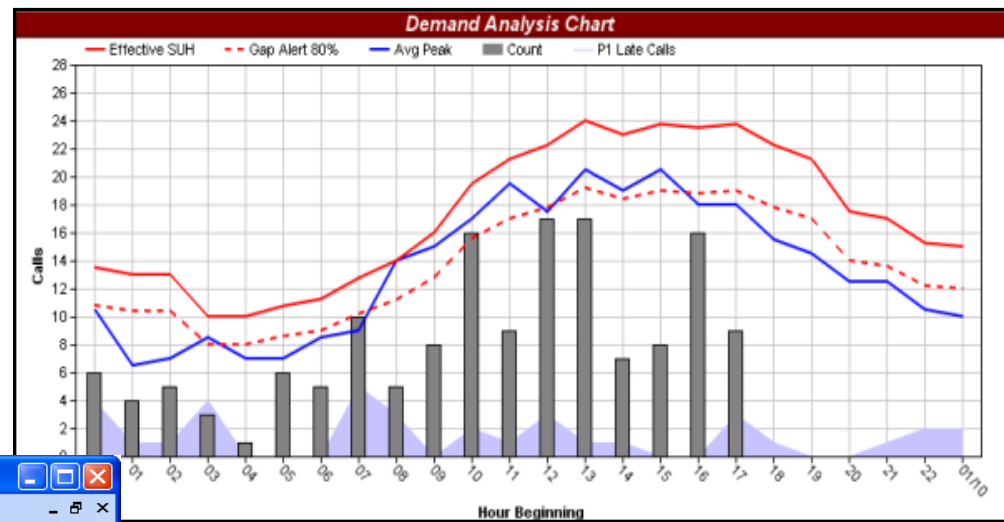




Real Time Demand Analysis

One of the many challenges faced by agencies is making the most effective use of the resources they have available. A common way to approach this is to analyze historical patterns of demand for service, both temporally (day of week and hour of day) and geographically, to forecast needs for staffing, scheduling and resource deployment. One time-proven approach to this is referred to as "Demand Analysis" and variations of this approach have been used for more than 20 years all around the world. In the past, the process of compiling and creating a complete temporal and geographic Demand Analysis was tedious, time-consuming, and too often, very manual.



Microsoft Excel - DownloadDA-20060911125641.xls

Formula bar: =Sun!Y31*0.2+Mon!B31*0.6+Mon!C31*0.2

| | A | B | C | D | E | F | G | H | I | J |
|----|-----------------------|------|------|------|------|------|------|------|------|------|
| 1 | Hr Ending | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2 | 20060501 | 6 | 7 | 4 | 3 | 3 | 3 | 7 | 11 | 8 |
| 3 | 20060508 | 6 | 7 | 4 | 3 | 3 | 0 | 8 | 9 | 3 |
| 4 | 20060515 | 2 | 2 | 7 | 3 | 1 | 3 | 8 | 2 | 7 |
| 22 | Total | 145 | 110 | 119 | 83 | 59 | 79 | 101 | 122 | 147 |
| 23 | Min | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 24 | Max | 15 | 13 | 12 | 7 | 7 | 9 | 8 | 11 | 16 |
| 25 | Mean | 7.25 | 5.5 | 5.95 | 4.15 | 2.95 | 3.95 | 5.05 | 6.1 | 7.35 |
| 26 | Median | 6 | 5 | 5 | 4 | 3 | 3 | 5.5 | 6 | 6.5 |
| 27 | Mode | 6 | 5 | 4 | 3 | 3 | 3 | 6 | 6 | 6 |
| 28 | StDev | 3.32 | 2.93 | 3.07 | 2.03 | 1.82 | 2.42 | 1.96 | 3.08 | 3.53 |
| 29 | Avg High | 10.6 | 8.6 | 8.8 | 5.8 | 4.8 | 6.6 | 6.8 | 9 | 11.8 |
| 30 | 90th Percentile Rank | 12 | 9.1 | 10.2 | 7 | 5 | 7.1 | 7.1 | 11 | 11.4 |
| 31 | Avg Peak | 13.5 | 11.5 | 11 | 7 | 6 | 7.5 | 7 | 11 | 13.5 |
| 32 | 2x StDev + Mean | 13.9 | 11.4 | 12.1 | 8.22 | 6.59 | 8.78 | 8.97 | 12.3 | 14.4 |
| 33 | Smoothed Average Peak | 12.9 | 11.8 | 10.3 | 7.6 | 6.5 | 7.1 | 7.9 | 10.7 | 13.6 |
| 34 | Blended Demand | 12.9 | 10.8 | 10.9 | 7.61 | 6.03 | 7.66 | 7.99 | 11.3 | 13.2 |

FirstWatch has worked with several customers to create a real-time, dynamically updated and calculated Demand Analysis temporal (time-based) views of their data, including the ability to download the Demand Analysis calculations in an Excel spreadsheet, *with all formulas intact*, for further interaction, if necessary. We're now working to enhance the current real-time Demand Analysis with other calculation approaches (including Demand Consumption-based approach), as well as geographically, by providing the ability to create up-to-the minute problem/solution maps for each hour of the day and each day of the week, and/or other, user-defined intervals.