

# 'Reasoning from Evidence'

## Emergency 911! Bay City - Example #2

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The aim of this assessment is to provide the opportunity for you to:

- select appropriate methods to analyze a data set, including appropriate graphs and calculations
- read and interpret a graph
- use the data analysis to make a recommendation.

Last week there was an accident at the Waterfront Amusement Park in Bay City. A seat on one of the rides broke loose resulting in the death of two teenagers. The owners of the amusement park have charged that if ambulances had responded more quickly, the two teens would have survived. They have threatened to sue the Bay City 911 emergency service for failing to dispatch ambulances efficiently.



The Bay City Council has hired your firm to conduct an independent investigation of the City's 911 response. Upon completion of your investigation, you are to make a report to the City

Council on your findings along with any recommendations for improving the 911 emergency service in the neighborhood of the amusement park.

You start to work on this assignment. Your investigation has uncovered the following information.

- The 911 operators dispatch ambulances from two companies: Arrow Ambulance Service and Metro Ambulances.
- The 911 operators aren't always sure which company to send when an emergency call is received.
- Data on the response times of the two companies for an area of a one mile radius of the Amusement Park shows that it can take as little as 6 minutes or as long as 19 minutes. (The response time is the length of time from when a 911 operator receives an emergency call to when an ambulance arrives on the scene of the accident).

You need to continue your investigation by analyzing the response time data from the 911 log sheets for May. (The log sheets are shown on the next page).

Based on the information above and your analysis of the response time data, you conclude that the Bay City Council needs to establish a policy about which service to call.

Write a report to the Bay City Council advising them of your recommendations about which service the 911 operators should dispatch in the area around the amusement park.

You will need to prepare charts, graphs, calculations or other materials to include in your report to support your recommendations. Be sure to give clear reasons for the policy you are recommending.

### **Emergency 911! Data sheet**

<b>Date of call</b>	<b>Time of call</b>	<b>Company Name</b>	<b>Response Time in minutes</b>
Wed., May 1	2:20 AM	Arrow	11
Wed., May 1	12:41 PM	Arrow	8
Wed., May 1	2:29 PM	Metro	11
Thurs., May 2	8:14 AM	Metro	8
Thurs., May 2	6:23 PM	Metro	16
Fri., May 3	4:15 AM	Metro	7
Fri., May 3	8:41 AM	Arrow	19
Sat., May 4	7:12 AM	Metro	11
Sat., May 4	7:43 PM	Metro	11
Sat., May 4	10:02 PM	Arrow	7
Sun., May 5	12:22 PM	Metro	12
Mon., May 6	6:47 AM	Metro	9
Mon., May 6	7:15 AM	Arrow	16
Mon., May 6	6:10 PM	Arrow	8
Tues., May 7	5:37 PM	Metro	16
Tues., May 7	9:37 PM	Metro	11
Thurs., May 9	5:30 AM	Arrow	17
Thurs., May 9	6:18 PM	Arrow	6
Fri., May 10	6:25 AM	Arrow	16
Sat., May 11	1:03 AM	Metro	12
Mon., May 13	6:40 AM	Arrow	17
Mon., May 13	3:25 PM	Metro	15
Tues., May 14	4:59 PM	Metro	14
Thurs., May 16	10:11 AM	Metro	8
Thurs., May 16	11:45 AM	Metro	10
Fri., May 17	11:09 AM	Arrow	7
Fri., May 17	9:15 PM	Arrow	8
Fri., May 17	11:15 PM	Metro	8
Mon., May 20	7:25 AM	Arrow	17
Mon., May 20	4:20 PM	Metro	19
Thurs., May 23	2:39 PM	Arrow	10
Thurs., May 23	3:44 PM	Metro	14
Fri., May 24	8:56 PM	Metro	10
Sat., May 25	8:30 PM	Arrow	8
Sun., May 26	6:33 AM	Metro	6
Mon., May 27	4:21 PM	Arrow	9
Tues., May 28	8:07 AM	Arrow	15
Tues., May 28	5:02 PM	Arrow	7
Wed., May 29	10:51 AM	Metro	9
Wed., May 29	5:11 PM	Metro	18
Thurs., May 30	4:16 AM	Arrow	10
Fri., May 31	8:59 AM	Metro	11