Place data in Yellow Areas up to 100 data points

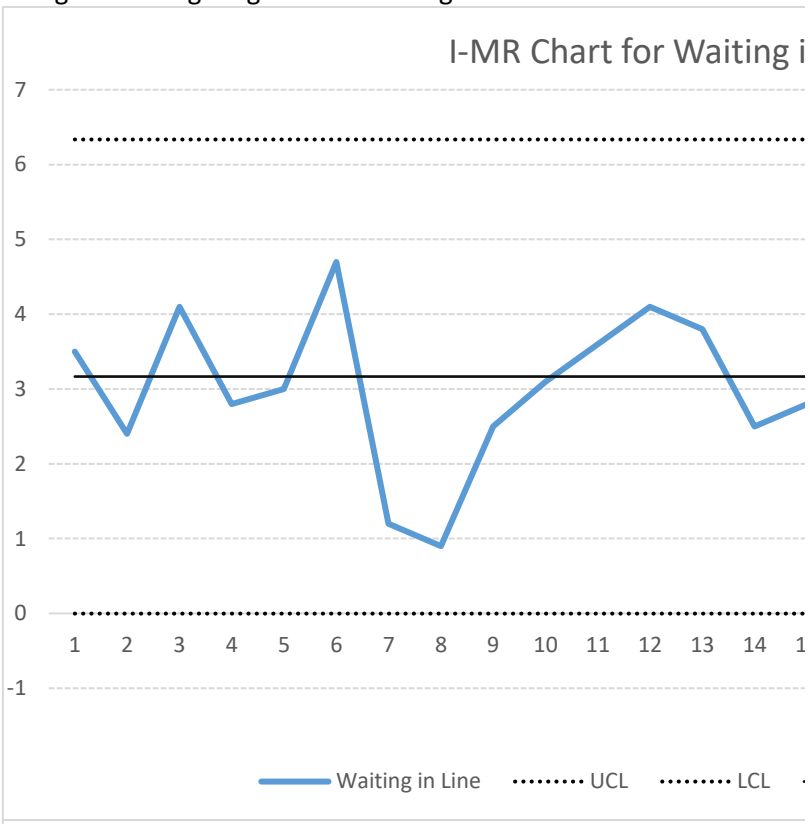
Trip	Waiting in Line
1	3.5
2	2.4
3	4.1
4	2.8
5	3
6	4.7
7	1.2
8	0.9
9	2.5
10	3.1
11	3.6
12	4.1
13	3.8
14	2.5
15	2.8
16	4.3
17	4.1
18	3.6
19	2.4
20	4.8
21	3.5
22	2.5
23	1.3
24	4.5

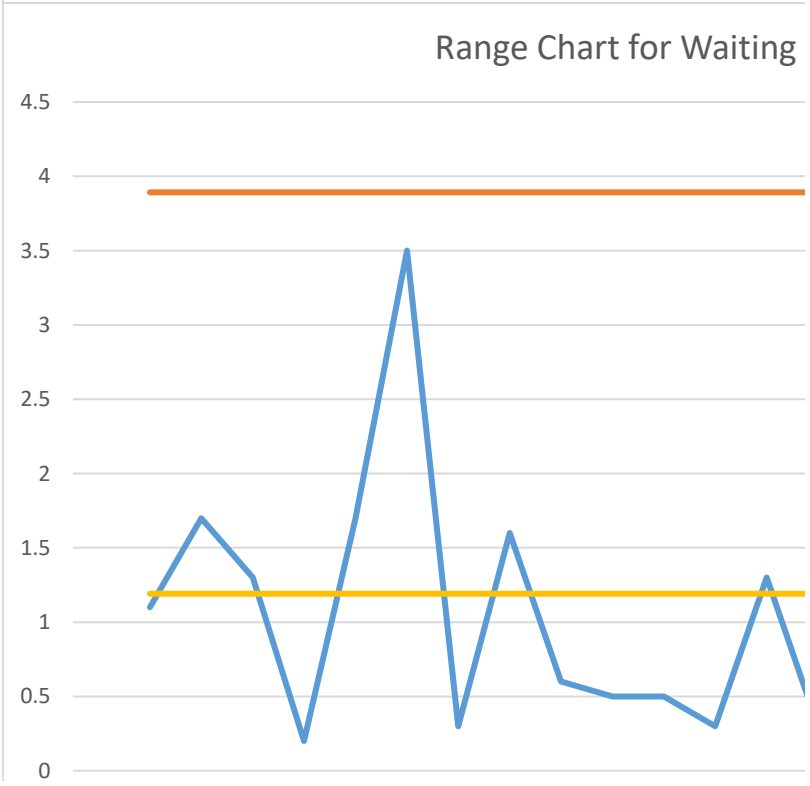
Process Behaviour Charts for Waiting in Line

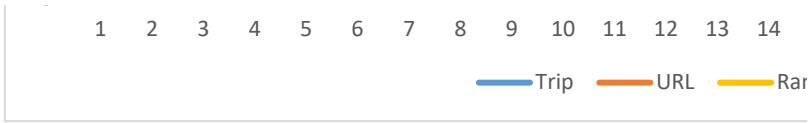
Average of 3.17, and natural process range of 0.00 to 6.34

Markers show points where process is outside predictable limits,

Range RangeAvg URL Avg LCL UCL







		3.166667	-0.0022	6.335536
		3.166667	-0.0022	6.335536
		3.166667	-0.0022	6.335536

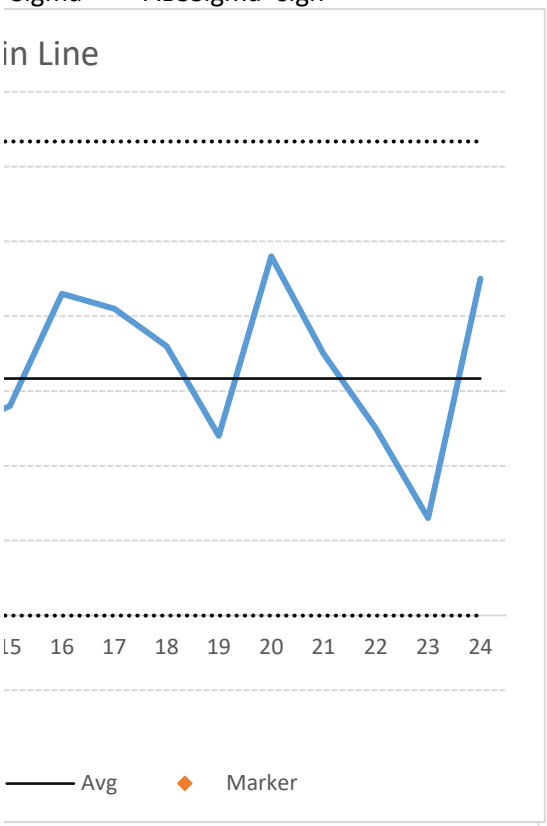
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536
3.166667	-0.0022	6.335536

X-chart title	I-MR Chart for Waiting in Line
Range chart title	Range Chart for Waiting in Line
WestinghouseRules	

3sigma	2sigma	1sigma	8inaRow

signal in the data.

Sigma ABSSigma sign Marker





#N/A
#N/A
#N/A

15	16	17	18	19	20	21	22	23	24		
ngeAvg											
										21.000	#N/A
										22.000	#N/A
										23.000	#N/A
										24.000	#N/A
										25.000	#N/A
										26.000	#N/A
										27.000	#N/A
										28.000	#N/A
										29.000	#N/A
										30.000	#N/A
										31.000	#N/A
										32.000	#N/A
										33.000	#N/A
										34.000	#N/A
										35.000	#N/A
										36.000	#N/A
										37.000	#N/A
										38.000	#N/A
										39.000	#N/A
										40.000	#N/A
										41.000	#N/A
										42.000	#N/A
										43.000	#N/A
										44.000	#N/A
										45.000	#N/A
										46.000	#N/A
										47.000	#N/A
										48.000	#N/A
										49.000	#N/A
										50.000	#N/A
										51.000	#N/A
										52.000	#N/A
										53.000	#N/A
										54.000	#N/A
										55.000	#N/A
										56.000	#N/A
										57.000	#N/A
										58.000	#N/A
										59.000	#N/A
										60.000	#N/A
										61.000	#N/A
										62.000	#N/A
										63.000	#N/A
										64.000	#N/A

65.000	#N/A
66.000	#N/A
67.000	#N/A
68.000	#N/A
69.000	#N/A
70.000	#N/A
71.000	#N/A
72.000	#N/A
73.000	#N/A
74.000	#N/A
75.000	#N/A
76.000	#N/A

UCL	6.34
LCL	0.00
Avg	3.17

2

Original Example

Trip	Waiting in Line
1	3.5
2	2.4
3	4.1
4	2.8
5	3
6	4.7
7	1.2
8	0.9
9	2.5
10	3.1
11	3.6
12	4.1
13	3.8
14	2.5
15	2.8
16	4.3
17	4.1
18	3.6
19	2.4
20	4.8
21	3.5
22	2.5
23	1.3
24	4.5

Chicago Murders

Date	Seasonally adjusted Murders
7/1/13	35.17
8/1/13	40.76
9/1/13	35.64
10/1/13	31.34
11/1/13	28.49
12/1/13	42.56
1/1/14	28.22
2/1/14	33.80
3/1/14	26.09
4/1/14	36.66
5/1/14	38.18
6/1/14	29.15
7/1/14	29.31
8/1/14	39.19
9/1/14	36.50
10/1/14	33.36
11/1/14	39.45
12/1/14	44.92
1/1/15	38.97
2/1/15	32.11
3/1/15	40.32
4/1/15	36.66
5/1/15	41.73
6/1/15	39.14
7/1/15	36.63
8/1/15	39.19
9/1/15	53.89
10/1/15	29.32
11/1/15	41.64
12/1/15	39.01
1/1/16	69.87
2/1/16	77.74
3/1/16	53.36
4/1/16	39.80
5/1/16	58.59
6/1/16	63.29
7/1/16	49.09
8/1/16	72.12

Engine Company Shift

Date	A-Turnout
Jul-15	02:08
Aug-15	02:00
Sep-15	01:53
Oct-15	02:16
Nov-15	02:02
Dec-15	01:54
Jan-16	02:01
Feb-16	01:46
Mar-16	02:01
Apr-16	02:03
May-16	01:51
Jun-16	02:00
Jul-16	01:53
Aug-16	01:49

B-Turnout	C-Turnout
02:05	02:09
02:00	02:03
01:52	02:10
02:08	02:10
01:58	02:09
02:04	02:15
01:57	02:16
01:43	01:41
02:05	01:59
01:46	01:46
01:56	01:48
01:49	01:34
01:53	01:33
02:08	01:28

Total Crimes by Month

Month	District 1	District 2	District 3	District 4	Total Crimes
Jan	1429	523	412	942	3306
Feb	1249	588	415	924	3176
Mar	1117	616	403	984	3120
Apr	1144	533	414	1211	3302
May	1109	541	448	766	2864
Jun	1243	600	426	982	3251
Jul	1119	579	391	993	3082
Aug	1001	665	443	1053	3162
Sep	1065	639	432	1006	3142
Oct	1117	637	401	1004	3159
Nov	939	585	488	1064	3076
Dec	982	637	414	1314	3347
Jan	868	692	441	770	2771
Feb	855	759	446	974	3034
Mar	1010	735	324	1013	3082
Apr	894	840	472	934	3140
May	928	775	443	1048	3194
Jun	869	728	435	1038	3070
Jul	715	796	484	956	2951
Aug	869	820	361	1183	3233

	Motor Vehicle Deaths	
Year	Wake Fatalities	NC Fatalities
2006	78	1560
2007	61	1702
2008	74	1465
2009	70	1346
2010	71	1323
2011	62	1208
2012	69	1262
2013	72	1260
2014	63	1277
2015	67	1380
2016	79	1441

	Percent of High School Students who are current users	
Year	Any tobacc	Cigarettes
1999	38.3	31.6
2001	35.8	27.8
2003	33.7	27.3
2005	28.5	20.3
2007	26.6	19
2009	25.8	16.7
2011	25.8	15.5
2013	29.7	13.5
2015	27.5	9.3

Accident Data for Organization, By Accident Type, Dept, and Date

90 Accidents for 2015

Accident	Date	Type	Dept
1	1/6/15	T-26	Dept E
2	1/7/15	T-10	Dept D
3	1/14/15	T-09	Dept D
4	2/4/15	T-01	Dept C
5	2/6/15	T-14	Dept D
6	2/12/15	T-02	Dept C
7	2/17/15	T-04	Dept B
8	2/18/15	T-02	Dept C
9	2/22/15	T-02	Dept C
10	2/24/15	T-11	Dept D
11	3/3/15	T-13	Dept E
12	3/10/15	T-02	Dept C
13	3/14/15	T-01	Dept D
14	3/15/15	T-05	Dept E
15	3/28/15	T-06	Dept D
16	3/29/15	T-10	Dept E
17	4/3/15	T-04	Dept D
18	4/7/15	T-02	Dept C
19	4/11/15	T-06	Dept D
20	4/13/15	T-06	Dept D
21	4/21/15	T-01	Dept B
22	4/23/15	T-25	Dept D
23	4/28/15	T-20	Dept E
24	5/2/15	T-02	Dept C
25	5/8/15	T-04	Dept D
26	5/14/15	T-06	Dept A
27	5/17/15	T-06	Dept D
28	5/18/15	T-02	Dept C
29	5/19/15	T-02	Dept C
30	5/22/15	T-02	Dept A
31	5/30/15	T-06	Dept D
32	6/6/15	T-17	Dept A
33	6/8/15	T-06	Dept E
34	6/11/15	T-02	Dept C
35	6/12/15	T-02	Dept C
36	6/18/15	T-02	Dept C
37	6/18/15	T-06	Dept E
38	6/30/15	T-19	Dept B
39	7/4/15	T-06	Dept A
40	7/6/15	T-12	Dept E
41	7/19/15	T-10	Dept C

Accidents for 2016

Accident	Date	Type
136	1/12/16	T-18
103	1/20/16	T-02
135	1/25/16	T-10
92	1/26/16	T-01
106	1/28/16	T-19
119	2/3/16	T-18
114	2/17/16	T-03
128	2/23/16	T-11
116	3/1/16	T-05
124	3/4/16	T-06
122	3/10/16	T-03
132	3/22/16	T-02
130	3/26/16	T-02
118	3/30/16	T-17
101	4/9/16	T-02
125	4/11/16	T-06
102	4/14/16	T-18
104	4/19/16	T-17
137	4/20/16	T-17
131	4/24/16	T-03
120	4/25/16	T-02
112	4/30/16	T-03
108	5/6/16	T-18
105	5/14/16	T-06
94	5/18/16	T-10
134	5/25/16	T-02
107	6/13/16	T-19
93	6/21/16	T-03
126	6/22/16	T-02
138	7/2/16	T-03
139	7/3/16	T-18
140	7/3/16	T-06
129	7/8/16	T-06
91	7/14/16	T-05
98	8/1/16	T-02
127	8/13/16	T-03
110	8/28/16	T-19
133	9/1/16	T-02
95	9/7/16	T-11
115	9/15/16	T-06
121	9/15/16	T-06

42	8/3/15 T-22	Dept D
43	8/11/15 T-03	Dept B
44	8/14/15 T-02	Dept C
45	8/14/15 T-18	Dept C
46	8/20/15 T-27	Dept D
47	8/28/15 T-02	Dept C
48	8/28/15 T-06	Dept C
49	8/29/15 T-07	Dept C
50	9/5/15 T-02	Dept C
51	9/11/15 T-04	Dept A
52	9/13/15 T-06	Dept B
53	9/13/15 T-19	Dept A
54	9/16/15 T-13	Dept D
55	9/17/15 T-27	Dept E
56	9/20/15 T-03	Dept D
57	9/20/15 T-11	Dept D
58	9/22/15 T-11	Dept A
59	9/30/15 T-03	Dept D
60	10/2/15 T-06	Dept C
61	10/2/15 T-14	Dept D
62	10/5/15 T-02	Dept C
63	10/5/15 T-06	Dept C
64	10/6/15 T-02	Dept C
65	10/9/15 T-02	Dept C
66	10/10/15 T-02	Dept C
67	10/10/15 T-17	Dept D
68	10/11/15 T-06	Dept C
69	10/12/15 T-02	Dept C
70	10/12/15 T-20	Dept D
71	10/13/15 T-06	Dept A
72	10/17/15 T-01	Dept D
73	10/23/15 T-02	Dept C
74	11/6/15 T-09	Dept E
75	11/9/15 T-20	Dept D
76	11/19/15 T-10	Dept C
77	11/23/15 T-06	Dept E
78	11/27/15 T-03	Dept D
79	11/28/15 T-14	Dept D
80	12/2/15 T-25	Dept D
81	12/4/15 T-06	Dept D
82	12/5/15 T-03	Dept E
83	12/7/15 T-06	Dept E
84	12/10/15 T-02	Dept C
85	12/13/15 T-19	Dept A
86	12/19/15 T-02	Dept C
87	12/24/15 T-02	Dept C
88	12/24/15 T-20	Dept B

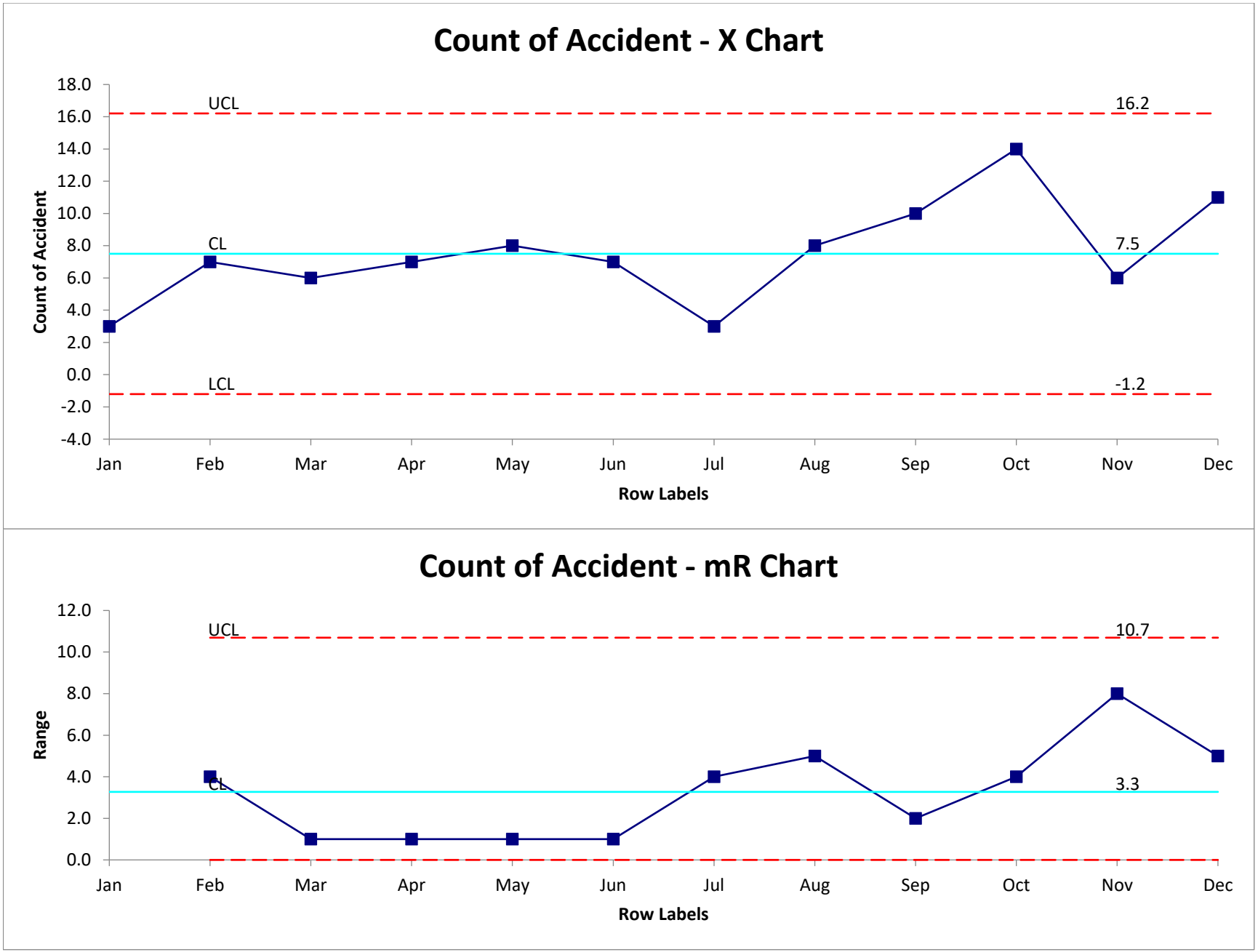
123	9/20/16 T-06	
100	10/4/16 T-27	
96	10/15/16 T-17	
99	10/16/16 T-25	
111	10/29/16 T-17	
113	11/3/16 T-09	
117	11/19/16 T-02	
97	11/20/16 T-27	
109	12/7/16 T-06	

	89	12/26/15	T-05	Dept C
	90	12/30/15	T-02	Dept D

Dept
Dept D
Dept D
Dept C
Dept C
Dept A
Dept D
Dept D
Dept C
Dept A
Dept E
Dept C
Dept C
Dept C
Dept C
Dept D
Dept C
Dept C
Dept C
Dept E
Dept A
Dept D
Dept B
Dept B
Dept D
Dept D
Dept C
Dept D
Dept B
Dept C
Dept C
Dept D
Dept A
Dept C
Dept E
Dept D
Dept A
Dept C
Dept A
Dept C
Dept C
Dept C

Dept C
Dept C
Dept D
Dept C
Dept D
Dept D
Dept E
Dept D
Dept C

Row Labels	Count of Accident
Jan	3
Feb	7
Mar	6
Apr	7
May	8
Jun	7
Jul	3
Aug	8
Sep	10
Oct	14
Nov	6
Dec	11
Grand Total	90


Count of Accident - X Chart
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
-2.0
-4.0
Count of Accident
UCL
16.2
CL
7.5
LCL
-1.2
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Row Labels
Count of Accident - mR Chart
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Range
UCL
10.7
CL
3.3
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Row Labels

Summary of 90 Accidents by Type and Department

	Dept A	Dept B	Dept C	Dept D	Dept E	Total
T-01	0	1	1	2	0	4
T-02	1	0	23	1	0	25
T-03	0	1	0	3	1	5
T-04	1	1	0	2	0	4
T-05	0	0	1	0	1	2
T-06	3	1	4	6	4	18
T-07	0	0	1	0	0	1
T-08	0	0	0	0	0	0
T-09	0	0	0	1	1	2
T-10	0	0	2	1	1	4
T-11	1	0	0	2	0	3
T-12	0	0	0	0	1	1
T-13	0	0	0	1	1	2
T-14	0	0	0	3	0	3
T-15	0	0	0	0	0	0
T-16	0	0	0	0	0	0
T-17	1	0	0	1	0	2
T-18	0	0	1	0	0	1
T-19	2	1	0	0	0	3
T-20	0	1	0	2	1	4
T-21	0	0	0	0	0	0
T-22	0	0	0	1	0	1
T-23	0	0	0	0	0	0
T-24	0	0	0	0	0	0
T-25	0	0	0	2	0	2
T-26	0	0	0	0	1	1
T-27	0	0	0	1	1	2
TOTAL	9	6	33	29	13	90

The highlig

A Focussed

hted boxes represent 64 of the 90 accidents, 71%.

l Work Plan

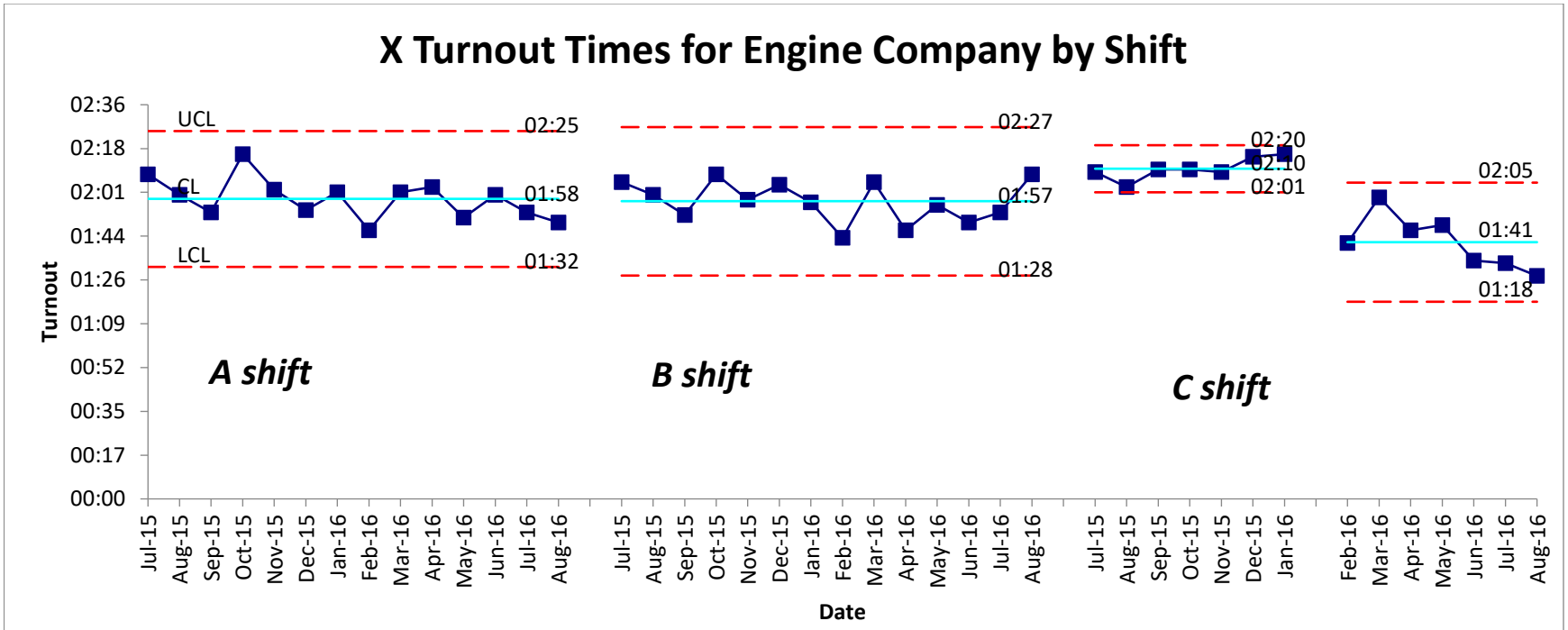
1. Dept C, Accident type 2
2. Dept D, General Accident Prevention
3. Accident Type 6, across all Depts.

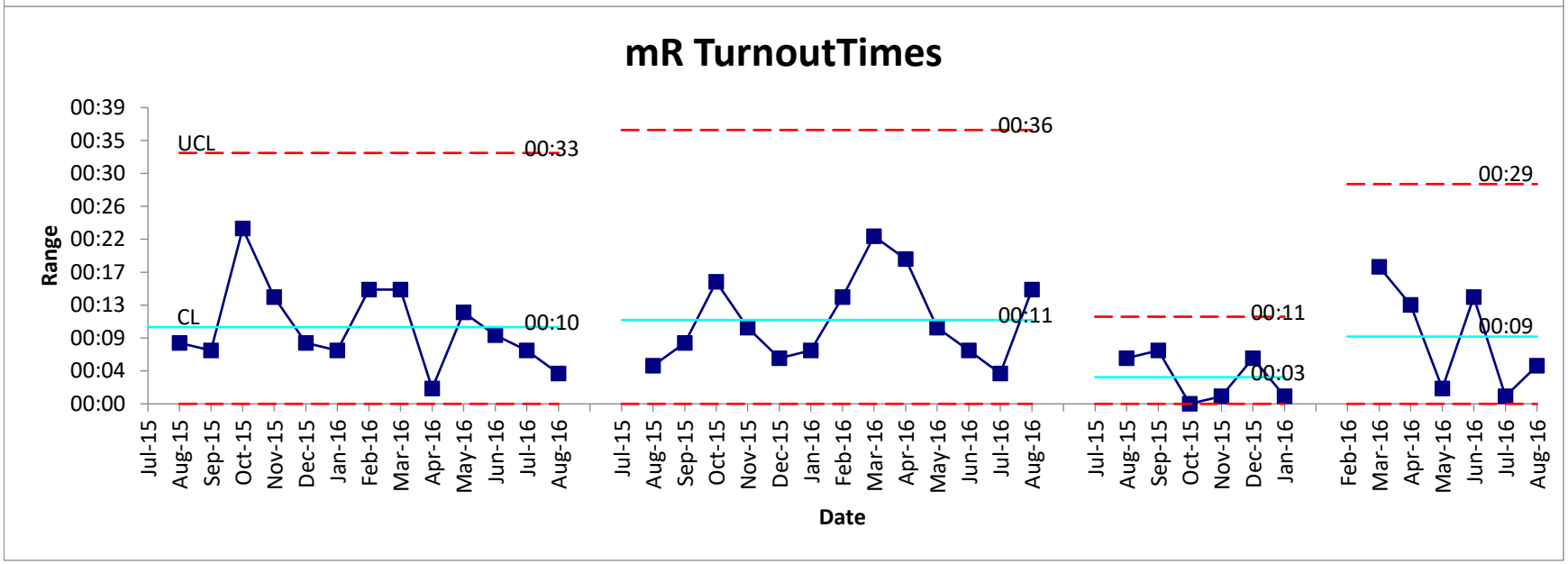
Engine Company 1 Shift

Date	A-Turnout	B-Turnout	C-Turnout
Jul-15	02:08	02:05	02:09
Aug-15	02:00	02:00	02:03
Sep-15	01:53	01:52	02:10
Oct-15	02:16	02:08	02:10
Nov-15	02:02	01:58	02:09
Dec-15	01:54	02:04	02:15
Jan-16	02:01	01:57	02:16
Feb-16	01:46	01:43	01:41
Mar-16	02:01	02:05	01:59
Apr-16	02:03	01:46	01:46
May-16	01:51	01:56	01:48
Jun-16	02:00	01:49	01:34
Jul-16	01:53	01:53	01:33
Aug-16	01:49	02:08	01:28

Jul-15	02:09
Aug-15	02:03
Sep-15	02:10
Oct-15	02:10
Nov-15	02:09
Dec-15	02:15
Jan-16	02:16
Feb-16	01:41
Mar-16	01:59
Apr-16	01:46

May-16	01:48
Jun-16	01:34
Jul-16	01:33
Aug-16	01:28


X Turnout Times for Engine Company by Shift
Turnout
02:36
02:18
02:01
01:44
01:26
01:09
00:52
00:35
00:17
00:00
UCL
CL
LCL
02:25
01:58
01:32
02:27
01:57
01:28
02:20
02:10
02:01
02:05
01:41
01:18
A shift
B shift
C shift
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Date


mR TurnoutTimes
Range
00:39
00:35
00:30
00:26
00:22
00:17
00:13
00:09
00:04
00:00
UCL
CL
00:33
00:10
00:36
00:11
00:11
00:03
00:29
00:09
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Date