

Staffing Analysis “Autopost” Excel-Based Tools

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Developed as a service to the field by:

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Introduction

Welcome to the new and updated staffing analysis automated posting tool for activities, scheduling, and coverage. This tool was designed to expedite the previously tedious process of formatting and organizing data into a more usable and useful format by providing an clear, easy to use entry form with an automated process to handle the tedious work quickly, efficiently, and accurately. This material supplements *NIC Jail Staffing Analysis, Third Edition*.

Getting started

Excel Program

The AutoPost program is based on the Excel program from Microsoft. It was designed with Excel 2003 and appears to be compatible with Excel 2007.

Opening AutoPost

When you first attempt to open one of the three AutoPost files, you will be asked whether or not to enable “macros.” Answer “yes” to allow the macros that operate the program.

If you have a problem opening the program, try reducing the security level of your Excel program by opening Excel and then—

- Clicking on Tools on the top of the page
- Clicking on Macros from the drop-down menu
- Selecting a medium or lower level of security

After you have made this change, try opening the AutoPost program again.

One at a Time

You should only have one AutoPost program open at a time, so the macros do not get confused. It is wise to save your AutoPost frequently, and you may want to rename it when you have made significant changes so you can retrace your steps as needed.

How to Use the Program

Let us start by using the activities form. Upon loading, the worksheet entitled “Data Sheet” should appear. The “Data Sheet” table has been recreated below to provide a visual example. Throughout this process, it is very important to *never* change any of the worksheet names, as this will prevent the automated process from locating them.

The Activities Worksheet

	A	B	C	D	E	F	G	H	I	J	K
1	Activity	Start Time (0000-2400)	End Time (0000-2400)	Weight	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
2											
3											
4											

Though many of these fields are fairly self-explanatory, others are less clear in their purpose. As such, a list has been included below to better elaborate on what each field expects as input, as well as the restrictions on and formatting required of the data.

Activity	This field is for the name of the activity. It is recommended that the activity name not be made excessively long, though any length can be input.
Start/End Time	This field holds the starting and ending times for the activity. Always make certain that the time is formatted as military time (0000-2400) and do not include any colons (:) between the hours and minutes. Only insert times on the half hour. If an activity takes place over a period time either beginning or ending on a time other than the half hour, round to the nearest half hour. Times such as 0500 – 0500 are acceptable. Finally, if an activity or shift travels across more than one day, such as from Wednesday at 23:00 to Thursday at 02:00, insert the time as normal (in this case 2300 for a start time and 0200 as an end time); the program is able to properly distribute the time across days.
Weight	Weight represents the number of employees involved in the operation of the activity. If an activity is exceptionally light and requires little time or effort for staff, a value of zero is acceptable. We recommend using a range of 1 to 3, with 3 having the greatest impact on the facility.
Days of the Week	Place a marker in the box for each day on which an activity takes place. The marker can be any text value, though the letter “X” is recommended. If an activity takes place over two days, only mark the day on which the activity <i>begins</i> . (Example: An activity taking place from Wednesday at 23:00 to Thursday at 02:00 would have its time written as 2300-0200 and marked as taking place on Wednesday.)

Example:

The following table contains an example of the following activities properly placed into the data entry worksheet:

- Alcoholics Anonymous from 7:00PM – 10:00 PM, every Tuesday
- Inmate recreation from 9:00 AM – 11:00 AM, every day, requires 4 employees
- Cross-day activity from 10:00PM Friday to 3:00AM Saturday
- Cleanup from 1:00PM – 1:15PM every Monday, Wednesday, Friday, and Saturday
- Church – 10:00AM – 12:00PM Sunday, 8:00PM – 10:00PM Thursday

	A	B	C	D	E	F	G	H	I	J	K
1	Activity	Start Time (0000-2400)	End Time (0000-2400)	Weight	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
2	AA	1900	2200	1		X					
3	Recreation	0900	1100	4	X	X	X	X	X	X	X
4	CD Activity	2200	0300	1					X		
5	Cleanup	1300	1300	1	X		X		X	X	
6	Church (Th)	2000	2200	1				X			
7	Church (Su)	1000	1200	1							X

Schedule/Coverage Worksheets

The schedule and coverage worksheets have some fields which differ from the activities worksheet. A visual example of the schedule/coverage worksheet is provided below.

	A	B	C	D	E	F	G	H	I	J	K	L
1	Code Number	Employee Name or Description	Start Time (0000-2400)	End Time (0000-2400)	Employee Classification	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.
2												
3												

Note: Days have been abbreviated in order to save space.

Each of these fields holds a similar function to the fields on the activities form, as described below.

Code Number

Code Number holds a unique identifier for a given employee. Identifiers are recommended to relate visibly to the employee's position, such as giving the first intake employee the identifier "IN-001."

Employee Name/Description

This field should hold the employee's name or the description of their post, such as "Intake Officer."

Start/End Time

These fields should hold the time at which the employee's shift begins and ends. The same formatting and limitations as the activity times for the activity's form apply.

Employee Classification

Identifies the employee's classification, such as Captain, Lt., Sgt, etc

Days of the Week

See the above explanation concerning the activities form.

Running the Automated Posting Program

There are three separate programs included in this tool, with each one achieving a different result. All three are recommended. These programs are run by pressing the control key, followed by the letter key pertaining to the desired function. If the program is not running, check and ensure that macros are enabled.

- **Control + P:** This reformats the entered data into a new format on the form named “Activity Chart” or “Schedule Chart,” depending on which form you have active.
- **Control + O:** This formats a seven day chart, detailing a half hour-by-half hour view of each day of the week and how the activities or shifts are distributed, all on one worksheet.
- **Control + L:** This formats the data on a day-by-day format, similar to the previous, only laid out horizontally rather than vertically, includes a visual graph, and each day is segregated to its own Worksheet.

When you activate one of the macros using P, O or L, the excel program will process a series of functions and in some instances you will see these flashing by on the screen. As you work through P, O and L you will be able to see the products of these macros by clicking on the tabs across the bottom on the page, left to right as you progress through the macros.

We hope you find these tools helpful.

You may want to check for newer versions and other free resources at our web site, www.correction.org

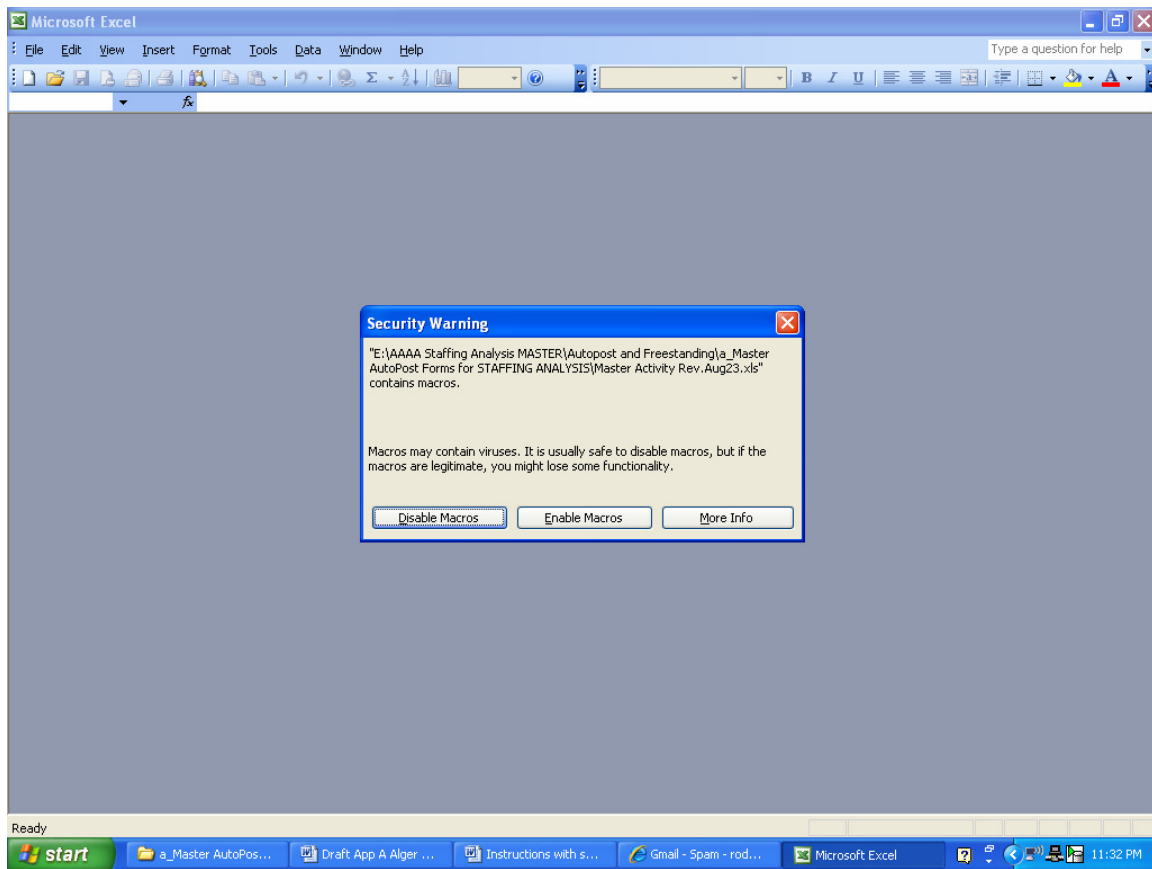
For additional staffing analysis resources, go to the National Institute of Corrections Information Center web site at www.nicic.org.

Sample Screens

The following pages present a series of sample screens for each of the three AutoPost programs.

Sample Screens from AutoPost Programs

Security warning asking for permission to enable macros (yes).



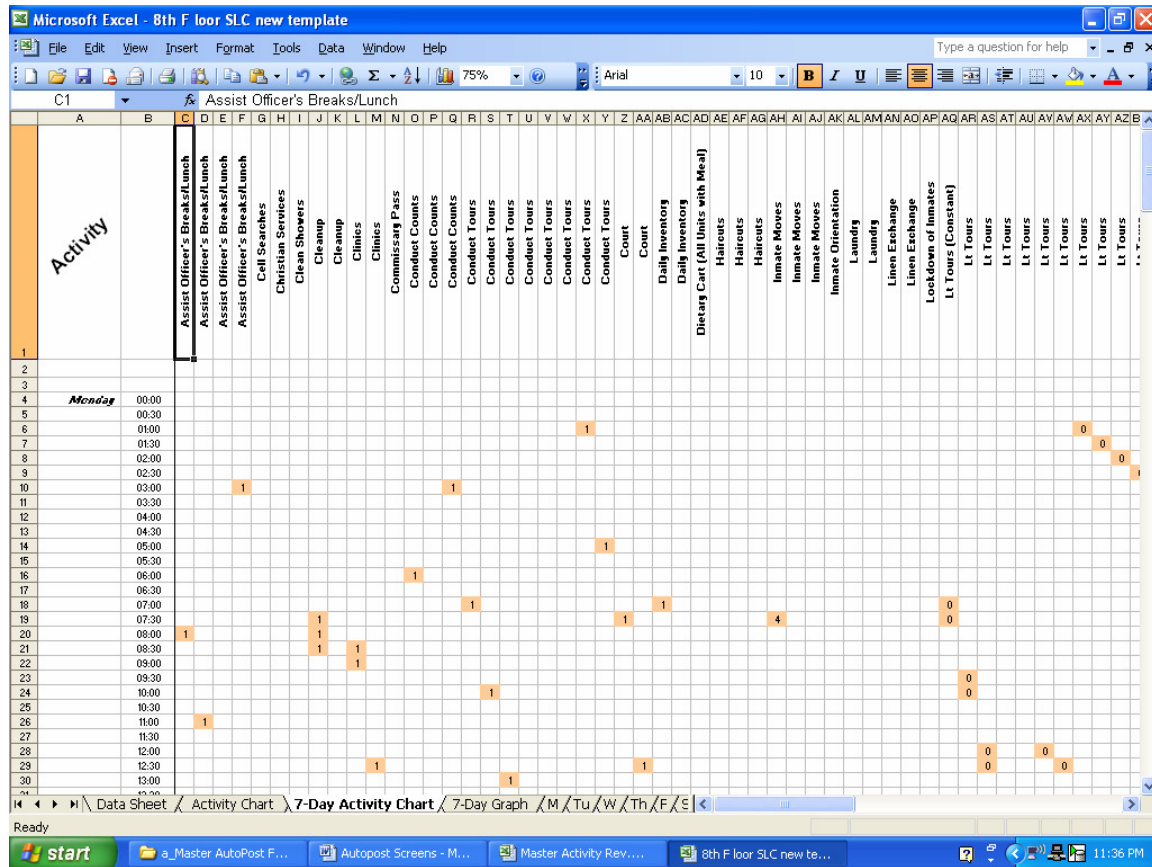
Sample Data Sheet for Activities AutoPost

Activity											
Activity	Start Time (0000-2400)	End Time (0000-2400)	Weight	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Assist Officer's Breaks/Lunch	0800	0800	1	x	x	x	x	x	x	x	
Assist Officer's Breaks/Lunch	1100	1100	1	x	x	x	x	x	x	x	
Assist Officer's Breaks/Lunch	1800	1800	1	x	x	x	x	x	x	x	
Assist Officer's Breaks/Lunch	0300	0300	1	x	x	x	x	x	x	x	
Cell Searches	1430	1500	1	x	x	x	x	x	x	x	
Christian Services	0900	1100	1				x				
Clean Showers	2230	2330	3	x	x	x	x	x	x	x	
Cleanup	0730	0900	1	x	x	x	x	x	x	x	
Cleanup	1730	1800	1	x	x	x	x	x	x	x	
Clinics	0830	0930	1	x	x	x	x	x			
Clinics	1230	1300	1	x	x	x	x	x			
Commissary Pass	1500	1800	1			x					
Conduct Counts	0600	0600	1	x	x	x	x	x	x	x	
Conduct Counts	1400	1400	1	x	x	x	x	x	x	x	
Conduct Counts	0300	0300	1	x	x	x	x	x	x	x	
Conduct Tours	0700	0700	1	x	x	x	x	x	x	x	
Conduct Tours	1000	1000	1	x	x	x	x	x	x	x	
Conduct Tours	1300	1300	1	x	x	x	x	x	x	x	
Conduct Tours	1530	1530	1	x	x	x	x	x	x	x	
Conduct Tours	2030	2030	1	x	x	x	x	x	x	x	
Conduct Tours	2230	2230	1	x	x	x	x	x	x	x	
Conduct Tours	0100	0100	1	x	x	x	x	x	x	x	
Conduct Tours	0500	0500	1	x	x	x	x	x	x	x	
Court	0730	0800	1	x	x	x	x	x			
Court	1230	1230	1	x	x	x	x	x			
Daily Inventory	0700	0730	1	x	x	x	x	x	x	x	
Daily Inventory	1430	1500	1	x	x	x	x	x	x	x	
Dietary Cart (All Units with Meal)	1600	1630	0	x	x	x	x	x			
Haircuts	1430	1500	2					x	x	x	
Haircuts	1500	1630	2					x	x	x	
Haircuts	1900	2130	2					x	x	x	

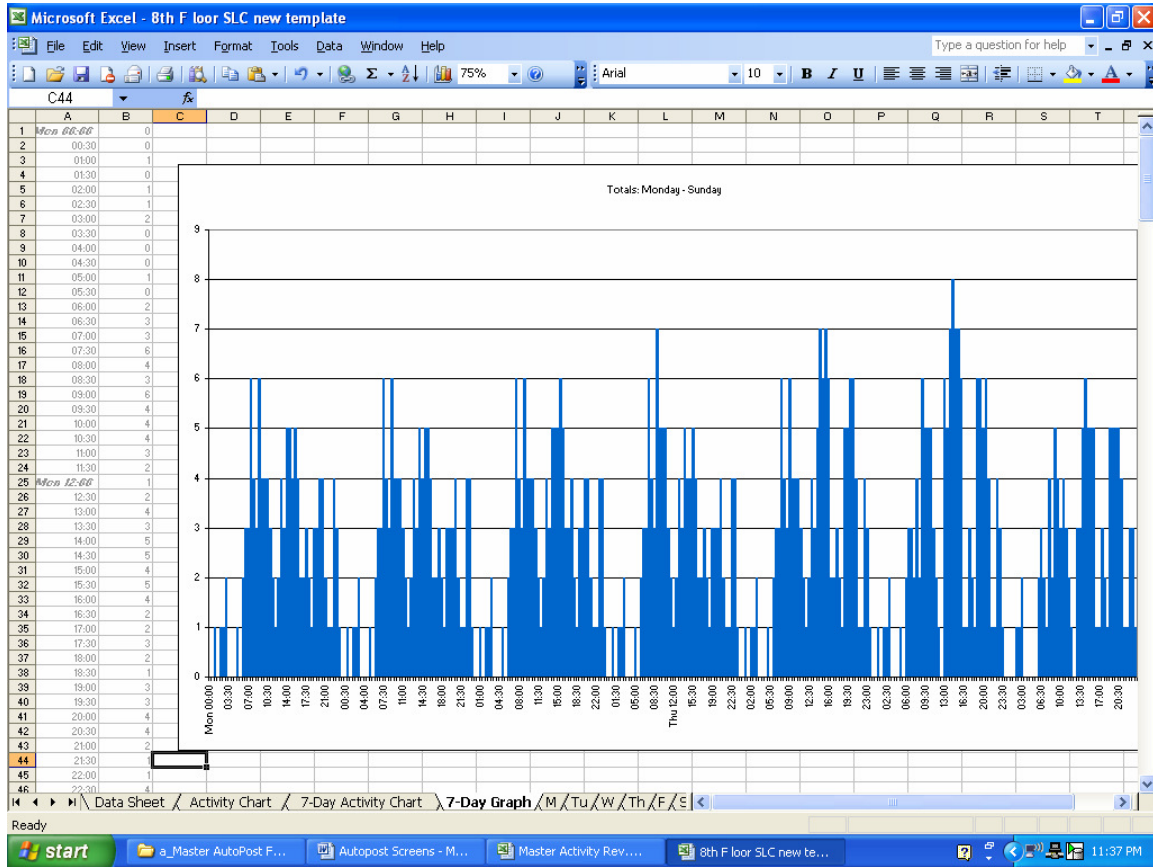
Sample Activity Chart (second tab at bottom of page)

Microsoft Excel - 8th Floor SLC new template																											
File Edit View Insert Format Tools Data Window Help																											
Type a question for help																											
A2 Assist Officer's Breaks/Lunch																											
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA
1	Activity	Time	Date							Weight																	
2	Assist Officer's Breaks/Lunch	08:00 - 08:00	M	Tu	W	Th	F	Sa	Su	1																	
3	Assist Officer's Breaks/Lunch	11:00 - 11:00	M	Tu	W	Th	F	Sa	Su	1																	
4	Assist Officer's Breaks/Lunch	18:00 - 18:00	M	Tu	W	Th	F	Sa	Su	1																	
5	Assist Officer's Breaks/Lunch	03:00 - 03:00	M	Tu	W	Th	F	Sa	Su	1								1									
6	Cell Searches	14:30 - 15:00	M	Tu	W	Th	F	Sa	Su	1																	
7	Christian Services	09:00 - 11:00	M	Tu	W	Th	F	Sa	Su	1																	
8	Clean Showers	22:30 - 23:30	M	Tu	W	Th	F	Sa	Su	3																	
9	Cleanup	07:30 - 09:00	M	Tu	W	Th	F	Sa	Su	1																1	
10	Cleanup	17:30 - 18:00	M	Tu	W	Th	F	Sa	Su	1																	
11	Clinics	08:30 - 09:30	M	Tu	W	Th	F	Sa	Su	1																	
12	Clinics	12:30 - 13:00	M	Tu	W	Th	F	Sa	Su	1																	
13	Commissary Pass	15:00 - 18:00	M	Tu	W	Th	F	Sa	Su	1																	
14	Conduct Counts	06:00 - 06:00	M	Tu	W	Th	F	Sa	Su	1														1			
15	Conduct Counts	14:00 - 14:00	M	Tu	W	Th	F	Sa	Su	1																	
16	Conduct Counts	03:00 - 03:00	M	Tu	W	Th	F	Sa	Su	1								1									
17	Conduct Tours	07:00 - 07:00	M	Tu	W	Th	F	Sa	Su	1																1	
18	Conduct Tours	10:00 - 10:00	M	Tu	W	Th	F	Sa	Su	1																	
19	Conduct Tours	13:00 - 13:00	M	Tu	W	Th	F	Sa	Su	1																	
20	Conduct Tours	15:30 - 15:30	M	Tu	W	Th	F	Sa	Su	1																	
21	Conduct Tours	20:30 - 20:30	M	Tu	W	Th	F	Sa	Su	1																	
22	Conduct Tours	22:30 - 22:30	M	Tu	W	Th	F	Sa	Su	1																	
23	Conduct Tours	01:00 - 01:00	M	Tu	W	Th	F	Sa	Su	1								1									
24	Conduct Tours	05:00 - 05:00	M	Tu	W	Th	F	Sa	Su	1														1			
25	Court	07:30 - 08:00	M	Tu	W	Th	F	Sa	Su	1																	1
26	Court	12:30 - 12:30	M	Tu	W	Th	F	Sa	Su	1																	
27	Daily Inventory	07:00 - 07:30	M	Tu	W	Th	F	Sa	Su	1																1	
28	Daily Inventory	14:30 - 15:00	M	Tu	W	Th	F	Sa	Su	1																	
29	Dietary Cart (All Units with Meal)	16:00 - 16:30	M	Tu	W	Th	F	Sa	Su	0																	
30	Haircuts	14:30 - 15:00	M	Tu	W	Th	F	Sa	Su	2																	
31	Haircuts	15:00 - 16:30	M	Tu	W	Th	F	Sa	Su	2																	
32	Haircuts	19:00 - 21:30	M	Tu	W	Th	F	Sa	Su	2																	
33	Inmate Moves	07:30 - 08:00	M	Tu	W	Th	F	Sa	Su	4																	4
34	Inmate Moves	12:30 - 13:00	M	Tu	W	Th	F	Sa	Su	4																	

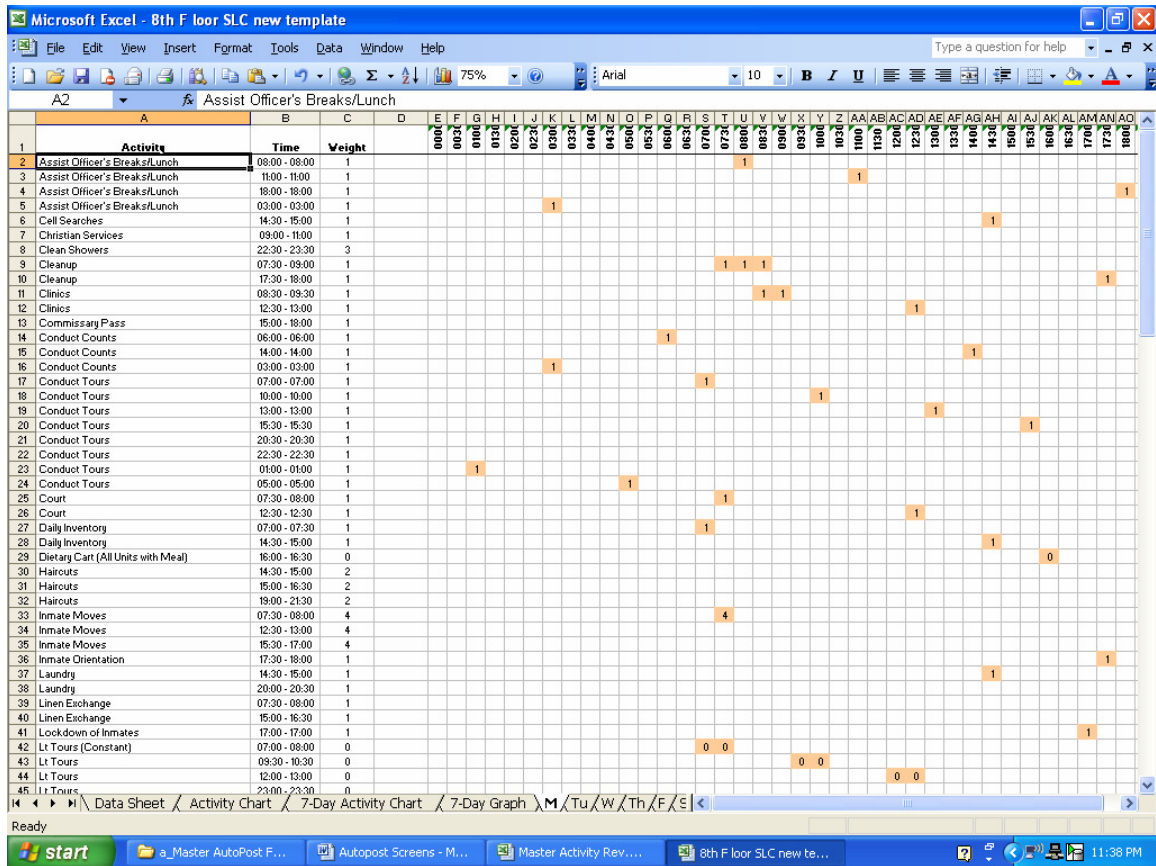
7-Day Activity Chart (3rd tab)



Sample 7-Day Graph (4th tab)

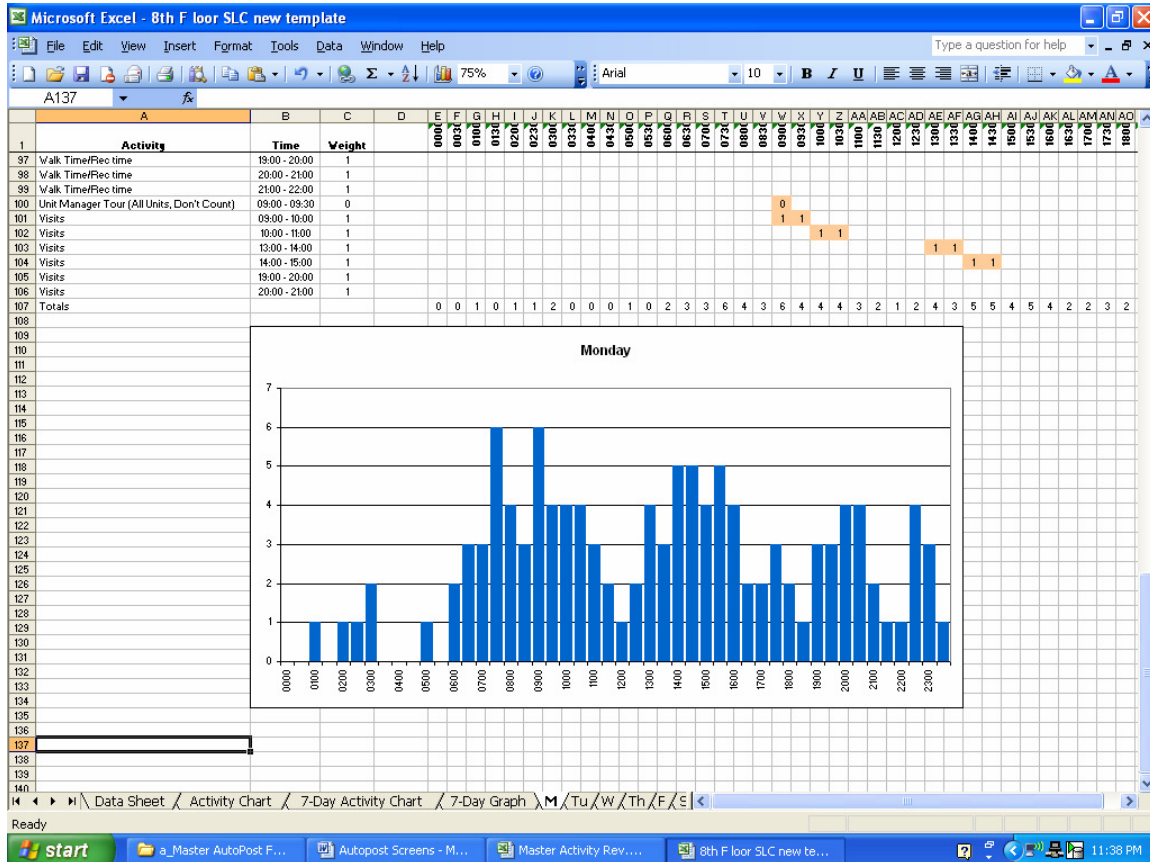


Sample activity chart for Monday (5th tab)

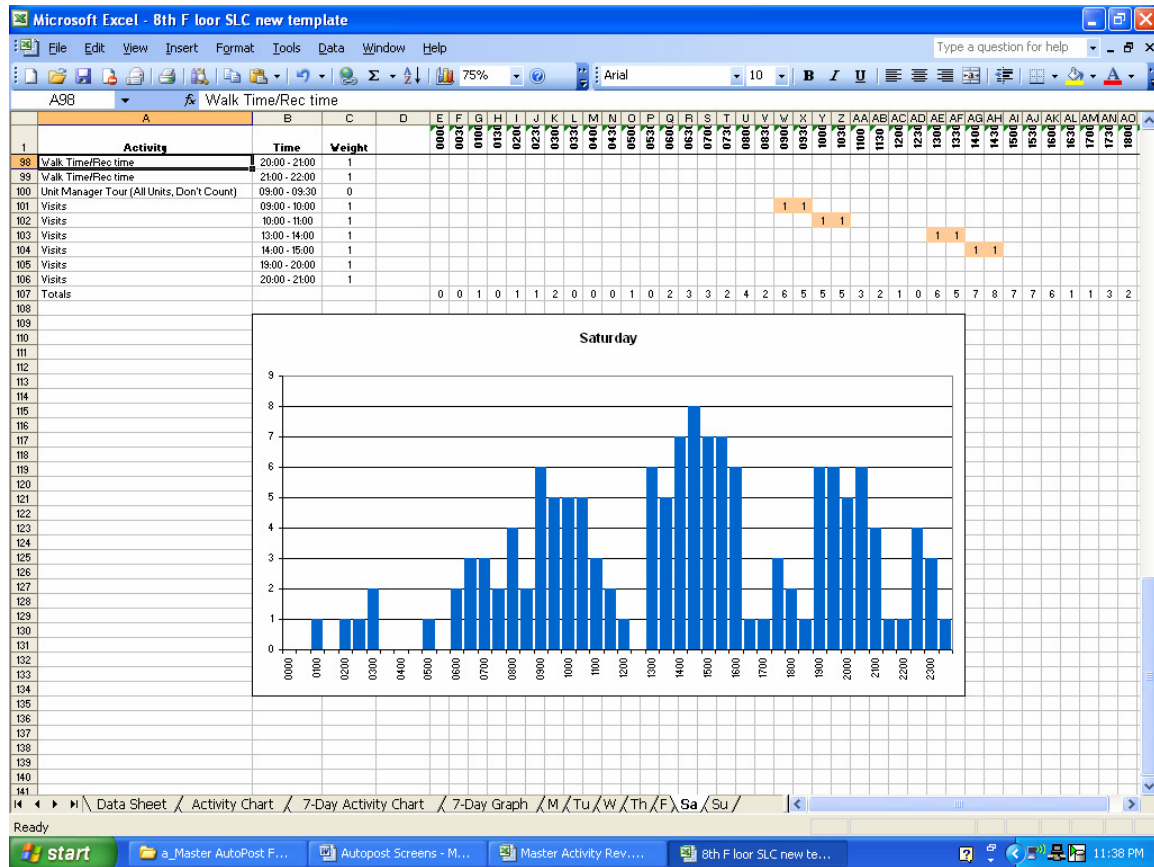


Sample daily activity graph for Monday, located further down the page

From the activity chart (Tab 5)



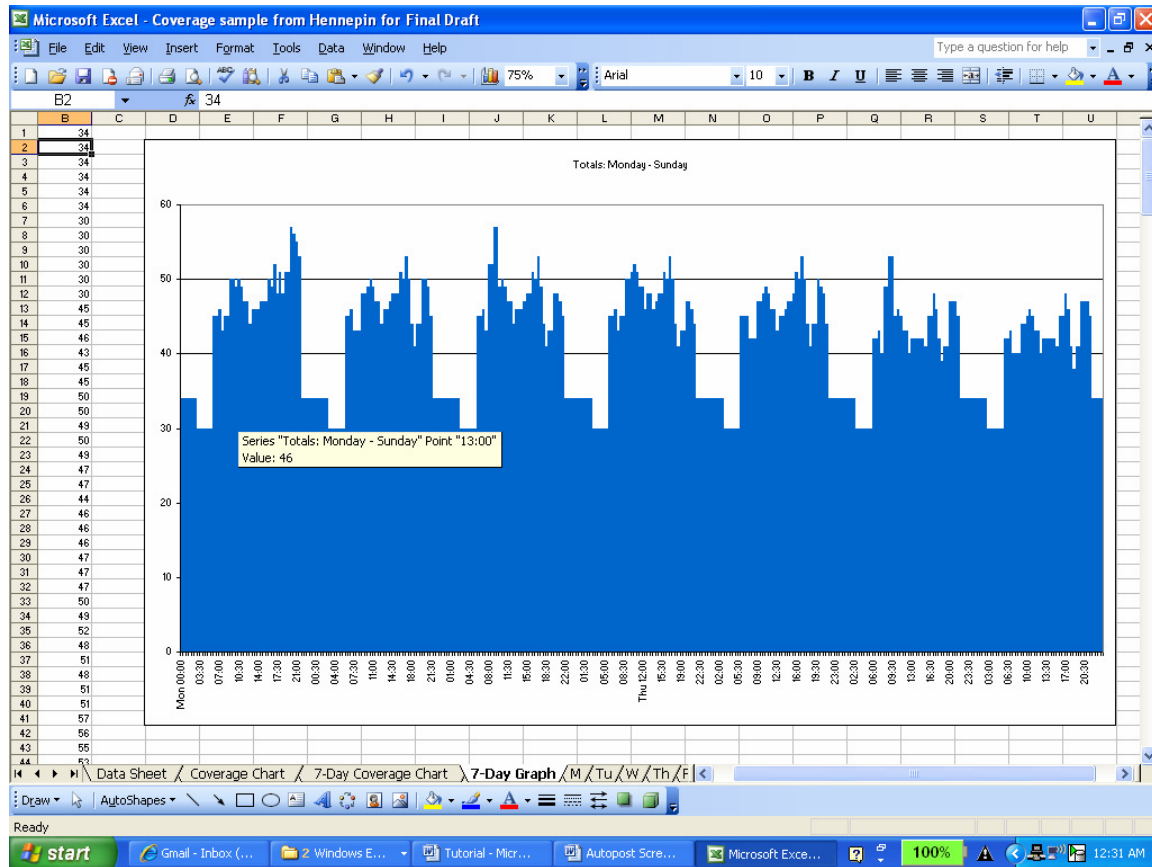
Sample activity chart for Saturday (10th tab)



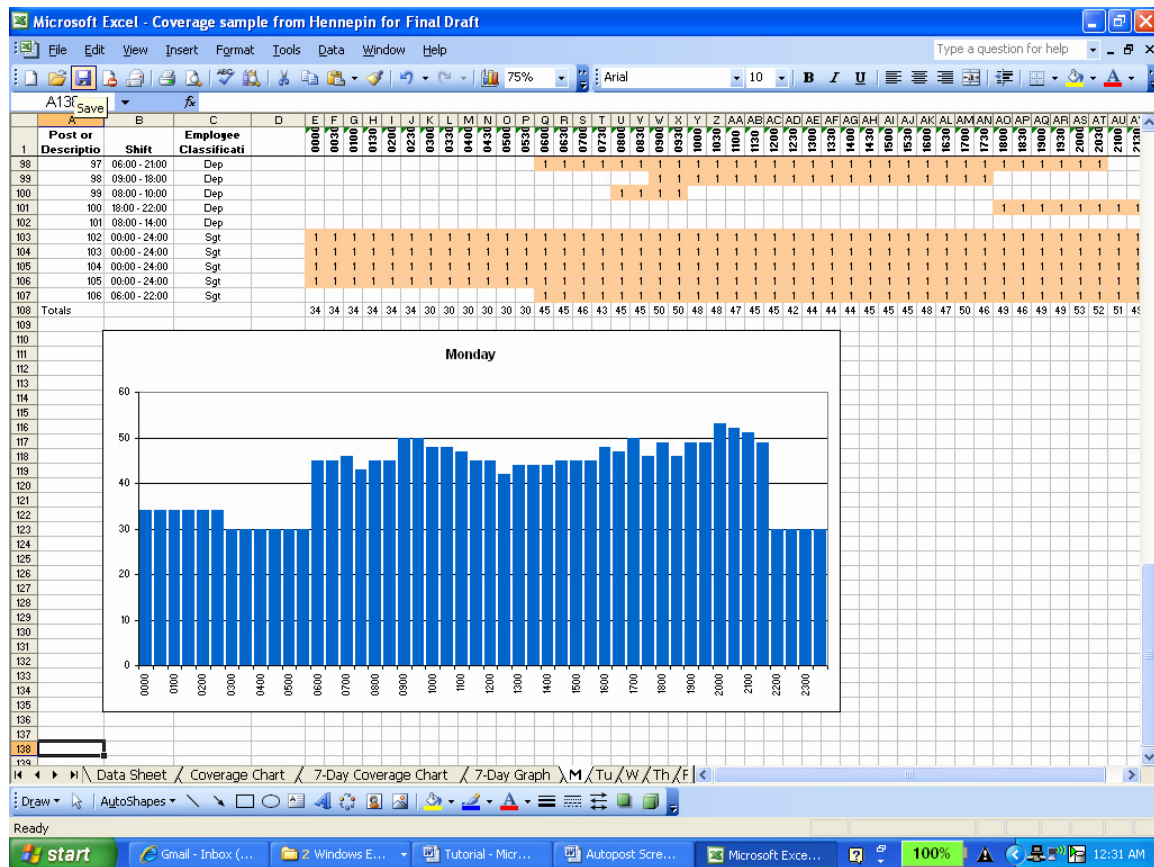
Sample data sheet for Coverage AutoPost

Microsoft Excel - Coverage sample from Hennepin for Final Draft													
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	A	B	C	D	E	F	G	H	I	J	K	L	M
	Code		Start Time	End Time	Employee								
1	Number	Post or Description	(0000-2400)	(0000-2400)	Classification	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
2	1	Q13	0000	2400	Dep	x	x	x	x	x	x	x	
3	2	Q14	0000	2400	Dep	x	x	x	x	x	x	x	
4	3	Row6	0600	1130	Dep	x	x	x	x	x	x	x	
5	4	Row6	1300	1730	Dep	x	x	x	x	x	x	x	
6	5	Row6	1900	2130	Dep	x	x	x	x	x	x	x	
7	6	VisitA	1800	2200	Dep	x							
8	7	VisitB	0800	1000	Dep			x			x		
9	8	MedsA	0900	1100	Dep	x	x	x	x	x	x	x	
10	9	MedsB	1600	1800	Dep	x	x	x	x	x	x	x	
11	10	MedsC	2000	2200	Dep	x	x	x	x	x	x	x	
12	11	MedsA	0900	1100	Dep	x	x	x	x	x	x	x	
13	12	MedsB	1600	1800	Dep	x	x	x	x	x	x	x	
14	13	MedsC	2000	2200	Dep	x	x	x	x	x	x	x	
15	14	Uniform	1730	2130	Dep		x		x				
16	15	Linen	1730	2000	Dep				x				
17	16	Comm6	1900	2200	Dep		x						
18	17	Comm11	1900	2030	Dep					x			
19	18	Comm12	1900	2030	Dep	x							
20	19	Meals	0545	0715	Dep	x	x	x	x	x	x	x	
21	20	Meals	1045	1215	Dep	x	x	x	x	x	x	x	
22	21	Meals	1645	1815	Dep	x	x	x	x	x	x	x	
23	22	Q11	0000	2400	Dep	x	x	x	x	x	x	x	
24	23	Q12	0000	2400	Dep	x	x	x	x	x	x	x	
25	24	Row4	0600	1130	Dep	x	x	x	x	x	x	x	
26	25	Row4	1300	1730	Dep	x	x	x	x	x	x	x	
27	26	Row4	1900	2130	Dep	x	x	x	x	x	x	x	
28	27	SocVis5	0800	1000	Dep			x			x		
29	28	SocVis5	1800	2200	Dep	x							
30	29	MedUnit	0000	2400	Dep	x	x	x	x	x	x	x	
31	30	MedUnit	0000	2400	Dep	x	x	x	x	x	x	x	

Sample 7-Day Coverage Graph



Sample Graph for Monday, Coverage



Sample Data Sheet for Schedule AutoPost

Microsoft Excel - Master Schedule Rev. Aug2

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Arial

10

B I U

B4

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Code Number	Employee Name or Description	Start Time (0000- 2400)	End Time (0000- 2400)	Employee Classificatio n	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday				
1																
2																
3																
4																
5																
6																
7																
8																
9																
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