

Tabular matter

156

Designers often encounter typographic problems that are not based on narrative or instructions ('This happened, then this happened,' or 'Do this, then do this'). Timetables, financial statements, lists of dates, weather charts — many kinds of information design — often need to accommodate reading in two directions simultaneously. Setting up columns and rows that read clearly requires a thorough understanding of working with tabs.

The timetable to the right (actual size: 6 in or 152 mm square) demonstrates many of the problems with overdesigning tabular matter. Extraneous rules, both vertical and horizontal, have been imposed on the basic typographic organization to correct for unfortunate first choices about type size, leading, and placement.

SATURDAYS AND SUNDAYS						
INBOUND	1204	1208	1212	1216	1220	1224
READ DOWN	A.M.	A.M.	P.M.	P.M.	P.M.	P.M.
Dep: Haverhill	7 15	10 15	1 15	4 15	7 15	10 15
Bradford	7 17	10 17	1 17	4 17	7 17	10 17
Lawrence	7 26	10 26	1 26	4 26	7 26	10 26
Andover	7 31	10 31	1 31	4 31	7 31	10 31
Ballardvale	f7 36	f10 36	f1 36	f4 36	f7 36	f10 36
North Wilmington	f7 42	f10 42	f1 42	f4 42	f7 42	f10 42
Reading	7 51	10 51	1 51	4 51	7 51	10 51
Wakefield	7 57	10 57	1 57	4 57	7 57	10 57
Greenwood	f8 00	f11 00	f2 00	f5 00	f8 00	f11 00
Melrose Highlands	8 02	11 02	2 02	5 02	8 02	11 02
Melrose/Cedar Park	f8 04	f11 04	f2 04	f5 04	f8 04	f11 04
Wyoming Hill	f8 06	f11 06	f2 06	f5 06	f8 06	f11 06
Malden Center	8 09	11 09	2 09	5 09	8 09	11 09
Arr: North Station	8 19	11 19	2 19	5 19	8 19	11 19
OUTBOUND	1205	1209	1213	1217	1221	1225
READ DOWN	A.M.	A.M.	P.M.	P.M.	P.M.	P.M.
Dep: North Station	8 45	11 45	2 45	5 45	8 45	11 30
Malden Center	8 55	11 55	2 55	5 55	8 55	11 40
Wyoming Hill	f8 58	f11 58	f2 58	f5 58	f8 58	f11 43
Melrose/Cedar Park	f9 00	f12 00	f3 00	f6 00	f9 00	f11 45
Melrose Highlands	9 02	12 02	3 02	6 02	9 02	11 47
Greenwood	f9 04	f12 04	f3 04	f6 04	f9 04	f11 49
Wakefield	9 08	12 08	3 08	6 08	9 08	11 53
Reading	9 14	12 14	3 14	6 14	9 14	11 59
North Wilmington	f9 22	f12 22	f3 22	f6 22	f9 22	f12 07
Ballardvale	f9 28	f12 28	f3 28	f6 28	f9 28	f12 13
Andover	9 33	12 33	3 33	6 33	9 33	12 18
Lawrence	9 38	12 38	3 38	6 38	9 38	12 23
Bradford	9 47	12 47	3 47	6 47	9 47	12 32
Arr: Haverhill	9 49	12 49	3 49	6 49	9 49	12 34

<p>July 4 and New Year's Eve contact Customer Service for service updates at 617-222-3200</p>	<p>HOLIDAYS SATURDAY SERVICE Presidents' Day Independence Day New Year's Day <i>f stops only on request</i></p>	<p>SUNDAY SERVICE Memorial Day • Labor Day Thanksgiving Day • Christmas Day</p>
---	--	--

Uppercase numerals were initially designed to all have the same set width, in part so that they would align vertically in columns of figures. Lowercase numerals were not.

Saturdays and Sundays						
Inbound	1204	1208	1212	1216	1220	1224
Dep: Haverhill	7:15	10:15	1:15	4:15	7:15	10:15
Bradford	7:17	10:17	1:17	4:17	7:17	10:17
Lawrence	7:26	10:26	1:26	4:26	7:26	10:26
Andover	7:31	10:31	1:31	4:31	7:31	10:31
Ballardvale	7:36*	10:36*	1:36*	4:36*	7:36*	10:36*
North Wilmington	7:42*	10:42*	1:42*	4:42*	7:42*	10:42*
Reading	7:51	10:51	1:51	4:51	7:51	10:51
Wakefield	7:57	10:57	1:57	4:57	7:57	10:57
Greenwood	8:00*	11:00*	2:00*	5:00*	8:00*	11:00*
Melrose Highlands	8:02	11:02	2:02	5:02	8:02	11:02
Melrose/Cedar Park	8:04*	11:04*	2:04*	5:04*	8:04*	11:04*
Wyoming Hill	8:06*	11:06*	2:06*	5:06*	8:06*	11:06*
Malden Center	8:09	11:09	2:09	5:09	8:09	11:09
Arr: North Station	8:19	11:19	2:19	5:19	8:19	11:19
Outbound	1205	1209	1213	1217	1221	1225
Dep: North Station	8:45	11:45	2:45	5:45	8:45	11:30
Malden Center	8:55	11:55	2:55	5:55	8:55	11:40
Wyoming Hill	8:58*	11:58*	2:58*	5:58*	8:58*	11:43*
Melrose/Cedar Park	9:00*	12:00*	3:00*	6:00*	9:00*	11:45*
Melrose Highlands	9:02	12:02	3:02	6:02	9:02	11:47
Greenwood	9:04*	12:04*	3:04*	6:04*	9:04*	11:49*
Wakefield	9:08	12:08	3:08	6:08	9:08	11:53
Reading	9:14	12:14	3:14	6:14	9:14	11:59
North Wilmington	9:22*	12:22*	3:22*	6:22*	9:22*	12:07*
Ballardvale	9:28*	12:28*	3:28*	6:28*	9:28*	12:13*
Andover	9:33	12:33	3:33	6:33	9:33	12:18
Lawrence	9:38	12:38	3:38	6:38	9:38	12:23
Bradford	9:47	12:47	3:47	6:47	9:47	12:32
Arr: Haverhill	9:49	12:49	3:49	6:49	9:49	12:34
Holidays	Presidents' Day • Independence Day • New Year's Day • Memorial Day • Labor Day • Thanksgiving Day • Christmas Day					
Weekend service	contact Customer Service for service updates at 617-222-3200					
July 4 and New Year's Eve	* stops only on request					

As with the previous exercise, the first step is to set all the material in one size of one typeface in order to uncover the internal logic of the information.

Here a sans serif typeface (Univers 45) is chosen because the relatively large x-height and open counters aid reading at smaller sizes. The horizontal rules used on the original schedule have been replaced by line spaces. Vertical rules and the 'frame' of the original have been eliminated altogether. Centered type has been reformatted to flush left/ragged right. The term 'READ DOWN' has

been eliminated and the 'f' before some entries in the schedule has been replaced with an asterisk after.

From this point, the goal is to reinforce the two directions of reading (across and down) without introducing elements that supersede the information itself.

Saturdays and Sundays

Inbound	1204	1208	1212	1216	1220	1224
Dep: Haverhill	7:15	10:15	1:15	4:15	7:15	10:15
Bradford	7:17	10:17	1:17	4:17	7:17	10:17
Lawrence	7:26	10:26	1:26	4:26	7:26	10:26
Andover	7:31	10:31	1:31	4:31	7:31	10:31
Ballardvale	7:36*	10:36*	1:36*	4:36*	7:36*	10:36*
North Wilmington	7:42*	10:42*	1:42*	4:42*	7:42*	10:42*
Reading	7:51	10:51	1:51	4:51	7:51	10:51
Wakefield	7:57	10:57	1:57	4:57	7:57	10:57
Greenwood	8:00*	11:00*	2:00*	5:00*	8:00*	11:00*
Melrose Highlands	8:02	11:02	2:02	5:02	8:02	11:02
Melrose/Cedar Park	8:04*	11:04*	2:04*	5:04*	8:04*	11:04*
Wyoming Hill	8:06*	11:06*	2:06*	5:06*	8:06*	11:06*
Malden Center	8:09	11:09	2:09	5:09	8:09	11:09
Arr: North Station	8:19	11:19	2:19	5:19	8:19	11:19
Outbound	1205	1209	1213	1217	1221	1225
Dep: North Station	8:45	11:45	2:45	5:45	8:45	11:30
Malden Center	8:55	11:55	2:55	5:55	8:55	11:40
Wyoming Hill	8:58*	11:58*	2:58*	5:58*	8:58*	11:43*
Melrose/Cedar Park	9:00*	12:00*	3:00*	6:00*	9:00*	11:45*
Melrose Highlands	9:02	12:02	3:02	6:02	9:02	11:47
Greenwood	9:04*	12:04*	3:04*	6:04*	9:04*	11:49*
Wakefield	9:08	12:08	3:08	6:08	9:08	11:53
Reading	9:14	12:14	3:14	6:14	9:14	11:59
North Wilmington	9:22*	12:22*	3:22*	6:22*	9:22*	12:07*
Ballardvale	9:28*	12:28*	3:28*	6:28*	9:28*	12:13*
Andover	9:33	12:33	3:33	6:33	9:33	12:18
Lawrence	9:38	12:38	3:38	6:38	9:38	12:23
Bradford	9:47	12:47	3:47	6:47	9:47	12:32
Arr: Haverhill	9:49	12:49	3:49	6:49	9:49	12:34

Holidays**Weekend service**

Presidents' Day • Independence Day • New Year's Day •
 Memorial Day • Labor Day • Thanksgiving Day • Christmas Day

July 4 and New Year's Eve

contact Customer Service for service updates at 617-222-3200

*** stops only on request**

Two weights of boldface (Univers 65 and 75) are added, both to indicate hierarchy (days of the week, trains' numbers and directions, ends of the line) and to distinguish morning and afternoon/evening times at a quick glance.

This latter use of boldface is more an issue with 12-hour American time systems than with 24-hour European systems. Still, the distinction between before and after noon can be useful for quick orientation.

SATURDAYS AND SUNDAYS

Inbound	1204	1208	1212	1216	1220	1224
Dep: Haverhill	7:15	10:15	1:15	4:15	7:15	10:15
Bradford	7:17	10:17	1:17	4:17	7:17	10:17
Lawrence	7:26	10:26	1:26	4:26	7:26	10:26
Andover	7:31	10:31	1:31	4:31	7:31	10:31
Ballardvale	7:36*	10:36*	1:36*	4:36*	7:36*	10:36*
North Wilmington	7:42*	10:42*	1:42*	4:42*	7:42*	10:42*
Reading	7:51	10:51	1:51	4:51	7:51	10:51
Wakefield	7:57	10:57	1:57	4:57	7:57	10:57
Greenwood	8:00*	11:00*	2:00*	5:00*	8:00*	11:00*
Melrose Highlands	8:02	11:02	2:02	5:02	8:02	11:02
Melrose/Cedar Park	8:04*	11:04*	2:04*	5:04*	8:04*	11:04*
Wyoming Hill	8:06*	11:06*	2:06*	5:06*	8:06*	11:06*
Malden Center	8:09	11:09	2:09	5:09	8:09	11:09
Arr: North Station	8:19	11:19	2:19	5:19	8:19	11:19
Outbound	1205	1209	1213	1217	1221	1225
Dep: North Station	8:45	11:45	2:45	5:45	8:45	11:30
Malden Center	8:55	11:55	2:55	5:55	8:55	11:40
Wyoming Hill	8:58*	11:58*	2:58*	5:58*	8:58*	11:43*
Melrose/Cedar Park	9:00*	12:00*	3:00*	6:00*	9:00*	11:45*
Melrose Highlands	9:02	12:02	3:02	6:02	9:02	11:47
Greenwood	9:04*	12:04*	3:04*	6:04*	9:04*	11:49*
Wakefield	9:08	12:08	3:08	6:08	9:08	11:53
Reading	9:14	12:14	3:14	6:14	9:14	11:59
North Wilmington	9:22*	12:22*	3:22*	6:22*	9:22*	12:07*
Ballardvale	9:28*	12:28*	3:28*	6:28*	9:28*	12:13*
Andover	9:33	12:33	3:33	6:33	9:33	12:18
Lawrence	9:38	12:38	3:38	6:38	9:38	12:23
Bradford	9:47	12:47	3:47	6:47	9:47	12:32
Arr: Haverhill	9:49	12:49	3:49	6:49	9:49	12:34

HOLIDAYS**Weekend service**

Presidents' Day • Independence Day • New Year's Day •
 Memorial Day • Labor Day • Thanksgiving Day • Christmas Day

July 4 and New Year's Eve

contact Customer Service for service updates at 617-222-3200

* stops only on request

Hierarchy is reinforced by introducing rules to signify major breaks in information. Major heads are reversed out of wide black rules, secondary heads follow hairlines.

SATURDAYS AND SUNDAYS

Inbound	1204	1208	1212	1216	1220	1224
Dep: Haverhill	7:15	10:15	1:15	4:15	7:15	10:15
Bradford	7:17	10:17	1:17	4:17	7:17	10:17
Lawrence	7:26	10:26	1:26	4:26	7:26	10:26
Andover	7:31	10:31	1:31	4:31	7:31	10:31
Ballardvale	7:36*	10:36*	1:36*	4:36*	7:36*	10:36*
North Wilmington	7:42*	10:42*	1:42*	4:42*	7:42*	10:42*
Reading	7:51	10:51	1:51	4:51	7:51	10:51
Wakefield	7:57	10:57	1:57	4:57	7:57	10:57
Greenwood	8:00*	11:00*	2:00*	5:00*	8:00*	11:00*
Melrose Highlands	8:02	11:02	2:02	5:02	8:02	11:02
Melrose/Cedar Park	8:04*	11:04*	2:04*	5:04*	8:04*	11:04*
Wyoming Hill	8:06*	11:06*	2:06*	5:06*	8:06*	11:06*
Malden Center	8:09	11:09	2:09	5:09	8:09	11:09
Arr: North Station	8:19	11:19	2:19	5:19	8:19	11:19
Outbound	1205	1209	1213	1217	1221	1225
Dep: North Station	8:45	11:45	2:45	5:45	8:45	11:30
Malden Center	8:55	11:55	2:55	5:55	8:55	11:40
Wyoming Hill	8:58*	11:58*	2:58*	5:58*	8:58*	11:43*
Melrose/Cedar Park	9:00*	12:00*	3:00*	6:00*	9:00*	11:45*
Melrose Highlands	9:02	12:02	3:02	6:02	9:02	11:47
Greenwood	9:04*	12:04*	3:04*	6:04*	9:04*	11:49*
Wakefield	9:08	12:08	3:08	6:08	9:08	11:53
Reading	9:14	12:14	3:14	6:14	9:14	11:59
North Wilmington	9:22*	12:22*	3:22*	6:22*	9:22*	12:07*
Ballardvale	9:28*	12:28*	3:28*	6:28*	9:28*	12:13*
Andover	9:33	12:33	3:33	6:33	9:33	12:18
Lawrence	9:38	12:38	3:38	6:38	9:38	12:23
Bradford	9:47	12:47	3:47	6:47	9:47	12:32
Arr: Haverhill	9:49	12:49	3:49	6:49	9:49	12:34

HOLIDAYS**Weekend service**

Presidents' Day • Independence Day • New Year's Day •
 Memorial Day • Labor Day • Thanksgiving Day • Christmas Day

July 4 and New Year's Eve

contact Customer Service for service updates at 617-222-3200

* stops only on request

The space between columns of times already supports vertical reading. Screened wide horizontal rules, added between alternating lines of arrival/departure times, aids readability across the timetable.

SATURDAYS AND SUNDAYS

Inbound	1204	1208	1212	1216	1220	1224
Dep: Haverhill	7:15	10:15	1:15	4:15	7:15	10:15
Bradford	7:17	10:17	1:17	4:17	7:17	10:17
Lawrence	7:26	10:26	1:26	4:26	7:26	10:26
Andover	7:31	10:31	1:31	4:31	7:31	10:31
Ballardvale	7:36*	10:36*	1:36*	4:36*	7:36*	10:36*
North Wilmington	7:42*	10:42*	1:42*	4:42*	7:42*	10:42*
Reading	7:51	10:51	1:51	4:51	7:51	10:51
Wakefield	7:57	10:57	1:57	4:57	7:57	10:57
Greenwood	8:00*	11:00*	2:00*	5:00*	8:00*	11:00*
Melrose Highlands	8:02	11:02	2:02	5:02	8:02	11:02
Melrose/Cedar Park	8:04*	11:04*	2:04*	5:04*	8:04*	11:04*
Wyoming Hill	8:06*	11:06*	2:06*	5:06*	8:06*	11:06*
Malden Center	8:09	11:09	2:09	5:09	8:09	11:09
Arr: North Station	8:19	11:19	2:19	5:19	8:19	11:19

Outbound	1205	1209	1213	1217	1221	1225
Dep: North Station	8:45	11:45	2:45	5:45	8:45	11:30
Malden Center	8:55	11:55	2:55	5:55	8:55	11:40
Wyoming Hill	8:58*	11:58*	2:58*	5:58*	8:58*	11:43*
Melrose/Cedar Park	9:00*	12:00*	3:00*	6:00*	9:00*	11:45*
Melrose Highlands	9:02	12:02	3:02	6:02	9:02	11:47
Greenwood	9:04*	12:04*	3:04*	6:04*	9:04*	11:49*
Wakefield	9:08	12:08	3:08	6:08	9:08	11:53
Reading	9:14	12:14	3:14	6:14	9:14	11:59
North Wilmington	9:22*	12:22*	3:22*	6:22*	9:22*	12:07*
Ballardvale	9:28*	12:28*	3:28*	6:28*	9:28*	12:13*
Andover	9:33	12:33	3:33	6:33	9:33	12:18
Lawrence	9:38	12:38	3:38	6:38	9:38	12:23
Bradford	9:47	12:47	3:47	6:47	9:47	12:32
Arr: Haverhill	9:49	12:49	3:49	6:49	9:49	12:34

HOLIDAYS

Weekend service

Presidents' Day • Independence Day • New Year's Day •
Memorial Day • Labor Day • Thanksgiving Day • Christmas Day

July 4 and New Year's Eve

contact Customer Service for service updates at 617-222-3200

* stops only on request

A second color reinforces existing organization both by highlighting primary and secondary information and by calling attention to exceptions to the regular schedule. The hairline rule signifying outbound trains (rendered redundant by the use of color) is removed.

Southbound

Train Name ▶				Missouri River Runner	Lincoln Service	Lincoln Service	Missouri River Runner	Texas Eagle	Lincoln Service	Lincoln Service
Train Number ▶				311	301	303	313	21	305	307
Normal Days of Operation ▶				Daily	Daily	Daily	Daily	Daily	Daily	Daily
On Board Service ▶				R B ☕ ☎ 🚲	R B ☕ ☎ 🚲	R B ☕ ☎ 🚲	R B ☕ ☎ 🚲	R ☕ ☎ 🚲	R B ☕ ☎ 🚲	R B ☕ ☎ 🚲
	Mile	Symbol	▼							
CHICAGO, IL (CT) ☎ Rockford, Madison—see pg. 4	0	● & QT	Dp		7 00A	9 25A		☎ 1 45P	5 15P	7 00P
Summit, IL	12	○	↓			9 48A			5 37P	7 22P
Joliet, IL	37	● & ☎			7 57A	10 15A		☎ R 2 40P	6 05P	7 50P
Dwight, IL	74	○				10 49A			6 39P	8 24P
Pontiac, IL	92	○ & ☎				11 06A		3 27P	6 56P	8 41P
Bloomington–Normal, IL ☎ Davenport, Indianapolis—see pg. 4	124	● & QT			9 14A	11 39A		☎ 4 04P	7 29P	9 14P
Lincoln, IL	156	○ & ☎				12 10P		4 37P	8 02P	9 47P
Springfield, IL	185	● & ☎			10 15A	12 50P		☎ 5 14P	8 39P	10 24P
Carlinville, IL	224	○ & ☎				1 28P		5 49P	9 19P	11 04P
Alton, IL	257	● & ☎			11 20A	1 57P		6 20P	9 48P	11 33P
ST. LOUIS, MO –Gateway Station	284	● & QT		Ar	12 20P	3 00P		☎ 7 21P	10 45P	12 30A
			Dp	9 15A		↳	4 00P			
Kirkwood, MO	297	○ M ☎ QT		9 44A			4 29P			
Washington, MO	335	○ M ☎		10 21A			5 06P			
Hermann, MO	365	○ & ☎		10 49A			5 34P			
Jefferson City, MO	409	○ M ☎		11 36A			6 22P			
Sedalia, MO	473	○		12 46P			7 39P			
Warrensburg, MO	502	○ & ☎		1 20P			8 09P			
Lee's Summit, MO	544	○ & ☎		2 04P			8 50P			
Independence, MO	557	○		2 20P			9 06P			
KANSAS CITY, MO (CT)	567	● & QT	Ar	2 55P			9 40P			

Southbound

Train Name ▶				Missouri River Runner	Lincoln Service	Lincoln Service	Missouri River Runner	Texas Eagle	Lincoln Service	Lincoln Service	
Train Number ▶				311	301	303	313	21	305	307	
Normal Days of Operation ▶				Daily	Daily	Daily	Daily	Daily	Daily	Daily	
On Board Service ▶				R B ☕ 📶 🚲	R B ☕ 📶 🚲	R B ☕ 📶 🚲	R B ☕ 📶 🚲	R 🍴 ☕ 📶 🚲	R B ☕ 📶 🚲	R B ☕ 📶 🚲	
	Mile	Symbol	▼								
CHICAGO, IL (CT) 🚆 Rockford, Madison—see pg. 4	0	● & QT	Dp		7 00A	9 25A		🧳 1 45P	5 15P	7 00P	
Summit, IL	12	○	↓			9 48A			5 37P	7 22P	
Joliet, IL	37	● ♿			7 57A	10 15A		🧳 R2 40P	6 05P	7 50P	
Dwight, IL	74	○				10 49A			6 39P	8 24P	
Pontiac, IL	92	○ ♿				11 06A		3 27P	6 56P	8 41P	
Bloomington–Normal, IL 🚆 Davenport, Indianapolis—see pg. 4	124	● & QT			9 14A	11 39A		🧳 4 04P	7 29P	9 14P	
Lincoln, IL	156	○ ♿				12 10P		4 37P	8 02P	9 47P	
Springfield, IL	185	● ♿			10 15A	12 50P		🧳 5 14P	8 39P	10 24P	
Carlinville, IL	224	○ ♿				1 28P		5 49P	9 19P	11 04P	
Alton, IL	257	● ♿			11 20A	1 57P		6 20P	9 48P	11 33P	
ST. LOUIS, MO –Gateway Station	284	● & QT		Ar	12 20P	3 00P		🧳 7 21P	10 45P	12 30A	
			Dp	9 15A		↳	4 00P				
Kirkwood, MO	297	○ M ♿ QT	↓	9 44A			4 29P				
Washington, MO	335	○ M ♿			10 21A			5 06P			
Hermann, MO	365	○ ♿			10 49A			5 34P			
Jefferson City, MO	409	○ M ♿			11 36A			6 22P			
Sedalia, MO	473	○			12 46P			7 39P			
Warrensburg, MO	502	○ ♿			1 20P			8 09P			
Lee’s Summit, MO	544	○ ♿			2 04P			8 50P			
Independence, MO	557	○			2 20P			9 06P			
KANSAS CITY, MO (CT)	567	● & QT		Ar	2 55P			9 40P			