# COMMUTER RAIL SYSTEM ON-TIME PERFORMANCE REPORT May 2010



## COMMUTER RAIL ON-TIME PERFORMANCE May 2010

This report presents an analysis of the May 2010 train delays as reported for Metra's eleven commuter rail lines. On-time is defined, for this analysis, as those trains arriving at their last station stop within five minutes of schedule. Trains that are six minutes or more behind schedule are regarded as late.

Table 1 presents the number of train delays by rail line and service period. During May 2010, Metra operated 16,504 scheduled trains, including 'extras'. 739 of these trains were delayed (late or annulled), representing an on-time performance rate of 95.5%. Table 2 lists on-time percentages by line for each month and year since 2005. Table 3 lists each train that was on time for less than 85% of its weekday runs in May 2010, in order of line, train, and dates delayed. The codes in the 'Delay Code' column of Table 3 are defined in Table 4 and shown sorted by delay-cause category in Table 5.

Table 6 provides a daily listing of the number of delays by line and branch for May 2010.

Table 7.a shows the frequency of train delays by delay-cause category and by line during May 2010. Table 7.b shows the average frequencies over the previous five Mays, and Table 7.c shows the differences between Table 7.a and Table 7.b. There were 739 delays systemwide in May 2010, 242 more than the average over the previous five Mays. Table 8.a shows delays from the beginning of the year through May 2010. Table 8.b shows the average frequencies through May of each of the previous five years, and Table 8.c shows the differences between Table 8.a and Table 8.b. Tables 9.a and 9.b display the systemwide frequency of train delays by cause and by month, for 2010 and 2009 respectively, and Table 9.c shows the difference between the two. From January through May of 2010, a total of 2,921 trains were delayed, compared to 3,315 trains delayed in the same five months of 2009.

Table 10 shows, by line and month, all train delays caused by freight operations over the past 24 months. In May 2010 freight operations delayed 67 trains systemwide, compared to 51 a year earlier. Tables 11.a and 11.b display the frequency of lift-deployment train delays by line and month, for 2010 and 2009 respectively. A total of 32 trains were delayed by lift deployment in May 2010.

A review of May 2010 late trains by duration of delay is shown in Table 12. The range with the greatest number of delays was, as usual, six-to-ten minutes, accounting for 45.6% of all late trains. Table 13 shows that the average length of delay was 15.9 minutes in May 2010. It should be noted that these averages relate only to reportable delays (i.e., trains late by six minutes or more).

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TABLE 1: SCHEDULED AND DELAYED TRAINS, AND ON-TIME PERFORMANCE BY SERVICE PERIOD AND LINE May 2010

				W	eekday	S						Weel	kends					
	I	Peak*		Off	-Peak*	*		Total		Sa	turday	s	Sunday	s & Ho	lidays			
	Trains Scheduled	Trains Late	Percent On-Time															
BNSF	1,081	51	95.3%	807	33	95.9%	1,888	84	95.6%	140	10	92.9%	109	9	91.7%	2,137	103	95.2%
Elec -ML	897	15	98.3%	683	26	96.2%	1,580	41	97.4%	230	7	97.0%	120	4	96.7%	1,930	52	97.3%
-BI	280	1	99.6%	460	7	98.5%	740	8	98.9%	150	4	97.3%				890	12	98.7%
-SC	<u>340</u>	<u>1</u>	99.7%	<u>740</u>	<u>9</u>	98.8%	1,080	<u>10</u>	99.1%	<u>240</u>	<u>0</u>	100.0%	<u>120</u>	0	100.0%	1,440	<u>10</u>	99.3%
Subtotal	1,517	17	98.9%	1,883	42	97.8%	3,400	59	98.3%	620	11	98.2%	240	4	98.3%	4,260	74	98.3%
Heritage	120	18	85.0%				120	18	85.0%							120	18	85.0%
Milw -N	499	40	92.0%	701	80	88.6%	1,200	120	90.0%	120	25	79.2%	120	22	81.7%	1,440	167	88.4%
-W	<u>538</u>	<u>29</u>	94.6%	<u>621</u>	<u>24</u>	96.1%	<u>1,159</u>	<u>53</u>	95.4%	<u>120</u>	<u>1</u>	99.2%	<u>108</u>	<u>6</u>	94.4%	1,387	<u>60</u>	95.7%
Subtotal	1,037	69	93.3%	1,322	104	92.1%	2,359	173	92.7%	240	26	89.2%	228	28	87.7%	2,827	227	92.0%
NCS	220	11	95.0%	220	3	98.6%	440	14	96.8%							440	14	96.8%
RI	720	8	98.9%	640	29	95.5%	1,360	37	97.3%	100	2	98.0%	96	2	97.9%	1,556	41	97.4%
sws	219	11	95.0%	380	21	94.5%	599	32	94.7%	30	2	93.3%				629	34	94.6%
UP -N	598	34	94.3%	801	38	95.3%	1,399	72	94.9%	130	15	88.5%	108	7	93.5%	1,637	94	94.3%
-NW	657	18	97.3%	643	18	97.2%	1,300	36	97.2%	120	12	90.0%	90	11	87.8%	1,510	59	96.1%
-W	<u>539</u>	<u>28</u>	94.8%	<u>641</u>	<u>32</u>	95.0%	1,180	<u>60</u>	94.9%	<u>100</u>	<u>3</u>	97.0%	<u>108</u>	<u>12</u>	88.9%	1,388	<u>75</u>	94.6%
Subtotal	1,794	80	95.5%	2,085	88	95.8%	3,879	168	95.7%	350	30	91.4%	306	30	90.2%	4,535	228	95.0%
SYSTEM	6,708	265	96.0%	7,337	320	95.6%	14,045	585	95.8%	1,480	81	94.5%	979	73	92.5%	16,504	739	95.5%

<sup>\*</sup>Includes peak direction trains operating during weekday peak periods. \*\*Includes all other weekday trains. Delays data for most recent month is final (06/15/10) version from TOPS.

TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH

													JAN-	
LINE YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAY	AVG
	1												1	ı
BNSF 2005	94.3	95.7	96.2	98.1	95.9	95.7	96.8	94.2	94.4	95.0	96.1	93.8	96.1%	95.5%
2006	96.9	96.4	96.4	97.7	96.2	93.4	97.4	95.0	96.2	93.7	90.2	91.4	96.7%	95.0%
2007	96.4	86.8	96.3	96.8	98.2	96.0	97.4	94.5	97.8	95.9	96.1	96.6	95.1%	95.8%
2008	92.9	94.3	97.0	98.2	97.0	94.3	94.8	94.6	92.8	92.8	94.2	89.9	95.9%	94.4%
2009	85.4	94.1	97.5	96.5	94.6	90.9	95.1	91.2	96.0	89.7	97.3	95.3	93.7%	93.6%
2010 2005-2009 average	97.8	97.4	96.4 96.7	95.7	95.2	94.0	96.3	93.9	95.4	93.4	94.8	02.4	96.5%	96.5%
2005-2009 average	93.2	93.5	96.7	97.5	96.4	94.0	96.3	93.9	95.4	93.4	94.8	93.4	95.5%	94.9%
Electric 2005	98.5	99.3	99.6	99.3	98.8	96.5	98.6	99.5	99.2	98.7	97.2	98.7	99.1%	98.7%
2006	99.3	98.6	98.1	99.1	98.9	98.1	95.4	97.9	98.0	97.4	98.7	99.0	98.8%	98.2%
2007	99.2	96.4	97.7	98.0	97.1	97.8	96.6	97.0	95.6	97.4	98.6	98.3	97.7%	97.5%
2008	96.4	98.5	98.8	98.3	99.3	98.5	99.2	98.1	97.9	98.2	96.7	95.0	98.3%	97.9%
2009	96.7	98.5	98.7	99.1	98.6	95.7	97.2	97.2	97.2	97.7	98.5	94.7	98.3%	97.5%
2010	97.7	98.1	98.4	97.9	98.3								98.1%	98.1%
2005-2009 average	98.0	98.3	98.6	98.8	98.5	97.3	97.4	97.9	97.6	97.9	97.9	97.1	98.4%	97.9%
Heritage 2005	95.2	95.0	96.4	95.2	95.2	95.5	93.3	92.8	90.5	88.9	92.1	87.5	95.4%	93.1%
2006	94.4	94.2	92.8	92.5	95.5	92.4	91.7	90.6	90.0	92.4	92.1	95.0	93.4%	92.9%
2007	98.5	80.0	90.2	89.1	87.1	92.1	90.1	89.1	97.4	92.8	96.8	90.8	89.1%	91.1%
2008	93.9	89.7	83.3	87.2	89.7	92.9	91.7	86.5	88.2	89.1	93.0	78.6	88.8%	88.6%
2009	79.4	91.7	91.7	98.5	96.7	92.4	94.9	92.9	90.5	84.1	88.3	88.6	91.6%	90.8%
2010	92.5	93.3	89.1	91.7	85.0	72.1	74.7	72.7	70.5	01.1	00.5	00.0	90.3%	90.3%
2005-2009 average		90.1	91.0	92.5	92.8	93.1	92.4	90.4	91.2	89.5	92.7	87.9	91.8%	91.3%
0	· I													I
Milw - N 2005	90.4	98.4	97.5	95.4	95.7	94.3	92.4	95.8	95.6	97.7	91.3	88.3	95.5%	94.4%
2006	92.7	97.3	95.6	97.1	93.9	93.5	90.6	95.4	94.2	92.8	89.3	92.6	95.3%	93.7%
2007	96.0	89.5	95.6	94.0	96.0	93.0	92.0	95.0	94.1	95.2	93.7	88.1	94.3%	93.6%
2008	96.1	92.6	96.4	95.8	95.6	95.0	93.3	93.1	95.8	96.9	92.9	84.4	95.3%	94.0%
2009	85.9	97.3	97.1	95.5	95.4	94.7	96.0	95.1	96.2	96.3	95.3	93.5	94.2%	94.9%
2010	96.1	96.4	94.2	94.5	88.4	04.1	02.0	04.0	05.2	05.0	02.5	90.4	93.9%	93.9%
2005-2009 average	92.2	95.0	96.4	95.5	95.3	94.1	92.9	94.9	95.2	95.8	92.5	89.4	94.9%	94.1%
Milw - W 2005	91.1	97.0	96.1	96.6	97.7	95.5	96.2	93.8	96.0	96.2	93.0	89.1	95.7%	94.8%
2006	91.9	97.7	96.0	97.3	97.4	97.2	93.4	95.2	97.4	96.9	98.2	94.1	96.0%	96.0%
2007	98.8	90.1	97.8	95.5	96.7	95.7	93.8	93.7	96.8	98.3	98.0	93.5	95.9%	95.8%
2008	94.5	96.6	97.1	97.4	97.8	97.8	96.1	94.1	98.3	97.9	96.6	92.3	96.7%	96.4%
2009	92.6	96.3	97.4	99.2	98.6	96.3	97.9	95.4	99.2	99.2	98.8	94.4	96.9%	97.1%
2010	96.0	95.9	97.3	97.9	95.7								96.6%	96.6%
2005-2009 average	93.8	95.6	96.9	97.2	97.6	96.5	95.5	94.4	97.5	97.7	96.9	92.7	96.2%	96.0%
NCS 2005	88.6	07.0	80.6	90.0	98.1	95.5	90.5	00.0	89.0	02.2	99.2	940	92.5%	90.2%
NCS 2005 2006	92.6	97.0 98.0	89.6 93.5	93.8	96.1 96.1	85.5 96.8	89.5 95.3	90.0 96.3	95.6	93.3 91.7	88.2 91.1	84.9 93.4	95.0%	90.2%
2007	95.9	91.2	93.3 94.0	93.8	93.8	90.8	95.5	94.3	93.0	96.2	97.2	93.4	93.6%	94.5%
2007	93.4	94.4	97.4	95.1	95.0	91.3	96.5	97.4	94.4	98.0	95.9	86.5	95.0%	94.6%
2009	88.9	93.4	97.3	95.5	95.2	93.2	97.8	92.4	97.6	94.6	97.7	93.0	94.1%	94.8%
2010	96.4	94.5	92.3	91.1	96.8	13.4	71.0	<i>&gt;</i> 2.∓	71.0	) T.U	21.1	73.0	94.1%	94.1%
2005-2009 average		94.4	94.9	93.9	95.3	93.0	95.8	94.5	94.9	95.0	94.7	91.0	94.2%	94.2%
average	12.3	J+.+	ノオ・ノ	73.7	13.3	73.0	73.0	77.3	74.7	75.0	ノ <b>サ.</b> /	71.0	77.2/0	ノマ・ム /0

TABLE 2 (continued): ON-TIME PERFORMANCE BY LINE/BRANCH

													JAN-	
LINE YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAY	AVG
RI 2005	96.6	98.6	97.9	98.0	96.3	93.7	94.2	97.4	93.8	86.5	91.8	91.6	97.5%	94.7%
2006	95.9	97.1	96.8	97.5	96.3	96.7	94.4	97.1	96.8	95.7	97.4	94.2	96.7%	96.3%
2007		84.0	96.4	98.4	96.1	93.9	92.0	94.3	95.8	97.1	95.2	90.9	94.3%	94.2%
2008	95.5	95.6	94.5	98.8	97.6	96.4	96.5	96.9	95.8	92.3	96.3	89.3	96.4%	95.4%
2009	93.4	97.5	96.2	96.8	97.5	96.2	95.9	97.1	97.2	96.4	96.7	93.6	96.2%	96.2%
2010		96.7	97.6	97.1	97.4								96.9%	96.9%
2005-2009 averag	e 95.5	94.6	96.4	97.9	96.7	95.4	94.6	96.5	95.9	93.7	95.4	91.9	96.2%	95.4%
SWS 2005	94.0	92.5	97.0	96.7	94.7	96.0	94.4	96.7	96.1	95.5	93.2	90.5	95.1%	94.8%
2006	92.3	93.3	97.0	96.2	94.1	96.4	93.0	89.7	85.2	90.8	95.7	93.0	94.8%	93.1%
2007	98.6	95.3	97.0	97.8	97.0	96.2	96.9	95.8	97.4	95.1	95.7	95.2	97.2%	96.5%
2008		96.3	95.1	94.4	95.4	95.7	98.3	93.5	95.3	92.2	93.7	89.2	94.9%	94.4%
2009	87.1	96.5	96.1	95.9	95.1	97.1	97.5	97.1	98.0	87.8	96.8	96.2	94.2%	95.1%
2010		93.4	96.9	97.2	94.6								95.4%	95.4%
2005-2009 averag	e 93.2	95.1	96.4	96.1	95.3	96.3	96.3	94.3	94.3	91.9	95.2	93.1	95.3%	94.8%
UP - N 2005	94.0	99.6	99.0	99.5	98.8	96.6	96.3	93.7	97.6	96.7	98.4	99.0	98.2%	97.4%
2006		98.1	98.8	97.0	99.5	98.3	95.6	95.8	97.8	98.7	96.7	96.6	98.4%	97.6%
2007		92.8	97.9	98.5	97.4	93.9	93.5	89.8	96.8	97.6	96.8	92.6	97.0%	95.4%
2008	91.9	89.4	95.1	95.5	97.1	90.9	92.2	89.9	93.5	95.6	95.2	94.2	93.8%	93.4%
2009	91.4	98.0	96.9	97.8	95.3	90.7	90.4	89.9	94.0	94.8	97.3	95.1	95.9%	94.2%
2010		96.8	96.5	97.2	94.3								95.8%	95.8%
2005-2009 averag	e 94.6	95.5	97.5	97.6	97.6	93.9	93.4	91.7	95.8	96.6	96.9	95.4	96.6%	95.5%
UP - NW 2005	93.6	98.0	97.1	98.4	98.8	96.2	98.6	94.8	98.6	98.4	94.9	96.0	97.1%	96.9%
2006	97.9	98.6	98.5	98.0	99.1	98.4	98.0	96.3	97.3	96.5	96.6	96.9	98.4%	97.7%
2007	95.8	91.8	97.1	97.7	98.0	97.2	96.5	93.2	95.7	98.0	95.2	95.2	96.2%	96.0%
2008		91.8	97.1	96.5	96.8	95.5	95.1	97.1	96.9	96.9	94.5	91.7	94.8%	95.2%
2009		97.6	97.4	97.9	95.4	94.7	95.4	95.3	95.3	94.8	96.5	94.9	96.0%	95.6%
2010		97.2	97.3	97.7	96.1								97.0%	97.0%
2005-2009 averag	e 94.2	95.5	97.4	97.7	97.6	96.4	96.7	95.3	96.8	96.9	95.5	94.9	96.5%	96.3%
UP - W 2005	91.7	97.0	96.8	98.1	94.1	92.7	95.3	92.2	96.4	94.9	95.0	92.7	95.5%	94.7%
2006		93.7	96.0	94.2	94.2	95.6	96.1	94.8	95.1	96.0	94.9	93.8	94.0%	94.7%
2007		91.5	93.6	96.5	94.7	93.7	95.6	90.7	93.2	96.6	95.5	91.0	94.5%	94.1%
2008		90.4	93.7	94.5	96.9	95.4	95.3	94.5	93.0	91.0	93.0	91.6	94.1%	93.7%
2009		97.3	95.5	97.2	97.2	94.3	95.7	92.5	95.2	94.7	97.8	95.2	95.9%	95.4%
2010		96.7	97.9	95.9	94.6								96.4%	96.4%
2005-2009 averag	e 93.4	93.9	95.1	96.1	95.4	94.3	95.6	92.9	94.6	94.6	95.2	92.9	94.8%	94.5%
SYSTEM 2005		97.9	97.7	98.0	97.3	95.3	96.4	95.9	96.7	95.9	95.1	94.4	97.1%	96.3%
(excluding 2006		97.2	97.1	97.4	97.1	96.5	95.2	96.0	96.3	95.7	95.5	95.3	97.0%	
South Shore) 2007		91.4	96.6	97.0	96.7	95.6	95.2	94.2	95.8	96.9	96.5	94.4	95.9%	95.7%
2008		94.5	96.6	97.0	97.4	95.7	96.0	95.3	95.7	95.5	95.2	91.4	96.0%	95.4%
2009		97.1	97.3	97.6	96.7	94.3	95.8	94.6	96.4	95.2	97.4	94.6	96.1%	95.7%
2010		96.9	97.0	96.7	95.5	05.5	05.7	05.3	063	05.0	05.0	0.1.0	96.5%	96.5%
2005-2009 averag		95.6	97.1	97.4	97.0	95.5	95.7	95.2	96.2	95.8	95.9	94.0	96.4%	95.9%

Delays data for most recent month is final (06/15/10) version from TOPS.

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<sup>&#</sup>x27;2005-2009 average' calculated by summing the delays over the five years, summing the trains run over the five years, and calculating their ratio.

# TABLE 3: LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME May 2010

		Minutes Late	Delay	Delay Femilians
Line Train	Date		Code	Delay Explanation
BNSF 1243	Fri, May 07	9	RF	FREIGHT DISPATCHER ERROR
60% OT	Thu, May 13	9	C U	COPIED FORM "A" RESTRICTION AT MP19 ADA LIFT AT DOWNERS GROVE AND LISLE
	Fri, May 14 Mon, May 17	8	I	FOLLOWING 1241 FROM DGM, ADA PSGR LDG
	Mon, May 24	19	D	HELD FOR AMTRK 4 EAST M-BRCGAL1 IN EMERGENCY NCY RT 59
	Wed, May 26	14	D	FOLLOWED M-BRCGAL 1-26 AHEAD HIGHLANDS-LISLE
	Thu, May 27	7	U	LISLE, 2 ADA LIFTS UNLOADING AND HEAVY UNLOADING AT LISLE AND NAPERVILLI
	Fri, May 28	20	D	FOLLOWED 9543 WHO HAD 1241 AHEAD. DELAYED BY FREIGHT TRAFFIC AT EOLA
	, ,			(SEE ABOVE)
HC 0917	Fri, May 07	27	G	18" SWITCH FAILURE, CUS; 9" HEAVY X-TRAFFIC ENROUTE.
80% OT	Thu, May 20	11	D	11" X-TRAFFIC, LEMOYNE.
	Mon, May 24	12	RF	5" RUNNING TIME, LEMOYNE; 4" OPERATING MT2, STATEVILLE-JUD; 3" NO REASON GIVEN.
	Wed, May 26	10	CC	10" SLOW ORDERS EN ROUTE
	Mon, May 17	7	I	4" SLOW ENTRAINING ENROUTE; 3" S/O ENROUTE.
80% OT	Tue, May 18	7	C	2" SLOW ENTRAINING, LOCKPORT & LEMONT; 2" FRT TRN INT, LEMOYNE.
	Mon, May 24	13	G	13" FLAGGING JUSTICE AND CP CANAL/ARGO (TRK CIRCUIT, CP CANAL).
HC 0010	Tue, May 25	7	CC	6" DELAYED #412 CLEARING JUD; 12" S/O ENROUTE.
HC 0919	Fri, May 07	9	G	5" RESTRICTING, LOCKPORT; 5" RESTRICTING, STATEVILLE.
75% 01	Wed, May 19 Fri, May 21	7 6	AM AM	8" AMTRAK #305 AHEAD, CP BRIGHTON-SUMMIT. 2" STOPPED BEHIND AMTRAK #305, CORWITH; 4" FOLLOWING AMTRAK #305, 47TH X/O
	rii, way 21	O	AW	TO CP CANAL.
	Mon, May 24	25	D1	6" SOUTH BRANCH BRIDGE OPEN; $3"$ FRT TRN INT, LEMOYNE; $15"$ TRAFFIC AHEAD, STATEVILLE/FRT DERAILMENT, JUD.
	Tue, May 25	6	CC	2" NO REASON GIVEN; 4" FLAGGING JUD, SLOW ORDERS EN ROUTE
HC 0921	Fri, May 07	10	RF	10" CN DISP COULDNT REACH IHB DISP, CP CANAL.
80% OT	Tue, May 11	12	RF	2" MECHANICAL PROBS; 8" PLANT-IN-TIME, CP CANAL/ARGO; 6" X/O, JUSTICE AND STATEVILLE.
	Thu, May 13	7	D	14" FRT X-TRAFFIC CP498, LEMOYNE.
	Mon, May 24	117		1' 53" SOUTH BRANCH BRIDGE STUCK OPEN; 10" S/O, MP 19.8-20.8.
ELML 0142	Fri, May 07	7	I	1" KENSINGTON,1" 95TH,2' 55-56-57,2" 51ST ALL FOR SLOW LOADING.1" NO REASON GIVEN
80% OT	Tue, May 18	7	J1	6" MEETING DELAYED #141, UNIVERSITY PK; 1" NO REASON GIVEN.
	Mon, May 24	19	J	17" FARE DISPUTE, 57TH; 2" NO REASON GIVEN.
ELMI 0146	Wed, May 26	8	J1	5" MEETING DELAYED #141, UNIVERSITY PK; 3" DOOR PROBS, RICHTON.
ELML 0146		8	II	8" LATE TURN OF DELAYED #145.
80% 01	Wed, May 12	13 7	G I	13" TRK CIRCUIT PROBS, KENSINGTON-67TH. 2" LATE DEPT NO REASON GIVEN, UYP; 5" SLOW ENTRAINING, HARVEY & 55TH & 51ST
	Fri, May 21	,	1	2 LATE DEFT NO REASON GIVEN, UTF, 3 SLOW ENTRAINING, HARVET & 33TH & 31ST & 47TH.
	Fri, May 28	6	G	$3"$ SIGNAL IN TIME, $115\mathrm{TH};1"$ SLOW ENTRAINING ENROUTE; $1"$ SLOW ENTRAINING ENROUTE.
ELML 0149	Mon, May 10	8	I	8" HEAVY ENTRAINING/DETRAINING, 18TH AND WOODLAWN.
80% OT	Wed, May 12	10	G	9" TRK CIRCUIT PROBS, 67TH-KENSINGTON.
	Fri, May 14	9	F	9" 3 OVERLOADS ENROUTE INTERMITTENT DOOR LIGHTS THROUGHOUT TRAIN.
	Tue, May 25	8	I	8" SLOW ENTRAINING/DETRAINING AND F STOPS ENROUTE.
MN 2130	Mon, May 10	9	CC	17" MEETING DELAYED #2109, GRAYSLAKE; 8" MEETING #2111, A20 (SINGLE TRACKING-MOW); 3" ADA, LAKE FOREST; 3" S/O, MP 19.5-17.0.
65% OT	Tue, May 11	7	F1	18" MEETING DELAYED #2109, GRAYSLAKE; 3" RULE 6.30 W/AMTRAK #333, GLENVIEW; 2" S/O, MT2-MT3, TOWER A2.
	Thu, May 13	15	CC	6" HELD FOR #2109, GRAYSLAKE; 18" MOW WORK, A20; 3" ITEM 1, LINCOLN AVE; 2" STOP, RONDOUT; 4" MOW WORK, MP 19.5 TO 15.5.
	Fri, May 14	9	CC	$9^{\circ}$ HOLD FOR #2109, GRAYSLAKE; 17" HOLD FOR AMTRAK #333, A20; 5" MOW WORK ENROUTE.
	Thu, May 20	22	CC	8" HOLD FOR #2109, GRAYSLAKE; 19" HELD FOR AMTRAK #333, A20; 4" PSGR ON WRONG SIDE, MORTON GRV; 3" FORM B, MP 15.4.
	Mon, May 24	14	CC	15" MEETING DELAYED #2109/DOOR LIGHT PROBS, GRAYSLAKE; 13" 13" MEETING DELAYED #2113, MORTON GROVE (SINGLE TRACKING-MOW).
	Thu, May 27	15	A	18" STOP, MORTON GROVE; 12" STOP, GRAYSLAKE.
MN 2139	Fri, May 14	0	M1	ANNULLED ACCT #2121 ACCIDENT, CALDWELL AVE.
80% OT	Mon, May 24	12	G1	11" LATE ARRIVAL OF EQUIP (ACCT SW FAILURE, CP CANAL ST); 1" NOREASON GIVEN
	Wed, May 26	74	E	74" LOCO PROBS, TOWER A2; 2" ADA OFF, LAKE COOK.
	Thu, May 27	0	K1	ANNULLED ACCT NO CREW OR EQU.

TABLE 3 (continued): LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME May 2010

Line	Train	Date	Minutes Late		Delay Explanation
MN	2141	Fri, May 14	43	M1	42" ACCT #2121 ACCIDENT, CALDWELL AVE.
80	% OT	Mon, May 24	23	E1	$10^\circ$ LATE TURN OF DELAYED #2142; 13" MEETING AMTRAK #340, DEER- FIELD (SINGLE TRACKING AROUND ANNULLED #2146/2148).
		Wed, May 26	24	E1	24" DELAYED #2139 AHEAD.
		Thu, May 27	15	K1	15" HEAVY ENTRAINING #2139 SHORTS ENROUTE.
MN	2143	Mon, May 03	17	CC	$5^{\circ}$ LATE TURN OF DELAYED #2144; 2" P/U COLLECTOR, HEALY; 11" SIG DROPPED TO RED, EAST LAKE FOREST.
70	% OT	Fri, May 14	86	M1	83" ACCT #2121 ACCIDENT, CALDWELL AVE.
		Mon, May 24	0	E1	ANNULLED AT CUS. CREW/EQUIP USED FOR #2147-WHICH MAKE ALL STOPSTO FOX LAKE.
		Wed, May 26	92	E	$50^\circ$ MECH PROBS, CUS; $42^\circ$ TRN AHEAD TO GRAYSLAKE/MEETING EXTRA #423, GRAYSLAKE.
		Thu, May 27	13	K1	13" FOLLOWING #2141 ENROUTE.
		Fri, May 28	6	L	4" KIDS ON TKS, MP 10.75; $1"$ HELD FOR #2152, MORTON GROVE; $1"$ HELD FOR AMTRAI #340, LAKE FOREST.
MN	2144	Fri, May 14	28	M1	38" ACCT #2121 ACCIDENT, CALDWELL AVE.
80	% OT	Mon, May 24	11	G	6" #2142 CLEARING AHEAD, DEERFIELD; 15" SW PROBS, CP CANAL ST.
		Wed, May 26	0	F1	GASKET PROBLEM 2123
		Thu, May 27	25	K1	35" FOLLOWING #2142 ENROUTE.
MN	2145	Mon, May 03	23	CC	23" LATE TURN OF DELAYED #2146.
80	% OT	Fri, May 14	0	M1	ANNULLED ACCT #2121 ACCIDENT, CALDWELL AVE.
		Mon, May 24	0	E1	ANNULLED. WOULD HAVE BEEN FLIP OF ANNULLED #2146.
		Thu, May 27	16	K1	14" LATE TURN OF #2146, CUS; 2" NO REASON GIVEN.
MN	2149	Fri, May 14	15	M1	15" ACCT #2121 ACCIDENT, CALDWELL AVE.
80	% OT	Mon, May 24		E1	2" NO REASON GIVEN, CUS; 10" MEETING DELAYED #120 OF THE J LINEAT RONDOUT.
		Wed, May 26		E1	16" MEETING DELAYED #2156 OFF THE J LINE, RONDOUT; 14" DELAYED #2143 AHEAD FROM LIBERTYVILLE.
		Thu, May 27	13	K1	10" TRAIN REV ACCT DOORS DIDN'T OPEN, EDGEBROOK; 15" WAITING FOR #2156, RONDOUT.
MN	2150	Fri, May 14	33	M1	33" ACCT #2121 ACCIDENT, CALDWELL AVE.
75	% OT	Tue, May 18	9	E1	6" LATE TURN OF DELAYED #2133; 3" DOOR LIGHT PROBS.
		Thu, May 20	8	V	10" ENG #118 WOULDNT LOAD ENROUTE.
		Mon, May 24		E1	15" HEAVY ENTRAINING (ACCT ANNULLMENT #2146/2158).
		Thu, May 27	7	CC	7" LATE TURN OF #2133, DEERFIELD.
MN	2151	Fri, May 14	19	M1	19" ACCT #2121 ACCIDENT, CALDWELL AVE.
80	% OT	Tue, May 25		D1	10" MEETING DELAYED #2158 OFF THE J LINE, RONDOUT.
		Wed, May 26		E1	26" MEETING DELAYED #2158 OFF THE J LINE, RONDOUT; 5" FRT TRN INT, CP/WC XING.
		Thu, May 27	15	K1	15" WAITING FOR #2158, RONDOUT.
MN		Fri, May 14	0	M1	ANNULLED ACCT #2121 ACCIDENT, CALDWELL AVE.
75	5% OT	Mon, May 24 Wed, May 26		E1 E1	ANNULLED GRAYSLAKE. EQUIP OPERATED OUT OF GRAYSLAKE AS #2158.  11" MEETING DELAYED #2147, GRAYSLAKE. (ORIGINATED GRAYSLAKE. FOX LK-
					GRAYSLAKE PSGRS ACCOMODATED ON EX #423/2158).
		Thu, May 27	27	K1	18" LATE TURN FROM #2141 AND WAITING FOR #2143 TO CLEAR, FOX LAKE.
		Fri, May 28	11	Ll	10" WAITING FOR #2143, FOX LAKE; 3" STOP, MAYFAIR.
MN <b>8</b> 0		Fri, May 14 Mon, May 24		M1 E1	15" ACCT #2121 ACCIDENT, CALDWELL AVE. ORIGINATED FOX LAKE AS #2156 (WHICH WAS ANNULLED GRAYSLAKE). 10" MEETING #2140. OR AVSI AVE.
		Wed, May 26	31	E1	MEETING #2149, GRAYSLAKE.  30" MET DELAYED #2143, GRAYSLAKE; 1" NO REASON. (ORIGINATED FX LK AS EX #4: COVERING SCHED OF #2156, WHICH ORIGINATED GRAYSLAKE)
		Thu, May 27	11	K1	14" WAITING FOR #2149, GRAYSLAKE.
RI	0525	Wed, May 12	6	U	2" ENTRAINING, LSS; 9" ADAS AT 95TH, ROBBINS AND TINLEY/80.
65	3% OT	Thu, May 20	8	U	8" ADA LIFT MALFUCTION
		Mon, May 24	74	R	$7^{\rm o}$ HeLD FOR HCD PSGRS, LSS; $10^{\rm o}$ LIFT PROBS, 95TH; 59" SW #190 OUT-OF-CORRESPONDENCE, RICHARDS ST.
		Tue, May 25	7	U	$2"$ ADA ON, LSS; $2"$ ADA ON, $95\mathrm{TH/OFF},$ ROBBINS; $2"$ SLOW ENTRAIN- ING ON BEVERL BRANCH.
		Wed, May 26	7	U	$4^{\circ}$ ADAS, 95TH, ROBBINS AND TINLEY/80; $4^{\circ}$ HEAVY ENTRAINING ON BEVERLY BRANCH.
		Thu, May 27	6	U	1" LATE PSGRS, LSS; 2" DETRAINING BEV SUB; 4" ADA, 95TH & ROBBINS.
		Fri, May 28		I	3" SLOW ENTRAINING ACCT 9 CAR TRAIN, BEV SUB; 3" FLAG STOPS, 123RD & PRAIRI & ROBBINS; 3" TRACTION MOTOR PROBS, MP 15.6 TO 20.4.

TABLE 3 (continued): LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME May 2010

			Minutes	Delav	
Line	Train	Date	Late	Code	Delay Explanation
SWS	0838	Wed, May 12	11	N1	16" MEETING DELAYED #829, ORLAND/179.
809	% OT	Wed, May 19	18	D	17" NS #23M (MAKING SET-OUT AT 55TH YD) CLEARING CP 518; 1" NO REASON GIVEN.
		Mon, May 24	8	GA	8" TRAFFIC, CUS.
		Wed, May 26	19	GA	16" FLAGGING SOUTH BRANCH BRIDGE (BRIDGE WOULD NOT LOCK DOWN); 3" NO REASON GIVEN.
UPN	0356	Thu, May 06	18	Gl	18" LATE TURN OF #335, KENOSHA.
709	% OT	Tue, May 11	6	S	6" EFFICIENCY TESTS, WAUKEGAN AND NORTH CHICAGO.
		Wed, May 12	20	T	13" DOOR PROBS, KENOSHA; 7" DOOR PROBS, KENOSHA-GREAT LAKES ANDOPERATED MT2, MP 50/0-44.0.
		Fri, May 14	7	I	7" SLOW ENTRAINING, WAUKEGAN TO GREAT LAKES.
		Thu, May 20	10	C1	10" LATE TURN OF #335, KENOSHA.
		Fri, May 21	12	C1	6" LATE TURN OF #335, KENOSHA; 6" HEAVY ENTRAINING, GREAT LAKES TO HIGHLAND PARK.
UPW	0036	Wed, May 05	6	U	6" SLOW, MP 26.65-26.56, SLOW ENTRAINING AT ELMHURST AND EIGHT ADAS ENROUTE.
809	% OT	Tue, May 11	7	A	7" PSGR TRN INT, TOWER A2.
		Thu, May 13	12	C	12" S/O, MP 25.5 TO 25.1; X-TRAFFIC, A2.
		Wed, May 26	12	U	12" SIX ADAS ENROUTE.
UPW	0056	Thu, May 06	18	CC	28" RAN CENTER TK, WINFIELD TO ELMHURST; QNPSKP-5 AHEAD, LOMBARD.
809	% OT	Thu, May 20	49	R1	49" #54 AHEAD, ELMHURST; CREW ENTRAINED #54 SHORTS, ELMHURST.
		Fri, May 21	6	D	6" CNAPL-17 AHEAD, PECK; HEAVY ENTRAINING, GENEVA TO ELMHURST.
		Thu, May 27	10	K1	10" X-TRAFFIC, A2, CONGESTION AT A2 ON ACCT OF 2142 STRIKING GATE AT DEMPSTER PULLING 27PT CABLE
UPW	0058	Wed, May 05	20	D	20" #MPRCB-05 AHEAD, ELBURN AND #MNPPRB-04 AHEAD, PEACK AND GX PROCEDURES, MP 33.05.
809	% OT	Thu, May 20	15	R1	15" #56 AHEAD ENROUTE.
		Fri, May 21	6	I	6" HEAVY ENTRAINING, GENEVA TO WHEATON.
		Thu, May 27	8	S	8" FTX TEST, PECK.

Data is final (06/15/10) version from TOPS.

 $P: \label{lem:continuous} P: \label{lem:co$ 

**TABLE 4: DELAY CODES AND DEFINITIONS** 

Code	Definition	Code	Definition
A	Passenger Train Interference	M	Right of Way Accident/Misc.
AA	Rule 9.9 Delayed in Block/Rule 6.30	MW	Right of Way Accident/Misc., Weather
AD	Non-Revenue Passenger Train Interference	M1	Right of Way Accident/Misc., Train Ahead
AM	Amtrak Caused Delay	N	ComEd Failure
AS	NICTD Train Interference	NW	ComEd Failure, Weather
AW	Pass. Train Interference, Weather	N1	ComEd Failure, Train Ahead
A1	Pass. Train Interference, Train Ahead	O	AC/DC System Failure
В	Human Error, Eng. Dept.	OW	AC/DC System Failure, Weather
BA	Amtrak Engineering Human Error	O1	AC/DC System Failure, Train Ahead
BW	Human Error, Eng. Dept. Weather	P	Late Equipment From Coach Yard
B1	Human Error, Eng. Dept. Train Ahead	PW	Late Equipment From Coach Yard, Weather
C	M of W Work	P1	Late Equipment From Coach Yard, Train Ahead
CA	Amtrak Engineering	Q	Late Issuance of Track Warrant
CC	Scheduled Track Work	Q1	Late Issuance of Track Warrant, Train Ahead
CF	M of W Caused Mechanical Malfunction	R	Human Error, Transportation
CG	Scheduled Signal Work	RA	Human Error, Amtrak Transportation
CH	Contractor Failure	RD	Human Error, Metra Dispatcher
CO	Scheduled Wire Work	RF	Freight Dispatcher/Opr/Non-Freight Train Error
CW	M of W Work, Weather	RL	Human Error, Job Action/Employee No Show
CW C1	M of W Work, Train Ahead	RO	Human Error, Metra Operator
D	Freight Train Interference	RS	Human Error, NICTD Transportation
DD DD	e	RW	Human Error, Transportation, Weather
DW DW	Freight Dispatcher/Opr/Freight Train Error Freight Train Interference, Weather	R1	Human Error, Transportation, Train Ahead
DW D1	=	S	Operational (Efficiency) Testing
E E	Freight Train Interference, Train Ahead Locomotive Malfunction	S S1	Operational (Efficiency) Testing  Operational (Efficiency) Testing, Train Ahead
	Amtrak Locomotive Malfunction	T	Property Vandalism
EA			Vandalism of Gates
EW	Locomotive Malfunction, Weather	TG	
E1 F	Locomotive Malfunction, Train Ahead	T1	Property Vandalism, Train Ahead
	Cab Car/Trailer/MU Malfunction	U	Accessibility Related (ADA)
FA	Amtrak Car Malfunction	UF	ADA Lift Failure
FW	Cab Car/TRL/MU Malfunction, Weather	UW	Accessibility, Weather
F1	Cab Car/TRL/MU Malfunction, Train Ahead	U1	Accessibility, Train Ahead
G	Signal/Switch Malfunction	V	Mechanical Problem Reported, Nothing Found
GA	Signal/Switch Failure Amtrak	V1	Mech. Prob., Nothing Found, Train Ahead
GW	Signal/Switch Malfunction Weather	W	Gas Leak
GX	Broken Gate Crossing	WW	Gas Leak, Weather
G1	Signal/Switch Malfunction, Train Ahead	W1	Gas Leak, Train Ahead
H	Human Error, Mechanical Department	XA	Train Annulled - Amtrak
HS	Human Error, NICTD Mechanical Dept.	XB	Train Annulled - Engineering Dept.
HW	Human Error, Mech. Dept., Weather	XD	Train Annulled - Freight Interference
H1	Human Error, Mech. Dept., Train Ahead	XE	Train Annulled - Engine Failure
I	Passenger Handling, Running Time	XF	Train Annulled - B/O Car
IB	Passenger Handling, Bicycle	XG	Train Annulled - Signal Dept.
IW	Passenger Handling, Weather	XH	Train Annulled - Mechanical Dept.
I1	Passenger Handling, Train Ahead	XJ	Train Annulled - Passenger Problem/Removal
J	Passenger Problems/Removal	XK	Train Annulled - Obstruction
JA	Amtrak Passenger Problems/Removal	XL	Train Annulled - Unauthorized People On Trk
J1	Passenger Problems/Removal Train Ahead	XM	Train Annulled - Right of Way Accident/Misc.
K	Obstruction On Tracks	XN	Train Annulled - ComEd Problem
KD	Obstruction On Tracks, Debris	XO	Train Annulled - AC/DC Failure
KP	Suspicious Package(s)/Person(s)/Activity	XQ	Train Annulled - No Track Warrant
KW	Obstruction On Tracks, Weather	XR	Train Annulled - Transportation Dept.
K1	Obstruction On Tracks, Train Ahead	XT	Train Annulled - Vandalism
L	Unauthorized People On Tracks/Near Miss	XV	Train Annulled - Mech. Problem, Nothing Found
L1	Unauthorized People On Tracks, Train Ahead	XW	Train Annulled - Gas Leak

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TABLE 5: DELAY CODES SORTED BY CAUSE CATEGORY

CATE	GORY	CATE	GORY
_	Definition		Definition
1	PASSENGER TRAIN INTERFERENCE	13	HUMAN ERROR
A1	Pass. Train Interference, Train Ahead	B1	Human Error, Eng. Dept. Train Ahead
A	Passenger Train Interference	В	Human Error, Eng. Dept.
AA	Rule 9.9 Delayed in Block/Rule 6.30	BA	Amtrak Engineering Human Error
AD	Non-Revenue Passenger Train Interference	H1	Human Error, Mech. Dept., Train Ahead
AM	Amtrak Caused Delay	Н	Human Error, Mechanical Department
AS	NICTD Train Interference	HS	Human Error, NICTD Mechanical Dept.
P1	Late Equipment From Coach Yard, Train Ahead	R1	Human Error, Transportation, Train Ahead
P	Late Equipment From Coach Yard	R	Human Error, Transportation
XA	Train Annulled - Amtrak	RA	Human Error, Amtrak Transportation
2 & 3	FREIGHT INTERFERENCE	RD	Human Error, Metra Dispatcher
D1	Freight Train Interference, Train Ahead	RF	Freight Dispatcher/Opr/Non-Freight Train Error
		RL	
D	Freight Train Interference		Human Error, Job Action/Employee No Show
DD	Freight Dispatcher/Opr/Freight Train Error	RO	Human Error, Metra Operator
XD	Train Annulled - Freight Interference	RS	Human Error, NICTD Transportation
4	ACCIDENT	XB	Train Annulled - Engineering Dept.
M1	Right of Way Accident/Misc., Train Ahead	XH	Train Annulled - Mechanical Dept.
M	Right of Way Accident/Misc.	XR	Train Annulled - Transportation Dept.
XM	Train Annulled - Right of Way Accident/Misc.	14	SICK, INJURED, UNRULY PASSENGER
5	PASSENGER LOADING	J1	Passenger Problems/Removal Train Ahead
I1	Passenger Handling, Train Ahead	J	Passenger Problems/Removal
I	Passenger Handling, Running Time	JA	Amtrak Passenger Problems/Removal
IB	Passenger Handling, Bicycle	XJ	Train Annulled - Passenger Problem/Removal
6	LIFT DEPLOYMENT	15	WEATHER
U1	Accessibility, Train Ahead	AW	Pass. Train Interference, Weather
U	Accessibility Related (ADA)	BW	Human Error, Eng. Dept. Weather
UF	ADA Lift Failure	CW	M of W Work, Weather
7	OBSTRUCTION/DEBRIS	DW	Freight Train Interference, Weather
K1	Obstruction On Tracks, Train Ahead	EW	Locomotive Malfunction, Weather
K	Obstruction On Tracks	FW	Cab Car/TRL/MU Malfunction, Weather
KD	Obstruction On Tracks, Debris	GW	Signal/Switch Malfunction Weather
KP	Suspicious Package(s)/Person(s)/Activity	HW	Human Error, Mech. Dept., Weather
XK	Train Annulled - Obstruction	IW	Passenger Handling, Weather
8	SIGNAL/SWITCH FAILURE	KW	Obstruction On Tracks, Weather
G1	Signal/Switch Malfunction, Train Ahead	MW	Right of Way Accident/Misc., Weather
G	Signal/Switch Malfunction	NW	ComEd Failure, Weather
GA	Signal/Switch Failure Amtrak	OW	AC/DC System Failure, Weather
GX	Broken Gate Crossing	PW	Late Equipment From Coach Yard, Weather
XG	Train Annulled - Signal Dept.	RW	Human Error, Transportation, Weather
9	TRACK WORK	UW	Accessibility, Weather
C1	M of W Work, Train Ahead	WW	Gas Leak, Weather
C	M of W Work	16	OTHER
CA	Amtrak Engineering	L1	Unauthorized People On Tracks, Train Ahead
CC	Scheduled Track Work	L	Unauthorized People On Tracks/Near Miss
CF	M of W Caused Mechanical Malfunction	N1	ComEd Failure, Train Ahead
CG	Scheduled Signal Work	N	ComEd Failure
CH	Contractor Failure	Q1	Late Issuance of Track Warrant, Train Ahead
10	CATENARY FAILURE	Q.	Late Issuance of Track Warrant
CO	Scheduled Wire Work	S1	Operational (Efficiency) Testing, Train Ahead
01	AC/DC System Failure, Train Ahead	S	Operational (Efficiency) Testing
0	AC/DC System Failure  AC/DC System Failure	T1	Property Vandalism, Train Ahead
XO	Train Annulled - AC/DC Failure	T	Property Vandalism
11	NON-LOCOMOTIVE EQUIPMENT FAILURE	TG	Vandalism of Gates
F1	Cab Car/TRL/MU Malfunction, Train Ahead	V1	Mech. Prob., Nothing Found, Train Ahead
F	Cab Car/Trailer/MU Malfunction	V	Mechanical Problem Reported, Nothing Found
FA	Amtrak Car Malfunction	W1	Gas Leak, Train Ahead
XF	Train Annulled - B/O Car	W	Gas Leak Train Appulled - Unauthorized Pacala On Tak
12 E1	LOCOMOTIVE FAILURE	XL	Train Annulled - Unauthorized People On Trk
E1	Locomotive Malfunction, Train Ahead	XN	Train Annulled - ComEd Problem
E	Locomotive Malfunction	XQ	Train Annulled - No Track Warrant
EA	Amtrak Locomotive Malfunction	XT	Train Annulled - Vandalism
XE	Train Annulled - Engine Failure	XV	Train Annulled - Mech. Problem, Nothing Found
Ī		XW	Train Annulled - Gas Leak

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TABLE 6: NUMBER OF DELAYS BY DATE May 2010

WEEKDA	Y	3	4	5	6	7	10	11	12	13	14	17	18	19	20	21	24	25	26	27	28			TOTAL
		Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr			
BNSF		3	0	1	3	10	1	1	7	8	1	10	1	1	1	3	6	2	8	2	15			84
Elec -ML		0	3	2	0	2	5	4	6	2	2	0	2	1	2	2	1	2	2	2	1			41
-BI -SC		0 4	0	0	1	1 2	3	0	0	0	1 0	0	1 0	0	0	0	0	0	0	1	0			8 10
Heritage		0	0	0	0	4	0	1	0	1	0	1	1	1	1	1	4	2	1	0	0			18
Milw -N		4	2	1	0	3	3	5	0	13	29	1	1	0	3	3	20	4	10	16	2			120
<b>-W</b>		4	8	1	0	3	2	4	2	10	2	3	1	1	2	0	5	0	2	1	2			53
NCS		0	3	0	1	0	0	1	1	1	2	1	0	0	1	1	2	0	0	0	0			14
RI		0	1	0	0	2	0	0	2	0	3	0	0	2	1	0	3	5	3	1	14			37
SWS		0	1	1	0	0	0	1	5	0	0	5	1	3	1	0	6	0	8	0	0			32
UP -N		0	0	1	17	3	16	4	2	20	1	0	0	0	3	1	3	0	0	1	0			72
-NW -W		0 <u>0</u>	0 <u>0</u>	1 <u>9</u>	1 <u>6</u>	2 2	0 <u>0</u>	7 <u>3</u>	0 <u>0</u>	2 <u>15</u>	9 <u>1</u>	0 <u>0</u>	2 <u>2</u>	1 <u>0</u>	0 <u>9</u>	0 <u>4</u>	1 <u>3</u>	0 <u>0</u>	2 <u>1</u>	8 <u>3</u>	0 <u>2</u>			36 <u>60</u>
SYSTEM		15	18	17	30	34	31	31	25	72	51	21	12	11	24	15		15	37	36	36			585
SATURDA	۱Y	1	8	15	22	29	1	ТОТ	AL			SUN	NDA	Y/F	ЮI	LID	AY	2	9	16	23	30	31	TOTAL
BNSF		1	0	1	7	1			10			BN	NSF					1	0	1	2	5	0	9
Elec -ML		0	0	1	2	4			7			Ele		-ML				0	0	0	2	2	0	4
-BI -SC		1	0	1 0	2 0	0			4 0					-BI -SC				0	0	0	0	0	0	0
Heritage		-	-	-	-	-			-			Не	erita	ge				-	-	-	-	-	-	-
Milw -N		8	6	4	2	5			25			Mi	ilw					7	3	1	8	2	1	22
<b>-W</b>		0	0	0	1	0			1					<b>-W</b>				2	0	0	2	2	0	6
NCS		-	-	-	-	-			-			N(	CS					-	-	-	-	-	-	-
RI		0	0	0	0	2			2			RI						0	0	0	0	0	2	2
SWS		1	1	0	0	0			2			SV	VS					-	-	-	-	-	-	-
UP -N		8	2	0	5	0			15			UI		-N	-			4	1	0	0	2	0	7
-NW -W		6 <u>0</u>	1 <u>0</u>	4 <u>1</u>	0 <u>0</u>	1 2			12 <u>3</u>					-NW -W	,			0 <u>3</u>	4 2	0 <u>1</u>	2 <u>0</u>	3 2	2 <u>4</u>	11 <u>12</u>
SYSTEM		25		12		15			81			SY	STI	EM				17	10		16		9	73

Data is final (06/15/10) version from TOPS.

TABLES 7.a, 7.b & 7.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE May 2010

		Electric PAGE MI PH 60				Mil	w				Un	ion Pacif	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Passenger Train Interference	10	1	0	2	2	9	2	0	0	0	0	1	2	29
Freight Interference - Peak	9	0	0	0	3	2	1	6	0	3	0	0	0	24
Freight Interference - Off-Peak	12	0	0	0	0	6	2	2	3	6	0	2	10	43
Freight Interference - Total	21	0	0	0	3	8	3	8	3	9	0	2	10	67
Accident	0	0	0	4	0	27	3	0	0	0	0	10	0	44
Passenger Loading	13	13	4	2	1	2	1	0	11	0	9	19	10	85
Lift Deployment	5	0	0	0	0	2	2	0	8	0	1	7	7	32
Obstruction/Debris	0	0	0	0	0	14	0	0	2	0	3	2	4	25
Signal/Switch Failure	6	8	2	0	4	12	14	1	9	17	31	4	15	123
Track Work	11	10	2	0	4	56	2	0	0	0	23	3	9	120
Catenary Failure	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Non-Locomotive Equipment Failure	1	1	0	0	0	4	6	0	0	0	0	1	1	14
Locomotive Failure	11	0	0	0	0	23	22	5	0	1	0	0	0	62
Human Error	15	3	1	0	4	1	2	0	6	2	1	2	8	45
Sick, Injured, Unruly Passenger	1	13	2	1	0	1	3	0	1	0	3	3	0	28
Weather	8	0	0	1	0	3	0	0	1	0	20	2	0	35
Other	1	3	0	0	0	5	0	0	0	5	3	3	9	29
TOTAL TRAINS DELAYED	103	52	12	10	18	167	60	14	41	34	94	59	75	739

May - Average Over Previous Five Years: 2005-2009

	RNSF MI RI SC F					Mil	w				Un	ion Pacifi	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Passenger Train Interference	2	3	1	1	0	5	2	1	2	1	0	0	2	20
Freight Interference - Peak	7	0	0	0	4	2	1	1	2	3	1	0	5	26
Freight Interference - Off-Peak	9	0	0	0	0	7	3	4	3	10	1	1	20	58
Freight Interference - Total	16	0	0	0	4	9	4	6	5	13	2	1	25	84
Accident	7	0	0	1	0	4	5	3	2	1	0	1	1	25
Passenger Loading	4	5	3	2	0	5	3	0	5	0	15	9	2	53
Lift Deployment	1	0	0	0	0	3	0	0	3	0	1	1	2	11
Obstruction/Debris	7	0	0	1	1	3	1	0	2	1	1	1	4	22
Signal/Switch Failure	10	6	3	2	3	14	7	3	9	6	2	9	9	82
Track Work	4	2	1	4	0	8	4	1	3	1	3	4	3	37
Catenary Failure	0	3	1	2	0	0	0	0	0	0	0	0	0	6
Non-Locomotive Equipment Failure	1	3	1	0	0	1	0	0	1	1	1	1	3	13
Locomotive Failure	9	0	0	0	0	4	3	2	8	1	2	1	3	31
Human Error	13	5	1	2	0	4	4	1	6	2	8	4	3	53
Sick, Injured, Unruly Passenger	3	4	0	1	0	1	1	1	4	0	2	2	2	20
Weather	3	2	0	0	0	7	0	0	0	1	0	1	3	17
Other	1	3	1	1	1	1	1	0	2	1	3	3	5	23
TOTAL TRAINS DELAYED	80	35	12	17	9	69	34	19	53	27	39	37	66	497

May 2010 Divergence From May Average Over Previous Five Years

		I	Electric			Mil	w				Un	ion Pacifi	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Passenger Train Interference	8	-2	-1	1	2	4	0	-1	-2	-1	0	1	0	9
Freight Interference - Peak	2	0	0	0	-1	0	0	5	-2	0	-1	0	-5	-2
Freight Interference - Off-Peak	3	0	0	0	0	-1	-1	-2	0	-4	-1	1	-10	-15
Freight Interference - Total	5	0	0	0	-1	-1	-1	2	-2	-4	-2	1	-15	-17
Accident	-7	0	0	3	0	23	-2	-3	-2	-1	0	9	-1	19
Passenger Loading	9	8	1	0	1	-3	-2	0	6	0	-6	10	8	32
Lift Deployment	4	0	0	0	0	-1	2	0	5	0	0	6	5	21
Obstruction/Debris	-7	0	0	-1	-1	11	-1	0	0	-1	2	1	0	3
Signal/Switch Failure	-4	2	-1	-2	1	-2	7	-2	0	11	29	-5	6	41
Track Work	7	8	1	-4	4	48	-2	-1	-3	-1	20	-1	6	83
Catenary Failure	0	-3	0	-2	0	0	0	0	0	0	0	0	0	-5
Non-Locomotive Equipment Failure	0	-2	-1	0	0	3	6	0	-1	-1	-1	0	-2	1
Locomotive Failure	2	0	0	0	0	19	19	3	-8	0	-2	-1	-3	31
Human Error	2	-2	0	-2	4	-3	-2	-1	0	0	-7	-2	5	-8
Sick, Injured, Unruly Passenger	-2	9	2	0	0	0	2	-1	-3	0	1	1	-2	8
Weather	5	-2	0	1	0	-4	0	0	1	-1	20	1	-3	18
Other	0	0	-1	-1	-1	4	-1	0	-2	4	0	0	4	6
TOTAL TRAINS DELAYED	23	17	0	-7	9	98	26	-5	-12	7	55	22	9	242

Data for current month is final (06/15/10) version from TOPS.

 $P: \label{lem:continuous} P: \label{lem:co$ 

TABLES 8.a, 8.b & 8.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE January-May 2010

		]	Electric			Mil	w				Un	ion Pacif	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Passenger Train Interference	19	12	5	4	5	48	9	3	3	4	19	14	6	151
Freight Interference - Peak	37	0	0	0	27	9	10	31	5	14	9	5	9	156
Freight Interference - Off-Peak	37	1	1	0	0	45	22	34	22	45	10	5	45	267
Freight Interference - Total	74	1	1	0	27	54	32	65	27	59	19	10	54	423
Accident	27	2	0	4	0	27	3	5	29	2	2	20	14	135
Passenger Loading	19	38	19	18	1	8	10	0	23	1	83	39	24	283
Lift Deployment	12	1	0	0	0	4	18	1	25	0	11	11	17	100
Obstruction/Debris	35	5	2	10	0	17	4	1	18	5	7	23	10	137
Signal/Switch Failure	71	48	10	17	17	67	49	18	34	43	49	25	28	476
Track Work	15	12	3	0	4	90	5	2	13	1	41	4	29	219
Catenary Failure	0	7	4	1	0	0	0	0	0	0	0	0	0	12
Non-Locomotive Equipment Failure	6	29	13	15	0	6	9	0	12	4	4	7	3	108
Locomotive Failure	26	0	0	0	0	60	48	25	11	2	14	14	7	207
Human Error	31	7	3	2	7	20	24	10	15	14	19	29	12	193
Sick, Injured, Unruly Passenger	7	51	6	11	0	4	14	1	14	0	15	17	13	153
Weather	37	11	4	2	0	24	10	5	20	8	51	12	15	199
Other	5	31	2	2	0	16	5	0	6	7	21	5	25	125
TOTAL TRAINS DELAYED	384	255	72	86	61	445	240	136	250	150	355	230	257	2,921

### January-May - Average Over Previous Five Years: 2005-2009

			Electric			Mil	W				Un	ion Pacif	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Passenger Train Interference	14	14	4	3	1	18	17	7	13	5	6	5	10	117
Freight Interference - Peak	35	0	0	0	23	6	9	12	8	15	3	8	26	144
Freight Interference - Off-Peak	55	0	0	0	0	35	24	19	19	35	6	12	98	304
Freight Interference - Total	89	0	0	0	23	41	32	31	28	51	9	20	124	448
Accident	35	5	1	5	1	12	19	9	10	6	12	26	11	151
Passenger Loading	13	12	8	6	0	16	8	2	30	0	62	19	17	192
Lift Deployment	8	0	0	0	0	12	6	3	15	1	5	7	9	66
Obstruction/Debris	23	4	3	11	1	19	15	3	10	4	10	21	15	138
Signal/Switch Failure	115	35	9	11	13	72	48	28	38	30	20	37	49	506
Track Work	19	15	3	15	1	25	11	4	11	6	8	11	13	142
Catenary Failure	0	8	3	7	0	0	0	0	0	0	0	0	0	18
Non-Locomotive Equipment Failure	13	13	8	3	0	4	3	1	5	1	7	6	8	72
Locomotive Failure	40	1	0	0	1	28	24	7	25	5	8	19	17	175
Human Error	55	20	6	9	3	23	22	6	27	9	35	28	21	264
Sick, Injured, Unruly Passenger	16	17	4	5	0	14	9	1	18	0	11	8	10	113
Weather	48	37	11	11	6	74	42	12	58	13	62	47	44	465
Other	12	7	3	3	2	12	10	3	15	4	15	18	21	125
TOTAL TRAINS DELAYED	499	187	62	91	53	370	268	116	303	135	270	270	369	2,991

January-May 2010 Divergence From January-May Average Over Previous Five Years

			Electric			Mil	w				Un	ion Pacif	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Passenger Train Interference	5	-2	1	1	4	30	-8	-4	-10	-1	13	9	-4	34
Freight Interference - Peak	2	0	0	0	4	3	1	19	-3	-1	6	-3	-17	12
Freight Interference - Off-Peak	-18	1	1	0	0	10	-2	15	3	10	4	-7	-53	-37
Freight Interference - Total	-15	1	1	0	4	13	0	34	-1	8	10	-10	-70	-25
Accident	-8	-3	-1	-1	-1	15	-16	-4	19	-4	-10	-6	3	-16
Passenger Loading	6	26	11	12	1	-8	2	-2	-7	1	21	20	7	91
Lift Deployment	4	1	0	0	0	-8	12	-2	10	-1	6	4	8	34
Obstruction/Debris	12	1	-1	-1	-1	-2	-11	-2	8	1	-3	2	-5	-1
Signal/Switch Failure	-44	13	1	6	4	-5	1	-10	-4	13	29	-12	-21	-30
Track Work	-4	-3	0	-15	3	65	-6	-2	2	-5	33	-7	16	77
Catenary Failure	0	-1	1	-6	0	0	0	0	0	0	0	0	0	-6
Non-Locomotive Equipment Failure	-7	16	5	12	0	2	6	-1	7	3	-3	1	-5	36
Locomotive Failure	-14	-1	0	0	-1	32	24	18	-14	-3	6	-5	-10	32
Human Error	-24	-13	-3	-7	4	-3	2	4	-12	5	-16	1	-9	-71
Sick, Injured, Unruly Passenger	-9	34	2	6	0	-10	5	0	-4	0	4	9	3	40
Weather	-11	-26	-7	-9	-6	-50	-32	-7	-38	-5	-11	-35	-29	-266
Other	-7	24	-1	-1	-2	4	-5	-3	-9	3	6	-13	4	0
TOTAL TRAINS DELAYED	-115	68	10	-5	8	75	-28	20	-53	15	85	-40	-112	-70

Data for current month is final (06/15/10) version from TOPS.

TABLES 9.a, 9.b & 9.c: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH  $2010\,$ 

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	May
Passenger Train Interference	43	43	18	18	29								151	5.2%
Freight Interference - Peak	39	30	26	37	24								156	5.3%
Freight Interference - Off-Peak	49	61	55	59	43								267	9.1%
Freight Interference - Total	88	91	81	96	67								423	14.5%
Accident	18	49	15	9	44								135	4.6%
Passenger Loading	47	34	62	55	85								283	9.7%
Lift Deployment	18	14	18	18	32								100	3.4%
Obstruction/Debris	29	13	28	42	25								137	4.7%
Signal/Switch Failure	85	63	118	87	123								476	16.3%
Track Work	14	9	31	45	120								219	7.5%
Catenary Failure	7	0	4	0	1								12	0.4%
Non-Locomotive Equipment Failure	18	10	16	50	14								108	3.7%
Locomotive Failure	12	50	46	37	62								207	7.1%
Human Error	54	33	32	29	45								193	6.6%
Sick, Injured, Unruly Passenger	14	32	57	22	28								153	5.2%
Weather	94	41	3	26	35								199	6.8%
Other	44	11	12	29	29								125	4.3%
TOTAL TRAINS DELAYED	585	493	541	563	739								2,921	100%

### 2009

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	May
Passenger Train Interference	52	43	12	28	18	24	17	19	14	31	15	31	153	4.6%
Freight Interference - Peak	40	15	21	16	13	24	18	57	20	73	18	29	105	3.2%
Freight Interference - Off-Peak	56	22	42	28	38	36	35	48	38	90	29	58	186	5.6%
Freight Interference - Total	96	37	63	44	51	60	53	105	58	163	47	87	291	8.8%
Accident	98	12	9	27	8	20	20	9	9	6	5	38	154	4.6%
Passenger Loading	45	33	51	21	84	249	278	216	154	56	68	113	234	7.1%
Lift Deployment	23	15	13	8	12	16	41	21	30	33	22	21	71	2.1%
Obstruction/Debris	29	48	31	36	34	47	45	23	31	26	14	35	178	5.4%
Signal/Switch Failure	265	97	107	67	103	189	71	154	62	119	58	109	639	19.3%
Track Work	15	15	25	58	47	117	34	170	85	132	64	46	160	4.8%
Catenary Failure	0	8	0	11	1	19	8	0	0	0	0	9	20	0.6%
Non-Locomotive Equipment Failure	9	9	7	6	26	41	16	19	16	11	6	35	57	1.7%
Locomotive Failure	107	80	49	44	48	17	40	48	22	59	26	61	328	9.9%
Human Error	38	19	28	30	71	57	52	45	51	55	24	59	186	5.6%
Sick, Injured, Unruly Passenger	23	32	27	10	22	46	56	44	30	35	49	20	114	3.4%
Weather	599	9	11	4	1	62	11	20	3	84	14	257	624	18.8%
Other	27	10	37	18	14	16	17	31	31	40	11	17	106	3.2%
TOTAL TRAINS DELAYED	1,426	467	470	412	540	980	759	924	596	850	423	938	3,315	100%

### 2010 Divergence From 2009

			2010	Diver	gene	CIIO	111 20	0)						
CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	May
Passenger Train Interference	-9	0	6	-10	11								-2	0.6%
Freight Interference - Peak	-1	15	5	21	11								51	2.2%
Freight Interference - Off-Peak	-7	39	13	31	5								81	3.5%
Freight Interference - Total	-8	54	18	52	16								132	5.7%
Accident	-80	37	6	-18	36								-19	0.0%
Passenger Loading	2	1	11	34	1								49	2.6%
Lift Deployment	-5	-1	5	10	20								29	1.3%
Obstruction/Debris	0	-35	-3	6	-9								-41	-0.7%
Signal/Switch Failure	-180	-34	11	20	20								-163	-3.0%
Track Work	-1	-6	6	-13	73								59	2.7%
Catenary Failure	7	-8	4	-11	0								-8	-0.2%
Non-Locomotive Equipment Failure	9	1	9	44	-12								51	2.0%
Locomotive Failure	-95	-30	-3	-7	14								-121	-2.8%
Human Error	16	14	4	-1	-26								7	1.0%
Sick, Injured, Unruly Passenger	-9	0	30	12	6								39	1.8%
Weather	-505	32	-8	22	34								-425	-12.0%
Other	17	1	-25	11	15								19	1.1%
TOTAL TRAINS DELAYED	-841	26	71	151	199								-394	

Data for current month is final (06/15/10) version from TOPS.

TABLE 10: FREIGHT DELAYS between June 2008 and May 2010

		]	Electric			Mil	w				Un	ion Pacif	fic	
	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Jun-08	8	0	0	0	4	9	7	17	8	10	0	4	7	74
Jul-08	12	0	0	0	4	10	5	4	9	6	2	3	20	75
Aug-08	15	0	0	0	6	10	3	3	5	12	2	1	25	82
Sep-08	35	0	0	0	4	8	2	7	9	17	3	8	42	135
Oct-08	28	0	0	0	7	7	5	1	10	26	8	0	42	134
Nov-08	9	0	0	0	5	5	4	1	6	15	1	9	21	76
Dec-08	5	0	0	0	4	8	9	10	5	13	2	4	4	64
Jan-09	20	0	0	0	7	6	9	18	5	21	0	4	6	96
Feb-09	6	0	0	0	2	1	6	9	5	6	0	0	2	37
Mar-09	13	0	0	0	3	3	5	8	8	10	4	1	8	63
Apr-09	18	0	0	0	1	3	2	0	5	5	0	4	6	44
May-09	11	0	0	0	1	4	3	7	6	10	1	4	4	51
Total	180	0	0	0	48	74	60	85	81	151	23	42	187	931
Jun-09	6	0	0	0	3	6	7	6	5	11	0	5	11	60
Jul-09	13	0	0	0	3	7	5	2	10	4	0	4	5	53
Aug-09	37	0	0	0	3	5	8	9	1	11	3	4	24	105
Sep-09	16	0	0	0	3	3	5	5	2	7	0	6	11	58
Oct-09	22	0	0	0	14	13	3	4	5	68	2	14	18	163
Nov-09	6	0	0	0	8	5	1	4	1	11	0	0	11	47
Dec-09	13	0	0	0	5	10	7	9	4	10	5	1	23	87
Jan-10	9	0	0	0	7	8	8	10	8	11	15	1	11	88
Feb-10	17	1	1	0	3	9	13	9	5	17	0	2	14	91
Mar-10	14	0	0	0	7	12	4	12	6	14	2	1	9	81
Apr-10	13	0	0	0	7	17	4	26	5	8	2	4	10	96
May-10	21	0	0	0	3	8	3	8	3	9	0	2	10	67
Total	187	1	1	0	66	103	68	104	55	181	29	44	157	996

Data for current month is final (06/15/10) version from TOPS.

TABLES 11.a & 11.b: FREQUENCY OF LIFT-DEPLOYMENT TRAIN DELAYS BY LINE & MONTH  $2010\,$ 

LINE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Lift Delays YTD	% of All Delays YTD
BNSF	1	2	2	2	5								12	3.13%
Electric ML	0	0	0	1	0								1	0.39%
Electric BI	0	0	0	0	0								0	0.00%
Electric SC	0	0	0	0	0								0	0.00%
HER	0	0	0	0	0								0	0.00%
Milw N	1	0	0	1	2								4	0.90%
Milw W	4	4	7	1	2								18	7.50%
NCS	1	0	0	0	0								1	0.74%
RI	6	4	4	3	8								25	10.00%
SWS	0	0	0	0	0								0	0.00%
UP N	4	1	4	1	1								11	3.10%
UP NW	0	3	0	1	7								11	4.78%
UP W	1	0	1	8	7								17	6.61%
Total Lift Delays	18	14	18	18	32								100	3.42%
ALL DELAYS		`	·	`	`	`	·	·	·	`	·	•		2,921

Data for current month is final (06/15/10) version from TOPS.

2009

LINE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Lift Delays All Year	% of All Delays All Year
BNSF	0	2	1	1	2	3	4	5	6	8	3	1	36	2.12%
Electric ML	0	0	0	0	0	2	0	0	0	1	0	0	3	0.39%
Electric BI	0	0	0	0	0	0	0	0	0	1	0	0	1	0.35%
Electric SC	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
HER	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Milw N	13	0	0	0	0	0	2	1	1	0	0	1	18	1.97%
Milw W	0	0	0	0	0	0	0	0	1	0	1	6	8	1.62%
NCS	1	0	1	0	1	2	0	0	0	2	0	0	7	2.38%
RI	3	5	6	1	3	3	15	9	4	11	10	6	76	10.23%
SWS	0	0	0	3	0	0	0	0	0	0	0	0	3	0.78%
UP N	1	0	2	1	3	1	11	1	11	5	2	4	42	3.58%
UP NW	1	4	1	1	2	0	6	1	1	2	3	3	25	3.02%
UP W	4	4	2	1	1	5	3	4	6	3	3	0	36	4.55%
Total Lift Delays	23	15	13	8	12	16	41	21	30	33	22	21	255	2.90%
ALL DELAYS					·			·			·			8,785

TABLE 12: FREQUENCY OF TRAIN DELAYS BY DURATION May 2010

Minutes	BNSF		Electric		Her	Milwa	aukee	NCS	RI	SWS		UP		System
171111111111111111111111111111111111111	D1 (101	ML	BI	SC	1101	N	W	1105		5115	N	NW	W	System
Peak *			•	•		•	•	•	•					
6-10	23	15	0	0	11	10	13	5	5	7	16	14	9	128
11-15	17	0	1	1	4	4	4	5	1	3	10	2	5	57
16-20	5	0	0	0	0	5	3	0	0	0	7	0	2	22
21+	3	0	0	0	3	14	6	1	1	1	1	1	11	42
Annulled	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>7</u>	<u>3</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>16</u>
Sub-Total	51	15	1	1	18	40	29	11	8	11	34	18	28	265
Off-Peak *														
6-10	20	30	9	5	0	38	12	2	21	10	22	19	21	209
11-15	15	4	1	0	0	31	9	0	8	3	10	5	13	99
16-20 21+	7 10	2	1 0	0	0	20 28	1 7	0	2 2	4 4	10 18	11 6	5 6	63 83
Annulled	0	0	0	<u>4</u>	<u>0</u>	10	<u>2</u>	0	0	<u>2</u>	0	0	<u>2</u>	20
Sub-Total	52	37	11	9	0	127	31	3	33	23	60	41	47	474
May 2010														
6-10	43	45	9	5	11	48	25	7	26	17	38	33	30	337
11-15	32	4	2	1	4	35	13	5	9	6	20	7	18	156
16-20	12	2	1	0	0	25	4	0	2	4	17	11	7	85
21+	13	1	0	0	3	42	13	2	3	5	19	7	17	125
Annulled	<u>3</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>17</u>	<u>5</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>3</u>	<u>36</u>
TOTAL	103	52	12	10	18	167	60	14	41	34	94	59	75	739
2010 Year-														
6-10	181	166	47	41	30	173	110	74	143	71	216	121	120	1,493
11-15	90	38	11	11	16	116	60	36	48	26	68	30	60	610
16-20 21+	32 70	26	5 7	9	5	48	16	8	16	19	28	28	21	261
Annulled	11	24 <u>1</u>	<u>2</u>	13 12	10 <u>0</u>	87 21	46 <u>8</u>	17 1	33 10	32 <u>2</u>	38 <u>5</u>	46 <u>5</u>	50 <u>6</u>	473 <u>84</u>
TOTAL	384	255	72	86	61	445	240	136	250	150	355	230	257	2,921
TOTAL	304		-										231	2,721
		PER	CENT	COMP	OSITIC	ON OF I	DELAY	S BY R	ANGE	OF DU	RATIO	N		
Minutes	BNSF		Electric		Her	Milwa	aukee	NCS	RI	SWS		UP		System
		ML	BI	SC	-	N	W				N	NW	W	
May 2010	Total													
6-10	41.7%	86.5%	75.0%	50.0%	61.1%	28.7%	41.7%	50.0%	63.4%	50.0%	40.4%	55.9%	40.0%	45.6%
11-15	31.1%	7.7%	16.7%	10.0%	22.2%	21.0%	21.7%	35.7%	22.0%	17.6%	21.3%	11.9%	24.0%	21.1%
16-20	11.7%	3.8%	8.3%	0.0%	0.0%	15.0%	6.7%	0.0%	4.9%	11.8%	18.1%	18.6%	9.3%	11.5%
21+	12.6%	1.9%	0.0%	0.0%	16.7%	25.1%	21.7%	14.3%	7.3%	14.7%	20.2%	11.9%	22.7%	16.9%
Annulled	2.9%	0.0%	0.0%	40.0%	0.0%	10.2%	8.3%	0.0%	2.4%	5.9%	0.0%	1.7%	4.0%	<u>4.9%</u>
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2010 Year-			,											
6-10	47.1%	65.1%	65.3%	47.7%	49.2%	38.9%	45.8%	54.4%	57.2%	47.3%	60.8%	52.6%	46.7%	51.1%
11-15	23.4%	14.9%	15.3%	12.8%	26.2%	26.1%	25.0%	26.5%	19.2%	17.3%	19.2%	13.0%	23.3%	20.9%
16-20	8.3%	10.2%	6.9%	10.5%	8.2%	10.8%	6.7%	5.9%	6.4%	12.7%	7.9%	12.2%	8.2%	8.9%
21+ Annulled	18.2% 2.9%	9.4% <u>0.4%</u>	9.7% 2.8%	15.1% 14.0%	16.4% <u>0.0%</u>	19.6% <u>4.7%</u>	19.2% 3.3%	12.5% 0.7%	13.2% 4.0%	21.3% 1.3%	10.7% <u>1.4%</u>	20.0% 2.2%	19.5% 2.3%	16.2% 2.9%
111111111111111111111111111111111111111	2.770	<u>0.170</u>	2.070	1 1.0 /0	0.070	1.7 /0	2.2/0	0.1 /0	1.0 /0	1.0/0	1.7/0	<u>=.2 /0</u>	2.5 /0	<u> </u>

TOTAL 100.0% 100

TABLE 13: AVERAGE LENGTH OF DELAY BY SERVICE PERIOD, IN MINUTES

	BNSF	]	Electric	:	Her	Milwa	aukee	NCS	RI	SWS		UP		System
		ML	BI	SC		N	W				N	NW	$\mathbf{W}$	
May 2010														
Peak *	13.4	7.2	13.0	11.0	16.6	25.2	14.7	12.3	11.3	17.6	11.6	9.4	22.8	15.5
Off-Peak **	13.8	9.7	8.3	8.0		17.6	16.7	14.7	11.7	26.7	18.8	17.7	16.6	16.2
All	13.6	9.0	8.7	8.5	16.6	19.3	15.7	12.8	11.6	23.6	16.2	15.2	18.9	15.9
2010 Year-1	to-Date													
Peak *	14.0	11.7	13.5	20.7	14.5	17.3	16.9	14.5	13.3	16.5	12.7	16.0	14.8	14.6
Off-Peak **	16.5	11.2	11.3	14.9		15.6	13.2	15.3	13.4	18.9	14.1	17.2	18.2	15.2
All	15.1	11.5	12.1	16.6	14.5	16.1	14.7	14.9	13.4	18.1	13.5	16.6	17.0	14.9

Excludes annulled trains, which do not have delay times.
\*Includes peak direction trains operating during weekday peak periods. \*\*Includes all other weekday and weekend trains.

Data for most recent month is final (06/15/10) version from TOPS.