



U.S. Department of Transportation
Federal Railroad Administration
Office of Research and Development
Washington, D.C. 20590

Work Schedules and Sleep Patterns of Railroad Dispatchers

Survey Data and Description Associated with Report
DOT/FRA/ORD-07/11



Survey Data and Description Made Available via FRA Web March, 2008

DATA FILES:
Work Schedules and Sleep Patterns of Railroad Dispatchers

TABLE OF CONTENTS

Description of the Survey Data.....	2
Railroad Dispatcher Background Survey.....	4
Dispatcher's Daily Log.....	11

Description of the Survey Data

The Federal Railroad Administration (FRA) sponsored a study of the work schedules and sleep patterns of railroad dispatchers. The purpose of this document is to describe the study's data files that are available at www.fra.dot.gov. A separate technical report describes the study methods and findings in detail (see reference below). The Office of Management and Budget (OMB) approved this collection of information under OMB control number 2130-0570 on February 23, 2006. Data collection for this study occurred in April 2006.

Survey Methodology

The study collected data from a random sample of actively working U.S. railroad dispatchers. The study used two survey instruments, a background survey and a daily log. Copies of both instruments are a part of this document. The background survey gathered demographic information, descriptive data for the dispatcher's job type and work schedule, and a self-assessment of overall health. Study participants used the daily log to record sleep and work periods on both regular workdays and non-workdays for a 2-week period.

The response rate for the survey was 46 percent. The accompanying files contain data for the 443 usable responses.

Data Files

Data from each participant's background survey and daily log are available in two files. The background survey data is in one Excel file, and the daily log data is in a separate file. A unique participant identification number appears in both files. Each of these data sets is provided in Excel files.

Adjustments to the Data

Protecting the identity of the survey participants necessitated some modifications to the original dataset. A few categories of data are reported as ranges rather than as the raw reported data. For example, this is the case with the age data. For others, such as years of experience, top coding was employed to prevent identification of respondents with over 35 years of experience. Comparison of the survey instruments, which appear on the following pages, with the data file, will reveal where these adjustments were made. Blank fields indicate missing data. To differentiate between missing data for a main sleep period and an instance where the individual did not sleep, a sleep period of 00:00 duration (i.e., same start and end time) was entered to indicate no sleep.

Description of the data items in each file

Each Excel file contains two tabs, one with the data and one with a description of each of the data items in that file.

Use of the Data

These data files are the property of the FRA. The data is being made available for researchers and others who are interested in the safety and health of the study population

and in the relationship between work schedules and fatigue. Use of the data in books, journal articles, dissertations, theses, and other publications (print or electronic) is authorized provided that the data is cited as “Federal Railroad Administration. (2008). *Data Files: Work schedules and sleep patterns of railroad dispatchers*. Washington, DC: U.S. Department of Transportation.,” and that FRA is notified of the publication (ATTN: Thomas G. Raslear, Federal Railroad Administration, Mail Stop 20, 1200 New Jersey Avenue, SE, Washington, DC 20590).

Reference

Gertler, J., & Viale, A. (2007). *Work Schedules and Sleep Patterns of Railroad Dispatchers*. (DOT/FRA/ORD-07/11). Washington, DC: Federal Railroad Administration. Available at <http://www.fra.dot.gov/downloads/Research/ord0711.pdf>

ID Number: _____

Railroad Dispatcher Background Survey



The Federal Railroad Administration (FRA) is conducting a study of the work schedules and sleep patterns of railroad dispatchers. The purpose of the study is to develop an understanding of the issue of work schedule-related fatigue of railroad dispatchers. The study results will inform possible future FRA policy and regulatory actions, will assist the railroad industry in addressing any work-schedule related fatigue issues of railroad dispatchers, and, in general, will contribute to overall railroad operational safety.

The data collected from this study will be used primarily for statistical purposes, and is authorized by law (49 U.S.C. 20901). Your participation in this study is completely voluntary. Your personal information will be kept strictly confidential, and will not be disclosed to anyone other than employees and contractors who work on this study.

Public reporting burden for this information collection is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Please note that an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The OMB control number for this information collection is 2130-0570.

About Yourself

1. Age: ____ years
2. Sex: ____ male ____ female
3. How long have you been a dispatcher?
____ years and ____ months
4. How long have you been a dispatcher at your
current railroad?
____ years and ____ months
5. What type of dispatcher job do you currently
work?
____ regular
____ relief
____ extraboard
____ assistant chief
____ other (please explain) _____

6. What is your marital status?
____ single ____ divorced ____ other
____ married ____ widowed
7. How many children or other dependents do you
have (not including your spouse)? _____
8. How many of your dependents are under the age
of 2 years? _____
9. a) Do you drink caffeinated beverages?
____ yes ____ no
b) On average, how many cups and cans of these
beverages do you drink per day? _____

Your Health

1. How many times have you marked off sick in the last year? ____ days
2. In general, how would you rate your health?
Circle one:
Excellent Good Fair Poor
3. Some people feel younger or older than their biological age. How old do you feel? ____ years
4. Have you been diagnosed as having a sleep disorder?
____ yes ____ no (skip questions 5 and 6)
5. Do you have sleep apnea?
____ yes ____ no
6. Are you receiving medical treatment for your condition?
____ yes ____ no

Your Work Schedule

1. Please describe your job characteristics using this table. Leave rest days blank. If you work a job that varies from week to week, just write "extraboard" across the table.

	S	M	T	W	Th	F	S
Start time							
End time							

2. On average, how many hours do you work per week? ____
3. Is your position covered by the Hours of Service Law?
____ yes ____ no
4. How often do you feel well rested and alert over the course of your work period? Circle one:
Never Occasionally Frequently Always
5. How often do you feel *mentally* drained at the end of your work period? Circle one:
Never Occasionally Frequently Always
6. How often do you feel *physically* drained at the end of your work period? Circle one:
Never Occasionally Frequently Always

Stress at Work

Use the following scale to rate how much each factor below contributes to your stress at work:

No Stress	A Little Stress	Stressful	Very Stressful
1	2	3	4

Please assign a rating to *each* of the following items:

- ☐ Responding to emergencies
- ☐ Lack of control over work schedule
- ☐ Loss of sleep
- ☐ Coordination with other departments
- ☐ Pressure to finish a task
- ☐ Ambiguous operating rules or procedures
- ☐ Management policies and decisions
- ☐ Job security
- ☐ Surges in workload
- ☐ Communication problems
- ☐ Inadequate staffing
- ☐ Responsibility for safety of others
- ☐ Lack of break time
- ☐ Inadequate time off
- ☐ Other (please specify) _____
- _____
- _____
- _____

Life Events

Please indicate with a ✓ whether any of the events listed below has occurred to you in the last 6 months:

- ☐ Personal illness or injury
- ☐ Marital difficulties
- ☐ Birth of a child
- ☐ Death of a spouse
- ☐ Change in sleeping habits
- ☐ Difficulty with the law
- ☐ Illness/injury of family member or friend
- ☐ Financial difficulties
- ☐ Change in living conditions
- ☐ Change in social activities
- ☐ Death of a close family member



ID Number _____

If you have questions, you can contact:

Alex Viale
781-684-8444
aviale@foster-miller.com

Susan McDonough
781-684-3966
smcdonough@foster-miller.com

FRA F6180.123 (07/05)

Welcome...

and thank you for participating in this project. The purpose of this study is to assemble data on both work and sleep patterns of railroad dispatchers. The data that you record will serve as a history of your work and sleep patterns and how you feel throughout the day. The study will examine the relationship between dispatchers' work schedules and their level of alertness / fatigue.

Your participation is appreciated. Please contact us if you have any questions or comments.

Instructions

This log is divided into 14 sections, one for each day that you will be recording data. Each section contains both a Sleep and Nap Log and a Work Log.

Start a new section for each new day. On the section divider page, write the date and indicate whether or not you worked this day. Please start with Day 1. It is important that you provide data for 14 *consecutive* days.

When recording time, use the 2400 clock system. For example, 4:30 p.m. is 1630.

Complete the Sleep and Nap Log for every day of the study. Complete the Work Log for those days that you work.

If for any reason you do not record data at the appointed time, fill out your log as soon as possible to the best of your ability.

Sleep and Nap Log

Make entries on this log *upon awakening* and *at bedtime every day*. Record your sleep on the day you awoke. In addition, if you took any naps, enter this information in the log. If you work third shift, record sleep after a work period on the day the sleep occurs.

Work Log

Make entries on the work log at the *start of your workday* when you arrive at your workplace, *midway through your shift* and at the *end of the workday* when you arrive home.

If you work third shift, enter information about your work period on the day that you begin your shift.

Study Compensation

Complete the last page of this log book to indicate your preference for the study compensation.

Day 1

Date ____/____/2006

Today I: ☐ worked

☐ did not work

Upon Awakening

Sleep Location

Home☐

Away from home☐

Time you went to bed

Time you fell asleep

Time you woke up

Time you got up

Number of awakenings during the night

Rate your sleep

Ease of falling asleep

12345

Very difficultVery easy

Ease of getting up

12345

Very difficultVery easy

Length of sleep

12345

Wholly insufficientMore than sufficient

Quality of sleep

12345

Very poorVery good

Indicate how you feel now

12345

Very sleepyVery alert

Complete if you took any naps, or had subsequent sleep after a nighttime interruption.

Nap 1

Time fell asleep

Time awoke

Nap 2

Time fell asleep

Time awoke

Comments on today's sleep experience:

15

Work Log

Start of *workday*

Time you began commute to worksite	
Time you arrived at work	
Time started work	

Indicate how you feel now

1	2	3	4	5
Very sleepy			Very alert	

Midpoint of shift

Time Now	
----------	--

Indicate how you feel now

1	2	3	4	5
Very sleepy			Very alert	

End of workday when you arrive home

Number of breaks today	
Longest break today, if any	min.
Time you completed today's work period	
Time you arrived home	

Indicate how you feel now

1	2	3	4	5
Very sleepy			Very alert	

[illegible]