

The Business Roundtable

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ABSENTEEISM AND TURNOVER

**A CONSTRUCTION INDUSTRY COST
EFFECTIVENESS PROJECT REPORT**

ABSENTEEISM AND TURNOVER

TABLE OF CONTENTS

| | | |
|------|--|----|
| I. | SUMMARY | 1 |
| II. | INTRODUCTION | 2 |
| III. | HOW THE STUDY WAS MADE | 3 |
| IV. | FINDINGS | 5 |
| V. | CONCLUSIONS | 9 |
| VI. | THE ECONOMIC IMPACT OF ABSENTEEISM AND TURNOVER | 10 |
| VII. | RECOMMENDATIONS | 13 |

I

SUMMARY

Productivity in construction frequently suffers as a result of high levels of absenteeism and worker turnover. There is evidence that all concerned-owners, contractors, and workers--are interested in resolving this problem. This study examines the source and size of the problem, and makes recommendations to reduce it. For the most part, data for this study were collected from workers and required the cooperation of owners and contractors. Without exception everyone cooperated.

Some causes of absenteeism are uncontrollable. The major causes, however, are controllable. They center around the work-site environment. Such de-motivators as excessive rework, poor supervision, and unsafe working conditions are reported by workers to be more frequent reasons for absenteeism than personal illness. These data suggest that absenteeism can be minimized if managed. Wellplanned, safe jobsites where an effort is made to recognize workers' individual skills and utilize employees accordingly will have less absenteeism and inherently enjoy a gain in productivity.

Worker turnover is also a serious problem in construction and warrants attention. Poor supervision, unproductive relationships with the boss, poor planning, and generally poor management are the prime reasons cited by the workers for turnover. As in the case of absenteeism, this too can be minimized by planning, supervising, and the application of good management principles. Lower turnover offers a broad range of productivity gains. One other significant cause of turnover is the attractiveness of nearby jobs offering extended overtime. This subject has been covered in another Roundtable study¹ and will not be discussed in this report except to reiterate: "It is unproductive to utilize overtime to attract labor."

A conservative estimate of the direct cost effects of absenteeism and turnover, based only on clearly identifiable costs, indicates that a 9% reduction in project labor costs is attainable on a typical job. In some situations, the potential savings are much greater. This is ample incentive to apply the management attention needed to achieve them. Recommendations offered in Section VII point the way.

Absenteeism and turnover occur on every construction jobsite; however, there is no common understanding or definition of either. The industry needs to focus on a common

¹ See Report C-2, "*Scheduled Overtime Effect on Construction Projects*," the Business Roundtable, February 1981

definition so that relative performance may be used as a management guide. Section VI of this report applies definitional logic that could be a starting point for standardization of reporting statistics and for monitoring performance.

II

INTRODUCTION

One of the major problems facing the construction industry in the 1980's is its declining productivity. Indeed construction recently has been identified as the sector of the U.S. economy with the *worst* productivity performance. Since 1965, construction has been the only industry with a consistently negative productivity growth, and it has been a major source of the declining growth rate of the total economy.

Table 1

**LABOR PRODUCTIVITY MEASURES OF THE U.S. ECONOMY, BY
SECTOR AND SELECTED PERIOD, 1948-1980
(AVERAGE ANNUAL GROWTH RATE, REAL GDP/HOUR)**



Source: "Productivity Perspectives: A Chart Book of Key Facts About U.S. & Worldwide Productivity Trends," p.5, published by the American Productivity Center, Houston, Texas, 1981 (reprinted with permission)

Many forces play a role in these productivity figures, but construction industry leaders agree that absenteeism and turnover contribute significantly to the decline. Turnover rates of more than 200% annually, not including reductions in the work force, have been reported. Concurrently, absenteeism has been observed as high as 20%. High rates of turnover and absenteeism add to the costs of construction.

The complex problems of absenteeism and turnover are difficult to deal with in isolation. More often than not, the reasons relate to the organizational environment and demotivation of individual workers that result from other unrelated activities.

This study was aimed at achieving productivity gains in the construction industry through an improved understanding of the causes and effects of absenteeism and turnover. Specifically, the study sought to:

- Verify the problem;
- Analyze the major contributing factors;
- Quantify the costs;
- Offer recommendations for corrective action.

III

HOW THE STUDY WAS MADE

A team of knowledgeable construction people representing owners and contractors was assembled. Their experiences were the source of much of the deductive input to the conclusions and recommendations.

A faculty member of the University of Houston Clear Lake City School of Business and Industry was retained to devise a questionnaire, based on the team's understanding of the practical problems and his sensitivity to humanistic to identify reasons for absenteeism and turnover from the worker's perspective. The questionnaire was designed specifically to measure construction-worker attitudes about their jobs and to investigate underlying causes for absenteeism and turnover. This questionnaire was completed by more than 1,000 workers on their jobsites.

Data for this study was collected in two phases. Phase I was a pilot study providing an opportunity to anticipate potential problems in the national survey. In this phase, different methods of distribution, collection, and data analysis were compared to find the most efficient method.

Based upon the pilot-study results, the final questionnaire² was divided into four main parts. Part 1 asked workers to respond to questions about demographic items such as age, type of craft, earnings, union membership, and work-attendance habits. Part 2 asked for information about attitudes toward job factors—e.g., safety aspects, work quality, supervision, and pay. Part 3 asked for opinions about the importance of various items in their decision to quit a job. Part 4 covered the importance of various items in a worker's decision to miss work.

Job sites for the national survey were selected to maximize geographical representation (see Table 2). Managers at each site were instructed to select workers at random to increase the validity of the study.

TABLE 2
PARTICIPATING ORGANIZATIONS

| Geographical Area | Project Type | Project Size (Manpower) | Number of Respondents | Labor Affiliation |
|--------------------------|---------------------|--------------------------------|------------------------------|--------------------------|
| Midwest | Nuclear Power Plant | 1350 | 175 | Union |
| East | Refinery | 1250 | 175 | Union |
| Southeast | Petrochemical | 3000 | 200 | Open shop |
| Southwest | Refinery | 375 | 150 | Union |
| Southeast | Petrochemical | 248 | 200 | Open shop |
| Midwest | Petrochemical | 125 | 30 | Union |
| Southwest | Petrochemical | 525 | 50 | Union |
| Southwest | Refinery | 100 | 25 | Open shop |
| TOTAL | | | 1005 | |
| SAMPLE | | | | |

² The questionnaire is available upon request. Contact The Business Roundtable, Suite 2222, 200 Park Avenue, New York, New York 10166.

IV

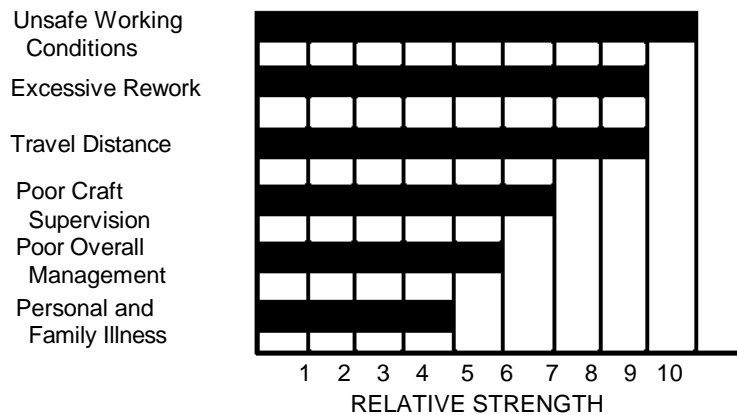
FINDINGS

At the start of the survey, each participant was asked for information regarding his attendance and voluntary terminations.

Among six reasons for absence from the job, the responding workers rated personal or family illness last in order of importance. The top five, in descending order of importance, were: unsafe working conditions, excessive rework, travel distance to the job, poor craft supervision and poor overall management (see Figure 1).

FIGURE 1

REASONS FOR ABSENCES AS REPORTED BY WORKERS



Among seven reasons for quitting their jobs, workers put their relationship with the boss at the top of the list, by a considerable margin over the runner-up reason, overtime available on another job (see Figure 2).

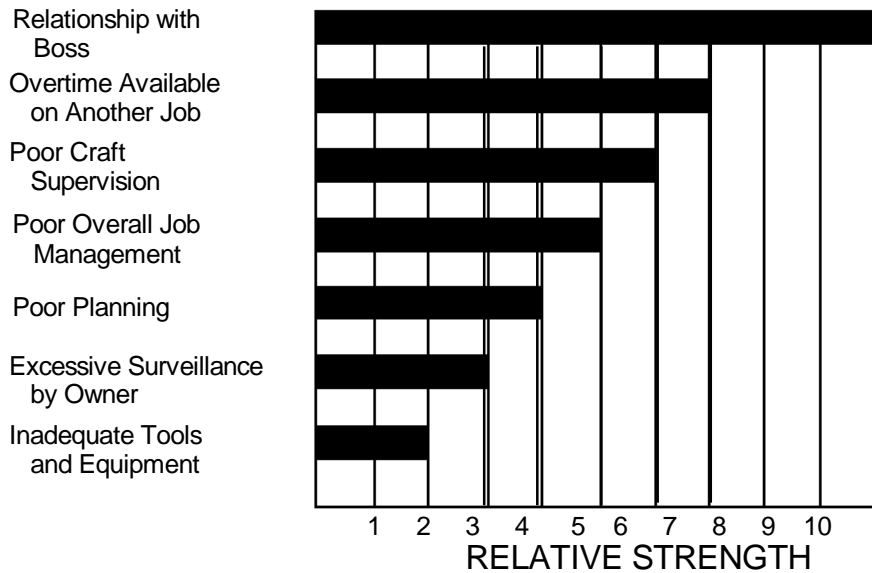
The rankings did not differ between union and open-shop workers, nor by geographical areas. Age differences did not affect the results, except that distance from home did cause higher absenteeism in age groups above 30.

Workers were asked "How many jobs have you voluntarily quit in the last two years?" and "How many days have you missed in the last year?"

The results show that a comparatively small fraction of the work force is apparently responsible for most absenteeism and voluntary job departures. Four percent reported quitting more than 10

FIGURE 2

REASONS FOR TURNOVER AS REPORTED BY WORKERS



jobs in two years; another 10% said they had left three to six jobs over the same time span. But 86% said they had left fewer than three jobs (see Figure 3). The pattern was similar for absenteeism. Slightly more than two-thirds of the workers said they had been absent less than five days during one year, but 6% reported absences totaling more than 40 days and another 11% reported absences totaling 15 to 40 days.

FIGURE 3

NUMBER OF JOBS VOLUNTARILY QUIT DURING A TWO-YEAR PERIOD AS REPORTED BY WORKERS

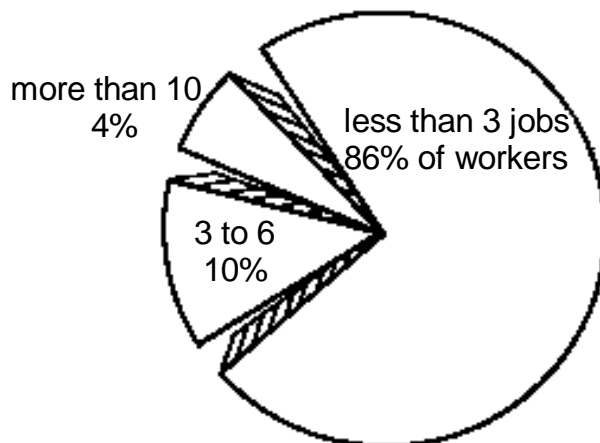
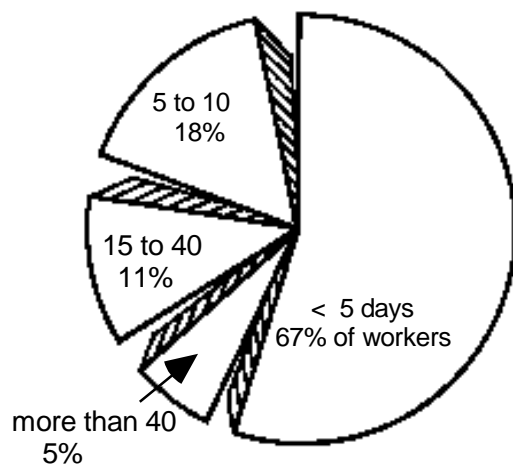


FIGURE 4

NUMBER OF DAYS ABSENT DURING A ONE-YEAR PERIOD AS REPORTED BY WORKERS



Since this type of data can be influenced by economic factors, labor availability, seasonal job opportunities, etc., workers were asked additional questions to identify demographic influences.

- 65% responded that they rarely or never consider quitting their job and 10% responded that they often or very often considered quitting.
- Approximately 50% reported feeling that it would be difficult to find another job.
- 83% responded that a commuting distance in the range of 50 to 100 miles would be a reason to quit their job.
- 84% reported preferring an eight hour day, five day week work schedule.
- Roughly one-half reported preferring a work force size of less than 500, with the other one-half preferring a work force size of 500 to 1000.
- 65% reported that they rarely or never accept other work in addition to their present job.

Responses dealing with differences among various crafts revealed that:

- Of the crafts surveyed, welders, riggers, millwrights, and iron workers reported the highest average turnover rates. Highest self-reported absenteeism occurred among pipefitters, electricians, truck drivers, boilermakers, and asbestos workers.
- Workers above 30 years of age reported lower turnover rates but higher rates of absenteeism.

- Turnover rates did not differ significantly in the different geographical areas reporting; however, absenteeism tended to be higher in the midwest .
- Union workers reported lower turnover but higher absenteeism rates than open-shop workers.

Much care was taken in administration of the questionnaire to assure anonymity to the respondents. Still, the study team has some concern that the reasons cited may be skewed somewhat by self-consciousness or poor memory, and that the self-reported levels of absenteeism and turnover are likely to be understated.

Construction projects generally reflect wide variations in experience among craftsmen. Questions relating experience to absenteeism and turnover disclosed that:

- Experienced workers were more quality conscious than less experienced workers.
- As work experience increased, turnover rates decreased.
- As work experience increased, craft supervision and overall job management became more important reasons for absenteeism.
- These findings were consistent throughout the entire sample.

The survey examined the very important variable of job satisfaction, and how it affected attendance and turnover. The responses showed that:

- Job dissatisfaction tended to influence absenteeism rates more than turnover rates.
- Quality of supervision and an understanding of company goals were the most important job-satisfaction factors affecting absenteeism .
- Considering quitting was the most accurate indicator of job dissatisfaction for all age categories, geographic regions, and both union and open-shops
- As the size of a job increased, job satisfaction decreased. (This, however, did not cause the respondents to express a clear preference for smaller jobs.)

Study team participants had a preception at the outset that absenteeism and turnover resulted partly from the high wages paid construction workers, because their needs for income could be met by working less than full time. The survey dealt with the issue and the somewhat surprising results were:

- Reported absenteeism or turnover rates did not correlate with annual income levels.
- Wages were not significantly related to worker job satisfaction.

V

CONCLUSIONS

Based on the findings reflecting the workers' views, reasons for absenteeism and turnover fall into two broad categories:

1. Controllable

- Relationship with the boss
- Unsafe working conditions
- Excessive rework
- Poor craft supervision
- Poor overall management
- Poor planning
- Excessive surveillance by owner
- Inadequate tools and equipment

2. Uncontrollable

- Travel distance from the residence to the job
- Overtime availability on another job
- Personal and family illness

- The controllable reasons for absenteeism and turnover involve the ingredients of the environment of a construction site. In addition, each ingredient is important in its own right, quite apart from its effect on absenteeism and turnover. Careful attention to planning, safety, interpersonal relationships, and other management fundamentals will not only reduce absenteeism and turnover, but will have other positive effects on job costs and schedules.
- A relatively small portion of the work force is causing most of the absenteeism and turnover. Eighty-six percent of the workers surveyed reported quitting fewer than three jobs in the last two years. Similarly, 67% of the work force reported missing work fewer than five days per year³. This reinforces a conclusion that prompt management action with respect to chronic offenders can be very effective.
- The size of the work force does not appear to be a significant factor since about half of the workers stated preferences for jobs with less than 500 workers while the other half preferred jobs with a work force of 500 - 1000. (The survey was conducted at worksites

³ As noted earlier, the study team recognizes that, despite assurances of anonymity, these self-reported quits and absences are likely to be understated, and responses may not always reflect accurately the personal reasons which may be involved

ranging from 125 to 3,000 workers.) Some independent observations indicate that work forces smaller than 100 tend to be more stable.

- Distance from a worker's home to the jobsite seemed to have an effect on turnover at a range of 50 to 100 miles.
- Excessive absenteeism is an indicator of future turnover problems.
- Older and more experienced workers exhibited lower turnover, but higher absenteeism. This leads to interesting deductions—that jobs that do not challenge or provide satisfaction for a highly skilled, experienced craftsman will produce absenteeism, and that younger, less experienced workers seem to change jobs rather than cope with unpleasant situations.
- No significant differences in reasons for absenteeism and turnover were cited by union and open-shop workers. Union workers reported lower turnover and higher absenteeism rates, but the differences were too small to justify any conclusions.

VI

THE ECONOMIC IMPACT OF ABSENTEEISM AND QUILTS

Gauging precisely the cost impact of absenteeism and turnover is difficult. From its collective experience, the study team identified the following effects of high levels of absenteeism and turnover:

- Increased manpower complement to meet staffing needs.
- Loss of revenues from not meeting project schedules.
- Administrative cost to recruit, process and train new employees.
- Lost efficiency in work crews with new or inexperienced members.
- Underutilization of capital investments (tools, equipment).
- Interruption of work flow and task accomplishment.
- Misallocation of skills and talents of employees.
- Increased demand for administrative time and resources for planning and rescheduling.
- Increased overtime and employee fatigue.
- Lower morale.

The cost impact of many of these items will vary, depending on circumstances and management's ability to recognize the problems and to deal with them effectively. The wasted manhours from certain direct effects, however, can be more readily estimated. In making a conservative estimate of the cost improvement incentive, only these direct, more easily quantifiable effects were considered.

The main direct impacts of *absenteeism* on productivity are:

1. Time spent by crew members (others) waiting for replacements.
2. Time spent moving replacements to and from other work locations.
3. Lost time by supervisory personnel in reassignment of work activities and locating replacements.

The study team estimated that, on average, these direct effects result in a total of 12 manhours of paid time wasted, for each worker absent. Thus, each 1% increase in daily absenteeism produces a 1 1/2% increase in labor costs, as illustrated by the following computation for a hypothetical 100-man job:

$$\begin{aligned} \text{Added cost} & & \text{Non-productive manhours} \\ \text{due to 1\%} & = & \\ \text{absenteeism} & = & \frac{\text{Productive manhours if no absences}}{\text{Productive manhours if no absences}} = \\ & & \frac{1 \text{ man absent (1\% x 100 men) x 12 manhours}}{100 \text{ men x 8 hours}} = \frac{12}{800} = 0.015 = 1 \frac{1}{2} \% \end{aligned}$$

... or a 15% increase in direct labor cost for 10% absenteeism. *Therefore, a reduction in average absenteeism from 10% to 5% would decrease labor costs by 7 1/2 %.*

For *turnover*, the principal cost effects are:

1. All of the absentee-costs plus:
2. Payroll and clerical (administrative) costs associated with terminating and hiring.
3. Workers non-productive time (portions of the first and last day).
4. Disruption of other workers on the job site.

The study team estimated that these effects, on average, result in 24 manhours of paid time wasted for each resignation.

Data was obtained from an industrial construction project completed in 1980 near Houston. It employed an average of 350 men for a job that lasted 450 working days, during which there were

1,560 terminations (quits plus firings, not including reductions in force), yielding the following statistics:

$$\text{Turnover rate for total job} = \frac{1560 \text{ terminations}}{350 \text{ man/day}} = 4.5 \text{ or } 450\%$$

$$\text{Turnover rate per year} = \frac{450\% \times 253 \text{ working days/year}}{1} = 253\%/year$$

$$\begin{aligned} \text{Added cost due to turnover} &= \frac{\text{non-productive manhours}}{\text{productive manhours if no turnover}} = \frac{1560 \text{ terminations} \times 24 \text{ hrs lost/term.}}{350 \text{ men} \times 8 \text{ hrs/man day} \times 450\text{-workdays}} = 0.029 = 2.9\% \end{aligned}$$

Thus, reducing the 253 % 1 year turnover rate by one-half would have decreased labor costs by about 1 1/2 %.

The evidence indicates that there are steps available to contractors and owner management to substantially reduce the levels of absenteeism and turnover in construction. If one assumes that an absentee rate of 10% and an annual turnover rate of 250% can each be cut in half—a reasonable assumption—the computations presented above indicate there would be a savings of about 9% in direct labor costs with the lion's share attainable by improving worker attendance. Many indirect effects not considered here would further increase the potential savings.

VII

RECOMMENDATIONS

A variety of steps have been found to be effective in decreasing absenteeism and turnover on construction jobs. Those which are most appropriate will vary with the circumstances of each job—its size, duration, remoteness, type of work, labor demand in the locale, labor practices in the area, etc. Serious consideration of the following actions is recommended with recognition that some may already be in effect and others may not fit a given job situation:

For Action By Contractors

- Screen applicants. Examine work histories. Reject those who are poorly qualified or who have a history of job hopping.
- Keep attendance records for all employees. Monitor to identify trouble spots. Establish a clear policy of firing chronic absentees, and communicate this to all employees when they are hired.
- Maintain good communications with workers. Sense worker moods, understand their concerns, provide feed back from management, and prompt action where appropriate, to show that worker concerns are heard. Bulletin boards, newsletters, tool-box meetings, and suggestion boxes are all helpful, but face-to-face communication on the job by top contractor supervision is indispensable.
- Use the latest behavioral-science techniques for organizational effectiveness⁴, including:
 - Train supervisors in motivation and interpersonal skills.
 - Create small work groups with as much autonomy as possible.
 - Communicate goals for the organization and for each work unit (including attendance goals).
- Keep craftsmen informed of how their accomplishments compare with the job's goals:
- Be creative in developing incentives for employees to stay with the job and have good attendance. Emphasize attendance rather than absenteeism. Bumper stickers, job posters, and helmet decals can be used to stimulate interest. Awards to each individual after periods of perfect attendance by an entire crew can develop peer pressure to improve attendance. Bonuses to workers who remain until job completion may be helpful in reducing turnover during the critical final stages.

⁴ See Report A-2, "Construction Labor Motivation", The Business Roundtable, 1982

For Action by Owners:

- Require contractors to make periodic reports on absenteeism and turnover. Mutually develop goals for improvement and actions to achieve them.
- Encourage and support innovative efforts by contractors in communicating with and motivating the workforce.
- Assure that contractors have well-planned and well-executed safety programs.
- Mutually with contractors, identify and alleviate irritants ("dissatisfiers") within the control of owners that may contribute to absenteeism and turnover among contractor employees.
Examples: parking lots in disrepair or unreasonably located, undue limitations on smoking, unnecessary limitations on contractor's starting and quitting times, inadequate areas for eating lunch, and insufficient facilities for checking in and out.

For Action by Unions:

- Recognize that active involvement in discouraging absenteeism and turnover is in their self-interest.
- Modify referral procedures to discourage absenteeism and turnover. Example: For a pre-determined period (say, 30 days) prohibit referral to another job of any worker who has quit a job without good cause or who was fired for excessive absenteeism. The survey suggests that most workers would support such action so long as it is administered fairly and equitably.