What are Labor Statistics for?

A series of pictorial charts prepared by the Bureau of Labor Statistics for the United States Department of Labor exhibit at the Century of Progress Exposition Chicago 1933
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At the Century of Progress Exposition in Chicago, the Bureau of Labor Statistics of the United States Department of Labor undertook to answer, in part, the questions it so frequently encounters in its work—What are labor statistics and what are they for?

The answer took the form of a series of pictorial charts, popularly treated, presenting selected types of facts and figures of interest to the worker which the Bureau is organized to collect, and pointing out the way in which such facts and figures promote the welfare of American workers. These charts are reproduced in this booklet, amplified by text which attempts a fuller and more specific answer to the query: What are labor statistics for?

The collection and dissemination of statistics of labor through bureaus established for that purpose have grown out of a very real need. The development of those bureaus is part of the story of the progress of the workers of the United States during the latter half of the century 1833–1933. When the workers of Massachusetts attempted just after the Civil War to secure an 8-hour day by law, they bolstered up their arguments with a presentation of data about hours and working conditions based upon study, observation, and their own daily experiences in the industries of that State. The employers countered with facts about conditions in the same industries based upon their records. The result was two very contradictory sets of "facts" and a bewildered legislature.

In an earnest effort to learn the truth about industrial conditions, the Massachusetts Legislature adopted a resolution in 1866 calling for the appointment by the Governor of a commission "to investigate the subject of hours of labor, especially in its relation to the social, educational, and sanitary condition of the industrial classes." Out of the findings of that commission and the political disturbances which followed its report grew the first permanent governmental agency in this or any country for systematic, continuous
study of working conditions and labor relations in industry. The Massachusetts Bureau of Statistics of Labor was created in 1869 to "collect, assort, systematize, and present in annual reports to the legislature . . . statistical details relating to all departments of labor in the Commonwealth."

After a year spent in attempting a preliminary "reconnoitering of its almost limitles field of research", the bureau, which consisted solely of a chief and one deputy, stated in its first annual report that "an organized and efficient body would be necessary to 'gather up detailed statistics and positive facts.'" But the bureau "ventured to predict" that the information made available by that means would bring enlightenment and a new viewpoint on the problems of labor and industry.

This pioneer "standing committee of investigation" as its second chief, Carroll D. Wright, called it, had a stormy life during the first few years, and resolutions calling for its abolition were introduced in the legislature regularly. Discussing the service it had rendered and might render, the Governor, in his annual address to the legislature in 1873, said:

We ought approximately to know, for instance, how many grown persons there are in the State, not prevented from labor by vice, indolence, or physical infirmity, who cannot procure comfortable homes for themselves and their dependents, fair education for their children, adequate provision for sickness and old age, and sufficient leisure for the comprehension and discharge of the duties of citizenship. The incapacity to procure this is poverty. We ought to know whether the proportion of such persons is increasing or diminishing; whether our legislation hastens or can be made to hasten the decrease or counteract the increase. If there is carried on in the State any business so unremunerative that it will not permit the employers to pay those employed such wages as are necessary to keep them from poverty, however desirable that business is it ought to cease. And surely we ought to know, if it be possible to ascertain, whether there are really among us employers who are laying up great riches for themselves by keeping their employees in a condition of impoverished dependence.

The Massachusetts bureau was strengthened and enlarged, not abolished, and became the model upon which State after State organized agencies for the collection and dissemination of statistical information concerning wage earners. Fifteen years after Massachusetts began the experiment 11 States and the Federal Government had created bureaus of labor statistics.
The Bureau of Labor Statistics of the United States Department of Labor, into which the first Federal Bureau of Labor evolved as Federal activity in the interest of the workers expanded, is primarily a fact-finding agency the statutory duty of which is "to collect information upon the subject of labor, its relation to capital, the hours of labor and the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity." Labor statistics are the means used by the Bureau in disseminating information upon the facts and conditions it finds.
Wages constitute the means of livelihood of the worker and his dependents. It might be argued that all the worker needs to know about wage statistics is the figures on his pay envelop. Granting that that is his chief concern, it is not his only interest. Questions arise in his mind and he is entitled to an answer to them.

How do his wages compare with those received by workers in the same occupation in other localities? How do his earnings and his wage rate compare with similar work in other occupations in his own community? Do other workers in the same or similar occupations receive time and a half for overtime while he gets only straight time? Are women doing practically the same work for materially less pay, thus endangering his own job?

The workers themselves, especially where they are unorganized, would find it exceedingly difficult, if not impossible, to work out the answers to these questions. Wage statistics, compiled and analyzed by impartial Government agencies whose objective is accurate information on wage rates and earnings as they find them, afford everyone the means of knowing what wages are paid in various industries, occupations, and localities, and of making the comparisons necessary for wage adjustments.
COST-OF-LIVING STATISTICS

THE worker thinks of wages in terms of his earnings as stated on his pay envelop. The economist sees two different kinds of wages in the same pay envelop—money wages, that is, the money actually received, and real wages, or what the amount of money he receives means to the worker in terms of what it will buy and the margin left him over and above his necessary expenditures for daily living. To estimate the buying power of the worker’s wages it is necessary to know what it costs him to live and how his living costs vary from time to time; to know the relative importance in the family budget of rent, food, fuel, clothing, and all the many other expenditures for health and decent living.

Cost-of-living statistics and statistics of changes in the cost of living, as compiled by the Bureau of Labor Statistics, furnish a basis on which wages can be considered in the light of what it costs the worker and his family to live. As such they play an important part in wage negotiations, in drawing up new agreements, and in arbitration cases where the cost of living is an important factor in the settlement of a dispute.

The chart above shows the great changes which have occurred in the cost of living during the past several years, and indicates how the purchasing power of money wages has been affected thereby.
PRODUCTIVITY STATISTICS

Much is said and written nowadays about the increased output per worker and the displacement of labor resulting from the use of machinery in industry. Facts and figures are needed to know to what extent the individual worker’s output is really increased by machinery, and how much of what is known as “technological unemployment” actually results when labor is displaced because one man working on a machine produces a volume of output which would require many men if machines were not used. Statistics of productivity of labor furnish these facts and figures in terms of output per worker per unit of time, such as man-hour or man-day. They are also indicative of the amount of work produced by the worker in exchange for his wages.

The efficiency of new machines, new methods, and improved technique in increasing labor output can be measured by the record of comparative output per man-hour under conditions prevailing before and after their adoption. Hence the story of the mechanization of industry which is so characteristic of the present era can be told in no more forceful and impressive way than in actual figures showing how production and output per worker per unit of working time have increased as mechanization has progressed.
ACCIDENT STATISTICS

Accident statistics show up the danger spots in industry. They record the accident and accident-prevention experience of employers, machines, and occupations. Any occupation or industry or machine concerning which figures show high accident rates or a record of constantly mounting accidents in relation to the number of workers employed, is shown by those figures to demand correction in the interest of the workers.

A factory inspector in possession of statistics proving that a factory or a machine is having more accidents than a neighboring factory doing the same kind of work or using the same machines is in a position to require the employer to take action at once to make his plant at least as safe as his neighbor's.

Accident statistics show to what extent protective devices are serving their purpose of making work places safe. With such data, based on the actual experience of the workers themselves, safety engineers are enabled to improve and develop safety devices and measures in the light of that experience.

Statistics showing the value of organized safety movements and safety appliances as reflected in decreased accident rates record the progress of those movements and are strong arguments in support of the policy of "safety first" in industry.
A REASONABLE workday and increased leisure have been, next to wages, the focal point of the struggle to improve working conditions. The first use to which labor statistics were formally put was to prove by records and figures that workers, especially women and children, were working intolerably long hours. These data on hours of labor helped to secure for child workers in Massachusetts the first law limiting working hours, passed in 1842. Ever since then statistics showing actual hours worked have been the basis for the enactment and the enforcement of legislation regulating working hours.

Hours of labor statistics have entered into negotiations for wage scales and particularly for overtime pay, and, like wage statistics, they play an important part in the adjustment of industrial disputes.

Statistical proof of decreased hours per day and per week in other localities and trades is an effective argument often used by workers to secure shorter hours for their communities.

In short, the whole movement to break down the wall of the long workday which shuts the workers out of needed recreation and leisure time has depended from the first upon the facts and figures showing actual conditions in employment which statistics of hours of labor have presented.
STRIKE AND LOCKOUT STATISTICS

Many purposes may be served by statistics of strikes and lockouts, which provide a record of the number of industrial disputes, the number of workers directly and indirectly affected, the issues and disagreements which led to the dispute, and the manner and terms of its settlement.

A strike, as the worker sees it, is a symptom of economic ill health in the industry or the plant, and data which show unusual frequency and extent of industrial disturbances in a given industry or locality point to conditions which need correction.

Every successful effort to adjust a labor dispute by mediation makes it easier to handle the next similar situation by the same method, and adds to the influence and prestige of the representatives of Federal and State Governments who are trying to maintain peace in industry. The idea suggested in this drawing of dropping the tug-of-war under the friendly guidance of an intermediary becomes rather more than a fanciful figure if attention is directed as well to the sharp decrease in the actual number of industrial disputes as shown by the chart, in the years during which definite efforts have been made to adjust differences before they develop into open rupture.
MANY economists hold that the construction industry is the gage of industrial activity—that employment and business conditions reflect almost exactly and immediately fluctuations in building. Hence it is important to know what the building outlook is and what it promises in job opportunities and increased buying power. Data on the number and location of building permits and the kind and extent of building contemplated furnish that information.

Building-permit and housing statistics as compiled by the Bureau of Labor Statistics show the construction costs of the various types of dwelling per family provided for, and afford comparisons of building costs in various parts of the country.

These data also constitute a record of the extent, location, and kind of new housing for workers. They show the shifts in types of housing, such as the trend toward apartment-house living in some centers, the development of 2-family houses in others, and the reverse movement in still other localities away from congested areas into private dwellings.

Many of these changes in what might be called housing styles are socially significant and information about them is vital to any movement looking toward planned housing for the workers.
EMPLOYMENT STATISTICS

EMPLOYMENT statistics act in the manner of a clinical thermometer to indicate the state of economic health of the community, the industry, and the country. Measuring, as they do, increase and decrease in the number of workers employed, they furnish a basis for expansion and contraction of industrial and commercial activity in relation to indicated changes in the labor market and in purchasing power.

Scientifically gathered and intelligently applied, employment statistics can throw much light on seasonal and cyclical fluctuations, and thus aid in establishing methods of stabilization and control.

From the worker's point of view, employment statistics may be of immense value in showing up labor surplus or labor shortage in various localities and in different industries. Practical application of information on the state of the labor market throughout the country could save workers from ill-planned and fruitless migrations in search of work.

Statistics of unemployment have played an important part in the past few years not only in directing attention to actual conditions but in furnishing facts upon which relief programs were founded and developed.

The chart shows how employment in manufacturing industries declined after 1929. In 1932 it was only about 60 percent of what it was in the relatively good years, 1926 to 1929.
DEVELOPMENTS in industry, such as mechanization, the introduction of altogether new industries and the decadence of old ones, produce constant shifts in occupations and trades. Statistics of occupations record these changes and their effect upon the labor market and the number of workers employed in given fields.

They can be used to show what occupations and industries are overcrowded and what ones need workers; what positions formerly held by men are being taken over by women; the kinds of job opportunities opening to women. Moreover they show, with relation to established occupations and callings, whether the tendency over a long period of time is toward expansion or recession.

For young persons who are trying to decide upon a trade or profession, and for use in the vocational guidance movement, actual figures showing which occupations are expanding and which receding, and forecasting probable trends, are of the utmost importance. Similarly, the intelligent planning of courses in vocational schools requires definite knowledge of the effect upon jobs and job opportunities, of the growth and obsolescence of industries, occupations, and professions.

The above chart is based on reports compiled by the U.S. Bureau of the Census.