

How the Kansas City Southern Allots Expenditures*

The yearly budgets are each a further step in an improvement program which was adopted 22 years ago

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THE system now in use on the Kansas City Southern for the budgeting of maintenance and improvement work was begun in a general way about 1907, at which time a comprehensive engineering report was rendered the management by H. G. Burt, consulting engineer and a former president of the Union Pacific. This report went into the then physical condition of the Kansas City Southern, its traffic at that time, and dealt further with its traffic potentialities and possibilities.

The report on traffic and its probable growth was favorable. However, the actual traffic growth has far exceeded the estimates then made, notwithstanding the fact that they appeared almost fantastically optimistic. The report on physical condition, briefly summarized, was that a railroad would have to be built to handle that traffic.

This report led to a bond issue which provided funds for essentially rebuilding the property. The work undertaken included grade reduction, involving considerable change of line, the re-location of engine terminals causing the abandonment of two then in operation and the construction of three new ones, together with the general rehabilitation of the entire property.

Naturally, this extensive work called for heavy expenditures and it is equally natural that not all the recommended work could be financed. The report referred to formed the first program for improvements seriously undertaken by the management of the Kansas City Southern Railway and it may be added that this original program devised some 22 years ago is still one of the definite aims toward which the railroad is working.

Program and Budget Defined

At this point I wish to give the explicit definition of two words which are used throughout this discussion and which are oftentimes more or less confused. First, the word "program," which is intended to mean a definite, closely connected plan for the direction of effort, year after year, which sets forth in a general way the sequence of individual projects in order to gain a definite end. Our programs are projected five or ten years into the future. Second, the word, "budget." This word conveys more definite meaning than the foregoing for, as used here, it means small portions of perhaps many programs, to be undertaken within a definite time (usually one calen-

dar year) and for which funds are available and appropriated.

The programs are the underlying basis of the budget. Important items of property are considered individually and a period of from five to ten years is selected over which additions, improvements or replacements are spread, careful attention being given to the probable sequence of work, the need for which may actually then exist or may be only anticipated. These programs are prepared by the interested departments, usually under the guidance of consulting advice and carry general estimates of the cost of the work outlined. These programs are submitted to the management and the executive officers and thereafter become recognized as general plans for the guidance of future recommendations, but do not carry any definite authority to proceed with work. They cover, in more or less detail, improvements to and the purchase, replacement and retirement of locomotives, freight cars, passenger cars, shop machinery, rail, bridges, ballast, stations, office buildings, section houses and, with these principal items, many smaller details related to them.

Budgets are divided into two classes, one of which deals with items involving capital charges; the other covers only maintenance. The budget which involves capital charges is known as the additions and betterments budget. In the latter part of the year, the chief engineer and the superintendent of machinery prepare for their own and allied departments a preliminary budget which embraces new work recommended and unfinished work already under way which will incur charges in the succeeding year. This preliminary budget shows the cost of the proposed work, divided as to additions and betterments, maintenance and stock. This preliminary budget is worked down to the point where the charges to capital account are compatible with available funds and the final budget is then submitted for formal approval. However, approval of the budget is the approval only of the total amount shown as charged

to investment and means only that the amount shown thereon can be expended. Since many items incur heavy maintenance charges, it is important that these items be given consideration in the maintenance budget. Again, when emergency work is undertaken, it has to be substituted for one or more items approved on the budget in order to protect the integrity of the total charge to investment.

Budgets for maintenance of way and maintenance of equipment are also prepared on an annual basis and are inter-



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woven with the improvement budget to provide sufficient funds for maintenance work incidental to the betterment work. The maintenance work in both the road and equipment departments is scheduled with the purpose of avoiding disturbing fluctuations in working forces and, so far as possible, keeping the expenditures more or less uniform throughout the year. The method by which this is accomplished is the equalization of some accounts, which allows a proportionate charge to that account each month without respect to the actual work performed. The two principal accounts in which this is done are rail and ties. At the end of each year all equalized accounts are adjusted to reflect the actual work chargeable to them.

No budget, however carefully planned and prepared, is either self-starting or self-continuing. A budget is nothing more or less than an approved and adapted plan of procedure for which the funds have been appropriated. The carrying out of the budget requires constant and careful supervision. It is of almost equal importance that all the money appropriated be applied to the property and that no more than that amount be approved to be expended. This requires a careful follow-up system and reports come to the management at stated intervals showing the exact status of work performed and money expended. This is perhaps as important as any phase of either programming or budgeting and must be followed up, for the effectiveness of any plan is in its execution and never in its conception.

The foregoing outlines the way in which the Kansas City Southern prepares its budgets and, in a measure, the aims for which it strives. The following will describe briefly what has been accomplished and what it is hoped to accomplish by the budget system.

Under the general improvement program undertaken in 1907, the principal locomotive and car shops, located at Pittsburg, Kan., and Shreveport, La., were improved and enlarged to the extent that they provided approximately twice as much shopping capacity as the traffic at that time required. The management was building for the future, confident that the future would justify it and knowing that the economical thing was to do a good job of building in the beginning instead of adding piece-meal. In approximately ten years the surplus capacity was exhausted. When this occurred, the management started the preparation of an elaborate program for the further enlargement of the Pittsburg shops, and arranged this program to cover, in some items, a three and in others a five year period. Accordingly, a large expenditure for the extension of this shop was absorbed so gradually that it was entirely met from available funds without hardship. No machine over ten years old was left in that shop when any improvement in that particular machine had been made. It was found to be of material advantage to have the shop equipped with modern machines and tools. The machines thus replaced were either sent to shops of lesser importance, when they could be used advantageously, or were sold or scrapped.

The Equipment Rebuilding Program

The Kansas City Southern has a program for rebuilding freight cars under which a certain number are rebuilt each year and these cars are turned back into traffic as good as new cars, each one thoroughly renovated. I mention this particularly because the maintenance charges for this class of work are unusually heavy, and to point out that the maintenance budget must provide for this work as well as the improvement budget.

Locomotives are shopped on a programmed basis and when a particular locomotive has run its assigned mileage it is taken into the shop. It may be functioning perfectly and probably is, but we know that economy demands that attention be given locomotives in proportion to the mileage run. Each locomotive that goes through the back shop is fitted with authorized improvements applicable to its class and in this way locomotives are not only kept in good repair but are largely modernized.

Roadway and Bridge Programs

For years rail laying has been in strict accordance with a program. The approximate amount of rail required was determined in order that a constant annual renewal of that amount would provide a uniform condition of rail on the entire system. This program has been in effect for more than 15 years, with the consequence that in that time the road has not been burdened with unduly heavy renewals in any one period.

Ballasting was handled in largely the same way. A program for a definite minimum thickness of ballast under the tie was spread over a period of approximately eight years. During that time, a specific amount of track was given attention and the work accomplished in such fashion that it was never a hardship.

Similarly, a program covering bridge work was devised and carried out. It included the elimination of many short trestles by concrete culverts or permanent structures of various kinds, as well as the strengthening of certain metal bridges not strong enough for heavy power, together with the entire rebuilding of several major structures such as the bridge over the Arkansas river. All of this important work was carried out in accordance with a long term program prepared to cover this need.

Much has been done over a period of years towards the improvement of passenger stations. This was undertaken in the same way by careful programming. Important towns that were supported by permanent and growing agricultural or industrial areas were first separated from the mill towns and lumber camps which depended upon temporary conditions for their prosperity. These permanent towns were then programmed for substantial stations and the program arranged in such a way that some 10 years would be consumed in its completion. The original sequence was often disturbed by influence or authority which had to be regarded. In general, however, this work has gone on, and is still going on, in accordance with the program.

Transportation Budgeting of Minor Importance

The budgeting of transportation expenses has not yet been carried to any systematized conclusion. At least one other road has done this successfully and it is a subject which is being studied. A large portion of transportation expense varies almost directly with the tonnage offered for movement and it is certain that this portion of the transportation expense would have to depend entirely upon traffic conditions, regardless of any budgeting. However, the elements of transportation, such as fuel consumption, overtime, train load and such items, are given careful scrutiny to see that normal conditions and costs are maintained. These things are a matter of supervision rather than budgeting. Certain other expense which is included in transportation accounts, such as station service and other miscellaneous items, is probably susceptible of successful budgeting but would certainly not exceed 25 per cent of the total cost of conducting transportation. It may be that the

budgeting of these items would give the supervisory forces in charge of transportation a gauge of normal conditions for these accounts. In the main, as long as lost motion is reduced to a minimum through adequate and competent supervision, it would seem that the actual budgeting of the miscellaneous accounts in the transportation department would be of minor importance.

In conducting any business, be it a corner grocery, a manufacturing plant or a railroad, the success of that business is dependent upon one and only one thing—the relationship which exists between earnings and expenses. Some positive current record must be always available in a business as complicated as a railroad, and unless that is true, expenses may mount to the point where drastic curtailment is the only salvation. Drastic curtailment is most objectionable. It demoralizes working forces during its enforcement and incurs the heavy expenses of training new men when ended. Worse even than that, it allows property to deteriorate expensively, requiring greater expenditures to make deferred maintenance effective. The budget system, well planned and carefully supervised, eliminates disturbing fluctuations in the large maintenance accounts, stabilizes working forces, and provides at short intervals, a reliable index of the relationship of earnings to expenses.

Freight Car Loading

WASHINGTON, D. C.

REVENUE freight car loading in the week ended November 23 amounted to 950,280 cars, a reduction of 78,957 cars as compared with the corresponding week of last year but an increase of 109,638 cars as compared with 1927. All classes of commodities except coke showed a reduction as compared with last year, while all except grain and grain products and forest products showed a reduction as compared with 1927. The largest reduction as compared with last year was that in miscellaneous freight, of which 37,864 cars less than the corresponding figure for last year was reported. All districts reported de-

creases as compared with last year but increases as compared with 1927. The summary, as compiled by the Car Service Division of the American Railway Association, follows:

Revenue Freight Car Loading

Week Ended Saturday, November 23, 1929			
Districts	1929	1928	1927
Eastern	207,835	234,047	180,907
Allegheny	200,351	214,562	168,181
Pocahontas	57,126	60,969	45,210
Southern	138,003	154,161	134,958
Northwestern	112,955	120,857	105,068
Central Western	152,119	157,906	131,341
Southwestern	81,891	86,735	75,077
Total Western Districts	346,965	365,498	311,386
Total All Roads	950,280	1,029,237	840,642
Commodities			
Grain and Grain Products	39,760	54,777	42,755
Live Stock	29,817	32,873	28,141
Coal	192,010	200,890	152,794
Coke	10,975	10,559	9,260
Forest Products	54,796	64,715	56,005
Ore	15,744	17,752	11,030
Merchandise L.C.L.	257,801	260,430	225,629
Miscellaneous	349,377	387,241	315,026
November 23	950,280	1,029,237	840,642
November 16	983,323	1,056,120	968,052
November 9	1,049,475	1,054,353	975,134
November 2	1,071,650	1,103,942	1,039,075
October 26	1,133,810	1,162,974	1,112,816
Cumulative totals, 47 weeks	48,611,689	47,172,296	47,460,529

The freight car surplus for the period ended November 15 averaged 226,131 cars, an increase of 62,808 cars as compared with the week before. This included 123,336 box cars, 65,925 coal cars, 21,338 stock cars and 6,978 refrigerator cars.

Car Loading in Canada

Revenue car loadings at stations in Canada for the week ended November 23 totaled 63,855 cars, an increase over the previous week of 1,030 cars but a decrease of 22,140 cars from the same week last year.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada		
November 23, 1929	63,855	35,775
November 16, 1929	62,825	37,130
November 9, 1929	71,782	37,570
November 24, 1928	85,995	40,297
Cumulative Totals for Canada		
November 23, 1929	3,248,878	1,918,752
November 24, 1928	3,358,688	1,856,214
November 26, 1927	3,071,176	1,753,596

