Table I.—Showing Relative Values of the Various Qualities of an Ideal Pavement.

Qualities.	Baker.	Tillson.	U.S. Bulletin.
First cost—cheapness	15	14	14
Maintenance cost—cheapness	—	—	—
Durability	—	21	20
Ease of maintenance	20	10	10
Ease of cleaning	10	15	14
Low tractive resistance	10	15	14
Non-slipperiness	5	7	7
Sanitariness	25	13	13
Noiselessness	—	—	—
Acceptability	15	—	4
Favorableness to travel	—	5	4
Total	100	100	100

While the authorities quoted have not done so, the writer would suggest the sub-division of the items on the following bases:—

"Maintenance cost" into "maintenance cost" (i.e., on a basis of dollars and cents), and "durability" (i.e., on the basis of ease and frequency of repairs required). "Acceptability" into "noiselessness" (which explains itself), "acceptability" (i.e., on a basis of personal or local preferences of abuttors and æsthetic considerations), and "favorableness to travel" (i.e., on the basis of absence of bad effects on animals and vehicles using the pavement).

He would then base his values for "ease of maintenance" in the list on the ease of actually making the repairs necessary (i.e., whether or not special outfits, such as asphalt plants, were required or not), and "ease of cleaning" on the requirement for unusual machines, the frequency of cleaning required, and the actual cost in dollars and cents.

It will be noted that, while the values assigned by Tillson and the U.S. Bulletin are practically identical, a considerable variation exists between them and those given by Baker, and it has been suggested that this variation results from consideration of different conditions. Apparently Tillson and the U.S. authorities had in mind pavements subjected to heavy hauling, while Baker was considering a type of pavement for residential streets. This illustrates the former reference to differences in ideals or to the relative importance of the classifications composing the ideal.

Hence, it seems to the writer that the standardization of a table for the selection of pavementts covering all conditions, character of traffic and with positive values assigned to each kind of pavement is impracticable. Rather, on the other hand, should the effort be made for the standardization of a set of tables—one for use with each class (not amount) of traffic under each class of circumstantial conditions. That is, the writer would suggest a set of tables as follows:—

Table A.—For use on streets in a commercial district where heavy hauling is prevalent or likely to be so; such, for instance, as along the docks or freight depots.

Table B.—For use on streets in a commercial district where heavy hauling is not preponderant nor likely to be so; such, for instance, as about the retail stores of a city.

Table C.—For use on streets carrying occasional heavy loads, occasional pleasure vehicles, and a large proportion of vehicles of moderate weight; such, for instance, as the main thoroughfares of the "down town" portions of a city.

Table D.—For use on streets of the residential portions of a city and where street railway tracks do not exist. (Where street railway tracks exist, use for the width occupied by the rails plus 4 ft., Table C.)

Table E.—For use on city streets where special conditions exist; such as around hospitals, court-rooms, etc.

Table F.—For use on boulevards and on places where æsthetic conditions are preponderant.

Table V.—For use on main country roads, such as "State roads" carrying fairly heavy mixed travel.

Table W.—For use on secondary country roads carrying moderate travel.

Table X.—For use on minor country roads carrying farm travel almost wholly.

Note that the classification is based on the kind of travel known to require support by the pavement, or likely, from the situation of the road, to so require, and not the amount of travel. Consideration of the latter factor will enter when, for any particular case, comes the entering of figures of value for each kind of pavement.

Assuming that the main classifications of travel are given in the above list (though, of course, it is possible to extend the latter), a set of values for the components of the ideal in each case can be made, as shown in Table II.

Table II.—Showing Values for Components of Ideal for Different Tables.

Components	Tables A	B	C	D	E	F	V	W	X
First cost—cheapness	10	10	10	12	10	8	15	15	15
Maintenance—cheapness	20	20	20	15	10	10	25	25	20
Durability	5	5	5	5	5	7	7	7	7
Ease of maintenance	5	5	5	5	5	5	8	10	10
Cleanliness	5	5	7	10	10	12	5	5	5
Low tractive resistance	20	15	10	5	5	5	10	5	5
Non-slipperiness	15	15	12	10	10	10	10	10	10
Sanitariness	5	8	10	13	15	10	5	5	5
Noiselessness	5	7	8	10	20	8	5	5	5
Acceptability	5	5	8	10	5	20	5	5	8
Favorableness to travel	5	5	5	5	5	5	5	8	10
	100	106	100	100	100	100	100	100	100

The application of the tables to the selection of a pavement would be as follows:—

If the case of a street along the freight station is taken, Table A may be applied thus:—

Example I.

Qualities	Ideal (Table A)	Values for Vit. brick	Grouted stone block	Pitched stone block	Grouted Durax	Sheet asphalt
First cost	10	10	8	8	7	10
Maintenance cost	20	8	18	15	20	6
Durability	5	2	5	4	5	3
Ease of maintenance	5	5	5	4	5	2
Cleanliness	5	5	4	3	4	5
Low tractive resistance	20	20	15	10	18	19
Non-slipperiness	15	3	8	13	15	2
Sanitariness	5	5	4	3	4	5
Noiselessness	5	4	1	2	3	5
Acceptability	5	4	4	4	5	4
Favorableness to travel	5	2	2	3	5	4
Totals	100	68	74	69	91	65

Or, in the case of a residential street without street railway tracks:—

Example II.

Qualities	Ideal (Table D)	Values for Vit. brick	Durax	Sheet asphalt	Water-bound macadam
First cost	12	6	3	7	12
Maintenance cost	15	12	15	10	8
Durability	5	4	5	3	2
Ease of maintenance	5	4	4	2	5
Cleanliness	10	10	8	10	4
Low tractive resistance	5	5	4	5	4
Non-slipperiness	10	3	8	2	10
Sanitariness	13	12	8	13	6
Noiselessness	10	6	4	10	8
Acceptability	10	8	6	10	8
Favorableness to travel	5	3	2	4	5
	100	73	67	76	72