ECONOMIC IMPACT OF HIGHWAY CONSTRUCTION
AND RIGHT OF WAY PURCHASING

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Economic benefits which stem from the highway construction program and the purchasing of land to be used as right of way for these highways are substantial and far-reaching. There are also certain minor isolated economic detriments because of anticipated highway construction and because of the relocation of existing highways.

Some of the economic benefits are clearly visible and others—even though equally as great—are not as readily discernable.

At the present time, there is a great deal of talk and interest about the wonderful job that is being done to attract new industry and to otherwise stimulate the economy of the State of Kentucky. I assume that practically all far-sighted Kentuckians agree with the general philosophy involved here and are proud of the excellent progress that is increasingly evident. From time to time, we read in the newspapers thumbnail sketches of the total payroll volume, the total tax benefits, the total buying power, and the numerous other indices of benefits which stem from this program of growth and expansion.

We also read periodically about the total dollar volume of highway construction contracts in the State of Kentucky. There are direct and rather striking economic benefits to the state stemming from this construction activity. A recent issue of "The Residential Appraiser" gave the following estimate:

Nationwide, a half million new jobs are expected to result from the construction of the Interstate Highway system alone. Inevitably, almost every segment of American industry and each individual will benefit directly or indirectly from this vast program. A single one million dollar road contract requires in an average locality and in normal circumstances:

1. A survey party of 4 to select routes.
2. 11 employees to buy right of way.
3. 2 engineers and 5 draftsmen to plan structures.
4. 30 local workers to move fences, buildings, etc.
5. Issuance of about 150 local title policies—all-together a two-year outlay locally of $200,000, providing extra jobs for 21 local residents.

The road contractor would, when he began work, add another 100 local jobs—plus bringing in his permanent employees for about 6 months. In an average situation, the contractor would buy locally some $11,000 worth of cement and lumber, $12,000 worth of structural steel; he would spend $1,500 locally for motor fuel, would spend another $6,000 in royalties to landowners for sand and gravel, would hire 30 trucks—many local, which would buy $5,000 worth of gasoline. The final sodding alone would expend $5,000 locally.

A total payroll of $1,000 extra spent daily in the local community for the 6 months peak period would add to other items to make $300,000 in new spending money, plus 100 new jobs.
The figures I have just quoted, if applied to the construction contracts let in the State of Kentucky in the past 3 years, which have averaged $81,000,000 per year, would result in the following annual benefits to the economy generally.

1. Purchase of $891,000 worth of cement and lumber.
2. $972,000 worth of structural steel from local sources.
3. $121,500 for motor fuel.
4. $486,000 in royalties to landowners on sand and gravel.
5. The hiring of 2,430 trucks—many locally throughout the State.
6. $405,000 worth of gasoline.
7. And the final sodding alone would amount to $810,000 in local expenditure.

Thus, over the average of the last 3 years $81,000 extra payroll spent daily in the local community for 6 months of the year would add to other items stemming from the highway construction to make $24,300,000 in new spending money, plus 8,100 new jobs for a 6 months period.

We read in the newspapers, and we see evidence firsthand, that our economic situation in Kentucky is not all that we would like it to be. Yet, without the economic shot-in-the arm of the expanded road-building program, the situation in Kentucky would be much, much, worse.

Another economic impact worthy of consideration by all interested and far-sighted Kentuckians is what the huge land-acquisition program might result in if some of the almost inevitable built-in inflationary aspects are permitted to go unchecked.

Although it isn’t exactly how much right of way will be needed, or exactly where it will be needed, it has been estimated that approximately six billion dollars will be spent for right of way for the Interstate System in the next 12-15 years, and at least $10 billion for all Federal-aid highway improvements during the same period. Approximately 730,000 parcels of land will be involved in the Interstate program alone, and almost three times as many for the whole Federal-aid highway operation. This acquisition sets in motion a chain reaction in property exchange. Probably no public works program in history has had a more far-reaching effect on the demand and value of real estate than our current program of road building.

A few years ago, it was estimated that there are approximately 19 million acres of land in the United States in the rights-of-way of public roads and streets. Making a variety of assumptions, we estimate that the rights-of-way needed to complete just the Interstate System will require roughly an additional million acres of land.

The trend of right of way expenditures is sharply upwards. Such costs for State-administered highways alone increased more than tenfold during the ten-year period from 1947 to 1956, from less than $50 million in 1947 to nearly $500 million in 1956. Right of way costs comprised less than six percent of capital outlay for highway purposes in 1939. By 1956, they constituted more than 13 percent. Because of the requirements for an extensive right of way for Interstate highways, the proportion spent for such purposes will probably be even higher in the future.

One reason for this is that not as much attention can be given to property damage as was formerly possible. When building roads primarily intended to serve local needs and local traffic the highway designer can consider local land boundaries to some extent when he selects a location for the road. Relatively low traffic volumes and speeds permit more flexible design criteria. For distance travel, speed and time become more important. The Interstate System is the ultimate highway system for distance travel in this country and requires the most stringent design criteria yet applied. Accordingly, the problem of land boundaries
is subordinated to the problem of traffic movement; and greater dislocation of land increments and disruption of existing land use results. It is this greater dislocation which results from right of way acquisition for the Interstate System and the resulting greater severance and consequential damages which presently cost the taxpayers more money than they have paid for right of way heretofore.

Some statistics recently developed by the Research Division of the U.S. Bureau of Public Roads are quite interesting on this point. In connection with their estimates as to the road needs of the country, they requested the states to break down these estimates into certain categories, one of which was right of way acquisition. For the Interstate System, the average cost of right of way for the entire county was estimated at 20% of the total construction cost. In urban areas the average was 31% while in rural areas it was estimated at 11%. For the less traveled routes, it was of course less, but even for federal-aid and secondary routes in rural areas there is a substantial difference between the present estimate of 9%, and the old days when farmers were glad to convey the right of way free in order to get a road to their farms.

In Kentucky over the last three years we have spent an average of 14 million dollars a year for highway right of way. This is an average of $63,350 per linear mile. Urban right of way costs have averaged $401,965 per mile; right of way for secondary roads has averaged $10,250 per mile. The southern-most section of the North-South Expressway in Louisville cost $370,000 per mile. The northern-most section for which right of way has been acquired cost $4,369,345 per mile. This North-South Expressway right of way averaged 220 ft. in width.

Extremes of unit land prices have been $30 per acre in non-agricultural rural areas to $1,100 per front foot on Broadway between First and Brooks Streets in Louisville. This, if calculated on a per acre basis, is just short of a quarter of a million dollars per acre.

When one considers the estimated cost of the Interstate System alone, the importance of right of way acquisition in the modern highway financing picture becomes apparent immediately. The total estimated cost of right of way for the entire national system is six billion dollars. Even a 10% variation in this cost would make a difference of almost half a billion dollars. These figures illustrate not only the importance of the right of way acquisition in the whole road construction picture, but also indicate the vast sums involved and the importance to the taxpayers of sound appraisals, sound policies, and citizen-awareness of the role they can play.

In addition to the damages actually paid, the Department had incurred substantial costs in building service roads and in providing livestock and machinery underpasses to connect divided remainder parcels of some landowners. Reports have reached the Department that, even at this early date before the highway-system is completed, individual landowners by swap, sale, or lease, are taking action to lessen or counteract the damages inflicted by the division of their holdings. In many instances the structural features provided may have been unnecessary in the first instance, or inadequate for the intended purpose. In other instances, initiative of landowners is rendering such structural features superfluous and obsolete. Whatever the cause, such actions have caused a revision of the Department’s practice of providing underpasse and frontage roads until a thorough study is made of the economic justification in each individual case.

It has been rather generally believed that severance, cuts, fills, control of access and other features of new type highways cause substantial diminution of property values. These views have resulted in damage awards to owners whose property has been affected. These awards have been made by Highway Department appraisers, by county-court commissioners, and by juries.

Recent studies of actual sales of properties thus affected by new roads are proving that this generally-held view of damages has been more apparent than real. Every definition of “fair market value”, whether legal or economic, has as its core “what a willing buyer will pay and a willing seller will accept neither
acting under duress and both exercising reasonably good judgment”. A study of situations where this willing buyer-willing seller relationship has taken place reflects that properties which were believed to have been diminished in value have proven to be either diminished in value to a much lesser degree, not diminished at all, or in many cases actually enhanced.

Practically all states have done some research in this particular field. Michigan and California have perhaps led the way and have made more intensive and complete studies. Michigan’s individual case studies have proven time after time that the allowance for damages at the appraisal stage were far greater than the resulting market transactions proved justifiable.

As you all know, one of the most universal fears on the part of middle-sized or small towns is to be bypassed by a limited access highway. Actual case studies have shown that this too is a false fear. When California studied the business activities in 12 towns, in which either the business area or the entire town had been bypassed by limited access highways, they came up with the following figures:

In Anderson, California, business increased 49%
In Anahum, business increased 17%
In Buellton, business increased 14%
In Camarillo, business was up 6%
In Escondido, business was up 12%

In all, business in 11 out of 12 towns had risen, often over 35%, and in only one town had business decreased, and this decrease was only 6.2%.

Many other states have made similar studies and they all have one common conclusion; business increases when better roads are built.

Kentucky has conducted several case studies involving properties which have changed hands on particular projects. The Adair Street Overpass, in Jefferson County, was the subject of one such study; two projects in Kenton and Boone Counties were studied; a project in Fayette County was the subject of such research; and all sales in Shelby County along the route of I-64 which took place after right of way was purchased, were recorded and analyzed to ascertain to what extent the damage estimates were accurate. The conclusions in Kentucky were much the same as the conclusions in other states. Property values are not diminished as greatly as was expected at the appraisal stage, or at the jury stage; and in many instances are not diminished at all—but rather increased from the over-all influence of the new roadway.

On the national scene, juries seem to be becoming increasingly aware that damages are not as great as was originally believed. For instance, as the following table shows the right of way cost on 25,500 parcels reported from 35 states:

**INTERSTATE R/W COSTS**

<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th>% of Appraised Value</th>
<th>Kentucky</th>
<th>% of Appraised Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Parcels</td>
<td>25,000</td>
<td></td>
<td>1,720</td>
<td></td>
</tr>
<tr>
<td>Negotiated at Appraisal Price</td>
<td>82.4%</td>
<td>100%</td>
<td>84.9%</td>
<td>100%</td>
</tr>
<tr>
<td>Settled Prior to Condemnation</td>
<td>7.5%</td>
<td>107%</td>
<td>0.7%</td>
<td>119%</td>
</tr>
<tr>
<td>Prepared for Jury Trial</td>
<td>10.1%</td>
<td></td>
<td>14.4%</td>
<td></td>
</tr>
<tr>
<td>Settled by Trial Commissioners</td>
<td>5.6%</td>
<td>101%</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Settled by Jury Award</td>
<td>5.5%</td>
<td>130%</td>
<td>4.1%</td>
<td>264%</td>
</tr>
</tbody>
</table>

*Not possible under Kentucky laws.

Such, however, is not the case in Kentucky. As the following table shows (assuming that the original appraisals reasonably reflect actual market value—in view of the fact that 84.9% of the property owners accepted these appraisals,
it seems reasonably valid to conclude that this is a safe assumption—-) Kentucky juries have been extremely liberal when asked to establish a sum of money which constitutes just compensation to property owners.

KENTUCKY INTERSTATE R/W COSTS

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<tbody>
<tr>
<td>Parcels Acquired</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiated at Appraisal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>1,412</td>
<td>8,849</td>
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<td></td>
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<tr>
<td>Parcels Condemned</td>
<td>308</td>
<td>12,569</td>
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</tbody>
</table>

Breakdown of Parcels Condemned

<table>
<thead>
<tr>
<th>Settled Prior to Trial</th>
<th>133</th>
<th>10,004</th>
<th>17,769</th>
<th>177%</th>
<th>11,911</th>
<th>119%</th>
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</thead>
<tbody>
<tr>
<td>Cases Tried by Jury</td>
<td>78</td>
<td>4,426</td>
<td>6,820</td>
<td>154%</td>
<td>11,670</td>
<td>264%</td>
</tr>
<tr>
<td>Cases Pending Jury Trial</td>
<td>97</td>
<td>10,158</td>
<td>18,741</td>
<td>184%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From all of the above, several things appear to be note-worthy.

First, there is an immediate and substantial local economic stimulus provided by the highway construction program.

Second, better highway facilities result in increased real estate values and varying degrees of positive benefit to business activity. The type of highway improvement has a great bearing on the extent to which adjacent land values rise—almost astronomically in the case of a non-limited access urban bypass, all the way to only moderately in the case of rural land adjacent to a limited access facility.

Thirdly, citizens who are asked to help ascertain the amount of compensation due landowners generally tend to over-compensate the individual landowners involved, thereby shortchanging and depriving all the people of the State of Kentucky of the number of miles of roads that could have been constructed if only fair compensation had been awarded the individual property owners.

When these three thoughts are combined that is, the manifold economic benefits which result from all types of road-building and the excessive awards that are taking place in condemnation cases, it seems safe to say that a given citizen of a given Kentucky county should be in favor of every person whose land is needed for any highway improvement getting all the money to which he is by law entitled, measured in terms of local market value, but not one penny more.

If this citizen were faced with the task of helping arbitrate a legitimate difference of opinion as to value between the Highway Department and a property owner, and if the value could not be measured with precision, and he had to choose between applying a conservative yardstick or a liberal yardstick, he should be in favor of a liberal but realistic yardstick being applied.

However, he should be determined to see to it that his county did not get a reputation of trying to kill the goose that was laying the golden eggs, and he should be equally determined to not cripple the goose, or make his trip so unpleasant and costly that he would be reluctant to come that way again.