

# HIGHWAY AND STREET SYSTEMS CAN BE MADE ADEQUATE AND TRAFFIC AND PARKING ILLS CAN BE CURED IF THE RIGHT TREATMENTS ARE APPLIED\*

By Robert J. Ross, M-CSCE  
Consultant

## VISION—FAITH—COURAGE AND FUNDS

THE exasperating, crippling and costly highway traffic situation cannot be cured or greatly improved without *Vision, Faith, Courage* and *Funds*.

### *Vision*

*Vision* is necessary to enable us to appreciate where and what improvements are needed and how improvements can be brought about.

Fortunately we have trained experts qualified to study, analyze and advise on such matters and their talents should be resorted to if comprehensive workable plans are expected.

### *Faith*

Without *Faith* in the future growth and prosperity of any area where *Vision* has indicated the highway and traffic needs and also the solution, nothing of importance can be undertaken or satisfactorily accomplished.

### *Courage*

If *Vision* has shown where and how and *Faith* is not lacking, then *Courage* is needed to accomplish worthwhile improvements.

### *Funds*

Admittedly improvements cost money but *Funds* can and must be made available to finance the tremendous program of relief which is called for. With the proper attitude and approach, new ways and means can be found to raise the all important dollars.

Planning is a vital necessity if we are to progress, but plans in themselves, regardless of their merit, will avail nothing unless and until a program is instituted to bring them about.

---

\*Presented at the Annual Meeting of the Connecticut Society of Civil Engineers, Inc., Hartford, Connecticut, March 16, 1955. Written by R. J. Ross. Delivered by I. Skilton.

In many cases planners have not been able to have fine comprehensive schemes adopted which they have *Visioned* and have *Faith* in, due to the lack of *Courage* on the part of those who feel that a share of the burden of costs might fall upon them and who fear that the suggested solutions may not be justified because of the enormous sums involved.

Such an attitude is ridiculous in view of the growth and prosperity which this country enjoyed due to the *Courage* of our pioneers.

As an example of the brand of *Courage* needed, let us recall the trials which our early railroad builders *endured* and *overcame* in their determination to link the east with the west. We need more people of their stamina today to tackle and solve the problems with which the automobile has confronted us.

These pioneer railroad builders were gifted with *Vision*, *Faith* and *Courage* and they set an example which upon reflection should inspire us into seeing, believing and doing.

With them nothing was impossible either to build or to finance.

The highway and traffic situation can be classified in two main categories, namely:

#### INTERURBAN AND URBAN

##### *Interurban*

It is possible today to drive across our United States from the Atlantic on the east to the Pacific on the west on reasonably smooth roads, but near and in most large cities along the way delaying traffic conditions are likely to be experienced.

Traffic on the open road need not concern us overmuch, except for finances, as efficient Highway Departments have fully demonstrated that they have the know how to enable them to improve conditions as fast as *funds* are made available, but unfortunately at present, sufficient funds are lacking.

Cities should be by-passed by through traffic to the advantage of the traveler not interested in the city itself.

Dual highways between cities should be provided where the volume of traffic warrants so that travel on each would be in but one direction. On such highways, however, where the dividing strip is narrow, deflectors should be constructed along the left side to guard against cars out of control crossing over, causing fatal head-on collisions.

Where dual roadways are not warranted, the pavement areas in many cases should be widened and on miles of existing roads hardened shoulders and guard rails are needed.

At some river crossings, additional bridges are called for, or, where structural conditions permit, a second deck should be provided, and many narrow bridges should be widened or replaced.

At busy route intersections and railroad crossings, grade separations must be provided.

Where truck travel is in sufficient volume to justify such treatment these trucks should be required to use suitable roadways apart from automobiles and on pavements built to stand up under such traffic.

So much for travel on the open road between busy built-up areas.

### *Urban Traffic*

The traffic ills from which the principal cities suffer are more serious and far more difficult of solution than those pertaining to the open roads between centers of importance, but these ills can be cured, for, "if there is a will there is a way."

The downtown business area in most any city is the main source of real estate tax income and if these areas are to continue to be healthy and productive, they must be made convenient and economically accessible. The preservation of central values for tax revenue alone justifies the support of outlying property owners for costly schemes, since, as central values fall off, general real estate tax levies must increase.

If city highway problems are solved, central values will be stabilized and the present threat of decentralization can be dismissed.

Most large cities have serious traffic and parking problems and no one panacea can be applied to effect a cheap and complete solution.

The causes of city street congestion are many, but the intersections, the parked cars, narrow streets, and the loading or unloading truck are definitely deterrents to free movements. It is obvious that if we are to insure free movement we must adopt a system which eliminates or lessens the effect of these and others.

By-passing cities helps the through traveler as stated, but of equal importance by eliminating his car from the necessary and inevitable city street traffic the situation within the city itself is greatly improved. Connections from through highways should be provided, however, for the motorist who comes from a distance and is heading for a particular city area.

In earlier days, when travel by trolleys was universal, these transportation companies showed *Vision, Faith and Courage* by going underground or overhead in subways and elevated structures in order to render the service which the travelling public expected and which the companies were willing to finance.

We today should take a leaf from their book and realize that to bring about real relief, we must resort to such measures to double up on ways and facilities for travel.

To even hold their own or to insure any further increase of values in the central areas, we must act at once to ease congestion within such sections. We must rid these sections of traffic which need not be there and we

must make business areas readily, economically and conveniently accessible from all directions from which heavy traffic originates.

Only with a sufficient and balanced design can central areas expand or prosper.

The safe, economical and expeditious movement of people and goods within and through a city promotes the safety, convenience, prosperity and well-being of its people, business and industry and the general welfare of the surrounding metropolitan areas.

Improvements will pay for themselves in reduced traffic congestion, fewer accidents, expanded markets and property values stabilized at high levels.

It is not a question of whether a city can afford its financial share of the needed and necessary improvements, but rather—*Can a City Afford to be Without Them.*

Within as well as on approaches to the cities, traffic separation at many busy intersections are called for in the interest of safety and free traffic movement.

There are a great many motorists who must come into the center of the city every business day, who remain throughout the day and who are interested in *but one destination.*

New highways *apart from existing streets* should be provided for such traffic with parking facilities *directly accessible.* Such highways coming in from north, east, south and west, if necessary, with parking facilities immediately adjacent as indicated, would keep many cars off the present city streets and leave these streets freer for those who must of necessity circulate through them.

In many cases these new additional highways located between blocks, in subways, or elevated, if called for, might cost little more than extensive street widenings in built-up districts and such highways would frequently serve better and make expensive widenings unnecessary.

Better highways into the cities *will avail little or nothing, however, unless adequate, convenient and economical parking facilities are provided for the cars we need to and should induce into the business areas.*

The valuable business centers and the automobile travelers have suffered long and patiently and it is necessary that people realize that funds spent for better highways and traffic improvements are investments and not just extravagant outlays.

For too long we have been "penny wise and pound foolish."

### *Parking*

No permanent solution to the highway problem as applied to cities can be had except through adequate parking facilities distributed so as to meet

the requirements of the traffic generators, retail stores, professional, government and private offices, and all commercial establishments, hotels, theatres, etc.

The facilities must be adequate in every respect or business will go elsewhere.

The advantages of parking facilities immediately adjacent to new highways into cities has been stated, but they in themselves are not sufficient.

People today do not care to walk any appreciable distance from a parking area to the business centers or any other desired destination, and any walk in excess of two blocks is considered excessive.

If it is necessary and logical to locate extensive parking facilities at some distance from business areas, then facilities to transport the parkers to the centers should be provided and this transportation should be included in the parking charge. A decided improvement over present services is a must if the plan is to be popular and successful.

This transportation should be de luxe, and an experience to be looked forward to, enjoyed, and to be talked about. The route should be mostly elevated or depressed, or in the center of blocks, to avoid delays and congestion on city streets. Narrow gauge electric trains, battery charged to eliminate odors and built to assure a comfortable ride, could be made a real attraction to shoppers and others who have parked their cars. This is not a grandiose idea and the first city to adopt it will profit not only from the service itself, but from country-wide acclaim.

These miniature trains should circle and criss-cross the business areas in a manner not to clutter up existing streets, and if frequent on and off stations are provided at the curbs, and not in stores, or other business buildings, no establishment would enjoy an advantage to the disadvantage of others. Attractive illuminated advertisement displays could be provided along the route to afford a source of income and many other advantageous ramifications of such a service would be evident to those qualified to manage it.

As an example, purchases could be delivered to the parked cars by returning trains, saving on delivery costs, besides affording other advantages which are evident.

If outlying parking areas are to be provided with special de luxe transportation service as indicated, they should be in various locations to cater to patrons from more than one direction and to intercept traffic before such traffic reaches the central streets.

In some business districts extensive one-story new establishments have sprung up and in others, upper floors are not too profitable for the owners of the properties.

Such situations are logical for development and for rental of the air space above these going establishments.

They are frequently ideal locations for multiple floor off-street parking facilities catering to the neighborhood businesses.

Occasional street widening and other changes improve local conditions, but nothing but a comprehensive plan carried to completion can solve the overall problems or effect sufficient relief.

Much of the discussion in the past pertaining to busy cities has unduly emphasized the shopper, but it must be realized that a vast army of people come into the cities on general business and not necessarily to shop.

The thought that the leading department stores and other merchants should largely finance suggested central improvements has held up many ambitious plans.

Highway improvement and traffic relief must be viewed as everybody's business and not the responsibility of any one group if the problem is to be solved and only broadminded viewpoints should be tolerated.

More multiple floor parking structures, strategically located where cars can be left while their occupants are on foot about their business, must be had.

To guard against disrupting business continuity, stores could be planned in these structures at street level, and incoming and outgoing merchandise in connection with these particular stores could be handled within the structures and not from the adjacent streets.

The municipal authorities should not only cooperate in the planning of these added facilities, but should, by reducing taxes on the new developments or otherwise, make the parking business more attractive to the operators and also less expensive for the patrons than is now the case.

It is financially ridiculous to pay say 25 to 50 cents for parking to enable one to leave his car for but a few minutes to make a necessary call or a trivial purchase.

Truck terminals should be located on the outskirts of cities and large trailer trucks should be barred from city streets except at designated after-hour periods. During rush hours, deliveries should be restricted or limited to smaller vehicles.

The trial which traffic lights, stop signs, meters and such devices have had has demonstrated their value, but these necessary safeguards and others within the present powers of police and traffic authorities are but palliatives, necessary but insufficient.

Where they do not already exist, state redevelopment acts are necessary to make possible independent or joint action by public and private forces for taking over and modernizing structures and for acquiring land for needed new highways or off-street parking facilities, and also, and this is important, to assure that bond issues for such purposes are legal.

## THE SOLUTION

## Recapitulation

*Interurban Travel*

A. More dual roadways are needed and in many of such highways, deflectors should be installed to eliminate the danger of head-on collisions.

B. On numerous highways the present paved surfaces should definitely be widened, shoulders hardened, and guard rails installed.

C. On many important route intersections and railroad crossings, grade separations are called for.

D. More bridges over streams would help, or the capacity of existing bridges should be increased by widening, or otherwise.

E. Truck travel should be separated from automobiles on highways where trucks have proved troublesome.

F. Congested centers should be by-passed.

G. A greater share of federal, state and local taxes collected from the automobile industry and car users should be applied to highway improvements.

*Urban Travel*

A. Traffic separations at main intersections and railroad crossings must be resorted to.

B. New highways serving the main sources of supply, apart from existing city streets, should be provided.

C. Ample parking facilities are a must and, in many cases, space above first floor establishments now wasted would be logical locations for such facilities.

D. If fringe parking is resorted to, patrons should be carried to and from business areas free of charge, under pleasant conditions not now in use.

E. Decks over existing railroads might in some cases serve as locations for new express highways into cities. On such right-of-ways, open grid pavements would be practical now that locomotives are on the way out and electric or diesel engines are being used.

F. Large trailer trucks should not be permitted in central areas except at designated hours.

G. New legislation should be resorted to, if necessary, to enable cities to take over properties to improve traffic conditions and to provide needed parking facilities, and also to legalize bond issues for such purposes.

### *Funds and Finances*

Perhaps that word *Funds* is the crux of the whole matter and the lack of funds or the reluctance to make the necessary outlays is the underlying cause of the highway traffic situation from which we suffer.

Admittedly, the needed improvements will require vast outlays, and it is easier to suggest solutions than to state a financial plan universally adaptable and acceptable. In fact, no one financial plan could logically be applied in all cases.

The situation is critical and relief cannot wait until funds are accumulated or to permit of a pay-as-you-go policy. Borrowing must be restored to.

Financing needed highway improvements by revenue bonds met by receipts derived from tolls, general taxation and special appropriation must be resorted to if real relief is to be realized.

Gasoline taxes, motor registration charges and all such sources of revenue should be continued, *and all of this income should be devoted to highway needs and not diverted to other uses.*

A greater share of state highway money should be made available for improvements within the cities.

The federal government today collects a staggering total in taxes, both from the automobile industry and the users of the vehicles and if this taxing is to continue, a greater share of the take, as stated, should be plowed back into needed highway improvements, where it justly belongs.

If these funds could be made available they would go a long way toward a solution.

The through traveler does not seriously object to paying toll on outstanding highways or on costly bridges which eliminate ferries, and these tolls are paid by those who are directly benefited.

Daily commuters and business firms, however, who of necessity must use such facilities continuously should be required to pay but a small fraction of the cost applying to the occasional through traveler.

All tax revenue now in effect needs to be continued and, in fact, increased and new sources of income must be found before we can hope to make highway traffic safe, comfortable and efficient.

Toll roads, bridges, parking facilities and other revenue producing installations could and should be made *safe investment opportunities.*

Our great insurance companies, automobile manufacturers and other agencies looking for safe fields in which to invest their funds could be made to realize that, to a great extent, their own prosperity and the continued well being of our cities and our country in general, so vital to them, depends to some extent on adequate highways and general traffic relief.

If limitations on investments by certain companies do not now permit their sponsoring highway projects with proper safeguards, the law should be modified in the light of existing conditions.

If these agencies would invest in the most needed and outstanding highway improvements, and if the investments were handled in a manner to assure safe and satisfactory returns, the patriotism of the participants would be rewarded and relief would be afforded to the benefit of all.

If any nationally known company received due credit for sponsoring an outstanding highway improvement, others would immediately realize the advertising value of such undertakings and they would follow suit.

The advertising value of a spectacular highway improvement, *identifying by name* the organization financing it, would open a new field of promotion and would justify the wholehearted participation of other progressive concerns.

The companies interested in, and depending to some extent on the continued prosperity of the automobile industry, are legion, and it is only reasonable to expect that they would realize the wisdom of their participation by investing funds in drives for improved highways.

A campaign "*To Buy Highway Bonds*" could, by proper promotion, be made popular and the wherewithal thus realized would, if properly administered and if coupled with the participation of industry, furnish the means to solve our highway and traffic problems, promptly and effectively.

Statistics can be tiresome and the disgruntled driver who is travelling bumper to bumper does not need to be told how many millions of cars are in existence compared with some former year or the rate of seasonal increase. He is painfully aware without the argument of figures that existing facilities are over taxed and he would favor something more done about it and the sooner the better.

Admittedly if more people would use busses instead of their private cars, both the traffic and parking conditions would be improved. This is still a free country, however, and we cannot order folks to patronize the public carrier busses if they prefer to drive their own automobiles.

It would be a hopeless task to undertake to change people's established habits in this regard and, therefore, ways and means must be found to meet and solve conditions as they exist. In other words, ample facilities should be provided for the cars in motion and while they are parked.

It is unnecessary to dwell on all the details of effective programs and, in fact, such detail is uncalled for, since we need have no fear of the ability of our skilled planners and efficient highway and traffic engineers to solve the problems which confront us if funds are made available.

If towns or small cities lack the talent or the finances to develop workable and comprehensive plans, the services of capable and non-political state planning boards should be made available to them.

We cannot expect something for nothing and the highway and traffic improvements we need as stated are worth paying for, but to solve our

dilemma, new solutions and also new ways of raising money, such as herein suggested, are definitely necessary.

The wisdom and necessity of financing more and better schools throughout the land is generally approved and if the American people will but realize that this same attitude is also necessary in regard to traffic and parking, relief will be assured.

It is inconceivable that we, the people of this resourceful country, will continue to suffer from conditions brought about by the automobile, one of our greatest blessings.

If we will but apply *Vision, Faith* and *Courage* to the problem, workable plans can be developed and ways and means can be found to finance the improvements.