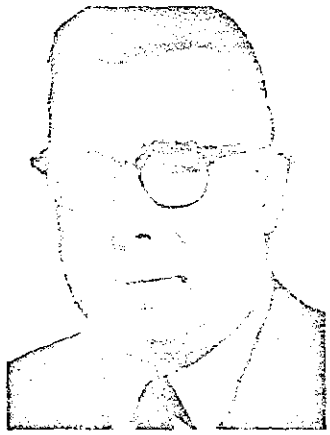

Ours is a nation of builders. Whether it be 19th century railroads that reached to the frontier or 20th century space ships that reach the moon, we have accomplished remarkable progress. *No other civilization* in history has enjoyed the freedom and mobility possessed by the American people.

Since 1956, when the Interstate Highway System was authorized, vehicle registrations have increased 53% and vehicle mileage 59%. As the Interstate program nears completion more funds will become available for upgrading of the existing highways. Of the 3.7 million miles of roads and streets in this country, 24% are unsurfaced and 35% are surfaced but unpaved. It is obvious there will be a tremendous demand for highway construction and improvement.

Development of an adequate transportation system, however, will not be a simple matter of allocating funds and putting construction forces to work. We must preserve the habitability of our environment. Care must be taken to avoid spoiling established neighborhoods.

In our continuing search for alternatives to alleviate transportation problems we have not shunned any sound proposal. Our inquiries have ranged from new vehicle types to new tunneling techniques for super subways. We feel the future affords a brilliant opportunity for applying the scientific and technical genius of the American people.

F. C. TURNER,
Administrator
Federal Highway
Administration

tion. Yesterday these matters might have been identified as frills. Today they must become an essential part of the highway program."

Coming up fast then is a highway concept that has been labeled a 'corridor.' The right-of-way contains rail lines, parks, stores, and high-rise apartments, as well as the highway lanes. Reduced to construction terms, many jobs will cut across traditional lines that separate highway and building work. This means a shift in equipment needs. The contractor might well be taking on as much building work (housing, industry, and commercial) as grading and paving.

Tractors will take on new roles. High horsepower crawlers make demolition simple; as dozers they load out debris and charge beltline loaders. On-road haul trucks look good for removing spoil over city streets, and hauling materials onto the job. Many contractors now handling downtown roadbuilding favor trailers for boosting pay-yards hauled—they reduce the number of units on the job.

One of the problems to be faced is public relations. Extra care will be needed on jobs along current highways to hold down dust and noise, and to be sure blasting stays under control. Shots will be limited in size, with delay patterns designed to reduce shock waves.

Move utilities on site

On another major highway improvement problem—relocating utilities—Uncle Sam has proposed a new solution. Back to the corridor concept: some utilities (mainly trunk lines and long-distance cables) will be routed down the right-of-way. On the job, this means specialized equipment like wheel and ladder ditchers and vibratory cable plows.

Safety could trigger the decade's first spurt of street improvement projects. Call it TOPICS—Traffic Operations Program to Increase Capacity and Safety. With $200 million available in 1970, and a like sum in 1971, work will be under way in almost 200 cities in 40 states. TOPICS is designed to increase traffic capacity and safety of major arterial streets. Work starts with a traffic engineering study of the area. Then follows necessary construction: curbs, islands, overpasses.

Smaller contractors with highly mobile spreads (compact tractors and backhoes, portable curb and gutter machines, front-end loaders) will find this safety work profitable. Major concern, though, will be safety of work crews in heavy traffic. Early traffic flow planning, and use of flashers and cones have protected men handling the TOPICS work on last year's pilot projects.

Off-road roads

It's too early to cross off Interstate roadbuilding as a profitable work area for the 70s. Many 'missing links' remain to be built, and these are the tough ones that require top contractor skills. A recent listing pinpoints 133 miles of urban Interstate held up by matters like route disputes. Half this mileage is in New York City, Washington, D.C., and San Francisco. Problem links are also being studied in Atlanta, Baltimore, Boston, Charleston, W.Va., Cleveland, Detroit, Indianapolis, Memphis, Nashville, Newark, New Orleans, Philadelphia, and Pittsburgh.

Another strong possibility for added roadbuilding in this decade is for special off-roads for mass transit lines like buses. Milwaukee for one has under discussion a plan for building special routes to limited access standards but reserved for use of rapid transit bus lines at all times.

Summing up the picture for roadbuilding in the 70s, you see a broad area of work in improvement projects and upgrading of streets to arterial status. Most of the construction will be in major urban hubs. An example: The Bureau of Public Roads figures about $2.5 billion will be spent in the next decade to build intercity highways in what is called the 'Northeast Corridor' (Boston-New York-Washington). Total spending by state and local units for all street and highway work in this Corridor figures to be $33 billion through 1985. Expand that work volume to include some 20 other major urban corridors in the U.S.