

**WHEN POLITICS MEETS THE ROAD: THE U.S. INTERSTATE HIGHWAY SYSTEM**

Author: Neil Wigner 6677-1553-36  
SAE 550: Engineering Management of Government-Funded Programs  
Professor Kenneth Cureton

(Edited by Ken Cureton to remove explicit references to the Political Facts of Life)

## Abstract

In 1956 then President Dwight D. Eisenhower signed into law the landmark legislation known as the *Federal-Aid Highway Act of 1956*. Over 50 years and \$130 billion dollars later the effects of this Act have changed the face of American society and touched nearly every American's life<sup>1</sup>. The scale of the Interstate Highway System rivals almost any other Government funded project in history. Rare few Government funded programs have ever lasted this long, cost this much, and involved almost every level of politics from Federal down to local political offices. In the 1950's there was no connected system of highways. As a young military officer Eisenhower was involved in a military exercise to simulate war on U.S. soil. This exercise, conducted in the summer of 1919, took an expedition of 81 Army vehicles on a trip from Washington, D.C. to San Francisco<sup>2</sup>. The 62 day trip left a lasting impression on Eisenhower. During World War II, Eisenhower saw the German system of Autobahns and realized that the U.S. road system was inadequate. As President, Eisenhower made it a primary goal of his administration to correct the inadequacy that was the existing system of U.S. roads.<sup>3</sup> Passing the 1956 Act was a historic political battle and the impact can still be felt today. The Highway Act did not specify that the Federal Government would actually build the highway system. Instead, the Highway Act allocated funds from the Federal Government, but left the physical building of the highway to the individual States. This division of roles immediately led to political in-fighting over the budget and who got to control what during the construction. Follow-on Federal-aid Highway Acts changed the requirements of the program and continued to push out the completion date. In fact, technically speaking the program has never ended. However, by most accounts the original program goal's that were envisioned by Eisenhower were accomplished by the late 70's, early 80's and it's this time period, dating all the way back to Eisenhower's 1919 experiences, that is of greatest interest in the political battle over the U.S. Interstate Highway System. This paper will analyze the fiscal and political influences involved in building the U.S. Interstate Highway System. Analysis of the Political Facts of Life as applied to this program will provide an understanding of the political impacts of this program as well as give insight to its continuing influence.

---



Neil Wigner is a Systems Design Engineer for the F-35 program at Northrop Grumman Corporation and is currently pursuing his Master's Degree in Systems Architecture and Engineering from the University of Southern California. He holds a Bachelors Degree in Aerospace Engineering from the University of Colorado. His involvement in large scale DOD funded programs has provided many years of experience with politics and defense contracting. To expand his knowledge of political process and large scale government funded programs, he decided to broaden his research into large non-DOD funded government programs.

## THE U.S. INTERSTATE HIGHWAY PROGRAM

The U.S. Federal Highway Association estimates that in one month of travel (January 2008) the total mileage traveled by American citizens is over 220 billion vehicle-miles.<sup>4</sup> One would need to compare this to the distance of something far, like the Sun which is approximately 100 million miles away, to get an appreciation of just how dependant the United States is on the automobile (10 Earth-Sun roundtrips per month).<sup>5</sup> None of this would be possible without one of the largest systems of roads ever built in the world. The Federal-Aid Highway Act of 1956 authorized the money to build our current system of roads. Championed by President Eisenhower, the 1956 Act defined a financial structure for funding the construction of Interstate Highways. The original 1956 Act called for 41,000 miles of Interstate Highway construction over a 10 year period at an estimated cost of \$27 billion, with \$25 billion to be provided by the Federal Government.<sup>3</sup> At present, the U.S. Interstate Highways boast these mind-boggling figures:

- Over 50 years of financing, construction and politics
- Estimated total cost around \$130 billion (1991) with \$115 billion in Federal funding (note: this does not include turnpikes and other additions)
- Over 46,867 miles paved to date, 42,795 of those allocated under the original program<sup>1</sup>

How did this 10-year, \$27 billion program become a budget guzzling \$130 billion behemoth that continues to this day? One must turn to the politics involved in the creation of the 1956 Act and the continued political influences to this day. In this paper the political motives behind the planning, financing and constructing of the U.S. Interstate Highway will be analyzed. To understand this program it is necessary to understand that the majority of politics can be summarized into five key Political Facts of Life (FOLs). These facts have been shown to be fundamental influences on every large-scale government funded program. The U.S. Interstate Highway program was heavily influenced by these five following Political Facts of Life:

1. POLITICS, NOT TECHNOLOGY, CONTROLS WHAT TECHNOLOGY IS ALLOWED TO ACHIEVE
2. COST RULES
3. A STRONG, COHERENT CONSTITUENCY IS ESSENTIAL
4. TECHNICAL PROBLEMS BECOME POLITICAL PROBLEMS
5. THE BEST ENGINEERING SOLUTIONS ARE NOT NECESSARILY THE BEST POLITICAL SOLUTIONS

First, the history of the U.S. Interstate Highway program is described and following is an analysis of the events of this program and the extent to which the FOLs influenced the program.

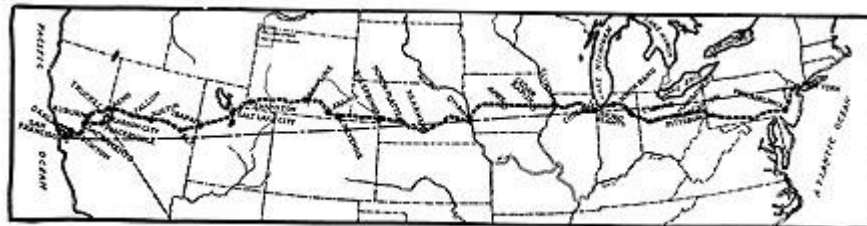
## WHY DID THE U.S. NEED ROADS?

The late 19<sup>th</sup> century saw the invention of a new method of transportation: the automobile. By 1908 the automobile was being mass produced by Henry Ford. The Ford Model-T began to transform American society into a highly mobile and dynamic being. As more and more people started to own an automobile, it became quickly apparent that there needed to be a system of roads built to support them. In parallel with the American citizens, the American military forces adopted the automobile and began to explore its usefulness. In the roaring 1920's America was experiencing a time of economic prosperity. More and more cars were sold, and more and more roads were constructed. However, there was no centralized entity that planned the construction of these roads. Most cities had paved over dirt roads in

support of the automobile and the States had provided some road construction in between major cities. About this time, the U.S. Army was experimenting with the automobile utilization in warfare as well as the logistics of moving soldiers, equipment and evacuations of large civilian populations. In 1919, the Army decided to simulate a wartime scenario of moving a large number of soldiers and supplies across the U.S. Heading up this large-scale maneuver was Lt. Colonel Charles W. McClure, and his challenge was to lead a convoy of 81 Army vehicles from Washington D.C. to San Francisco.<sup>3</sup> The purpose of this convoy was fourfold:

1. To support the good roads movement.
2. To test the Army's vehicles under field conditions.
3. To interest potential drivers and mechanics in applying for motor transport training.
4. To demonstrate to the public that the Motor Transport Corps. had played a vital role in winning the recent war in Europe.<sup>2</sup>

The Army also included one small Renault tank in the convoy. The drivers of the tank were to be observers of the convoy. At the time, a prominent figure in history, Dwight David Eisenhower, trained in the Tank Corps and was promoted to Lt. Colonel due to his achievements in World War I.<sup>2</sup> When Eisenhower found out about the convoy, he volunteered to be the tank operator and observer. The convoy was to take what was about the only coherent system of highways across the United States, the then called Lincoln Highway as shown in Figure 1.



The Lincoln Highway Association, 1920

Figure 1 Lincoln Highway<sup>2</sup>

Immediately, the convoy was confronted with poor road conditions and numerous mechanical problems. At their third stop in Bedford, Pennsylvania the convoy was greeted by a crowd of over 2,000 people throwing a celebration for them.<sup>2</sup> As the convoy continued, they ran into more crowds of excited citizens that wanted to see the cross-country motorcade making history. In all, some 3 million people cheered on the convoy showing just how strong the American public's interest was in the automobile and the roads that connected their great country.<sup>2</sup> It is this amazing public interest that exerted a tremendous amount of political influence over the construction of the U.S. Interstate Highway System. The Army convoy reached its final destination in San Francisco, California after 62 days of travel. Along the way the convoy encountered dirt roads converted into mud traps due to rain, collapsed wooden bridges, roads as slippery as ice, roads with the consistency of shifting sand and weather extremes of searing desert to frozen mountain roads.<sup>2</sup> One newspaper gave this account of the road conditions:

"The delay has been due entirely to road conditions, the vehicles themselves standing up wonderfully well under the racking work. No stronger commentary upon the necessity of good roads and the lack of them can be made than is given in the story of the Herculean struggles of the train personnel to 'Keep ago in' through mud or quicksand, in which the trucks often [are] buried hub deep."<sup>2</sup>

As an observer, Eisenhower compiled a six page report and gave the following observations:

- Army trucks operated well on "smooth, level roads"
- Without such roads, Army vehicles would have "practically no value as cargo carriers"
- Excellent roads had been built some years ago and "since received no attention whatsoever"

- It was evident that given a “very small amount of money spent at the proper time would have kept the roads in good conditions”<sup>2</sup>

## THE GERMAN AUTOBAHN

By 1944, Lt. Colonel Eisenhower had become a 5-star General and Supreme Commander of Allied forces during World War II.<sup>6</sup> It was during the invasion of Germany that Eisenhower got his first look at the German Autobahn – the system of highways that Hitler had commissioned to connect the country of Germany. The Autobahn System provided Hitler with the logistical advantage at the beginning of the war to launch his *Blitzkrieg* attacks, which was simply that ability to move huge amounts of soldiers and equipment in a relatively short amount of time. It was this same system of roads that the Allied Forces used to move their soldiers and equipment into Germany in the final push to end the war and defeat German forces. E. F. Koch was a highway and bridge engineer in the U.S. Army and he saw the Autobahn in 1944.<sup>2</sup> His group was charged with keeping the roads in good condition as they supplied the Allied Forces throughout Europe. The roads in Belgium, Luxembourg and the Netherlands that his group maintained were constantly under repair due to the use of heavy military vehicles and the extreme weather conditions. When the Allies invaded German soil they quickly realized the utility of the Autobahn. Koch personally recalled that “after crossing the Rhine and getting into the areas of Germany served by the Autobahn ... our maintenance difficulties were over ... no maintenance was required.”<sup>2</sup>

Like other American soldiers, Eisenhower was keenly impressed with the German engineering of the Autobahn. Eisenhower’s experience as an observer of the 1919 Army convoy already impressed upon him the need for quality roads that were wide enough to support two lanes of traffic. The Autobahn showed Eisenhower a much larger highway system that connected an entire country together. Eisenhower later explained that “after seeing the Autobahns of modern Germany and knowing the asset those highways were to the Germans, I decided, as President, to put an emphasis on this kind of road building ... the old [1919] convoy had stared me thinking about good, two-lane highways, but Germany had made me see the wisdom of broader ribbons across the land.”<sup>2</sup>

## BEFORE ‘56

The public interest had risen as a result of the 1919 convoy and many questioned the need for a highway system planned at the Federal Government level, as funding and control was solely at the State level at the time. This immediately created a debate between the roles of the State Governments versus the role of the Federal Government. One of the State advocates, Thomas M. McDonald the chief of the Bureau of Public Roads (BPR), stated that he, “appreciated the need for a connected system of interstate highways, but he did not believe that a separate national system under a federal commission was the way to achieve it.”<sup>3</sup> McDonald’s view of State control was widely held and the Federal Highway Act of 1921 “reflected this view, strengthening the State Highway Department’s control of the highway system, particularly in maintenance. This Act temporarily quieted demands for interstate highways under federal control.”<sup>3</sup> As more Americans owned cars the “public sentiment for federal control of the construction of transcontinental superhighways” began to increase.<sup>3</sup> Although there were many pockets of construction efforts during the roaring 20’s, the Great Depression of 1932 caused significant disruption within American society. The first ever tax imposed on gasoline was signed into law with the Revenue Act of 1932.<sup>7</sup> This new gas tax was enacted to help repay Government debt during the Depression instead of

how it is used today for road construction and maintenance. President Franklin D. Roosevelt saw that the construction of an Interstate Highway system might be the type of public works project that could “pull the nation out of the Great Depression,” by providing jobs for the unemployed. Congress had similar thoughts and so in 1938, passed the Federal Highway Act which “directed the Bureau of Public Roads to study the feasibility of a six-route toll highway network.”<sup>3</sup> The report concluded that “amount of transcontinental traffic was insufficient to support a network of toll superhighways.”<sup>3</sup> Instead, the report recommended a “43,000-mile non-toll highway network in its ‘Master Plan for Free Highway Development.’”<sup>3</sup> Roosevelt liked the recommendation and he sent it before Congress saying that “instead of imposing user tolls, the cost of highways could be recovered by selling off federal land along the right-of-way to homebuilders and others.”<sup>3</sup> Immediately this drew fire from critics in and out of Congress who suggested this was a “socialistic scheme to transfer the cost of providing deluxe highways from those most benefited to the already heavily burdened landowner.”<sup>3</sup> But the arguments would not last long as World War II soon took center stage in America’s political agenda.

In 1944 Federal-Aid Highway Act brought about the next wave of political debate regarding the highway system. The 1944 Act recognized the need for improved roads and it authorized a “limited 40,000-mile National System of Interstate Highways, to be selected by the state highway departments, to connect the major metropolitan areas and to serve the national defense.”<sup>3</sup> This act was passed after “after nine months of intense negotiations in Congress”<sup>3</sup> and it was the largest highway Bill in history. However, to resolve the conflict and pass the Bill the Congress left out any funding to actually build the roads. Hence the political conundrum: the public, the Congress, and the President all agreed that there was an absolute need to fix the roads, but no one agreed on how to pay for it!

The Public Roads Administration (PRA, which replaced the BPR) got to work on analyzing the highway system in preparations for carrying out the 1944 Act. The PRA was responsible for determining which roads should be built, as well as providing standardization of construction codes to ensure consistent and safe roadways. In 1947, the PRA proposed approved a “37,681-mile system, including urban thoroughfares and circumferentials.”<sup>3</sup> However, around 1950 the breakout of another war, the Korean War, once again distracted policymakers.

President Harry S. Truman (term 1945-1953), was interested in improving the U.S. highway system as he had been a “road builder as a young man and a long-time member of the American Road Builders Association (ARBA).”<sup>2</sup> However Truman was unable to make very much progress as he dealt with “the economy, strikes in key sectors, the housing shortage, the emergence of the Cold War, the Korean War.”<sup>2</sup> The Federal-Aid Highway Act of 1952 was the only highway legislation passed during Truman’s term and it only offered a mere token of Federal dollars for improving the roads: \$25 million a year for fiscal years 1954 and 1955.<sup>8</sup>

## THE SURPRISE 1955 DEFEAT

In 1954 the U.S. Presidency saw its strongest highway advocate elected, President Dwight D. Eisenhower. Obviously, Eisenhower’s impressions of the U.S. Highway system extended all of the way back to his participation in the 1919 Army convoy. Now that he was elected President, he made the U.S. Highway construction program a top priority for his administration. In his 1954 State of the Union address, Eisenhower acknowledged the end of the Korean War and said that his goal was “the building of a stronger America,” and as for the debate over the highway system he stated “to protect the vital interest of every citizen in a safe and adequate highway system, the Federal Government is continuing its central

role in the Federal Aid Highway Program.”<sup>2</sup> On May 6<sup>th</sup>, Eisenhower signed into law the Federal-Aid Highway Act of 1954 which allocated \$2 billion in Federal funds for road construction and it changed the gas tax laws to ensure that 100% of gas taxes collected were spent on the improvement on roads. Even Eisenhower knew that \$2 billion was a token amount and he stated that “the needs are so great that continued efforts to modernize and improve our obsolescent highway system are mandatory.”<sup>2</sup>

Eisenhower was not blind to the fact that there was a power struggle occurring between States rights and Federal rights over who financed and controlled the U.S. Highway system. At the July 12<sup>th</sup> Governor’s Conference Eisenhower planned to introduce his “grand plan” for highway construction in an attempt to bridge the gap and bring the States and the Congress together. Unfortunately, the unexpected death of his sister-in-law, Mrs. Milton S. Eisenhower, caused the President to miss the Governor’s Conference.<sup>2</sup> In his place, Eisenhower sent his Vice President Richard M. Nixon to deliver his speech. In delivering the speech, Nixon pointed out the problems being encountered with the current state of the U.S. Highway system:

- An annual death toll approaching 40,000
- Economic loss in the billions from detours and traffic jams
- Civil suits clogging our courts
- The efficiency in the production of goods nullified by the inefficiency of transport

The appalling inadequacies to meet the demands of catastrophe or defense, should an atomic war come.<sup>2</sup> To accomplish all of this, Eisenhower called for a \$50 billion dollar program to solve the problems of “speedy, safe, transcontinental travel – intercity communication – access highways – and farm-to-market – metropolitan area congestion – bottlenecks – and parking.”<sup>2</sup> Most importantly, Eisenhower stressed that the plan should not create more Government debt, rather it should be “self-liquidating by tolls or increased gas tax revenue” and be a “Federal program to help the States modernize their highway systems.”<sup>2</sup> It was reported that the Governors conference attendees were “electrified”<sup>2</sup> in a very bad way upon hearing this speech. The Governors expected a “friendly, informal speech in praise of the Governors conference and the important work of the Governors,”<sup>2</sup> but instead they heard a strong speech challenging their beliefs that the Federal Government should get out of the business of highway construction and leave it to the States. Normally a President making such a public speech would do some behind-the-scenes work before the meeting, contacting key personnel, to ensure that everyone was on the same page and that there would be no public embarrassment. Unfortunately with the funeral, Eisenhower did not have time and rushed through this step. At his heart, Eisenhower agreed with the Governors about overbearing Federal Government but Nixon’s delivery did anything but unite the two sides. Some infuriated Governors went so far as to express publicly that they “want the Federal Government to get out of the gasoline and fuel oil tax field for once and for all and now is the time to do it before we embark on any large-scale highway program.”<sup>2</sup> One commentator summed Eisenhower’s faux-pas up “this curious political reaction stems from the incredible clumsiness and self-assurance with which the White House handled the proposal.”<sup>2</sup>

Soon Eisenhower’s attention turned to supporting the Republican Congressmen who were seeking reelection and trying to maintain control of Congress. In October, Eisenhower traveled “more than 10,000 miles ... and delivered nearly 40 speeches.”<sup>9</sup> During this period he often took the opportunity to mention his plans for improving the highway system. He repeatedly said that the U.S. needed “a vast new highway program” and that the “worlds of useful work that this Nation has to do” included “great highway programs to build.”<sup>9</sup> While in Detroit, Eisenhower leapt on the chance to address the auto industry and while commenting on the growth of the auto industry he added “we are pushing ahead with a great road program, a road program that will take this Nation out of its antiquated shackles of secondary roads all over this country and give us the types of highways that we need for this great mass of motor

vehicles.”<sup>9</sup> He even went so far as to carry a traffic theme in his general speeches “we won’t get anywhere with red lights at all the governmental crossroads ... two drives at every governmental steering wheel, each trying to go in a different direction, and we shall certainly end up in a hopeless traffic jam.”<sup>9</sup> Eisenhower’s efforts however did too little, too late and a new Democrat controlled Congress was elected. This meant that the public works committees, the House Ways and Means Committee and the Senate Finance Committee would all be headed by Democrat leaders and would most likely be against any actions that would help make the Republican President look good.

1955 marked the year of the financial battle over the U.S. Highway system. While working with the Governor’s to develop an amicable solution, Eisenhower asked his trusted advisor General Lucius D. Clay to head an “advisory Committee to develop a finance plan in cooperation with the Governors.”<sup>2</sup> The Clay Committee’s report, *A Ten-year National Highway Program*, concluded the following:

- Estimated construction needs on all highways systems at \$101 billion (not just the Interstate Highways)
- Federal Government should pay for 30% of costs, with State and other levels picking up the rest
- Interstate system would cost \$23 billion plus and additional \$4 billion for rural segments and urban area feeder roads, for a total of \$27 billion for the Interstate system
- Federal funds of \$2.5 billion a year for 10 years to cover 90% of the Interstate funds required States’ share of Interstate system kept to same level as needed to match the \$175 Million authorized for the system by the 1954 Act, a 10-year total of \$2 billion<sup>2</sup>

The Clay Committee added one very controversial point: to pay for the Federal share of the Interstate system the Federal Government would:

“establish a Federal Highway Corporation that would issue bonds to pay the Federal share of the Interstate System. Revenue from the gas tax would be dedicated to repaying the bonds and continuing the other elements of the Federal-Aid highway program at existing levels. Because receipts from the gas tax would increase as traffic grew, no increase in the tax would be needed for the Interstates System or the remaining Federal-Aid program.”<sup>2</sup>

Not everyone in Eisenhower’s administration was fully on board with this proposal; in fact Eisenhower himself favored using toll roads to repay the interest on the bonds rather than using the gas tax. However, it was a plan to move forward and Eisenhower sent it to Congress on February 22, 1955. The committee’s report met with immediate opposition. The now head of the Senate Finance Committee, Senator Harry Flood Byrd (D-VA), suggested that the concept of financing government bonds through a private company was “thoroughly unsound and an attempt to defy budgetary control and evade federal debt law.”<sup>9</sup> Most importantly for the proposed private company, it would have “neither assets nor income to repay the debt.”<sup>9</sup> It turned out that the Republican leaders were not enthused about the proposal either and they introduced the Bill but “gave it only token support.”<sup>9</sup>

At the same time another Bill was introduced: the Federal-Aid Highway Act of 1955, by Senator Albert Gore Sr. (and you thought he only invented the internet – oh different person). Gore proposed the following:

- Continue existing Federal-Aid highway program, but with \$500 Million authorized for the Interstate annually though FY 1960
- Funds would be apportioned one-half on the basis of population and one-half on the basis of the formula for apportioning Federal-aid primary (FAP) funds
- Federal share would be 66.3%
- Increased share in States with large amounts of public lands and nontaxable Indian lands
- Increased the statutory mileage limitation on the Interstate system to 42,500 miles
- Right-of-way legal assistance from the Secretary of Commerce if the States did not have the rights to take the land required
- Public hearings to be held for any plan involving the bypassing of a city, town, village, or community<sup>9</sup>



Gore's law did not specify the origins of the revenue that it would authorize as "the Constitution specified that tax legislation must originate in the House of Representatives."<sup>9</sup> But this was far less than the \$2 billion a year proposed in the Clay report and many criticized that this would not be sufficient, nor would it allow the completion of construction in a timely manner. The Senate approved the Gore Bill by an overwhelming majority via voice vote. And due to the constitutional requirement that tax legislation must originate in the House, "the Gore Bill directed the Secretary to study and encourage the States to consider the feasibility of providing, by multiple-State compacts, for the construction, operation, and maintenance of Interstate toll roads as a supplement to the Federal-aid highway system."<sup>9</sup> Chairman of the House George H. Fallon was in general favor of the Clay proposal and after its defeat in the Senate he began looking for another solution. Fallon teamed with BPR's Francis C. Turner to write and introduce his own highway funding Bill. On June 28<sup>th</sup> Fallon introduced his Bill which was unusual because "it included highway user tax changes to support the increased funding levels for the Interstate System – increases that normally would have originated in the House Ways and Means Committee."<sup>9</sup> Fallon had the Speaker of the House Sam Rayburn (D-TX) intervene and allowed him to write the tax legislation. Fallon's Bill proposed the following:

- An increase of 1 cent a gallon in the tax on gasoline and another half-cent in 1970
- An increase of 3 cents a gallon on diesel fuel
- An increase in taxes on truck tires and tubes
- A new tax of 15 cents per pound on camelback (tread rubber) used for any tire
- An increase of 2 percent in the manufacturers' excise tax on trucks, buses, and trailers (bringing the tax to 10%)<sup>9</sup>

This would allow a pay-as-you-go plan that would complete the Interstate Highway System in 12 years with a 90% Federal share of the money. Once again opposition was met with this Bill, but this time the opposition came from outside the Congress. The proposed tax increases on gas, tires and trucks drew fire from the petroleum industry, the tire manufacturers and the trucking industry. John V. Lawrence, the managing director of the American Trucking Associations (ATA) said that the Bill would "raise taxes to a confiscatory, ruinous and unjustified level."<sup>9</sup> Even the House Public Works Committee criticized that the only agreement was that the roads needed to be built, but not how to build them. Fallon agreed that the committee was "in full accord on the need for highways but sharply split on funding."<sup>9</sup> Fallon continued that "if it wasn't for that, we could have had a Bill months ago."<sup>9</sup>

Due to their opposition to the Fallon Bill, the Public Works committee assigned a special committee to formulate a new plan. After the special committee revised the Bill, Fallon decided to hold a hearing on July 11 to discuss the revisions. Again, since Fallon was given the special agreement to draft tax legislation, he invited five members of the Ways and Means Committee to join this special Public Works Committee for these hearings. It was very obvious that the members of the Ways and Means Committee were not happy with this new arrangement. At first they showed their frustration through "petty disputes over which door its members would use to enter the hearing chamber and where they would sit during the hearing."<sup>9</sup> Out of courtesy, when the hearing started, one of the Ways and Means Committee representatives Hale Boggs (D-LA) was asked if he would like to make a statement. Boggs took the opportunity to express the Ways and Means committee's dislike of the special deal brokered by Rayburn. Their Republican Representative, Richard M. Simpson, added that "revenue matters should be confined to the [Ways and Means] Committee and we protest the fact that another committee has been given – and we do not deny the legality by which it has been given – that authority to conduct these hearings today for this purpose."<sup>9</sup> He explained that the Ways and Means committee does allow extended hearings for revenue matters but that in this session they "sit here unhappily without a right to vote on the matter of who is to pay the tax."<sup>9</sup>

The tax increases proposed in the Fallon Bill were quickly spread through the country and they ignited a wave of backlash. Immediately the ATA's assistant general manager William A. Bresnahan slammed the tax increases as "aimed at a single type of user"<sup>9</sup> of the highways and that any revenue measure should affect everyone. But this was just the beginning and soon every trucker in America heard of the substantial increases being proposed on diesel fuel, tires and truck sales taxes. It is estimated that over 500 truckers joined the cause to lobby against these tax increases. In a calculated political move, the ATA "parked a tractor trailer outside the Capitol with real dollar Bills decorating both sides of the trailer to symbolize the amount the owner of a big truck must pay in taxes before earning a cent."<sup>9</sup> Of course the irony was that this trailer was only large enough to put 3,212 dollar Bills on the sides of it when in fact the real tax that most truckers paid was \$4,480!<sup>9</sup> In addition to this very public stunt, members of Congress reported receiving over 100,000 telegrams from truckers. Fallon himself indicated that he received 10,000 of these directed to him. One member of Congress, Representative Tom Steed (D-OK), said that he "feared it was 'dead' and would be rejected overwhelmingly because of 'the most effective lobby I've ever seen.'"<sup>9</sup>

In response to this public outcry, the Public Works committee revisited the Bill and decreased the proposed tax increase to help satisfy the Republicans and the truckers while keeping the same basic structure of the plan to appease the Democrats. Before the revised plan was sent to the House floor for debate, Speaker Rayburn predicted that this revisions "should pass the House all right."<sup>9</sup> In fact the general feeling that this Bill would be approved was so strong the Senator Byrd "issued a call for a meeting of the Senate Finance Committee to expedite consideration of the alternative financing plans following House passage of the Fallon Bill."<sup>9</sup> Even the executive secretary of the American Association of State Highway Officials (AASHO) "assured State highway officials that the [revised] Fallon Bill,"<sup>9</sup> would pass.

Before the Fallon Bill reached the House Bill there was one last bit of administrative work that needed to be worked out. Before a Bill in the House goes to the floor for a vote, the Bill has to go through the House Rules Committee which "controls the flow of legislation and determines the conditions for House consideration."<sup>9</sup> A Bill is typically sent to the House Rules Committee by the Ways and Means Committee after they have determined the appropriate financing mechanism for the proposed legislation. When the Bill is sent to the floor, it can be sent either open or closed. An open Bill is established with the rules that it can be amended in any way before being passed whereas a closed Bill must be approved only on the exact provisions with which it was presented. In the case of the Fallon Bill, a hearing was held by the House Rules Committee and it was decided that this Bill would be sent with a "modified open rule"<sup>9</sup> that would allow any changes to the Bill on the floor for all parts of the Bill except the finance section.

Before the Fallon Bill was introduced, Engineering News-Record magazine reported that "passage of a compromise highway Bill ... for the Nation's first large-scale road building program – seemed assured this week."<sup>9</sup> Support for the Bill seemed to wane, just a bit, days before it was introduced. Senator Byrd who was so confident that the Bill would pass, declared that the tax measures would receive "more scrutiny in the Senate than they did in the House."<sup>9</sup> The Engineering News-Record magazine had retracted their earlier view and stated that it was "touch and go as to whether Congress will act on the highway legislation this session."<sup>9</sup> The party line from the Republicans still favored the President's desire to implement the Clay report. The Bill was scheduled to be introduced on July 27<sup>th</sup>. The day before the Bill was introduced, many Congressmen had upheld party lines when debating about their support for the Bill. The next day the Bill was introduced to the House floor and it was served a shocking defeat (292-123)<sup>9</sup>. This meant that many Democrats had stepped away from the party line and voted against the Bill. But why the complete break with their party? Speaker Rayburn was shocked and he insinuated that the trucking lobby was to blame when he said "the people who were going to have to pay

for these roads put on a propaganda campaign that killed the Bill.”<sup>9</sup> The *New York Times* suggested that the “trucking, gasoline, and tire industries have been most active in button holing legislators and inspiring telegrams and letters against the proposed tax rises.”<sup>9</sup>

## FINGER POINTING

The day after the Bill died, Eisenhower expressed his regret for not getting immediate action from the Congress. Eisenhower even made a call for a special Congressional session to resolve the issue before the 1955 Congressional session ended. But for many it was too little, too late and 1955 closed without any new highway legislation being passed. The finger pointing raged on as pundits and reporters struggled to determine how such a surprising upset had occurred. Representative McCormack perhaps summed up the outcome best, “everybody wants a road Bill but nobody wants to pay for it.”<sup>9</sup> The ATA defended the accusations of their derailing the efforts to pass a highway Bill. Neil J. Curry, the ATA’s president said that:

“The industry wants a modern highway system as much as other motorists did and would be willing to pay for it. [But] when we called the attention of Congress to the fact that the so-called pay-as-you-go plan ... would charge 1 per cent of all motor vehicles with 26 percent of the additional revenue requirements, the fantastic unfairness of their proposal was obvious to them.”<sup>9</sup>

The AASHO’s Johnson’s tried to put the defeat in perspective for his organization:

“First of all, the Bill was the biggest public works program ever proposed, and early in the session it took on a political flavor, and it was also so big that special interests became involved, and it was no longer the consideration of a conventional Federal-aid road Bill. When certain interests in the Congress insisted on a pay-as-you-go feature, additional taxes were required, and you might sum it up by saying that the Democrats defeated the Republicans’ bond Bill, and the special interests defeated the increased taxation proposed by the Democrats.”<sup>9</sup>

One of the nations best known road and bridge builder, Robert Moses, issued the following statement assessing blame, as he saw it, to the *Hearst Newspapers*, “an indispensable national program, about the need of which there is no dispute, has been bogged down due to obscure and obscene fights over financing, pride of opinion, and legislative weakness.”<sup>9</sup> The *Evening Star*, Washington’s leading newspaper, had this to say, “truckers, bus operators, and the rubber, diesel oil and gasoline industries spearheaded the fight that ended in defeat for the Eisenhower road program.”<sup>9</sup> The *New York Times* carried an editorial called “Good Roads Lobbied Away” and said that “the public gets nothing except a stunning disappointment.”<sup>9</sup> The *New York Herald-Tribune* added that “it would be funny if we didn’t need the roads so badly.”<sup>9</sup>

Soon speculation began that another interested lobby had cast its influence over the members of Congress: the Railway Industry. Theodore H. White, a reporter for *Collier’s* magazine, showed figures indicating that the trucking industry competition with the railway had eaten into the railway profits to the tune of \$5 billion. He speculated that the Interstate System would benefit the truckers so the railroad interests had reason to try and minimize this benefit. Of course the railroad interests were not so dumb as to openly oppose such a popular program as the highway system, rather the railways supported “the highways the nation wanted, while making sure their competitive rivals, the truckers, gained no advantage out of them.”<sup>9</sup> Indeed the truckers felt that the railroad interests had worked against them in supporting increased taxes. In response, the ATA’s John Lawrence chastised the railroad interests:

“no such railroad lobby has descended on Washington in the history of the Republic as that which is now operating in support of the soak-the-truck proposals. It is this wrecking crew which is mainly responsible for throwing the highway situation out of perspective.”<sup>9</sup>

In fact, the railroad interests were quoted as making such statements before Congress as the following:

“it was heavy trucks that profited most from the new roads, that heavy trucks required most of the extra-cost features of the new roads – the wider lanes, the sturdier bridges, the paving thickness of 12 inches rather than the six or eight that might handle normal passenger traffic.”<sup>9</sup>

## THE POWER OF THE COMMITTEE

Although many assigned blame to various interest groups and party-line voting, Congressional members knew that there was an internal grudge over the House Speaker Rayburn’s bypassing the Ways and Means Committee. In a speech before the AASHO, Congressman Clifford Davis (D-TN), a member of the Subcommittee on roads, summed up the sentiment felt by many in Congress:

“I will give you the reason the highway Bill failed. Under the Constitution, all revenue Bills originate in the House of Representatives. I tell you no specific suggestions were made in the Senate to pay for this much needed road program. The House Bill would have passed but for the fact that leadership insisted that we put tax provisions in the Bill. This was almost unprecedented. We had a very limited time to hear witnesses on the tax provisions. We ran into great difficulty with the petroleum interest, the tire industry, and those engaged in trucking, and I can tell you that that is a very minimum, mild statement I have just made. In truth, we had only 12 hours to hear witnesses on the important money angle. It was agreed everybody in the United States wanted highways, but nobody wanted to pay for them. I voted against the Bill when it got in that bad shape. I felt that a better job could have been done on any increase in tax provisions to pay as we go, and pay as we use, if the Committee on the House Ways and Means had been given the responsibility which rightly belonged to that committee. They have career staff experts on duty the year around. They have the benefit of the advice of the Department of the Treasury. That committee is headed by an able Tennessean, Jere Cooper. Not being an experienced member of the tax-writing committee, and with only 12 hours to be informed on the tax provisions, I was not willing to vote for a Bill so important, and on which I thought so all-inclusive, which required so much money without all the equities having been carefully considered with ample time for presentation of views of those who would be required to meet the additional cost of operation. This is but the fair American way.”<sup>9</sup>

Fallon was interviewed after he retired from Congress about his thoughts on the 1955 defeat. Fallon certainly attributed much of the reason to the powerful lobbies, but in a footnote the following observation was noted:

“One cause of the ultimate vote was committee ill-will within the House. The Bill had not been sent to the Ways and Means Committee, despite its general jurisdiction over revenue measures. While an arrangement was worked out whereby a handful of Ways and Means Committee members would participate in the Public Works Committee hearings, that arrangement turned sour after petty debating about committee member prerogatives.”<sup>9</sup>

It was well established that the members of the Ways and Means Committee were upset with this special arrangement. It turns out that the Ways and Means Committee held an incredible position of power within the Congress and it was an unwritten rule that no one in Congress wanted to upset a member of the Ways and Means Committee. In a 1988 interview, BPR’s Frank Turner described the consequences of upsetting this committee:

“It was very, very obvious what was happening. You have to know that at that time, the Ways and Means Committee not only was the committee on finances and taxes for the House, but it was also the committee on committees. And no member of the Congress could get on any committee in the Congress without being approved by that committee on committees, which was the same as the Ways and Means Committee. There were two committees but it was the same people [with] jurisdiction. The Ways and Means Committee, wearing its finance hat, tax hat, was teed off at the Public Works Committee [for] treading on their turf in taxes. Even though they had had this

informal arrangement, they didn't like it, period. And they passed the word that they didn't like it and they didn't want the Bill passed because of this jurisdictional question. The taxes belonged in the Ways and Means Committee ... all 435 members of Congress realized, recognizing that they owed their committee assignments to these guys on the Ways and Means Committee, they did what the Ways and Means Committee wanted. And they passed the word, appropriately, that they didn't want that Bill passed, and so it didn't pass. And that was the end of that!"<sup>9</sup>

#### EISENHOWER'S GRAND PLAN REALIZED: FEDERAL-AID HIGHWAY ACT OF 1956

The inability for Congress to pass any highway Bill was both unexpected and an embarrassment. Many Congressional members were looking for action to regain their public image in the 1956 Congressional session. However, 1956 was also an election year. In an election year most politicians back away from politically charged issues so as to avoid making any unpopular decisions thus hurting their re-election chances. *Engineering News-Record* reported that initially Fallon's feeling towards getting a highway Bill passed were not very good, "if they wouldn't vote for taxes to pay for highways this year, how can they be expected to in 1956, an election year?"<sup>9</sup> The easy way out was to reauthorize another 2-year extension to the current Federal-Aid Highway Act and avoid the introduction of a major new program.

During the winter recess of Congress, the White House, BPR, AASHO, the American Road Builders' Association, Members of Congress and the various opposition groups (trucker, gas, tires) spent many hours discussing viable alternatives and seeking an amicable solution. Although the opponents of the 1955 Fallon Bill such as the truckers, tires and gas companies didn't like the higher taxes they also knew that they stood to gain a tremendous amount of new business if the highway system was expanded. All of these behind-the-scene agreements gave many hope that a Bill could be passed in the 1956 Congressional session. Once Congress was back in session the issue of highway improvement was one of the top priorities to address. But this time the political faux-pas against the Ways and Means committee was addressed by breaking the Bill into two parts. The first part would define all of the technical parameters of the program and the second part would specify the financing and would be left for the Ways and Means committee to draft.

The Ways and Means Committee began hearings on possible financing methods for the proposed highway act. During the hearings, Representative Boggs suggested making a "rough linkage"<sup>9</sup> between the highway user tax revenue and highway construction funding. Boggs was trying to ensure a way that the tax revenues collected for highway user taxes, such as the gas tax and the tire taxes, were only spent on highway construction. Treasury Secretary Humphrey weighed in on this and suggested that it was not a good idea to have loosely defined financing schemes. Instead, Humphrey suggested that the Social Security Trust Fund financing structure would be a suitable way to collect the taxes and ensure that they were devoted solely to highway construction. The Social Security Trust Fund is basically a way of estimating how much money you are going to need over a period of time, say 50 years. In the case of Social Security, if the projections are that some nominal level of people will retire in the next 50 years then you determine how much is needed to collect in taxes on a yearly basis now to pay for those people retiring in 50 years. Eventually you reach a state of equilibrium where the money that is being collected for the future, is being used to pay people who are retired today with only enough money reserved to ensure a continuous flow of money (except when something called the "Baby Boomers" destroys this logic). This is how it gets the "pay-as-you-go" name because you are paying money out at the same time you are collecting money for the future. As this financing structure was already in use, Boggs agreed that it would be acceptable and the Highway Trust Fund was drafted into the legislation. The final step was to

reconsider the tax increases that caused such opposition. During the behind-the-scenes work in the winter, a general agreement was reached that a few key taxes increases would be significantly reduced:

- Proposed increase of 3 cents per gallon on diesel fuel was lowered to a 1 cent increase
- Proposed increase of 15 cents per pound on camelback (tread rubber) was reduced to a 12 cent increase<sup>9</sup>

The two parts of the Bill were introduced by Fallon as H.R. 10660 on April 19<sup>th</sup>. The Bill went to the Public Works Committee and was approved by April 21<sup>st</sup>. The Bill was then introduced on the House floor for approval. By a vote of 388 to 19 the House approved the Federal-Aid Highway Act of 1956 (its revised title). A House-Senate Conference Committee took the 1955 Gore Bill and the Fallon-Boggs Bill and came out with a combined Bill on June 25<sup>th</sup>. The combined Bill retained the Highway Trust Fund and the taxation schedule of the Fallon-Boggs Bill, while making only minor changes to the rest of the Bill. So on June 26<sup>th</sup> the House approved the combined Bill by a voice vote and the Senate voted 89-1 for the Federal-Aid Highway Act of 1956. Senator Gore and Representative Fallon issued a joint statement declaring that this Bill would set into motion “the greatest governmental construction program in the history of the world.”<sup>9</sup> One historian, Mark Rose, commented on how Congress was able to reach such a compromise in 1956 after such a heated debate in 1955, “the key to success was providing something for everyone without imposing high taxes on truckers.”<sup>9</sup> It was obvious that the tax reduction finally gained support from the trucking industry and allowed the Bill to move forward. Clearly another key element was allowing the Ways and Means Committee to perform their normal function by determining the best financing approach. In fact the irony this time was that when the House allowed the Ways and Means Committee to perform their job they actually came up with an amicable solution. One might argue that had Speaker Rayburn and Fallon just stuck to the usual bureaucratic process the Bill might have passed in 1955 and perhaps even with the higher tax rates.

## THE BRAGDON COMMITTEE

After the 1956 Bill passed, Congress went about drafting road construction standards and spreading construction money among rival bidders and it was full speed ahead. But barely two years into it, the pay-as-you-go program began to run into financial problems. The 1956 Federal-Aid Highway Act authorized \$27.5 billion to be paid over 13 years to build the Interstate Highway System (note the projected 1969 completion).<sup>10</sup> In 1958 the first estimate at completion for the program indicated rising problems. Normally, such a large-scale government-funded program is mandated to provide numerous financial data to determine the success of a program. One commonly used indicator is making a yearly assessment of how much money the program is estimated to cost upon completion. This takes into account the current program spending levels and determines whether or not costs have risen due to unforeseen problems. In this case, the original estimate of \$27.5 billion had increased by 45% to \$39.9 billion in only two years!<sup>10</sup> Given the already large sums of money, rumors of Government corruption and wasteful spending were already being spun in public opinion, but a surprise increase of 45% gave the public a real reason to worry. Many projected that at this rate the pay-as-you-go program could extend well into the 80's. Eisenhower reacted immediately to this news and contacted the Bureau of the Budget (BOB) and the BPR. Both groups confirmed the findings and suggested that action needed to be taken. For this, Eisenhower turned to his Special Assistant for Public Works Major General J. S. Bragdon, U.S. Army retired. He asked Bragdon to conduct a “high-priority review of the policies, methods, and standards in effect of the Interstate System’ delineate Federal, State and local responsibilities in financing, planning,

an supervising the highway program; and determine the means for improving coordination, especially in urban planning.”<sup>11</sup>

General Bragdon knew that Eisenhower’s vision was to build broad ribbons across the country, mostly away from the big cities, to connect the country together which is what he saw in the German Autobahns. Furthermore, Eisenhower and Bragdon knew that urban congestion was an increasing problem and the Interstate would never be completed if they had to first fix the traffic congestion for every single city in America. Immediately Bragdon got to work by making inquiries to B. D. Tallamy, the Federal Highway Administrator, to determine what constituted and eligible route and impress upon him Eisenhower’s vision for the Interstate. In general Tallamy agreed that it was not the job of the Interstate system to fix every traffic congestion problem in America. However, Tallamy also knew that the public cried out for help in overpopulated urban areas. In fact the public began becoming increasingly irate at expensive highway construction projects being conducted in remote locations where few people needed the roads. But Tallamy quoted from the original Federal-Aid Highway Act of 1944 that established the Interstate System:

“All facts available to the Committee [who drafted the 1944 legislation] point to the sections of the recommended system within and in the environs of the larger cities and metropolitan areas as at once the most important in traffic service and the least adequate in their present state of improvement. These sections included routes around as well as into and through the urban areas. If priority of improvements within the System be determined by either the magnitude of benefits resulting or the urgency of need, it is to these sections that first attention should be accorded.”<sup>10</sup>

Furthermore, Tallamy quoted from the 1956 Act:

“this system may be located both in rural and urban areas ...it being the intent that local needs to the extent practicable, suitable and feasible, shall be given equal consideration with the needs of interstate commerce.”<sup>10</sup>

Bragdon was given a task to streamline the Interstate Highway construction program and get the budget back on track. In his view, Tallamy’s direction would ensure that many more billions were spent with no end in sight. Bragdon did not believe Tallamy’s motives were illegal, but he rejected this interpretation of the provisions for local and urban traffic as not in line with the intent of the law.

Bragdon ramped up his efforts and had his staff start to review the entire construction process, making inquiries to almost every field office trying to trace the money and determine how to limit the scope of the program. After further investigation, Bragdon wrote to Eisenhower to inform him of his progress and explain his findings that “many cities wish to take extreme advantage of the very liberal 90-10 provisions to solve their local problems of congestion which may include commuter traffic and other local needs.”<sup>10</sup> Bragdon suggested that there were more appropriate solutions to local traffic congestion, citing a study that showed “a rapid transit rail facility can move 40,000 seated passengers and hour whereas it takes 40 lanes of freeway to move an equivalent number by car.”<sup>10</sup> Eisenhower quickly responded and agreed that further action was required. Eisenhower reaffirmed his belief that the intent of the 1956 Bill was to provide the following<sup>10</sup> :

- Sharply accelerated roads program
- An established time limit for completing the Interstate System
- Commitment to complete the 40,000-mile long system irrespective of cost
- Increasing the Federal share of the Interstate project to 90%
- A pay-as-you-go system for funding

Eisenhower also proposed three draft policy statements making the Federal Government’s “commitment” more clearly defined and worded in favor of cross-country roads and no so much focus on urban routes.

Bragdon requested that the BOB and the Department of Commerce study the history of the Federal-Aid Highway Acts to get a better understanding of intent. The report once again reaffirmed what Tallamy had said that provisions were made for local and urban needs. The report attributed the majority of the estimate to complete increase of 45% was due to these additions to the program. But it concluded that the intent of Congress in drafting the Bill was divided, with some Congressmen intent on cross-

country connector roads and other Congressmen looking to use the Interstate to alleviate urban crowding. Again Bragdon took the stance that the main focus was to build Interstate roads and the urban routes should largely be left to the States. This kicked off a year long battle between Bragdon and Tallamy over the extent of the Federal Government's involvement in urban roads. Bragdon would write to Secretary of Commerce Mueller a list of ways to refocus the program, such as the 1944 Act did not envision "local traffic"<sup>10</sup> and therefore any interpretation to use the Interstate for local traffic was incorrect. Mueller would send the report to Tallamy to discuss the matter. Tallamy would write back to Mueller and in very strong language would respond to every single one of Bragdon's points in great depth, refuting every suggestion. Bragdon would write to Ellis L. Armstrong the Commissioner of the BPR to suggest ideas like "other belts would be highest priority, inner belts to be paid for by other funds"<sup>10</sup>. Armstrong would contact Tallamy and again Tallamy would respond back in great detail, refuting Bragdon. During this time various rumors of the infighting would come out in the media. The *Washington Star* carried an article in October of 1959 reporting that conditions were becoming worse and Bragdon was suggesting alternatives such as "abandon pay-as-you-go, eliminate urban Interstate, reduce frills and increase taxes."<sup>10</sup> The same article did indicate that Bragdon had "turned away from eliminating urban Interstate routes because of the political ramifications since urban motorists pay half the highway user taxes."<sup>10</sup> Eventually Bragdon and Tallamy, once friendly colleagues, became bitter rivals. Bragdon had gone over Tallamy's authority on multiple occasions and caused Tallamy a considerable amount of pain. In November 1959, Tallamy refused any further contact with Bragdon unless his inquiries came through official channels. Further media reports began to spark more and more opposition to Bragdon's efforts. The *Indianapolis Star* reported that Congressman Joseph W. Bar (D-IN) was "deeply disturbed that the urban Interstate might be cut back leaving the urban areas to cope with the floods of traffic that the Interstate would dump into the urban areas."<sup>10</sup> They also quoted Mayor Boswell of Indianapolis who said that "it would be better to drop the whole Interstate program than to leave the cities to cope alone."<sup>10</sup> The *Congressional Quarterly* quoted Senator Dennis Chavez (D-NM) as saying that he would "oppose any cut backs."<sup>10</sup> Senator Gore (D-TN) and Republican Whip Thomas Kuchel (CA) said that there would be "bi-partisan opposition to any attempt to cut back the program."<sup>10</sup> And the Chairman of the House Public Works Committee, Fallon himself, also voiced his opposition to cut-backs. All of this fighting came to a head when Eisenhower called a meeting with Mueller, Bragdon, Tallamy and other key personnel on April 6<sup>th</sup>. Bragdon recorded notes during the meeting and they indicated that Eisenhower agreed with him that the purpose of the 1956 Act was to build an Interstate and not to fix urban congestion. Tallamy gave a different account, suggesting that Eisenhower discuss the Interstate at a high level and had very little to say. On April 13<sup>th</sup>, Congressman Gordon Scherer (R.-OH) wrote to Secretary Mueller to determine exactly what was decided in the closed meeting with President Eisenhower, "in order to eliminate this uncertainty I am wondering whether or not you are able to advise me if any conclusions have been reached with respect to this matter, and if so, the nature thereof."<sup>10</sup> On April 15<sup>th</sup> Secretary Mueller replied and made it very clear in his written letter that there would be "NO CUTBACKS IN URBAN INTERSTATE HIGHWAYS."<sup>10</sup>

## A NEW ADMINISTRATION

On November 8<sup>th</sup>, 1960 Senator John F. Kennedy (D-MA) defeated Vice President Nixon to become the next President of the United States. Most accounts of JFK indicate that he knew what the Interstate System meant to the U.S. and he supported continuing Eisenhower's program. But President Kennedy was not in for an easy task because the 1961 Interstate Cost Estimate suggested that Congress needed to come up with another \$11 billion in funds to keep the program on schedule. The inability of the Bragdon Committee to resolve the urban road issue added to continued fighting about the role of the Federal Government. In addition, the enormous cost overruns made the public very suspicious of gross ineptitude and Government corruption in carrying out the program. Soon a sentiment within the public to stop the program began to grow. Kennedy was going to have to address this problem before public disappointment grew too large that the program could face cancellation. Through Kennedy's appointments, Rex Whitton became the third Federal Highway Administrator on February 10<sup>th</sup>, 1961.



Whitton knew his assignment was clear and in his first speech before the American Road Builders Association (ARBA) he said that the Interstate System “can and must be completed by 1972 as scheduled.”<sup>12</sup> Whitton said there were three main issues with the program that needed to be addressed:

- Funding problems
- Scandals that were undermining public support
- Public apathy, little appreciation for the urgent need for the highway program its benefits<sup>12</sup>

Kennedy immediately attacked the funding program and he wrote to Congress that the “Federal pay-as-you-go highway program is in peril.”<sup>12</sup> He suggested extending the temporary gas tax, due to expire on July 1<sup>st</sup>, as well as many other tax adjustments to help raise \$9.7 billion over a 10-year period. He also directed Commerce Secretary Hodges and Housing and Home Finance Administrator Robert C. Waver “to increase their joint planning at every level, to improve coordination of urban renewal and freeway construction plans in the same area, and to invite the cooperative efforts of State and local highway and housing officials and private experts.”<sup>12</sup> Congress responded and implemented the suggested changes for the next fiscal year’s budget. This solidified Kennedy’s support and Congressional support for the program and construction efforts greatly increased. By the end of 1963 over 16,600 miles were open for use.

Next, Kennedy and Whitton focused on public relations. Kennedy declared May 21-27 to be National Highway Week. Whitton began travelling the country promoting on the good progress of the highway program. He personally attended many of the highway openings and always taking the opportunity to discuss his views with the press members. But Whitton’s efforts did not satisfy everyone and there continued to be considerable negative press coverage regarding the highway program. In 1962 *Parade* magazine wrote an article titled “The Great Highway Robbery” and quoted Representative John A. Blatnik (D-MN) as saying “corruption permeates the highway program and stigmatizes the whole road-building industry.”<sup>12</sup> They also quoted counsel to the program, Walter May, as suggesting that “throwing a dart at a U.S. map [and] wherever it sticks, we can find something wrong with the new highways.”<sup>12</sup> To combat these accusations, the BPR strengthened its program controls. Many accused the Government of eminent domain abuse, basically stealing property and kicking people off the land without compensation. The BPR responded by establishing an office dedicated to Right-of-Way location and dispute resolution. They also tapped former FBI agent Joseph M. O’Connor to direct a new office of Audit and Investigations. Furthermore, the BPR was cooperative fully with the FBI, the General Accounting Office and State Investigative forces. The investigations were kept public and the officials worked hard to show their efforts were meeting with success. Due to these actions most accounts declare that the BPR was able to diffuse the crisis and restore most of the public’s faith that their money was being properly spent.

## THE INTERSTATE-AND-URBAN HIGHWAY SYSTEM

The arguments over urban congestion and interstate roads continued to cause political pressure. In addition, many people still accused the Government of taking land and not offering appropriate compensation. So in 1962 Kennedy signed into law another Federal-Aid Highway Act. This time the law required that land could not be taken unless the State agency showed the Commerce Secretary that the families were being provided assistance. It also allowed the State to use part of the Federal aid to help with relocation payments. To address the urban congestion issue, the 1962 act included provisions for “transportation Planning in Certain Urban Areas”<sup>12</sup> and ensured that Federal aid could be used for mass transportation programs to provide a “comprehensive balance to congestion issues.”<sup>12</sup> Yes the debate was over and the improvement of urban roads was now considered part of the Interstate program.

Whitton still realized that the highway program was in danger of not meeting its 1972 completion goal, so he began to push for an increased focus in completing 20,000 miles by 1964 which would mark the half-way point of the program. At a 1962 meeting of the AASHO, Whitton issued a challenge to State officials to push forward against continuing criticism because “nothing succeeds like success.”<sup>12</sup> He suggested focusing on longer, intercity highways so that the mileage would grow at a faster rate (such a novel concept).

#### NEW CONSIDERATIONS: LADY BIRD JOHNSON’S DISPLEASURE

Beginning in 1962 a number of new considerations began to rise about the Interstate Highway program. In September 1962 Rachel Carson’s book *Silent Spring* was published and became a big seller. The book itself had nothing to do with the Interstate Highway Program, but in it, Rachel nostalgically described a simpler time where America had a clean environment and it was now under threat of new chemicals, such as DDT and other industrialization. Due to its popularity it started to sway public opinion towards a more environmentally aware attitude. Soon the massive scale of the Interstate Highway program came under attack from the public opinion that the road construction was ruining our land. This would usher in an entirely new era of rules and regulations written to ensure that highway construction was kept in balance with nature.

In 1964 a new administration took office, that of President Johnson. During Johnson’s campaign his wife, Lady Bird Johnson, complained that there were a number of roadside junkyards that made many of the Interstate Highways very ugly. During his campaign Johnson remarked that these auto junkyards the Lady Bird saw were “driving her mad.”<sup>12</sup> In a few speeches he promised that he would “develop a national policy for the control and disposal of technological and industrial waste.”<sup>12</sup> *U.S. News & World Report* reported that many audiences applauded Johnson’s conservation views and that said “if it’s beautifying they want, it’s beautifying they’ll get.”<sup>12</sup> Within the first weeks of taking office Johnson wrote to Congress about the Government’s duty to preserve the countryside so as to keep the beauty of the country for generations to come. President Johnson called for “a new conservation that would protect the countryside, restore what has been destroyed, and salvage the beauty and charm of our cities.”<sup>12</sup> President Johnson directed Commerce Secretary John T. Connor to “ensure that landscaping would be part of all Interstate and Federal-aid primary and urban highways.”<sup>12</sup> Johnson also wanted legislation to control Billboards and “unsightly, beauty-destroying junkyard and auto graveyards along our highways.”<sup>12</sup> Even BPR’s Whitton promoted the Bill by often repeating in interviews that “highways are for people” and that “the highways must be beautiful as seen from the driver’s seat...and they also must not be a scourge on the community though which they pass.”<sup>12</sup>

The Highway Beautification Act of 1965 enacted many of Johnson’s initiatives into law. After signing the law, Johnson “gave the first pen to Lady Bird, along with a kiss on the cheek.”<sup>12</sup> The Billboard portion of the law required the States to “provide effective control of outdoor advertising along the Interstate System and primary system highways. For States that did not do so, their Federal aid apportionment could be reduced by 10 percent.”<sup>12</sup> It also authorized a similar control scheme and penalty for roadside junkyards. But this was a very important point – the Federal Government was now setting requirements for the States and using the threat of withholding Federal money if their requirements were not met. This is exactly the type of Federal intrusion that the States Governor’s had argued against before the 1956 Bill, and it only confirmed the States fears of the growing Federal Government. Much of the negative public opinion regarding the size of the Federal Government can be directly attributed to the

heavy-handedness of such tactics used by the Federal Government to coerce States into conforming to the Federal Government wishes.

### 1972 – ARE WE THERE YET?

Whitton had issues a challenge to complete half of the Interstate Highway system by 1964 with 20,000 miles of highway open. In February 1966 the BPR announced that they had meet that challenge, with 21,185 miles open, or 52 percent complete. In addition, they also announced that only 7 percent of the highway system had not been started, but that 93 percent of the highway system was under construction. At this point it is estimate that \$24.7 billion had been spent on highway construction. 50 years after the first Federal-Aid Highway Program of 1916 had made quiet a remarkable change on the country and the American society. By the late 1960's the American population had become very dependent on the automobile and many enjoyed the freedom to explore their country on the newly built roads. There were still many issues that plagued the program; accusations of racially motivated right-of-way land seizures, added cost to protect the environment, added cost to beautify the roads, new requirements for 4-lane highways to meet the traffic needs beyond 1972 and urban sprawl. But still the program had a great start being really only 2 years behind in schedule, although it was more than 100 percent over budget! The Federal Highway-Aid Programs never officially ended, they just changed their names to Beautification Act or Omnibus Bill. The Federal Highway Administration officially states that the Federal-Aid Highway program started construction in 1956 and ended somewhere between 1965 and 1980.<sup>13</sup> But this is simply an estimate of what they consider to be the original program goals and when those goals were achieved – the 41,000 miles of road. Even today new requirements are being added, new goals are being defined and the program continues on in one way or another. The Federal Highway Administration categorizes various time periods in the last 100+ years into different versions of the Interstate Highway program as shown in Table 1.

Table 1 Various Interstate Highway Periods<sup>13</sup>

Program Version	Program Title	Start	End	Some Characteristics
<b>Interstate Alpha and beta tests</b>	How Many miles, where will it go.	1944 <a href="#">[iii]</a>	1956	Miles designated, some construction with Federal- aid Primary financing.
<b>Interstate Program 1.0</b>	Build Basic Freeways Fast; incorporate toll roads as needed. Financing with IC based on cost-to-complete ICE.	1956 <a href="#">[iiii]</a>	Between about 1965 and about 1980	Many miles of 4-lane highways; sometimes narrow medians; occasional left hand exits and short ramps.
<b>Interstate Program 1.1</b>	Build Basic Freeways Fast but with some extras; no new tolls	About 1965	About 1980	As with 1.0 but with wider medians, better landscaping
<b>Interstate</b>	Build Interstates but with	About	IC appropriations	Better interchanges; more attention

<b>Program 2.0</b>	more safety and more attention to the environment	1970	end in 1993; era essentially over by 1998.	to clear zones <a href="#">[iv]</a> ; environmental statements <a href="#">[v]</a> ; significant efforts to avoid, minimize and mitigate environmental impacts.
<b>Interstate Program 2.1</b>	Interstate Program with Transfers	Mid 1970s	Mid 1980s	ICE used to authorize funds for substitute highways and transit.
<b>Interstate Program 3.0</b>	Build Interstates to help solve non transportation problems; some leniency on tolling	About 1980	Hasn't ended yet <a href="#">[vi]</a>	Interstates used as catalyst to promote development or redevelopment.
<b>Interstate Program 4.0</b>	Congress designates Future Interstates; more leniency on tolling	1995 <a href="#">[vii]</a>	Hasn't ended yet.	Future Interstates designated per section 1105(e) of ISTEA. However, little dedicated funding available. Tolls may be placed on previously non-tolled sections of Interstate.
<b>Interstate Program 4.1 or 5.0, 5.1, 5.2, 5.3?</b>	Alternatives such as changes in design, financing or operations.	2005 <a href="#">[viii]</a>	?	?

The Federal-Aid Interstate Highway Program continues to this day, in one form or another. Given over 100 years of technological advances, this on-going program shall continue to revolutionize American society for years to come.

## POLITICAL FACTS OF LIFE

What can be made of the rich political history of the U.S. Interstate Highway Program? This case study certainly depicts one of the largest ever Government Funded Programs. Much of what happened over the years, such as the defeat of the Federal-Aid Highway Act of 1955, seems confusing and unexpected. Popular opinion in 1955 was that the Bill would be passed due to numerous political pressures. By analyzing the effects of the Political Facts of Life on this program, events, such as the 1955 Act's defeat, are demystified. In fact through this analysis, it may be shown that in hindsight the outcome of the political process was obvious and could have been predicted.

Before 1956 it was clearly established that the system of roads in the U.S. was inadequate to meet the needs of its citizens. Eisenhower's participation in the 1919 Army convoy certainly shows the poor state of the roads. Reports from Eisenhower suggested that many roads were inadequate, but some roads, most notably California who had "excellent paved ones"<sup>2</sup>, were quiet good even in 1919. So it was not a question of lacking technological prowess to build good roads that held the country back. During the convoy it was estimated that three million people<sup>2</sup> showed interest in this experiment, so public opinion seemed pro-road construction. Yet, for many years, most notably the failure of passing the 1955 Fallon Bill, the politics got in the way and we see the influence of politics controlling what technology can achieve. For example, Representative McCormack suggested that "everybody wants a road Bill"<sup>9</sup> and he surmised that politics got in the way. The House Public Works Committee criticized that the only

agreement was that the roads needed to be built, but not how to build them. The head of the AASHO provided a more clear definition of the political fighting, "First of all, the Bill was the biggest public works program ever proposed, and early in the session it took on a political flavor, and it was also so big that special interests became involved, and it was no longer the consideration of a conventional Federal-aid road Bill."<sup>9</sup> Robert Moses also agreed, issuing this statement "an indispensable national program, about the need of which there is no dispute, has bogged down due to obscure and obscene fights over financing, pride of opinion, and legislative weakness."<sup>9</sup> As luck would have it, the political climate changed the next year, but many considered the 1955 stereotypical of the political fighting that controlled what the technology could achieve by delaying the program for so many years.

Often times an unexpected political pressure can limit what technology is allowed to achieve. Such an unexpected political pressure was Lady Bird Johnson's displeasure of the roadside junkyards. Her disgust for these eyesores caused considerable influence on her husband, President Johnson. While campaigning for president Johnson decided to make a speech to a conservationist group regarding beautification of the highways. His response was so great that he was quoted as saying "if it's beautifying they want, it's beautifying they'll get."<sup>12</sup> This led to Johnson's support for the Highway Beautification Act of 1965. This Act increased the regulations regarding highway construction by refusing Federal funds to highways built next to junkyards or highways that were cluttered with numerous Billboards. This considerably slowed the technical progress of road construction as States had to delay construction while re-planning their layout and spending effort to remove junkyards and Billboards.

In 1955 Chairman of the House Fallon saw the defeat of the Clay proposal and decided to do some research of his own. Fallon knew that fixing the roads was a politically important goal for the Congress to pass in 1955. Fallon introduced his own Bill which avoided using a financial structure of bonds in favor of a user tax-based approach. When he introduced his Bill, Fallon said that he felt that the committee "in full accord on the need for highways but sharply split on funding."<sup>9</sup> Here we see the political influence of how *Cost Rules*. It seemed that everyone agreed to the program, but everyone seems split on the financing. In fact Fallon continued saying that "if it wasn't for that [financing], we could have had a Bill months ago."<sup>9</sup>

The entire Interstate Highway program is an example of Cost Rules. It was clear from Eisenhower's 1919 convoy that the roads needed to be improved, but the roaring 20's came to a crashing halt in 1929 and there was no money for anything. Various wars, such as the Korean War and Vietnam dominated the finances of the U.S. for many years. Even the Federal-Aid Highway Act of 1944 that required 40,000 miles of roads to be constructed, failed to provide any money because no one could agree on how to pay for it. The 1955 Bill was defeated in part due to the financial structure to fund the construction. Public accusations of Government corruption and mismanagement of the construction efforts just 2 years into construction threatened to shut the program down. Considering the scale and cost of this program it is obviously that the biggest problem faced was the high costs.

The Federal Gas Tax introduced in 1932 has never gone away. Once in these 70+ years the tax was reduced, every other year the tax either remained or increased. The Federal-Aid Highway Act of 1956 made the Gas Tax permanent and setup the Highway Trust Fund earmarking all gas tax dollars for road construction/maintenance use only. Often critics argue that the Government neglects the roads and our tax dollars get spent elsewhere. Regarding State and local funds for road maintenance this may indeed be the case in many areas of the country. However, the Federal Gas Tax is an example of an

opposite *Cost Rules* effect. First of all there's a lot of publicity concerning the gas taxes, but people seem willing to pay them. In fact the ATA's president said of the 1955 Bill that, "the industry wants a modern highway system as much as other motorists did and would be willing to pay for it,"<sup>9</sup> they were just upset about the size. By reducing the proposed taxes, the 1956 Bill passed with ease. Politicians are almost never criticized for spending too much to fix our roads and since the gas taxes are earmarked for the roads anyway politicians are willing to spend the money in spite of the Cost Rules FOL. Of course the public does not like taxes so in general the gas tax is viewed as always too much. And taxes to the public are really income and power to politicians. So when it comes to lowering the gas tax cost most certainly does rule and it's highly unlikely that this tax will ever go away.

The failure of Congress to pass a highway Bill in 1955 was a clear example of how a strong constituency can affect politics and politicians. The Clay proposal envisioned a financial structure consisting of Federal bonds and taxes paying the bond interest. The key to the proposal was that the interest paid by the taxes would not be very significant, therefore the current tax structure could pay for it. The newly introduced Fallon Bill rejected the bond structure and suggested a wide array of new tax increases<sup>9</sup>. Fallon appears to have mistaken the public's interest in the program as a solid constituency behind funding the program. Fallon skipped the step of building support and even before he introduced the Bill the word began to spread rapidly. Obviously the petroleum industry, the rubber/tire industry and the commercial vehicle production industry were solidly against these taxes they viewed as directly targeting their industries. The ATA said that the Bill would "raise taxes to a confiscatory, ruinous and unjustified level"<sup>9</sup> and that they were "aimed at a single type of user"<sup>9</sup> instead of adopting a measure that would affect everyone. But the ATA knew how to mobilize their support base and build a strong constituency. First they staged a public stunt where they "parked a tractor trailer outside the Capitol with real dollar Bills decorating both sides of the trailer to symbolize the amount the owner of a big truck must pay in taxes before earning a cent."<sup>9</sup> They also encouraged their supporters to write to their Congressmen and boy did they ever - members of Congress reported receiving over 100,000 telegrams from truckers. Fallon himself indicated that he received 10,000 of these directed to him. But did this strong constituency have any weight to it? The 1955 Act was rejected against popular belief that it would pass. There was a lot of speculation as to the cause of the 1955 Bill being rejected. The *Evening Star* said that "truckers, bus operators, and the rubber, diesel oil and gasoline industries spearheaded the fight that ended in defeat for the Eisenhower road program."<sup>9</sup> The *New York Times* editorial called "Good Roads Lobbied Away" said that "the public gets nothing except a stunning disappointment."<sup>9</sup> The *New York Herald-Tribune* reaffirmed the recognized need for the program "it would be funny if we didn't need the roads so badly."<sup>9</sup> One Congressman, Representative Tom Steed (D-OK) was a proponent of the Bill originally, then changed mind and said it was due to "the most effective lobby I've ever seen." It is clearly obvious that the petroleum, rubber/tire, truck manufactures, truck drivers and bus drivers collective, coherent opposition was enough to make quiet an impression and it was certainly true that this constituency was essential in defeating these proposed tax increases.

Many lessons were learned from the defeat of the 1955 Fallon Bill, for example it was clear that a strong and coherent constituency was essential. To avoid the same mistake, during the winter recess those that sought to pass a road Bill began worked hard to build a constituency of supporters. Many members of Congress and the White House began contacting and coordinating a new highway act while trying to gain support from the BPR, AASHO, American Road Builders' Association, petroleum industry, rubber/tire industry and the trucking industry. As previously mentioned, the ATA said that they were willing to pay for some, not all of the construction effort. The new Bill did in fact include tax increases, but

they were significantly reduced compared to the 1955 Bill. One other key to the financial arrangement was setting up the Highway Trust Fund and ensuring all taxes collected would be spent on the roads and nothing else. This was enough of a change to solidify the support for the Bill. The newly improved Bill was sent to Congress and was approved by wide margins. Historian Mark Rose's view was that "the key to success was providing something for everyone without imposing high taxes on truckers."<sup>9</sup> The 56 Bill provides a good example on how building support and creating a strong constituency can significantly influence the outcome of the political process.

A political constituency is usually considered to be synonymous with public support. But sometimes the constituency needed is not thousands of voters, but powerful members of Congress. There is another widely held belief that the members of the Ways and Means Committee were instrumental in getting the 1955 Bill defeated. When the Speaker of the House Rayburn made a special deal with Fallon regarding the financing of the 1955 Act he also ended up stepping on the turf of the Ways and Means Committee. BRP's Frank Turner described the power of the Ways and Means Committee and why it was a miscalculated political step to avoid gaining their support:

"It was very, very obvious what was happening. You have to know that at that time, the Ways and Means Committee not only was the committee on finances and taxes for the House, but it was also the committee on committees. And no member of the Congress could get on any committee in the Congress without being approved by that committee on committees, which was the same as the Ways and Means Committee. There were two committees but it was the same people [with] jurisdiction. The Ways and Means Committee, wearing its finance hat, tax hat, was teed off at the Public Works Committee [for] treading on their turf in taxes. Even though they had had this informal arrangement, they didn't like it, period. And they passed the word that they didn't like it and they didn't want the Bill passed because of this jurisdictional question. The taxes belonged in the Ways and Means Committee ... all 435 members of Congress realized, recognizing that they owed their committee assignments to these guys on the Ways and Means Committee, they did what the Ways and Means Committee wanted. And they passed the word, appropriately, that they didn't want that Bill passed, and so it didn't pass. And that was the end of that!"<sup>9</sup>

Many agree with Turner's view that Rayburn suffered the power of this FOL by failing to first seek support from the Ways and Means Committee before working the deal with Fallon. Of course by 1956 Rayburn and Fallon had learned their lesson and this time they gave the Ways and Means Committee full control of the financial details and surprise the Bill passed with a wide margin.

Eisenhower made a fatal mistake when he sent Nixon to deliver his "Grand Plan" speech before the annual Governors' convention. Typically before making such a public speech, the President will contact the convention attendees to give them a preview of the speech and avoid any embarrassing surprises. This was even more critical at the Governors' convention because they believe Eisenhower was trying to take over the business of building roads. In fact, Eisenhower did not like large Federal Government involvement and he was planning to make the speech in an effort to secure the Governors' support. However, due to a family death Eisenhower had to send Nixon in his place. Unprepared, Nixon gave a speech highlighting a \$50 billion dollar Federal program to "help the States modernize their highway systems."<sup>2</sup> The speech came as a shock and in one single stroke the speech destroyed Eisenhower's efforts to secure the support of the Governors'. Some infuriated Governors issued statement that they wanted "the Federal Government to get out of the gasoline and fuel oil tax field for once and for all and now is the time to do it before we embark on any large-scale highway program."<sup>2</sup> One commentator summed his mistake, "this curious political reaction stems from the incredible

clumsiness and self-assurance with which the White House handled the proposal.”<sup>2</sup> Eisenhower knew the power of this FOL and was trying to secure support. Unfortunately, it is not an easy task and this was a crucial mistake. Eisenhower was forced to spend many hours working to regain the trust that had been lost.

Two years after the Interstate Highway program began construction the technical problem of administering such a large program became apparent. During the 1958 estimate at completion financial review the program was estimated to be 45% over budget.<sup>10</sup> There were already public rumors of Government mismanagement of funds, but this news created a political firestorm that lasted nearly two presidencies. Eisenhower fought hard to get to the bottom of the cost overruns, even appointing the Bragdon Committee to conduct a “high-priority review of the policies, methods, and standards in effect of the Interstate System’ delineate Federal, State and local responsibilities in financing, planning, an supervising the highway program; and determine the means for improving coordination, especially in urban planning.”<sup>11</sup> The JFK administration was immediately hit with continued highway funding problems. On article in *Parade* called “The Great Highway Robbery” quoted Representative John A. Blatnik (D-MN) as saying “corruption permeates the highway program and stigmatizes the whole road-building industry”<sup>12</sup> and Walter May as suggesting that “throwing a dart at a U.S. map [and] wherever it sticks, we can find something wrong with the new highways.”<sup>12</sup> This forced many changes within the BPR’s administration of the program. A newly created office was dedicated to Right-of-Way location and dispute resolution. A former FBI agent Joseph M. O’Connor headed up another new office of Audit and Investigations. The BPR worked closely with the FBI, the General Accounting Office and State Investigative forces. All of these political problems were brought about by the technical problem of managing such a large program. Even to this day remnants of this distrust in the Highway Trust Fund are still seen in popular culture, all because the original program administrators did not have the technical prowess to properly oversee the program.

Eisenhower had envisioned a highway system that avoided the congestion of main cities and who’s purpose was to connect the whole country together, not just connecting cities together. However the 1956 Bill had one technical problem – the language in the 1956 and the intent of Eisenhower were not exactly the same. The 1958 cost overruns of 45% made Eisenhower assign Bragdon to investigate the matter. Bragdon suspected that more money was being used for urban cities than Eisenhower had originally intended. The Bragdon Committee began contacting everyone involved with the construction of the highway. The head of the Federal Highway Administrator, B. D. Tallamy, indeed believed that he was justified in using the money for urban congestion and he responded to inquires by quoting the 1956 Act, “this system may be located both in rural and urban areas ...it being the intent that local needs to the extent practicable, suitable and feasible, shall be given equal consideration with the needs of interstate commerce.”<sup>10</sup> This created a heated political fight between the Federal Highway Administration and the Bragdon Committee. Bragdon told Eisenhower that “many cities wish to take extreme advantage of the very liberal 90-10 provisions to solve their local problems of congestion which may include commuter traffic and other local needs.”<sup>10</sup> It was clear that the Interstate construction program was becoming much larger than originally intended, but technically those that fought for the urban traffic de-congestion were justified under the law and the political battle raged on.



Previous to the Federal-Aid Highway Act of 1956 Congress enacted the Federal-Aid Highway Act of 1944. The 1944 Act recognized the engineering importance of improving roads and it authorized a "limited 40,000-mile National System of Interstate Highways, to be selected by the State Highway Departments, to connect the major metropolitan areas and to serve the national defense."<sup>3</sup> The provision for the highway system in the 1944 Act was the correct technical solution and it was the foundation that the 1955 and 56 Acts were based on. This bill was passed "after nine months of intense negotiations in Congress,"<sup>3</sup> but it lacked on key element. Those nine months of negotiation made it clear to many Congressmen that many aspects of this program, such as the financial structure, would be hotly debated and a compromise would be very difficult to achieve. So the Congress men settled for the best political solution – pass the Bill defining what needs done but avoid conflict by not providing any funds. Often times the best political solution is to make it look like something is being done, when in reality nothing is being done.

Concerning the defeat of the 1955 Bill, the AASHO's Johnson's said the following, "when certain interests in the Congress insisted on a pay-as-you-go feature, additional taxes were required, and you might sum it up by saying that the Democrats defeated the Republicans' bond Bill, and the special interests defeated the increased taxation proposed by the Democrats."<sup>9</sup>

Again, the best engineering solution was to improve the roads because the technology and the people were ready and available. However, neither political party was willing to accept that the other party's financing structure was better than theirs. So you get the situation where the best political solution is to defeat the Bill, rather than suffer the public humiliation of the other party's success. Note: doing nothing, rather than the wrong thing, sometimes is a highly desirable result.

The Bragdon Committee found that the Interstate Highway cost overruns were largely due to increasing the program to cover areas not originally intended: urban congestion relief. Bragdon contacted Eisenhower expressing his belief that the best technical solution to the growing size of the program was to focus on the Interstate construction and the original intent of the 1956 Bill. Eisenhower agreed that his intent was to provide the following<sup>10</sup> :

- Sharply accelerated roads program
- An established time limit for completing the Interstate System
- Commitment to complete the 40,000-mile long system irrespective of cost
- Increasing the Federal share of the Interstate project to 90%
- A pay-as-you-go system for funding

Eisenhower proposed that a new policy statement refining the Federal Government's intentions was the best technical solution to the problem. However many Congressional members did not agree to this technical solution. The *Indianapolis Star* reported that Congressman Joseph W. Bar (D-IN) was "deeply disturbed that the urban Interstate might be cut back leaving the urban areas to cope with the floods of traffic that the Interstate would dump into the urban areas."<sup>10</sup> They also quoted Mayor Boswell of Indianapolis who said that "it would be better to drop the whole Interstate program than to leave the cities to cope alone."<sup>10</sup> The *Congressional Quarterly* quoted Senator Dennis Chavez (D-NM) as saying that he would "oppose any cut backs."<sup>10</sup> Senator Gore (D-TN) and Republican Whip Thomas Kuchel (CA) said that there would be "bi-partisan opposition to any attempt to cut back the program."<sup>10</sup> To them the politics of the situation dictated that a different, political solution was found for the program. In this case the political solution was simply to provide more money and more resources to help fix the urban congestion that was a more immediate concern to the public. As hard as Bragdon fought to streamline the program, even he was overcome with the politics and it was reported that he "turned away from eliminating urban

Interstate routes because of the political ramifications since urban motorists pay half the highway user taxes.”<sup>10</sup>

Eisenhower felt that the best engineering solution to the road problem in the U.S. was to provide funding for an Interstate Highway System. Soon this vision was overrun by the political solution of providing relief to urban congestion. However, under the Johnson administration the best technical solution to completing the road work was to finish connecting the States and relieving major areas of congestion. But by this point the U.S. Government was getting a large amount of revenue money from the road-taxing structure and they were gaining some increased ability to influence the construction process. When Johnson gained favor while speaking for conservation and highway beautification a new political solution became clear – keep the program going. Johnson enacted the Highway Beautification Act of 1965 that had many new provisions for road construction regulation. For example, a billboard regulation required the States to “provide effective control of outdoor advertising along the Interstate System and primary system highways. For States that did not do so, their Federal-Aid apportionment could be reduced by 10 percent.”<sup>12</sup> Why was Johnson able to introduce such a law? Well thanks to the popularity of Rachel Carson’s book *Silent Spring*, an environmental movement began that change the public’s view of the road construction. No longer were the roads providing freedom, but they were destroying the countryside of this beautiful Nation. For Eisenhower the best engineering solution was also the best political solution – to improve the roads like he promised. Now for Johnson, the best political solution became protecting the beauty of America. It did not hurt that the side effect of this was to substantially increase the Federal Governments power of influence over the State Governments.

The Interstate Highway System consumed many decades of money and politics. Eisenhower was instrumental in beginning the program with the 1956 Highway Act. Eisenhower knew this was a long-term program, but he also knew that he would receive immediate gratification if he was known as the person that started the Interstate Highway Program. Indeed history does look favorably on Eisenhower’s accomplishment to set up a program that eventually succeeded. For later Presidents it was always a good idea to support the road construction, but there was little they could do to change the program or even speed it along. Kennedy has many other accomplishments in his Presidency and is not particularly known for his efforts to save the highway construction effort from sever mismanagement. And too, Johnson would not have put forth much effort if there was no gratification to come of it. But when Johnson realized that the people were interested in beautifying the road he said “if it’s beautifying they want, it’s beautifying they’ll get.”<sup>12</sup> Now Johnson had a reason to support the construction effort – near-term gratification. Indeed Johnson’s support for the 1956 Highway Beautification Act gave him very good publicity just when he needed it. In fact this becomes a trend in the Interstate Highway Program. The best way to reap rewards from this ongoing program was to impose some new regulation to fix some terrible aspect that was being neglected by the evil States that were building the roads.

Eisenhower felt that the roads needed to be improved and he was committed to getting the word out. By building public support, Eisenhower was able to build pressure on Congress to act. Although the 1955 Bill failed, many Congressmen knew that the public would be disappointed by their inaction. This is shown by the hard work put into getting the Highway Bill passed in 1956. To build this support Eisenhower took every public opportunity to promote the program. He sloganeered his program by repeatedly making a call for “a vast new highway program” and saying that the “worlds of useful work that this Nation has to do [include] great highway programs to build.”<sup>9</sup> Certainly these catchy, almost lofty phrases gave the public a sense of pride in their abilities. At the same time he created a sense of shame

in the condition of roads by saying that such a road improvement program “take this Nation out of its antiquated shackles of secondary roads all over this country and give us the types of highways that we need for this great mass of motor vehicles.”<sup>9</sup> He even went so far as to carry a traffic theme in his general speeches “we won’t get anywhere with red lights at all the governmental crossroads ... two drives at every governmental steering wheel, each trying to go in a different direction, and we shall certainly end up in a hopeless traffic jam.”<sup>9</sup>

When Lady Bird Johnson complained of ugly looking highways, President Johnson made it a priority to reform the regulations regarding the Interstate Highway construction. Johnson would often say that the countryside was being destroyed by the construction and his efforts would “salvage the beauty and charm of our cities.”<sup>12</sup> Even BPR’s Whitton promoted the Bill by often repeating in interviews that “highways are for people” and that “the highways must be beautiful as seen from the driver’s seat...and they also must not be a scourge on the community though which they pass.”<sup>12</sup> Well, the poetry and sloganeering worked and the Highway Beautification Act was passed in 1965.


There is no such thing as a free lunch and in politics there will always be someone that will be opposed to your program. The Interstate Highways are a great example of this FOL regarding opposition. All Eisenhower wanted to do was improve the roads – who can argue with that? Yet political lines that were drawn on funding the program, exactly what roads to improve, who had control the States or the Federal Government, the ugliness of the roads and their environmental impact are but, a few good examples of this.

In the battle between the Bragdon Committee and Tallamy, we know that Tallamy was “out gunned” because Bragdon had the support of the White House. The Bragdon Committee meticulously investigated every aspect of the Highway Program and repeatedly suggested changes to streamline the effort. Tallamy was mainly upset that Bragdon was trying to usurp his authority and he simply refused to be beaten. Tallamy responded to every single suggestion put forth by the Bragdon Committee in great detail. It was through this persistence that Bragdon eventually backed down and Tallamy won the power struggle.

## CONCLUSION

The U.S. Interstate Highway Program provides an interesting study of politics in this country. Over 100 years of its history crosses many generations and still touches our lives to this day. In this ever increasingly mobile society the problems surrounding the growth and maintenance of the highways has only become more pronounced. The same budget afflictions and political fighting shown during the 1950’s continue to have their present-day equivalents. The Interstate Highway Program has grown so large that money from the original Highway Trust Fund structure is being used to construct highways on new parts of the country that are not even physically connected to the U.S. (Hawaii as an example). In fact today oil levels are reaching record highs, causing gas prices to soar and a public outcry for a reduction in the gas tax. To make matters worse, most of the U.S. Highway infrastructure has only seen moderate maintenance since they were first constructed decades ago. A terrible tragedy occurred when the I-35 turnpike through the Minnesota Twin Cities collapsed during rush hour causing numerous injuries and a number of deaths. Many argue that after 50+ years of use the U.S. Highways are due for another major overhaul. One thing is for sure, over 50 years later and the question of road construction and

maintenance is still stuck in a political struggle. This analysis has shown that the five Political Facts of Life had a major influence over the start of this program and continue to do so.



## APPENDIX: THE POLITICAL FACTS OF LIFE

What can be made of the rich political history of the U.S. Interstate Highway Program? This case study certainly depicts one of the largest ever Government Funded Programs. Much of what happened over the years, such as the defeat of the Federal-Aid Highway Act of 1955, seems confusing and unexpected. Popular opinion in 1955 was that the Bill would be passed due to numerous political pressures. By analyzing the effects of the Political Facts of Life on this program, events, such as the 1955 Act's defeat, are demystified. In fact through this analysis, it may be shown that in hindsight the outcome of the political process was obvious and could have been predicted.

### #1 - POLITICS, NOT TECHNOLOGY, CONTROLS WHAT TECHNOLOGY IS ALLOWED TO ACHIEVE

*This is the idea that despite even the most advanced technology that promises to change the world, there is almost always some political influence that will take precedence. The influence of this FOL is found wherever a technology is limited due to budget limitations, regulatory constraints or even overly restrictive schedule deadlines.*

### #2 - COST RULES

*Advanced technology is rarely an inexpensive prospect to fund; therefore politicians are constantly fighting a battle for funding in a constrained budget. The influence of this FOL is found wherever someone ends up overstating the benefits of a program and understating the costs simply to get the program started. Most programs are subject to the Congressional budget cycle and are forced to fight for funding on an annual basis. Typically, most programs are underfunded and struggle to keep going while fighting for more funds.*

### #3 - A STRONG, COHERENT CONSTITUENCY IS ESSENTIAL

*Congress controls the Government money and it is necessary to get support from Congress in order to get a program funded. The influence of this FOL is found wherever a program is easily funded due to a large constituency of supporters. The reverse is also true; if there is a strong opposition to a program then it risks being cancelled.*

### #4 - TECHNICAL PROBLEMS BECOME POLITICAL PROBLEMS

*Given that the Government's budget is finite, people are constantly fighting for funding. The influence of this FOL is found wherever an opposing group finds some reason to attack another program. It can be very difficult to keep a good program funded, but when technical problems occur, like the crash of a test airplane, the opposition will immediately take advantage of the situation and attempt to cause enough political turmoil that Congress will decide to stop supporting your program*

## #5 - THE BEST TECHNICAL SOLUTIONS ARE NOT NECESSARILY THE BEST POLITICAL SOLUTIONS

*It seems like a no brainer to scientists and engineers when it comes to implementing good engineering solutions. However, in the political world it is rarely as cut-and-dry. The influence of this FOL is found when a sound engineering solution is overlooked in favor of a good political solution. Often times when a politician tries to act in the public's favor, they find themselves being ridiculed for doing something stupid. Politicians are mainly concerned about keeping their job. So when a tough decision needs to be made about a technical program, politicians will try to determine what solution would best suit them.*

## References

1. "50th Anniversary of the Interstate Highway System -Frequently Asked Questions." 4/27/2008 <<http://www.fhwa.dot.gov/interstate/faq.htm>>.
2. Weingroff, Richard F. "The Man Who Changed America, Part I." Public Roads. March/April 2003. US Department of Transportation Federal Highway Administration. 4/27/2008 <<http://www.tfrc.gov/pubrds/03mar/05.htm>>.
3. Pfeiffer, David A. "Ike's Interstates at 50." 2/14/2008 <<http://www.archives.gov/publications/prologue/2006/summer/interstates.html>>.
4. "OHPI - Traffic Volume Trends January 2008 Report." Federal Highway Association. 5/4/2008 <<http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.htm>>.
5. "Earth Statistics." 5/4/2008 <<http://www.windows.ucar.edu/tour/link=/earth/statistics.html>>.
6. "Dwight Davide Eisenhower biography." 4/27/2008 <[http://www.eisenhower.archives.gov/visitors\\_center/school\\_group\\_packets/DWIGHT\\_DAVID\\_EISENHOWER.pdf](http://www.eisenhower.archives.gov/visitors_center/school_group_packets/DWIGHT_DAVID_EISENHOWER.pdf)>.
7. "When did the Federal Government begin collecting the gas tax? - Ask the Rambler." Federal Highway Administration. 4/27/2008 <<http://www.fhwa.dot.gov/infrastructure/gastax.cfm>>.
8. "AASHTO: Interstate 50th Anniversary." 4/25/2008 <<http://www.interstate50th.org/history.shtml>>.
9. Weingroff, Richard F. "Kill The Bill: Why the U.S. House of Representatives Rejected the Interstate System in 1955." Federal Highway Association. 4/27/2008 <<http://www.fhwa.dot.gov/infrastructure/killbill.cfm>>.
10. Mertz, Lee. "The Bragdon Committee." Federal Highway Administration. 5/1/2008 <<http://www.fhwa.dot.gov/infrastructure/bragdon.htm>>.
11. Weingroff, Richard F. "The Man Who Changed America, Part II." Public Roads. May/June 2003. Federal Highway Administration. 4/30/2008 <<http://www.tfrc.gov/pubrds/03may/05.htm>>.
12. Weingroff, Richard F. "The Battle of Its Life." Federal Highway Association. May/June 2006. 5/1/2008 <<http://www.tfrc.gov/pubrds/06may/05.htm>>.
13. Weiss, Martin H. "How Many Interstate Programs Were There?" Federal Highway Administration. 5/1/2008 <<http://www.fhwa.dot.gov/highwayhistory/howmany.cfm>>.