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Impact of Program Implementation on the Effectiveness of the American Recovery and Reinvestment Act

The Case of Transportation

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The beginning of an economic recession in 2007 and its lingering effects on the economy led to the passage of American Recovery and Reinvestment Act (ARRA) in February 2009. This legislation focused on several goals:

1. Preserve and create jobs and promote economic recovery.
2. Assist those most impacted by the recession.
3. Provide investments needed to increase economic efficiency by spurring technological advances in science and health.
4. Invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits.
5. Stabilize state and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive state and local tax increases [P.L. 111-5 Section 3 (a)].

Because of the more immediate effects on job creation or job retention and the economic benefits associated with infrastructure, investment in the nation's transportation system became an important component of the ARRA program. A long history of federal involvement in transportation investment allowed the ARRA program to take advantage of long-standing institutional relationships and standard operating procedures for implementing the transportation element of the program. Historically, the federal government has used a range of tools, including funding eligibility criteria, local matching ratios, process regulations, program requirements, and technical guidance, to influence federally aided investment in state and local transportation systems. These tools became part of the transportation element of the ARRA program.

The purpose of this paper is to gain an understanding of how the structure and rules of the federal transportation grants authorized under ARRA affected the outcomes of the program. Specific areas of inquiry include:

- How did ARRA affect states' transportation spending priorities? How did program requirements impact the selected projects for ARRA funding? Would altering ARRA program requirements and rules have resulted in a mix of projects with greater stimulus benefits or greater long-term transportation benefits (e.g., by accelerating construction) or greater long-term transportation benefits (e.g., by allowing project that were difficult to fund under ARRA rules)?
- What were the states' experiences with the ARRA competitive grant programs [Transportation Investment Generating Economic Recovery (TIGER) and grants for passenger rail]?
- How did state officials view the program requirements of ARRA grants? And which ones were least constructive in achieving the overall goals of the legislation. What administrative relief might have expedited the completion of ARRA projects or reduced costs? What would have been the effects of this proposed relief?

- What was the effect of the ARRA "maintenance of effort" requirement? And how did ARRA affect a state's total transportation spending?
- What impact did a "business-as-usual" structure of federal and state transportation program administration have on the effectiveness of transportation spending as a stimulus?
- What is the practicality of maintaining a "shelf" or backlog of projects that would be available for quick implementation and that would have high value as a stimulus or show long-term economic value?

STUDY APPROACH

Many of the questions listed above could only be answered through a structured interview process with the state transportation officials who were responsible for implementing ARRA in their state. Thus, the major approach to collecting information on these questions was via telephone interviews. The responsible officials were identified and contacted; the actual interviews often included additional staff who had participated in the state's program. Appendix A shows the questions that served as the basis of these interviews. Prior to contacting state officials, federal reporting forms relating to federal transportation expenditures—FHWA Forms 531, 532, and 1392—were reviewed for each state.

The states contacted were selected based on several criteria—population and geographic size; experience with the ARRA program; range of projects selected; and degree to which the states had been a subject of previous study [e.g., a case study state in a General Accountability Office (GAO) study of the ARRA program]. The states contacted included Arizona, California, Florida, Illinois, Iowa, New Jersey, New York, Pennsylvania, Rhode Island, Texas, and Washington. State officials were forthcoming in answering the questions and in identifying those aspects of ARRA that were considered beneficial, as well as the program implementation characteristics that influenced the resulting project selection.

ARRA PROGRAM CHARACTERISTICS

In order to understand state officials' response to the survey questions, it is important to describe some of the programmatic requirements of ARRA implementation that strongly influenced how states responded (and, as will be seen below, were identified by those surveyed as being some of the most important explanations of why a state chose the investment portfolio it did). Just over $48 billion was provided for transportation programs administered by the U.S. Department of Transportation. The largest portions of this investment went for highways ($27. 5 billion), followed by intercity passenger rail ($9.3 billion), transit ($8.4 billion), and airports ($1.3 billion). Major program and process requirements included:

- No matching funds for ARRA grants were required, which was very different from normal federal transportation grant programs where the recipient is required to provide some level of matching support.
- ARRA, in an attempt to speed the process of distributing the funds to the states, utilized existing legislatively defined formulas for federal transportation grant programs. Thus, highway, transit, and airport funding distribution was based on formulas that were in existence for then-

current programs. Transportation enhancement projects were to receive 3% set-aside of the ARRA allocation.

- Thirty percent of the ARRA funds in a state were to be suballocated based on the population formula used for the federal Surface Transportation Program (STP). The STP is part of the federal-aid transportation program that provides flexible funding for states and localities on any federal-aid highway that might include road construction, bridge improvements, transit capital projects, and intracity and intercity bus terminals and facilities. Under the normal STP program, 25% of a state's apportionment was to be based on total lane miles of federal-aid highways, 40% based on vehicle miles traveled on lanes on federal-aid highways and 35% based on estimated tax payments attributable to highway users in the states into the Highway Account of the Highway Trust Fund. The 30% suballocation to STP was not the normal federal transportation aid program apportionment.
- Twenty percent of the ARRA funds were to be allocated to two competitive (that is, at the discretion of the secretary of transportation) grant programs—high speed rail and TIGER grants.
- In order to assure that the ARRA funds were used as additional investment in the transportation system and not simply a replacement for state or local funds that could now be used for other purposes, state governors had to certify that the historical expenditure of transportation funding was being maintained—this is the "maintenance of effort" requirement.
- States were required to give priority to highway projects located in economically distressed areas, where "economically distressed" meant an area where the per capita income was 80% or less of the national average, or if it had an unemployment rate that was, for the most recent 24-month period for which data were available, at least 1% greater than the national average unemployment rate.
- Highway and transit funds had to be obligated by September 30, 2011. More than 50% of the highway funds had to be used for projects that could be started within 120 days after enactment of the law.
- Projects must comply with the requirements of the National Environmental Policy Act (NEPA), if applicable.
- Recipients were required to report on the number of "direct, on-project jobs created and, to the extent possible, the estimated indirect jobs created or sustained in associated supplying industries." In addition, the level of funds obligated and expended, and the status of projects needed to be reported periodically. As it turned out, recipients ended up reporting to U.S. Department of Transportation (DOT), GAO, Office of Management and Budget (OMB), and the House Transportation and Infrastructure Committee.
- ARRA emphasized the use of fixed-price contracts and competitive procedures to the maximum extent possible (FHWA, 2012).

With respect to this last characteristic, a recent report by the FHWA Inspector General found that around 19% of the ARRA highway-related projects received just one or two bids. Based on a sample of nine states, the one- to two-bid projects were on average 11% higher than those receiving three or more bids, suggesting that a large infusion of dollars that must be spent in a short timeframe could end up being more costly simply because of the capacity of the construction industry to respond (FHWA, 2012). The report also noted that neither the states nor FHWA could have done anything more to increase competition.

GAO reported that the states faced several challenges in implementing ARRA requirements (GAO, 2011). Maintenance-of-effort, in particular, was pointed to as a requirement that many states had difficulty in meeting, or at least demonstrating to the satisfaction of the U.S. DOT. This was an important issue to the states because those states not meeting this requirement were not allowed to participate in a redistribution of obligation authority that distributed fund authority from states not in compliance to those that were.

GAO also found issues with how jobs were defined and estimated. For example, OMB changed guidance over the ARRA period that modified data record frequency as well as how one defined "jobs created." One could expect that given changing definitions and guidance on data reporting over the course of ARRA implementation that states would have faced challenges in meeting these requirements.

SURVEY RESULTS

The results of the survey will be summarized in four major categories:

1. ARRA influence on the state and local institutional characteristics for project decision making;
2. Influence of ARRA program requirements on decision making and priorities;
3. Influence of the U.S. DOT programmatic and institutional structure on decision making and priorities; and
4. Recommended actions to improve future stimulus programs.

ARRA Influence on State and Local Institutional Characteristics for Project Decision Making

Table 1 shows a breakdown of the types of highway projects funded by the ARRA program. The majority of projects selected, identified as "pavement improvements," was confirmed by most of the state DOT officials interviewed. The speed with which states had to respond to ARRA requirements had a significant influence on the types of projects that were selected and thus who was involved in the decision making. For example, many states noted that the 30% local (STP) project requirement basically meant projects were selected by metropolitan (MPO) or regional planning organizations (RPO), and thus subject to the normal policy board, committee, and public involvement procedures. Most states noted that the projects selected for ARRA funding were those that had been scheduled for implementation in some future year, but had not been considered top priority when ARRA funds became available.

The responses from state DOT officials regarding state highway projects ranged widely. In some cases, and often relating to the size of the state, state DOTs relied on district or regional offices to identify projects (e.g., Florida, Illinois, and New York). In others, the central office, relying on such tools as pavement management systems (PMS), identified those sections of the highway network that were in most need of improvement. And in still others (e.g., Texas) a set-aside was established for allocation by the DOT Commission or Board. In Iowa, for example,

TABLE 1 Highway Project Types Funded by ARRA

Project Breakdown by State By Project Type (incomplete info and projects not started removed)										
	Bridge Improvement	Bridge Replacement	New Bridge Construction	New Construction	Other	Pavement Improvement	Pavement Widening	Safety/Traffic Management	Transportation Enhancements	Total
AL	0.4%	2.1%	0.0%	0.8%	4.2%	82.2%	1.3%	3.8%	5.1%	100%
AK	7.4%	0.0%	0.0%	3.7%	0.0%	66.7%	3.7%	3.7%	14.8%	100%
AS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100%
AZ										
AR	0.9%	3.4%	1.7%	5.2%	0.9%	55.2%	16.4%	13.8%	2.6%	100%
CA	0.9%	0.5%	0.0%	0.5%	2.6%	75.8%	2.2%	6.5%	11.1%	100%
CO	0.0%	4.3%	1.1%	3.2%	2.1%	33.0%	8.5%	13.8%	34.0%	100%
CT	9.2%	4.2%	0.0%	0.0%	3.3%	51.7%	0.8%	16.7%	14.2%	100%
DE	10.0%	3.3%	0.0%	3.3%	16.7%	36.7%	0.0%	10.0%	20.0%	100%
DC	14.3%	0.0%	0.0%	0.0%	0.0%	42.9%	7.1%	21.4%	14.3%	100%
FL	2.6%	0.0%	0.5%	1.3%	0.5%	52.4%	6.0%	9.2%	27.5%	100%
GA	0.0%	8.8%	0.0%	2.2%	0.6%	65.5%	3.4%	11.3%	8.2%	100%
GU	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	100%
HI	18.8%	6.3%	0.0%	6.3%	0.0%	62.5%	0.0%	6.3%	0.0%	100%
ID	10.3%	0.0%	2.6%	1.3%	5.1%	52.6%	9.0%	0.0%	19.2%	100%
IL	5.9%	3.8%	0.0%	1.0%	4.8%	73.3%	0.3%	6.6%	4.2%	100%
IN	7.4%	1.9%	1.6%	0.5%	1.1%	74.4%	1.3%	7.5%	4.5%	100%
IA	2.8%	10.6%	1.1%	3.4%	2.2%	67.0%	0.6%	2.8%	9.5%	100%
KS	1.5%	11.8%	0.7%	2.9%	2.9%	55.9%	8.1%	5.9%	10.3%	100%
KY	1.1%	0.0%	0.0%	6.3%	1.1%	33.7%	7.4%	5.3%	45.3%	100%
LA	0.0%	12.5%	0.0%	6.3%	0.0%	40.6%	9.4%	2.1%	29.2%	100%
ME	6.7%	4.0%	0.0%	0.0%	5.3%	76.0%	0.0%	5.3%	2.7%	100%
MD	4.5%	1.3%	0.0%	0.0%	0.0%	61.3%	2.6%	21.3%	9.0%	100%
MA	3.6%	2.4%	0.0%	0.0%	2.4%	75.9%	0.0%	8.4%	7.2%	100%
MI	3.8%	2.1%	0.0%	0.0%	4.2%	81.9%	1.3%	3.4%	3.4%	100%
MN	2.7%	14.1%	1.6%	0.5%	2.2%	46.2%	1.1%	19.6%	12.0%	100%
MS	3.7%	8.5%	0.0%	1.8%	0.6%	62.8%	1.8%	10.4%	10.4%	100%
MO	2.7%	1.3%	0.7%	4.3%	5.7%	57.3%	8.7%	2.0%	17.3%	100%
MT	3.6%	4.8%	0.0%	3.6%	4.8%	61.9%	4.8%	4.8%	11.9%	100%
NE	6.7%	16.3%	0.0%	3.8%	1.0%	60.6%	2.9%	3.8%	4.8%	100%
NV	0.0%	0.0%	1.8%	1.8%	0.0%	74.5%	1.8%	1.8%	18.2%	100%
NH	0.0%	0.0%	0.0%	5.9%	0.0%	61.8%	5.9%	0.0%	26.5%	100%
NJ	9.2%	5.3%	0.0%	1.3%	23.7%	47.4%	0.0%	6.6%	6.6%	100%
NM	0.0%	4.4%	0.0%	2.9%	0.0%	60.3%	8.8%	1.5%	22.1%	100%
NY	13.8%	12.0%	0.0%	0.3%	10.4%	52.1%	1.2%	5.5%	4.6%	100%
NC	5.0%	6.1%	0.3%	1.2%	6.4%	37.4%	6.7%	5.6%	31.3%	100%
ND	0.7%	2.8%	0.0%	0.0%	0.7%	91.0%	0.0%	0.0%	4.9%	100%
MP	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100%
OH	8.9%	8.0%	0.9%	3.0%	3.3%	57.6%	3.0%	9.5%	5.9%	100%
OK	2.4%	22.1%	1.6%	0.0%	0.0%	51.8%	2.8%	3.2%	16.2%	100%
OR	0.4%	0.0%	0.0%	0.4%	38.5%	41.0%	0.7%	9.9%	9.2%	100%
PA	26.5%	11.0%	0.0%	0.4%	0.7%	44.2%	0.7%	6.7%	9.9%	100%
PR	9.5%	0.0%	0.0%	0.0%	0.0%	81.0%	9.5%	0.0%	0.0%	100%
RI	9.7%	1.6%	0.0%	0.0%	4.8%	58.1%	0.0%	21.0%	4.8%	100%
SC	0.0%	4.8%	0.0%	1.2%	1.8%	52.4%	4.8%	13.1%	22.0%	100%
SD	0.0%	0.0%	0.0%	0.0%	0.0%	70.6%	2.0%	0.0%	27.5%	100%
TN	0.0%	22.3%	0.4%	1.7%	2.9%	55.8%	5.8%	2.5%	8.7%	100%
TX	0.0%	7.3%	1.3%	2.7%	2.7%	63.1%	10.3%	6.3%	6.3%	100%
UT	3.4%	2.5%	0.0%	2.5%	5.0%	46.2%	8.4%	10.9%	21.0%	100%
VT	12.3%	4.6%	0.0%	0.0%	1.5%	67.7%	3.1%	0.0%	10.8%	100%
VI	0.0%	0.0%	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	100%
VA	0.0%	0.0%	1.0%	5.7%	28.6%	42.9%	10.5%	10.5%	1.0%	100%
WA	0.9%	3.3%	0.9%	3.3%	3.3%	54.9%	5.6%	8.4%	19.5%	100%
WV	18.5%	19.3%	0.0%	1.5%	0.0%	45.9%	3.7%	2.2%	8.9%	100%
WI	1.9%	10.4%	0.5%	0.0%	22.5%	50.1%	4.1%	2.2%	8.2%	100%
WY	4.6%	0.0%	0.0%	0.0%	16.9%	52.3%	1.5%	4.6%	20.0%	100%

SOURCE: (Dowell, 2012).

the Iowa Transportation Commission directly funded freight rail projects, in essence accelerating four projects into construction.

In some cases, state officials noted that longer-term economic benefits from project investment was an important consideration, and that adding capacity and enhancing network connectivity became a focus of many projects. In Texas, an important factor was the amount of financial leverage ARRA investment would bring to the program through the investment of state and local dollars in transportation over and above the ARRA funding.

In almost all cases, Transportation Enhancement (TE) funding followed the normal process for allocating such funds. TE funding is apportioned to the states by formula, based on amounts made available from the STP. The normal apportionment is 10% of the sum of STP funds for a state after some adjustments. TE funds can be used for such projects as pedestrian and bicycle facilities, education programs for pedestrians and bicyclists, scenic or historic sites, historic highways, landscaping, and historic preservation, etc.

A wide range of transit projects were selected, from bus replacements and intercity bus enhancement to facility modernization, where the amount of funding to recipients was determined via grant formula. In these cases, transit agencies were the major player in determining priorities. In Texas, for example, where the focus was on rural intercity bus improvement, 38 service providers were involved in the prioritization process. The sense of most transit officials is that ARRA allowed agencies to catch up on asset management backlogs (in Texas, 2,000 vehicles were purchased statewide where prior to ARRA the expenditures allowed only 45 vehicles to be purchased annually).

Aviation projects primarily focused on runway and taxiway rehabilitation. Many of those interviewed did not know how the projects were selected, although most believed that the Federal Aviation Administration (FAA) was the final decision maker. This reflected the normal process for FAA-funded projects.

An interesting aspect of the ARRA state and local decision-making process was the extent to which any formal analysis preceded the project selection process. In some cases, that is, where such systems existed, asset management systems (such as PMSs or public transit management systems) were used to identify project candidates, and in others a formal analysis approach was used to assign weights to different types of projects. Such was the case in Texas where weighted scores, geographical distribution considerations and relative contribution to the state's gross domestic product or population were factors considered in final priorities. In most cases, the level of analysis that preceded ARRA project determination was related to the level to which a state had been using such tools before ARRA.

In some cases, delays were encountered because legislative approval was required to allow the state DOT to work on ARRA projects. The ARRA deadlines presented special challenges for those states caught in between legislative sessions for obtaining such approval. This reflects the fact that many state DOT work programs and expenditures of dollars are subject to the approval of the state legislature. In most cases, a legislature approves a multiyear work–budget program that allows state transportation officials to allocate funds to different aspects of a state DOT's program…planning, engineering, construction, and operations–maintenance. Several state DOTs found themselves in a bind when ARRA funds became available but they did not have legislative approval to work on the program.

With respect to the desirability of a backlog or shelf of projects waiting for funding to become available, most state officials thought this was a good idea. In fact, many of those interviewed felt that ARRA used up the existing backlog and that inadequate engineering design

funding existed to replenish the list. In one state, the DOT has hired additional consultants to prepare designs for future projects given that many of the backlogged projects have now been funded. In another state, however, the existence of a backlog was considered impractical simply because of the lack of engineering design dollars to produce the designs. The uncertainty surrounding the reauthorization of the federal transportation law has resulted in states being fairly conservative in furthering project design, and thus limiting the number of projects that could be "shovel ready." As noted by many, there are numerous reasons why project schedules slip or why funding suddenly is not available for a project. Having such a revolving "backlog" is considered a desirable feature of responding to stimulus-type programs. The only exception to this conclusion related to transit projects where some felt that small (usually rural) operators do not have the resources to develop projects to "shovel ready" status.

Influence of ARRA Program Requirements on Decision Making and Priorities

As could be inferred from the previous section, the ARRA program requirements had a strong influence on the types of projects selected and thus most likely the ultimate economic impact of the program. As one state DOT official noted, "the requirements drove everything." The project eligibility requirements were very influential; the TIGER program was considered more flexible by those states that received TIGER projects (see Appendix B). This does not mean that state DOTs prefer a discretionary grant program versus a formula-based program. Simply, there was a sense that TIGER projects, once selected, provided an easier institutional structure to navigate through as compared to other ARRA programs.

The most influential requirement pointed to by all was the obligation timing restriction. This restriction in essence forced states to choose projects that could be started within the statutorily required time frame, not necessarily the ones having the most significant economic benefit. This obligation timeframe was substantially shorter than that for normal federal highway programs—27 months from the beginning of ARRA versus 48 months in a normal federal aid program. As one state official noted, the non-state DOT involvement with project prioritization was most easily described as the state DOT simply presenting what they could do to meet the requirements, and then asking, "do you concur?" Each state concluded that the types of projects chosen would have been very different if the time constraint had not been part of the program requirements. As one state suggested, there would have been more of the larger scale, economic impact-oriented projects with additional flexibility (although some groups felt that those states that did attempt to put more resources into such projects did so at the expense of the needs backlog facing the state) (SmartGrowth, 2009).

Another influential program requirement pointed to by each of the states was the need to have projects in each economically depressed area of the state. One state noted that one county was very poor and thus met the economically depressed definition, and yet had so few people that projects constructed in that county did not in any way provide the most economically beneficial use of the ARRA funds.

The biggest burden to those administering the ARRA program was the reporting requirements, and the changing definition of jobs created. This latter became an issue to some states in that the reporting requirements for jobs created had been built into construction contracts, and then had to be changed when the federal definition changed. As noted by Dowell (2012), changing definitions also created several problems with regard to data analysis:

- Data Availability. Because of adjustments in reporting requirements and guidance, Section 1512 data reported in 2009 were not comparable to data reported after January 1, 2010.
- Data Consistency. The method and units of analysis for reported jobs numbers varied between sources and appeared to be a source of public confusion.
- Data Accuracy. Nearly every review and audit of reported data has revealed inconsistencies and inaccuracies. Oftentimes projects were reported with zero expenditures and significant jobs numbers or vice versa.
- Data Impact. The employment effects of expenditures to date may be muted as funds directed to highway programs have been used primarily for pavement improvement projects, and public transportation funds used primarily for upgrading facilities and bus fleets.

There was some sense that the federal agencies themselves were learning about the program as time went by and that in some sense they were "inventing" program implementation requirements depending on which federal agency had produced its latest finding on desired data reporting. As noted by one state DOT official, "one federal agency was still changing the definition of a key reporting term even after 98% of the funds had been allocated." In addition, the multiple reporting agencies—OMB, U.S. DOT, and the House Transportation and Infrastructure Committee, each having different reporting formats—added to the administrative burden associated with the program (Appendix C shows the reporting requirements as listed by the Iowa DOT).

The maintenance of effort requirement in general was viewed differently by those who had difficulty in showing compliance versus those who did not. There was a sense that the requirement was not applied consistently across the states, that is, that the FHWA Division Offices seemed to show varying degrees of flexibility from one state to another. Some states, and most likely those caught in interpretation debates with federal agencies, expressed a great deal of frustration with the implementation of the maintenance of effort requirement. As noted by one state DOT official, when future capital programs are dependent on user fee revenues, and given economic uncertainties on what these user revenues might be, how can one be expected to certify the maintenance of historical expenditures?

The important question with respect to maintenance of effort is whether establishing a baseline reference for expenditures did result in states spending over and above what they ordinarily would have. Or put another way, did it discourage states and local governments from simply substituting federal dollars for what would have been state or local expenditures? The evidence from the state expenditures for transportation for those states contacted indicates that ARRA funding did represent a boost above the normal state expenditures for transportation. Even those state officials who had problems with how maintenance of effort was implemented agreed with the general principle that some mechanism had to be in place to assure that additional funding for transportation did occur.

Other observations that merit attention include one state noting that if a project's cost or bid came in under the budget, the extra funding could not be reallocated to other projects (it was suggested that the additional dollars should be allowed for use on similar types of projects elsewhere in the state). The NEPA and planning process requirements caused delays in many cases, and in fact led to good projects not being selected because they could not satisfy the requirements in time.

Several states noted that the ARRA response and the urgency in responding resulted in some benefit to the agency, this primarily being the ability to speed up contract delivery. In some cases, the procedures and processes used have now been incorporated into the standard operating procedures of the agency for normal project development activities.

Influence of the U.S. DOT Programmatic and Institutional Structure on Decision Making and Priorities

Given that the structure of the ARRA transportation program was based on existing federal programs, normal programmatic procedures and institutional relationships prevailed during the state response. Most state officials agreed that this use of the existing federal program structure was the best way of distributing stimulus funds simply because most everyone was familiar with the key elements and steps of how to implement projects. And given that most states chose projects they knew they could deliver, the program structure was geared to putting such projects in place as quickly as possible.

However, states differed in their opinion of how consistent federal agencies were in guidance and direction. Some states felt their FHWA Division Offices were very helpful and consistent throughout the response. Others thought the Division Office position on particular issues was contrary to statements coming from FHWA headquarters. There were also varying opinions on the effectiveness of different modal agencies in providing a consistent voice with respect to guidance. For example, the FA) was viewed as a process by itself, with FAA officials determining which projects were going to be funded. Of interest, FRA's ARRA rail program was a new program; nothing like it existed prior to ARRA. Because of the relative newness of this program, state officials noted that there was a lot more confusion and need for additional information on what was required to expend ARRA dollars for rail projects.

As noted previously, the changing definitions of "jobs created" and "economically distressed area" were an irritant to those responsible for program implementation.

Respondents' Recommended Actions to Improve Future Stimulus Programs

Not surprisingly, most of the state DOT officials recommended that the states be given more flexibility in choosing ARRA-type projects that meet national goals, the logic being that the states are much more familiar with project purpose and status. In particular, some states argued that the level of funding provided for local communities might not have been the best use of the funds. Local governments were less prepared to implement projects quickly and presented difficulties in showing compliance. Many states recommended that the best approach would have been to provide states flexibility in project selection, but subject to federally defined performance metrics (one could argue that in many ways the performance metrics, i.e., jobs created, was an attempt to provide federally stipulated performance measures). In a note of exasperation, one state DOT official noted that transportation was viewed simply as a federal expense, and not as an investment…"we lost the high ground when transportation investment was viewed simply as generating construction jobs."

Every state liked the idea of using the existing federal aid structure as the means of distributing stimulus funds, although there was no agreement as to the effectiveness of dedicating funds to some of the federal programs (e.g., TE program). The sense was that using the federal

aid structure, which both the federal oversight and state agencies were very familiar with, saved a lot of time and shortened the learning curve for both parties.

Almost every state liked the idea of having some dollars dedicated to "stimulus" or economic recovery projects, which were defined as short term and having immediate job-creating and job-maintaining impacts. They realized that along with such a stimulus program would likely come the more stringent rules to target investment on job-creating or maintaining investment. In addition, however, the states also recommended that separate funds be provided for economic development projects, which provided a longer-term investment in the transportation system and its ability to foster economic growth. Such a program would be more flexibly defined (in terms of requirements and constraints). As one state noted, the best projects for investing in economic benefits will likely be those that provide better connections and improved access to economic generators. These types of projects are not likely going to be "shovel ready" in a period of time measured in months.

Every state recommended that a longer timeframe be allowed for getting projects obligated. The states understand the need to get program dollars into the economy, but there was a sense that the very short-term obligation deadline severely restricted the selection of projects that most likely would have been better for the economy.

With respect to having a backlog or "shelf of projects" ready to go if extra funding became available, most states agreed that having such a capacity is desirable and in fact many have projects that are waiting for such a funding opportunity. In those states that had such a backlog, ARRA used up the capacity and state officials are worrying about how to fill it back up again. Several noted that in the absence of funding for engineering design, it is very difficult to do so, although one state mentioned that it had entered into new design consultant contracts to do exactly this.

The most important changes that state officials recommended for future transportation programs aimed at achieving the greatest economic stimulus effect were, in order of mentioning,

1. Select projects on the basis of greatest economic impact; do not artificially constrain the selection with requirements for economically depressed designation and geographic balance. This might entail adopting a more systems perspective in choosing projects because of the interconnection with, and mutual benefits between, transportation projects and other components of the transportation network.
2. The level of reporting to different federal agencies was unnecessarily burdensome. The desire to show transparency and accountability was considered admirable, and no one objected to this goal. However, the different organizations involved with the reporting of progress, and the differing definitions of key terms over the early stages of program implementation, created confusion and, in the eyes of many, inefficient utilization of staff resources.
3. Allow flexibility in moving dollars around. All ARRA funding had to be obligated by September 30, 2010, and there was no ability to move dollars around after the obligation. There was a sense in some states that dollars will lapse because of this inflexibility.
4. Allow a longer period of time for those projects that will have a strong economic impact, but which cannot be implemented in a short time frame.
5. Relax the process requirements if the goal is to get projects implemented quickly. The Transportation Improvement Program–State Transportation Improvement Program (TIP–

STIP), environmental impact, and cultural resource requirements were pointed to in particular as constraints in getting the right projects implemented.

With respect to one state's concern about the environmental requirements, officials suggested that the categorical exclusion program be expanded to include projects that have strong economic impacts when a stimulus-type program is implemented. More flexibility for right-of-way clearances and utility approvals was also desired.

6. Make engineering design eligible for stimulus dollars, which will allow projects that might not be implemented in the short timeframe be expedited as part of the normal investment program. Under normal federal aid procedures, federal dollars can be used for project design, although projects so designed must be forwarded to funding obligation with 10 years. Given the uncertainty associated with federal aid to highways, many states are being conservative in using federal dollars in such a manner.

On the positive side, as noted by one state DOT official, what often gets lost in the rhetoric of the stimulus package is that it was very successful in delivering projects quickly, although the structure of the program did not likely produce the portfolio of projects that provided the most economic benefit. In addition, a recent National Cooperative Highway Research Program (NCHRP) Synthesis report identified other positive outcomes from the stimulus program in terms of process and organizational effectiveness (McCarthy, Mensching and Horgan, 2011). For example, Florida saw benefits in streamlining the local transportation program through the use of design–build contracts in local resurfacing projects and the development of a boilerplate request for proposals document that can be used for federally funded projects. One Florida DOT district office developed a project management database that served as a prototype for other program management functions. In Ohio, the Synthesis reported that project streamlining benefits also occurred when multiple ARRA projects were bundled under three environmental documents, thus saving a significant amount of time in project implementation. The Ohio DOT "clearly defined guidelines for local agencies on what types of project characteristics could be eligible for grouping under a single environmental document. The types of projects included edge-of-pavement–edge-of-pavement resurfacing, video detection systems, solar-powered school crossing sign installations, and upgrade of overhead right-turn lane signs to comply with new design standards. The defining characteristic of all of these projects was that they included no significant environmental impacts and qualified as programmatic categorical exclusions (CEs)." Ohio DOT officials estimated that its strategy resulted in a cost savings of $300,000 to $500,000 and time savings of between 8 and 10 months.

LESSONS FOR A FUTURE STIMULUS PACKAGE

Investment in the nation's transportation system since the earliest days has been tied to national connectivity and fostering a strong national economy. It is not unusual then that a national government would turn to public works investment as a means of stimulating an economy. In most cases, public works projects are labor intensive and utilize resources whose economic effects can reverberate throughout the economy. It seems likely therefore that transportation investment will once again be viewed as an economic stimulus by national policy makers at some future date when the economy needs a "shot in the arm." What can be learned from the transportation experience with ARRA that can inform future stimulus programs?

1. *Stimulus programs should use the existing federal program structure for distributing stimulus funds in that it expedites the allocation of dollars to recipients in a way that reduces confusion and shortens the learning curve.*

Any new federal funding program usually has associated with it a period of time in which rules and regulations are promulgated and the basic characteristics of the program are disseminated to potential grant recipients. ARRA-type programs, however, have very short timeframes for producing results. Using existing institutional mechanisms and structures for distributing program funds, mechanisms and structures with which recipients and oversight agencies are very familiar, is an effective strategy for program implementation. Each of the state DOTs interviewed for this study agreed with this approach.

2. *The USDOT has an important role to play in providing guidance on ARRA-like programs as a multimodal agency.*

In a multiple mode agency like the U.S. DOT, existing federal aid programs and their requirements differ from one modal administration to another, thus resulting in different responses and potentially different guidance on how to respond. This was seen in the ARRA program in which FHWA, FTA, FAA, and FRA each had responsibilities regarding ARRA-sponsored projects, and which resulted in some confusion when it came to providing consistent guidance on such things as reporting requirements and definitions of terms. In such a multiple modal agency program structure it would be appropriate for the U.S. DOT itself to have a strong presence in working through the different programmatic requirements and making sure that there was a consistent message emanating from the agency. It should be noted that U.S. DOT officials were not interviewed as part of this study, so there might very well have been efforts made to provide overall coordination. This recommendation is based on the perceptions of the state DOT officials who were interviewed.

3. *Stimulus programs should be performance-based but allow those most familiar with potential projects to choose priorities based on their understanding of which projects best meet the performance metrics.*

In many ways, the ARRA program was performance-based, except that the definition of the performance metrics was changing over time. A performance-oriented program, especially one aimed at economic development and jobs, which can be achieved in many different ways, is best implemented by those most familiar with what is available to achieve the performance metric(s). Geographic and economic status constraints placed on project selection tend to distort the overall economic value of a program, although they can serve distributional and equity concerns. As noted by many state DOT officials, the list of selected projects was heavily influenced by the obligation deadlines and other requirements. Each official noted that the list was most likely not the most effective set of projects given the goals of job creation or job maintenance, and that the inability of state DOTs in particular to identify the best projects from a longer economic benefit perspective given programmatic constraints created an investment program that was not well targeted on economic recovery and longer term stability.

4. *Stimulus programs should include both projects aimed at producing or maintaining jobs in the short term as well as expediting longer term economic investment projects.*

The main purpose of an economic stimulus package is to stimulate the economy in the quickest way possible, thus resulting in expenditures on projects or programs that can be implemented quickly and that show the greatest gain on the performance metric of most import---jobs. Transportation investment, however, is one that can have longer term economic benefits due to the enhancing network connectivity and improving activity access nature of transportation infrastructure improvements. One of the common themes of state DOT response to the study questions was that bette" projects would have been selected if only more time had been allowed for funds obligation. In all cases, better was defined as being projects that provided enhanced capacity for handling future passenger and freight flows or which removed current bottlenecks, and which consequently provided much greater economic benefit than pavement preservation. No specific percentage was provided on the balance between stimulus and economic investment projects, but simply that some ability to invest in the long term was a desirable feature of any federal program to improve economic conditions.

5. *Part of the stimulus program should be aimed at putting in place the engineering and project plans for longer term, economic development-oriented projects.*

Many state DOT officials indicated that some very important projects from the perspective of economic impact were not selected because of lack of design funding (although they readily agreed that given time constraints it was unlikely that the projects would have been available within the obligation constraints anyway). In addition, many state backlogs are now much reduced with the state DOT having difficulty undertaking the engineering design necessary to get projects "back on the shelf." Some portion of stimulus funds being used for putting the final design in place for longer lasting economically beneficial projects would seem to be a reasonable expenditure for funds that are aimed at fostering economic benefits. In addition, as one state DOT official noted, "creating or maintaining jobs for design engineers who produce the designs for economic investment projects is also a job creation/maintenance outcome."

6. *Flexibility in the use of stimulus funds provides a better opportunity to obtain the best economic return on investment.*

Although perhaps only an issue at the margin of overall investment, the constraints and limitations on redistributing and redirecting ARRA funds to other projects in a state when circumstances dictate results in limiting the overall economic impact of federal investment. Several state DOTs noted that in some cases project bids came in under the estimated costs, and that the state was not allowed to reallocate these dollars to other projects in the state. Assuming that projects similar to the one funded could still be undertaken within a specified timeframe, such funds should be allowed to be redistributed, and given conclusion number 2 above, at the initiative of the state DOT with concurrence of the appropriate federal agency.

7. *Any federal program aimed at quick turn-around results should rely on consistent messages and communication channels.*

It is usually challenging enough when short implementation timeframes characterize expected program response, but this challenge becomes even greater when many different agencies are involved with a program to assure transparency and accountability through progress reporting, but in the process create confusion. Every state DOT participating in this study pointed to multiple reporting organizations, differing report formats and schedules and varying definitions of key terms that characterized program implementation. This interest in reporting on program progress is explained by the intense scrutiny and pressure brought to the program by numerous political and agency interests, each wanting to assure the public that stimulus dollars were indeed being used to stimulate the economy. However, there seemed to be very little coordination in making sure the messages were consistent and the burden on reporting agencies minimized…if anything, the changing reporting initiatives were viewed by many state DOTs as federal organizations simply indicating that their reporting scheme provided the more important program information.

Presumably, the various federal organizations that were involved in progress reporting have come to terms with the value associated with the different measures adopted in their reporting schemes. It would be appropriate for these organizations to develop a consistent set of economic impact measures that could be used by transportation agencies not only in time of great economic need, but which can also be used for normal measurement of economic benefits of transportation system performance.

8. *AMSs were important tools in helping states identify quickly those projects that presented the greatest need and that reduced the state's backlog of projects, all be they projects that tended to focus on asset preservation.*

For those states that focused on preservation projects, which included most, the existence of an AMS, e.g., PMS, maintenance management system, bridge management system, public transit asset management system, provided a systematic process for identifying where the greatest needs were in the transportation system. In other words, jobs created or maintained would be the same no matter where the investment for similar types of projects occurred, and asset management systems could be used to target this investment where the most need was. The recommendation relating to this observation is not so much focused on ARRA-type program implementation as it is to programmatic focus in the normal federal aid program.

Performance-based asset management is a concept that should be fostered and encouraged as part of any transportation investment program, especially those supported by federal dollars (stewardship of taxpayer investment). Not only is such a concept valuable in identifying the best investment opportunities in a normal investment environment, but they become even more valuable when decisions must be made to prioritize projects in a very short time frame. The inventory data exists in asset management systems to pick and define those projects that will provide the greatest infrastructure value for the dollar invested. Such a system performance management perspective is one that should be encouraged through exchange of best practice as well as in federal programmatic requirements for federally aided assets.

CONCLUSIONS

The conclusions and observations in this study are based on only a sample of states and on the limited literature available on ARRA response. However, no matter what the characteristics of the state—big–small, urban–rural, dollars allocated—there were consistent responses to the survey questions. There was an overall consensus among all of the states participating in the study that the ARRA investment in the transportation system was important, and in most cases allowed states to "make a dent" in preservation backlogs. However, there was also an overall consensus that ARRA investment could have been better targeted if several of the constraints had been lifted, and that the perceived "learn as you go" approach from federal oversight agencies was burdensome.

As noted previously, many states found new and innovative ways to speed up project delivery that has lasted beyond ARRA implementation, an ARRA legacy, if you will. Another legacy of ARRA implementation in the transportation sector will hopefully be the lessons learned from the most recent experience and considered as part of program structure if or when a transportation-oriented stimulus package is adopted at some point in the future.

REFERENCES

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APPENDIX A

Survey Instrument

Impact on Decision Making *(Note: these questions were asked for different modal funding categories)*

1. In general, how would you describe the types of projects funded by ARRA in our state?
2. How were the projects selected for ARRA funding? Who were the key decision makers? Short- and long-term economic impact was the primary goal of the program. What other goals were implicit or explicit in the selection process?
3. To what degree did other agencies (MPOs, RPOs, transit agencies, local governments, etc.) participate in the ARRA decision-making process?
4. To what extent did ARRA affect your state's transportation spending priorities? Did it undertake projects that would not have been undertaken? Or did it simply speed up the project from "out" years?
5. Did you have any ARRA projects from competitive grant programs (TIGER or passenger rail)? If so, how did ARRA affect spending priorities with respect to these types of projects?
6. How practical would it be of maintaining a "shelf" or backlog of projects that could be started quickly and would have high value as stimulus and long-term economic value? How would this affect the normal prioritization process?

Influence of Program Requirements on Decision Making and Priorities

7. To what extent did ARRA rules have an impact on the types and mix of projects selected? Are there specific aspects of these rules or their interpretation by federal agencies that were particularly influential?
8. If these aspects had been differently applied or defined, how would this have affected the mix of projects selected and ultimately the stimulus benefits associated with the projects?
9. Identify the three least constructive regulatory burdens connected with participation in ARRA. What administrative relief might have speeded up completion of ARRA projects or reduced costs. And what are possible negative effects of the proposed relief?
10. How was the ARRA maintenance of effort requirement considered with respect to your agency's response to ARRA? How did you meet this requirement? What, if any, impact did it have on program delivery?

Influence of Federal Institutional Structure on Decision Making and Priorities

11. To what extent were federal agencies consistent in their guidance on ARRA program implementation…both internally to one agency and among agencies?
12. To what extent does the "business-as-usual" structure of federal and state transportation programs hinder the effectiveness of transportation spending as stimulus?

Recommendations

13. The ARRA program had two primary purposes—stimulus and recovery. How should one strike a balance between the two when transportation-related programs are developed to meet these purposes? For example, should some funds be reserved for investment in projects that have long-term economic benefits instead of immediate job protection or creation?

14. Ideally, how should a federal transportation stimulus program be structured?

15. What are the three most important changes you would recommend to future transportation programs to achieve the maximum economic stimulus effect?

16. Other recommendations?

APPENDIX B

TIGER Grants as of February, 2010

Project Name	State(s)	TIGER Grant Amount
Crescent Corridor Intermodal Freight Rail Project	TN, AL	$105,000,000
CREATE Program Projects	IL	$100,000,000
National Gateway Freight Rail Corridor	OH, PA, WV,	$98,000,000
Moynihan Station, Phase 1	NY	$83,000,000
Tucson Modern Streetcar	AZ	$63,000,000
Priority Bus Transit in the National Capital Region	DC, VA, MD	$58,838,000
Fitchburg Commuter Rail Extension and Wachusett Station	MA	$55,500,000
Kansas City Transit Corridors and Green Impact Zone Project	MO, KS	$50,000,000
I-244 Multimodal Bridge Replacement	OK	$49,480,000
Doyle Drive Replacement	CA	$46,000,000
New Orleans Streetcar–Union Passenger Terminal–Loyola Loop	LA	$45,000,000
Saint Paul Union Depot Multimodal Transit and Transportation Hub	MN	$35,000,000
US-395 North Spokane Corridor–Francis Avenue to Farwell Road Southbound	WA	$35,000,000
Sahara Avenue Bus Rapid Transit	NV	$34,400,000
Alameda Corridor East: Colton Crossing	CA	$33,800,000
US-491 Safety Improvements	NM	$31,000,000
Black River Bridge Replacement	MI	$30,000,000
California Green Trade Corridor–Marine Highway Project	CA	$30,000,000
Mercer Corridor Redevelopment	WA	$30,000,000
M1–Woodward Avenue Light Rail Project	MI	$25,000,000
Reconstruction of Pier 29 in Honolulu Harbor	HI	$24,500,000
Portland's Innovation Quadrant–SW Moody Street and Streetcar Reconstruction	OR	$23,203,988
Philadelphia Area Pedestrian and Bicycle Network	PA, NJ	$23,000,000
Downtown Dallas Streetcar	TX	$23,000,000

Project Name	State(s)	TIGER Grant Amount
Quonset Wind Energy and Surface Transportation Project	RI	$22,300,000
Normal Multimodal Transportation Center	IL	$22,000,000
Park East Corridor Lift Bridges	WI	$21,500,000
Indianapolis Bicycle and Pedestrian Network	IN	$20,500,000
Otay Mesa Port-of-Entry I-805/SR-905 Interchange	CA	$20,200,000
Revere Transit Facility and Streetscape	MA	$20,000,000
Fast Track New Bedford	MA	$20,000,000
Port of Gulfport Rail Improvements	MS	$20,000,000
Texas State Highway 161	TX	$20,000,000
Milton–Madison Bridge Replacement	KY, IN	$20,000,000
Kent Central Gateway Multimodal Transit Facility	OH	$20,000,000
Appalachian Regional Short Line Rail Project	KY, WV, TN	$17,551,028
Revitalizing Maine's Ports	ME	$14,000,000
Lake County Transportation Connectivity Project	MT	$12,000,000
I-85 Corridor Improvement and Yadkin River Crossing	NC	$10,000,000
I-95 Interchange and Access Project	SC	$10,000,000
US-17 Septima Clark Parkway	SC	$10,000,000
Bella Vista Bypass	AR, MO	$10,000,000
Improvements to US-18	SD	$10,000,000
US-36 Managed Lanes–Bus Rapid Transit	CO	$10,000,000
Ames Intermodal Facility	IA	$8,463,000
The Southwestern Illinois Intermodal Freight Transportation Hub	IL	$6,000,000
Beartooth Highway Reconstruction Project	WY	$6,000,000
Millwork District Multimodal Improvements	IA	$5,600,000
Auke Bay Loading Facility	AK	$3,640,000
US-93–2nd Street Improvements	MT	$3,500,000
Burlington Waterfront North Project	VT	$3,150,000

SOURCE: U.S. DOT, Transportation Investment Generating Economic Recovery (TIGER) Grants, Washington D.C., Feb. 17.

APPENDIX C

Iowa Reporting Schedule, as of July 2011

Name of Report	Report Section	Report Document
Maintenance of Effort Certificate for U.S. DOT-Covered Programs under ARRA, July 7, 2011	1201	1201 Certification 070711 IA
Certification, Infrastructure investment (Highway Infrastructure Investment; Transit Capital Assistance; Fixed Guideway Infrastructure Investment; and Capital Investment Grants) has received full review and vetting required by law and chief executive accepts responsibility that the infrastructure investment is an appropriate use of taxpayer dollars, Feb. 16, 2010	1511	1511 Certification 021610 IA
U.S. House of Representatives Transportation and Infrastructure Committee Report for Highway Infrastructure Investment and Transit Capital Assistance, for the month of December 2009		Iowa Highway Infrastructure Investment and Transit Capital Assistance (Tables 1, 2, 3, and 4), submitted Jan. 20, 2009
U.S. House of Representatives Transportation and Infrastructure Committee Report for Highway Infrastructure Investment and Transit Capital Assistance, for the month of November 2009		Iowa Highway Infrastructure Investment and Transit Capital Assistance (Tables 1, 2, 3, and 4), submitted Dec. 21, 2009
U.S. House of Representatives Transportation and Infrastructure Committee Report for Highway Infrastructure Investment and Transit Capital Assistance, for the month of October 2009		Iowa Highway Infrastructure Investment and Transit Capital Assistance (Tables 1, 2, 3, and 4), submitted Nov. 20, 2009
U.S. House of Representatives Transportation and Infrastructure Committee Report for Highway Infrastructure Investment and Transit Capital Assistance, for the month of September 2009		Iowa Highway Infrastructure Investment and Transit Capital Assistance (Tables 1, 2, 3, and 4), submitted Sept. 30, 2009
Iowa Overview of the ARRA Progress		Report to Governor Culver, submitted October 14, 2009
FHWA Form 1587, Monthly Summary Employment Report, for the month of August 2009	1587	Form 1587, submitted September 20, 2009
U.S. House of Representatives Transportation and Infrastructure Committee Report for Highway Infrastructure Investment and Transit Capital Assistance, for the month of August 2009		Letter to the Chairman Oberstar Signed Memorandum Iowa EDA Documentation Iowa Highway Infrastructure Investment and Transit Capital Assistance (Tables 1, 2, 3, and 4) submitted September 18, 2009
FWHA Form 1585, Monthly Recipient Project Status Report, for the month of August 2009	1585	Form 1585, submitted September 14, 2009
U.S. House of Representatives Transportation and Infrastructure Committee Report for Highway Infrastructure Investment and Transit Capital Assistance, for the month of July 2009		Iowa Highway Infrastructure Investment and Transit Capital Assistance (Tables 1, 2, 3, and 4) submitted August 20, 2009
FHWA Form 1587, Monthly Summary Employment Report, for the month of July 2009	1587	Form 1587, submitted August 20, 2009
FWHA Form 1585, Monthly Recipient Project Status Report, for the month of July 2009	1585	Form 1585, submitted August 10, 2009

Name of Report	Report Section	Report Document
U.S. House of Representatives Transportation and Infrastructure Committee Report for Highway Infrastructure Investment and Transit Capital Assistance, for the month of June 2009		Iowa Highway Infrastructure Investment and Transit Capital Assistance (Tables 1, 2, 3, and 4) submitted July 20, 2009
Iowa Overview of the ARRA Progress		Report to Governor Culver , submitted July 21, 2009
FHWA Form 1587, Monthly Summary Employment Report, for the month of June 2009	1587	Form 1587, submitted July 20, 2009
FWHA Form 1585, Monthly Recipient Project Status Report, for the month of June 2009	1585	Form 1585, submitted July 8, 2009
FHWA Form 1587, Monthly Summary Employment Report, for the month of May 2009	1587	Form 1587, submitted June 15, 2009
U.S. House of Representatives Transportation and Infrastructure Committee Report for Highway Infrastructure Investment and Transit Capital Assistance, for the month of May 2009		Iowa Highway Infrastructure Investment and Transit Capital Assistance (Tables 1, 2, 3, and 4), submitted June 15, 2009
FWHA Form 1585, Monthly Recipient Project Status Report, for the month of May 2009	1585	Form 1585, submitted June 11, 2009
Revised Maintenance of Effort Certification for U.S. DOT-Covered Programs Under ARRA, May 22, 2009	1201	Letter of Certification Under Section 1201 of the Amercian Recovery and Reinvestment Act of 2009, From Iowa Governor Culver, May 22, 2009; and Attachment to Certification under Section 1201, submitted May 22, 2009
FHWA Form 1587, Monthly Summary Employment Report, for the month of April 2009	1587	Form 1587, submitted May 18, 2009
U.S. House of Representatives Transportation and Infrastructure Committee Report for Highway Infrastructure Investment and Transit Capital Assistance, for the month of April 2009		Iowa Highway Infrastructure Investment and Transit Capital Assistance (Tables 1, 2, 3, and 4), submitted May 18, 2009
FHWA Form 1586, Initial ARRA Project Plan, for the month of April 2009	1586	Form 1586, May 7, 2009
FWHA Form 1585, Monthly Recipient Project Status Report, for the month of April 2009	1585	Form 1585, submitted May 7, 2009
FHWA Form 1585, Monthly Recipient Project Status Report, for the month of March 2009	1585	Form 1585, submitted April 7, 2009
U.S. House of Representatives Transportation and Infrastructure Committee reports for Highway Infrastructure Investment and Transit Capital Assistance, April 3, 2009		Letter to the Chairman Oberstar Highway Infrastructure Investment Table 1: Aggregate Data, By Formula Program; Table 2: Project-Specific; and Table 3: Contact Person Transit Capital Assistance Table 1: Aggregate Date, By Formula Program and Table 3: Contact Person
FHWA Form 1587, Monthly Summary Employment Report, for the month of March 2009	1587	Form 1587, submitted April 17, 2009
Iowa Overview of the ARRA Progress		Report to Governor Culver , submitted April 14, 2009

Name of Report	Report Section	Report Document
FHWA Form 1586, Initial ARRA Project Plan, March 31, 2009. To view the locations of the local and state highway projects, visit the Google Map site or view the static printable map.	1586	1586
Maintenance of Effort Certification for U.S. DOT-Covered Programs Under ARRA, March 19, 2009	1201	1201 Certification 031909 IA
Certification, Accepting funds that will be used to create jobs and promote economic health, March 17, 2009	1607	1607 Certification Iowa 031709 IA
Certification, Infrastructure Investment (Highway Infrastructure Investment; Transit Capital Assistance; Fixed Guideway Infrastructure Investment; and Capital Investment Grants) has received full review and vetting required by law and chief executive accepts responsibility that the infrastructure investment is an appropriate use of taxpayer dollars, March 3, 2009	1511	1511 Certification 030309 IA

SOURCE: Iowa Department of Transportation, http://www.iowadot.gov/recovery/plans.htm