



**Fiscal impact on
The State of Ohio
from the planned
3C "Quick Start"
passenger rail service**

April 15, 2010



Executive Summary

In recent months, much work has been done by individuals, organizations, companies and agencies to identify the potential benefits of the planned introductory phase of passenger rail service between Cleveland, Columbus, Dayton and Cincinnati called the "3C 'Quick Start'." Identification of the potential benefits is essential to justify a public expenditure for any project; the 3C "Quick Start" rail project is no different.

The diverse benefits include newly created direct and spin-off temporary and permanent jobs, economic and productivity benefits, travel cost savings, increased consumer spending, enhanced freight rail services, reduced repairs to highway pavement and bridges and more.

However, no one has assessed the impact from these potential benefits on the fiscal standing of The State of Ohio, either from each individual benefit or from all of the benefits taken collectively.

This report will provide the assessment to learn how the annual, total financial benefits that are received by The State of Ohio measure up to the potential annual operating cost that the state could be expected to fund. The answer should allow Ohioans to better understand the net fiscal impact of 3C "Quick Start" on the state's budget. In short, this report shows the State of Ohio could see a positive net fiscal impact: an increase in annual revenues greater than the projected increase in annual costs.

While public agencies are non-profit, they often seek to conduct programs and projects that promote economic benefits in excess of their costs. Several of the benefits of 3C "Quick Start" are projected to individually achieve that goal; collectively their predicted total benefits are far in excess of the state's predicted total costs.

But the 3C "Quick Start" project is being held to a higher standard as critics contend the train service must pay for itself and not be a burden on the state's finances. Therefore, this assessment could also help to address questions of whether the State of Ohio can afford to financially support the passenger rail service, primarily through operating assistance.

All source material in this report has been released previously and often referred to as source information for other reports, news articles and commentaries both for and against the 3C "Quick Start" project. This time, the source material will be analyzed to determine budget offsets to the state's existing programs or services, as well as revenues generated to the state through the existing sales tax and income tax based on any increases in jobs, personal incomes and consumer spending resulting from 3C "Quick Start" passenger rail.

Overview

If the identified public benefits from the planned 3C "Quick Start" passenger rail service were taken together and subjected to state tax rates, budget offsets and other aspects of public finance, the rail service could create a fiscal benefit to The State of Ohio within a clearly defined range.

Additional fiscal benefits from 3C trains would be enjoyed by local governments, too. But these are more difficult to measure because of the large number of jurisdictions, variety of tax rates, numerous source budgets, etc. that are involved.

The low end of the range of total fiscal benefit to The State of Ohio reflects the first few years of service. The high end reflects The State of Ohio's total fiscal benefit after several years. The lag time in achieving all of the benefits is due mostly from the time it often takes for spin-off jobs to be created as a result of the presence and availability of new infrastructure.

Additional fiscal benefits from 3C trains would be enjoyed by local governments, too.

Another factor in the lag is that additional rail infrastructure enhancements are likely to be made to the 3C Corridor in later phases. For example, Positive Train Control advanced signal systems are required by federal law to be added to all passenger rail routes by 2015. This and other enhancements will likely increase the capacity of the rail infrastructure to handle even more rail freight and passenger traffic, thereby creating more jobs, more consumer spending and more budget offsets such as from reducing repair and maintenance costs to highway pavement and bridges.

Not all factors in the fiscal range are time-related, however. For example, projected travel cost savings by state employees vary by how conservative or aggressive agencies and department heads are in encouraging their employees to use the train. If a large number of state employees will use the train to reach meetings, seminars or hearings in other cities, then the savings to the state will be greater than if a small number of state employees use the 3C trains.

On the other hand, the cost to the State of Ohio from the operation of the 3C "Quick Start" passenger rail service is estimated to be as much as \$17 million per year but will likely be less because:

- ♦ The trains' faster start-to-stop initial average speeds of 45 mph vs. 39 mph that will attract more ridership with additional improvements achieved in later phases;
- ♦ A revised train schedule that increases Cleveland-Cincinnati daily round trips from two to three, increases annual ridership from 478,000 to 550,000 and enhances revenue without adding new train-miles or other operating costs;

- ◆ Competitively contracting out locomotive and railcar servicing, maintenance and major repairs, thereby reducing operating costs and scaling down the maintenance facility at Cleveland;
- ◆ Additional refinements and enhancements to the service will be identified as the final plan is developed by ODOT.

CMAQ could cut outlays of state funding to operate 3C trains to just \$3 million per year.

It should also be noted that ODOT will seek federal Congestion Mitigation/Air Quality (CMAQ) grants to pay 80 percent of the first three years of operating costs. **CMAQ could cut outlays of state funding to operate 3C trains to just \$3 million per year.**

The federal funds can be used to pay the operating costs for new-start rail and transit services only, and then only for the first three years. The states of Maine and North Carolina used CMAQ to pay 80 percent of the cost of operating new-start intercity passenger trains. Funding from the federal CMAQ program will go to an eligible applicant and will be spent regardless of whether Ohio taps the funding for 3C trains or not.

The Fiscal Benefit

Based on the tax revenues and budget offsets from the 3C "Quick Start" passenger rail's identified public benefits, **the State of Ohio could see annual fiscal benefits rising to \$31 million in the fifth year of the 3C train service** (see Table 1).

The State of Ohio could see annual fiscal benefits rising to \$31 million in the fifth year of the 3C train service.

This does not take into account the federal CMAQ grants which will allow ODOT to produce a much more positive net fiscal impact on the state's budget in the first three years of operating 3C trains.

In Table 2, it shows the approximate annual net fiscal impact on the State of Ohio (mostly the general fund). This does include the federal CMAQ grants.

In other words, after two years of construction and five years of the service being operational – after the federal CMAQ operating grants expire and the economic spin-off begins to mature – the State of Ohio should see a cumulative positive net fiscal impact of about \$67 million. This represents the total added revenues and budget offsets in excess of added train operating costs from the first seven years after the first shovel of dirt is turned.

Details about the various 3C benefits cited below are provided in the appendices to this report. In summary, these benefits could be expected to provide these fiscal impacts on the state's budget:

\$6.1 million to \$7.3 million in annual sales tax revenue growth from a projected \$111 million in first-year new consumer activity growing to \$133 million after five years resulting from traveler savings from growing ridership on 3C trains (state sales tax of 5.5% to generate \$6.1 million to \$7.3 million in new revenues does not include growth in local sales tax revenues of \$1.1 million to \$2.5 million in the first year). See Appendix I for details.

\$5 million to \$10 million in annual budget offsets from state employees using the train instead of driving to conduct state business in the 3C Corridor (another \$800,000 to \$900,000 could be saved by local governments in travel costs per year). See Appendix II.

About \$600,000 per year in new income tax revenues in the first two years from 360 construction jobs (payroll: \$15,120,000) settling to **\$250,000 in subsequent years** from 144 operating jobs (payroll: \$6,048,000). Average construction/industrial wages in Ohio are about \$42,000 per year. Ohio's tax rate for that income bracket is 4.109% = \$621,280 in new state income tax revenues from construction and \$248,512 from operations. See Appendix III.

\$1.2 million to \$10.4 million per year in income tax revenue growth from 1,281 in new indirect jobs and \$34,261,626 in payroll (median Ohio income in 2009 was \$26,746) from a 3.5 construction multiplier, growing to 11,000 indirect jobs and \$294,206,000 in new payroll from rail service spin-off economic activity after five years of train service. Initial payroll of \$34,261,626 x 3.531% tax for the median income bracket generates \$1.2 million in state income tax revenues. Later payroll of \$294,206,000 from 11,000 indirect jobs = \$10,359,030 in added state tax revenues annually. See Appendix IV.

\$1.07 million to \$3.2 million per year in reduced pavement and bridge repairs to roads and highways saved by diverting truck traffic to rail freight as a result of rail infrastructure capacity enhancements. The range predicts that 3C "Quick Start" infrastructure improvements will increase rail freight traffic capacity in the 3C Corridor by 5%, with Positive Train Control added by 2015 increasing traffic capacity a total of 15%. See Appendix V.

TOTAL: \$14.5 million growing to \$31.15 million per year in tax revenue growth and budget offsets enjoyed by The State of Ohio over the first five years of 3C "Quick Start" operations.

Note: the 3C "Quick Start" benefits identified for this report also show a net fiscal benefit to local governments of \$1.9 million to \$3.4 million per year. Additional local fiscal impacts from benefits such as increased property values near stations or growth in municipal income tax revenues were not accounted for here.

The above numbers are rounded, and in many cases are rounded down even though they should have been rounded up to the nearest whole number.

TABLE 1
Escalation of Fiscal Benefits
From 3C "Quick Start" passenger rail
All numbers are in millions

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Ohio sales tax revenues from consumers			\$6.1	\$6.4	\$6.7	\$7.0	\$7.3
Annual budget offsets from state employees using 3C trains			\$5.0	\$6.25	\$7.5	\$8.75	\$10.0
Ohio income tax revenues from direct 3C jobs	\$0.6	\$0.6	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25
Ohio income tax revenues from indirect 3C jobs	\$1.2	\$1.2	\$2.08	\$4.16	\$6.24	\$8.32	\$10.4
Annual budget offsets from reduced road repairs			\$1.07	\$1.07	\$1.07	\$2.14	\$3.2
TOTALS	\$1.8	\$1.8	\$14.5	\$18.13	\$21.76	\$26.46	\$31.15

Notes:

1. Assumes 3C train service begins at the start of state Fiscal Year 2013.
2. Calculations were done via a modified straight-line method depending on the baseline data and if the benefits are due to begin during construction or after train service starts.

TABLE 2
Net Fiscal Impact on The State of Ohio
From 3C "Quick Start" passenger rail
All numbers are in millions

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
3C 'Quick Start' operating cost (assumes 3% inflation rate)			-\$17	-\$17.51	-\$18.04	-\$18.57	-\$19.13
Fiscal benefit to state (see prior table) from 3C trains	+\$1.8	+\$1.8	+\$14.5	+\$18.13	+\$21.76	+\$26.46	+\$31.15
Federal CMAQ grant to fund 80% of 3C operating cost			+\$13.6	+\$14.01	+\$14.43		
NET FISCAL IMPACT ON THE STATE OF OHIO	+\$1.8	+\$1.8	+\$11.1	+\$14.63	+\$18.15	+\$7.89	+\$12.02

**APPENDICES
SOURCE MATERIAL
FOR DATA ON FISCAL BENEFITS**

APPENDIX I



WILL OHIO'S CONSUMER ECONOMY GET A RETURN ON INVESTMENT FROM STATE OPERATING SUPPORT FOR 3C "QUICK START" TRAINS?

The answer is YES!!Why?

SUMMARY

Cleveland – Columbus – Cincinnati (3C) "Quick Start" passenger trains are slated to be the least expensive way of traveling in Ohio's most populous travel market. This report will demonstrate that Ohioans could end up saving more than \$36 million per year, or more than double the state's proposed contract with an operator to run the trains.

Ohioans will still be making trips in the Cleveland – Columbus – Cincinnati (3C) Corridor but for less money. Those savings, plus increased travel resulting from the 3C "Quick Start" trains, could stimulate additional consumer spending of \$111 million per year.

In other words, the annual economic benefit of 3C "Quick Start" would equal the estimated one-time start-up investment of up to \$517 million in less than 5 years, and exceed the combined start-up investment and cumulative annual operating contract payments in just 5½ years.

These impressive benefits do not include spin-off benefits such as from the construction and operation of the 3C "Quick Start" passenger rail service, or from the real estate developments and increased property values around stations. For example, the state of Maine invested less than \$100 million in its "Downeaster" train service which triggered over \$7 billion in additional construction investment, almost 7 million square feet of new commercial space and 18,000 new jobs.

OVERVIEW

Why will Ohio get an economic return from state operating support for 3C "Quick Start" trains? The answer is found in a series of calculations using readily available data. The first steps in determining the traveler benefit is to identify the average distance to be traveled by 3C Corridor rail travelers, the ridership and what the average train fare/mile would be. That needs to be measured against where the rail travelers will come from. Will they be former motorists, bus travelers, airline passengers or new travelers? What will the percentages of those diversions be? And, finally, what is the average cost/mile they're paying to use those other transportation modes?

AVERAGE DISTANCE TO BE TRAVELED ON 3C "QUICK START" TRAINS:

According to Amtrak's draft 3C "Quick Start" study released Sept. 15, 2009, its ridership modeling estimates that there would be 478,000 riders in the first year of service. This was used as the annual amount for purposes of conservatism, even though Amtrak predicts usage would grow to 600,000 in the fifth year of service. First-year revenues from passenger ticket sales are projected to be \$12 million.

Although Amtrak did not specify its fare structure in the 3C "Quick Start" study, a survey was conducted in August 2009 by starting the booking process using Amtrak's Web site. The survey was of Amtrak's corridor and long-distance, state-supported and system trains in the Midwest, such as Chicago to St. Louis, Cleveland to Chicago, Cincinnati to Chicago, Detroit and Kalamazoo to Chicago as well as other intermediate markets with advance purchases of two to four weeks. These are all rail services in travel markets very similar to the 3C Corridor. The survey revealed per-mile passenger fares of 8½ to 14 cents. The median fare was 11.25 cents per mile. To be conservative, All Aboard Ohio applied a higher average rail fare of 12 cents per mile.

Average distance traveled is derived by multiplying one year of ridership (478,000) by the average per-mile rail fare (12 cents), which equals 57360. Then divide 57360 by one year's worth of train revenues of \$12 million = 209.2 miles.

Thus, several of the key figures for use in this report are:

AVG. 3C RAIL FARE: 12 cents per mile

AVG. DISTANCE TO BE TRAVELED ON 3C TRAINS: 209 miles (rounded)

FIRST YEAR RIDERSHIP ON 3C TRAINS: 478,000 riders

MODAL DIVERSIONS*:

80% diverted from car
12% from bus
2% from air
6% new/induced travel

*SOURCE: *Above modal diversions are based on the Ohio Hub Study, 2005.*

DETERMINING AVERAGE FARES/COSTS:

The average fares and costs for the existing modes of transportation from which travelers would be diverted to 3C "Quick Start" trains are readily available. One of the most significant is the Internal Revenue Service's standard tax deduction for business travel by car. The IRS allows business travelers to deduct 55 cents per mile in 2009, which does not include parking costs. Driving costs include fuel, insurance, depreciation, maintenance, licensing, taxes and financing. All are vehicular costs that common-carrier transportation providers (railroads, airlines, bus companies) must also account for in their own operations.

Despite a common misconception, most of the costs of driving are not limited to gasoline purchases, nor are the non-fuel costs fixed (ie: incurred regardless of how much the vehicle is driven). Indeed, if Ohioans were offered better alternatives to driving, many households would not need to own more than one car. For low-income households, transportation is a greater expense than housing costs. Many low-income workers are forced to own cars so they can reach available, but low-paying jobs that are in low-density, car-dependent areas far from more densely developed, transit-friendly city centers.

The AAA estimates that the cost of driving is 54 cents per mile (See: www.aaaexchange.com/Assets/Files/200948913570.DrivingCosts2009.pdf) which includes parking. The AAA's estimate for 2009 is based on a mid-sized sedan being driven 15,000 miles per year. If the medium-sized car was driven 10,000 miles per year, the cost of driving would rise to 70.2 cents per mile. If driven more, such as 20,000 miles per year, the cost would drop to only 45.5 cents per mile. Since the IRS and AAA figures are only one-cent apart, and because the AAA figure includes parking costs while the IRS figure doesn't, All Aboard Ohio went with the IRS figure as a probable median driving cost that could include nominal parking costs.

Per-mile travel costs for bus and air were derived by starting the booking process for trips in the 3C Corridor at the Web sites of Greyhound and Delta Airlines.

Delta offers flights from Cincinnati to Columbus and Cleveland. Continental offers flights from its Cleveland hub to Columbus and Dayton. As noted earlier, the average trip distance on 3C "Quick Start" trains is estimated to be 209 miles – essentially the distance from Cleveland to Dayton. Continental Airlines' Cleveland-Dayton flights have a round-trip fare of \$719 (including taxes/fees), or about \$1.80 per mile. Meanwhile Delta Air Lines' flights from Cincinnati to Cleveland have a round-trip fare of \$388 (including taxes/fees), or about 76 cents per mile. The median of those two fares is \$1.26, rounded to \$1.30 per mile.

Greyhound, which carries about 300,000 travelers per year in the 3C Corridor despite overselling many buses and putting 3C travelers on standby, also presented some challenges in estimating fares. Greyhound has a wide variety of fare options, including some bargains. But because of overselling and Greyhound's unwillingness to add more scheduled buses in short-distance travel markets like 3C Corridor, Greyhound has instituted a priority seating option of an additional \$5 to every ticket. This is available only to passengers boarding at the busier terminals in Cleveland and Cincinnati. In this report, this priority fee was added to the Greyhound fare as it is the only way 3C bus travelers can guarantee they will get a seat on crowded 3C buses. The average bus fare was approximately 13.5 cents per mile.

3C CORRIDOR TRAVEL COST SUMMARY

Driving – 55 cents/mile (SOURCE: IRS 2009)

Bus – 13.5 cents/mile (SOURCE: Greyhound, August 2009)

Air – \$1.30 cents/mile (SOURCE: Delta & Continental airlines, August 2009)

Rail – 0.12 cents/mile (SOURCE: Amtrak, August 2009)

THE CALCULATIONS

Armed with the previously noted data, it was then possible to calculate the savings which travelers could enjoy by switching from car, bus or plane to train in the 3C Corridor. The following calculations are 3C rail ridership x portion of ridership diverted from each mode = diverted ridership x fare or cost per mile x average distance to be traveled on 3C trains. The calculations show the traveler benefits on a system basis rather than a personal basis. This is useful for policymakers to determine the appropriateness of the state's investment in building and purchasing passenger rail service.

3C rail ridership x portion of ridership diverted from each mode = diverted ridership x fare or cost per mile x average distance to be traveled on 3C trains = savings for passengers diverted from that mode.

**3C CORRIDOR
TRAVEL COST SAVINGS – SYSTEM BASIS**

Car	– 478,000 x 0.8 = 382,400 x \$0.55 per mile x 209 miles =	\$43,956,880
Bus	– 478,000 x 0.12 = 57,360 x \$0.135 per mile x 209 miles =	\$ 1,618,412
Air	– 478,000 x 0.02 = 9,560 x \$1.3 per mile x 209 miles =	<u>\$ 2,597,452</u>
	SUBTOTAL	\$48,172,744
	LESS PROJECTED TRAIN REVENUES	<u>\$12,000,000</u>
	TOTAL SAVINGS	\$36,172,744

Total annual projected Amtrak contract \$17,000,000

Ratio of state assistance to traveler savings = 1 to 2.12

In other words, Ohio travelers could save more than twice as much money by having the train service available than what the state might have to pay to Amtrak to provide the service.

Traveler savings resulting from the 3C Corridor trains was then measured against other state-supported passenger rail services to see how 3C compares.

Comparison of 3C Corridor with all other state-supported passenger rail services elsewhere in U.S.

States supporting intercity passenger rail services	Travel Corridor(s)	2008 Total travelers' savings per state	2008 state operating support for passenger rail	Ratio of state support to travelers' savings
California	Oakland-Bakersfield; Sacramento-San Jose; Santa Barbara-LA-San Diego;	\$148 million	\$76.6 million	1.9
Illinois	Chicago-Carbondale Chicago-Milwaukee Chicago-St. Louis Chicago-Quincy	\$69.8 million	\$28 million	2.5
Maine	Portland-Boston	\$6.4 million	\$7.2 million	0.9
Michigan	Grand Rapids-Chicago Port Huron-Chicago	\$17.6 million	\$6.1 million	2.9
Missouri	Kansas City-St. Louis	\$10.3 million	\$7.4 million	1.4
New York	New York City-Montreal	\$7.9 million	\$4.3 million	1.9
North Carolina	Charlotte-New York City Charlotte-Raleigh	\$29.4 million	\$4.9 million	5.9
OHIO	Cleveland-Columbus-Cincinnati	\$36.2 million	\$17 million	2.1
Oklahoma	Oklahoma City-Fort Worth	\$1.5 million	\$2.3 million	0.7
Oregon	Portland-Eugene	\$14.3 million	\$4.2 million	3.4
Pennsylvania	Philadelphia-Harrisburg	\$22.1 million	\$7.2 million	3.2
Texas	Fort Worth-Oklahoma City	\$1.5 million	\$2 million	0.8
Vermont	St. Albans-New York City Rutland-New York City	\$8.2 million	\$4 million	2.1
Washington	Vancouver BC-Seattle-Portland	\$14.3 million	\$11.2 million	1.3
Wisconsin	Milwaukee-Chicago	\$2.8 million	\$7.1 million	0.4

- Ridership, revenue and state operating support data from National Railroad Passenger Corp. Government Affairs, September 2008;
- Data on modal diversions to rail is from Ohio Hub Study 2005 (avg. 80% of trips are diverted from auto, 10% from bus, 4% from air, 6% new travel);
- Travel cost data for other modes is per IRS median driving deduction 2008 (divided by 1.2 occupants/car), Greyhound 2009, U.S. Air 2009, United Airlines 2009, American Airlines 2009, Southwest Airlines 2009, Alaskan Airlines 2009, Jet Blue 2009.
- NOTE1: Where states jointly support service, 50 percent of the traveler savings were shown in each state's row while the operating support amounts shown were NRPC's actual 2008 contract with each state;
- NOTE2: Ohio has more population density (267 people/square mile) than all but one of the other sponsoring states (New York has 382.4 people/square mile).

3C CORRIDOR TRAVEL COST SAVINGS – PERSONAL BASIS

Sample round-trip costs for travel on Sept. 16, 2009 for existing 3C "Quick Start" transportation:

Travel market	Miles (one-way)	Estimated rail fare*	Bus**	Air	Car*****
Cleveland, OH – Cincinnati, OH	250	\$42-\$70	\$47-\$93	\$388***	\$275
Columbus, OH – Cleveland, OH	135	\$23-\$38	\$24-\$54	\$723****	\$149
Columbus, OH – Cincinnati, OH	115	\$20-\$32	\$20-\$45	\$424***	\$138

- * 3C rail fares have not been determined. Estimates are based on existing Midwest rail fares of 8.5 to 14 cents per mile published on Aug. 16, 2009.
- ** Range of Greyhound & Lakefront bus fares published on Aug. 16, 2009
- *** Delta Airlines fares published on Aug. 16, 2009
- **** Continental Airlines fare published on Aug. 16, 2009
- ***** IRS allows 55 cents per mile deduction for business-related driving in 2009

But those numbers tell only part of the story of the systematic benefit. If new/induced travel is included, the numbers change more greatly in the train's favor. That's especially true when the economic impacts come into play. The Ohio Hub Study estimated that new/induced travel on Ohio's trains would represent about 6 percent of the total rail ridership.

TOTAL TRAVEL BENEFITS RESULTING FROM 3C "QUICK START"

Car	-- 478,000 x 0.8 = 382,400 x \$0.55 per mile x 209 miles =	\$43,956,880
Bus	-- 478,000 x 0.12 = 57,360 x \$0.135 per mile x 209 miles =	\$ 1,618,412
Air	-- 478,000 x 0.02 = 9,560 x \$1.3 per mile x 209 miles =	\$ 2,597,452
New	-- 478,000 x 0.06 = 28,680 x \$0.12 per mile x 209 miles =	<u>\$ 719,294</u>
	SUBTOTAL	\$48,892,038
	LESS PROJECTED TRAIN REVENUES	<u>\$12,000,000</u>
	TOTAL BENEFIT	\$36,892,038

Total annual projected Amtrak contract \$17,000,000

Ratio of state support to traveler savings + new travel = 1 to 2.17

Thus, for every \$1 in the state's annual purchase-of-service contract with Amtrak for operating 3C "Quick Start" service, the direct benefit which results is **\$2.17**

ECONOMIC BENEFITS FROM TRAVELER SAVINGS, INCREASED TRAVEL

The previously noted ratios do NOT include spin-off benefits such as from real estate developments around stations, increased property values or even spending by construction workers, station employees, on-board train employees, maintenance/servicing employees, etc.

Yet, that is still but a part of the story because economic multipliers come into play on the traveler benefits. When consumers can still achieve the same utility from a purchase (ie: a trip to another city) and do so for less money, they often spend most of it and invest the rest which creates more economic activity.

According to The Institute for Economic Democracy, the consumer expenditure multiplier may be 3.5. To account for a marginal propensity to save, and to apply conservatism in these estimates, a lesser multiplier of 3 was used in the calculation.

Thus, the \$17 million purchase-of-service contract with Amtrak produces \$37 million in traveler savings and increased travel affected by a consumer spending multiplier of 3 results in a ***total annual economic benefit of \$111 million.***

This annual economic benefit of 3C "Quick Start" would equal the start-up investment of \$517 million in less than 5 years, and exceed the combined start-up investment and cumulative annual operating contract in just 5 1/2 years.

Again, this doesn't include spin-off benefits such as from the construction and operation of the 3C "Quick Start" passenger rail service, or from the real estate developments and increased property values around stations.

APPENDIX II

Saving taxpayers' money I

Impacts of 3C Corridor passenger rail

State employee travel savings

All Aboard Ohio estimates the state could be much more fiscally responsible by having state employees take the train, where possible, on state business in the 3-C Corridor. Fortunately, most state office buildings are in downtown areas, near where train stations will be located. Today the options for state employees are to drive state motor pool vehicles or use their own cars and then expense the trip.

The Ohio Department of Administrative Services seeks to control escalating state motor pool costs as the expenses of owning and operating a car keep rising. At 54 cents per mile, AAA says it costs \$8,100 per year to own and operate a mid-sized sedan 15,000 miles annually. That's an increase from 41 cents per mile in 1995 and 49 cents in 2000 (for 2009 data, see: <http://www.aaaexchange.com/Assets/Files/200948913570.DrivingCosts2009.pdf>).

This summer, Ohio DAS increased the base cost of driving a state motor pool car from \$19.50 to \$20 per day, and the mileage cost by five cents per mile to 26 cents (see detail on next page). The 3-C Corridor is an effective way for the state to get those costs under control.

State employees, including staff at state universities, could reduce travel and overtime costs incurred by the state by \$204 per person-trip. Cost savings would come from the general revenue fund.

All Aboard Ohio has encouraged the state to use this cost savings to financially support the 3-C Corridor trains. This answers a question posed by some state legislators how the state expects to sustain 3-C Corridor operations over the long term. The state would have the incentive to continue to support train services, for without the trains the state would return to incurring higher costs.

All Aboard Ohio analyzed the costs of a state employee traveling in the 3-C Corridor. While cost data was provided from the Ohio Environmental Protection Agency (EPA), the data appears to be consistent among all state agencies.

Cost for a state employee to drive Cleveland - Columbus

Basic data used in calculations

Distance: ~140 miles (one way)
 Estimated travel time: 2.5 hours (one way)
 Estimated employee wages: \$25.00/hour (conservative estimate).
 Motor pool cost (based upon motor pool rates in use at Ohio EPA): \$20.00/day + 26 cents/mile + gas (recently increased from \$19.50/day + 21 cents/mile).
 Vehicle: Ford Taurus (or similar commonly used state vehicle) at an estimated 27 mpg.

Vehicle cost (At 280 miles round trip)

\$20 + 280 miles @ 26 cents/mile =	\$ 92.80
+10.37 gallons of gasoline @ \$2.50/gallon =	\$ 25.93
Sub-Total:	\$118.73

Employee cost

5 hours drive time @ \$25.00/hour =	\$125.00
Total:	\$243.73

Drive time is lost productivity because employees can't get work done while driving except perhaps phone calls which is not necessarily safe. However on a 3-C Corridor train, an employee can get work done such as phone calls, e-mail, conference calls, paperwork, etc.

Notes:

- \$ Employee costs do not include the potential for overtime.
- \$ Figures are based on an employee traveling alone.
- \$ Use of the train also reduces greenhouse-gas emissions.

State Motor Pool considerations:

Since all state offices and other destinations an employee may need to reach may not be located within walking distance or reasonable public transit distance from the train stations, the state vehicle motor pool could be reduced and re-configured to work intermodally with the 3-C Corridor trains. This would optimize the overall efficiency for many employee trips.

The state could have motor pool vehicles located at, or very close to the 3-C Corridor transportation centers in major cities (or establish a contract with a car-sharing company like ZipCar or CityWheels). This way an employee could take a train, get work done along the way, then quickly and easily pick up a car to complete his/her trip.

In the following conclusions, the average round-trip rail fare (Amtrak's average fares in the Midwest are 14 cents per mile) and local transit connection in the 3-C Corridor is assumed to be **\$40 per person**.

Conclusions:

+ If 50 state employees are driving per workday in the 3-C Corridor, that's \$3 million per year, less \$500,000 for rail fare.

State could save \$2.5 million per year.

+ If 100 state employees are driving per workday in the 3-C Corridor, that's \$6 million per year, less \$1 million for rail fare.

State could save \$5 million per year.

+ If 200 state employees are driving per workday in the 3-C Corridor, that's \$12 million per year, less \$2 million for rail fare.

State could save \$10 million per year.

It is likely that hundreds of state employees are driving every workday between the major cities of the 3-C Corridor. That assumption is based on the fact that the 3-C Corridor has two-thirds of the state's population and it has Ohio's capital city where most state government offices are located. The largest numbers of state employees are located in Ohio's other large cities. More state employees travel between the largest cities in the 3-C Corridor than anywhere else in Ohio.

According to the Department of Administrative Services, state agencies spent \$18.4 million for travel in 2008 (for cost details, see: http://www.das.ohio.gov/gsd/Fleet/pdf/FleetAnnualReport_FY2008.pdf). Two-thirds of \$18.4 million is \$12.27 million, which roughly equals the total projected state operating support for 3-C Corridor passenger trains.

Those estimates don't fully account for agencies and state universities reimbursing employees for travel in their own vehicles. The IRS in 2009 estimates the cost of driving at 55 cents per mile for business travel deduction purposes. Parking expenses aren't included in the IRS data. It is not known how large the reimbursed travel expenses are. But, as of 2007, the state is attempting to capture and track those costs through the required use of the Fleet credit card and the FleetOhio Management Information System.

APPENDIX IIA

Saving taxpayers' money II

Impacts of 3C Corridor passenger rail on local governments in Ohio's most populous travel market

Question: How much money could 3C Corridor trains save taxpayers of Ohio's local governments?

Answer: \$798,784 saved in the first year; \$4,234,923 saved over five years.

BACKGROUND

All local governments in Ohio have their employees make frequent trips to the state capital to conduct the business of those local governments. With the rare exception of trips made when four or more persons are traveling in the same vehicle, these trips would be much more affordable if made by train. The reason is that the 3C train is projected to have fares of between 8½ and 14 cents per trip while local governments typically pay the Internal Revenue Service rate for car trips. In 2009, that rate was 55 cents per mile.

Why do local governmental employees make frequent trips to Columbus? They do so to attend meetings of state boards and commissions, seminars, training, certification and more.

Since 7 million people, or nearly two-thirds of Ohio's 11.5 million residents, are in the 3C Corridor it is therefore likely that most of the local government travel to Columbus is coming from villages, townships, cities, school districts, various local boards (health, sewer, special education, transit, etc), counties and other local governments along the 3C Corridor. With the exception of travelers from Metro Columbus (1.8 million population), many local government employees within 20 miles of 3C Corridor stations are potential users of the planned rail service.

COLLECTING THE DATA

At the end of 2009, the Lorain County Community Alliance, a council of governments, conducted a survey of department heads in the Lorain County government to see how many of its employees, board members or others made

trips to Columbus to conduct the county's business. See the attached spreadsheet and county travel policy.

The answer was:

Lorain County employees made 207 trips to the state capital in 2009.

The department heads were also asked how many of those trips were made by someone driving alone or with fellow county employees (if so, how many passengers):

Driver-only trips: 155 trips (75% of total trips)

One passenger: 39 trips

Two passengers: 13 trips

Three or more passengers: 3 trips

Information was also gathered on the average rate of pay by county employees, and the per-mile travel rate to drive to/from Columbus. The hourly pay rate averaged \$25 per hour, which was calculated against an estimated round-trip travel time between Lorain County and Columbus of five hours.

Meanwhile the driving cost per mile was budgeted at the 2009 IRS rate of 55 cents per mile, which was calculated using the distance between the SW Cleveland station to downtown Columbus and return. Costs of traveling between Lorain County and the SW Cleveland train station were not included because they did not represent a change compared with current travel practices.

Here are the calculations:

5 hours x \$25/hour = \$125 x 207 = \$25,875 worth of improved travel productivity

Driving costs-solo: 55 cents per mile x 240 miles round-trip SW Cleveland-Columbus-SW Cleveland = \$132.00

Rail travel costs: 14 cents per mile x 240 miles round-trip SW Cleveland-Columbus-SW Cleveland = \$33.60

Net savings with train: \$98.40 per one-person trip

Train offers annual savings from 0-passenger car-trips of: \$15,252 (\$98.40 x 155 = \$15,252)

Driving costs per person with driver and 1 passenger: 27.5 cents per mile x 240 miles round-trip SW Cleveland-Columbus-SW Cleveland = \$66.00

Net savings with train: \$32.40 per two-person trip

Train offers annual savings from 1-passenger car-trips of: \$1,263.60 (\$32.40 x 39 = \$1,263.60)

Driving costs per person with driver and 2 passengers: 18.33 cents per mile x 240 miles round trip SW Cleveland-Columbus-SW Cleveland = \$44

Net savings with train: \$10.40 per three-person trip

Train offers annual savings from 2-passenger car-trips of: \$104 (\$10.40 x 10 = \$104.00)

ANNUAL SAVINGS FOR LORAIN COUNTY

Using the aforementioned data, a projected annual savings of diverting trips made to conduct Lorain County business from road to rail can be calculated. The findings show this savings to Lorain County taxpayers to be significant. Again, this is applying the highest Midwest rail fares (14 cents per mile) to the calculations:

\$25,875.00 worth of improved travel productivity
 \$15,252.00 saved from 0-passenger car trips
 \$ 1,263.60 saved from 1-passenger car trips
 \$ 104.00 saved from 2-passenger car trips

\$42,484.60 total annual savings (in 2009 dollars) from Lorain County employees using the train instead of driving

FUTURE SAVINGS FOR LORAIN COUNTY

It should be noted that the 3C passenger rail service is not due to begin until 2012, at the earliest. Thus by the time the service begins, the savings could be even larger considering how quickly the cost of driving is rising while rail fares have been stable in recent years.

Yet the rate of inflation was applied here to adjust projected costs. Over the past 10 years, the annual rate of inflation has averaged 2.93 percent. If this rate continues at or near this level, it is therefore possible that by the time 3C "Quick Start" train service is available in a couple of years, the cost savings to Lorain County could be:

\$46,329.48 saved in 2012
\$47,686.93 saved in 2013
\$49,084.16 saved in 2014
\$50,522.33 saved in 2015
\$52,002.63 saved in 2016

\$245,625.53 saved over five years by Lorain County taxpayers

APPLYING THE DATA CORRIDOR-WIDE

Absent a survey of all department heads of all local governments in the 3C Corridor (excepting those in Metro Columbus), sampling of data will be needed to estimate local taxpayers' potential cost savings. To determine this, the sample size of Lorain County was taken into account.

Lorain County's 2009 population was 302,260, representing 5.8 percent of the 3C Corridor's population (not including Metro Columbus). Many reputable public polls use much smaller sample sizes to estimate the responses for an entire population.

Thus, if \$46,329.48 was saved by Lorain County in 2012, it is possible that all local governments corridor-wide could save \$798,784.

Furthermore, if \$245,625.53 was saved by Lorain County over the first five years of 3C passenger rail service, it is possible that all local governments corridor-wide could save \$4,234,923 over the same five years.

APPENDIX III

Economic Recovery Benefits of 3C "Quick Start" passenger rail

SOURCE:

**FRA High-Speed Intercity Passenger Rail (HSIPR) Program
Track 2–Corridor Programs
ODOT Application Form – Oct. 2, 2009**

Document can be found at:

http://www.dot.state.oh.us/Divisions/Rail/Programs/passenger/3CisME/3C%20Federal%20Stimulus%20Application%20Documents/OH_3C_Track_2_Corridor_Programs_Application_Form.pdf

The 3C "Quick Start" Corridor will provide economic recovery benefits to the State of Ohio. The proposed 3C "Quick Start" is in proximity to over 6.8 million residents. It will provide immediate stimulus opportunities for the construction of rail capital improvements, stations, maintenance facilities, and domestic passenger railroad equipment.

The 3C "Quick Start" Corridor presents new service opportunities to twelve of Ohio's seventy-nine federally designated economically challenged counties. With the exception of just two Central Ohio counties, most of the corridor's capital and station improvements are being done within Economically Disadvantage Areas, EDA. Outside of the approximately \$37 million of capital improvements identified as capital projects #4, #5, #6 & #7 in the Project List of Section B of this application, and \$10 million in stations, the majority of the project investments will benefit the EDA counties of Ohio.

The implementation of the 3C "Quick Start" Corridor capital improvements will result in immediate short-term construction jobs for 360 workers sustained over a two year period. Construction expenditures have been estimated at \$272 million to \$300 million. These jobs positively affect a state that has experienced a decline in domestic manufacturing for transportation and automotive equipment as well as many other economic segments.

The specific number of jobs created or retained by this project is dependent upon many factors including project scheduling, availability of materials and

other factors. In terms of the project's national economic impact, U.S. Department of Commerce data indicates that every dollar of rail infrastructure investment generates more than three dollars in total economic output because of the investment, purchases, and employment occurring among upstream suppliers. All told, each \$1 billion of new rail investment creates an estimated 20,000 jobs nationwide. Using this methodology, the \$564 million amount associated with this grant has the potential to create 11,280 jobs as a result of the construction of the 3C "Quick Start" Corridor.

Ohio has a rich history as a transportation producer for the nation and is using the opportunities provided by the TIGER stimulus programs and state resources to assist with the reintroduction of domestic manufacturing of passenger rail equipment. US Rail Car is seeking to re-establish the manufacturing of Diesel Multiple Units previously manufactured by the Colorado Rail Car Company. The assets of the former operation have been purchased by an Ohio based company, US Rail Car, which is seeking to restore this manufacturing capability for the US. Successful start up of this operation will create additional manufacturing jobs as well as provide a domestic owner and source of FRA compliant passenger rail equipment for the nation.

The operation of the 3C "Quick Start" Corridor will create positive economic impacts in perpetuity as the passenger rail operations affect the local economy. Estimates of \$10 million due to direct and indirect employment will help to stay the economic decline experienced across the project corridor. Direct employment of 33 workers and an additional 111 jobs connected with the passenger rail operations are expected to continue over the life of the service.

Passenger rail service is also expected to result in improved productivity and billable hours for many of the customers who wish to conduct business while in transit. These benefits, while positive to the state, are not reflected in these initial economic forecasts.

Ohio is home to many leading engineering and technology institutions. These organizations have produced significant advances in transportation technology and equipment. The development and manufacture of Positive Train Control technologies creates another opportunity to utilize this intellectual resource.

New station development creates additional economic opportunities for the corridor, such as for the City of Riverside, population 23,500 citizens, and gateway to the state's largest single-site employer, Wright Patterson Air Force Base. At the proposed Riverside station stop, Riverside is now engaged with a developer on a \$50 million hotel and conference center site, leveraging the rail-oriented development 3C "Quick Start" Corridor will bring to the city.

Job Creation

Provide the following information about job creation through the life of the Corridor Program. Please consider construction, maintenance and operations jobs.

**Anticipated number of onsite
and other direct jobs created
(on a 2080 work-hour per year,
full-time equivalent basis)**

FD/ Construction Period	First full year of operation	Fifth full year of operation	Tenth full year of operation
360	144	144	144

APPENDIX IV

Mighty Economic Engine Will Power 3C Train **Ohio Environmental Council - Press Release – Sept. 15, 2009**

Diverse stakeholders representing business, regional planners, rail passengers, and environment begin "whistle stop tour" urging Ohioans to get on board 3C "Quick Start" Rail Plan

Developer of \$100 million project next to new train station in old New England mill town predicts Ohio will reap handsome return on investment from 3C train

(Columbus, OH)– Proponents of Ohio's proposal to restart passenger train service along its 3C corridor kicked off a "whistle stop" tour of cities along the 250-mile route today to push a potent message: Ohio's 3C "Quick Start" passenger rail plan will deliver much more than passengers; it also will deliver jobs and economic development to the Buckeye State.

The supporters—including local chambers of commerce, regional planning organizations, real estate developers, and rail passenger and environmental groups—are hoping to build support among local business and community leaders for the state's application for federal stimulus funds to get trains running between Cleveland, Columbus, Dayton, and Cincinnati. State officials are competing for federal stimulus funds to start train service as early as 2011.

Helping roll out their case at a Statehouse press event this morning was Robert Martin, a real estate developer from New England. Mr. Martin is spearheading a \$100 million redevelopment project to convert an abandoned mill to residential and commercial space next to a new train station along the Downeaster passenger rail line in Saco, Maine.

"Done right, a well-run train and a well-placed train station can be a magnet for growth and development in a town center," said Martin. "Condos and apartments get built. New shops and restaurants open. Energy and commerce jump as people converge to do business.

"We found that the Amtrak Downeaster is a true economic engine on our steel interstate. After less than \$100 million in public investment, we see over \$7

billion in additional construction investments; 42,000 new housing units; almost 7 million square feet of commercial space and almost 18,000 new jobs. Magnify that by the impact on energy and the \$2.4 billion per year of additional consumer purchasing power, and you have a huge shift in the economy of a state one-eighth the size of Ohio. If we can do this in our little state, think of what Ohio can do."

Ohio transportation officials plan to apply for \$400 million in federal stimulus funds through the American Recovery and Reinvestment Act to initiate 79 MPH service along the 3C corridor. Ohio plans to use federal funds to make capitol and infrastructure improvements, upgrading tracks, signals, and crossings and acquiring train cars and locomotives.

Competition for federal stimulus funds is fierce. Forty states have submitted pre-applications, seeking \$102 billion from a pool of \$8 billion available for passenger rail. The U.S. Department of Transportation is expected to make its funding decisions this fall.

"The 3C passenger train will be a real economic boon to Ohio," said Chester Jourdan, Executive Director of the Mid Ohio Regional Planning Commission. "We know from the experience of cities across the country and around the world that when a solid passenger rail system is created, it boosts the private sector's confidence in the long term commitment to the area and triggers private investment and development. These investments will help create jobs, bringing people and activity to Ohio's downtowns, suburbs, and even smaller towns, creating ripple effects in our economy. This train can't start to roll soon enough."

State officials plan the start-up service as a prelude to 115 MPH high-speed train service. The 3C corridor is part of the high-speed Chicago Hub Network, connecting Cleveland, Columbus, Dayton, and Cincinnati with other Midwest cities. Nearby connections are envisioned to include Buffalo, Detroit, Indianapolis, Louisville, Pittsburgh, and Toledo.

"On September 11, 2001, I was half way across the globe, working on the feasibility study of the Dubai metro system," said Ken Sislak, Associate Vice President, AECOM Transportation and board member of All Aboard Ohio. "Last week, on Sept. 9, the system opened. In just eight years, this former fishing village went from feasibility study to revenue service on a world-class, fully automated light-rail system. In Ohio we've had 30 years of study but precious little action on passenger rail. The time for study is over, and the time to act is now. ODOT Director Molitoris is on the right track to get trains rolling again on the 3C corridor."

Advocates believe Ohio will benefit from investing in the 3C rail plan, pointing out that:

- ◆ nearly 6 million people live within 15 miles of the 3C corridor;
- ◆ well-planned train station projects attract new construction and development;
- ◆ freight rail will benefit from infrastructure improvements at congested choke points;
- ◆ trains offer an affordable, safe, convenient, and productive way to travel;
- ◆ nearly 1 million residents along the 3-C Corridor do not drive due to age, health,
- ◆ financial disability, the high cost of driving or personal preference;
- ◆ existing transportation alternatives to driving from Cincinnati to Cleveland (258 mi.) are inadequate, with airfares ranging from nearly \$400 to more than \$700 round trip and bus services in retreat despite trips being oversold two and three times over;
- ◆ driving costs 55 cents per mile, or more than four times higher than taking the train (Midwest rail fares average 8-14 cents per passenger mile);
- ◆ business travelers can work on the train, safely and conveniently talking on the phone, working on their laptop, even conducting meetings, making their travel time more productive, even when the train travels slower than a car; and
- ◆ a March 2009 statewide poll showed 64% of Ohioans want passenger rail.

Once the 3C train is rolling, Ohio will join 14 other states that contract with Amtrak to operate state-funded passenger trains in their state, including Michigan and Pennsylvania.

Ohio officials estimate \$10 million to \$15 million in state support will be necessary to supplement ticket sales and other revenue to operate the train and pay for engineers, conductors, fuel, maintenance, etc. Some critics have suggested that Ohio should not invest in passenger rail, citing the subsidy and supposed competition for highway project funding from the state motor fuel tax.

An annual \$10 million operating support for the 3C train would amount to only 0.26% of Ohio's annual \$3.8 billion state transportation budget. ODOT, however, has indicated that it will use non-fuel tax revenue to help operate the train, preserving the state fuel tax for the state's historic investment in highways and bridges.

It's been almost 40 years since the last passenger train traveled the 3C corridor. Advocates are wasting little time urging Ohioans to let state officials know that they support the 3C.

"The 3C train stands for more than Cleveland, Columbus, and Cincinnati," said Jack Shaner, Deputy Director of the Ohio Environmental Council. "It also stands for conservation, convenience, and commerce. Fourteen other states have figured that out, including our Big-10 rivals, Illinois, Michigan, Pennsylvania, and Wisconsin. They're investing in state supported passenger train service. And they're growing jobs, stimulating new investment, and saving travelers millions on travel expenses. Ohio cannot afford to be stuck at the end of the line. It's high time for Ohio to get on board modern passenger rail service. We urge every Ohioan who supports the 3C plan to tell their lawmakers to get on board, today."

APPENDIX V

Reduced highway pavement/bridge damage costs

In order to enable 3-C Corridor passenger rail service, the state will likely have to use much of the ARRA (federal stimulus) grant to finance capacity enhancements to freight railroad-owned rights of way.

For long periods of each day and throughout each night, there will be no passenger trains on 3-C Corridor tracks. Technical data being amassed by the major transportation engineering and consulting firms estimates the construction of additional passing sidings and/or main tracks when combined with the addition of a federally required Positive Train Control signaling system could increase overall rail corridor throughput capacity by 15 percent. That will allow freight railroads to accommodate freight rail traffic growth and enhance rail service reliability and efficiency.

Some of the freight traffic would likely come from totally new shipping activity. However most new rail freight traffic industry-wide is likely to come from increased market share, according to the American Association of State Highway Transportation Officials' Freight Rail Bottom Line Report (see <http://freight.transportation.org/doc/FreightRailReport.pdf>). The report said that this could have profound impacts by making highway pavement and bridges last longer with fewer trucks damaging them.

A report by the Kansas Rural Development Council looked at impacts on highway pavement conditions if short-line freight railroads were shut down and rail traffic was diverted from train to truck. The report (see <http://www.planning.dot.gov/Documents/Rural/KansasFreight.htm>) found that pavement damage ranged from \$4 to \$8 per truck-mile/year.

That data works in reverse, too, resulting in cost savings to transportation departments. Thus, for each truck-mile/year diverted to rail saves \$4 to \$8 in highway pavement damage. The Kansas Rural Development Council's estimate did not include damage to highway bridge structures.

All Aboard Ohio estimates that the 3-C Corridor right of way capacity enhancements could allow the freight railroads to divert 400,000 truck-miles per year to trains, saving ODOT \$1.6 million to \$3.2 million per year in having to repair highway pavement damage. All Aboard Ohio used the higher end of the range to account for the savings from reduced damage to highway bridge structures.

It's noteworthy that freight would be transferred from government-owned and maintained highway rights of way to corporate-owned and maintained railroad rights of way. Right of way maintenance costs would similarly be transferred. They are now borne by taxpayers but instead would be borne by private enterprise. That would reduce the burden on taxpayers and should be favored by fiscal conservatives. Additional transfers statewide (and even nationally) could help state and federal transportation departments cope with gas tax funding shortfalls by reducing highway maintenance expenses.

All Aboard Ohio calculated the reduced highway repair and maintenance costs as follows in these 3-C Corridor operating segments:

Cleveland-Berea (NS Chicago Line)

Route miles: 12
 Daily rail traffic: 90 freight trains
 Equivalent truck traffic (@250 trucks/train): 22,500 trucks
 Equivalent truck traffic (truck-miles): 270,000
 3-C Corridor capacity enhancement (@15%): 40,500 truck miles
 Annual highway maintenance savings: \$324,000

Berea-Greenwich (CSX Greenwich Subdivision)

Route miles: 42
 Daily rail traffic: 70 freight trains
 Equivalent truck traffic (@250 trucks/train): 17,500 trucks
 Equivalent truck traffic (truck-miles): 735,000
 3-C Corridor capacity enhancement (@15%): 110,250 truck miles
 Annual highway maintenance savings: \$882,000

Greenwich-Galion (CSX Greenwich Subdivision)

Route miles: 24
 Daily rail traffic: 30 freight trains
 Equivalent truck traffic (@250 trucks/train): 7,500 trucks
 Equivalent truck traffic (truck-miles): 180,000
 3-C Corridor capacity enhancement (@15%): 27,050 truck miles
 Annual highway maintenance savings: \$216,000

Galion-Columbus (CSX Columbus Line Subdivision)

Route miles: 57
 Daily rail traffic: 15 freight trains
 Equivalent truck traffic (@250 trucks/train): 3,750 trucks
 Equivalent truck traffic (truck-miles): 213,750
 3-C Corridor capacity enhancement (@15%): 32,063 truck miles
 Annual highway maintenance savings: \$256,504

Central Columbus (mixed segments of CSX & NS)

Route miles: 10
 Daily rail traffic: 45 freight trains
 Equivalent truck traffic (@250 trucks/train): 11,250 trucks
 Equivalent truck traffic (truck-miles): 112,500

3-C Corridor capacity enhancement (@15%): 16,875 truck miles
Annual highway maintenance savings: \$135,000

Columbus-Dayton (NS Dayton District)

Route miles: 65
Daily rail traffic: 35 freight trains
Equivalent truck traffic (@250 trucks/train): 8,750 trucks
Equivalent truck traffic (truck-miles): 568,750
3-C Corridor capacity enhancement (@15%): 85,313 truck miles
Annual highway maintenance savings: \$682,504

Dayton-Winton Place (NS Dayton District)

Route miles: 45
Daily rail traffic: 40 freight trains
Equivalent truck traffic (@250 trucks/train): 10,000 trucks
Equivalent truck traffic (truck-miles): 450,000
3-C Corridor capacity enhancement (@15%): 67,500 truck miles
Annual highway maintenance savings: \$540,000

Winton Place-Cincinnati (CSX Cincinnati Terminal Subdivision)

Route miles: 5
Daily rail traffic: 100 freight trains
Equivalent truck traffic (@250 trucks/train): 25,000 trucks
Equivalent truck traffic (truck-miles): 125,000
3-C Corridor capacity enhancement (@15%): 18,750 truck miles
Annual highway maintenance savings: \$150,000

TOTALS

398,251 (round to 400,000) fewer annual truck-miles.
Saves \$3,186,008 (round to \$3.2 million) in total highway repair and maintenance costs per year.

**Ken Prendergast
All Aboard Ohio
April 2010**