

**2012**

**Fifty-Seventh Annual  
Inspection Report**

**The James W. Shocknessy Ohio Turnpike**

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## 1.0 INTRODUCTION

This report is a general summary of the detailed field inspections performed in 2012 of the physical features of the Ohio Turnpike; specifically the bridge and sign structures, pavement, and buildings, as well as a summary of observations pertaining to new construction, maintenance, revenues, traffic and safety. Transcriptions of the detailed 2012 field inspection notes were delivered to the Ohio Turnpike Commission staff for their use in the early planning of maintenance and repair programs for 2013. In addition, the Ohio Department of Transportation (ODOT) and Federal Highway Administration (FHWA) bridge inspection reports were completed and submitted to the Ohio Turnpike Commission (Commission).

During the last several years, the Commission has been limited in its performance of mainline resurfacing, bridge painting and selective rehabilitation due to the economic slowdown. The 2012 calendar year, however, was a much more active year for the Commission's capital improvement program resulting in several resurfacing projects and the continuation of the pavement replacement and third lane programs. The new electronic toll collection system and conversion to *E-ZPass*<sup>®</sup> continues to perform as designed. The system became operational on October 1, 2009 and is an axle based system resulting in streamlining the current 11 classes of vehicular identification to seven classes. The Commission continues to attempt to catch up for the reduced maintenance and capital projects during the past several years.

The Commission's Third Lane Program between MP 178.01 and MP 185.3 in Summit County is currently in its second year of construction, with substantial completion expected in late November 2012. Upon completion the Ohio Turnpike will run three lanes continuously between MP 218 and MP 64 leaving only the western most section between MP 59 and MP 64 to be constructed.

Although the Commission's annual resurfacing of portions of the mainline roadway became subject to the adverse effects of the budget shortfalls during 2009, the resurfacing program has returned and continued with several projects being performed over the course of the past three years. In 2010, the Commission completed a study to evaluate the condition of the original concrete pavement for the entire 241 miles of the Turnpike. The purpose and goal of the study is to assess the life expectancy of the pavement and make a recommendation for the sequential reconstruction along the entire length of the Turnpike. The study has shown that the pavement

and roadway are in relatively good condition for its age, however, the base pavement is in differing states of deterioration. The report has ranked and prioritized the pavement into five mile increments for replacement considerations. In 2011 the Commission began replacement of the original concrete pavement from MP 95.9 to 101.2 to be used as a guideline for future original concrete pavement replacement projects.

The Commission's multi-year program to replace its existing service plazas continues into 2012 with substantial completion of the Glacier Hills and Mahoning Valley service plazas at MP 237.2 expected in late October of 2012. The Oak Opening and Fallen Timbers plazas at MP 49 have been demolished and construction of the new facilities is expected to begin upon completion of bio-remediation of the existing site. To date the Commission has replaced 6 pairs of service plazas which equates to 12 service plazas total. The new service plazas are modern, state of the art facilities with improved energy efficiency, designed to accommodate the ever-increasing number of Turnpike travelers. Amenities for the new service plazas include a food court arrangement with a sit-down restaurant and multiple fast food vendors, electronic travel and weather information centers, and retail outlets. Special trucker areas have been incorporated into the facilities which include a lounge, laundry, shower facilities and dedicated phones.

The Turnpike's safety record continues to compare favorably with other similar highways. The accident rate per one hundred million vehicle miles increased from 80.9 in 2010 to 92.7 in 2011, while the fatality rate remained constant at 0.2 in 2010 and 2011.

Total revenues for the Commission from all sources in 2011 were \$254,433,000, which is a 0.3 percent decrease compared to 2010. This revenue decrease was caused by a decrease in passenger car traffic and an increase in *E-ZPass*<sup>®</sup> usage. The revenue data for the first eight months of 2012 shows that, when compared to the same period in 2011, toll revenues from passenger cars were up 10.1 percent and toll revenues from commercial vehicles were up 10.9 percent. Total toll revenues were up 10.5 percent for the first eight months of 2012 and investment income was down 36.1 percent. Total revenues for the first eight months of 2012 were up 9.4 percent compared to January-August, 2011. The total number of vehicles using the Turnpike during January-August, 2012 was 2.7 percent higher than for this same period in 2011. Based on current trends to date, total revenues from all sources for 2011 are estimated at approximately \$275,000,000.

## **2.0 REPORT OF FINDINGS AND RECOMMENDATION FOR MAINTENANCE AND REPAIR**

### **2.1 Pavement and Shoulders**

The Ohio Turnpike Commission has completed the evaluation of the condition of the original concrete pavement for the entire 241 miles of the Turnpike. The comprehensive pavement evaluation and analysis identifies all of the factors contributing to the current condition of both the pavement and the sub base. The purpose and goal of the study is to assess the remaining life expectancy of the pavement and make a recommendation for the sequential reconstruction along the entire length of the Turnpike. Based upon this report and prioritization, the Commission is currently undertaking the reconstruction of the first section of original base pavement. This project is located between MP 95.9 and MP 101.2 in Sandusky County. This initial project is scheduled to be completed in October 2012.

The 2012 construction budget included the final easterly portion of the Third Lane between MP 178.01 to MP 185.3. This seven mile segment will complete the last link in the eastern portion of the third lane and is scheduled to be completed in November 2012. Once this section is finished, the Third Lane will be complete from MP 64 to MP 218, with only the final five miles between MP 59 to MP 64 remaining to be constructed.

This year the Commission performed several mainline resurfacings totaling approximately 27 miles spread throughout the Turnpike from MP 69 to 214. The largest sections include 8 miles from 101.2 to 109.2 and 8.4 miles from 118.8 to 127.2. The resurfacing program for 2012 continues to be closely coordinated with the results and recommendations of the comprehensive pavement evaluation and analysis.

The pavement on the Turnpike continues to be well sealed and maintained as required by the Commission's maintenance personnel to preserve the riding quality and structural integrity of the roadway. As previously noted, the evaluation of the original concrete pavement began in order to prepare the Master Plan for the replacement of the pavement where necessary.

## **2.2 Landscaping**

The Commission's landscape personnel continue to supervise the contract herbicide spray program along the mainline and at interchanges, and perform minor herbicide and pesticide spraying at interchanges and service plazas. Landscape personnel maintain landscaping along the right-of-way and also construct and maintain the landscaping and plantings at the interchanges, service plazas, maintenance buildings and administration building. The Commission's landscape personnel developed and implemented the landscaping plans for the six pairs of newer service plazas. In addition, landscaping is developed for exits and interchanges. The landscaping has been renewed and upgraded at the administration building.

## **2.3 Bridges**

The Commission's bridge maintenance and improvement program includes miscellaneous repair to bridge parapets, fencing, bridge deck and bridge painting. This year's program included the replacement of the deck at Gulf Road (MP 146.4). Three structures received deck overlays as part of the pavement replacement project. These include Royalton Road (MP 165.4), York Road (165.5), and Bennett Road (MP 166.2). In addition two pairs of mainline bridges and three overhead bridges have undergone repainting in 2012. These bridges include: mainline over NS RR (MP 19.6), mainline over US Route 127 (MP 20.1), Schilling-Ely Road (MP 22.7), State Route 66 (MP 26.3) and Lauber Hill-Ritters Road (MP 28.3).

This year the Commission has also undertaken the repair to several slopes both along approach roadways. This is being performed on the Yorktown Road overhead bridge at MP 100.2. This work is part of a joint effort with the Sandusky County Engineer's office to settle a long standing debate on the responsibility for maintenance of such overhead structures.

Annual inspections revealed that the overall condition of the bridges on the Turnpike system is good. Typical maintenance recommendations include repainting of steel, substructure concrete patching, and embankment repair. The good condition of structures can be at least in part attributed to the bridge repainting, replacement, and rehabilitation program and to continued maintenance by the Commission's personnel. To help maintain the good condition of structures, the Commission should continue the bridge repainting program in the upcoming years. No major and/or fracture critical bridge inspections were required during the 2012 inspection year.

Inspection forms for 2012 as required by the Federal Highway Administration and the Ohio Department of Transportation have been prepared by the Consulting Engineer for the Commission on all Turnpike structures, including culverts with a span of 10 feet or greater.

A transcription of the detailed 2012 field inspection notes for all Turnpike structures, including photos illustrating areas of required maintenance or repair, were submitted to the Commission's staff to use in planning future maintenance and repair programs. All bridge inspections have been completed for the 2011-2012 season.

## **2.4 Culverts**

### *Culverts Classified as Bridges*

Structures having a span of 10 feet or greater, which carry waterways under the Turnpike, are inspected and reported as bridges. These culverts are usually constructed with reinforced concrete in either an arch shape or as a box shape with single or multiple cells. Deficiencies noted in these culverts consist primarily of deteriorated concrete headwalls and wingwalls, leaking barrel joints, undermined and broken ditch paving, accumulated debris and/or vegetation growth in ditches, silting and erosion. In some locations, concrete headwall and wingwall deterioration has become so extensive that they require replacement.

### *Small Culverts*

There are numerous culverts which carry storm run-off and smaller streams in pipes ranging from 30" to 108" in diameter. Culvert types include corrugated steel and concrete pipe culverts. Corrugated metal pipes are inspected closely to ensure early detection of areas of corrosion which may require repair or replacement. The deficiencies found in small culverts also consist of broken ditch pavement, headwall deterioration, erosion, silting, and/or vegetation growth in the ditches.

### *Culvert Construction and Rehabilitation*

In conjunction with the Third Lane Program between Exits 59 and 218, all culverts within a design contract section were inspected by the design consultants and required repairs were included in the Third Lane construction plans. These repairs typically included recoating of bituminous pipes, realigning if required, wingwall and headwall repairs and/or reconstruction



with new flared end sections. Required ditch improvements were also included in these construction contracts.

## **2.5 Fence and Guardrail**

The entire right-of-way of the Turnpike is fenced to deter the entrance of animals and pedestrians onto the roadways. The fence also serves as a demarcation of the right-of-way. The majority of this fence is the welded wire type farm fence. A program was started in 1987 to replace this fence in its entirety. This work, which is being performed by the Commission's maintenance forces, continues with over 439 miles (approximately 91%) of the fence replaced to date. In some areas, primarily where development has occurred adjacent to the Turnpike, a chain-link fence has replaced the welded wire fence. The chain link fence is in generally good condition.

In areas where Third Lane construction is complete, the 56 foot grass median strip has been replaced by two traffic lanes, paved shoulders and a 50 inch concrete median barrier. The concrete median barrier is currently in place for approximately 159 miles of the Turnpike, eliminating the need for interior guardrail in those areas.

The guardrail replacement program has continued and includes the replacement of deteriorated guardrail, posts, block and hardware with new replacement components. The major portion of this work has been and will continue to be performed in the Third Lane. The guardrail replacement and upgrade program includes replacing the buried end terminals on guardrails with an energy-dissipating end terminal designed to reduce the potential for more serious accidents, and the replacement of deteriorated rail elements, block and posts.

## **2.6 Interchanges and Toll Plazas**

The number of interchanges on the Turnpike is currently at 31. The program to perform major renovations to, or replacement of the toll plazas commenced in 1995, and to date, renovation is complete on all of the original toll facilities.

The Ohio Turnpike has been operating with *E-ZPass*<sup>®</sup> for nearly three years and continues to benefit from the electronic tolling system. Enhancements continue to be made to further streamline this service for the patrons of the Ohio Turnpike.

An overview of the findings of the inspection of the toll plaza utility buildings and toll booths is included in Section 2.8 Buildings.

## **2.7 Technology**

Construction of the Commission's Telecommunications Building was completed in 1999. Prior to 1999, all telecommunications equipment was installed in various rooms throughout the Administration Building. The new facility is attached to the service garage, which is located adjacent to the main Administration Building. The building serves as the Commission's hub site for all of its telecommunications systems. Installation of the new digital microwave equipment and fiber-optic equipment was completed in late 1999 and installation of the CRT touch-screen dispatch console system was completed in January 2000. The Telecommunications Building became fully equipped and operational in February 2000, initially housing both communications centers (Ohio Turnpike Commission and Ohio State Highway Patrol, Turnpike Operations) as well as the offices of the Telecommunications Department and Ohio State Highway Patrol. In mid-2003, the Commission's Information Systems Department and Data Center were relocated to the Telecommunications Building.

The Commission will issue a Bid Invitation in late 2012 for the replacement of its dispatch console system. The existing system is obsolete and repair parts, software upgrades and support are no longer offered by the manufacturer. The new system will be designed with transparency for the user and will feature LCD touch-screen monitors in place of the outdated CRT monitors. As part of the project, new equipment will be procured for the Commission's backup Communications Center located at the Towpath Service Plaza. Cutover to the new dispatch console system is expected to be completed by February, 2013.

The 6GHz digital microwave radio system comprises 13 repeater sites and 21 transmit/receive terminal sites to provide voice communication to 8 maintenance buildings, 22 toll plazas, 2 state highway patrol posts and the Administration Complex in Berea. The Berea complex is the backbone of the system and serves as the hub site for all of the Turnpike telecom systems. Fourteen spur paths were upgraded in 1995 when the FCC mandated that the 2GHz band be vacated. The entire backbone and remaining spur paths were upgraded in 1999.

The *SONET* fiber optic system provides voice and data transport to every Turnpike facility with the exception of 4 service plazas, which will be added to the system as they are reconstructed. Formerly, voice communication to the “old” service plazas was provided by means of T-1 leased lines. In 1984, the Commission approved a right-of-way agreement allowing Qwest Communications (formerly Litel) to install fiber-optic cable along the Turnpike right-of-way between milepost 40 and milepost 228. As part of that agreement, Qwest reserved 24 fiber strands for the Commission to utilize for its private telecommunications network. In 1998, the Commission awarded contracts to extend the cable to the Eastgate and Westgate terminals. Upon completion of the *SONET* fiber optic system, all data transport was successfully transferred in December of 1999. In the event of catastrophic failure at the primary hub, the system is designed to automatically switch all *SONET* traffic to the backup hub site located at Toll Plaza 161. The installation of a secondary 24-strand fiber optic cable between the Telecommunications Building and the backup hub site was completed in 2006.

In 2005, the Commission awarded a contract for the development of a strategic plan for the implementation of Intelligent Transportation Systems (ITS) components. As part of that study, it was determined that the Commission’s existing fiber optic communication equipment must be replaced with higher capacity hardware components to provide the additional bandwidth required for future ITS components. As a result, the Commission awarded a contract in June, 2007 to replace its existing *SONET* system with new switchgear to provide OC-192 bandwidth capacity for the west leg of the system and OC-48 for the east leg. Installation was completed in September, 2008. ITS components being considered include mainline variable message signs, an all facility messaging and alarm system, a pavement weather monitoring system and an integrated video monitoring system. The video monitoring system will allow the Commission to monitor and record activity at each of the Commission’s toll plazas, service plazas, maintenance facilities and key locations along the Turnpike mainline to provide safety for the Commission’s employees and its customers, and will be designed with remote viewing capability to allow administrators to view all cameras from the Administration Complex in Berea. In mid-2007, the Ohio State Highway Patrol procured new Computer-Aided Dispatch (CAD) and GIS systems from the State of Ohio’s Multi-Agency Radio Communication System (MARCS). As part of the MARCS upgrade, all of the patrol vehicles were equipped with 800MHz trunked mobile radios, automated vehicle location (AVL) and mobile computer terminals (MCT).

VHF high-band two-way radio systems provide for the mobile voice communications needs of the Commission's maintenance and toll employees as well as District 10 of the Ohio State Highway Patrol. Mobile units have been installed in Commission vehicles, OSHP vehicles, contracted wrecker service vehicles and construction contractor's zone vehicles. Replacement of 16 VHF base repeater radios and four satellite receivers was completed in 2006.

The Federal Communications Commission (FCC) has issued a mandate requiring all two-way radios operating in the 150-512MHz radio bands cease operation using 25kHz efficiency technology and begin operating with 12.5kHz efficiency. To comply with the mandate, the Commission must replace the majority of its VHF high-band mobile and portable radios. VHF mobile and portable radios purchased by the Commission since 2002 are programmable for 12.5kHz spacing; VHF base radios installed in 2006 are also programmable for narrowband spacing. In early 2012, the Commission purchased 60 portable and 400 mobile two-way radios to replace any non-compliant equipment. One base radio was also purchased to replace the non-compliant unit utilized for Inter-City communication. The Commission expects to complete cutover of all VHF two-way radio equipment by November, 2012.

In 2000, contracts were awarded to replace three communications towers and to paint/repair the remaining towers. The communications tower located at Toll Plaza 187 was relocated approximately 100 feet during renovation of the site to accommodate the addition of new entrance lanes. An obsolete 75-foot communications tower located at the Berea site was removed in 2005. In 2007 the Consulting Engineer performed inspections of 34 communication towers along the Ohio Turnpike. The inspectors reported that all 34 towers, including the original 8 towers erected in 1955, appear to be in good condition with minor surface cracks in the foundations and pedestals. Repairs to the towers began in 2008.

The Commission's PBX telephone network provides telephone communication to every Turnpike facility. In 2005, a contract was awarded for the installation of a new integrated PBX telephone network which includes such features as voicemail, automated attendant and call accounting. Installation of the new PBX telephone system was completed in 2006. All new PBX network equipment including the primary switch was installed in the Telecommunications Building; new PBX sub-switches were installed in each of the remote facilities. The majority of the PBX telephones were replaced with multi-line digital sets.

The Commission utilizes a voice logging recorder to record all radio and telephone traffic processed by each of the two communications centers. In 2004, the Commission replaced its obsolete analog 24-channel recorder with a new 48-channel digital recorder. The new recorder features a modular design, DVD-R storage and network capability. In Spring of 2012, the Commission upgraded its digital voice logging recorder.

Category 6 communications cabling has been installed throughout the entire Administration Building to replace outdated twisted-pair and coaxial cable formerly used for telephones, radio remotes and data transport. Phase I of the project provided for replacement of cabling in the core of the building and was completed in August of 2003. Phase II provided for replacement of cabling in the newly renovated east wing and was completed in July of 2004. Phase III provided for replacement of cabling in the newly renovated west wing and was completed in April of 2007. All remaining communications cabling was replaced during the final phase, which was completed in December of 2008.

In May, 2012 the Commission combined its Telecommunications and Information Systems departments to form the new Technology Department.

## **2.8 Buildings**

### *Administration Building*

The Administration Building, located adjacent to the Turnpike in the City of Berea, houses the administrative offices; engineering staff, maintenance supervisory offices; legal, comptroller and toll audit offices; purchasing, customer services, and toll collection supervisors. A vehicle maintenance garage and contiguous communications center are located east of the Administration Building and houses the computer center; highway patrol headquarters, and radio communications headquarters. The Administration Building, vehicle maintenance garage, and communications center have been maintained in generally good condition. The third and final phase of the renovation of the original portion of the Administration Building, as well as the roof replacement on the south section, was completed in 2009.

### *Maintenance Buildings*

With minor exception, Maintenance Centers are in generally good condition and are generally well maintained. Typically, wood frame storage buildings and, to a lesser degree, engineered metal storage buildings at Maintenance Centers require selective repairs.

*Highway Patrol Facilities*

All Highway Patrol facilities are in generally good condition and have been generally well maintained.

*Toll Plaza Buildings*

With limited exception, the overall appearance of the toll booths, canopies and the utility buildings at toll plazas is satisfactory. Newly renovated and newly constructed toll plazas are in generally good condition and have been generally well maintained.

*Service Plaza Buildings*

Currently there are 14 Service Plazas in operation on the Turnpike. See Table 2.8.1 for a list of the Service Plazas.

Table 2.8.1 Service Plazas in Operation on the Turnpike

<b><u>EASTBOUND SERVICE PLAZAS</u></b>	<b><u>WESTBOUND SERVICE PLAZAS</u></b>
<b>Tiffin River (MP 20.8)</b>	<b>Portage (MP 197.0)</b>
<b>Wyandot (MP 76.9)</b>	<b>Great Lakes (MP 170.1)</b>
<b>Commodore Perry (MP 100.0)</b>	<b>Middle Ridge (MP 139.5)</b>
<b>Vermilion Valley (MP 139.5)</b>	<b>Erie Islands (MP 100.0)</b>
<b>Towpath (MP 170.1)</b>	<b>Blue Heron (MP 76.9)</b>
<b>Brady's Leap (MP 197.0)</b>	<b>Indian Meadow (MP 20.8)</b>

The original service plaza facilities dating to the early 1950's have all been demolished and/or replaced.

The reconstructed service plaza facilities are in generally good condition and are generally well maintained. The new service plazas are designed to accommodate the Turnpike travelers and professional drivers with amenities including a food court arrangement with a sit-down restaurant and multiple fast food vendors, electronic travel and weather information centers, and retail outlets. Special trucker areas have been incorporated including a lounge, laundry, shower facilities and dedicated telephones.

The wastewater treatment plant at Erie Islands Service Plaza (MP 100.0) is in generally good condition.

Table 2.8.2 Total number of buildings on the Turnpike

Building	Qty
Administration Building	1
Vehicle Maintenance Garage/Communications Center	1
Maintenance Buildings	8
Sign Shop	1
Ohio State Highway Patrol Buildings	1
Toll Plaza/Interchanges	31
Service Plaza Buildings	14
Total	57

The total does not include ancillary buildings, such as vehicle storage garages, salt domes, equipment storage buildings, toll booths and sewage and water treatment plant buildings.

## 2.9 Maintenance Organization and Equipment

Eight maintenance buildings are located at approximately 30-mile intervals along the Turnpike. Each of these buildings serves as headquarters for a maintenance section and is headed by a section foreman. Maintenance equipment and supplies are stored in these buildings and in the adjacent yards. The Commission's maintenance organization is divided into two divisions, each under the direction of a division superintendent. Each division consists of four maintenance sections. The western division personnel and equipment is housed in the Elmore Maintenance building, and the eastern division is housed in the Hiram Maintenance building.

The maintenance section personnel perform work such as snow removal, mowing, pavement and minor bridge repairs and maintenance, sealing of roadways, right-of-way fence replacement, guardrail repair and replacement, storm water and sanitary sewer repairs and replacements, policing the right-of-way and maintenance and repair of vehicles and equipment. The division personnel consist of various tradesmen and mechanics that perform such duties as mechanical and electrical work, equipment repair, operation and maintenance of utilities, and perform major work items, with the assistance of the section, not performed under contract.

Mobile equipment such as trucks, bulldozers, asphalt pavers and rollers, front-end and skid steer loaders, conveyors, asphalt paver, and other construction/maintenance equipment continues to be well maintained by the maintenance personnel and replaced when it can no longer be economically maintained or provide reliable service.

## **2.10 Safety and Signs**

The Ohio State Highway Patrol (OSHP) developed an electronic OH-1 crash reporting system that was instituted on the Turnpike in March of 2008. To accommodate the changes, the Commission developed a file transfer system in cooperation with the OSHP. The combination of these changes significantly reduces the amount of time between the actual crash and the Commission's ability to process crash data. This new electronic system allows for a greater level of accuracy in the Commission's reporting system.

The Commission's safety record continues to compare favorably with other similar highways. The accident rate per one hundred million vehicle miles increased from 80.9 in 2010 to 92.7 in 2011, while the fatality rate remained constant at 0.2 in 2010 and 2011. Appendix D contains crash statistics including traffic accidents and fatalities and annual accident rates and fatality rates per one hundred million vehicle miles of travel. Table 2.10.1 indicates the causes to which accidents have been attributed for the past ten years.



Table 2.10.1 Ohio Turnpike Causation Factors

CAUSE OF ACCIDENT	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Tire Condition	9	8	8	2	---	1	---	43	55	59
Mechanical Failure	42	43	31	21	27	15	17	3	2	2
Exceeding Speed Limit	2	2	5	4	2	1	2	2	2	4
Unsafe Speed/Conditions										
High Wind	3	3	1	11	0	14	7	8	6	1
Poor Visibility (Fog/Smoke, Rain, Snow)	13	632	719	610	368	547	748	397	604	813
Other Reasons	28	19	---	156	166	219	331	65	---	1
Improper Parking/Backing/Starting	114	126	138	149	186	175	102	109	144	179
Fire	14	21	31	36	24	23	35	40	45	46
Improper Passing/ Fail. to Yield	229	240	242	224	268	275	221	8	5	12
Driver Asleep/Sleepy	77	57	83	62	85	81	73	68	68	82
Driver Ill	6	6	6	6	3	5	2	10	1	8
Driver Drinking/ Intoxicated	19	31	12	8	10	5	4	27	38	37
Driver Inattention/ Carelessness	425	410	405	468	253	209	201	74	94	89
Driver/Other	---	---	---	---	---	---	---	4	4	6
Person Fell from Vehicle	---	---	---	---	---	---	---	---	1	---
Object on Roadway/ Thrown	143	135	154	271	203	213	245	157	182	251
Object Dropped off Overpass	4	7	4	3	11	8	2	2	---	---
Deer on Roadway	322	365	395	400	351	356	409	419	402	361
Other Animal on Roadway	6	8	11	11	10	16	14	13	12	14
Vehicle Stopped/Slowed	2	---	3	5	1	4	3	2	2	---
Insecure Load	28	36	36	41	36	23	36	14	18	18
Pedestrian/Passenger Action	1	4	3	1	5	7	4	4	4	1
Illegal Use of Crossover	1	4	3	7	6	3	4	11	19	27
Following Too Closely/ A.C.D.A	188	199	182	221	187	211	128	67	59	81
Unsafe Vehicle	96	83	93	139	142	134	106	62	62	51
Side-Swiped	---	---	---	---	---	---	---	24	39	40
Rear-Ended	---	---	---	---	---	---	---	74	65	78
Swerving to Avoid	---	---	---	---	---	---	---	39	44	36
Failure to Control	---	---	---	---	---	---	---	61	66	68
Other Improper Action	---	---	---	---	---	---	---	7	13	17
Operation Vehicle in Erratic	---	---	---	---	---	---	---	4	7	---
Defective Lights	---	---	---	---	---	---	---	---	---	---
Not at fault	---	---	---	---	---	---	---	310	384	435
<b>TOTAL</b>	<b>2373</b>	<b>2433</b>	<b>2609</b>	<b>2858</b>	<b>2342</b>	<b>2532</b>	<b>2689</b>	<b>2125</b>	<b>2268</b>	<b>2583</b>

The Commission has a staffed Sign Shop that routinely performs the removal, fabrication and replacement of missing, obsolete, damaged and/or non-reflective traffic signs and parking area pavement markings. Additionally, the Sign Shop fabricates the necessary guide, warning and regulatory signs for the mainline roadway, ramps and plaza areas.

In conjunction with the Third Lane Program, the Sign Shop will furnish the permanent signs that are necessary for the completed third lane addition. The Sign Shop furnishes permanent signs needed for mainline resurfacing contracts, toll plaza ramp resurfacing, bridge construction, as well as toll and service plaza renovation projects.

The Commission is currently on an annual cycle for updating the pavement markings located on the mainline, the interchange ramps, and service plaza acceleration and deceleration ramps. Each year, by contract, the pavement markings are retraced with a high quality, waterborne acrylic paint system and glass beads. The glass beads are designed to enhance the retro-reflectivity of the markings during wet pavement and/or nighttime conditions.

The Sign Shop and Maintenance personnel routinely repair the roadside delineation and replace damaged raised pavement marker reflectors.

## 2.11 Patrol

The Ohio State Highway Patrol continues to patrol the Turnpike under an agreement between the Commission and the Director of the Department of Public Safety of Ohio. The Commission, under this agreement, reimburses the State for all costs of the Turnpike patrol. Table 2.11.1 shows the contingent of officers designated to the Ohio Turnpike. District 10 presently has 14 trooper vacancies in this contingent designation.

Table 2.11.1 Officers designated to the Ohio Turnpike

<b>Officer Ranking</b>	<b>Qty</b>
Captain, as Commanding Officer	1
Staff Lieutenant	1
Lieutenants	3
Sergeants	13
Communications Technicians	10
Troopers	71
<b>Total Personnel</b>	<b>99</b>

The Patrol now utilizes 72 patrol vehicles and utilizes aircraft from Columbus to accomplish their duties on the Turnpike. In addition, the Patrol has increased its activities in apprehending those persons involved in drug trafficking on the Turnpike. The Patrol has increased its presence at the Service Plazas to provide additional assistance to vehicles and drivers having difficulties along the Turnpike. In response to the events of September 11, 2001, Motor Carrier Enforcement officers have increased their hours to monitor hazardous material transport that could be used as weapons. These inspections also ascertain if the drivers are authorized by the company to transport that particular load. All shipping papers are also checked for authenticity. In addition, all officers are diligent in looking for any unusual circumstances or suspicious persons that may be potentially involved in terrorist activities.

Table 2.11.2 Activities of the Patrol, 2003-2009

ACTIVITY	2003	2004	2005	2006	2007	2008	2009	2010
Total Arrests for All Offenses	63,579	63,879	*45,283	*47,633	*46,095	*41,165	*41,903	*44,479
Accidents Investigated	2,433	2,594	2,858	2,346	2,534	2,668	2,133	2,276
Assistance to Vehicles Having Difficulties	52,580	49,827	52,318	55,230	50,008	40,787	41,185	31,890
Stolen Vehicles Recovered	35	39	51	47	57	39	40	24
Culprits of Stolen Vehicles Apprehended	33	36	50	32	31	31	25	18
Abandoned Cars Removed from Turnpike	137	207	104	143	**463	**373	**474	**410
Driving Under the Influence of Alcohol	435	382	346	346	340	283	307	290

\* The Patrol is no longer tracking arrests. The number shown is for enforcement stops, which accounts for the variation between 2005 through 2009 to the years prior.

\*\* Due to the changes in reporting using the CAD system, this figure includes vehicles towed due to enforcement and abandonment.

## 2.12 Traffic, Revenues and Expenses

Total revenues for the Commission from all sources in 2011 were \$254,433,000, which is a .3 percent decrease compared to 2010. This revenue decrease was caused by a decrease in passenger car traffic and an increase in *E-ZPass*<sup>®</sup> usage.

Table 2.12.1 Comparison of the Records of 2010 with 2011

Vehicle-Miles of Travel	Decreased	0.6%
Toll Revenues	Decreased	0.5%
Total All Revenue	Decreased	0.3%
Operating Expense	Decreased	5.0%
Total Expenses, Including Interest Expense	Decreased	4.5%

The revenue data for the first eight months of 2012 shows that, when compared to the same period in 2011, toll revenues from passenger cars were up 10.1 percent and toll revenues from commercial vehicles were up 10.9 percent. Total toll revenues were up 10.5 percent for the first eight months of 2012 and investment income was down 36.1 percent. Total revenues for the first eight months of 2012 were up 9.4 percent compared to January-August, 2011. The total number of vehicles using the Turnpike during January-August, 2012 was 2.7 percent higher than for this same period in 2011. Based on current trends to date, total revenues from all sources for 2012 are estimated at approximately \$275,000,000.

### 3.0 ESTIMATE OF CURRENT EXPENSES

The Commission's fiscal year is based on a January-December time period. Summarized below is an estimate of the amount of money required to maintain and operate the Ohio Turnpike during the calendar year 2013.

#### ***Summary***

Administration and Insurance.....	\$ 11,000,000
Maintenance and Operations Expense .....	\$ 106,000,000
Bond Interest and Principal .....	\$ 56,000,000

#### ***Estimate of Current Expenses***

Fiscal Year 2013 .....	\$173,000,000
------------------------	---------------

URS has reviewed historical data of the Commission's pledged revenues, expenses and debt service payments. Pursuant to Article IV, Section 4.08 (b)(ii) of the Master Trust Agreement dated February 15, 1994 between the Ohio Turnpike Commission and The Huntington National Bank, URS expresses its agreement with the Commission's past practice of maintaining the Expense Reserve Account in an amount equal to one-twelfth (1/12) of the annual operating, maintenance and administrative expenses to be paid from pledged revenues, as set forth in the Commission's annual budget for such Fiscal Year. URS recommends that the Commission continue this practice for 2013.

## **4.0 SCHEDULE OF INSURANCE**

The Schedule of Insurance currently in force is shown in Appendix E.

Included in this schedule are those policies required by Article V, Section 5.05 of the Trust Agreement. These consist of policies on Bridges, Use and Occupancy, and Commercial Liability. In addition to the required policies, a number of other insurance policies are carried in accordance with prudent business practices.

As Consulting Engineer, we continue to recommend to the Commission the required coverage limits on several of these policies and to review limits on others. A review of these policy limits reveals them to be suitable and adequate, and it is recommended that each of these policies be continued.

## **5.0 RENEWAL, REPLACEMENT AND SYSTEM PROJECT FUNDS**

Pledged revenues exceeding those required for operations, maintenance, and administration, bond interest and principal, and the required deposit to the expense reserve account, are deposited into the Renewal and Replacement and System Projects Funds. The revenues in the Renewal and Replacement Fund are used for the purchase of replacement vehicles and equipment and routine annual maintenance operations, while the System Projects Fund is used for the rehabilitation and upgrading of the Turnpike bridges, roadways, buildings, and for construction of new interchanges and other facilities.

It is estimated that total pledged revenues in 2013 will amount to approximately \$271,000,000, of which approximately \$117,000,000 will be needed for the operations, maintenance, and administration of the Turnpike and \$56,000,000 will be required for bond interest and principal expense. Of the remaining amount, approximately \$6,000,000 will likely be deposited into the Renewal and Replacement Fund, leaving a total of approximately \$92,000,000 to be deposited into the System Projects Fund.

# Appendix A

Ohio Turnpike Resurfacing Diagram &  
Straight Line Diagram



# Appendix B

## Ohio Turnpike Resurfacing

Table 1: Third Resurfacing

Year	Milepost Limits	Length (Miles)	Total Length for Year (Miles)
1980	144.0 to 153.5	9.5	20.1
	230.6 to 241.2	10.6	
1981	132.3 to 144.0	11.7	11.7
1983	92.4 to 101.4	9	25.7
	186.9 to 196.3	9.4	
	223.3 to 230.6	7.3	
1985	153.5 to 161.6	8.1	19.4
	161.6 to 172.9	11.3	
1986	214.2 to 223.3	9.1	9.1
1987	71.0 to 80.7	9.7	19.5
	111.7 to 118.7	7	
	177.4 to 180.2	2.8	
1988	27.5 to 38.9	11.4	18.3
	180.1 to 187.0	6.9	
1989	205.4 to 214.3	8.9	8.9
1990	39.0 to 48.6	9.6	14.0
	173.0 to 177.4	4.4	
1991	118.8 to 132.3	13.5	13.5
1992	62.5 to 71.1	8.6	18.9
	101.4 to 111.7	10.3	
1993	0.0 to 5.7	5.7	5.7
1994	5.7 to 14.8	9.1	20.7
	80.8 to 92.4	11.6	
1996	14.8 to 27.5	12.7	19.7
	55.5 to 62.5	7	
1998	48.6 to 55.5	6.9	6.9
2006	196.3 to 205.4(*)	9.1	9.1
2007	196.3 to 205.4 (**)	9.1	
<b>Total to Date</b>			<b>241.2</b>

(\*) – Eastbound lanes only.

(\*\*) – Westbound Lanes only.

Table 2: Fourth Resurfacing

Year	Milepost Limits	Length (Miles)	Total Length for Year (Miles)
1989	144.0 to 153.0	9	9
1990	230.6 to 234.9	4.3	4.3
1991	234.9 to 241.2	6.3	6.3
1992	132.0 to 144.0	12	12
1993	91.2 to 101.4	10.2	20.6
	161.6 to 172.0	10.4	
1994	214.2 to 223.3	9.1	9.1
1995	111.7 to 118.8	7.1	23.8
	186.9 to 196.3	9.4	
	223.3 to 230.6	7.3	
1996	153.5 to 160.0	6.5	6.5
1997	71.1 to 80.8	9.7	14
	160.0 to 161.6	1.6	
	177.4 to 180.1	2.7	
1998	27.5 to 38.9	11.4	11.4
1999	38.9 to 48.6	9.7	16.5
	180.1 to 186.9	6.8	
2000	101.4 to 111.7	10.3	21.3
	172.9 to 177.0	4.1	
	207.4 to 214.3	6.9	
2001	118.8 to 127.23	8.4	8.4
2002	0.0 to 5.7	5.7	5.7
2003	62.5 to 69.3	6.8	6.8
2004	55.5 to 63.8	8.3	8.3
2007	80.9 to 91.2	10.3	10.3
2008	5.7 to 14.8	9.1	9.1
2011	14.8 to 27.5	12.75	12.75
<b>Total to Date</b>			<b>215.15</b>

**Table 3: Fifth Resurfacing**

Year	Milepost Limits	Length (Miles)	Total Length for Year (Miles)
1997	144.0 to 153.5	9.5	9.5
2001	230.6 to 241.3	10.7	10.7
2002	92.4 to 101.4	9	12.2
	161.6 to 164.8	3.2	
2003	132.1 to 144.4	12.3	12.3
2004	168.6 to 172.0	3.4	11.9
	214.8 to 223.3	8.5	
2006	111.2 to 111.7	0.5	0.5
2006	186.9 to 196.3(*)	9.4	9.4
2007	186.9 to 196.3 (**)	9.4	
2008	111.7 to 118.8	7.1	7.1
2010	223.3 to 230.6	7.3	7.3
2011	205 to 210(***)	3	10
	153 to 160(***)	7	
2012	69.3 to 71.1	1.8	1.8
2012	101.2 to 109.2	8	8
2012	118.8 to 127.3	8.5	8.5
2012	209.6 to 214.4	4.8	4.8
<b>Total to Date</b>			<b>114</b>

(\*) – Eastbound lanes only.

(\*\*) - Westbound lanes only.

(\*\*\*) – Lanes 1 and 2 only.

**Table 4: Sixth Resurfacing**

Year	Milepost Limits	Length (Miles)	Total Length for Year (Miles)
2006	144.4 to 153.5	9.1	9.1
2010	91.2 to 101.5	10.3	14.4
	132.1 to 136.2	4.1	
2011	160 to 161.6 (***)	1.6	1.6
2012	95.9 to 101.2 (*)	5.3	5.3
2012	172 to 176.3	4.3	4.3
<b>Total to Date</b>			<b>34.7</b>

(\*) – Eastbound lanes only.

(\*\*\*) – Lanes 1 and 2 only.

**Table 5: Seventh Resurfacing**

<b>Year</b>	<b>Milepost Limits</b>	<b>Length (Miles)</b>	<b>Total Length for Year (Miles)</b>
2011	152 to 153.5	1.5	1.5
2012	164.82 to 169.74	4.94	4.94
<b>Total to Date</b>			<b>6.44</b>

**Table 6: Third Lane - First Resurfacing**

<b>Year</b>	<b>Milepost Limits</b>	<b>Length (Miles)</b>	<b>Total Length for Year (Miles)</b>
2003	193.4 to 199.0	5.6	5.6
2005	145.0 to 152.0	7	7
2006	199.0 to 205.4(*)	6.4	6.4
2007	199.05 to 205.4(**)	6.4	
<b>Total to Date</b>			<b>19.0</b>

(\*) – Eastbound lanes only.

(\*\*) – Westbound lanes only.

# Appendix C

## Bridge Replacement and Rehabilitation Program

### Mainline Bridge Deck Replacements

Year	Bridge	Milepost
1983	Maumee River - EBL	63.0
1983	Cuyahoga River - WBL	176.9
1984	S.R. 109	40.3
1984	D T & I Railroad	40.5
1984	Bad Creek	41.3
1984	Maumee River - WBL	63.0
1984	S.R. 53	92.0
1984	Sandusky River	92.3
1984	N & S Railroad	98.9
1984	S.R. 510	99.1
1984	S.R. 412	99.7
1984	S.R. 99	111.2
1984	Vermilion River	132.1
1984	Quarry Road	138.0
1984	Penn Central Railroad	138.2
1984	Black River	145.9
1984	S.R. 301	147.3
1984	Chestnut Ridge Road	152.0
1984	Over Ramp at Exit 152	152.2
1984	Lorain Road	152.3
1984	Conrail Railroad	152.6
1984	S.R. 82 (Royalton Road)	165.4
1984	York Road	165.5
1984	Bennett Road	166.2
1984	Cuyahoga River - EBL	176.9
1984	Tinkers Creek	185.6
1984	S.R. 45	217.3
1984	Penn Central Railroad	217.3
1984	Meander Reservoir	221.3
1984	Evans Lake-Yellow Creek	234.4
1984	Poland-Unity Road	237.8
1984	Columbiana Road	238.1
1984	Garfield Road	240.8

### Mainline Bridge Deck Replacements (continued)

Year	Bridge	Milepost
1985	S.R. 49	2.1
1985	Swan Creek	47.4
1985	S.R. 64	47.5
1985	Little Muddy Creek	90.2
1985	S.R. 19	90.3
1985	N & W Railroad	90.7
1985	Green Creek	96.2
1985	Branch of South Creek	96.7
1985	Erlin Road and South Creek	97.1
1985	Raccoon Creek	97.9
1985	S.R. 58 (Oberlin N. Road)	140.2
1985	N & W Railroad	140.6
1985	Penn Central Railroad	141.7
1985	Cuyahoga River	191.4
1985	Bryant Road	202.8
1985	Tumor Road	222.7
1985	Kirk Road	222.8
1985	Erie Lackwanna Railroad	223.0
1986	Sugar Creek	81.3
1986	Wolf Creek	82.0
1986	Wagoner Road	83.3
1986	Penn Central Railroad	83.3
1986	Berlin Road	124.0
1986	S.R. 61 & Ceylon-Norwalk Rd.	124.5
1986	Humm Road	125.3
1986	Ditch	126.6
1986	Baumhart Road	136.2
1986	Lake Avenue	144.4
1986	B & O Railroad	144.6
1986	S.R. 57	145.1
1986	Penn Central Railroad	147.9
1986	U.S. 20	148.0
1986	W. Branch of Rocky River	157.4
1986	Lindbergh Blvd.	157.5
1986	N. Royalton-Brecksville Pkwy.	168.6
1986	Western Reserve Road	230.7
1986	Sharott Road	232.0
1986	S.R. 7	232.0



### Mainline Bridge Deck Replacements (continued)

Year	Bridge	Milepost
1987	Grand Trunk Western Railroad	34.2
1987	S.R. 108	34.5
1987	S.R. 295	51.4
1987	Penn Central Railroad	52.3
1987	Albion Road	56.1
1987	Penn Central Railroad	56.3
1987	Swan Creek	58.5
1987	S.R. 65	63.3
1987	B & O Railroad	63.5
1987	White Road	63.6
1987	Simmons Road	63.9
1987	East Branch Grassy Creek	64.2
1987	Nine Mile Creek	85.3
1987	Muddy Creek	87.3
1987	Fuller Creek	101.5
1987	Dirt Access Road	103.4
1987	Pickel Street	103.5
1987	Mills Creek	108.3
1987	Penn Central Railroad	109.1
1987	Portland Road	109.2
1987	Hudson Aurora Road	184.2
1987	Norfolk and Western Railroad	186.0
1987	Erie Lackawanna and Penn Central Railroads	208.1
1987	Penn Central Railroad	208.7
1987	Newton Falls - Braceville Road	208.9
1987	Newton Falls - Bailey Road	211.5
1987	B & O and Penn Central Railroads	211.7
1987	Branch of Duck Creek	212.6
1987	Carson - Salt Springs Road	213.6
1987	Tippecanoe Road	228.4
1987	Indian Run	228.6
1987	Mill Creek	230.4

### Mainline Bridge Deck Replacements (continued)

Year	Bridge	Milepost
1988	Nettle Creek	10.6
1988	St. Joseph River	11.3
1988	Conrail	19.6
1988	U.S. 127	20.1
1988	U.S. 20	59.8
1988	Eastgate Road	61.1
1988	Norfolk & Western Railroad & Stengel Avenue	61.5
1988	Glenwood Road	66.0
1988	Conrail Railroad	66.2
1988	Cedar Creek	68.0
1988	Conrail Railroad & C.R. 10	68.8
1988	S.R. 163	73.0
1988	Conrail Railroad	74.0
1988	County Line Road	74.1
1988	Trapp Road	77.4
1988	Toussaint Creek	77.5
1988	Lime Road	77.6
1988	Bark Creek	94.2
1988	U.S. 6	95.4
1988	N & W Railroad - Kelley Road	117.3
1988	U.S. 250	118.1
1988	Huron River - N & W Railroad	119.6
1988	Infirmity Road	193.1
1988	Parkman Road	203.7
1988	South Fork Eagle Creek	205.2
1988	Ohio Turnpike over Interchange 16 Ramps	232.9
1989	St. Joseph Beaver Road	14.1
1989	N & W Railroad	14.2
1989	Tiffin River	24.7
1989	C & O Railroad	70.2
1989	Cummins Road	70.3
1989	S.R. 420 & I-280	71.4
1989	S.R. 43	188.2
1989	Mahoning Avenue	219.8

**Mainline Bridge Deck Replacements (continued)**

<b>Year</b>	<b>Bridge</b>	<b>Milepost</b>
1990	Portage River	80.5
1990	B & O Railroad	113.7
1990	Ransom Road	114
1990	S.R. 5	209.6
1990	Mahoning River	209.9
1990	Ravenna-Warren Road	210.1
1990	B & O Railroad	210.3
1991	Eastland Road	160.4
1991	East Branch of Rocky River	160.7
1991	Rocky River Road	160.7
2002	Turnpike over I-76	219
2006	Turnpike over Meander Reservoir	221.3
	<b>Total to Date</b>	<b>147 Pairs</b>

### Crossroads and Ramp Deck Replacements

Year	Bridge	Milepost
1980	Gulf Road	146.4
1983	<i>Bagley Road</i>	152.9
1983	<i>Sprague Road</i>	159.0
1983	U.S. 42 (Pearl Road)	161.1
1983	S.R. 91	183.2
1984	Holland Road	59.0
1984	Ramp over Chestnut Ridge Road at Exit 152	152.0
1984	Usher Road	156.1
1984	Webster Road	162.9
1984	<i>Abbey Road</i>	164.4
1984	Ramp over S.R. 21 at Exit 173	172.9
1984	S.R. 303	207.3
1985	Ramp over Turnpike at Exit 13	13.4
1985	Ramp over Turnpike at Exit 173	173.2
1985	S.R. 21	172.9
1986	Ramp over Turnpike at Exit 34	34.9
1986	Ramp over S.R. 57 at Exit 145	145.1
1986	<i>Jennings Road over Turnpike</i>	154.0
1986	<i>W. 130th Street over Turnpike</i>	163.8
1986	Turnpike Ramp over S.R. 8	180.0
1987	Ramp over US 250 at Exit 118	118.1
1987	<i>Ramp over Turnpike at Exit 118</i>	118.6
1987	West Ridge Road	142.6
1987	<i>Ramp over Turnpike at Exit 145</i>	145.5
1987	S.R. 83	150.5
1987	S.R. 252	156.9
1987	<i>Edgerton Road</i>	169.6
1987	Highland Road	171.1
1987	Barr Road	171.6
1987	Raccoon Road	226.7
1988	Race Road	149.2
1988	Maddock Road	149.8
1988	Ramp over C.R. 12 at Exit 152	152.3
1988	Old Exit 161 Ramp over Turnpike	161.5
1988	S.R. 3	166.8
1988	Ramp over S.R. 7 at Exit 232	232.6
1988	S.R. 164	233.8

**Crossroads and Ramp Deck Replacements (continued)**

<b>Year</b>	<b>Bridge</b>	<b>Milepost</b>
1989	S.R. 66	26.3
1989	Wilkins Road	50.4
1989	S.R. 2	52.9
1989	Eber Road	53.5
1989	Crissey Road	54.8
1989	Manley Road	58.6
1989	S.R. 590	85.5
1989	Fought Road	86.6
1989	Four Mile House Road	88.1
1989	Fangboner Road	91.1
1989	Ramp over Turnpike at Exit 91	91.6
1989	Ramp over S.R. 53 at Exit 91	92.0
1989	Shannon Road	93.0
1989	Carley Road	94.7
1989	Northwest Road	106.1
1989	S.R. 269	106.8
1989	Deyo Road	107.5
1989	<i>Billings Road</i>	<i>108.7</i>
1989	<i>Patten-Tract Road</i>	<i>112.5</i>
1989	<i>Thomas Road</i>	<i>115.1</i>
1989	S.R. 13	119.3
1989	Gore-Orphanage Road	133.1
1989	<i>Vermilion Road</i>	<i>135.0</i>
1989	South Amherst Road	138.7
1989	Oberlin Road	141.3
1989	Stearns Road	154.6
1989	Big Creek Parkway	161.0
1989	<i>Black Road over EB Turnpike</i>	<i>174.1</i>
1989	<i>Black Road over WB Turnpike</i>	<i>174.1</i>
1989	Boston Mills Road	178.0
1989	S.R. 8 Northbound	180.0
1989	S.R. 8 Southbound	180.0
1989	Ramp over Turnpike at Exit 180	180.3
1989	Stow Road	184.7
1989	U.S. 224	227.6
1989	New Springfield Road	235.6
1989	Beard Road	236.7
1989	S.R. 170	240.4

**Crossroads and Ramp Deck Replacements (continued)**

<b>Year</b>	<b>Bridge</b>	<b>Milepost</b>
1990	Nettle Creek Road	6.2
1990	Farmer Center Road	9.0
1990	S.R. 576	10.2
1990	Townline Road	12.1
1990	S.R. 15 over Exit 13 Ramp	13.2
1990	S.R. 15	13.2
1990	Pleasant Hill Road	15.1
1990	Holloway Road	57.3
1990	<i>Camper Road</i>	75.6
1990	Gibbs Road	97.6
1990	Karbler Road	98.1
1990	Yorktown Road	100.2
1990	Vickery Road	101.2
1990	Mugg Road	102.3
1990	<i>Albion Road</i>	162.2
1990	S.R. 94	167.3
1990	<i>S.R. 176</i>	169.5
1990	Old S.R. 8	179.5
1991	Exit 59 Ramp over US 20	59.8
1991	Portage River-South Road	80.6
1991	Murray Ridge Road	143.4
1991	West River Road	145.8
1991	Page Road	189.2
1991	Diagonal Road	191.2
1992	<i>Harrison Road</i>	130.8
1992	Prospect Road	182.1
1992	Exit 187 Ramp over Turnpike	187.2
1992	Exit 187 Ramp over S.R. 14	187.2
1992	Peck Road	195.2
1993	<i>S.R. 105</i>	79.5
1993	Joppa Road	128.5
1993	<i>S.R. 60</i>	131.6
1993	Coit Road	192.4
1993	Limeridge Road	196.7
1993	S.R. 534	207.6
1993	Exit 209 Ramp over Turnpike	209.2
1993	Exit 209 Ramp over S.R. 5	209.6

**Crossroads and Ramp Deck Replacements (continued)**

<b>Year</b>	<b>Bridge</b>	<b>Milepost</b>
1994	Township Line Road	94.1
1994	S.R. 101	104.2
1994	Exit 161 over Turnpike	161.8
1994	S.R. 88	199.5
1994	S.R. 4 over Turnpike	110.7
1994	S.R. 44 over Turnpike	194.2
1995	River Road	62.8
1996	EB I-480 over Turnpike	186.8
1996	WB I-480 over Turnpike	186.8
1999	Gibson Road	223.9
1999	US 62/S.R. 46	225.2
2000	Shiets Road	96.1
2000	Jacobs Road	96.5
2000	Vickery Road	101.2
2000	Dirt Access Road	103.4
2000	S.R. 101 Bridge	104.2
2000	EB I-90 over West Ridge Road	142.6
2000	EB I-90 over Turnpike	142.8
2001	Stanley Road	201.8
2001	Lintz Road	214.5
2002	<i>Pemberville Road</i>	72.0
2002	Prospect Street	159.5
2002	Ramp over I-71	161.5
2002	Lipkey Road	220.3
2003	Slagle Road	200.2
2003	Horn Road	204.7
2004	Shiloh-Whiteville Road	44.4
2004	Scott Road	49.4
2004	Ramp over Turnpike at Exit 234	234.1
2004	Ramp over Yellow Creek at Exit 234	234.1
2005	Fulton-Lucas County Road	48.4
2005	Cass Road	60.3
2005	Ramp Over Turnpike at Exit 71	71.7
2007	Reighard-Whiteville	43.9
2007	Utah Road	45.4
2012	Gulf Road	146.4
	<b>Total to Date</b>	<b>149</b>

\*Bridges replaced or rehabilitated as part of Third Lane Construction are shown in italics. See page C-13.

### Latex Overlay Projects

Year	Bridge	Milepost
1982	Prospect Street (S.R. 237)	159.5
1983	Key Street	60.8
1983	Ramp over I-71 at Exit 161	161.5
1983	Ramp over Turnpike at Exit 161	161.5
1984	S.R. 101	104.2
1984	U.S. 62 - S.R. 46	225.2
1985	EB Turnpike over I-77	172.5
1985	WB Turnpike over I-77	172.5
1985	EB Turnpike over I-271	175.3
1985	<i>Ramp over Turnpike at Exit 218</i>	219.0
1985	EB Turnpike over I-76	219.0
1985	WB Turnpike over I-76	219.0
1988	<i>Root Road over Turnpike</i>	151.1
1989	Heller Lyon Road over Turnpike	39.3
1989	Liberty-Adrian Road over Turnpike	41.1
1989	Raker-Barden Road over Turnpike	41.9
1989	Delta-Santee Road over Turnpike	42.4
1989	<i>Lime City Road over Turnpike</i>	65.4
1989	<i>Oregon Road</i>	67.2
1989	Ramp under Toll Plaza, Exit 161	162.0
1990	Pettisville-Morenci Road	30.3
1990	Tedrow-Morenci Road	31.4
1990	Hartman-Inlet Road	32.5
1990	Lena-Morenci Road	33.2
1990	Exit 71 Ramp over S.R. 420	71.4
1990	Pemberville Road	72.0
1990	<i>Billman Road</i>	75.2
1991	Fish Creek Road	0.9
1991	Malcolm Church Road	3.1
1991	Ricketts Bridge Road	4.1
1991	West Eagle Church Road	5.1
1991	White Bridge Road	6.9
1991	Champion Road	7.6
1991	Cummins Road	11.6
1991	Old State Route 259	16.1
1991	Eberly Home Road	17.1
1991	Clays Church Road	18.1
1991	Alvordton Road	19.1



### Latex Overlay Projects (continued)

Year	Bridge	Milepost
1991	Clifton Gunn Road	21.4
1991	Zone-Southern Road	25.3
1991	Spies Handy Corners Road	27.3
1991	Lauber Hill-Ritter Road	28.3
1991	Eckley-Powers Road	29.3
1991	Reighard-Whiteville Road	43.9
1991	Shiloh-Whiteville Road	44.4
1991	Utah Road	45.4
1991	Brailey Road	46.6
1991	Fulton-Lucas Road	48.4
1991	Scott Road	49.4
1991	Exit 59 Ramp	59.5
1991	Cass Road	60.3
1991	<i>Crystal Street</i>	62.0
1991	US 24 - SR 25	62.3
1991	<i>Swartzman Road</i>	82.2
1991	Hessville Road	84.4
1991	Dean Road	132.4
1991	Gifford Road	135.4
1991	Exit 142 Eastbound Ramp over West Ridge Road	142.6
1991	Lipkey Road	220.3
1991	Herbert Road	225.0
1991	Exit 234 Eastbound Ramp over Turnpike	234.1
1991	Exit 234 SB Ramp over the Yellow Creek	234.4
1992	Asbury Road	197.8
1992	Nichols Road	199.2
1992	Jewel-North Road	206.3
1993	Stryker-Lockport Road	22.0
1993	Shilling-Ely Road	22.7
1993	Ruegar Shelter Road	23.9
1993	Fulton-Williams Road	24.4
1993	Wauseon-Ottokee Road	35.2
1993	W. Barre-Advance Road	36.3
1993	Biddle Scott Road	37.1
1993	Winnemeg-Lyons Road	38.3
1993	Brigham-Fraker Road	42.9
1993	<i>Dutch Road</i>	76.3
1993	<i>Martin- Williston Road</i>	78.7

### Latex Overlay Projects (continued)

Year	Bridge	Milepost
1993	<i>Dishinger Road</i>	81.5
1993	River Road	120.1
1993	Wikel Road	121.9
1993	Arlington Road	122.3
1993	Chapin Road	123.1
1993	Frailey Main Road	126.3
1993	<i>Angling Road</i>	129.0
1993	S.R. 700	198.5
1995	Copp Road	104.3
2012	Royalton Road	165.4
2012	York Road	165.5
2012	Bennet Road	166.2
	<b>Total to Date</b>	<b>88</b>

\* Bridges replaced or rehabilitated as part of Third Lane Construction are shown in italics. See Page C-13.

### Third Lane Construction Program through 2012 Overhead Bridge Replacement or Reconstruction

Year	Bridge	Milepost
1996	Dishinger Road	81.5
1996	Billings Road	108.7
1996	Root Road	151.2
1996	S.R. 88	199.5
1997	Lime City Road	65.4
1997	Tracy Road	67.7
1997	Lemoyne Road	70.8
1997	Billman Road	75.2
1997	Dutch Road	76.3
1997	Martin-Williston Road	78.7
1997	Swartzman Road	82.2
1997	Kingsway Road	89.4
1997	Patten-Tract Road	112.5
1997	Thomas Road	115.1
1997	Gate 7 Ramp	118.6
1997	Gate 8 Ramp	145.5
1997	West 130th Street	163.8
1997	S.R. 176	169.5
1997	Black Road	174.1
1997	Metroparks Bikeway	179.2
1997	Selkirk-Bush Road	212.5
1998	Crystal Avenue	62.0
1998	Detroit Avenue	62.3
1998	Vermilion Road	135.0
1998	Albion Road	162.2
1999	Camper Road	75.6
1999	S.R. 105	79.5
1999	Angling Road	129.0
1999	S.R. 60	131.6
1999	Abbey road	164.4
1999	Edgerton Road	169.6
2000	Oregon Road	67.2
2000	Luckey Road	69.7
2000	Harrison Road	130.8
2000	Berea-Bagley Road	152.9
2000	Sprague Road	159.0
2000	Elsworth Bailey NB	215.4
2000	Elsworth Bailey SB	215.4

**Third Lane Construction Program through 2011\* (continued)**  
**Overhead Bridge Replacement or Reconstruction**

<b>Year</b>	<b>Bridge</b>	<b>Milepost</b>
2000	Exit 218 Ramp Over Turnpike	219.0
2002	S.R. 795 Over Turnpike	65.1
2002	Pemberville Road	72.0
2003	Ramp over Turnpike	59.5
2003	CSX Railroad	157.2
2006	Norfolk Southern Railroad	182.0
	<b>Total to Date</b>	<b>44</b>

\* No third lane widening projects for overhead bridges took place in 2010, 2011.

# Appendix D

## Crash Statistics

## Crash Statistics (1955 to 2011 Year to Date)

Year	Accidents	Accident Rate	No. of Fatalities	Fatality Rate
1955	233	147	4	2.5
1956	806	102.5	16	2.0
1957	775	85	28	3.1
1958	666	72.5	29	3.1
1959	763	77.7	18	1.8
1960	756	73.2	20	1.9
1961	735	72.3	23	2.3
1962	773	72.6	13	1.2
1963	778	71.6	16	1.5
1964	966	83.3	35	3.0
1965	1,039	86.3	32	2.6
1966	1,193	93.4	40	3.1
1967	1,268	98.7	27	2.1
1968	1,485	108.4	35	2.6
1969	1,502	104.1	40	2.8
1970	1,478	100.2	24	1.6
1971	1,542	101.3	34	2.2
1972	1,832	114.9	26	1.6
1973	1,902	115.4	28	1.7
1974	1,491	98.1	10	0.7
1975	1,366	88.5	24	1.6
1976	1,496	90.7	21	1.3
1977	1,770	103.4	26	1.5
1978	1,726	98.4	19	1.1
1979	1,543	95.5	38	2.4
1980	1,393	88.4	26	1.7
1981	1,583	94.6	20	1.2
1982	1,552	98.3	12	0.8
1983	1,625	98.6	13	0.8
1984	1,821	107.8	11	0.7

## Crash Statistics (1955 to 2011 Year to Date)

Year	Accidents	Accident Rate	No. of Fatalities	Fatality Rate
1985	1,814	104.8	19	1.1
1986	1,698	93	8	0.4
1987	1,944	101.7	12	0.6
1988	1,874	93	18	0.9
1989	1,944	92.7	21	1.0
1990	1,847	84.6	13	0.6
1991	1,759	81.5	13	0.6
1992	1,755	78.5	21	0.9
1993	1,846	80	12	0.5
1994	1,978	81.8	19	0.8
1995	2,019	80.3	12	0.5
1996	2,248	90.5	13	0.5
1997	2,035	82.9	10	0.4
1998	1,889	73.5	8	0.3
1999	2,303	86.7	8	0.3
2000	2,443	90.4	12	0.4
2001	2092	77	14	0.5
2002	2373	84.5	10	0.4
2003	2433	85.9	11	0.4
2004	2609	89.6	17	0.6
2005	2858	95.6	14	0.5
2006	2342	77.0	8	0.3
2007	2532	85.0	11	0.5
2008	2689	95.0	5	0.2
2009	2125	81.6	8	0.3
2010	2268	80.9	7	0.2
2011	2583	92.7	6	0.2
2012*	1461	91.8	5	0.3

\*7 months

# Appendix E

## Schedule of Insurance



## Ohio Turnpike Commission Insurance Schedule 09-01-13

Insurance Coverage	Insurer and Agent	Policy No.	Ins. Value	Term	Policy Date	Premium
<b>1. General Liability Ins.</b>	Travelers Indemnity Company Arthur J. Gallagher Risk Mgmt Services, Inc. 2 Summit Park Dr., Suite 235 Independence, OH 44131 216-566-9799	14563137	Bodily injury and property damage \$1,000,000 each occurrence, \$3,000,000 aggregate. Includes employer's liability and employee benefits E & O and terrorism. Self-Insured Retention (SIR) of \$50,000 each occurrence, including loss adjustment expense.	1 year	09-01-13	Advance premium of \$314,362
<b>Automobile Liability Ins.</b>	Travelers Indemnity Company Arthur J. Gallagher Risk Mgmt Services, Inc. 2 Summit Park Dr., Suite 235 Independence, OH 44131 216-566-9799	810-2C410370	Bodily injury and property damage \$1,000,000 each occurrence; \$50,000 SIR; any auto (includes Owned, Non-Owned autos. Physical damage coverage over \$50,000 for OTC vehicles. Includes garage keepers legal liability of \$250,000 per occurrence. Not subject to audit.	1 year	09-01-13	Included in General Liability
<b>Excess Liability Ins.</b> To cover losses over the limits of policies above.	Travelers Indemnity Company Arthur J. Gallagher Risk Mgmt Services, Inc. 2 Summit Park Dr., Suite 235 Independence, OH 44131	14563149	\$20,000,000 excess of primary – includes Public Officials coverage – deductible \$10,000  Includes terrorism	1 year	09-01-13	Included in General Liability
	North River Insurance Co./Crum & Forster	552015345-6	\$20,000,000 excess of \$20,000,000	1 year	09-01-13	Advance premium of \$65,800
	Great American Insurance Co.	EXC2100927	\$25,000,000 excess of \$40,000,000  Includes terrorism	1 year	09-01-13	Advance premium of \$40,400
	Wells Fargo Ins. Services USA, Inc. 1301 E. 9 <sup>th</sup> St., Suite 3800 Cleveland, OH 44114 216-902-5171					
<b>Public Officials Errors &amp; Omissions Insurance</b>	Travelers Indemnity Company Arthur J. Gallagher Risk Mgmt Services, Inc. 2 Summit Park Dr., Suite 235 Independence, OH 44131	14563137	\$1,000,000 per occurrence, \$1,000,000 aggregate/claims made. \$50,000 SIR - including defense costs. Includes \$5,000,000 employment practices with 7/1/98 retro date. Choice of counsel endorsement included.	1 year	09-01-13	Included in General Liability

## Ohio Turnpike Commission Insurance Schedule 09-01-13

Insurance Coverage	Insurer and Agent	Policy No.	Ins. Value	Term	Policy Date	Premium
<b>2. Bridge Insurance</b> Cuyahoga, Huron, Sandusky, Maumee River, Vermilion and Tinkers Creek bridges; NY Central and Penn Central RR structures. Usual all risk bridge policy including vandalism and malicious and civil disorder.	Travelers Property Casualty Company of America  The Hoffman Group 2 Berea Commons, Suite 10 Berea, Ohio 44017 440-826-0700	QT660290D6021TIL12	\$182,239,251 agreed value. Deductible of \$100,000 Does not exclude terrorism.	1 year	09-01-13	Advance premium of \$148,023
<b>Use &amp; Occupancy</b> Covers loss of toll and other operating revenues due to destruction or damage to any part of the Turnpike or service facilities. All risk including vandalism and malicious mischief.	Travelers Property Casualty Company of America  The Hoffman Group 2 Berea Commons, Suite 10 Berea, Ohio 44017	QT660290D6021TIL12	\$10,000,000 per occurrence. Deductible of \$100,000/7days	1 year	09-01-13	Included in Bridge insurance.
<b>3. Multi-Peril/Property</b>	Affiliated F.M. Insurance Company  Hylant Group 6000 Freedom Square Drive, Suite 400 Independence, Ohio 44131 216-447-1050	MJ375	\$469,665,919 Replacement cost; blanket, real and personal property coverage as scheduled. \$5,000 deductible per occurrence. Includes: building ordinance or law, flood and earthquake coverage, automatic builders risk, business income, extra expense, mold, transit, and terrorism coverages. (Increased coverage at adjusted rate as insured locations and contents are added.)	1 year	09-01-13	Annual Premium of \$239,525

## OHIO TURNPIKE COMMISSION INSURANCE SCHEDULE 09-01-13

Insurance Coverage	Insurer and Agent	Policy No.	Ins. Value	Term	Policy Date	Premium
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(Continued)

Blanket replacement cost insurance on Administration Building, including Communication Building, and Contents, Maintenance Garage and Contents, Toll Plaza Buildings and Contents, Maintenance Buildings and Contents, Highway Patrol Buildings and Contents, Salt Storage Buildings, Radio Communication Equipment and Towers.

Self insured retentions and deductibles -See policy for schedule of insurance.

Blanket Insurance on the sixteen (16) Restaurants, Filling Station and Tool House Buildings collectively known as "Service Plazas".

<b>Data Processing Insurance</b>	Affiliated F.M. Insurance Company  Hylant Group 6000 Freedom Square Drive, Suite 400 Independence, Ohio 44131	MJ375	Replacement cost - Variable Administration Building data processing equipment coverage and total toll plaza data processing equipment coverage; total data processing and media coverage; extra expense; total business interruption coverage, each working day; accounts receivable. 48 hours and \$5,000 deductible.	1 year	09-01-13	(Included in Multi-Peril/Property)
<b>Maintenance/Contractors Equipment</b>	Affiliated F.M. Insurance Company  Hylant Group 6000 Freedom Square Drive, Suite 400 Independence, Ohio 44131	MJ375	\$12,073,042 Covers all items within "Major Equipment List" having an actual cash value in excess of \$1,000. All risk coverage on all perils, inland marine included, valuable papers and transit.	1 year	09-01-13	(Included in Multi-Peril/Property)
<b>Boiler &amp; Machinery</b>	Affiliated F.M. Ins. Co.  Hylant Group 6000 Freedom Square Drive, Suite 400 Independence, Ohio 44131	MJ375	Blanket coverage Deductible \$5,000 per occurrence; includes business interruption and extra expense.	1 year	09-01-13	(Included in Multi-Peril/Property)

## Ohio Turnpike Commission Insurance Schedule 09-01-13

	Insurer and Agent	Policy No.	Ins. Value	Term	Policy Date	Premium
<b>4. Money &amp; Securities</b>	Travelers Casualty & Surety of America  Arthur J. Gallagher Risk Mgmt Services, Inc. 2 Summit Park Dr., Suite 235 Independence, OH 44131 216-566-9799	105648514	\$15,000,000 limit; \$50,000 deductible. Public employee dishonesty; Theft, disappearance and destruction; Robbery and safe burglary; Forgery and alteration; Credit, debit or charge card forgery; Computer fraud; \$1,000,000 Faithful performance of duty; Wire transfer communication fraud. Money orders and counterfeit currency.	1 year	09-01-13	Advance premium of \$34,639
<b>5. Pollution Legal Liability</b>	Ironshore Specialty Insurance Company  Arthur J. Gallagher Risk Mgmt Services, Inc. 2 Summit Park Dr., Suite 235 Independence, OH 44131 216-566-9799	001443600	\$1,000,000 per occurrence \$2,000,000 aggregate Includes Terrorism \$50,000 deductible Third claims for BI/PD; First party remediation; emergency response; business interruption. Coverage excess of customers, contractors, service plaza operators, etc., if applicable. Includes transportation activities of Commission and customers.	2 year	09/01/14	Two year advance premium of \$27,405
<b>6. Cyber/Privacy Liability</b>	Axis Insurance Company  Arthur J. Gallagher Risk Mgmt Services, Inc. 2 Summit Park Dr., Suite 235 Independence, OH 44131 216-566-9799	MCN769079012012	\$2,000,000 with various sub-limits. Includes Terrorism. SIR \$100,000 and 10,000 individuals. 3 <sup>rd</sup> party enterprise security & privacy liability, regulatory action, breach response, computer system extortion. 1 <sup>st</sup> party forensic and legal services, public relations expense, website media liability, business interruption, data restoration.	1 year	09/01/13	Advance premium of \$39,751

**Claims Service –** York Claims Services, Inc.  
16560 Commerce Court  
Suite 100  
Middleburg Heights, Ohio 44130  
440-243-8409