

FORT WASHINGTON WAY 2000



1956



1998



2000

**FORT
WASHINGTON
WAY
2000**



*A project managed by the City of Cincinnati
with the cooperation of thousands*

FORT WASHINGTON WAY 2000

Project Overview

Project Management Team:

John Deatruck, P.E., AICP,
Director of Transportation

Bob Richardson, AIA,
City Architect

Don Gindling, P.E.,
Construction Manager

Project Management Consultant:

Fred Craig, PE

*Area Manager, Senior Vice President
Parsons Brinckerhoff*



Project Team:

- Parsons Brinckerhoff Project Management Consultants
- Contributing PB Offices: Cincinnati, Baltimore, Boston, San Francisco, Miami, Tampa, Las Vegas, Denver and Louisville

Other Team Members:

- Balke Engineers
- BRW
- Burgess & Niple
- Chan Krieger & Associates
- Dan Pinger Public Relations
- H. C. Nutting Company
- Hargreaves Associates
- Infrastructure Services
- JMA Consultants
- KZF Incorporated
- Resource International
- TEC Engineers
- U.S. Cost, Inc.
- Vivian Llambi & Associates
- Wallace Floyd Associates
- Wilson & Associates



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Project Overview

PROJECT TIMELINE

November 1995

City of Cincinnati requests the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) to conduct a sub-corridor analysis for Fort Washington Way

January 1996

OKI begins Fort Washington Way sub-corridor analysis



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Project Overview

PROJECT TIMELINE (continued)

January 1997

OKI produces plan for reconstructing Fort Washington Way as a locally preferred alternative to address traffic congestion along Fort Washington Way

May 1997

Members of the Fort Washington Way project team meet to plan cooperative effort for accomplishing the work. Public meetings are held to obtain input on the plan



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Project Overview

PROJECT TIMELINE (continued)

July 1997

Project team presents Fort Washington Way reconstruction plan during a public forum at Cincinnati City Hall

September 1997

First formal design contracts let

October 1997

State of Ohio approves the FWW Major Investment Study and commits \$80 million in project funding



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Project Overview

PROJECT TIMELINE (continued)

October 15, 1997

City Council approves total funding package

November 1997

Ohio Governor George Voinovich visits Cincinnati to announce a \$20 million funding advance for the Fort Washington Way project

January 1998

Fort Washington Way Project Design Manual drafted



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Project Overview

PROJECT TIMELINE (continued)

April 1998

Value Engineering Workshops held

July 1998

Fort Washington Way reconstruction begins with the first construction contract let on July 2





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Project Overview

PROJECT TIMELINE (continued)

August 1998

Fort Washington Washington detour constructed; all traffic shifted to old eastbound lanes

October 1999

First section of new Fort Washington Way open and traffic shifted to future westbound lanes



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Project Overview

PROJECT TIMELINE (continued)

August 2000

Fort Washington Way completed and open to traffic

December 2000

Fort Washington Way dedication ceremony



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Project Overview

PROJECT PARTNERS:



City of Cincinnati



Hamilton County



Ohio Department of
Transportation



Kentucky Transportation Cabinet



Federal Highway Administration



Ohio-Kentucky-Indiana Regional
Council of Governments



Metro



FORT WASHINGTON WAY 2000

Project Overview

PROJECT GOALS

- Provide safer through and local network roadway for motorists and pedestrians
- Improve local and regional access and re-connect downtown with riverfront
- Provide economic development opportunities by reclaiming highway rights of way



TOTAL COST: \$328 MILLION

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Project Overview

BROAD COMMUNITY SUPPORT

- Team of communications professionals developed a strategic communications plan with a comprehensive package of communications tools
- Community support arose from the public's involvement in the decision to do the work as quickly as possible
- Emphasized message that the benefits were worth the wait



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Project Overview

SUPPORT FROM COMMUNITY ORGANIZATIONS

- The Greater Cincinnati Convention and Visitors Bureau
- The Northern Kentucky Convention and Visitors Bureau
- The City of Newport, Kentucky
- The City of Covington, Kentucky
- Chamber of Commerce
- The Reds and Bengals
- Cincinnati Business Committee
- Transit Authority of Northern Kentucky (TANK)
- Building Owners and Managers Association



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Project Overview

PROJECT COMPONENTS

- Reconfiguration of mainline
- Construction of 27 new bridges
- Creation of new landscape boulevard by construction of second street and reconstruction of Third Street
- Reconstruction of Third Street Viaduct



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Project Overview

PROJECT COMPONENTS (continued)



- Relocation of floodwall
- Construction of new riverfront transit center
- Installation of combined sewer overflow mitigation system
- Installation of foundations for future decks
- Fiber optic backbone

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FWW Project Facts

- Nearly 230 presentations given to downtown businesses, organizations and parkers to update them on traffic pattern changes
- 500 different highway signs placed in more than 300 locations throughout Cincinnati
- Nearly 70,000 detour maps distributed to area businesses, organizations and parking garages to update visitors and commuters of traffic pattern changes
- Approximately three million pounds of structural steel from bridges and roadways removed and recycled for use in other construction projects
- 4.1 million lbs. of structural steel placed at the Fort Washington Way project, which is 20 times the weight of the Statue of Liberty in New York
- 24,402 cubic yards of concrete placed
- Nearly 130,000 cubic yards of earth moved in preparation for the new Fort Washington Way
- Piles driven a total of approximately 655,000 feet



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Project Overview



DEFINING FEATURES

- Detailed Maintenance of Access Plan agreed during the environmental document
- Access maintained through phased and staged fast tracked construction, and with detailed manuals guiding all aspects of project
- Project management structure with unique blending of City of Cincinnati staff with consultant teams

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Project Overview

DEFINING FEATURES (continued)

- Innovative materials including stone mastic asphalt driving surface
- Bi-state funding accord
- Accelerated time frame
- Heavy emphasis on urban design and landscaping
- Innovative bridge types
- Well financed citizen involvement group
- Constructability and value engineering reviews



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Project Overview

THE TRENCH

- Narrowed mainline area, but now with through lane continuity to reduce weaving and merging and improved capacity



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Project Overview



NEW BOULEVARD

- Providing improved access and new front door for city

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Project Overview

THE THIRD STREET VIADUCT- CONNECTION TO US 50 ON THE EAST

- Provides dramatically improved traffic capacity to the East
- First use of steel box girder construction in Ohio
- New substructure constructed under old bridge, retaining access



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Project Overview



NEW FWW FLOODWALL

- Provides flood protection for new project while freeing 14 acres of land for future development by eliminating earthen levee
- Below grade pump house for highway trench storm water during extreme river flood conditions

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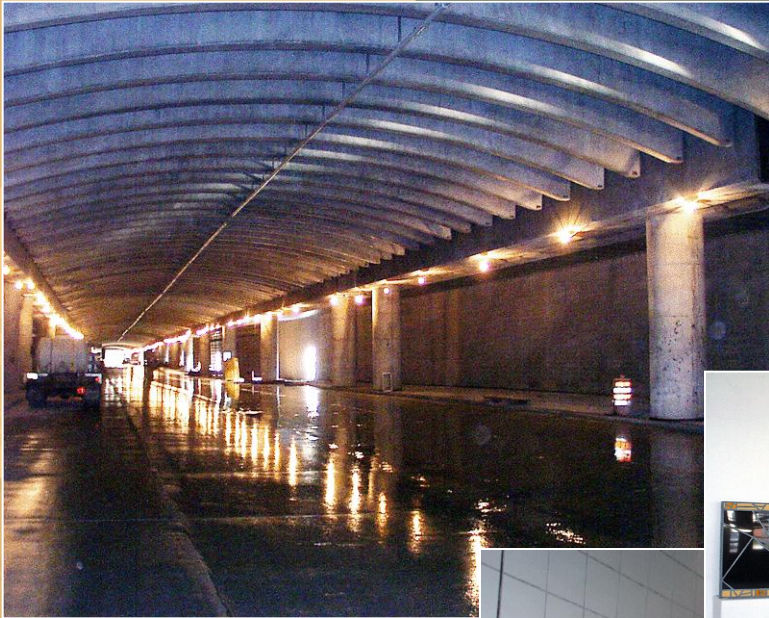


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Project Overview

RIVERFRONT TRANSIT CENTER

- Grade separated transit and pedestrian access for major riverfront events



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Project Overview

COMBINED SEWER OVERFLOW SYSTEM

- New water pollution mitigation system
- Measurable improvements to Ohio River water quality by reducing overflows to near zero



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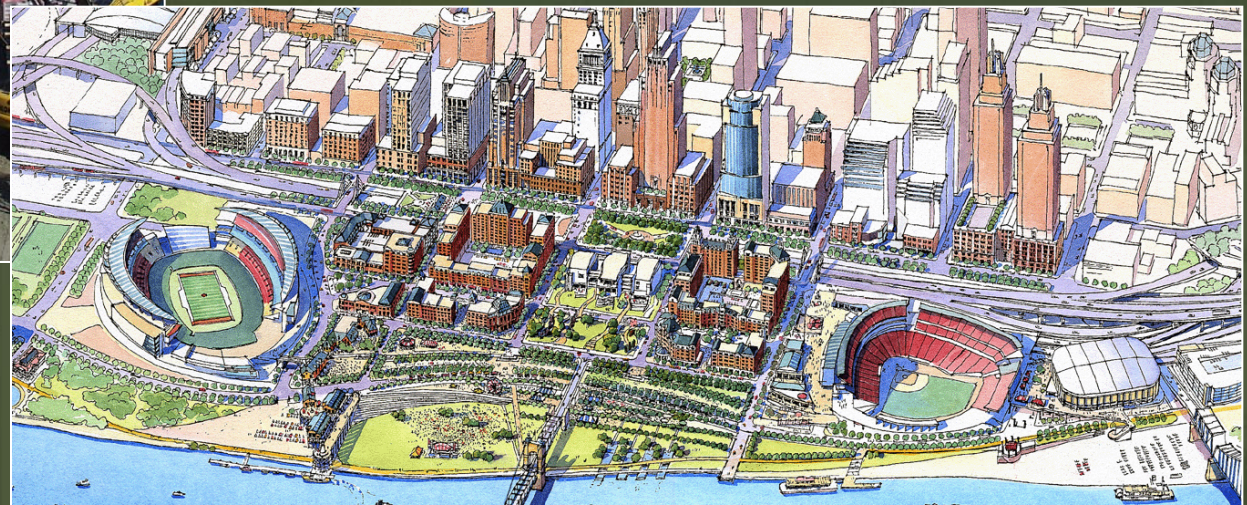


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Project Overview

FOUNDATION PILES FOR FUTURE DECKS

- Allows for the future placement of parks or other public spaces over highway facility



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Project Overview

FOSTERED REDEVELOPMENT OF TWO VACANT WAREHOUSES



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Project Overview



PROJECT COORDINATION

- Typical example illustrates City contracts for new Second Street (Contract 22a) and the Elm Street Bridge over the FWW trench (Contracts 8 and 17d), and Hamilton County contracts for the Bengals stadium and new Elm Street

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Urban Design



PROJECT DESIGN MANUAL

- Examined urban design in each aspect of the project
- Produced in conjunction with overall civil engineering design manual
- Controlled the overall project aesthetics
- Captured best value for dollars spent



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Urban Design



Linked the riverfront to downtown by extending the street grid over the highway.

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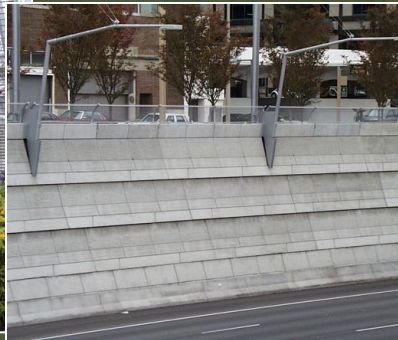


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Urban Design

HIGH QUALITY AND VALUE- MAXIMUM IMPACT

- Custom made pre-cast panels
- Unique lighting using standard fixtures
- Decorative vandal screens
- Multi-colored bridge beams



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Design and Construction

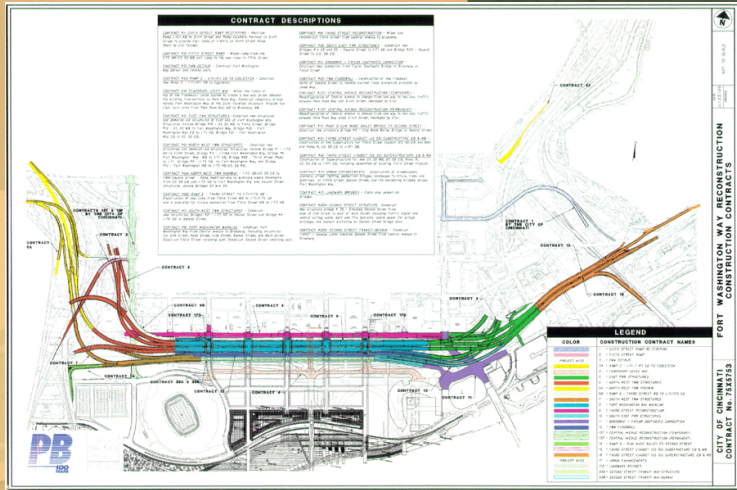
ENVIRONMENTAL DOCUMENTATION FWW CATEGORICAL EXCLUSION

- Document approved in record time
- Model for the Federal Highway Administration for highway reconfiguration
- Concurrent approval by ODOT and the state historical preservation office
- ODOT & SHPO approved on-site archeologist as appropriate mitigation considering site characteristics and construction methodology
- Accelerated OEPA review process



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Design and Construction



THE FWW PROJECT:

- 31 design contracts
- 27 construction contracts
- Work broken down to fast-track design and construction and encourage smaller contractors and minorities to bid
- Phasing and fast-track allowed quick response to changing regional priorities

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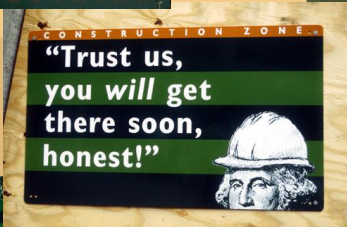


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Design and Construction

IN PREPARATION FOR CONSTRUCTION

- Early implementation of comprehensive vehicular and pedestrian way-finding signage system
- Construction of temporary exit ramps to provide alternate access to downtown
- Construction of temporary bridge to maintain access to Kentucky



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Design and Construction

IN PREPARATION FOR CONSTRUCTION (continued)

- Adaptation of new temporary street on then existing flood levee
- Revitalization of existing groups to insure strong communication networks
- Establishment of web site and list-service



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Design and Construction

IN PREPARATION FOR CONSTRUCTION (continued)

- Constructed two new temporary off ramps to serve the CBD (central business district), one from I-75 North and one from I-71 South to replace access provided by FWW
- Re-striped two other exit ramps to add lanes



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Innovative Bridge Types

Firsts in Ohio:

- Steel Box Girder
- Cast-in-Place Box Girder
- Concrete Integral Piers



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Innovative Bridge Types

27 Bridges Built In 42 Stages



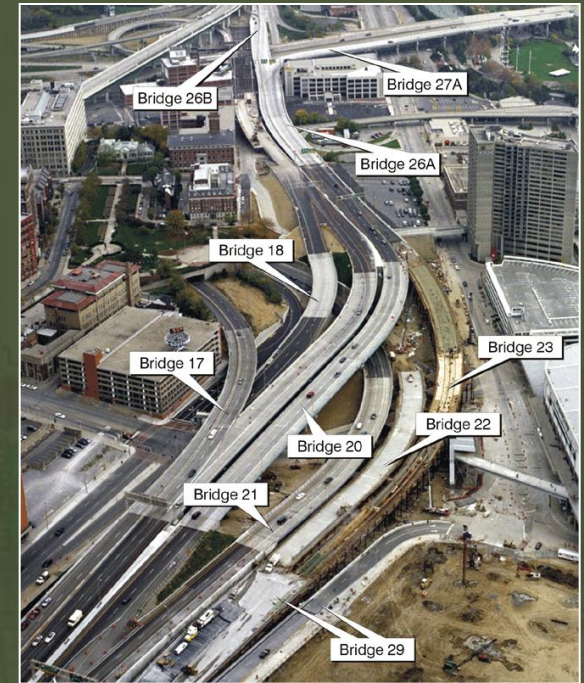
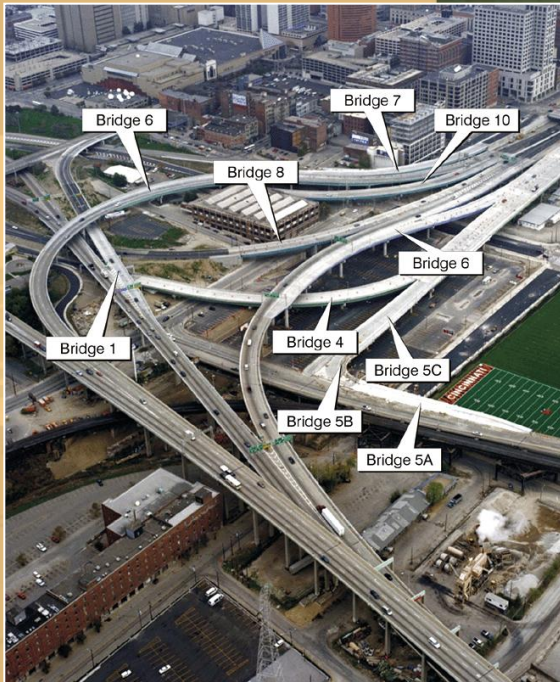
- 4 Steel Rolled Beam
- 16 Steel Curved Plate Girder
- 5 Steel Box Girder
- 7 Cast-in-Place Post-Tensioned Concrete Slab
- 3 Cast-in-Place Post-Tensioned Concrete Box Girder
- 1 Pre-Stressed Concrete “I” girder
- 2 Pre-Stressed Concrete Adjacent Box Beams
- 4 Cable-Stay Pedestrian Bridges

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Innovative Bridge Types



Innovative staged construction techniques used to maintain traffic while building bridges



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Bidding and Construction Management

PROCUREMENT MANUAL

- Assembled a manual of procedures combining federal, state and local requirements
- Established expedited pre-qualification process including MBE, WBE, DBE, SBE vendors, as the laws changed during the project



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Bidding and Construction Management

PROCUREMENT MANUAL (continued)

- All contracts locally advertised and bid by City using ODOT procedures
- Established a contract compliance officer on the job site
- Maintain pace of construction during law suite on MBE regulations and provided basis of consent decree



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Bidding and Construction Management

AGGRESSIVE OUTREACH TO POTENTIAL BIDDERS AND SUBCONTRACTORS

- Contractors encouraged to use minority contractors, pre-approved sub-consultants and suppliers
- Early notification to contractors of upcoming bids, including postings on the FWW Web site and pre-bid seminars
- Established a comprehensive data base of vendors to assist bidders
- MBE/WBE/DBE/SBE workshops held to encourage participation



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Bidding and Construction Management

THE BIDDING PROCESS

- Bid dates posted on the project Web site
- Bids advertised in local newspapers, ODOT and city of Cincinnati bulletins
- Bid many items lump sum to simplify bid and award process



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Bidding and Construction Management

THE BIDDING PROCESS (continued)

- Answers for pre-bid questions available through e-mail
- Contracts went from bid to award in one week or less
- OCIP (owner controlled insurance program) reduced bickering over damage and field claims



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Bidding and Construction Management

COST/CONTROL PROCEDURES

- Value engineering workshop sponsored by ODOT reviewed entire project design and finalized civil and urban design manuals
- Pre-approved design manuals simplified preparation of plans and specifications
- Preliminary constructability reviews by consultant, city, and state team reduced construction costs and enabled phased construction



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Bidding and Construction Management

COST/CONTROL PROCEDURES (continued)

- Contingency amounts added to contracts to enable field decisions to minor problems and focus on cost containment
- Innovative change order approval process using monthly FWW Construction Board to provide oversight and hear claims



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Bidding and Construction Management

MEETING THE SCHEDULE

- Conventionally bid construction contracts with liquidated damages
- No incentives
- Master schedule and traffic management defined early and included in project manuals bid documents



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Public Involvement

COMPREHENSIVE OUTREACH

- Established graphics standards for all materials
- Revitalized existing regional coordination committees
- “Connection to the Future” newsletter distributed to project stakeholders



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Public Involvement

Outreach (continued)



- Over 200 meetings held prior to start of construction to establish dialogue
- More than 400 community meetings held throughout project construction to maintain contact
- Distributed more than 200,000 motorist and pedestrian detour maps

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Public Involvement

OUTREACH (continued)



- Regular events to mark significant project milestones and maintain media contact
- Regularly scheduled meetings with community support groups
- Suggestions and comments taken through telephone, web sites, and e-mail



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Public Involvement

OUTREACH (continued)

Innovative Tools included:

- Roving information display
- ‘Connection to the future’ video
- www.FWW2000.com with three live cameras
- Interpretive site observation display
- Community events
- Traffic alert e-mail messages



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Public Involvement



AGGRESSIVE MEDIA RELATIONS

- Daily traffic updates
- Regular updates and tours of project site
- Open lines of communication
- Regular feedback sessions with police, fire and traffic helicopters



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Awards

- **ACEC** - American Council of Engineering Companies of Ohio - 2002 Engineering Excellence Award
- **CMAA** - Construction Management Association of America - 2001 Construction Management Project Achievement Award
- **ARTBA** - American Road & Transportation Builders Association - 2000 PRIDE in Transportation Construction Award -
- **ASCE Ohio OCEA** - American Society of Civil Engineers - Ohio - 2001 Outstanding Civil Engineering Achievement Award
- **Parsons Brinckerhoff** - Project of the Year 2001
- **SEGD - 2001 Award Outstanding Project from Society of Environmental Graphic Design**
- **Crystal Award** for Fort Washington Way “Connection to the Future” Video
- **ICMA - 2001 International City Council Management Association of America Award**
- **IRF - 2001 IRF Global Road Achievement Award** - International Road Federation - Honorable mention
- **WSO - 2000 Concerned Company/Organization Award**, World Safety Organization



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March
1999



November
1999



May
2000



August
2000

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