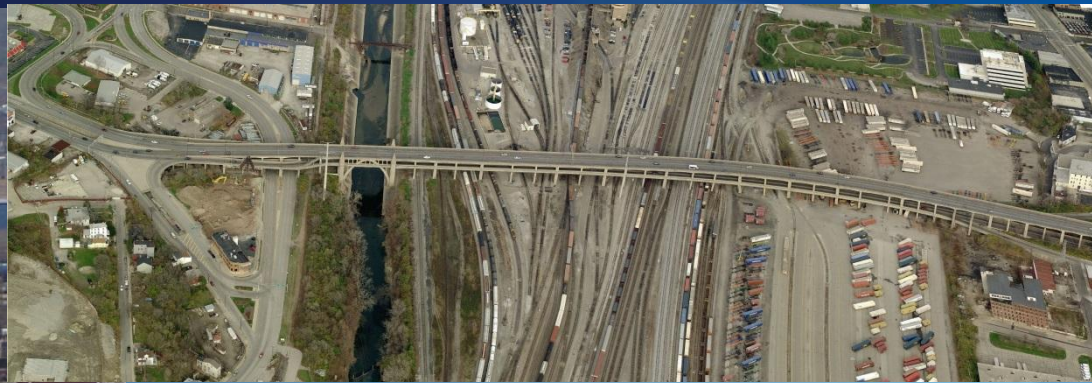
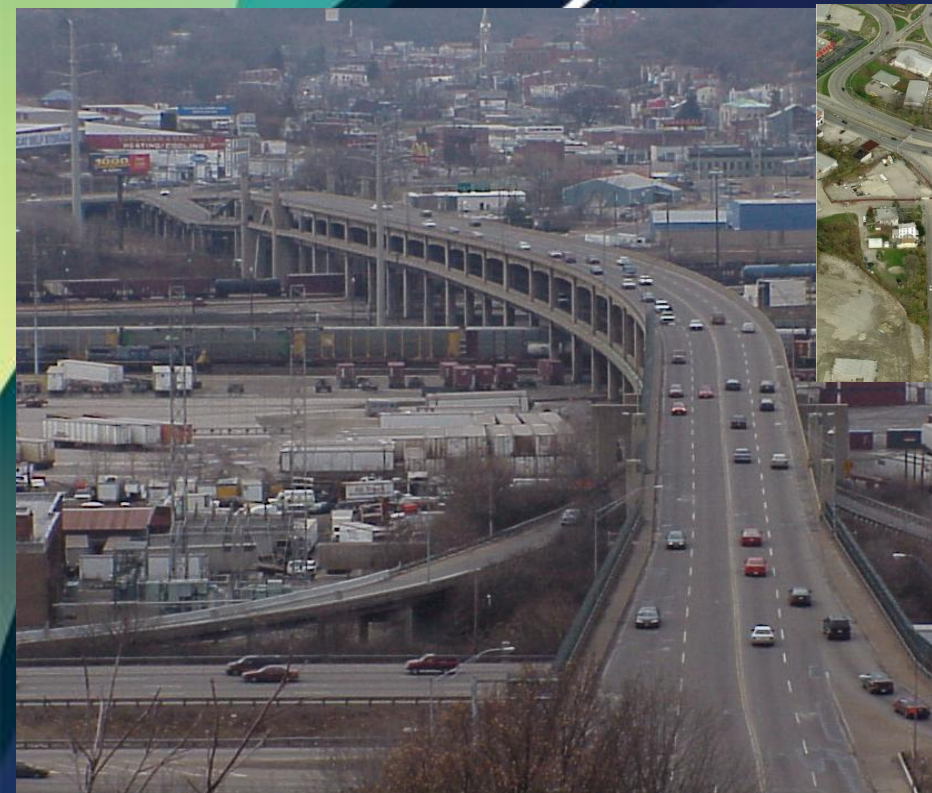


Western Hills Viaduct Major Projects & Smart Government Committee



January 9, 2018
ODOT PID 85388

Background Information

- **The Western Hills Viaduct is over a half mile long, double deck bridge that carries over 55,000 vehicles per day.**
- **Constructed in 1932. Last and only major rehabilitation in 1977.**
- **Widespread Concrete and Structural Steel Deterioration.**
- **Structurally deficient (condition rating of 5 or less).**
- **Functionally obsolete (geometry does not meet current design standards).**
- **Reaching the end of its design life.**
- **DOTE along with the Hamilton County Engineer's Office is actively pursuing a phased plan for its replacement.**

Preliminary Engineering

- Preliminary Engineering for replacement or major rehabilitation started in 2011.
- Developed and evaluated 17 replacement alternatives (6 single deck structures, 11 double deck structures, and 3 rehabilitation alternatives).
- Three rounds of Public Involvement meetings have been held in January 2012, September 2013, and December 2016.
- Five Railroad Coordination meetings have been held with CSX and two with Norfolk Southern.
- Five Utility Coordination meetings have been held with Duke Electric.
- A three day Value Engineering workshop was held with ODOT, FHWA, the Railroads, and City and Hamilton County representatives in August 2015.
- Preliminary Engineering scheduled to be completed by the end of 2017.

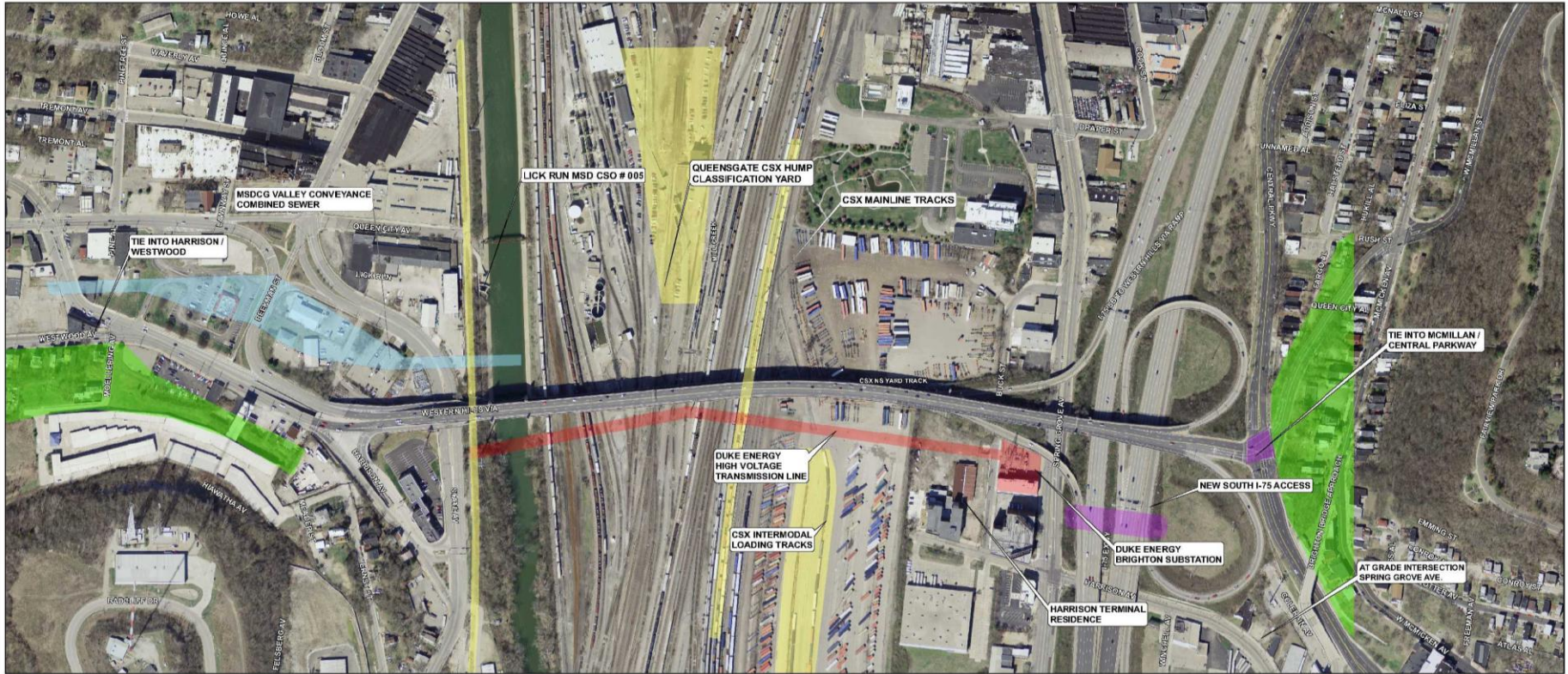
ODOT Coordination

Coordination with ODOT for the reconstruction of I-75 interchange at the Western Hills Viaduct

- Partial Interchange (I-75 access provided only to and from the west)
- All Interstate Traffic moved to the lower deck
- Location of I-75 access ramps fixed due adjacent interchanges
- Relocation of Duke Substation
- ODOT committed to funding and building interchange in conjunction with the Viaduct



Design Constraints



Western Hills Viaduct Preliminary Engineering Study
 Design Constraints Map
 September 2013

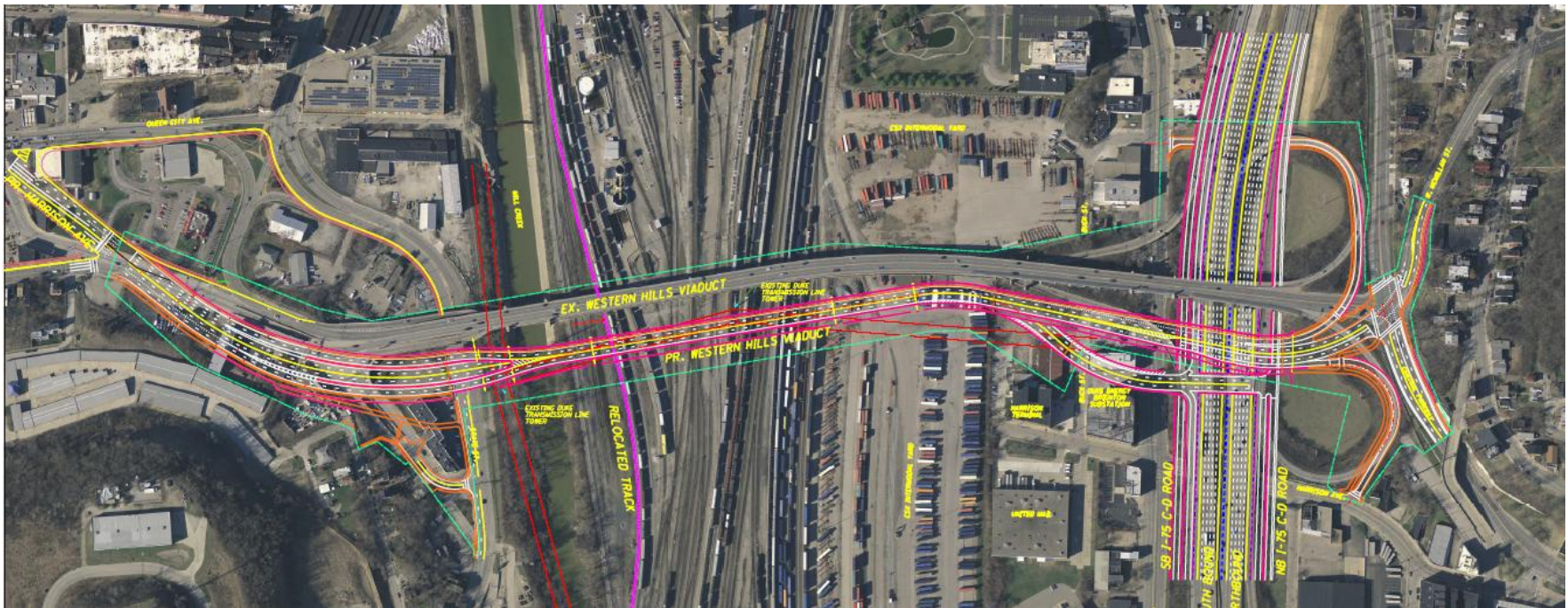
Legend

- MSDCG Valley Conveyance System
- Constraints-CSX>Loading
- Constraints-Hills
- Duke Energy Interfere
- Constraints-I75_Interchange

0 60 120 240 Feet

Preferred Alternative

The Preferred Alternative recommendation is replacement with a new, long span, double deck structure immediately south of the existing viaduct.



Preferred Alternative

West Approach



Preferred Alternative

East Approach

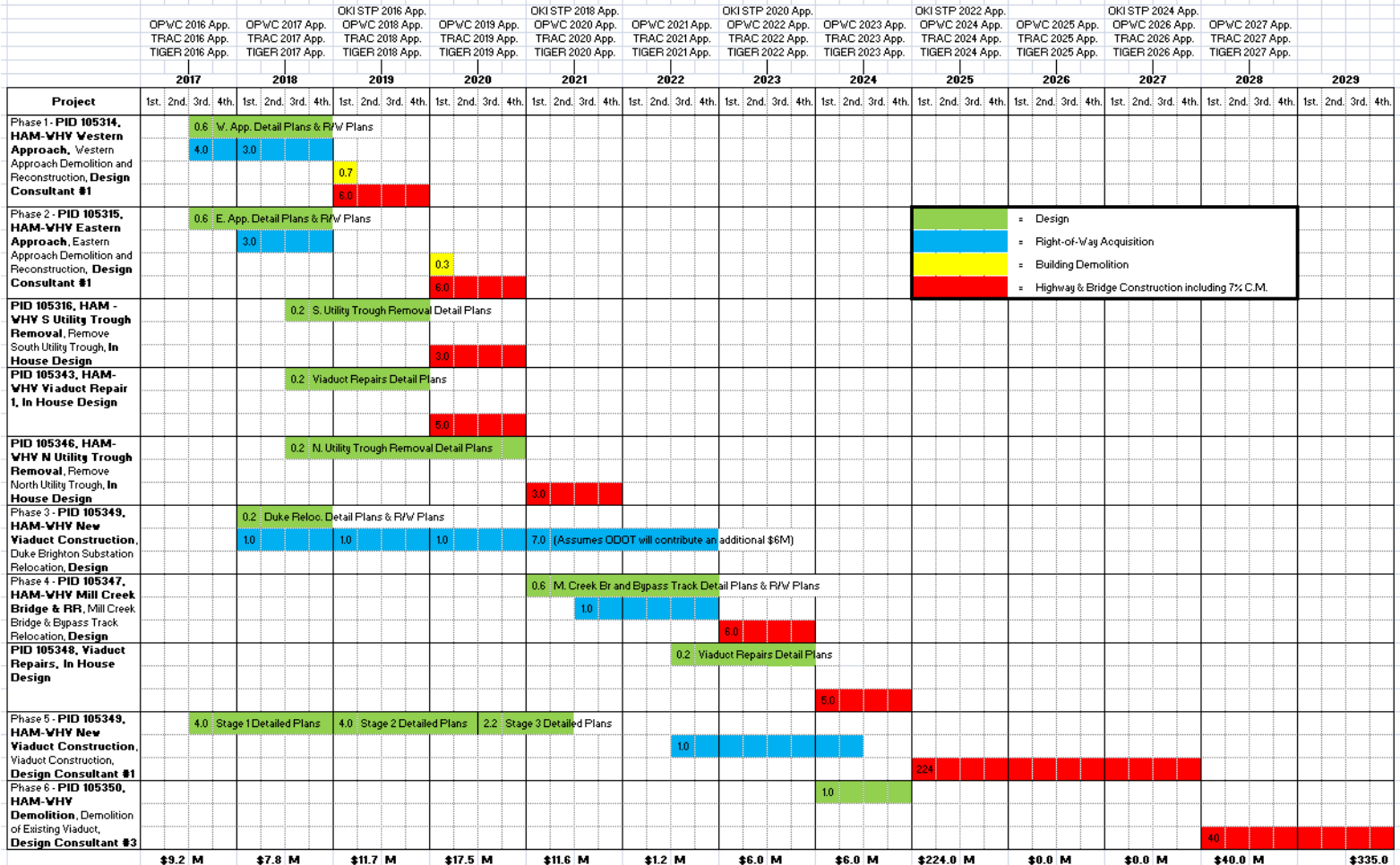


Phasing Plan Overview

Const. Year	Project	Estimated Cost
2019	Construction Phase 1 - PID 105314, HAM-WHV Western Approach , Western Approach Demolition and Reconstruction	\$15M
2020	Construction Phase 2 - PID 105315, HAM-WHV Eastern Approach , Eastern Approach Demolition and Reconstruction	\$10M
2020	Maintenance Phase - PID 105316, HAM - WHV S Utility Trough Removal , Remove South Utility Trough	\$3M
2020	Maintenance Phase - PID 105343, HAM-WHV Viaduct Repair 1	\$5M
2021	Maintenance Phase - PID 105346, HAM-WHV N Utility Trough Removal , Remove North Utility Trough	\$3M
2021	Construction Phase 3 - PID 105349, HAM-WHV New Viaduct Construction , Duke Brighton Substation Relocation	\$10M
2023	Construction Phase 4 - PID 105347, HAM-WHV Mill Creek Bridge & RR , Mill Creek Bridge & Bypass Track Relocation	\$8M
2024	Maintenance Phase - PID 105348, Viaduct Repairs	\$5M
2025	Construction Phase 5 - PID 105349, HAM-WHV New Viaduct Construction , Viaduct Construction	\$235M
2028	Construction Phase 6 - PID 105350, HAM-WHV Demolition , Demolition of Existing Viaduct	\$41M
	Estimated Total Project Cost (Design, R/W, Construction, Demolition)	\$335M

Phasing Plan Schedule

WHV Replacement Project Phasing and Maintenance Plan (Subject to Change Pending Funding Availability)



Secured Funding Table

Item	Secured Federal & Funding Source	Local 20% Match & Funding Source	
	Right-of-Way	\$5.4M OKI-STP	\$1.35M
Detailed Design (Alternatives Evaluation Report, Stage 1 Plans, Western Plans, Eastern Approach Plans)	\$5.0M TRAC	\$1.25M	County Administered MRF (\$250,000) County Administered MRF allocated through Existing Bridge Maint. Agreement (\$250,000) County Engineer's Office (\$250,000) City Capital (\$500,000)
Right-of-Way	\$5.0M TRAC	\$1.25M	Anticipated: County Administered MRF (\$250,000) TID (\$250,000) County Engineer's Office (\$250,000) City Capital (\$500,000)
Detail Design or Right-of-Way	\$2.8M Ear Marks	\$0.00M	Reallocated from FWW. Local match already met.
TOTAL (\$22M)	\$18.2M	\$3.85M	

NOTE: An additional \$1.75M in Local Funds has been spent on Preliminary Engineering.

Submitted Funding Applications

DATE SUBMITTED	APP.	FEDERAL ASK	LOCAL MATCH	TOTAL	FOR	PREPARED BY	SUBMITTED BY	RECEIVED FUNDING?
03/31/10	STP	\$3.2M	\$0.8M	\$4.0m	R/W	City	Hamilton Co.	Yes
09/30/12	LMB	\$187.6M	\$49.2M	\$236.8M	Entire Project	City	Joint City/Co.	No
03/28/14	STP	\$4.8M	\$1.2M	\$6.0M	R/W	City	Hamilton Co.	No
06/30/14	TRAC	\$14.50	\$2.9M	\$17.4M	R/W & Design	City	Joint City/Co.	No
05/31/16	STP	\$6.0M	\$1.5M	\$7.5M	R/W & Constr.	City	City	No
06/30/16	TRAC	\$10M	\$2.5M	\$12.5M	R/W & Design	City	Joint City/Co.	Yes
10/16/17	TIGER	\$15M	\$3.75M	\$18.75M	Construction	City	City	TBD
11/02/17	INFRA	\$25.2M	\$16.8M	\$42.0M	R/W & Constr.	City	City	TBD

Future Funding Needs

	Grant Funds	Local Match	Total
Funding Secured for Design	\$7,838,411.11	\$1,250,000.00	\$9,088,411.11
Funding Secured for R/W	\$10,400,000.00	\$2,600,000.00	\$13,000,000.00
Funding Needed for Design	\$ 4,929,271.11	\$ 1,232,317.78	\$ 6,161,588.89
Funding Needed for R/W	\$ 9,280,000.00	\$ 2,320,000.00	\$ 11,600,000.00
Funding Needed for Construction	\$ 239,200,000.00	\$ 59,800,000.00	\$ 299,000,000.00

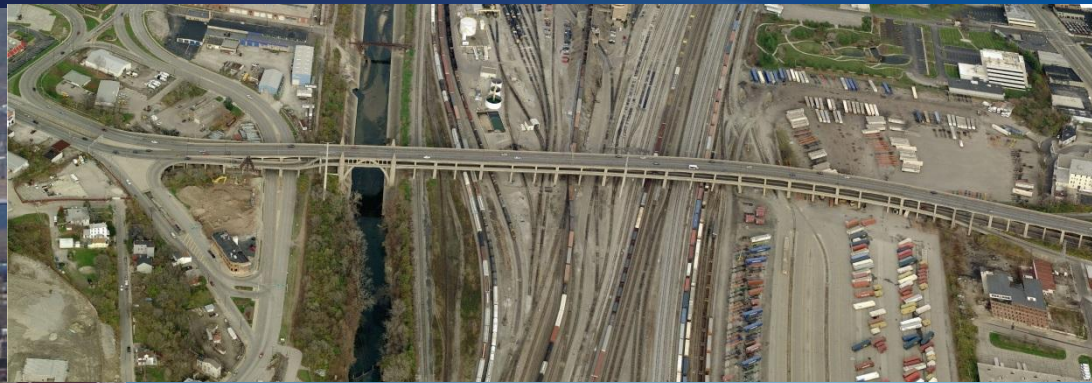
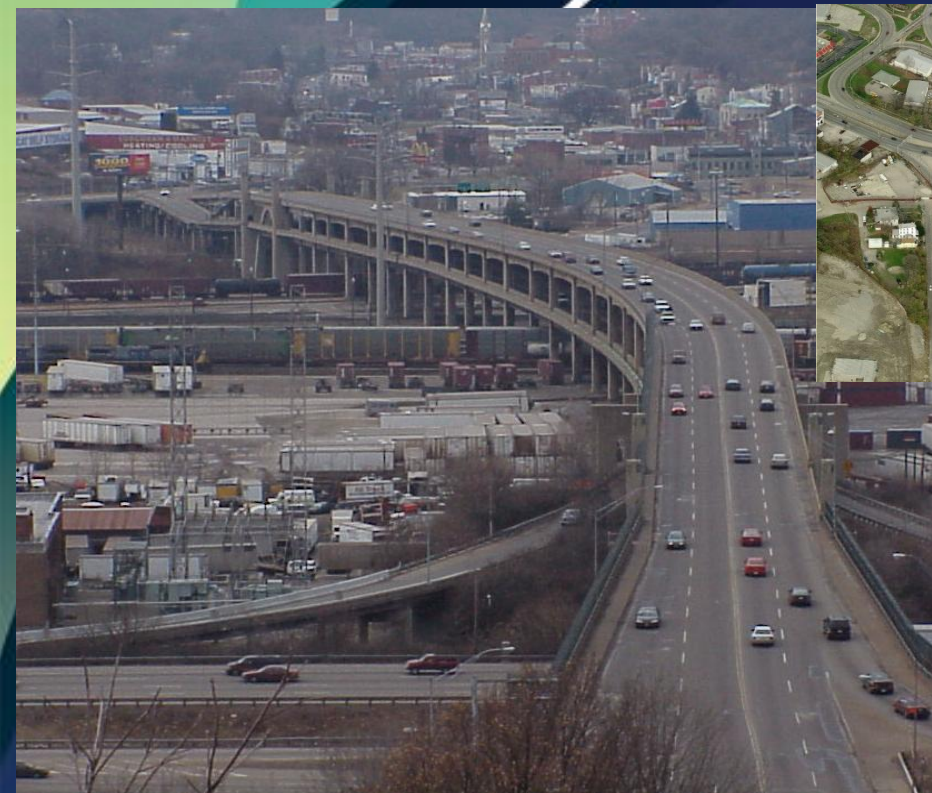
Project Status

- **Completing Environmental Document**
 - Environmental Document is under final review by State and Federal Agencies
 - Environmental Clearance expected to be in February, 2018
- **Detailed Design**
 - T Y Lin International has been selected as the design consultant
 - Consultant is currently developing price proposal
 - Contract is expected to be executed by March

Next Steps

- **Start acquiring needed Right-of-Way up to the limits of present funding**
- **Develop a Financial Plan**
 - **Develop Local Match Funding Plan. Expected to fund 20% of the project being funded through additional license fees and future City capital**
 - **Develop Non-Local Funding Plan. Expected to fund 80% of the project**
- **Authorize Consultant to Begin Stage 1 Design**
 - **Structure Type to be finalized**
- **Future Rounds of Public Meetings expected to be held in Fall of 2018**
- **Continue to seek Federal & State funding for the project**

Western Hills Viaduct Major Projects & Smart Government Committee



Questions?