SQUIRREL HILL INTERCHANGE | SR 376-A76 PUBLIC MEETING



Michael Baker

U.S. Department of Transportation

Federal Highway Administration

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FEBRUARY 20, 2025



AGENDA

- Project Team
- Location/Limits
- Purpose and Need
- Alternatives Overview
 - Traffic Analysis Summary
 - Benefits
 - Comparison
- Community Improvements
- Construction Phasing
- Schedule
- Comment Forms and Website
- Q&A



MEET THE TEAM



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PennDOT

- Jason Zang, PE | District Executive
- Doug Seeley, PE | Assistant District Executive Design
- Cheryl Solosky, PE | Senior Project Manager
- Stephanie Zolnak, PE | District Traffic Engineer
- John Zelesnak, PE | District Portfolio Manager
- Mark Young | District Environmental Planning Manager
- Todd Crouch | Environmental Supervisor NEPA
- Jacqueline Evans, PE | District Right-of-Way Administrator
- Ethan Bailey | Chief Right-of-Way Negotiator
- Nicole Haney | Community Relations Coordinator





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- David Jackson, PE | Project Manager | Senior Roadway Engineer
- Jessica Belowich, PE, PTOE | Senior Traffic Engineer
- Bill Zatezalo| Traffic Designer
- Justin Miller | Transportation Planner
- Danyel Patrick | Senior Public Engagement Specialist
- Meghan Rodgers | Senior Public Engagement Specialist

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- Steve Delong, PE | Project Manager
- Joe Pecora, PE | Senior Roadway Engineer



PROJECT LOCATION

Exit 74 | Primary Interchange – Squirrel Hill, Greenfield & Homestead



PROJECT LIMITS



Project Limits

Greenfield Bridge overpass to Squirrel Hill Tunnel

Scope of Work

- Squirrel Hill Interchange Redesign
 - Reverse Eastbound Ramp Sequence
 - Eliminate Stop Condition for On-Ramp Merge
- Beechwood Boulevard, Forward Avenue, and Monitor Street Improvements
- Associated Structure Improvements

Including:

• Environmental Investigation/Clearance

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• Public & Stakeholder Engagement

PROJECT PURPOSE AND NEED



PROJECT PURPOSE





Improve the interchange operations to accommodate current and future traffic demands



Reduce the potential for crashes at the interchange ramps and along Beechwood Boulevard within the project area



How Congestion Impacts Operations:

Parkway travel lanes, interchange ramps, and secondary streets see **recurring** and **non-recurring** congestion leading to:

- Excessive intersection delays
- Ramp queuing
- Corridor-wide travel time and reliability impacts



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SAFETY:

- **248** crashes from 2016 2021 (omitted 2020 due to Covid-19)
- 1 Fatal Collision; 2 Seriously Injured Collisions





SAFETY:

- 248 crashes from 2016 2021 (omitted 2020 due to Covid-19)
- Rear End = **47%**
 - Eastbound weave area at on/off ramp
 - Westbound off-ramp at tunnel exit





SAFETY:

- 248 crashes from 2016 2021 (omitted 2020 due to Covid-19)
- "Hit Fixed Object"= 25%
 - Westbound off-ramp on the curve





SAFETY: Ramps and Surface Streets



EXISTING RAMP CONFIGURATION | EASTBOUND



COMMUNITY FEEDBACK & TEAM OBSERVATIONS

Residential Survey Forms:

- Dangerous weaving at eastbound ramps
- Excessive vehicle speeds on Beechwood Boulevard (40-50 mph)
- Excessive traffic volume and congestion on Beechwood Boulevard
- Excessive traffic noise
- Flash flooding during heavy rains
- Frequent accidents involving vehicles and pedestrians
- Rush Hour parking restrictions are inconvenience

Observation / Engineering Concerns & Goals:

- Pedestrian safety at bus stops
- Multimodal connectivity
- Improving existing substandard roadway elements
- ITS Intelligent Transportation System Upgrades
- Over-height Truck Detection



ALTERNATIVES OVERVIEW



ALTERNATIVES OVERVIEW - ALTERNATIVE B





ALTERNATIVES OVERVIEW - ALTERNATIVE B



ALTERNATIVES OVERVIEW - ALTERNATIVE D





ALTERNATIVES OVERVIEW - ALTERNATIVE D



ALTERNATIVES OVERVIEW - ALTERNATIVE F



ALTERNATIVES OVERVIEW - ALTERNATIVE F



ALTERNATIVES OVERVIEW - ALTERNATIVE F



TRAFFIC ANALYSIS SUMMARY

- Traffic analysis was performed to understand future traffic operations and differentiate between the alternatives
- Analysis was performed using microsimulation modeling based on projected 2048 volumes
 - Microsimulation models allow for more complex analyses
 - Provides more insight with how freeways and local networks interact



MICROSIMULATION MODEL LIMITS



TRAFFIC ANALYSIS SUMMARY – TRAVEL TIMES

- In the AM peak, the Beechwood Blvd travel time:
 - Is reduced by 71% in Alternative B
 - Is reduced by 73% in Alternative D
 - Is reduced by 70% in Alternative F
- In the PM peak, the Beechwood Blvd travel time:
 - Is reduced by 2% in Alternative B
 - Remains the same in Alternative D
 - Is reduced by 28% in Alternative F
- In the PM peak, the SR 376 eastbound travel time:
 - Is reduced by 2% in Alternative B
 - Is reduced by 14% in Alternative D
 - Is reduced by 14% in Alternative F

Note: All result values refer to the Future Year - 2048



PROJECT BENEFITS

REGIONAL BENEFITS	No Build	Alternative B	Alternative D	Alternative F
Eliminates SR 376 eastbound ramp weave and stop sign	×	 ✓ 	 ✓ 	
Improves SR 376 corridor travel speeds	×	\checkmark	 	
Improves SR 376 westbound off-ramp curve	×	 Image: A start of the start of	 Image: A start of the start of	
Eliminates vertical clearance deficiencies of 9 structures (4 bridges; 5 sign structures)	×	 Image: A start of the start of	 Image: A start of the start of	 Image: A start of the start of
Eliminates Fracture Critical Bridge over Interstate	×	 ✓ 	 ✓ 	

EVALUATION LEGEND

Major Benefit — Moderate/Minor Benefit

No Benefit

PROJECT BENEFITS

GREENFIELD AND SQUIRREL HILL COMMUNITY BENEFITS	No Build	Alternative B	Alternative D	Alternative F
Reduces travel speeds on Beechwood Boulevard	×	\checkmark	\checkmark	
Improves pedestrian safety at bus stops	×	 ✓ 	 ✓ 	
Improves pedestrian connectivity and safety at crossings	×	 ✓ 	 ✓ 	 ✓
Improves bicycle network on Forward Avenue	×	 ✓ 	 ✓ 	 ✓
Improves stormwater management	×	 ✓ 	 ✓ 	 ✓
Provides roundabout at Beechwood Boulevard and Monitor Street intersection	×	 ✓ 	\checkmark	 ✓

EVALUATION LEGEND

Major Benefit Moderate/Minor Benefit

it 🛑 No Benefit

ALTERNATIVE COMPARISON

CRITERIA	No Build	Alternative B	Alternative D	Alternative F
Potential displacements (Parcels)	0	1	14	6
Potential displacements (Dwelling Units)	0	1	19	7
Reduction of on-street parking on Beechwood Boulevard	N/A	3,100'	1,500'	750'
Provides low-volume residential connection and additional parking*	N/A	×	×	 Image: A start of the start of
Reduces traffic volume on portion of Beechwood Boulevard	N/A	×	×	 Image: A start of the start of
Number of signals on Beechwood Boulevard	0	2	2	3
Total Project Cost **	N/A	\$112M	\$192M	\$138M
	*The realignment	of Beechwood Boulevard a	nd addition of low volume	one-way residential stree

*The realignment of Beechwood Boulevard and addition of low volume, one-way residential street as illustrated in Alternative F are also feasible in Alternatives B and D.

**Total Project Cost includes design, construction, construction inspection, right-of-way acquisition, and utility relocations.

PROPOSED COMMUNITY INPROVEMENTS



PROPOSED COMMUNITY IMPROVEMENTS

What we heard from stakeholders:

- DOMI's primary concern is <u>safety over operations</u>
- Eliminating on-street parking is very problematic
- Council District 5 Community Requests Implemented:
 - Forward Ave Bike Connection
 - Potential Saline Street Bike Connection
 - Improved user safety at Beechwood Blvd, Monitor St, and Forward Ave
 - Beechwood Blvd Concerns
 - Refinements to Beechwood Blvd, Greenfield Bridge, Alger St intersection
 - Residential parking
 - Accommodations for large truck turning movements at ramp intersections

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Improvements are illustrated on Alternative F, but are also feasible on Alternatives B and D.

PROPOSED COMMUNITY IMPROVEMENTS:

(ALTERNATIVE F SHOWN)



PROPOSED COMMUNITY IMPROVEMENTS:

RESIDENTIAL STREET



PROPOSED COMMUNITY IMPROVEMENTS: SALINE ST BIKE CONNECTION

Potential * Saline Street Bike Connection (feasible on all alternatives)

*(Pending FHWA and PennDOT Central Office approval)



PROPOSED COMMUNITY IMPROVEMENTS:

MONITOR ST ROUNDABOUT

Existing Partial Stop Intersection



PROPOSED COMMUNITY IMPROVEMENTS:

MONITOR ST ROUNDABOUT



- Maintains all existing driveway access points
- Provides U-turn movement to improve access and connectivity on Beechwood Boulevard
- Maintains existing roadway footprint with minor right-of-way impacts
- Reduces overall future intersection delays by 92% in the AM and 78% in the PM for the Recommended Alternative compared to the No Build Condition

Safety Enhancements:

- Reduces vehicular conflict points
- Reduces vehicle speeds during nonpeak hours
- Reduces vehicle speeds at pedestrian crossings
- Eliminates substandard intersection sight distance condition

CONSTRUCTION PHASING | TRAFFIC CONTROL

Traffic Control Requirements

- The existing SR 376 EB off-ramp movement must be maintained at all times to allow for over height vehicles to exit prior to the Squirrel Hill Tunnel.
- Two lanes of traffic will be maintained along SR 376 EB and SR 376 WB at all times with the following exceptions:
 - Short-term single lane closures during overnight hours or weekends
 - Short-term full stoppages are permitted during overnight hours to facilitate bridge demolition and beam erection activities.
- A series of Ramp closures and detours will be utilized.
- Construction is anticipated to take 3 construction seasons.



PROJECT SCHEDULE





PROJECT WEBSITE AND COMMENT FORMS

• The on-line project comment form can be found on the project website. To access: Visit <u>https://bit.ly/squirrel-hill-interchange</u> or scan the QR code.



1) Click Here

- 1) Click the "**Submit a Comment**" button under Contact Information on the right side of the screen.
- 2) Select "I-376 Squirrel Hill Interchange" from the list of projects in the dropdown box.



I-376 Parkway East – Squirrel Hill Interchange Improvement Project

ALLEGHENY COUNTY



Pennsylvania		Project Status				
Transportation		æ	Ô	61	***	
Search		Step 1: Development	Step 2:	Step 3: Construction	Step 4:	
About PennDOT		bovelopment	Dongh	Construction	Completed	
News & Media	>	Project O	verview			
		Calibra Allachenu			Contact	
Traveling in PA	2	Municipality: City of Pittsburgh			Information	
Projects Near You	~	State Route: oterstate 376				
District 1 Projects		Local Name: Pantyay East			Cheryl Solosky, P.E.	
District in rejects		Project Type: Improv	ment		Project Manager	
District 2 Projects	>	Proposed Construction Start: Early 2029			csolosky@pa.gov	
District 3 Projects	>	Last Updated: 02/04/2025				
					Mark Young	
District 4 Projects		PennDOT, in coopera	tion with the Federal Pigh	way Administration (FHWA),	Manager	
District 5 Projects	>	is advancing the I-376. Section A76 Squirrel Hill Merchange Improvement			412-429-4858	
District 6 Brojects		Project in the City of Pittsburgh, Allegheny County, Kennsylvania. The			markyoung@pa.gov	
District o Projects		project begins on the Parkway East (I-376) just west of the Greenfield			Yasmeen Manvisha	
District 8 Projects	>	Endge overpass and continues eastward to the entrance to be Squirrel Hill Tunnel. The scope of work includes the redesign of the Squirrel N			Press Officer	
District 9 Projects	>	Interchange and impr	ovements to Forward Ave	nue south of Murray	412-334-5436	
		Avenue, and Beechw	ood Boulevard from Rona	ld Street to Monitor Stree	ymanyisha@pa.gov	
		The project will includ	le rehabilitating the I-3761	ravel lanes, realigning and		
		reconfiguring all inter	change ramps, and const	ructing bridges and	Submit a Comment	
		retaining walls. The re	configuration and rehabili	tation of Beechwood	\sim	
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CONTACT

Contact Information:

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Mark Young District Environmental Planning Manager 412-429-4858 <u>markyoung@pa.gov</u>

Steve Cowan Press Officer 412-334-5436 <u>stcowan@pa.gov</u>

STAY UP TO DATE!

For more information on the SR 376, Section A76 Squirrel Hill Interchange Improvement Project, please visit our project website at:

https://bit.ly/squirrel-hill-interchange



PROJECT WEBSITE:

Q&A

This Q&A session will continue to be recorded solely for the Project Team's use in documenting the questions and answers. By participating, you are consenting to the recording, retention and use of this session.



